DAIKIN

EDUS071718

R-410A

# Engineering Data

## Split Type Air Conditioners

### - Heat Pump -

## FDMQ-R Series

INVERTER

# Split Type Air Conditioners FDMQ-R Series

| | |
|---|---|
| **Heat Pump** | **FDMQ09RVJU RX09RMVJU**<br>**FDMQ12RVJU RX12RMVJU**<br>**FDMQ15RVJU RX15RMVJU**<br>**FDMQ18RVJU RX18RMVJU**<br>**FDMQ24RVJU RX24RMVJU** |

**Cautions**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.

# 1. Power Supply

| Indoor Unit | Outdoor Unit | Power Supply |
|---|---|---|
| FDMQ09RVJU | RX09RMVJU | 1 phase, 208 - 230 V, 60 Hz |
| FDMQ12RVJU | RX12RMVJU | |
| FDMQ15RVJU | RX15RMVJU | |
| FDMQ18RVJU | RX18RMVJU | |
| FDMQ24RVJU | RX24RMVJU | |

**Note:** Power Supply Intake ; Outdoor Unit

# 2. Functions

| Category | Functions | FDMQ09/12/15/18/24RVJU RX09/12/15/18/24RMVJU with BRC1E73 | FDMQ09/12/15/18/24RVJU RX09/12/15/18/24RMVJU with BRC082A43 | Category | Functions | FDMQ09/12/15/18/24RVJU RX09/12/15/18/24RMVJU with BRC1E73 | FDMQ09/12/15/18/24RVJU RX09/12/15/18/24RMVJU with BRC082A43 |
|---|---|---|---|---|---|---|---|
| Basic Functions | Inverter (with inverter power control) | ● | ● | Health & Cleanliness | Auto cleaning filter | — | — |
| | Operation limit for cooling | Refer to P. 34 | | | Air-purifying filter | — | — |
| | Operation limit for heating | | | | Titanium apatite deodorizing filter | — | — |
| | PAM control | ● | ● | | Silver ion anti-bacterial drain pan | ● | ● |
| | Standby electricity saving | — | — | | Longlife filter (option) | ● | ● |
| Compressor | Oval scroll compressor | — | — | | Air filter | — | — |
| | Swing compressor | ● | ● | | Filter cleaning indicator | ● | ● |
| | Rotary compressor | — | — | | Wipe-clean flat panel | — | — |
| | Reluctance DC motor | ● | ● | | Washable grille | — | — |
| Comfortable Airflow | Power-airflow flap (horizontal blade) | — | — | | MOLD PROOF operation | — | — |
| | Power-airflow dual flaps (horizontal blade) | — | — | | Good-sleep cooling operation | — | — |
| | | | | Timer | Setpoint auto reset | ● | — |
| | Power-airflow diffuser | — | — | | Setpoint range restriction | ● | — |
| | Wide-angle louvers (vertical blades) | — | — | | WEEKLY TIMER operation | — | — |
| | Auto-swing (up and down) | — | — | | Schedule TIMER operation | ● | — |
| | Auto-swing (right and left) | — | — | | 24-hour ON/OFF TIMER | ● | — |
| | Individual flap control | — | — | | Count up/down ON/OFF timer | — | ● |
| | 3-D airflow | — | — | | NIGHT SET mode | — | — |
| | COMFORT AIRFLOW operation | — | — | | Off Timer (turns unit off after set time) | ● | — |
| | Switchable fan speed (3 steps) | ● | ● | Worry Free (Reliability & Durability) | Auto-restart (after power failure) | ● | ● |
| | Auto fan speed | ● | — | | Self-diagnosis (R/C, LED) | ● | ● |
| Comfort Control | Indoor unit quiet operation | — | — | | Wiring error check function | — | — |
| | NIGHT QUIET mode (automatic) | — | — | | Anti-corrosion treatment of outdoor heat exchanger | ● | ● |
| | OUTDOOR UNIT QUIET operation (manual) | — | — | Flexibility | Multi-split/split type compatible indoor unit | ● | ● |
| | 2 selectable temperature sensors | ● | — | | H/P, C/O compatible indoor unit | — | — |
| | Auto-cooling/heating changeover | ● | ● | | Flexible power supply correspondence | — | — |
| | Quick warming function | ● | ● | | | | |
| | Hot-start function | ● | ● | | | | |
| | Automatic defrosting | ● | ● | | Chargeless | 32.8 ft (10 m) | 32.8 ft (10 m) |
| | Program dry function | ● | ● | | | | |
| | Fan only | ● | ● | | Either side drain (right or left) | — | — |
| Lifestyle Convenience | POWERFUL operation (non-inverter) | — | — | | Drain pump | ● | ● |
| | POWERFUL operation (inverter) | — | — | | Power selection | — | — |
| | Priority-room setting | — | — | | Low outdoor temperature cooling operation (-20°C) (-4°F) | ● | ● |
| | COOL/HEAT mode lock | — | — | | | | |
| | HOME LEAVE operation | — | — | | °F/°C changeover R/C temperature display (factory setting: °F) | ● | — |
| | ECONO operation | — | — | | | | |
| | Emergency operation switch | — | ● | Remote Control | Remote control adaptor (normal open pulse contact) (option) | — | — |
| | Signal receiving sign | — | ●★ | | | | |
| | R/C with back light | ● | — | | Remote control adaptor (normal open contact) (option) | — | — |
| | | | | | | | |
| | | | | | DIII-NET compatible (adaptor) (option) | ● | ● |
| | | | | | Wireless LAN connection | — | — |
| | | | | Remote Controller | Wireless (option) | ● | ● |
| | | | | | Wired (option) | ● | ● |

**Note:** ● : Available
— : Not available
★ Receiving sound only

# 3. Specifications

| Model | Indoor Unit | | | FDMQ09RVJU | | FDMQ12RVJU | |
|---|---|---|---|---|---|---|---|
| | Outdoor Unit | | | RX09RMVJU | | RX12RMVJU | |
| | | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | | | 1 phase, 208-230 V, 60 Hz | | 1 phase, 208-230 V, 60 Hz | |
| Cooling capacity ★1 ★4 | | | kW | 2.64 | — | 3.18 | — |
| | | | Btu/h | 9,000 | — | 10,800 | — |
| | | | kcal/h | 2,270 | — | 2,720 | — |
| Heating capacity ★2 ★4 | | | kW | — | 3.18 | — | 3.99 |
| | | | Btu/h | — | 10,900 | — | 13,600 |
| | | | kcal/h | — | 2,750 | — | 3,430 |
| Heating capacity ★3 ★4 | | | kW | — | 1.98 | — | 2.49 |
| | | | Btu/h | — | 6,800 | — | 8,500 |
| | | | kcal/h | — | 1,710 | — | 2,140 |
| SEER/HSPF | | | | 17.8 | 10.3 | 19.4 | 10.6 |
| COP (Rated) | | | W/W | — | 4.1 | — | 3.7 |
| EER (Rated) | | | Btu/W·h | 11.1 | — | 11.6 | — |
| **Indoor Unit** | | | | **FDMQ09RVJU** | | **FDMQ12RVJU** | |
| Casing Color | | | | — | | — | |
| Dimensions (H × W × D) | | | in. (mm) | 9-5/8 × 27-9/16 × 31-1/2 (245 × 700 × 800) | | 9-5/8 × 27-9/16 × 31-1/2 (245 × 700 × 800) | |
| Coil | Type | | | Cross Fin Coil | | Cross Fin Coil | |
| | Rows × Stages × Fin per Inch | | | 3 × 26 × 18 | | 3 × 26 × 18 | |
| | Face Area | | ft² (m²) | 1-15/16 (0.178) | | 1-15/16 (0.178) | |
| Fan | Type | | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | | W | 130 | | 130 | |
| | Airflow Rate | H / M / L | cfm (m³/min) | 343 / 290 / 240 (9.7 / 8.2 / 6.8) | 343 / 290 / 240 (9.7 / 8.2 / 6.8) | 392 / 332 / 275 (11.1 / 9.4 / 7.8) | 392 / 332 / 275 (11.1 / 9.4 / 7.8) |
| | External Static Pressure ★5 | | $inH_2O$ | 0.20 (0.60 - 0.12) | | 0.20 (0.60 - 0.12) | |
| | | | Pa | 50 (150 - 30) | | 50 (150 - 30) | |
| Sound Pressure Level | | | dB(A) | 32 | 32 | 33 | 33 |
| Sound Power Level | | | dB(A) | 46 | 46 | 47 | 47 |
| Air Filter ★6 | | | | — | | — | |
| Weight (Mass) | | | Lbs (kg) | 64 (29) | | 64 (29) | |
| Piping Connections | Liquid | | in. (mm) | ϕ 1/4 (6.4) (Flare) | | ϕ 1/4 (6.4) (Flare) | |
| | Gas | | in. (mm) | ϕ 3/8 (9.5) (Flare) | | ϕ 3/8 (9.5) (Flare) | |
| | Drain | | in. (mm) | I.D. ϕ 1 (25) / O.D. ϕ 1-1/4 (32) | | I.D. ϕ 1 (25) / O.D. ϕ 1-1/4 (32) | |
| Remote Controller (Option) | Wired | | | BRC1E73 | | BRC1E73 | |
| | Wireless | | | BRC082A43 | | BRC082A43 | |
| **Outdoor Unit** | | | | **RX09RMVJU** | | **RX12RMVJU** | |
| Casing Color | | | | Ivory White | | Ivory White | |
| Dimensions (H × W × D) | | | in. (mm) | 21-5/8 × 26-9/16 × 11-3/16 (550 × 675 × 284) | | 21-5/8 × 26-9/16 × 11-3/16 (550 × 675 × 284) | |
| Coil | Type | | | Cross Fin Coil | | Cross Fin Coil | |
| | Rows × Stages × Fin per Inch | | | 2 × 24 × 17 | | 2 × 24 × 17 | |
| | Face Area | | ft² (m²) | 3-11/16 (0.342) | | 3-11/16 (0.342) | |
| Compressor | Model | | | 1YC23AUXD | | 1YC23AUXD | |
| | Type | | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Motor Output | | W | 790 | | 790 | |
| Fan | Type | | | Propeller | | Propeller | |
| | Motor Output | | W | 39 | | 39 | |
| | Airflow Rate | | cfm (m³/min) | 985 (27.9) | 1,105 (31.3) | 1,105 (31.3) | 1,105 (31.3) |
| Sound Pressure Level | | | dB(A) | 46 | 50 | 49 | 51 |
| Sound Power Level | | | dB(A) | 58 | 62 | 61 | 63 |
| Weight (Mass) | | | Lbs (kg) | 60 (27) | | 60 (27) | |
| Piping Connections | Liquid | | in. (mm) | ϕ 1/4 (6.4) (Flare) | | ϕ 1/4 (6.4) (Flare) | |
| | Gas | | in. (mm) | ϕ 3/8 (9.5) (Flare) | | ϕ 3/8 (9.5) (Flare) | |
| | Drain | | in. (mm) | I.D. ϕ 5/8 (16) | | I.D. ϕ 5/8 (16) | |
| Safety Devices | | | | Fuse | | Fuse | |
| Capacity Step | | | % | Compressor Revolution Speed Control (Inverter System) | | Compressor Revolution Speed Control (Inverter System) | |
| Refrigerant Control | | | | Electronic Expansion Valve | | Electronic Expansion Valve | |
| Max. Interunit Piping Length | | | ft (m) | 65-5/8 (20) | | 65-5/8 (20) | |
| Max. Interunit Height Difference | | | ft (m) | 49-1/4 (15) | | 49-1/4 (15) | |
| Refrigerant | Type | | | R-410A | | R-410A | |
| | Charge | | Lbs (kg) | 2.09 (0.95) | | 2.09 (0.95) | |
| Refrigerant Oil | Type | | | FVC50K | | FVC50K | |
| | Charge | | fl oz (L) | 12.68 (0.375) | | 12.68 (0.375) | |
| Drawing No. | | | | 3D112997C | | 3D112997C | |

**Notes:**

★1 Indoor temp.: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB) / Outdoor temp.: 95.0°FDB (35.0°CDB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★2 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 47.0°FDB (8.3°CDB), 43.0°FWB (6.1°CWB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★3 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 17.0°FDB (-8.3°CDB), 15.0°FWB (-9.4°CWB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

★5 External static pressure is changeable in 13 (FDMQ09/12RVJU), 11 (FDMQ15/18/24RVJU) stages by remote controller.

★6 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its dust collection efficiency (gravity method) 50% or more.

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

| Model | Indoor Unit | | | FDMQ15RVJU | | FDMQ18RVJU | |
|---|---|---|---|---|---|---|---|
| | Outdoor Unit | | | RX15RMVJU | | RX18RMVJU | |
| | | | | Cooling | Heating | Cooling | Heating |
| Power Supply | | | | 1 phase, 208-230 V, 60 Hz | | 1 phase, 208-230 V, 60 Hz | |
| Cooling capacity ★1 ★4 | | | kW | 4.23 | — | 5.16 | — |
| | | | Btu/h | 14,400 | — | 17,600 | — |
| | | | kcal/h | 3,630 | — | 4,440 | — |
| Heating capacity ★2 ★4 | | | kW | — | 5.28 | — | 6.33 |
| | | | Btu/h | — | 18,000 | — | 21,600 |
| | | | kcal/h | — | 4,540 | — | 5,440 |
| Heating capacity ★3 ★4 | | | kW | — | 3.36 | — | 3.99 |
| | | | Btu/h | — | 11,500 | — | 13,600 |
| | | | kcal/h | — | 2,900 | — | 3,430 |
| SEER/HSPF | | | | 20.2 | 10.3 | 18.5 | 10.3 |
| COP (Rated) | | | W/W | — | 3.8 | — | 3.8 |
| EER (Rated) | | | Btu/W·h | 12.7 | — | 12.50 | — |
| **Indoor Unit** | | | | **FDMQ15RVJU** | | **FDMQ18RVJU** | |
| Casing Color | | | | — | | — | |
| Dimensions (H × W × D) | | | in. (mm) | 9-5/8 × 39-3/8 × 31-1/2 (245 × 1,000 × 800) | | 9-5/8 × 39-3/8 × 31-1/2 (245 × 1,000 × 800) | |
| Coil | Type | | | Cross Fin Coil | | Cross Fin Coil | |
| | Rows × Stages × Fin per Inch | | | 2 × 26 × 18 | | 3 × 26 × 18 | |
| | Face Area | | ft² (m²) | 3-1/8 (0.288) | | 3-1/8 (0.288) | |
| Fan | Type | | | Sirocco Fan | | Sirocco Fan | |
| | Motor Output | | W | 230 | | 230 | |
| | Airflow Rate | H / M / L | cfm (m³/min) | 516 / 438 / 360 (14.6 / 12.4 / 10.2) | 516 / 438 / 360 (14.6 / 12.4 / 10.2) | 675 / 572 / 473 (19.1 / 16.2 / 13.4) | 675 / 572 / 473 (19.1 / 16.2 / 13.4) |
| | External Static Pressure ★5 | | $inH_2O$ | 0.20 (0.60 - 0.20) | | 0.20 (0.60 - 0.20) | |
| | | | Pa | 50 (150 - 50) | | 50 (150 - 50) | |
| Sound Pressure Level | | | dB(A) | 34 | 34 | 35 | 35 |
| Sound Power Level | | | dB(A) | 48 | 48 | 49 | 49 |
| Air Filter ★6 | | | | — | | — | |
| Weight (Mass) | | | Lbs (kg) | 77 (35) | | 82 (37) | |
| Piping Connections | Liquid | | in. (mm) | ϕ 1/4 (6.4) (Flare) | | ϕ 1/4 (6.4) (Flare) | |
| | Gas | | in. (mm) | ϕ 1/2 (12.7) (Flare) | | ϕ 1/2 (12.7) (Flare) | |
| | Drain | | in. (mm) | I.D. ϕ 1 (25) / O.D. ϕ 1-1/4 (32) | | I.D. ϕ 1 (25) / O.D. ϕ 1-1/4 (32) | |
| Remote Controller (Option) | Wired | | | BRC1E73 | | BRC1E73 | |
| | Wireless | | | BRC082A43 | | BRC082A43 | |
| **Outdoor Unit** | | | | **RX15RMVJU** | | **RX18RMVJU** | |
| Casing Color | | | | Ivory White | | Ivory White | |
| Dimensions (H × W × D) | | | in. (mm) | 28-15/16 × 34-1/4 × 12-5/8 (735 × 870 × 320) | | 28-15/16 × 34-1/4 × 12-5/8 (735 × 870 × 320) | |
| Coil | Type | | | Cross Fin Coil | | Cross Fin Coil | |
| | Rows × Stages × Fin per Inch | | | 1 × 32 × 18 | | 1 × 32 × 18 | |
| | Face Area | | ft² (m²) | 7-1/8 (0.664) | | 7-1/8 (0.664) | |
| Compressor | Model | | | 2YC36PXD | | 2YC36PXD | |
| | Type | | | Hermetically Sealed Swing Type | | Hermetically Sealed Swing Type | |
| | Motor Output | | W | 1,100 | | 1,100 | |
| Fan | Type | | | Propeller | | Propeller | |
| | Motor Output | | W | 91 | | 110 | |
| | Airflow Rate | | cfm (m³/min) | 2,313 (65.5) | 2,108 (59.7) | 2,461 (69.7) | 2,553 (72.3) |
| Sound Pressure Level | | | dB(A) | 50 | 51 | 54 | 55 |
| Sound Power Level | | | dB(A) | 62 | 63 | 66 | 67 |
| Weight (Mass) | | | Lbs (kg) | 97 (44) | | 97 (44) | |
| Piping Connections | Liquid | | in. (mm) | ϕ 1/4 (6.4) (Flare) | | ϕ 1/4 (6.4) (Flare) | |
| | Gas | | in. (mm) | ϕ 1/2 (12.7) (Flare) | | ϕ 1/2 (12.7) (Flare) | |
| | Drain | | in. (mm) | I.D. ϕ 5/8 (16) | | I.D. ϕ 5/8 (16) | |
| Safety Devices | | | | Fuse | | Fuse | |
| Capacity Step | | | % | Compressor Revolution Speed Control (Inverter System) | | Compressor Revolution Speed Control (Inverter System) | |
| Refrigerant Control | | | | Electronic Expansion Valve | | Electronic Expansion Valve | |
| Max. Interunit Piping Length | | | ft (m) | 98-1/2 (30) | | 98-1/2 (30) | |
| Max. Interunit Height Difference | | | ft (m) | 65-5/8 (20) | | 65-5/8 (20) | |
| Refrigerant | Type | | | R-410A | | R-410A | |
| | Charge | | Lbs (kg) | 2.49 (1.13) | | 2.49 (1.13) | |
| Refrigerant Oil | Type | | | FVC50K | | FVC50K | |
| | Charge | | fl oz (L) | 21.98 (0.650) | | 21.98 (0.650) | |
| Drawing No. | | | | 3D112997C | | 3D112997C | |

**Notes:**

★1 Indoor temp.: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB) / Outdoor temp.: 95.0°FDB (35.0°CDB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★2 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 47.0°FDB (8.3°CDB), 43.0°FWB (6.1°CWB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★3 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 17.0°FDB (-8.3°CDB), 15.0°FWB (-9.4°CWB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

★5 External static pressure is changeable in 13 (FDMQ09/12RVJU), 11 (FDMQ15/18/24RVJU) stages by remote controller.

★6 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its dust collection efficiency (gravity method) 50% or more.

| Conversion Formulae |
|---|
| kcal/h = kW × 860 |
| Btu/h = kW × 3412 |
| cfm = m³/min × 35.3 |

| Model | Indoor Unit | | FDMQ24RVJU | |
|---|---|---|---|---|
| | Outdoor Unit | | RX24RMVJU | |
| | | | Cooling | Heating |
| Power Supply | | | 1 phase, 208-230 V, 60 Hz | |
| Cooling capacity ★1 ★4 | | kW | 6.39 | — |
| | | Btu/h | 21,800 | — |
| | | kcal/h | 5,500 | — |
| Heating capacity ★2 ★4 | | kW | — | 7.02 |
| | | Btu/h | — | 24,000 |
| | | kcal/h | — | 6,050 |
| Heating capacity ★3 ★4 | | kW | — | 4.41 |
| | | Btu/h | — | 15,000 |
| | | kcal/h | — | 3,780 |
| SEER/HSPF | | | 18.6 | 10.0 |
| COP (Rated) | | W/W | — | 3.8 |
| EER (Rated) | | Btu/W·h | 12.5 | — |
| **Indoor Unit** | | | **FDMQ24RVJU** | |
| Casing Color | | | — | |
| Dimensions (H × W × D) | | in. (mm) | 9-5/8 × 39-3/8 × 31-1/2 (245 × 1,000 × 800) | |
| Coil | Type | | Cross Fin Coil | |
| | Rows × Stages × Fin per Inch | | 3 × 26 × 18 | |
| | Face Area | ft² (m²) | 3-1/8 (0.288) | |
| Fan | Type | | Sirocco Fan | |
| | Motor Output | W | 230 | |
| | Airflow Rate H / M / L | cfm (m³/min) | 798 / 678 / 558 (22.6 / 19.2 / 15.8) | 798 / 678 / 558 (22.6 / 19.2 / 15.8) |
| | External Static Pressure ★5 | $inH_2O$ | 0.20 (0.60 - 0.20) | |
| | | Pa | 50 (150 - 50) | |
| Sound Pressure Level | | dB(A) | 40 | 40 |
| Sound Power Level | | dB(A) | 54 | 54 |
| Air Filter ★6 | | | — | |
| Weight (Mass) | | Lbs (kg) | 82 (37) | |
| Piping Connections | Liquid | in. (mm) | ϕ 1/4 (6.4) (Flare) | |
| | Gas | in. (mm) | ϕ 5/8 (15.9) (Flare) | |
| | Drain | in. (mm) | I.D. ϕ 1 (25) / O.D. ϕ 1-1/4 (32) | |
| Remote Controller (Option) | Wired | | BRC1E73 | |
| | Wireless | | BRC082A43 | |
| **Outdoor Unit** | | | **RX24RMVJU** | |
| Casing Color | | | Ivory White | |
| Dimensions (H × W × D) | | in. (mm) | 28-15/16 × 34-1/4 × 12-5/8 (735 × 870 × 320) | |
| Coil | Type | | Cross Fin Coil | |
| | Rows × Stages × Fin per Inch | | 2 × 32 × 18 | |
| | Face Area | ft² (m²) | 7-1/16 (0.658) | |
| Compressor | Model | | 2YC36PXD | |
| | Type | | Hermetically Sealed Swing Type | |
| | Motor Output | W | 1,100 | |
| Fan | Type | | Propeller | |
| | Motor Output | W | 125 | |
| | Airflow Rate | cfm (m³/min) | 2,642 (74.8) | 2,642 (74.8) |
| Sound Pressure Level | | dB(A) | 56 | 58 |
| Sound Power Level | | dB(A) | 68 | 70 |
| Weight (Mass) | | Lbs (kg) | 108 (49) | |
| Piping Connections | Liquid | in. (mm) | ϕ 1/4 (6.4) (Flare) | |
| | Gas | in. (mm) | ϕ 5/8 (15.9) (Flare) | |
| | Drain | in. (mm) | I.D. ϕ 5/8 (16) | |
| Safety Devices | | | Fuse | |
| Capacity Step | | % | Compressor Revolution Speed Control (Inverter System) | |
| Refrigerant Control | | | Electronic Expansion Valve | |
| Max. Interunit Piping Length | | ft (m) | 98-1/2 (30) | |
| Max. Interunit Height Difference | | ft (m) | 65-5/8 (20) | |
| Refrigerant | Type | | R-410A | |
| | Charge | Lbs (kg) | 3.20 (1.45) | |
| Refrigerant Oil | Type | | FVC50K | |
| | Charge | fl oz (L) | 21.98 (0.650) | |
| Drawing No. | | | 3D112997C | |

**Notes:**

★1 Indoor temp.: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB) / Outdoor temp.: 95.0°FDB (35.0°CDB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★2 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 47.0°FDB (8.3°CDB), 43.0°FWB (6.1°CWB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★3 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 17.0°FDB (-8.3°CDB), 15.0°FWB (-9.4°CWB) / Equivalent piping length: 25 ft (7.6 m) / Level difference: 0

★4 Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

★5 External static pressure is changeable in 13 (FDMQ09/12RVJU), 11 (FDMQ15/18/24RVJU) stages by remote controller.

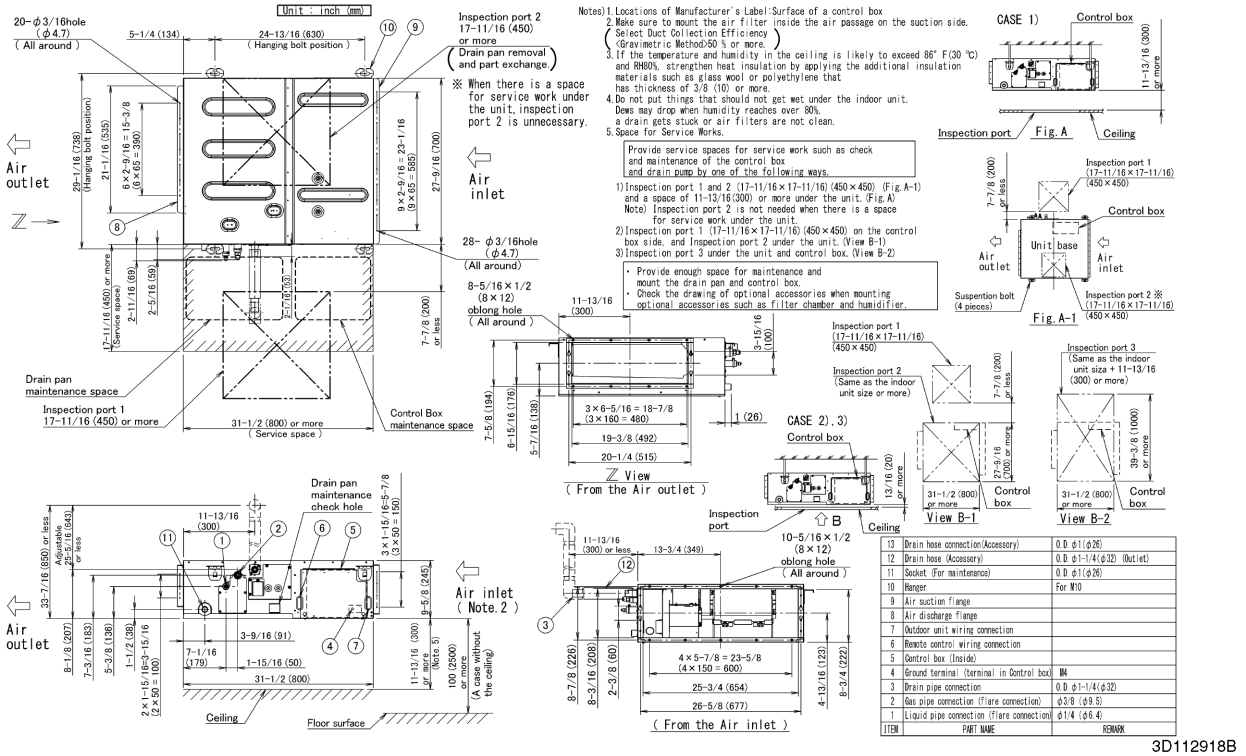
★6 Air filter is not standard accessory, but please mount it in the duct system of the suction side. Select its dust collection efficiency (gravity method) 50% or more.

| Conversion Formulae |
|---|
| kcal/h = kW × 860<br>Btu/h = kW × 3412<br>cfm = m³/min × 35.3 |

# 4. Dimensions

## 4.1 Indoor Unit

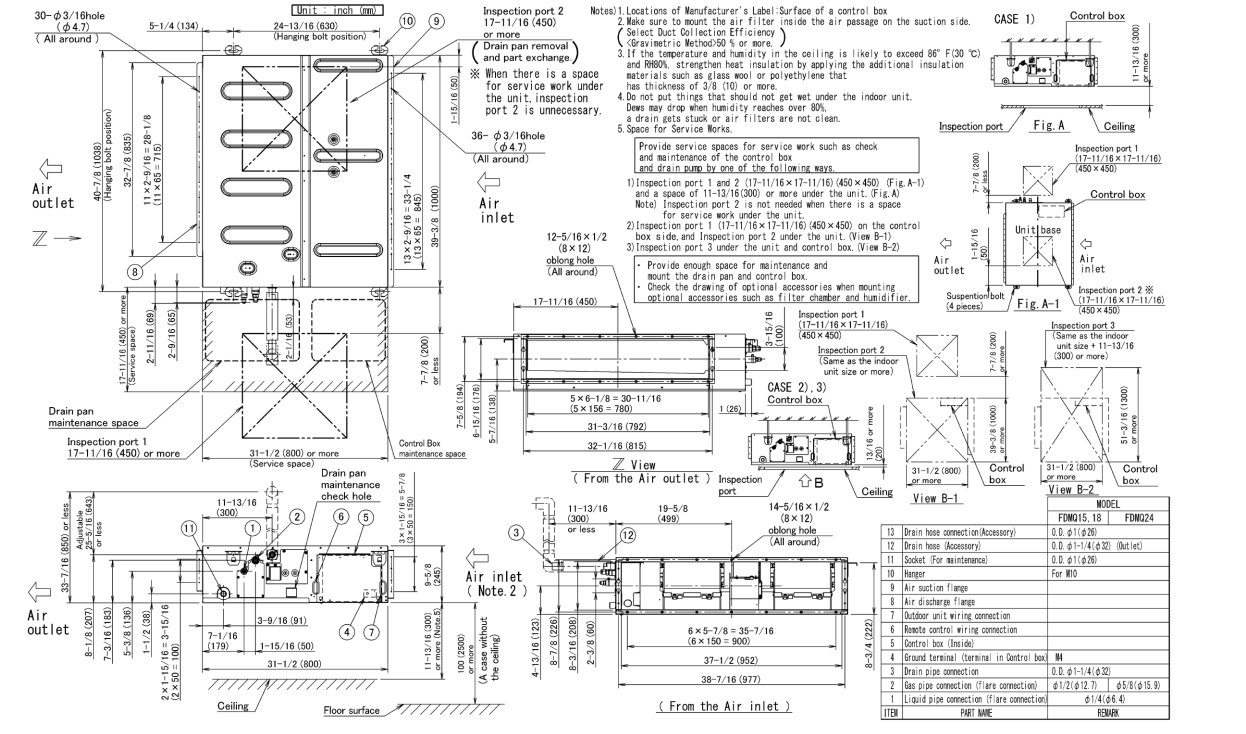
### FDMQ09/12RVJU




| ITEM | PART NAME | REMARK |
|---|---|---|
| 13 | Drain hose connection(Accessory) | O.D. φ1(φ26) |
| 12 | Drain hose (Accessory) | O.D. φ1-1/4(φ32) (Outlet) |
| 11 | Socket (For maintenance) | O.D. φ1(φ26) |
| 10 | Hanger | For M10 |
| 9 | Air suction flange | |
| 8 | Air discharge flange | |
| 7 | Outdoor unit wiring connection | |
| 6 | Remote control wiring connection | |
| 5 | Control box (Inside) | |
| 4 | Ground terminal (terminal in Control box) | M4 |
| 3 | Drain pipe connection | O.D. φ1-1/4(φ32) |
| 2 | Gas pipe connection (flare connection) | φ3/8 (φ9.5) |
| 1 | Liquid pipe connection (flare connection) | φ1/4 (φ6.4) |

3D112918B

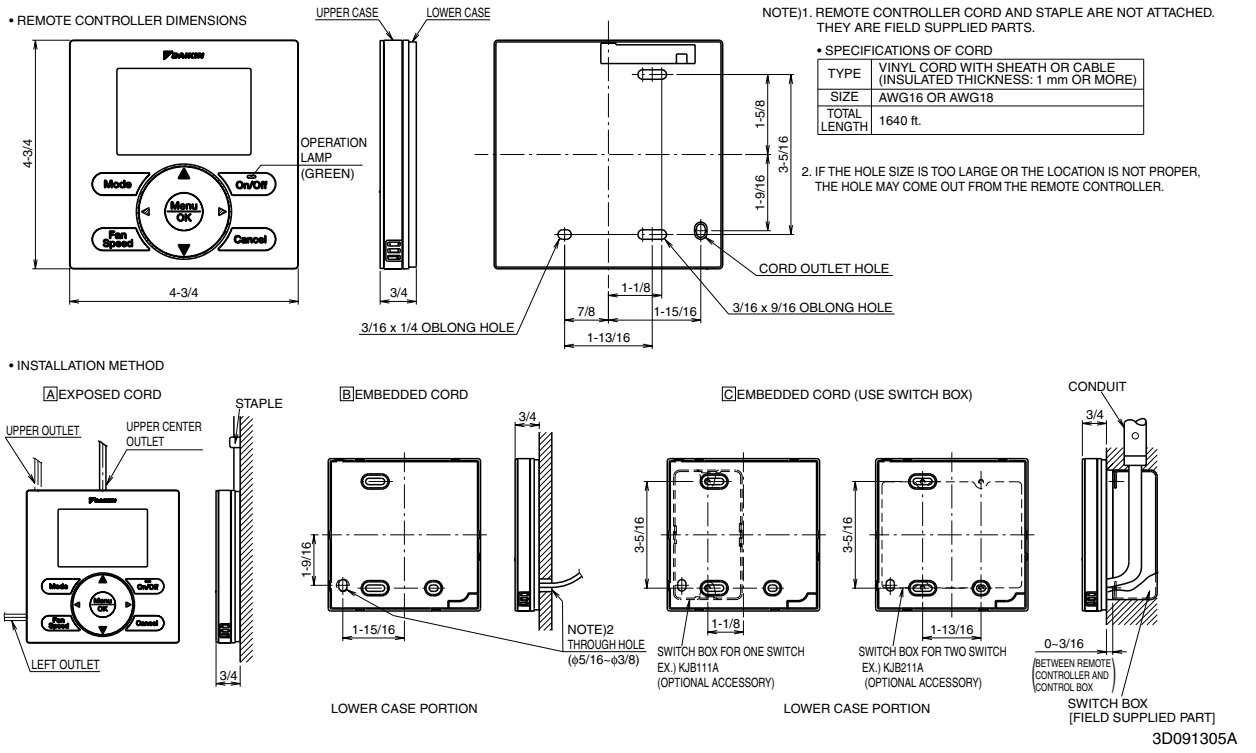
### FDMQ15/18/24RVJU




| ITEM | PART NAME | MODEL FDMQ15, 18 | MODEL FDMQ24 |
|---|---|---|---|
| 13 | Drain hose connection(Accessory) | O.D. φ1(φ26) | |
| 12 | Drain hose (Accessory) | O.D. φ1-1/4(φ32) (Outlet) | |
| 11 | Socket (For maintenance) | O.D. φ1(φ26) | |
| 10 | Hanger | For M10 | |
| 9 | Air suction flange | | |
| 8 | Air discharge flange | | |
| 7 | Outdoor unit wiring connection | | |
| 6 | Remote control wiring connection | | |
| 5 | Control box (Inside) | | |
| 4 | Ground terminal (terminal in Control box) | M4 | |
| 3 | Drain pipe connection | O.D. φ1-1/4(φ32) | |
| 2 | Gas pipe connection (flare connection) | φ1/2(φ12.7) | φ5/8(φ15.9) |
| 1 | Liquid pipe connection (flare connection) | φ1/4(φ6.4) | |

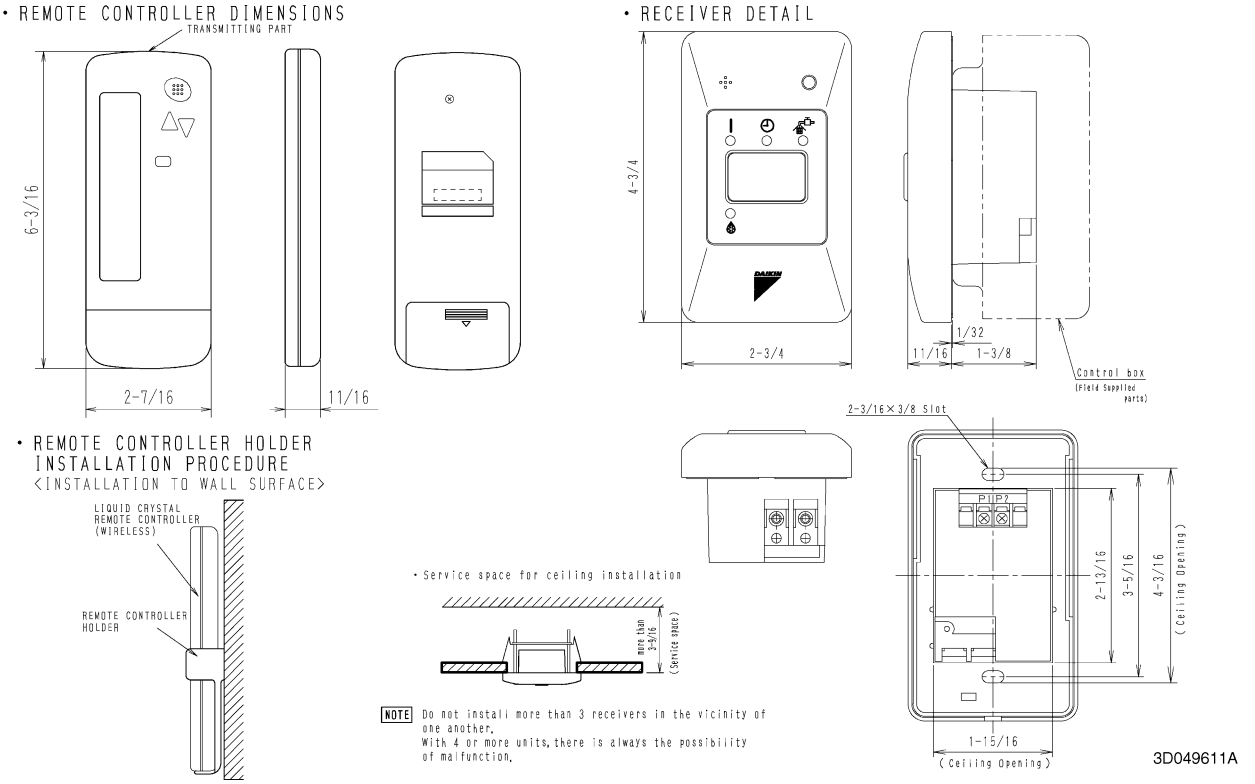
3D112919A

## BRC1E73 — Wired Remote Controller (Option) —




3D091305A

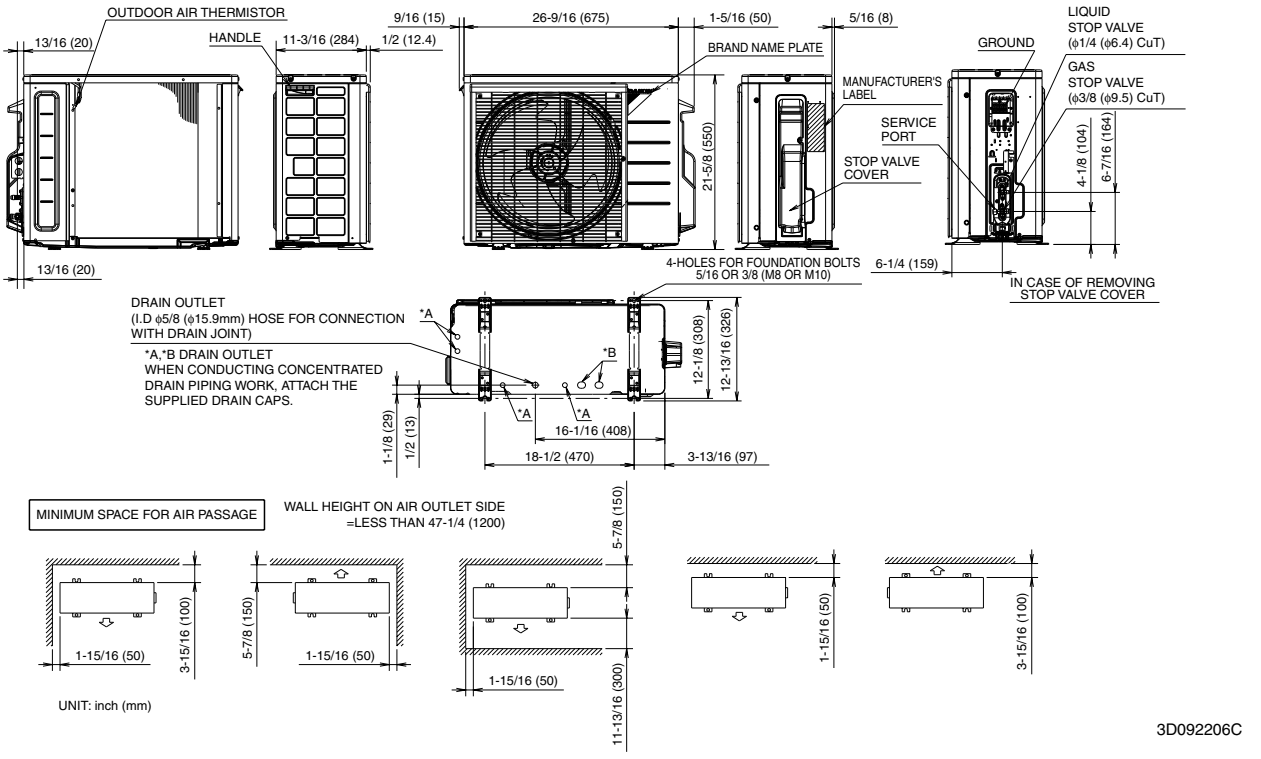
## BRC082A43 — Wireless Remote Controller (Option) —



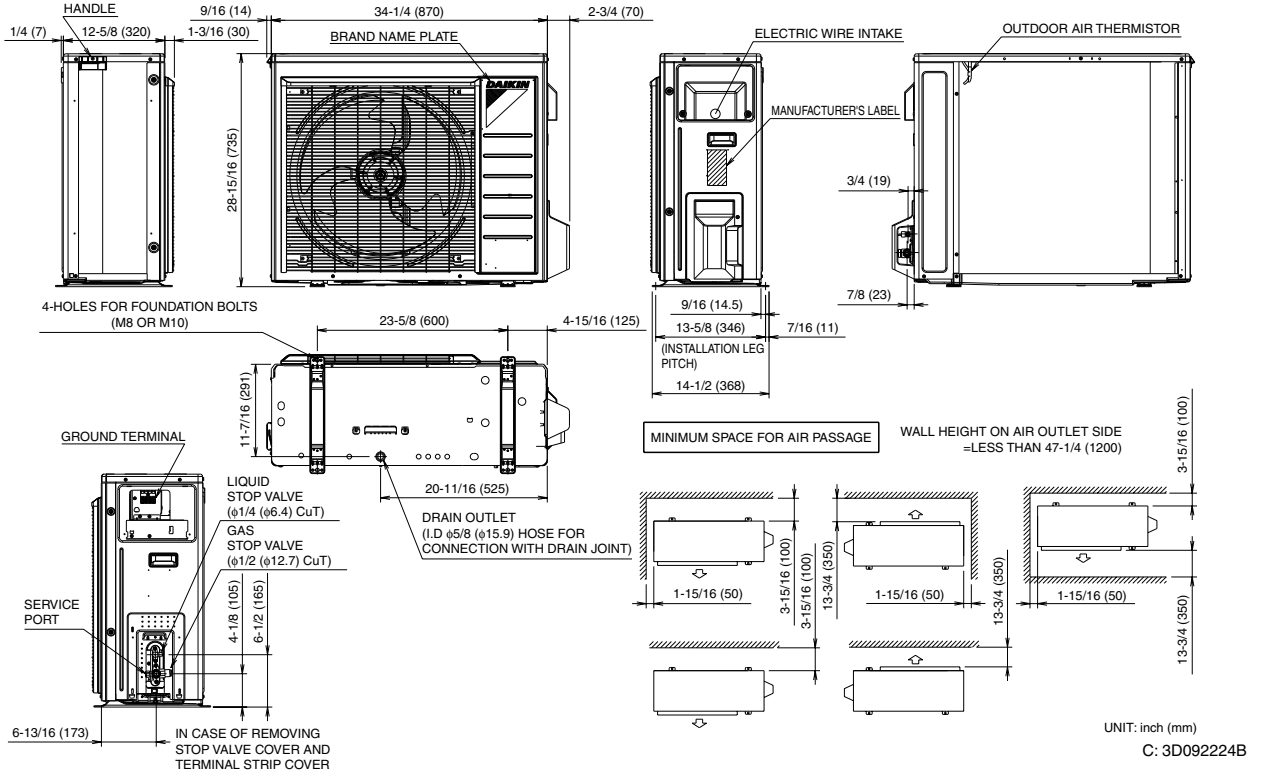

3D049611A

## 4.2 Outdoor Unit

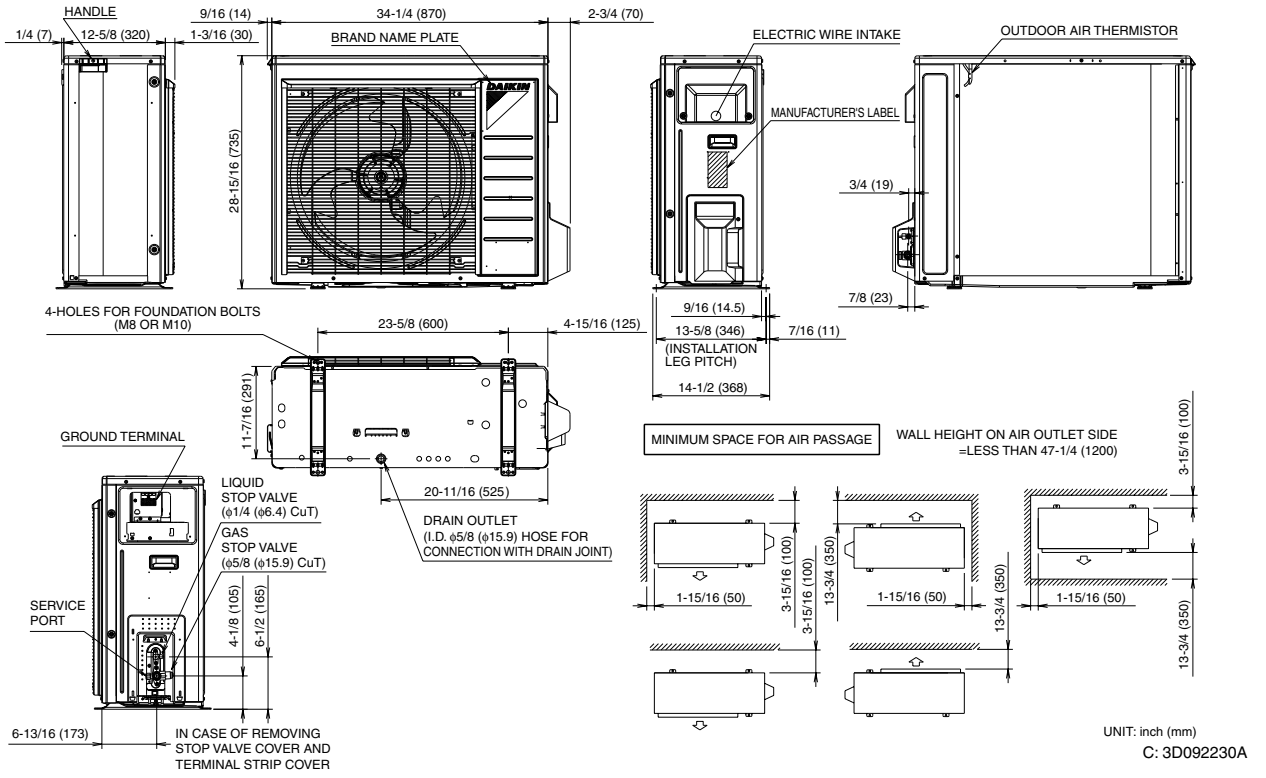
### RX09/12RMVJU




### RX15/18RMVJU



## RX24RMVJU

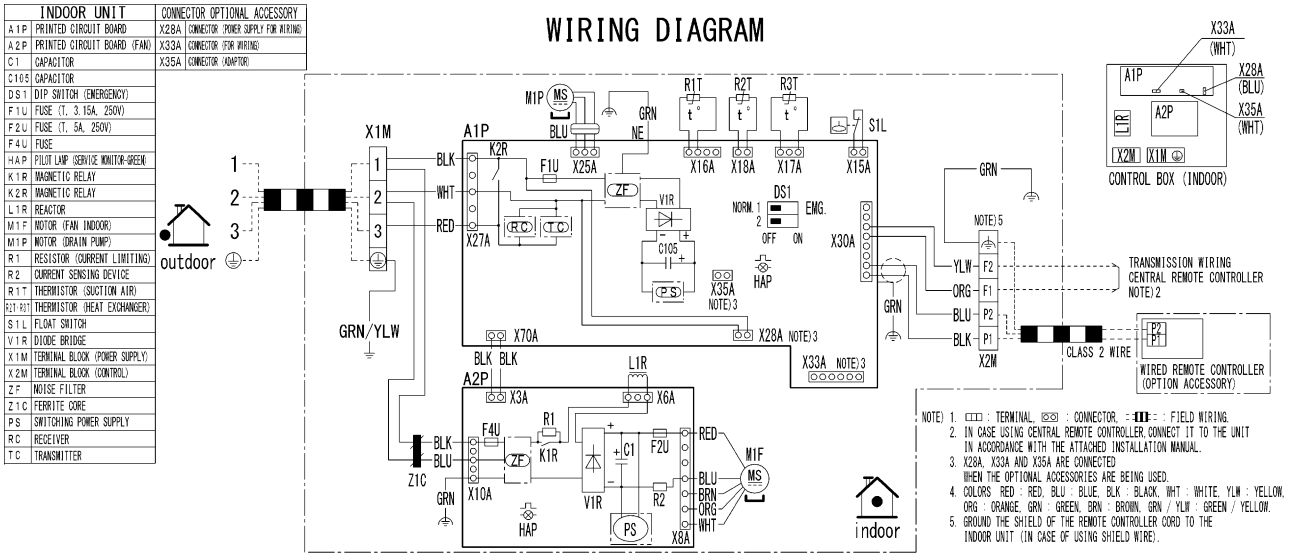

HANDLE
1/4 (7)
12-5/8 (320)
9/16 (14)
1-3/16 (30)
34-1/4 (870)
BRAND NAME PLATE
2-3/4 (70)
28-15/16 (735)
ELECTRIC WIRE INTAKE
OUTDOOR AIR THERMISTOR
MANUFACTURER'S LABEL
3/4 (19)
7/8 (23)
9/16 (14.5)
13-5/8 (346)
7/16 (11)
(INSTALLATION LEG PITCH)
14-1/2 (368)
4-HOLES FOR FOUNDATION BOLTS (M8 OR M10)
23-5/8 (600)
4-15/16 (125)
11-7/16 (291)
GROUND TERMINAL
LIQUID STOP VALVE (ϕ1/4 (ϕ6.4) CuT)
GAS STOP VALVE (ϕ5/8 (ϕ15.9) CuT)
20-11/16 (525)
DRAIN OUTLET (I.D. ϕ5/8 (ϕ15.9) HOSE FOR CONNECTION WITH DRAIN JOINT)
SERVICE PORT
4-1/8 (105)
6-1/2 (165)
6-13/16 (173)
IN CASE OF REMOVING STOP VALVE COVER AND TERMINAL STRIP COVER
MINIMUM SPACE FOR AIR PASSAGE
WALL HEIGHT ON AIR OUTLET SIDE =LESS THAN 47-1/4 (1200)
3-15/16 (100)
1-15/16 (50)
13-3/4 (350)
UNIT: inch (mm)
C: 3D092230A

# 5. Wiring Diagrams

## 5.1 Indoor Unit

**FDMQ09/12/15/18/24RVJU**

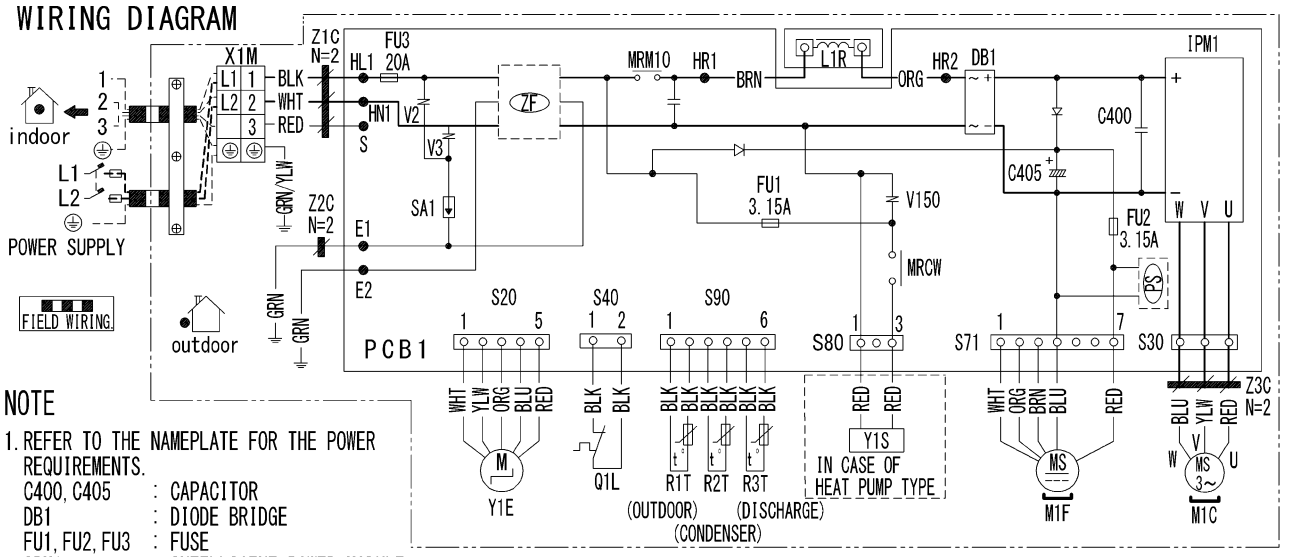
| INDOOR UNIT | | CONNECTOR OPTIONAL ACCESSORY | |
|---|---|---|---|
| A1P | PRINTED CIRCUIT BOARD | X28A | CONNECTOR (POWER SUPPLY FOR WIRING) |
| A2P | PRINTED CIRCUIT BOARD (FAN) | X33A | CONNECTOR (FOR WIRING) |
| C1 | CAPACITOR | X35A | CONNECTOR (ADAPTOR) |
| C10S | CAPACITOR | | |
| DS1 | DIP SWITCH (EMERGENCY) | | |
| F1U | FUSE (T, 3.15A, 250V) | | |
| F2U | FUSE (T, 5A, 250V) | | |
| F4U | FUSE | | |
| HAP | PILOT LAMP (SERVICE MONITOR-GREEN) | | |
| K1R | MAGNETIC RELAY | | |
| K2R | MAGNETIC RELAY | | |
| L1R | REACTOR | | |
| M1F | MOTOR (FAN INDOOR) | | |
| M1P | MOTOR (DRAIN PUMP) | | |
| R1 | RESISTOR (CURRENT LIMITING) | | |
| R2 | CURRENT SENSING DEVICE | | |
| R1T | THERMISTOR (SUCTION AIR) | | |
| R2T-R3T | THERMISTOR (HEAT EXCHANGER) | | |
| S1L | FLOAT SWITCH | | |
| V1R | DIODE BRIDGE | | |
| X1M | TERMINAL BLOCK (POWER SUPPLY) | | |
| X2M | TERMINAL BLOCK (CONTROL) | | |
| ZF | NOISE FILTER | | |
| Z1C | FERRITE CORE | | |
| PS | SWITCHING POWER SUPPLY | | |
| RC | RECEIVER | | |
| TC | TRANSMITTER | | |




3D112629A

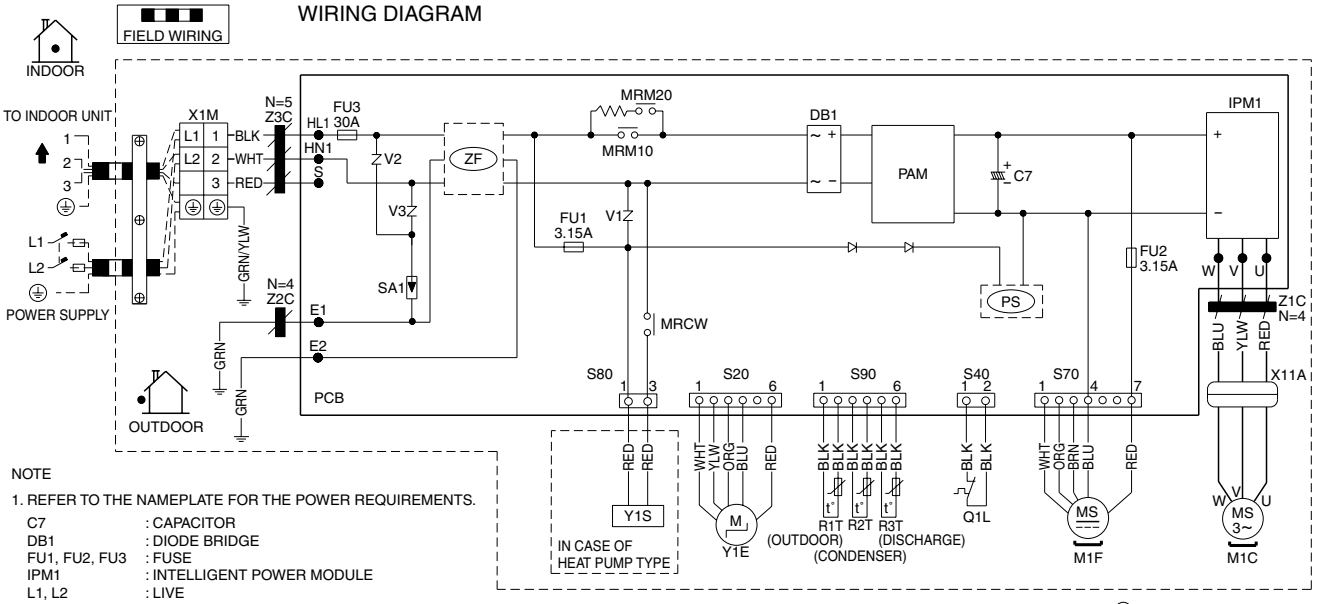
## 5.2 Outdoor Unit

**RX09/12RMVJU**




3D112531

**RX15/18/24RMVJU**

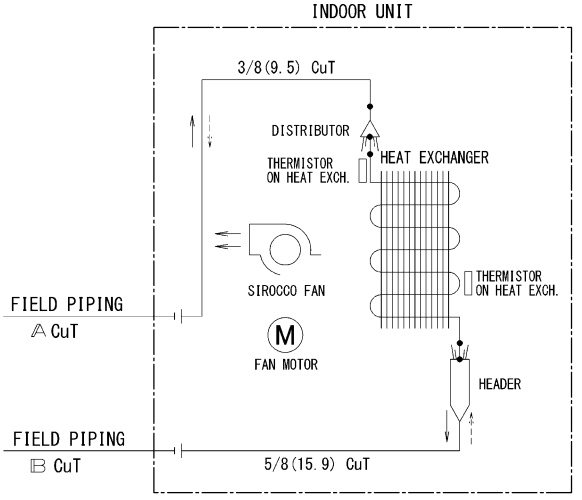



3D105962A

# 6. Piping Diagrams

## 6.1 Indoor Unit

**FDMQ09/12/15/18/24RVJU**

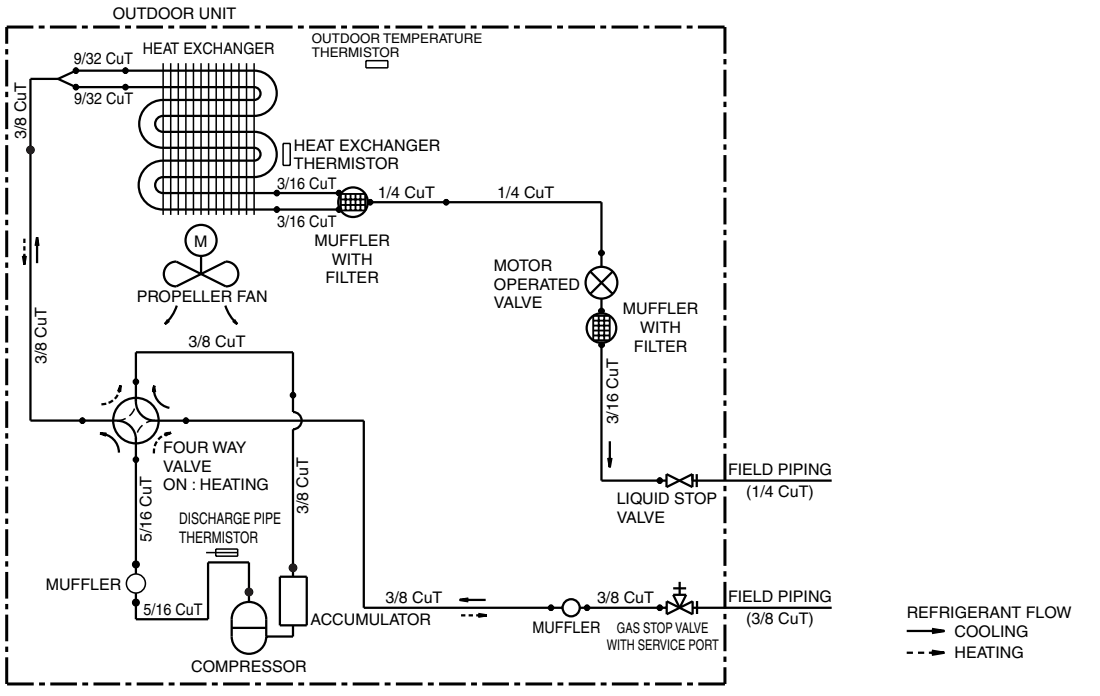



| MODEL | Ⓐ | Ⓑ |
|---|---|---|
| FDMQ09・12RVJU | 1/4(6.4) | 3/8(9.5) |
| FDMQ15・18RVJU | 1/4(6.4) | 1/2(12.7) |
| FDMQ24RVJU | 1/4(6.4) | 5/8(15.9) |

4D112974

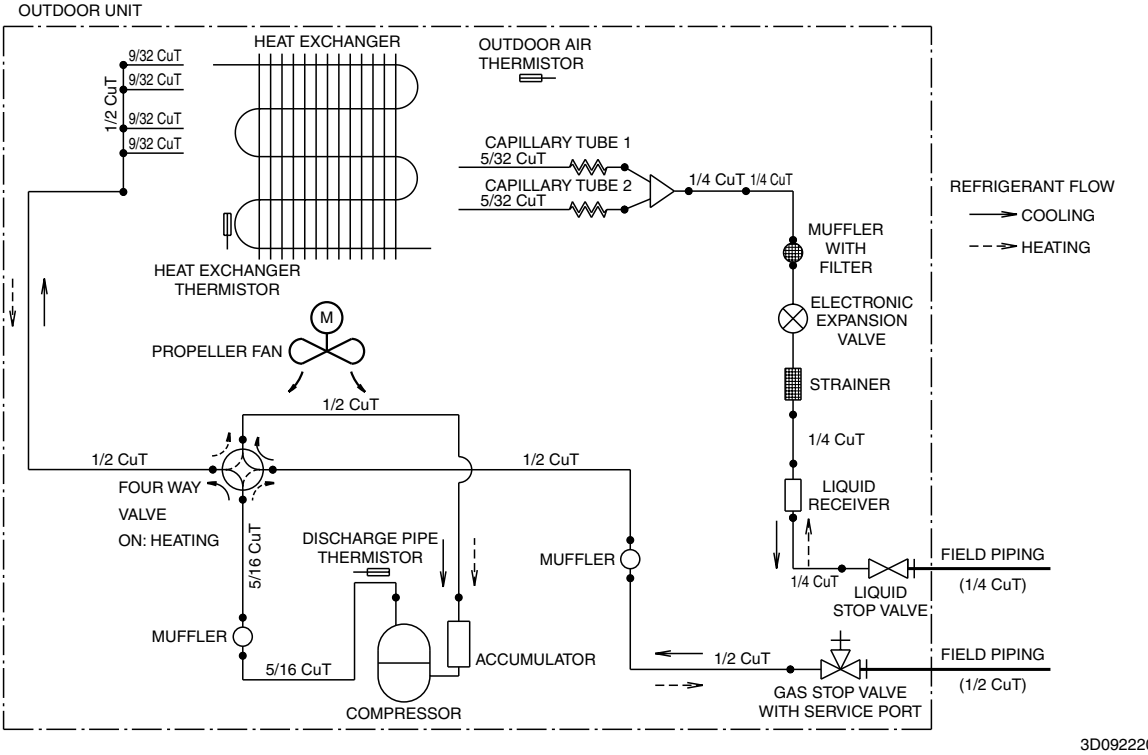
## 6.2 Outdoor Unit

**RX09/12RMVJU**



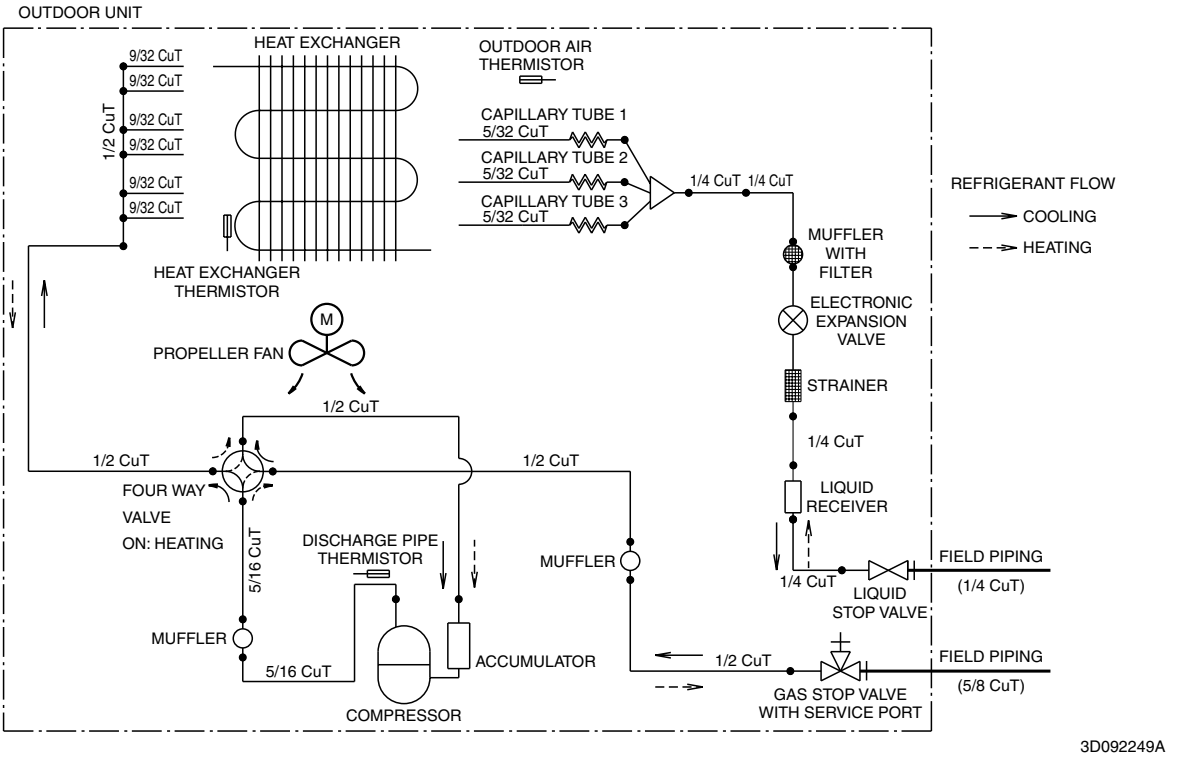

3D092207B

**RX15/18RMVJU**




3D092220B

**RX24RMVJU**


OUTDOOR UNIT
HEAT EXCHANGER
OUTDOOR AIR THERMISTOR
9/32 CuT
9/32 CuT
9/32 CuT
9/32 CuT
9/32 CuT
9/32 CuT
1/2 CuT
CAPILLARY TUBE 1
5/32 CuT
CAPILLARY TUBE 2
5/32 CuT
CAPILLARY TUBE 3
5/32 CuT
1/4 CuT 1/4 CuT
REFRIGERANT FLOW
COOLING
HEATING
MUFFLER WITH FILTER
ELECTRONIC EXPANSION VALVE
STRAINER
1/4 CuT
LIQUID RECEIVER
HEAT EXCHANGER THERMISTOR
M
PROPELLER FAN
1/2 CuT
1/2 CuT
1/2 CuT
FOUR WAY VALVE
ON: HEATING
5/16 CuT
DISCHARGE PIPE THERMISTOR
MUFFLER
1/4 CuT
FIELD PIPING
(1/4 CuT)
LIQUID STOP VALVE
MUFFLER
5/16 CuT
ACCUMULATOR
1/2 CuT
FIELD PIPING
(5/8 CuT)
GAS STOP VALVE WITH SERVICE PORT
COMPRESSOR
3D092249A

# 7. Capacity Tables

**FDMQ09RVJU + RX09RMVJU**

**60 Hz, 208 V**

**Cooling**

| AFR | 9.1 |
|---|---|
| BF | 0.11 |

Temp: Celsius
TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 2.95 | 2.27 | 0.50 | 2.70 | 2.15 | 0.62 | 2.46 | 2.03 | 0.74 | 2.33 | 1.98 | 0.80 | 2.21 | 1.92 | 0.86 | 2.06 | 1.85 | 0.93 |
| 16.0 | 22.0 | 3.07 | 2.23 | 0.51 | 2.82 | 2.11 | 0.63 | 2.58 | 2.00 | 0.75 | 2.46 | 1.95 | 0.81 | 2.33 | 1.90 | 0.87 | 2.19 | 1.83 | 0.94 |
| 18.0 | 25.0 | 3.19 | 2.34 | 0.51 | 2.95 | 2.24 | 0.63 | 2.70 | 2.13 | 0.75 | 2.58 | 2.08 | 0.81 | 2.45 | 2.03 | 0.87 | 2.31 | 1.98 | 0.94 |
| 19.4 | 26.7 | 3.25 | 2.48 | 0.51 | 3.01 | 2.38 | 0.63 | 2.76 | 2.28 | 0.75 | 2.64 | 2.23 | 0.81 | 2.51 | 2.18 | 0.87 | 2.37 | 2.13 | 0.94 |
| 22.0 | 30.0 | 3.43 | 2.39 | 0.52 | 3.19 | 2.30 | 0.64 | 2.94 | 2.21 | 0.76 | 2.82 | 2.17 | 0.82 | 2.70 | 2.13 | 0.88 | 2.55 | 2.08 | 0.95 |
| 24.0 | 32.0 | 3.56 | 2.33 | 0.58 | 3.31 | 2.25 | 0.64 | 3.06 | 2.17 | 0.76 | 2.94 | 2.13 | 0.82 | 2.82 | 2.09 | 0.88 | 2.67 | 2.05 | 0.95 |

Temp: Fahrenheit
TC, SHC: kBtu/h
PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 10.06 | 7.74 | 0.50 | 9.22 | 7.34 | 0.62 | 8.38 | 6.94 | 0.74 | 7.96 | 6.74 | 0.80 | 7.54 | 6.55 | 0.86 | 7.04 | 6.32 | 0.93 |
| 60.8 | 71.6 | 10.47 | 7.59 | 0.51 | 9.64 | 7.21 | 0.63 | 8.80 | 6.84 | 0.75 | 8.38 | 6.66 | 0.81 | 7.96 | 6.47 | 0.87 | 7.46 | 6.26 | 0.94 |
| 64.4 | 77.0 | 10.89 | 7.98 | 0.51 | 10.05 | 7.63 | 0.63 | 9.21 | 7.28 | 0.75 | 8.79 | 7.11 | 0.81 | 8.37 | 6.94 | 0.87 | 7.87 | 6.74 | 0.94 |
| 67.0 | 80.0 | 11.10 | 8.45 | 0.51 | 10.26 | 8.11 | 0.63 | 9.42 | 7.78 | 0.75 | 9.00 | 7.61 | 0.81 | 8.58 | 7.45 | 0.87 | 8.08 | 7.26 | 0.94 |
| 71.6 | 86.0 | 11.72 | 8.15 | 0.52 | 10.88 | 7.85 | 0.64 | 10.04 | 7.55 | 0.76 | 9.62 | 7.41 | 0.82 | 9.20 | 7.27 | 0.88 | 8.70 | 7.10 | 0.95 |
| 75.2 | 89.6 | 12.13 | 7.94 | 0.58 | 11.29 | 7.66 | 0.64 | 10.46 | 7.40 | 0.76 | 10.04 | 7.26 | 0.82 | 9.62 | 7.13 | 0.88 | 9.11 | 6.98 | 0.95 |

**Heating**

| AFR | 11.3 |
|---|---|

Temp: Celsius
TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 1.52 | 0.50 | 1.86 | 0.53 | 2.13 | 0.55 | 2.44 | 0.58 | 3.30 | 0.76 | 3.59 | 0.79 | 4.17 | 0.84 |
| 21.1 | 1.43 | 0.52 | 1.77 | 0.54 | 2.04 | 0.57 | 2.35 | 0.59 | 3.18 | 0.78 | 3.48 | 0.80 | 4.06 | 0.86 |
| 22.0 | 1.39 | 0.52 | 1.73 | 0.55 | 2.00 | 0.57 | 2.31 | 0.60 | 3.15 | 0.79 | 3.44 | 0.81 | 4.02 | 0.86 |
| 24.0 | 1.35 | 0.53 | 1.70 | 0.56 | 1.97 | 0.58 | 2.27 | 0.60 | 3.11 | 0.79 | 3.39 | 0.82 | 3.97 | 0.87 |
| 25.0 | 1.33 | 0.53 | 1.68 | 0.56 | 1.95 | 0.58 | 2.25 | 0.61 | 3.08 | 0.80 | 3.37 | 0.82 | 3.95 | 0.87 |
| 27.0 | 1.30 | 0.54 | 1.64 | 0.56 | 1.91 | 0.59 | 2.22 | 0.61 | 3.04 | 0.80 | 3.33 | 0.83 | 3.91 | 0.88 |

Temp: Fahrenheit
TC: kBtu/h
PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 5.19 | 0.50 | 6.36 | 0.53 | 7.28 | 0.55 | 8.33 | 0.58 | 11.28 | 0.76 | 12.26 | 0.79 | 14.23 | 0.84 |
| 70.0 | 4.87 | 0.52 | 6.04 | 0.54 | 6.96 | 0.57 | 8.01 | 0.59 | 10.90 | 0.78 | 11.88 | 0.80 | 13.85 | 0.86 |
| 71.6 | 4.74 | 0.52 | 5.91 | 0.55 | 6.84 | 0.57 | 7.88 | 0.60 | 10.75 | 0.79 | 11.73 | 0.81 | 13.70 | 0.86 |
| 75.2 | 4.62 | 0.53 | 5.79 | 0.56 | 6.71 | 0.58 | 7.75 | 0.60 | 10.60 | 0.79 | 11.58 | 0.82 | 13.55 | 0.87 |
| 77.0 | 4.55 | 0.53 | 5.72 | 0.56 | 6.64 | 0.58 | 7.69 | 0.61 | 10.52 | 0.80 | 11.51 | 0.82 | 13.48 | 0.87 |
| 80.6 | 4.42 | 0.54 | 5.60 | 0.56 | 6.52 | 0.59 | 7.56 | 0.61 | 10.37 | 0.80 | 11.36 | 0.83 | 13.33 | 0.88 |

**60 Hz, 230 V**

**Cooling**

| AFR | 9.1 |
|---|---|
| BF | 0.11 |

Temp: Celsius
TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 2.95 | 2.27 | 0.50 | 2.70 | 2.15 | 0.62 | 2.46 | 2.03 | 0.74 | 2.33 | 1.98 | 0.80 | 2.21 | 1.92 | 0.86 | 2.06 | 1.85 | 0.93 |
| 16.0 | 22.0 | 3.07 | 2.23 | 0.51 | 2.82 | 2.11 | 0.63 | 2.58 | 2.00 | 0.75 | 2.46 | 1.95 | 0.81 | 2.33 | 1.90 | 0.87 | 2.19 | 1.83 | 0.94 |
| 18.0 | 25.0 | 3.19 | 2.34 | 0.51 | 2.95 | 2.24 | 0.63 | 2.70 | 2.13 | 0.75 | 2.58 | 2.08 | 0.81 | 2.45 | 2.03 | 0.87 | 2.31 | 1.98 | 0.94 |
| 19.4 | 26.7 | 3.25 | 2.48 | 0.51 | 3.01 | 2.38 | 0.63 | 2.76 | 2.28 | 0.75 | 2.64 | 2.23 | 0.81 | 2.51 | 2.18 | 0.87 | 2.37 | 2.13 | 0.94 |
| 22.0 | 30.0 | 3.43 | 2.39 | 0.52 | 3.19 | 2.30 | 0.64 | 2.94 | 2.21 | 0.76 | 2.82 | 2.17 | 0.82 | 2.70 | 2.13 | 0.88 | 2.55 | 2.08 | 0.95 |
| 24.0 | 32.0 | 3.56 | 2.33 | 0.58 | 3.31 | 2.25 | 0.64 | 3.06 | 2.17 | 0.76 | 2.94 | 2.13 | 0.82 | 2.82 | 2.09 | 0.88 | 2.67 | 2.05 | 0.95 |

Temp: Fahrenheit
TC, SHC: kBtu/h
PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 10.06 | 7.74 | 0.50 | 9.22 | 7.34 | 0.62 | 8.38 | 6.94 | 0.74 | 7.96 | 6.74 | 0.80 | 7.54 | 6.55 | 0.86 | 7.04 | 6.32 | 0.93 |
| 60.8 | 71.6 | 10.47 | 7.59 | 0.51 | 9.64 | 7.21 | 0.63 | 8.80 | 6.84 | 0.75 | 8.38 | 6.66 | 0.81 | 7.96 | 6.47 | 0.87 | 7.46 | 6.26 | 0.94 |
| 64.4 | 77.0 | 10.89 | 7.98 | 0.51 | 10.05 | 7.63 | 0.63 | 9.21 | 7.28 | 0.75 | 8.79 | 7.11 | 0.81 | 8.37 | 6.94 | 0.87 | 7.87 | 6.74 | 0.94 |
| 67.0 | 80.0 | 11.10 | 8.45 | 0.51 | 10.26 | 8.11 | 0.63 | 9.42 | 7.78 | 0.75 | 9.00 | 7.61 | 0.81 | 8.58 | 7.45 | 0.87 | 8.08 | 7.26 | 0.94 |
| 71.6 | 86.0 | 11.72 | 8.15 | 0.52 | 10.88 | 7.85 | 0.64 | 10.04 | 7.55 | 0.76 | 9.62 | 7.41 | 0.82 | 9.20 | 7.27 | 0.88 | 8.70 | 7.10 | 0.95 |
| 75.2 | 89.6 | 12.13 | 7.94 | 0.58 | 11.29 | 7.66 | 0.64 | 10.46 | 7.40 | 0.76 | 10.04 | 7.26 | 0.82 | 9.62 | 7.13 | 0.88 | 9.11 | 6.98 | 0.95 |

**Heating**

| AFR | 11.3 |
|---|---|

Temp: Celsius
TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 1.52 | 0.50 | 1.83 | 0.53 | 2.13 | 0.55 | 2.44 | 0.58 | 3.30 | 0.76 | 3.59 | 0.79 | 4.17 | 0.84 |
| 21.1 | 1.43 | 0.52 | 1.73 | 0.54 | 2.04 | 0.57 | 2.35 | 0.59 | 3.18 | 0.78 | 3.48 | 0.80 | 4.06 | 0.86 |
| 22.0 | 1.39 | 0.52 | 1.70 | 0.55 | 2.00 | 0.57 | 2.31 | 0.60 | 3.15 | 0.79 | 3.44 | 0.81 | 4.02 | 0.86 |
| 24.0 | 1.35 | 0.53 | 1.66 | 0.55 | 1.97 | 0.58 | 2.27 | 0.60 | 3.11 | 0.79 | 3.39 | 0.82 | 3.97 | 0.87 |
| 25.0 | 1.33 | 0.53 | 1.64 | 0.56 | 1.95 | 0.58 | 2.25 | 0.61 | 3.08 | 0.80 | 3.37 | 0.82 | 3.95 | 0.87 |
| 27.0 | 1.30 | 0.54 | 1.60 | 0.56 | 1.91 | 0.59 | 2.22 | 0.61 | 3.04 | 0.80 | 3.33 | 0.83 | 3.91 | 0.88 |

Temp: Fahrenheit
TC: kBtu/h
PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 5.19 | 0.50 | 6.24 | 0.53 | 7.28 | 0.55 | 8.33 | 0.58 | 11.28 | 0.76 | 12.26 | 0.79 | 14.23 | 0.84 |
| 70.0 | 4.87 | 0.52 | 5.92 | 0.54 | 6.96 | 0.57 | 8.01 | 0.59 | 10.90 | 0.78 | 11.88 | 0.80 | 13.85 | 0.86 |
| 71.6 | 4.74 | 0.52 | 5.79 | 0.55 | 6.84 | 0.57 | 7.88 | 0.60 | 10.75 | 0.79 | 11.73 | 0.81 | 13.70 | 0.86 |
| 75.2 | 4.62 | 0.53 | 5.66 | 0.55 | 6.71 | 0.58 | 7.75 | 0.60 | 10.60 | 0.79 | 11.58 | 0.82 | 13.55 | 0.87 |
| 77.0 | 4.55 | 0.53 | 5.60 | 0.56 | 6.64 | 0.58 | 7.69 | 0.61 | 10.52 | 0.80 | 11.51 | 0.82 | 13.48 | 0.87 |
| 80.6 | 4.42 | 0.54 | 5.47 | 0.56 | 6.52 | 0.59 | 7.56 | 0.61 | 10.37 | 0.80 | 11.36 | 0.83 | 13.33 | 0.88 |

**Symbols:**

| | | |
|---|---|---|
| AFR | : Airflow rate | ($m^3$/min.) |
| BF | : Bypass factor | |
| EWB | : Entering wet bulb temp. | (°C) / (°F) |
| EDB | : Entering dry bulb temp. | (°C) / (°F) |
| TC | : Total capacity | (kW) / (kBtu/h) |
| SHC | : Sensible heat capacity | (kW) / (kBtu/h) |
| PI | : Power input | (kW) |

**Notes:**

1. shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
3. Capacities are based on the following conditions.
   Corresponding refrigerant piping length : 25 ft (7.6 m)
   Level difference : 0 ft (0 m)

C: 3D113019A

**FDMQ12RVJU + RX12RMVJU**

**60 Hz, 208 V**

**Cooling**

| | |
|---|---|
| AFR | 10.3 |
| BF | 0.15 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 3.54 | 2.63 | 0.58 | 3.24 | 2.48 | 0.71 | 2.95 | 2.34 | 0.85 | 2.80 | 2.26 | 0.92 | 2.65 | 2.19 | 0.99 | 2.48 | 2.11 | 1.07 |
| 16.0 | 22.0 | 3.68 | 2.57 | 0.58 | 3.39 | 2.44 | 0.72 | 3.09 | 2.30 | 0.86 | 2.95 | 2.24 | 0.92 | 2.80 | 2.17 | 0.99 | 2.62 | 2.09 | 1.08 |
| 18.0 | 25.0 | 3.83 | 2.69 | 0.58 | 3.53 | 2.56 | 0.72 | 3.24 | 2.44 | 0.86 | 3.09 | 2.38 | 0.93 | 2.94 | 2.32 | 1.00 | 2.77 | 2.24 | 1.08 |
| 19.4 | 26.7 | 3.90 | 2.84 | 0.59 | 3.61 | 2.71 | 0.72 | 3.31 | 2.59 | 0.86 | 3.18 | 2.53 | 0.93 | 3.02 | 2.47 | 1.00 | 2.84 | 2.40 | 1.08 |
| 22.0 | 30.0 | 4.12 | 2.73 | 0.59 | 3.83 | 2.62 | 0.73 | 3.53 | 2.51 | 0.87 | 3.38 | 2.46 | 0.94 | 3.24 | 2.41 | 1.01 | 3.06 | 2.35 | 1.09 |
| 24.0 | 32.0 | 4.27 | 2.65 | 0.67 | 3.97 | 2.55 | 0.73 | 3.68 | 2.46 | 0.87 | 3.53 | 2.41 | 0.94 | 3.38 | 2.36 | 1.01 | 3.21 | 2.31 | 1.09 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 12.07 | 8.96 | 0.58 | 11.06 | 8.46 | 0.71 | 10.06 | 7.97 | 0.85 | 9.56 | 7.73 | 0.92 | 9.05 | 7.49 | 0.99 | 8.45 | 7.21 | 1.07 |
| 60.8 | 71.6 | 12.57 | 8.78 | 0.58 | 11.56 | 8.31 | 0.72 | 10.56 | 7.85 | 0.86 | 10.05 | 7.63 | 0.92 | 9.55 | 7.40 | 0.99 | 8.95 | 7.14 | 1.08 |
| 64.4 | 77.0 | 13.07 | 9.18 | 0.58 | 12.06 | 8.74 | 0.72 | 11.05 | 8.32 | 0.86 | 10.55 | 8.11 | 0.93 | 10.05 | 7.90 | 1.00 | 9.44 | 7.65 | 1.08 |
| 67.0 | 80.0 | 13.31 | 9.68 | 0.59 | 12.31 | 9.26 | 0.72 | 11.30 | 8.84 | 0.86 | 10.80 | 8.64 | 0.93 | 10.30 | 8.44 | 1.00 | 9.69 | 8.21 | 1.08 |
| 71.6 | 86.0 | 14.06 | 9.31 | 0.59 | 13.06 | 8.94 | 0.73 | 12.05 | 8.58 | 0.87 | 11.55 | 8.40 | 0.94 | 11.04 | 8.22 | 1.01 | 10.44 | 8.01 | 1.09 |
| 75.2 | 89.6 | 14.56 | 9.05 | 0.67 | 13.55 | 8.72 | 0.73 | 12.55 | 8.38 | 0.87 | 12.04 | 8.22 | 0.94 | 11.54 | 8.06 | 1.01 | 10.94 | 7.87 | 1.09 |

**Heating**

| | |
|---|---|
| AFR | 12.7 |

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 1.90 | 0.69 | 2.28 | 0.73 | 2.66 | 0.76 | 3.05 | 0.80 | 4.12 | 1.05 | 4.48 | 1.09 | 5.20 | 1.16 |
| 21.1 | 1.78 | 0.71 | 2.16 | 0.75 | 2.55 | 0.78 | 2.93 | 0.82 | 3.99 | 1.08 | 4.35 | 1.11 | 5.07 | 1.18 |
| 22.0 | 1.73 | 0.72 | 2.12 | 0.76 | 2.50 | 0.79 | 2.88 | 0.83 | 3.93 | 1.09 | 4.29 | 1.12 | 5.01 | 1.19 |
| 24.0 | 1.69 | 0.73 | 2.07 | 0.76 | 2.45 | 0.80 | 2.84 | 0.83 | 3.88 | 1.10 | 4.24 | 1.13 | 4.96 | 1.20 |
| 25.0 | 1.66 | 0.73 | 2.05 | 0.77 | 2.43 | 0.80 | 2.81 | 0.84 | 3.85 | 1.10 | 4.21 | 1.14 | 4.93 | 1.21 |
| 27.0 | 1.62 | 0.74 | 2.00 | 0.78 | 2.38 | 0.81 | 2.77 | 0.85 | 3.79 | 1.11 | 4.15 | 1.15 | 4.87 | 1.22 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 6.48 | 0.69 | 7.78 | 0.73 | 9.09 | 0.76 | 10.39 | 0.80 | 14.07 | 1.05 | 15.30 | 1.09 | 17.76 | 1.16 |
| 70.0 | 6.08 | 0.71 | 7.38 | 0.75 | 8.69 | 0.78 | 9.99 | 0.82 | 13.60 | 1.08 | 14.83 | 1.11 | 17.29 | 1.18 |
| 71.6 | 5.92 | 0.72 | 7.22 | 0.76 | 8.53 | 0.79 | 9.83 | 0.83 | 13.41 | 1.09 | 14.64 | 1.12 | 17.10 | 1.19 |
| 75.2 | 5.76 | 0.73 | 7.06 | 0.76 | 8.37 | 0.80 | 9.67 | 0.83 | 13.22 | 1.10 | 14.45 | 1.13 | 16.91 | 1.20 |
| 77.0 | 5.68 | 0.73 | 6.98 | 0.77 | 8.29 | 0.80 | 9.59 | 0.84 | 13.13 | 1.10 | 14.36 | 1.14 | 16.82 | 1.21 |
| 80.6 | 5.52 | 0.74 | 6.82 | 0.78 | 8.13 | 0.81 | 9.43 | 0.85 | 12.94 | 1.11 | 14.17 | 1.15 | 16.63 | 1.22 |

**60 Hz, 230 V**

**Cooling**

| AFR | 10.3 |
|---|---|
| BF | 0.15 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 3.54 | 2.63 | 0.58 | 3.24 | 2.48 | 0.71 | 2.95 | 2.34 | 0.85 | 2.80 | 2.26 | 0.92 | 2.65 | 2.19 | 0.99 | 2.48 | 2.11 | 1.07 |
| 16.0 | 22.0 | 3.68 | 2.57 | 0.58 | 3.39 | 2.44 | 0.72 | 3.09 | 2.30 | 0.86 | 2.95 | 2.24 | 0.92 | 2.80 | 2.17 | 0.99 | 2.62 | 2.09 | 1.08 |
| 18.0 | 25.0 | 3.83 | 2.69 | 0.58 | 3.53 | 2.56 | 0.72 | 3.24 | 2.44 | 0.86 | 3.09 | 2.38 | 0.93 | 2.94 | 2.32 | 1.00 | 2.77 | 2.24 | 1.08 |
| 19.4 | 26.7 | 3.90 | 2.84 | 0.59 | 3.61 | 2.71 | 0.72 | 3.31 | 2.59 | 0.86 | 3.18 | 2.53 | 0.93 | 3.02 | 2.47 | 1.00 | 2.84 | 2.40 | 1.08 |
| 22.0 | 30.0 | 4.12 | 2.73 | 0.59 | 3.83 | 2.62 | 0.73 | 3.53 | 2.51 | 0.87 | 3.38 | 2.46 | 0.94 | 3.24 | 2.41 | 1.01 | 3.06 | 2.35 | 1.09 |
| 24.0 | 32.0 | 4.27 | 2.65 | 0.67 | 3.97 | 2.55 | 0.73 | 3.68 | 2.46 | 0.87 | 3.53 | 2.41 | 0.94 | 3.38 | 2.36 | 1.01 | 3.21 | 2.31 | 1.09 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 12.07 | 8.96 | 0.58 | 11.06 | 8.46 | 0.71 | 10.06 | 7.97 | 0.85 | 9.56 | 7.73 | 0.92 | 9.05 | 7.49 | 0.99 | 8.45 | 7.21 | 1.07 |
| 60.8 | 71.6 | 11.56 | 8.78 | 0.58 | 11.56 | 8.31 | 0.72 | 10.56 | 7.85 | 0.86 | 10.05 | 7.63 | 0.92 | 9.55 | 7.40 | 0.99 | 8.95 | 7.14 | 1.08 |
| 64.4 | 77.0 | 12.06 | 9.18 | 0.58 | 12.06 | 8.74 | 0.72 | 11.05 | 8.32 | 0.86 | 10.55 | 8.11 | 0.93 | 10.05 | 7.90 | 1.00 | 9.44 | 7.65 | 1.08 |
| 67.0 | 80.0 | 12.31 | 9.68 | 0.59 | 12.31 | 9.26 | 0.72 | 11.30 | 8.84 | 0.86 | 10.80 | 8.64 | 0.93 | 10.30 | 8.44 | 1.00 | 9.69 | 8.21 | 1.08 |
| 71.6 | 86.0 | 13.06 | 9.31 | 0.59 | 13.06 | 8.94 | 0.73 | 12.05 | 8.58 | 0.87 | 11.55 | 8.40 | 0.94 | 11.04 | 8.22 | 1.01 | 10.44 | 8.01 | 1.09 |
| 75.2 | 89.6 | 13.55 | 9.05 | 0.67 | 13.55 | 8.72 | 0.73 | 12.55 | 8.38 | 0.87 | 12.04 | 8.22 | 0.94 | 11.54 | 8.06 | 1.01 | 10.94 | 7.87 | 1.09 |

**Heating**

| AFR | 12.7 |
|---|---|

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 1.90 | 0.69 | 2.28 | 0.73 | 2.66 | 0.76 | 3.05 | 0.80 | 4.12 | 1.05 | 4.48 | 1.09 | 5.20 | 1.16 |
| 21.1 | 1.78 | 0.71 | 2.16 | 0.75 | 2.55 | 0.78 | 2.93 | 0.82 | 3.99 | 1.08 | 4.35 | 1.11 | 5.07 | 1.18 |
| 22.0 | 1.73 | 0.72 | 2.12 | 0.76 | 2.50 | 0.79 | 2.88 | 0.83 | 3.93 | 1.09 | 4.29 | 1.12 | 5.01 | 1.19 |
| 24.0 | 1.69 | 0.73 | 2.07 | 0.76 | 2.45 | 0.80 | 2.84 | 0.83 | 3.88 | 1.10 | 4.24 | 1.13 | 4.96 | 1.20 |
| 25.0 | 1.66 | 0.73 | 2.05 | 0.77 | 2.43 | 0.80 | 2.81 | 0.84 | 3.85 | 1.10 | 4.21 | 1.14 | 4.93 | 1.21 |
| 27.0 | 1.62 | 0.74 | 2.00 | 0.78 | 2.38 | 0.81 | 2.77 | 0.85 | 3.79 | 1.11 | 4.15 | 1.15 | 4.87 | 1.22 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 6.48 | 0.69 | 7.78 | 0.73 | 9.09 | 0.76 | 10.39 | 0.80 | 14.07 | 1.05 | 15.30 | 1.09 | 17.76 | 1.16 |
| 70.0 | 6.08 | 0.71 | 7.38 | 0.75 | 8.69 | 0.78 | 9.99 | 0.82 | 13.60 | 1.08 | 14.83 | 1.11 | 17.29 | 1.18 |
| 71.6 | 5.92 | 0.72 | 7.22 | 0.76 | 8.53 | 0.79 | 9.83 | 0.83 | 13.41 | 1.09 | 14.64 | 1.12 | 17.10 | 1.19 |
| 75.2 | 5.76 | 0.73 | 7.06 | 0.76 | 8.37 | 0.80 | 9.67 | 0.83 | 13.22 | 1.10 | 14.45 | 1.13 | 16.91 | 1.20 |
| 77.0 | 5.68 | 0.73 | 6.98 | 0.77 | 8.29 | 0.80 | 9.59 | 0.84 | 13.13 | 1.10 | 14.36 | 1.14 | 16.82 | 1.21 |
| 80.6 | 5.52 | 0.74 | 6.82 | 0.78 | 8.13 | 0.81 | 9.43 | 0.85 | 12.94 | 1.11 | 14.17 | 1.15 | 16.63 | 1.22 |

**Symbols:**

| | | |
|---|---|---|
| AFR | : Airflow rate | ($m^3$/min.) |
| BF | : Bypass factor | |
| EWB | : Entering wet bulb temp. | (°C) / (°F) |
| EDB | : Entering dry bulb temp. | (°C) / (°F) |
| TC | : Total capacity | (kW) / (kBtu/h) |
| SHC | : Sensible heat capacity | (kW) / (kBtu/h) |
| PI | : Power input | (kW) |

**Notes:**

1. shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
3. Capacities are based on the following conditions.
   Corresponding refrigerant piping length : 25 ft (7.6 m)
   Level difference : 0 ft (0 m)

C: 3D113020A

**FDMQ15RVJU + RX15RMVJU**

**60 Hz, 208 V**

**Cooling**

| AFR | 13.1 |
|---|---|
| BF | 0.08 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 4.72 | 3.53 | 0.70 | 4.32 | 3.34 | 0.87 | 3.93 | 3.15 | 1.04 | 3.73 | 3.06 | 1.12 | 3.54 | 2.96 | 1.21 | 3.30 | 2.85 | 1.31 |
| 16.0 | 22.0 | 4.91 | 3.46 | 0.71 | 4.52 | 3.28 | 0.87 | 4.13 | 3.10 | 1.04 | 3.93 | 3.02 | 1.13 | 3.73 | 2.93 | 1.21 | 3.50 | 2.83 | 1.31 |
| 18.0 | 25.0 | 5.11 | 3.63 | 0.71 | 4.71 | 3.46 | 0.88 | 4.32 | 3.29 | 1.05 | 4.12 | 3.21 | 1.13 | 3.93 | 3.13 | 1.22 | 3.69 | 3.03 | 1.32 |
| 19.4 | 26.7 | 5.20 | 3.83 | 0.71 | 4.81 | 3.66 | 0.88 | 4.42 | 3.50 | 1.05 | 4.23 | 3.43 | 1.13 | 4.02 | 3.35 | 1.22 | 3.79 | 3.26 | 1.32 |
| 22.0 | 30.0 | 5.49 | 3.68 | 0.72 | 5.10 | 3.54 | 0.89 | 4.71 | 3.40 | 1.06 | 4.51 | 3.33 | 1.14 | 4.32 | 3.26 | 1.23 | 4.08 | 3.18 | 1.33 |
| 24.0 | 32.0 | 5.69 | 3.59 | 0.81 | 5.30 | 3.45 | 0.89 | 4.90 | 3.33 | 1.06 | 4.71 | 3.26 | 1.15 | 4.51 | 3.20 | 1.23 | 4.27 | 3.13 | 1.33 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 16.09 | 12.06 | 0.70 | 14.75 | 11.39 | 0.87 | 13.41 | 10.74 | 1.04 | 12.74 | 10.43 | 1.12 | 12.07 | 10.11 | 1.21 | 11.27 | 9.74 | 1.31 |
| 60.8 | 71.6 | 16.76 | 11.82 | 0.71 | 15.42 | 11.20 | 0.87 | 14.08 | 10.59 | 1.04 | 13.40 | 10.29 | 1.13 | 12.73 | 10.00 | 1.21 | 11.93 | 9.65 | 1.31 |
| 64.4 | 77.0 | 17.42 | 12.38 | 0.71 | 16.08 | 11.80 | 0.88 | 14.74 | 11.23 | 1.05 | 14.07 | 10.95 | 1.13 | 13.40 | 10.68 | 1.22 | 12.59 | 10.35 | 1.32 |
| 67.0 | 80.0 | 17.75 | 13.06 | 0.71 | 16.41 | 12.50 | 0.88 | 15.07 | 11.96 | 1.05 | 14.40 | 11.69 | 1.13 | 13.73 | 11.43 | 1.22 | 12.92 | 11.11 | 1.32 |
| 71.6 | 86.0 | 18.75 | 12.57 | 0.72 | 17.41 | 12.08 | 0.89 | 16.07 | 11.60 | 1.06 | 15.40 | 11.36 | 1.14 | 14.72 | 11.13 | 1.23 | 13.92 | 10.85 | 1.33 |
| 75.2 | 89.6 | 19.41 | 12.23 | 0.81 | 18.07 | 11.78 | 0.89 | 16.73 | 11.35 | 1.06 | 16.06 | 11.13 | 1.15 | 15.39 | 10.92 | 1.23 | 14.58 | 10.67 | 1.33 |

**Heating**

| AFR | 16.6 |
|---|---|

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 2.51 | 0.89 | 3.02 | 0.94 | 3.53 | 0.98 | 4.03 | 1.03 | 5.46 | 1.36 | 5.93 | 1.40 | 6.89 | 1.49 |
| 21.1 | 2.36 | 0.92 | 2.86 | 0.96 | 3.37 | 1.01 | 3.88 | 1.06 | 5.28 | 1.39 | 5.75 | 1.43 | 6.66 | 1.51 |
| 22.0 | 2.30 | 0.93 | 2.80 | 0.97 | 3.31 | 1.02 | 3.81 | 1.07 | 5.20 | 1.40 | 5.68 | 1.45 | 6.56 | 1.51 |
| 24.0 | 2.23 | 0.94 | 2.74 | 0.98 | 3.25 | 1.03 | 3.75 | 1.08 | 5.13 | 1.41 | 5.61 | 1.46 | 6.46 | 1.51 |
| 25.0 | 2.20 | 0.94 | 2.71 | 0.99 | 3.22 | 1.04 | 3.72 | 1.08 | 5.09 | 1.42 | 5.57 | 1.47 | 6.41 | 1.51 |
| 27.0 | 2.14 | 0.95 | 2.65 | 1.00 | 3.15 | 1.05 | 3.66 | 1.09 | 5.02 | 1.43 | 5.50 | 1.48 | 6.31 | 1.51 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 8.57 | 0.89 | 10.30 | 0.94 | 12.03 | 0.98 | 13.75 | 1.03 | 18.62 | 1.36 | 20.25 | 1.40 | 23.50 | 1.49 |
| 70.0 | 8.04 | 0.92 | 9.77 | 0.96 | 11.50 | 1.01 | 13.23 | 1.06 | 18.00 | 1.39 | 19.63 | 1.43 | 22.73 | 1.51 |
| 71.6 | 7.83 | 0.93 | 9.56 | 0.97 | 11.29 | 1.02 | 13.02 | 1.07 | 17.75 | 1.40 | 19.38 | 1.45 | 22.38 | 1.51 |
| 75.2 | 7.62 | 0.94 | 9.35 | 0.98 | 11.08 | 1.03 | 12.80 | 1.08 | 17.50 | 1.41 | 19.13 | 1.46 | 22.03 | 1.51 |
| 77.0 | 7.52 | 0.94 | 9.24 | 0.99 | 10.97 | 1.04 | 12.70 | 1.08 | 17.38 | 1.42 | 19.00 | 1.47 | 21.85 | 1.51 |
| 80.6 | 7.30 | 0.95 | 9.03 | 1.00 | 10.76 | 1.05 | 12.49 | 1.09 | 17.13 | 1.43 | 18.76 | 1.48 | 21.51 | 1.51 |

**60 Hz, 230 V**

**Cooling**

| AFR | 13.1 |
|---|---|
| BF | 0.08 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 4.72 | 3.53 | 0.70 | 4.32 | 3.34 | 0.87 | 3.93 | 3.15 | 1.04 | 3.73 | 3.06 | 1.12 | 3.54 | 2.96 | 1.21 | 3.30 | 2.85 | 1.31 |
| 16.0 | 22.0 | 4.91 | 3.46 | 0.71 | 4.52 | 3.28 | 0.87 | 4.13 | 3.10 | 1.04 | 3.93 | 3.02 | 1.13 | 3.73 | 2.93 | 1.21 | 3.50 | 2.83 | 1.31 |
| 18.0 | 25.0 | 5.11 | 3.63 | 0.71 | 4.71 | 3.46 | 0.88 | 4.32 | 3.29 | 1.05 | 4.12 | 3.21 | 1.13 | 3.93 | 3.13 | 1.22 | 3.69 | 3.03 | 1.32 |
| 19.4 | 26.7 | 5.20 | 3.83 | 0.71 | 4.81 | 3.66 | 0.88 | 4.42 | 3.50 | 1.05 | 4.23 | 3.43 | 1.13 | 4.02 | 3.35 | 1.22 | 3.79 | 3.26 | 1.32 |
| 22.0 | 30.0 | 5.49 | 3.68 | 0.72 | 5.10 | 3.54 | 0.89 | 4.71 | 3.40 | 1.06 | 4.51 | 3.33 | 1.14 | 4.32 | 3.26 | 1.23 | 4.08 | 3.18 | 1.33 |
| 24.0 | 32.0 | 5.69 | 3.59 | 0.81 | 5.30 | 3.45 | 0.89 | 4.90 | 3.33 | 1.06 | 4.71 | 3.26 | 1.15 | 4.51 | 3.20 | 1.23 | 4.27 | 3.13 | 1.33 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 16.09 | 12.06 | 0.70 | 14.75 | 11.39 | 0.87 | 13.41 | 10.74 | 1.04 | 12.74 | 10.43 | 1.12 | 12.07 | 10.11 | 1.21 | 11.27 | 9.74 | 1.31 |
| 60.8 | 71.6 | 16.76 | 11.82 | 0.71 | 15.42 | 11.20 | 0.87 | 14.08 | 10.59 | 1.04 | 13.40 | 10.29 | 1.13 | 12.73 | 10.00 | 1.21 | 11.93 | 9.65 | 1.31 |
| 64.4 | 77.0 | 17.42 | 12.38 | 0.71 | 16.08 | 11.80 | 0.88 | 14.74 | 11.23 | 1.05 | 14.07 | 10.95 | 1.13 | 13.40 | 10.68 | 1.22 | 12.59 | 10.35 | 1.32 |
| 67.0 | 80.0 | 17.75 | 13.06 | 0.71 | 16.41 | 12.50 | 0.88 | 15.07 | 11.96 | 1.05 | 14.40 | 11.69 | 1.13 | 13.73 | 11.43 | 1.22 | 12.92 | 11.11 | 1.32 |
| 71.6 | 86.0 | 18.75 | 12.57 | 0.72 | 17.41 | 12.08 | 0.89 | 16.07 | 11.60 | 1.06 | 15.40 | 11.36 | 1.14 | 14.72 | 11.13 | 1.23 | 13.92 | 10.85 | 1.33 |
| 75.2 | 89.6 | 19.41 | 12.23 | 0.81 | 18.07 | 11.78 | 0.89 | 16.73 | 11.35 | 1.06 | 16.06 | 11.13 | 1.15 | 15.39 | 10.92 | 1.23 | 14.58 | 10.67 | 1.33 |

**Heating**

| AFR | 16.6 |
|---|---|

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 2.51 | 0.89 | 3.02 | 0.94 | 3.53 | 0.98 | 4.03 | 1.03 | 5.46 | 1.36 | 5.93 | 1.40 | 6.89 | 1.49 |
| 21.1 | 2.36 | 0.92 | 2.86 | 0.96 | 3.37 | 1.01 | 3.88 | 1.06 | 5.28 | 1.39 | 5.75 | 1.43 | 6.71 | 1.53 |
| 22.0 | 2.30 | 0.93 | 2.80 | 0.97 | 3.31 | 1.02 | 3.81 | 1.07 | 5.20 | 1.40 | 5.68 | 1.45 | 6.63 | 1.54 |
| 24.0 | 2.23 | 0.94 | 2.74 | 0.98 | 3.25 | 1.03 | 3.75 | 1.08 | 5.13 | 1.41 | 5.61 | 1.46 | 6.56 | 1.55 |
| 25.0 | 2.20 | 0.94 | 2.71 | 0.99 | 3.22 | 1.04 | 3.72 | 1.08 | 5.09 | 1.42 | 5.57 | 1.47 | 6.52 | 1.56 |
| 27.0 | 2.14 | 0.95 | 2.65 | 1.00 | 3.15 | 1.05 | 3.66 | 1.09 | 5.02 | 1.43 | 5.50 | 1.48 | 6.45 | 1.57 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 8.57 | 0.89 | 10.30 | 0.94 | 12.03 | 0.98 | 13.75 | 1.03 | 18.62 | 1.36 | 20.25 | 1.40 | 23.50 | 1.49 |
| 70.0 | 8.04 | 0.92 | 9.77 | 0.96 | 11.50 | 1.01 | 13.23 | 1.06 | 18.00 | 1.39 | 19.63 | 1.43 | 22.88 | 1.53 |
| 71.6 | 7.83 | 0.93 | 9.56 | 0.97 | 11.29 | 1.02 | 13.02 | 1.07 | 17.75 | 1.40 | 19.38 | 1.45 | 22.63 | 1.54 |
| 75.2 | 7.62 | 0.94 | 9.35 | 0.98 | 11.08 | 1.03 | 12.80 | 1.08 | 17.50 | 1.41 | 19.13 | 1.46 | 22.38 | 1.55 |
| 77.0 | 7.52 | 0.94 | 9.24 | 0.99 | 10.97 | 1.04 | 12.70 | 1.08 | 17.38 | 1.42 | 19.00 | 1.47 | 22.26 | 1.56 |
| 80.6 | 7.30 | 0.95 | 9.03 | 1.00 | 10.76 | 1.05 | 12.49 | 1.09 | 17.13 | 1.43 | 18.76 | 1.48 | 22.01 | 1.57 |

**Symbols:**

| | | |
|---|---|---|
| AFR | : Airflow rate | ($m^3$/min.) |
| BF | : Bypass factor | |
| EWB | : Entering wet bulb temp. | (°C) / (°F) |
| EDB | : Entering dry bulb temp. | (°C) / (°F) |
| TC | : Total capacity | (kW) / (kBtu/h) |
| SHC | : Sensible heat capacity | (kW) / (kBtu/h) |
| PI | : Power input | (kW) |

**Notes:**

1. shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
3. Capacities are based on the following conditions.
   Corresponding refrigerant piping length : 25 ft (7.6 m)
   Level difference : 0 ft (0 m)

C: 3D113021A

**FDMQ18RVJU + RX18RMVJU**

**60 Hz, 208 V**

**Cooling**

| | |
|---|---|
| AFR | 18.0 |
| BF | 0.11 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 5.77 | 4.45 | 0.87 | 5.28 | 4.21 | 1.08 | 4.80 | 3.99 | 1.29 | 4.56 | 3.87 | 1.39 | 4.32 | 3.76 | 1.50 | 3.30 | 3.30 | 1.40 |
| 16.0 | 22.0 | 6.00 | 4.36 | 0.88 | 5.52 | 4.14 | 1.09 | 5.04 | 3.93 | 1.29 | 4.80 | 3.82 | 1.40 | 4.56 | 3.72 | 1.50 | 3.52 | 3.28 | 1.40 |
| 18.0 | 25.0 | 6.24 | 4.58 | 0.88 | 5.76 | 4.38 | 1.09 | 5.28 | 4.18 | 1.30 | 5.04 | 4.09 | 1.40 | 4.80 | 3.99 | 1.51 | 3.73 | 3.57 | 1.40 |
| 19.4 | 26.7 | 6.36 | 4.86 | 0.89 | 5.88 | 4.66 | 1.10 | 5.40 | 4.47 | 1.30 | 5.16 | 4.38 | 1.41 | 4.92 | 4.28 | 1.51 | 3.84 | 3.88 | 1.40 |
| 22.0 | 30.0 | 6.72 | 4.68 | 0.90 | 6.24 | 4.51 | 1.11 | 5.75 | 4.34 | 1.31 | 5.51 | 4.26 | 1.42 | 5.27 | 4.18 | 1.52 | 4.17 | 3.81 | 1.40 |
| 24.0 | 32.0 | 6.95 | 4.56 | 1.01 | 6.47 | 4.40 | 1.11 | 5.99 | 4.25 | 1.32 | 5.75 | 4.18 | 1.42 | 5.51 | 4.10 | 1.53 | 4.38 | 3.76 | 1.40 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 19.67 | 15.17 | 0.87 | 18.03 | 14.38 | 1.08 | 16.39 | 13.60 | 1.29 | 15.57 | 13.22 | 1.39 | 14.75 | 12.84 | 1.50 | 11.25 | 11.26 | 1.40 |
| 60.8 | 71.6 | 20.48 | 14.88 | 0.88 | 18.84 | 14.13 | 1.09 | 17.20 | 13.41 | 1.29 | 16.38 | 13.05 | 1.40 | 15.56 | 12.69 | 1.50 | 11.99 | 11.19 | 1.40 |
| 64.4 | 77.0 | 21.29 | 15.64 | 0.88 | 19.65 | 14.95 | 1.09 | 18.01 | 14.28 | 1.30 | 17.19 | 13.94 | 1.40 | 16.38 | 13.61 | 1.51 | 12.73 | 12.19 | 1.40 |
| 67.0 | 80.0 | 21.70 | 16.57 | 0.89 | 20.06 | 15.90 | 1.10 | 18.42 | 15.25 | 1.30 | 17.60 | 14.93 | 1.41 | 16.78 | 14.61 | 1.51 | 13.11 | 13.23 | 1.40 |
| 71.6 | 86.0 | 22.91 | 15.97 | 0.90 | 21.27 | 15.39 | 1.11 | 19.64 | 14.81 | 1.31 | 18.82 | 14.53 | 1.42 | 18.00 | 14.25 | 1.52 | 14.22 | 13.00 | 1.40 |
| 75.2 | 89.6 | 23.72 | 15.56 | 1.01 | 22.09 | 15.03 | 1.11 | 20.45 | 14.51 | 1.32 | 19.63 | 14.25 | 1.42 | 18.81 | 13.99 | 1.53 | 14.96 | 12.83 | 1.40 |

**Heating**

| | |
|---|---|
| AFR | 21.6 |

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 3.01 | 1.07 | 3.62 | 1.13 | 4.23 | 1.18 | 4.84 | 1.24 | 6.55 | 1.63 | 7.12 | 1.68 | 8.26 | 1.79 |
| 21.1 | 2.83 | 1.10 | 3.44 | 1.16 | 4.04 | 1.21 | 4.65 | 1.27 | 6.33 | 1.67 | 6.90 | 1.72 | 8.05 | 1.83 |
| 22.0 | 2.75 | 1.11 | 3.36 | 1.17 | 3.97 | 1.22 | 4.58 | 1.28 | 6.24 | 1.68 | 6.82 | 1.74 | 7.96 | 1.85 |
| 24.0 | 2.68 | 1.13 | 3.29 | 1.18 | 3.90 | 1.24 | 4.50 | 1.29 | 6.16 | 1.70 | 6.73 | 1.75 | 7.87 | 1.86 |
| 25.0 | 2.64 | 1.13 | 3.25 | 1.19 | 3.86 | 1.24 | 4.47 | 1.30 | 6.11 | 1.70 | 6.68 | 1.76 | 7.83 | 1.87 |
| 27.0 | 2.57 | 1.14 | 3.18 | 1.20 | 3.78 | 1.25 | 4.39 | 1.31 | 6.02 | 1.72 | 6.60 | 1.77 | 7.74 | 1.88 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 10.29 | 1.07 | 12.36 | 1.13 | 14.43 | 1.18 | 16.51 | 1.24 | 22.35 | 1.63 | 24.30 | 1.68 | 28.20 | 1.79 |
| 70.0 | 9.65 | 1.10 | 11.73 | 1.16 | 13.80 | 1.21 | 15.87 | 1.27 | 21.60 | 1.67 | 23.55 | 1.72 | 27.45 | 1.83 |
| 71.6 | 9.40 | 1.11 | 11.47 | 1.17 | 13.55 | 1.22 | 15.62 | 1.28 | 21.30 | 1.68 | 23.25 | 1.74 | 27.16 | 1.85 |
| 75.2 | 9.15 | 1.13 | 11.22 | 1.18 | 13.29 | 1.24 | 15.37 | 1.29 | 21.00 | 1.70 | 22.95 | 1.75 | 26.86 | 1.86 |
| 77.0 | 9.02 | 1.13 | 11.09 | 1.19 | 13.17 | 1.24 | 15.24 | 1.30 | 20.85 | 1.70 | 22.81 | 1.76 | 26.71 | 1.87 |
| 80.6 | 8.77 | 1.14 | 10.84 | 1.20 | 12.91 | 1.25 | 14.98 | 1.31 | 20.56 | 1.72 | 22.51 | 1.77 | 26.41 | 1.88 |

**60 Hz, 230 V**

**Cooling**

| AFR | 18.0 |
|---|---|
| BF | 0.11 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 5.77 | 4.45 | 0.87 | 5.28 | 4.21 | 1.08 | 4.80 | 3.99 | 1.29 | 4.56 | 3.87 | 1.39 | 4.32 | 3.76 | 1.50 | 3.79 | 3.52 | 1.55 |
| 16.0 | 22.0 | 6.00 | 4.36 | 0.88 | 5.52 | 4.14 | 1.09 | 5.04 | 3.93 | 1.29 | 4.80 | 3.82 | 1.40 | 4.56 | 3.72 | 1.50 | 4.00 | 3.48 | 1.55 |
| 18.0 | 25.0 | 6.24 | 4.58 | 0.88 | 5.76 | 4.38 | 1.09 | 5.28 | 4.18 | 1.30 | 5.04 | 4.09 | 1.40 | 4.80 | 3.99 | 1.51 | 4.22 | 3.76 | 1.55 |
| 19.4 | 26.7 | 6.36 | 4.86 | 0.89 | 5.88 | 4.66 | 1.10 | 5.40 | 4.47 | 1.30 | 5.16 | 4.38 | 1.41 | 4.92 | 4.28 | 1.51 | 4.33 | 4.06 | 1.55 |
| 22.0 | 30.0 | 6.72 | 4.68 | 0.90 | 6.24 | 4.51 | 1.11 | 5.75 | 4.34 | 1.31 | 5.51 | 4.26 | 1.42 | 5.27 | 4.18 | 1.52 | 4.65 | 3.97 | 1.55 |
| 24.0 | 32.0 | 6.95 | 4.56 | 1.01 | 6.47 | 4.40 | 1.11 | 5.99 | 4.25 | 1.32 | 5.75 | 4.18 | 1.42 | 5.51 | 4.10 | 1.53 | 4.87 | 3.90 | 1.55 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 19.67 | 15.17 | 0.87 | 18.03 | 14.38 | 1.08 | 16.39 | 13.60 | 1.29 | 15.57 | 13.22 | 1.39 | 14.75 | 12.84 | 1.50 | 12.92 | 12.00 | 1.55 |
| 60.8 | 71.6 | 20.48 | 14.88 | 0.88 | 18.84 | 14.13 | 1.09 | 17.20 | 13.41 | 1.29 | 16.38 | 13.05 | 1.40 | 15.56 | 12.69 | 1.50 | 13.66 | 11.88 | 1.55 |
| 64.4 | 77.0 | 21.29 | 15.64 | 0.88 | 19.65 | 14.95 | 1.09 | 18.01 | 14.28 | 1.30 | 17.19 | 13.94 | 1.40 | 16.38 | 13.61 | 1.51 | 14.40 | 12.83 | 1.55 |
| 67.0 | 80.0 | 21.70 | 16.57 | 0.89 | 20.06 | 15.90 | 1.10 | 18.42 | 15.25 | 1.30 | 17.60 | 14.93 | 1.41 | 16.78 | 14.61 | 1.51 | 14.77 | 13.85 | 1.55 |
| 71.6 | 86.0 | 22.91 | 15.97 | 0.90 | 21.27 | 15.39 | 1.11 | 19.64 | 14.81 | 1.31 | 18.82 | 14.53 | 1.42 | 18.00 | 14.25 | 1.52 | 15.88 | 13.54 | 1.55 |
| 75.2 | 89.6 | 23.72 | 15.56 | 1.01 | 22.09 | 15.03 | 1.11 | 20.45 | 14.51 | 1.32 | 19.63 | 14.25 | 1.42 | 18.81 | 13.99 | 1.53 | 16.62 | 13.32 | 1.55 |

**Heating**

| AFR | 21.6 |
|---|---|

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 3.01 | 1.07 | 3.62 | 1.13 | 4.23 | 1.18 | 4.84 | 1.24 | 6.55 | 1.63 | 7.12 | 1.68 | 8.26 | 1.79 |
| 21.1 | 2.83 | 1.10 | 3.44 | 1.16 | 4.04 | 1.21 | 4.65 | 1.27 | 6.33 | 1.67 | 6.90 | 1.72 | 8.05 | 1.83 |
| 22.0 | 2.75 | 1.11 | 3.36 | 1.17 | 3.97 | 1.22 | 4.58 | 1.28 | 6.24 | 1.68 | 6.82 | 1.74 | 7.96 | 1.85 |
| 24.0 | 2.68 | 1.13 | 3.29 | 1.18 | 3.90 | 1.24 | 4.50 | 1.29 | 6.16 | 1.70 | 6.73 | 1.75 | 7.87 | 1.86 |
| 25.0 | 2.64 | 1.13 | 3.25 | 1.19 | 3.86 | 1.24 | 4.47 | 1.30 | 6.11 | 1.70 | 6.68 | 1.76 | 7.83 | 1.87 |
| 27.0 | 2.57 | 1.14 | 3.18 | 1.20 | 3.78 | 1.25 | 4.39 | 1.31 | 6.02 | 1.72 | 6.60 | 1.77 | 7.74 | 1.88 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 10.29 | 1.07 | 12.36 | 1.13 | 14.43 | 1.18 | 16.51 | 1.24 | 22.35 | 1.63 | 24.30 | 1.68 | 28.20 | 1.79 |
| 70.0 | 9.65 | 1.10 | 11.73 | 1.16 | 13.80 | 1.21 | 15.87 | 1.27 | 21.60 | 1.67 | 23.55 | 1.72 | 27.45 | 1.83 |
| 71.6 | 9.40 | 1.11 | 11.47 | 1.17 | 13.55 | 1.22 | 15.62 | 1.28 | 21.30 | 1.68 | 23.25 | 1.74 | 27.16 | 1.85 |
| 75.2 | 9.15 | 1.13 | 11.22 | 1.18 | 13.29 | 1.24 | 15.37 | 1.29 | 21.00 | 1.70 | 22.95 | 1.75 | 26.86 | 1.86 |
| 77.0 | 9.02 | 1.13 | 11.09 | 1.19 | 13.17 | 1.24 | 15.24 | 1.30 | 20.85 | 1.70 | 22.81 | 1.76 | 26.71 | 1.87 |
| 80.6 | 8.77 | 1.14 | 10.84 | 1.20 | 12.91 | 1.25 | 14.98 | 1.31 | 20.56 | 1.72 | 22.51 | 1.77 | 26.41 | 1.88 |

**Symbols:**

| | | |
|---|---|---|
| AFR | : Airflow rate | ($m^3$/min.) |
| BF | : Bypass factor | |
| EWB | : Entering wet bulb temp. | (°C) / (°F) |
| EDB | : Entering dry bulb temp. | (°C) / (°F) |
| TC | : Total capacity | (kW) / (kBtu/h) |
| SHC | : Sensible heat capacity | (kW) / (kBtu/h) |
| PI | : Power input | (kW) |

**Notes:**

1. shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
3. Capacities are based on the following conditions.
   Corresponding refrigerant piping length : 25 ft (7.6 m)
   Level difference : 0 ft (0 m)

C: 3D113022A

**FDMQ24RVJU + RX24RMVJU**

**60 Hz, 208 V**

**Cooling**

| | |
|---|---|
| AFR | 19.92 |
| BF | 0.16 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 7.14 | 5.21 | 1.08 | 6.55 | 4.91 | 1.34 | 5.95 | 4.61 | 1.60 | 5.65 | 4.47 | 1.72 | 5.36 | 4.33 | 1.85 | 4.36 | 3.86 | 1.82 |
| 16.0 | 22.0 | 7.44 | 5.11 | 1.09 | 6.84 | 4.82 | 1.35 | 6.25 | 4.55 | 1.60 | 5.95 | 4.41 | 1.73 | 5.65 | 4.28 | 1.86 | 4.63 | 3.83 | 1.82 |
| 18.0 | 25.0 | 7.73 | 5.32 | 1.10 | 7.13 | 5.06 | 1.35 | 6.54 | 4.80 | 1.61 | 6.24 | 4.68 | 1.74 | 5.94 | 4.55 | 1.87 | 4.90 | 4.13 | 1.82 |
| 19.4 | 26.7 | 7.88 | 5.60 | 1.10 | 7.28 | 5.34 | 1.36 | 6.69 | 5.10 | 1.62 | 6.39 | 4.98 | 1.74 | 6.09 | 4.86 | 1.87 | 5.04 | 4.44 | 1.82 |
| 22.0 | 30.0 | 8.32 | 5.38 | 1.11 | 7.72 | 5.16 | 1.37 | 7.13 | 4.94 | 1.63 | 6.83 | 4.83 | 1.76 | 6.53 | 4.72 | 1.88 | 5.44 | 4.35 | 1.82 |
| 24.0 | 32.0 | 8.61 | 5.23 | 1.12 | 8.02 | 5.02 | 1.38 | 7.42 | 4.82 | 1.63 | 7.13 | 4.73 | 1.76 | 6.83 | 4.63 | 1.89 | 5.71 | 4.28 | 1.82 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 24.36 | 17.78 | 1.08 | 22.33 | 16.75 | 1.34 | 20.30 | 15.75 | 1.60 | 19.29 | 15.25 | 1.72 | 18.27 | 14.77 | 1.85 | 14.89 | 13.19 | 1.82 |
| 60.8 | 71.6 | 25.37 | 17.42 | 1.09 | 23.34 | 16.46 | 1.35 | 21.31 | 15.52 | 1.60 | 20.29 | 15.05 | 1.73 | 19.28 | 14.60 | 1.86 | 15.81 | 13.08 | 1.82 |
| 64.4 | 77.0 | 26.37 | 18.16 | 1.10 | 24.34 | 17.27 | 1.35 | 22.31 | 16.39 | 1.61 | 21.30 | 15.96 | 1.74 | 20.28 | 15.54 | 1.87 | 16.72 | 14.09 | 1.82 |
| 67.0 | 80.0 | 26.88 | 19.10 | 1.10 | 24.85 | 18.23 | 1.36 | 22.82 | 17.39 | 1.62 | 21.80 | 16.98 | 1.74 | 20.78 | 16.57 | 1.87 | 17.18 | 15.16 | 1.82 |
| 71.6 | 86.0 | 28.38 | 18.36 | 1.11 | 26.35 | 17.59 | 1.37 | 24.32 | 16.85 | 1.63 | 23.31 | 16.48 | 1.76 | 22.29 | 16.12 | 1.88 | 18.56 | 14.83 | 1.82 |
| 75.2 | 89.6 | 29.39 | 17.83 | 1.12 | 27.36 | 17.14 | 1.38 | 25.33 | 16.46 | 1.63 | 24.31 | 16.12 | 1.76 | 23.30 | 15.79 | 1.89 | 19.48 | 14.59 | 1.82 |

**Heating**

| | |
|---|---|
| AFR | 25.6 |

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 3.35 | 1.19 | 4.02 | 1.25 | 4.70 | 1.31 | 5.38 | 1.37 | 7.28 | 1.81 | 7.91 | 1.87 | 9.18 | 1.99 |
| 21.1 | 3.14 | 1.22 | 3.82 | 1.29 | 4.49 | 1.35 | 5.17 | 1.41 | 7.02 | 1.85 | 7.67 | 1.91 | 8.94 | 2.03 |
| 22.0 | 3.06 | 1.24 | 3.74 | 1.30 | 4.41 | 1.36 | 5.09 | 1.42 | 6.94 | 1.87 | 7.57 | 1.93 | 8.84 | 2.05 |
| 24.0 | 2.98 | 1.25 | 3.65 | 1.31 | 4.33 | 1.37 | 5.00 | 1.43 | 6.84 | 1.88 | 7.48 | 1.95 | 8.75 | 2.07 |
| 25.0 | 2.94 | 1.26 | 3.61 | 1.32 | 4.29 | 1.38 | 4.96 | 1.44 | 6.79 | 1.89 | 7.43 | 1.95 | 8.70 | 2.08 |
| 27.0 | 2.85 | 1.27 | 3.53 | 1.33 | 4.20 | 1.39 | 4.88 | 1.45 | 6.69 | 1.91 | 7.33 | 1.97 | 8.60 | 2.09 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 11.43 | 1.19 | 13.73 | 1.25 | 16.04 | 1.31 | 18.34 | 1.37 | 24.83 | 1.81 | 27.00 | 1.87 | 31.33 | 1.99 |
| 70.0 | 10.73 | 1.22 | 13.03 | 1.29 | 15.33 | 1.35 | 17.64 | 1.41 | 24.00 | 1.85 | 26.17 | 1.91 | 30.50 | 2.03 |
| 71.6 | 10.44 | 1.24 | 12.75 | 1.30 | 15.05 | 1.36 | 17.35 | 1.42 | 23.67 | 1.87 | 25.84 | 1.93 | 30.17 | 2.05 |
| 75.2 | 10.16 | 1.25 | 12.47 | 1.31 | 14.77 | 1.37 | 17.07 | 1.43 | 23.34 | 1.88 | 25.51 | 1.95 | 29.84 | 2.07 |
| 77.0 | 10.02 | 1.26 | 12.32 | 1.32 | 14.63 | 1.38 | 16.93 | 1.44 | 23.17 | 1.89 | 25.34 | 1.95 | 29.68 | 2.08 |
| 80.6 | 9.74 | 1.27 | 12.04 | 1.33 | 14.35 | 1.39 | 16.65 | 1.45 | 22.84 | 1.91 | 25.01 | 1.97 | 29.34 | 2.09 |

**60 Hz, 230 V**

**Cooling**

| | |
|---|---|
| AFR | 19.92 |
| BF | 0.16 |

Temp: Celsius

TC, SHC, PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°CDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 10 | | | 20 | | | 30 | | | 35 | | | 40 | | | 46 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14.0 | 20.0 | 7.14 | 5.21 | 1.08 | 6.55 | 4.91 | 1.34 | 5.95 | 4.61 | 1.60 | 5.65 | 4.47 | 1.72 | 5.36 | 4.33 | 1.85 | 5.00 | 4.16 | 2.01 |
| 16.0 | 22.0 | 7.44 | 5.11 | 1.09 | 6.84 | 4.82 | 1.35 | 6.25 | 4.55 | 1.60 | 5.95 | 4.41 | 1.73 | 5.65 | 4.28 | 1.86 | 5.27 | 4.11 | 2.01 |
| 18.0 | 25.0 | 7.73 | 5.32 | 1.10 | 7.13 | 5.06 | 1.35 | 6.54 | 4.80 | 1.61 | 6.24 | 4.68 | 1.74 | 5.94 | 4.55 | 1.87 | 5.54 | 4.38 | 2.01 |
| 19.4 | 26.7 | 7.88 | 5.60 | 1.10 | 7.28 | 5.34 | 1.36 | 6.69 | 5.10 | 1.62 | 6.39 | 4.98 | 1.74 | 6.09 | 4.86 | 1.87 | 5.67 | 4.69 | 2.01 |
| 22.0 | 30.0 | 8.32 | 5.38 | 1.11 | 7.72 | 5.16 | 1.37 | 7.13 | 4.94 | 1.63 | 6.83 | 4.83 | 1.76 | 6.53 | 4.72 | 1.88 | 6.07 | 4.56 | 2.01 |
| 24.0 | 32.0 | 8.61 | 5.23 | 1.12 | 8.02 | 5.02 | 1.38 | 7.42 | 4.82 | 1.63 | 7.13 | 4.73 | 1.76 | 6.83 | 4.63 | 1.89 | 6.34 | 4.47 | 2.01 |

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

| INDOOR | | OUTDOOR TEMPERATURE (°FDB) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EWB | EDB | 50 | | | 68 | | | 86 | | | 95 | | | 104 | | | 115 | | |
| °F | °F | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 57.2 | 68.0 | 24.36 | 17.78 | 1.08 | 22.33 | 16.75 | 1.34 | 20.30 | 15.75 | 1.60 | 19.29 | 15.25 | 1.72 | 18.27 | 14.77 | 1.85 | 17.05 | 14.19 | 2.01 |
| 60.8 | 71.6 | 25.37 | 17.42 | 1.09 | 23.34 | 16.46 | 1.35 | 21.31 | 15.52 | 1.60 | 20.29 | 15.05 | 1.73 | 19.28 | 14.60 | 1.86 | 17.97 | 14.02 | 2.01 |
| 64.4 | 77.0 | 26.37 | 18.16 | 1.10 | 24.34 | 17.27 | 1.35 | 22.31 | 16.39 | 1.61 | 21.30 | 15.96 | 1.74 | 20.28 | 15.54 | 1.87 | 18.89 | 14.96 | 2.01 |
| 67.0 | 80.0 | 26.88 | 19.10 | 1.10 | 24.85 | 18.23 | 1.36 | 22.82 | 17.39 | 1.62 | 21.80 | 16.98 | 1.74 | 20.78 | 16.57 | 1.87 | 19.34 | 15.99 | 2.01 |
| 71.6 | 86.0 | 28.38 | 18.36 | 1.11 | 26.35 | 17.59 | 1.37 | 24.32 | 16.85 | 1.63 | 23.31 | 16.48 | 1.76 | 22.29 | 16.12 | 1.88 | 20.72 | 15.57 | 2.01 |
| 75.2 | 89.6 | 29.39 | 17.83 | 1.12 | 27.36 | 17.14 | 1.38 | 25.33 | 16.46 | 1.63 | 24.31 | 16.12 | 1.76 | 23.30 | 15.79 | 1.89 | 21.64 | 15.26 | 2.01 |

**Heating**

| | |
|---|---|
| AFR | 25.6 |

Temp: Celsius

TC, PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°CWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | –15 | | –10 | | –5 | | 0 | | 6 | | 10 | | 18 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15.0 | 3.35 | 1.19 | 4.02 | 1.25 | 4.70 | 1.31 | 5.38 | 1.37 | 7.28 | 1.81 | 7.91 | 1.87 | 9.18 | 1.99 |
| 21.1 | 3.14 | 1.22 | 3.82 | 1.29 | 4.49 | 1.35 | 5.17 | 1.41 | 7.02 | 1.85 | 7.67 | 1.91 | 8.94 | 2.03 |
| 22.0 | 3.06 | 1.24 | 3.74 | 1.30 | 4.41 | 1.36 | 5.09 | 1.42 | 6.94 | 1.87 | 7.57 | 1.93 | 8.84 | 2.05 |
| 24.0 | 2.98 | 1.25 | 3.65 | 1.31 | 4.33 | 1.37 | 5.00 | 1.43 | 6.84 | 1.88 | 7.48 | 1.95 | 8.75 | 2.07 |
| 25.0 | 2.94 | 1.26 | 3.61 | 1.32 | 4.29 | 1.38 | 4.96 | 1.44 | 6.79 | 1.89 | 7.43 | 1.95 | 8.70 | 2.08 |
| 27.0 | 2.85 | 1.27 | 3.53 | 1.33 | 4.20 | 1.39 | 4.88 | 1.45 | 6.69 | 1.91 | 7.33 | 1.97 | 8.60 | 2.09 |

Temp: Fahrenheit

TC: kBtu/h

PI: kW

| INDOOR | OUTDOOR TEMPERATURE (°FWB) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EDB | 5 | | 14 | | 23 | | 32 | | 43 | | 50 | | 64 | |
| °F | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 59.0 | 11.43 | 1.19 | 13.73 | 1.25 | 16.04 | 1.31 | 18.34 | 1.37 | 24.83 | 1.81 | 27.00 | 1.87 | 31.33 | 1.99 |
| 70.0 | 10.73 | 1.22 | 13.03 | 1.29 | 15.33 | 1.35 | 17.64 | 1.41 | 24.00 | 1.85 | 26.17 | 1.91 | 30.50 | 2.03 |
| 71.6 | 10.44 | 1.24 | 12.75 | 1.30 | 15.05 | 1.36 | 17.35 | 1.42 | 23.67 | 1.87 | 25.84 | 1.93 | 30.17 | 2.05 |
| 75.2 | 10.16 | 1.25 | 12.47 | 1.31 | 14.77 | 1.37 | 17.07 | 1.43 | 23.34 | 1.88 | 25.51 | 1.95 | 29.84 | 2.07 |
| 77.0 | 10.02 | 1.26 | 12.32 | 1.32 | 14.63 | 1.38 | 16.93 | 1.44 | 23.17 | 1.89 | 25.34 | 1.95 | 29.68 | 2.08 |
| 80.6 | 9.74 | 1.27 | 12.04 | 1.33 | 14.35 | 1.39 | 16.65 | 1.45 | 22.84 | 1.91 | 25.01 | 1.97 | 29.34 | 2.09 |

**Symbols:**

| | | |
|---|---|---|
| AFR | : Airflow rate | ($m^3$/min.) |
| BF | : Bypass factor | |
| EWB | : Entering wet bulb temp. | (°C) / (°F) |
| EDB | : Entering dry bulb temp. | (°C) / (°F) |
| TC | : Total capacity | (kW) / (kBtu/h) |
| SHC | : Sensible heat capacity | (kW) / (kBtu/h) |
| PI | : Power input | (kW) |

**Notes:**

1. shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
3. Capacities are based on the following conditions.
   Corresponding refrigerant piping length : 25 ft (7.6 m)
   Level difference : 0 ft (0 m)

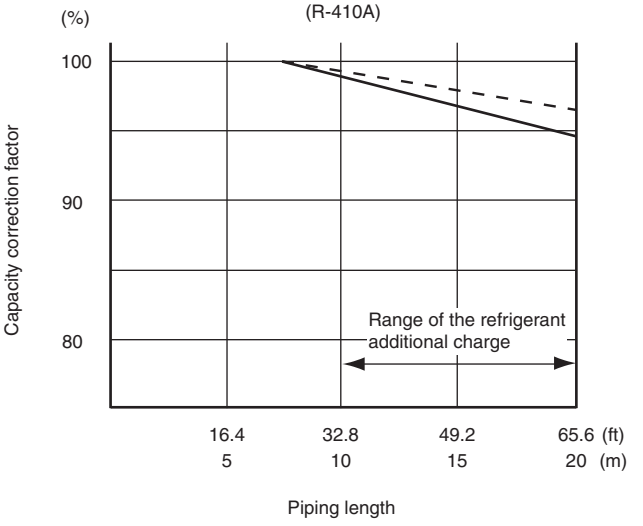
C: 3D113023B

# 7.1 Capacity Correction Factor by the Length of Refrigerant Piping (Reference)

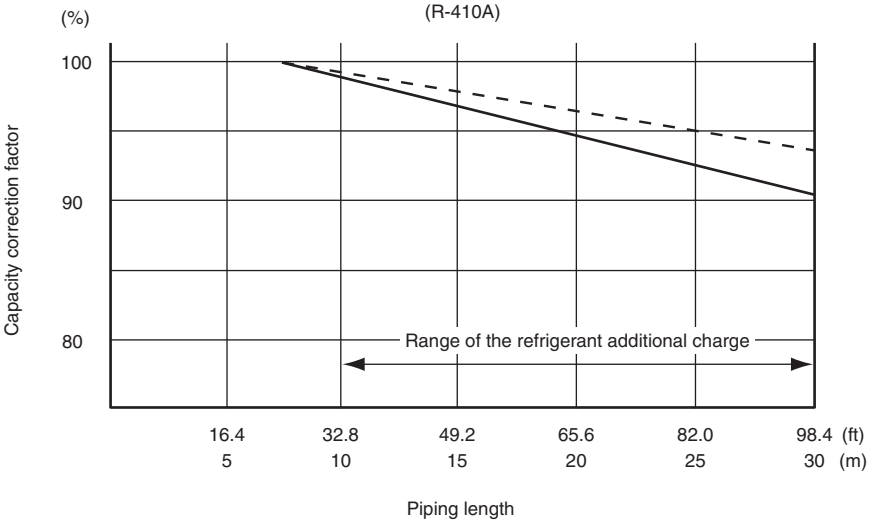
The cooling capacity and the heating capacity of the unit have to be corrected in accordance with the length of refrigerant piping — the distance between the indoor unit and the outdoor unit.

<— line : cooling capacity>
<--- line : heating capacity>

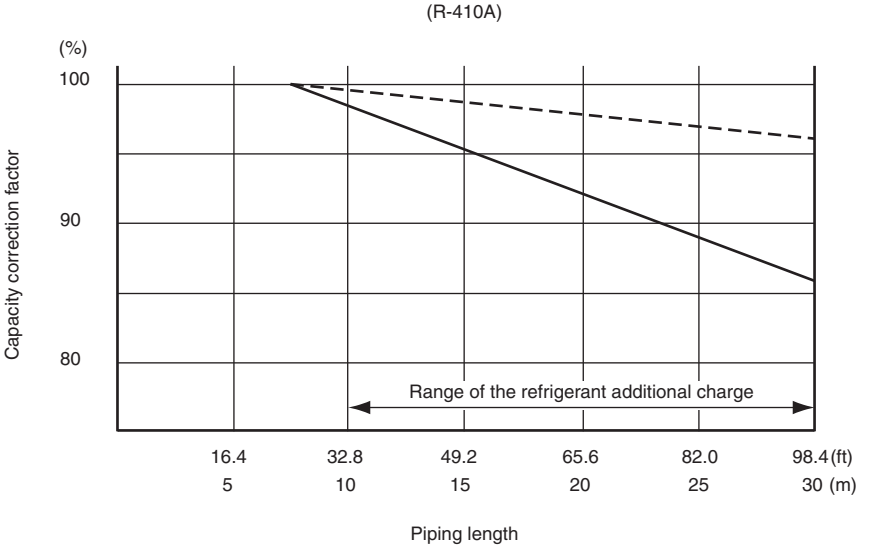
## 7.1.1 09/12 Class




## 7.1.2 15/18 Class



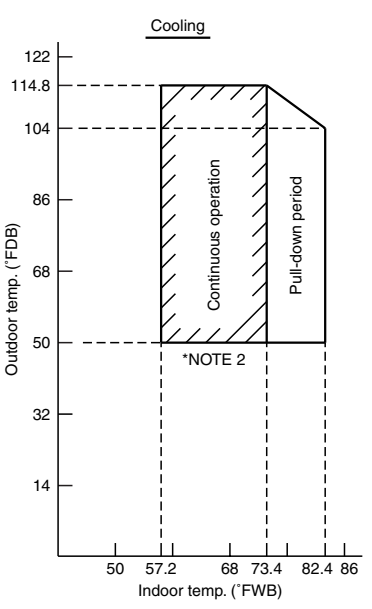
### 7.1.3 24 Class

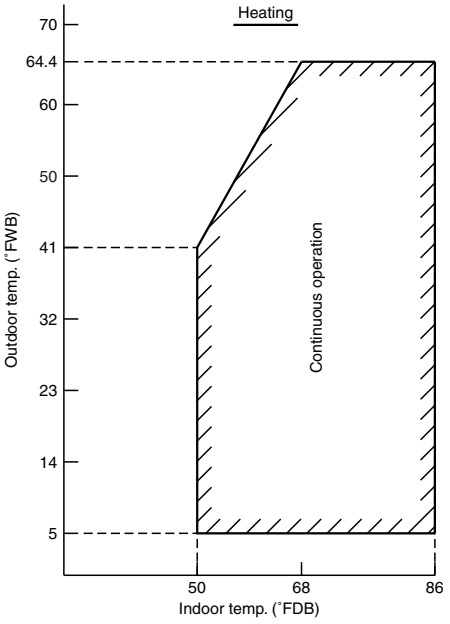



**Note:** The graphs show the factor when additional refrigerant of the proper quantity is charged.

# 8. Operation Limit

**RX09/12/15/18/24RMVJU**




Notes)

1. The graphs are based on the following conditions.
   · Equivalent piping length 25ft
   · Level difference 0ft

2. Facility Setting (cooling at low outdoor temperature: only for RX model)
   This function is limited only for facilities (the target of air conditioning is equipment such as computer).
   Never use it in a residence or office (The space where there is a human).
   Indoor fan tap should be fixed to high.
   · Cutting jumper 6 (J6) on the circuit board : extend the operation range to 14˚F (-10˚C).
   · Installing an air direction adjustment grille (wind baffle) (sold separately) : extend the operation range to -4˚F (-20˚C).

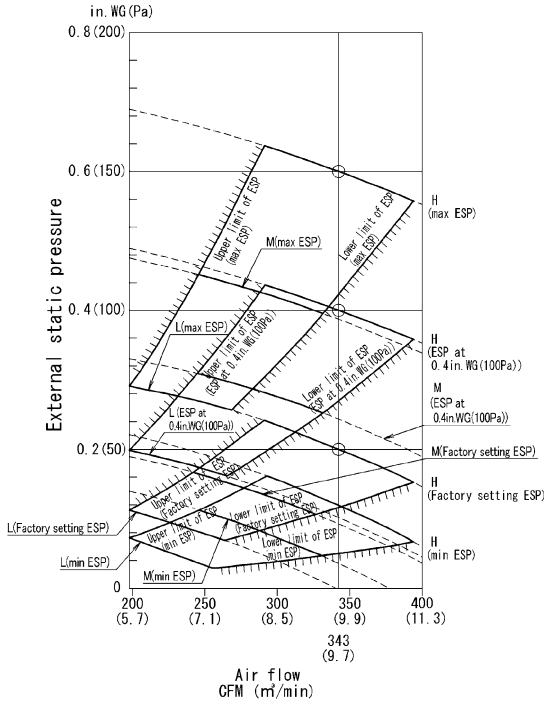
3D092209D

# 9. Fan Characteristics

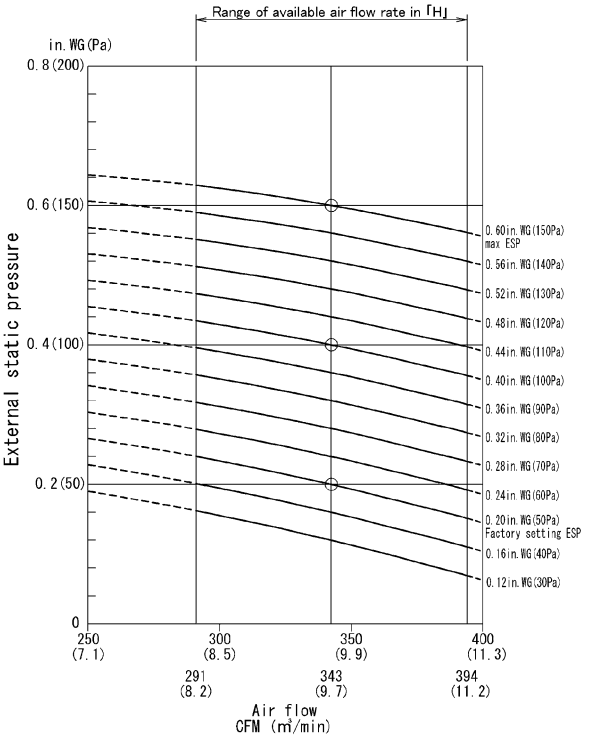
## 9.1 External Static Pressure

**FDMQ09RVJU**

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



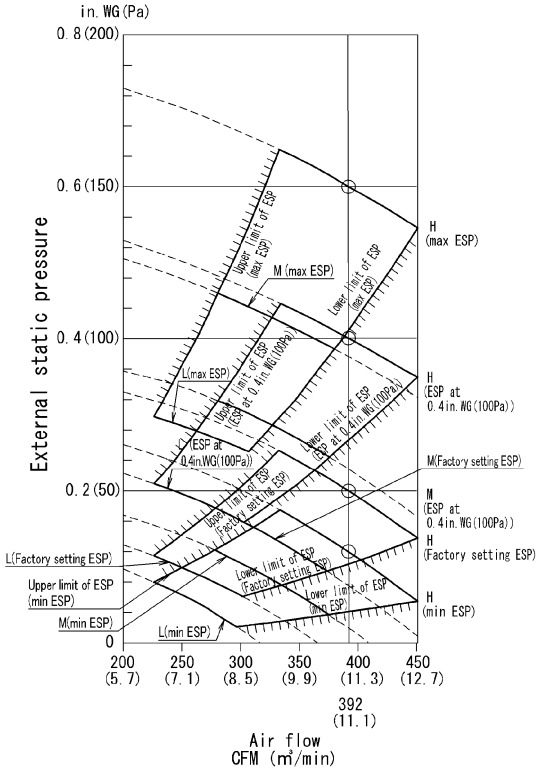

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics① shows a representative of fan characteristics at the time of "Maximum ESP","ESP at 0.4in.WG(100Pa)" "Factory setting ESP"and"Minimum ESP".
3. A remote controller can be used to change airflow rate of "H","M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics② (for field setting of remote controller) shows fan characteristics of airflow "H" which can be charged in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics① and② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 13 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

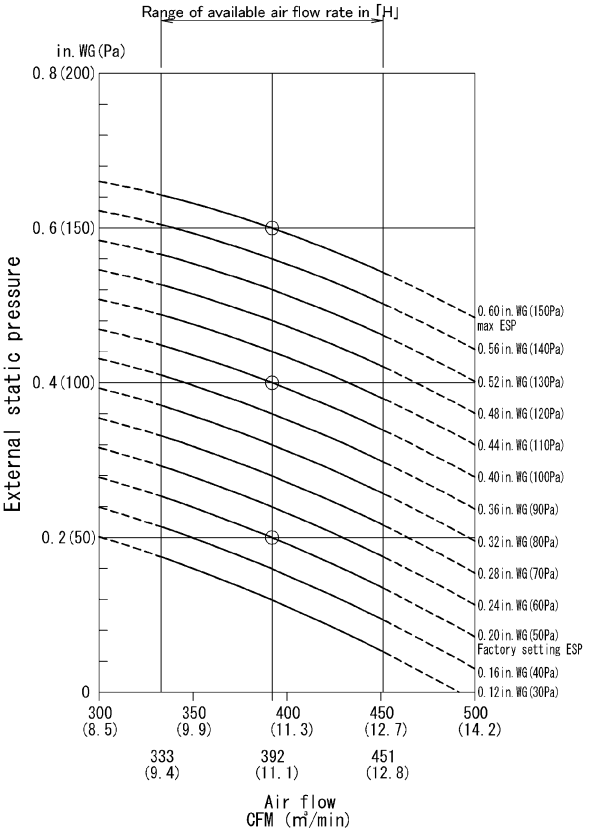
3D113100

## FDMQ12RVJU

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



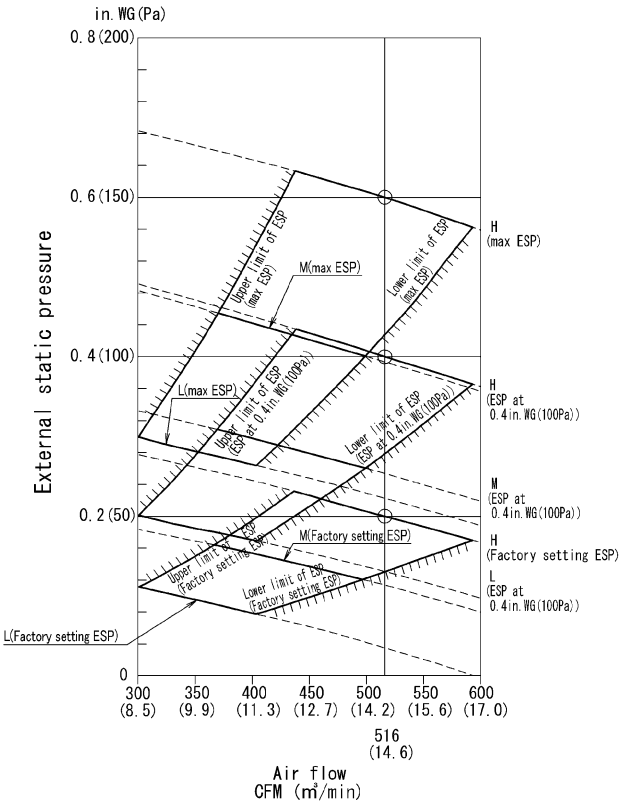

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics ① shows a representative of fan characteristics at the time of "Maximum ESP", "ESP at 0.4in.WG(100Pa)" "Factory setting ESP" and "Minimum ESP".
3. A remote controller can be used to change airflow rate of "H", "M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics ② (for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics ① and ② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 13 levels.
8. The value of Fan characteristics ② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

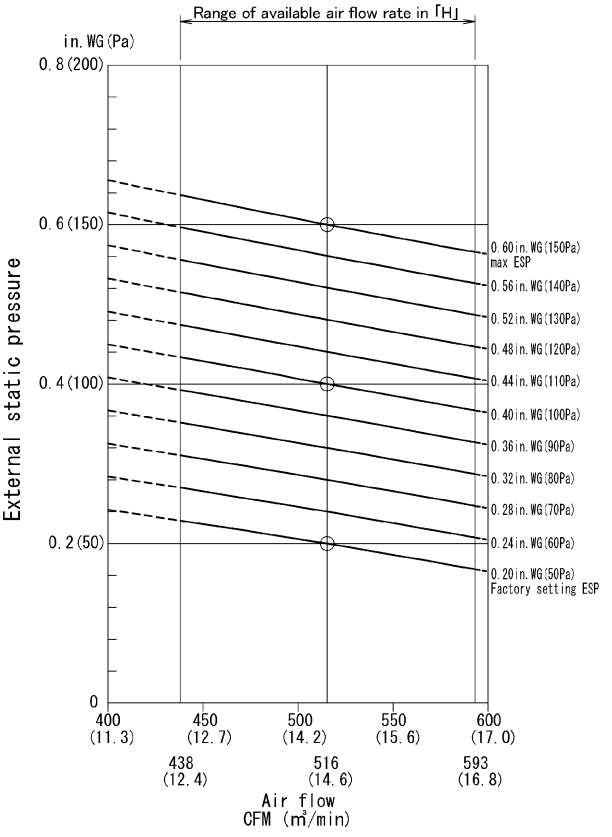
3D113121

## FDMQ15RVJU

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



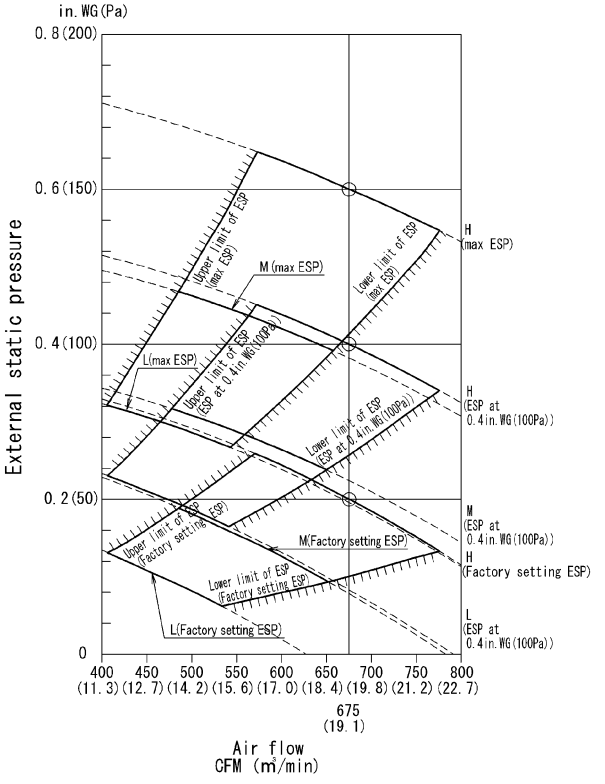

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics① shows a representative of fan characteristics at the time of "Maximum ESP", "ESP at 0.4in.WG(100Pa)" and "Factory setting ESP".
3. A remote controller can be used to change airflow rate of "H", "M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics② (for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics① and② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 11 levels.
8. The value of Fan characteristics② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

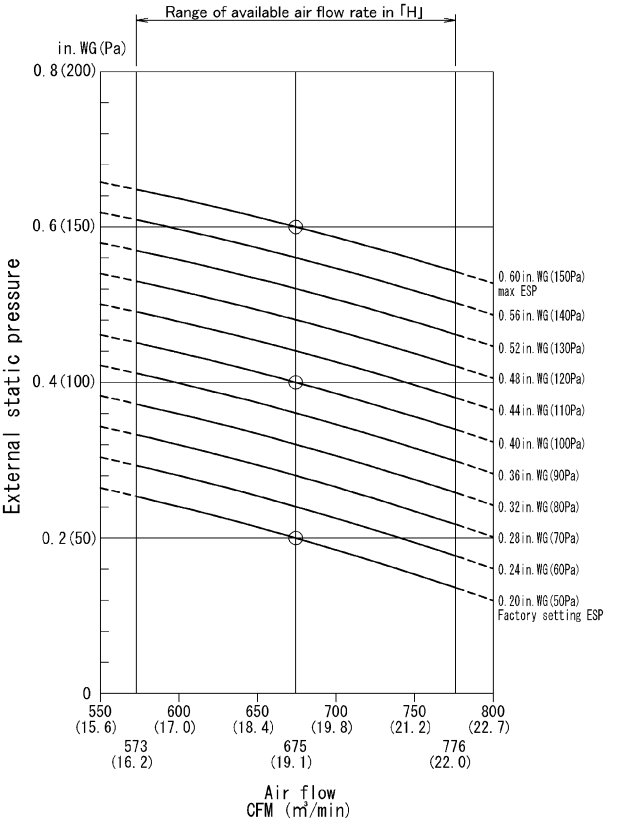
3D113123

## FDMQ18RVJU

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



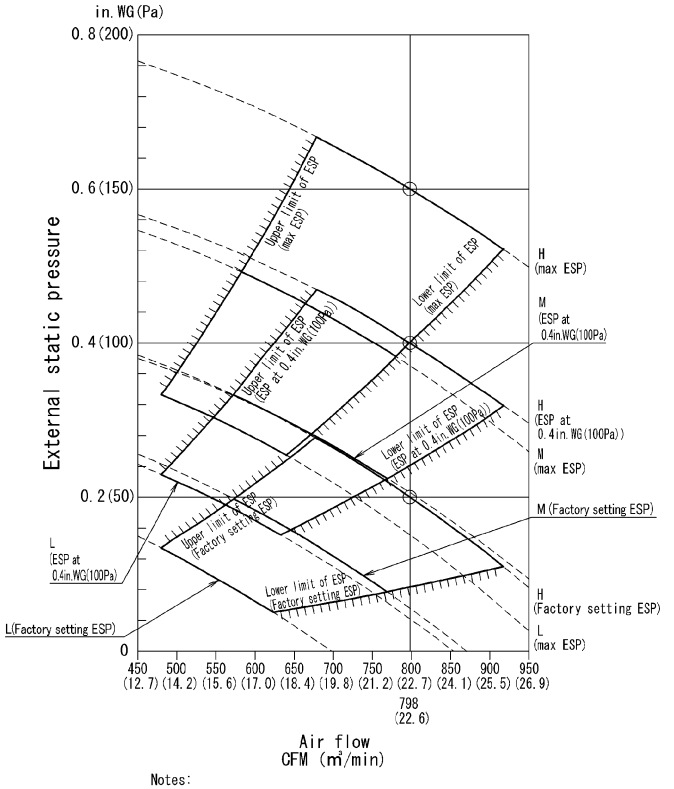

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics ① shows a representative of fan characteristics at the time of "Maximum ESP", "ESP at 0.4in.WG(100Pa)" and "Factory setting ESP".
3. A remote controller can be used to change airflow rate of "H", "M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics ② (for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics ① and ② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 11 levels.
8. The value of Fan characteristics ② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

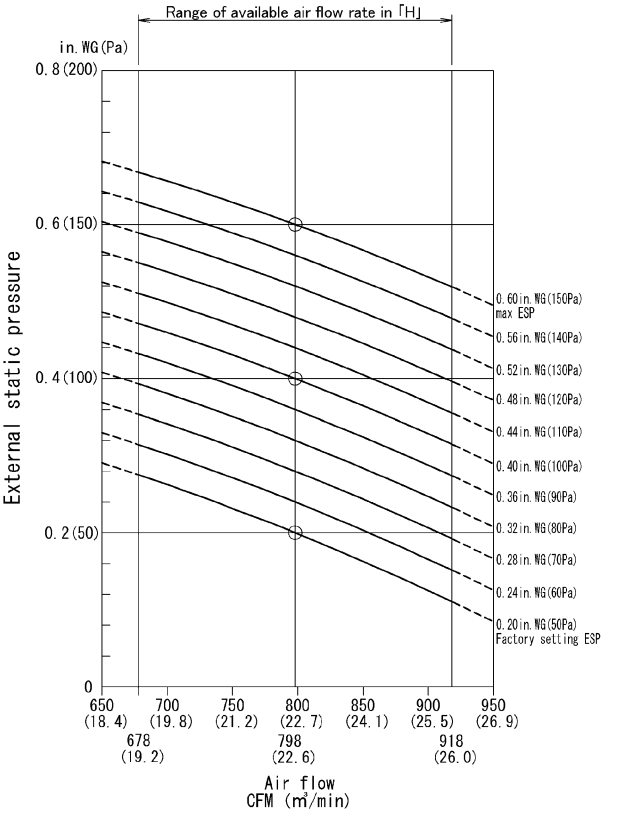
3D113126

## FDMQ24RVJU

Fan characteristics ①




Fan characteristics ②
(For field setting of remote controller)



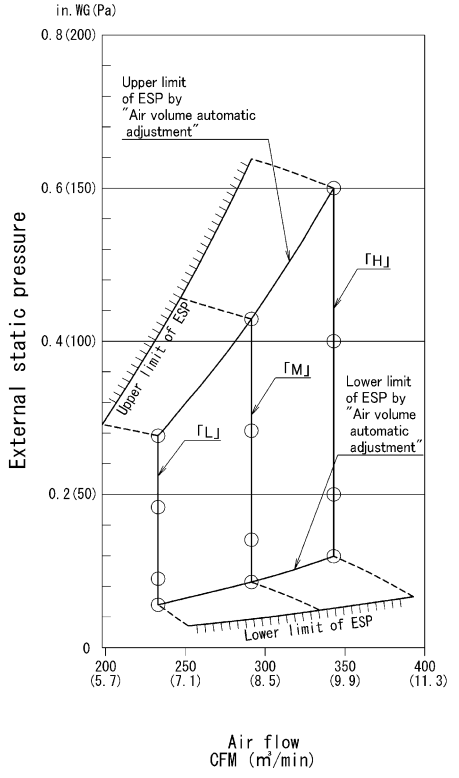

Notes:
1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
2. Fan characteristics ① shows a representative of fan characteristics at the time of "Maximum ESP", "ESP at 0.4in.WG(100Pa)" and "Factory setting ESP".
3. A remote controller can be used to change airflow rate of "H", "M" and "L".
4. Set the ESP on suction side to 0.4in.WG(100Pa) or less.
5. Fan characteristics ② (for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics ① and ② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure.)
7. The ESP setting of this unit can be changed into 11 levels.
8. The value of Fan characteristics ② mentioned in this drawing shows the ESP of rated airflow.

ESP : external static pressure

3D113128

## 9.2 Airflow Auto Adjustment

### FDMQ09RVJU

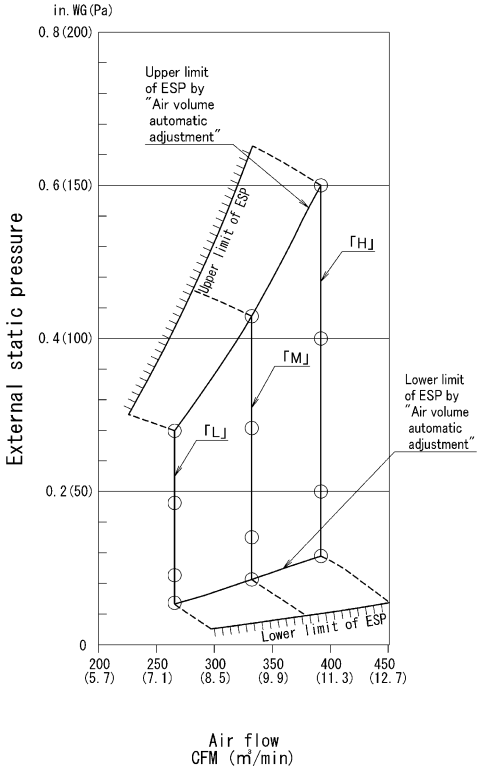



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment " by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.12in.WG (30Pa) - 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D113101

### FDMQ12RVJU

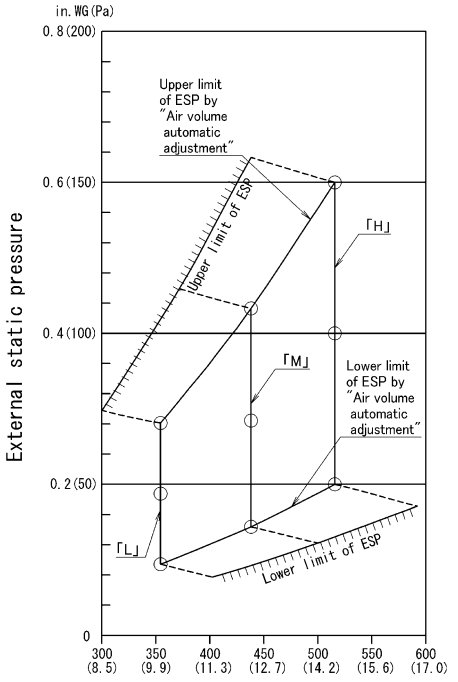



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.12in.WG (30Pa) - 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D113122

## FDMQ15RVJU

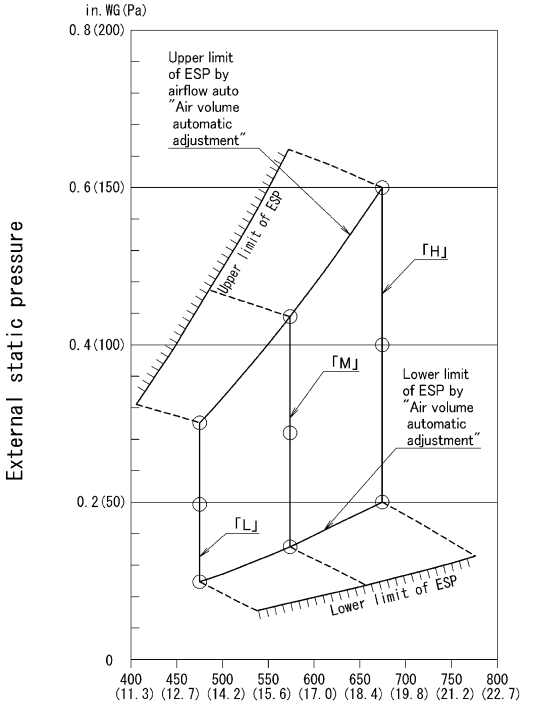



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG (50Pa) - 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D113124

## FDMQ18RVJU

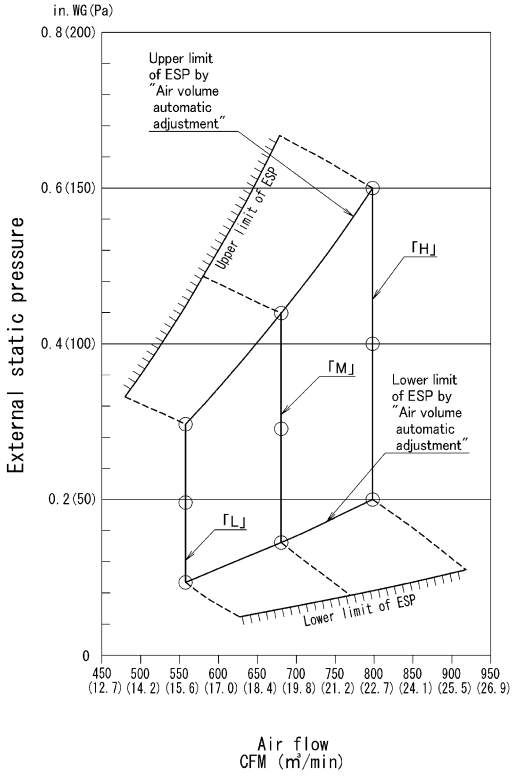



Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG (50Pa) - 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D113127

## FDMQ24RVJU



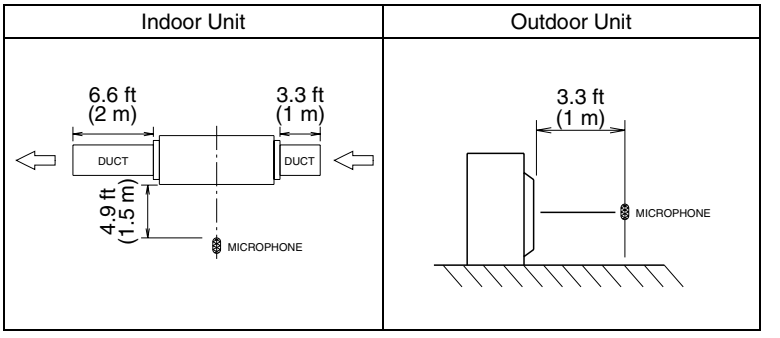

Notes :
1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
3. About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG (50Pa) - 0.6in.WG(150Pa) ( When air flow is "H" ).
5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.
6. This figure shows a fan characteristics at the time of "H" "M" and "L".
7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D113129

# 10. Sound Level

## 10.1 Measuring Location

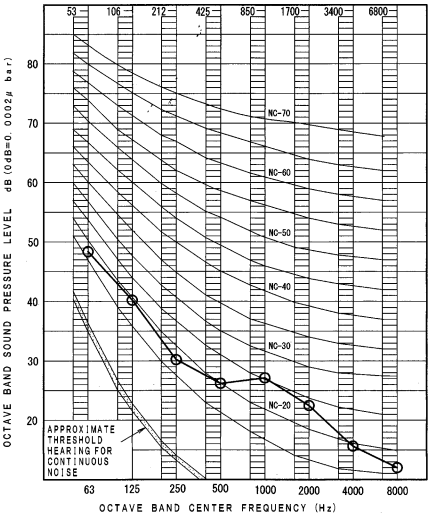



**Notes:**
1. Operation sound is measured in an anechoic chamber.
2. The data are based on the conditions shown in the table below.

| Cooling | Heating | Piping Length |
|---|---|---|
| Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)<br>Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) | Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB)<br>Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) | 16.4 ft (5 m) |

## 10.2 Indoor Unit

**FDMQ09RVJU**




OVER ALL (dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 32.0 |

(B.G.N IS ALREADY RECTIFIED)

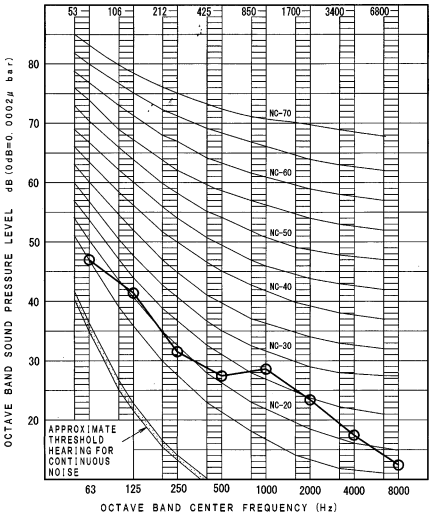
OPERATING CONDITIONS

| | | |
|---|---|---|
| POWER SOURCE | 208/230V 60Hz | |
| COOLING | RETURN AIR TEMPERATURE | : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB |
| | OUTDOOR TEMPERATURE | : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE | : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB |
| | OUTDOOR TEMPERATURE | : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

EXTERNAL STATIC PRESSURE 0.20in.WG(50Pa)

4D113009A

## FDMQ12RVJU




OVER ALL (dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 33.0 |

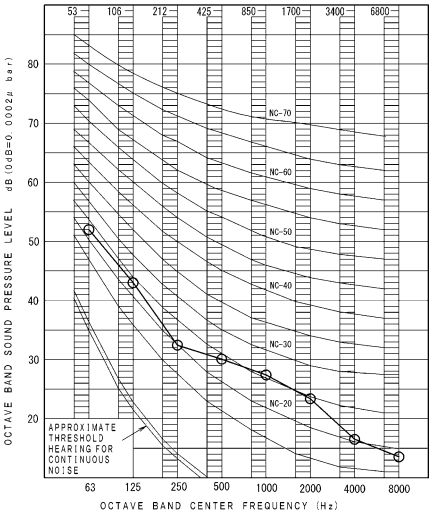
(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

| | |
|---|---|
| POWER SOURCE | 208/230V 60Hz |
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |
| EXTERNAL STATIC PRESSURE | 0.20in.WG(50Pa) |

4D113010A

## FDMQ15RVJU




OVER ALL (dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 34.0 |

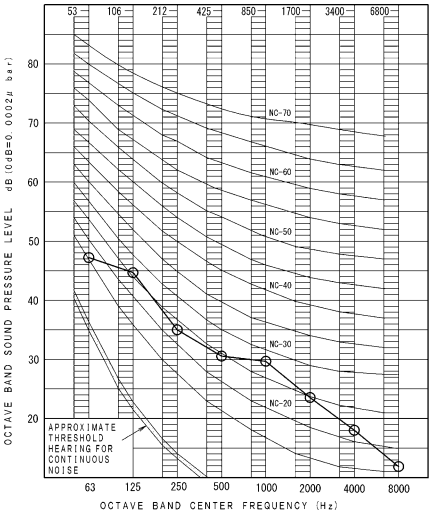
(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

| | |
|---|---|
| POWER SOURCE | 208/230V 60Hz |
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |
| EXTERNAL STATIC PRESSURE | 0.20in.WG(50Pa) |

4D113011

## FDMQ18RVJU




OVER ALL (dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 35.0 |

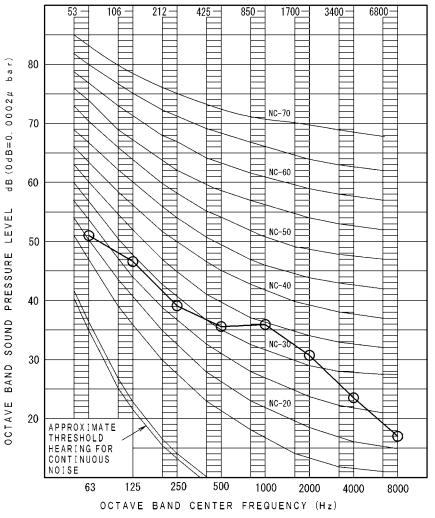
(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

| | |
|---|---|
| POWER SOURCE | 208/230V 60Hz |
| COOLING | RETURN AIR TEMPERATURE : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB<br>OUTDOOR TEMPERATURE : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB<br>OUTDOOR TEMPERATURE : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |
| EXTERNAL STATIC PRESSURE | 0.20in.WG(50Pa) |

4D113012

### FDMQ24RVJU




OVER ALL (dB)

| SCALE | AIR FLOW RATE |
|---|---|
| | H |
| A | 40.0 |

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

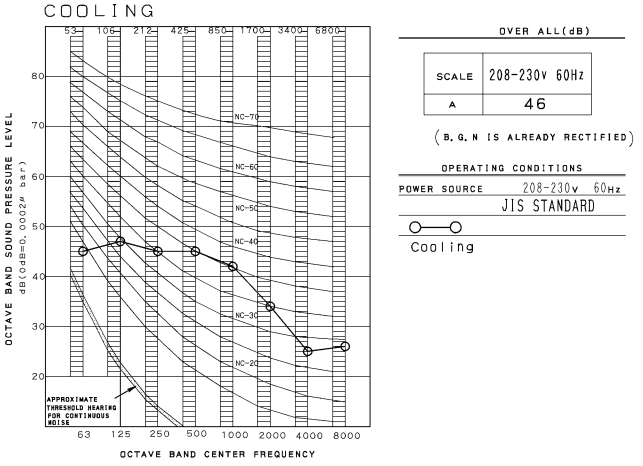
| | | |
|---|---|---|
| POWER SOURCE | 208/230V 60Hz | |
| COOLING | RETURN AIR TEMPERATURE | : 80.0 °F(26.7 °C) DB, 67.0 °F(19.4 °C) WB |
| | OUTDOOR TEMPERATURE | : 95.0 °F(35.0 °C) DB, 75.0 °F(23.9 °C) WB |
| HEATING | RETURN AIR TEMPERATURE | : 70.0 °F(21.1 °C) DB, 60.0 °F(15.6 °C) WB |
| | OUTDOOR TEMPERATURE | : 47.0 °F(8.3 °C) DB, 43.0 °F(6.1 °C) WB |

EXTERNAL STATIC PRESSURE 0.20in.WG(50Pa)

4D113013

## 10.3 Outdoor Unit

### RX09RMVJU




OVER ALL(dB)

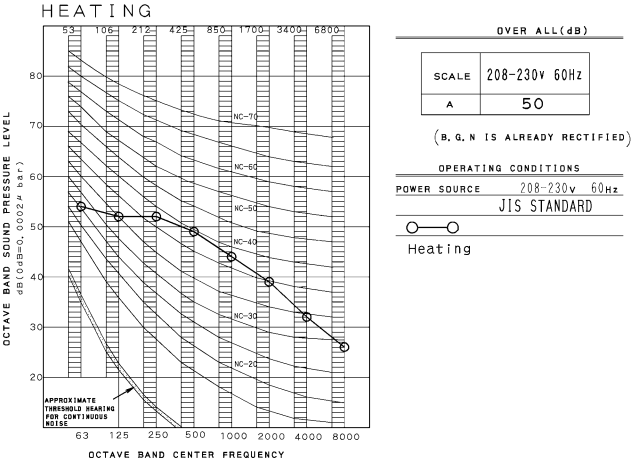
| SCALE | 208-230V 60Hz |
|---|---|
| A | 46 |

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208-230V 60Hz
JIS STANDARD

Cooling




OVER ALL(dB)

| SCALE | 208-230V 60Hz |
|---|---|
| A | 50 |

(B.G.N IS ALREADY RECTIFIED)

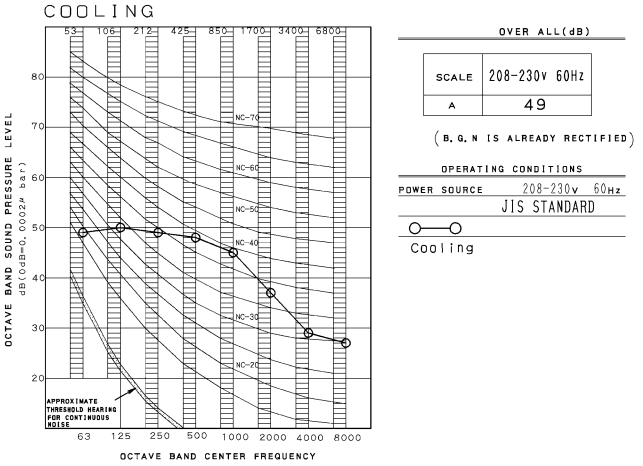
OPERATING CONDITIONS

POWER SOURCE 208-230V 60Hz
JIS STANDARD

Heating

3D106145A

### RX12RMVJU




OVER ALL(dB)

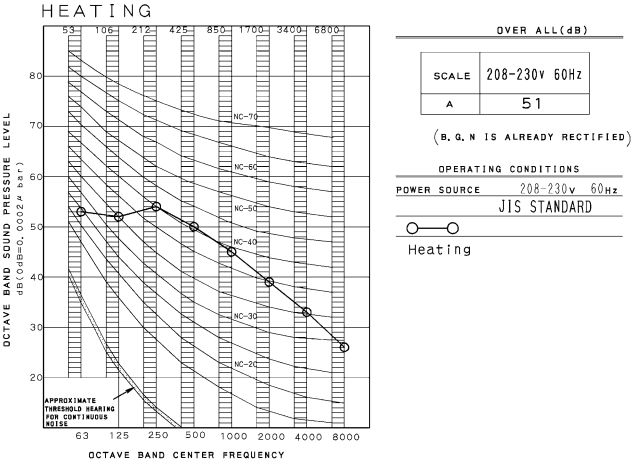
| SCALE | 208-230V 60Hz |
|---|---|
| A | 49 |

(B.G.N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208-230V 60Hz
JIS STANDARD

Cooling




OVER ALL(dB)

| SCALE | 208-230V 60Hz |
|---|---|
| A | 51 |

(B.G.N IS ALREADY RECTIFIED)

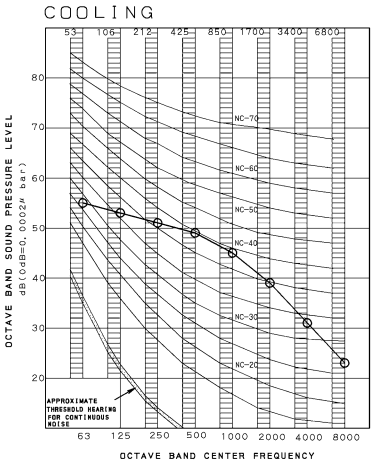
OPERATING CONDITIONS

POWER SOURCE 208-230V 60Hz
JIS STANDARD

Heating

3D106146A

## RX15RMVJU




| OVER ALL(dB) | |
|---|---|
| SCALE | 208-230v 60Hz |
| A | 50 |

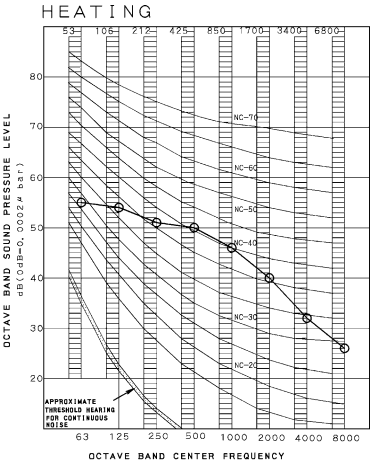
(B, G, N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208-230v 60Hz

JIS STANDARD

Cooling




| OVER ALL(dB) | |
|---|---|
| SCALE | 208-230v 60Hz |
| A | 51 |

(B, G, N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

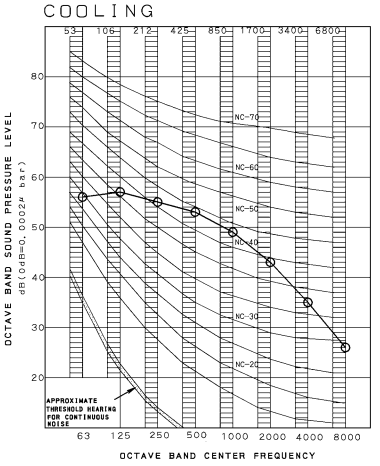
POWER SOURCE 208-230v 60Hz

JIS STANDARD

Heating

3D106147A

## RX18RMVJU




| OVER ALL(dB) | |
|---|---|
| SCALE | 208-230v 60Hz |
| A | 54 |

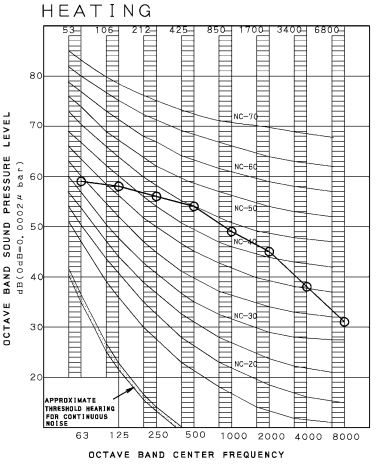
(B, G, N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208-230v 60Hz

JIS STANDARD

Cooling




| OVER ALL(dB) | |
|---|---|
| SCALE | 208-230v 60Hz |
| A | 55 |

(B, G, N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

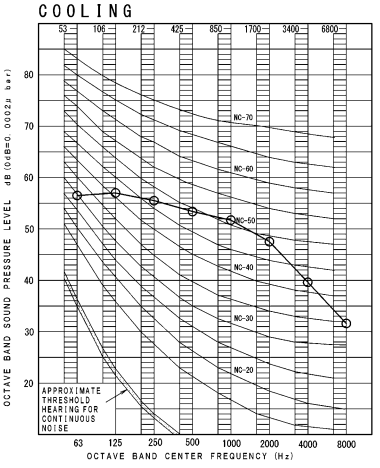
POWER SOURCE 208-230v 60Hz

JIS STANDARD

Heating

3D108255A

## RX24RMVJU




| OVER ALL (dB) | |
|---|---|
| SCALE | 208-230V 60Hz |
| A | 56 |

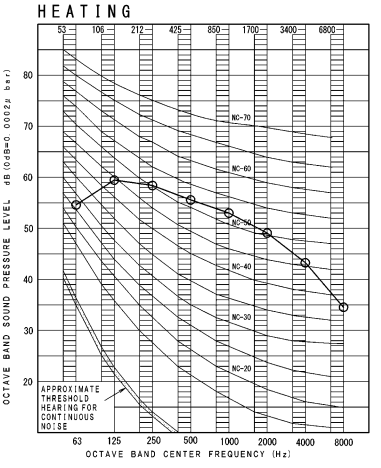
(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208-230V 60Hz

JIS STANDARD

Cooling




| OVER ALL (dB) | |
|---|---|
| SCALE | 208-230V 60Hz |
| A | 58 |

(B. G. N IS ALREADY RECTIFIED)

OPERATING CONDITIONS

POWER SOURCE 208-230V 60Hz

JIS STANDARD

Heating

3D113030

# 11. Electric Characteristics

| Unit Combination | | Power Supply | | | | Compressor | OFM | | IFM | |
|---|---|---|---|---|---|---|---|---|---|---|
| Indoor Unit | Outdoor Unit | Hz - Volts | Voltage Range | MCA | MFA | RLA | W | FLA | W | FLA |
| FDMQ09RVJU | RX09RMVJU | 60 - 208<br>60 - 230 | Max. 60 Hz 253 V<br>Min. 60 Hz 187 V | 9.0 | 15 | 7.5 | 39 | 0.13 | 130 | 0.63 |
| FDMQ12RVJU | RX12RMVJU | 60 - 208<br>60 - 230 | Max. 60 Hz 253 V<br>Min. 60 Hz 187 V | 9.1 | 15 | 7.5 | 39 | 0.13 | 130 | 0.73 |
| FDMQ15RVJU | RX15RMVJU | 60 - 208<br>60 - 230 | Max. 60 Hz 253 V<br>Min. 60 Hz 187 V | 9.7 | 15 | 8.0 | 91 | 0.31 | 230 | 0.87 |
| FDMQ18RVJU | RX18RMVJU | 60 - 208<br>60 - 230 | Max. 60 Hz 253 V<br>Min. 60 Hz 187 V | 12.8 | 15 | 10.75 | 110 | 0.38 | 230 | 1.22 |
| FDMQ24RVJU | RX24RMVJU | 60 - 208<br>60 - 230 | Max. 60 Hz 253 V<br>Min. 60 Hz 187 V | 16.9 | 20 | 14.5 | 125 | 0.43 | 230 | 1.54 |

**Symbols:**

MCA : Min. circuit amps (A)
MFA : Max. fuse amps (A)
RLA : Rated load amps (A)
OFM : Outdoor fan motor
IFM : Indoor fan motor
W : Fan motor rated output (W)
FLA : Full load amps (A)

**Notes:**

1. RLA is the max current that comes in cooling operation and heating operation.
2. Maximum allowable voltage variation between phases is 2%.
3. Select wire size based on the larger value of MCA.
4. Be sure to install a ground leak detector.
   (This unit uses an inverter, which means that a ground leak detector capable of handling high harmonics must be used in order to prevent malfunctioning of the ground leak detector.)

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# 12. Installation Manual
## 12.1 Indoor Unit

### CONTENTS



### 1. SAFETY CONSIDERATIONS

Read these **SAFETY CONSIDERATIONS for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product.
Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

**⚠ WARNING**

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.

  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
  (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors. This unit is for indoor use.
- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

**⚠ NOTE**

- The indoor unit should be positioned where the unit and inter-unit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 604 psi, the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

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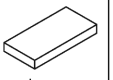
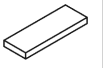
## 2. BEFORE INSTALLATION

**When unpacking the indoor unit or moving the unit after unpacked, hold the hangers (4 places) and do not apply force to other parts (particularly refrigerant piping, drain piping).**

- For installation of the outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not throw away the accessories until the installation work is completed.
- After the indoor unit is carried into the room, to avoid the indoor unit from getting damaged, take measures to protect the indoor unit with packing materials.
  (1) Determine the route to carry the unit into the room.
  (2) Do not unpack the unit until it is carried to the installation location.
  Where unpacking is unavoidable, use a sling of soft material or protective plates together with a rope when lifting, to avoid damage or scratches to the indoor unit.
- Have the user actually operate the air conditioner while looking at the operation manual.
  Instruct the user how to operate the air conditioner (particularly operation procedures, and temperature adjustment).
- Do not use the air conditioner in a salty atmosphere such as coastal areas, vehicles, vessels or where voltage fluctuation is frequent such as factories.
- Take off static electricity from the body when carrying out wiring and the electrical wiring box cover is removed.
  The electric parts may be damaged.

### 2-1 ACCESSORIES

| Name | (1) Clamp metal | (2) Drain hose | (3) Duct flange connection screw | |
|---|---|---|---|---|
| | | | 09/12 class | 15/18/24 class |
| Quantity | 1 | 1 | 10 | 18 |
| Shape |  |  |  | |

| Name | Fitting insulation | (6) Sealing pad | (7) Sealing pad | (8) Clamp |
|---|---|---|---|---|
| Quantity | 1 each | 1 | 2 | 8 |
| Shape |  Thin (4) For liquid pipe  Thick (5) For gas pipe |  Large (Dark gray) |  Medium (Dark gray) |  |

| Name | (9) Washer fixing plate | (10) Wire sealing pad | (11) Washer for hanger bracket |
|---|---|---|---|
| Quantity | 4 | 2 | 8 |
| Shape |  |  Small (Gray) |  |

| Name | (12) Conduit mounting plate | Others |
|---|---|---|
| Quantity | 1 | • Operation manual<br>• Installation manual<br>• Warranty |
| Shape |  | |

### 2-2 OPTIONAL ACCESSORIES

- **A remote controller is required for the indoor unit.**
- Select a remote controller from the table below according to user request and install in an appropriate place.

| Remote controller type | |
|---|---|
| Wired type | BRC1E73 |
| Wireless type | BRC082A43 |

- **The indoor unit can be switched to lower suction. (Refer to 4. PREPARATION BEFORE INSTALLATION.)**
  The side cover plate (KDBD63A160) is required in the case of wiring from the bottom for underside suction.
  For installation work, refer to the instruction sheet provided with the side cover plate.

## CARRY OUT THE WORK GIVING CAUTION TO THE FOLLOWING ITEMS AND AFTER THE WORK IS COMPLETED CHECK THESE AGAIN.

### 1. Items to be checked after the installation work is completed

| Items to be checked | Symptom | Check |
|---|---|---|
| Are the indoor and outdoor units rigidly fixed? | Drop · vibration · noise | |
| Are the installation works of the outdoor and indoor units completed? | Does not operate · burnout | |
| Is the insulation of refrigerant piping and drain piping completely carried out? | Water leakage | |
| Does the drain flow out smoothly? | Water leakage | |
| Is the power supply voltage identical to that stated in the manufacturer's label on the air conditioner? | Does not operate · burnout | |
| Are you sure that there is no wrong wiring or piping or no loose wiring? | Does not operate · burnout | |
| Is grounding completed? | Danger in case of leakage | |
| Are the sizes of electric wiring according to the specification? | Does not operate · burnout | |
| Are any of air outlets or inlets of the indoor and outdoor units blocked with obstacles? (It may lead to capacity drop due to fan speed drop or malfunction of equipment.) | Does not cool / Does not heat | |
| Is the external static pressure set correctly? | Does not cool / Does not heat | |

Also review the "SAFETY CONSIDERATIONS".

### 2. Items to be checked at time of delivery

| Items to be checked | Check |
|---|---|
| Have you carried out field setting? (if necessary) | |
| Are the electrical wiring box cover, air filter, suction grille attached? | |
| Does the cool air discharge during the COOL operation and the warm air discharge during the HEAT operation? Does the indoor unit makes unpleasant sound of air discharge? | |
| Did you explain about operations while showing the operation manual to your user? | |
| Have you explained the description of COOL, HEAT, DRY and AUTOMATIC (cooling/heating) given in the operation manual to the user? | |
| If you set the fan speed at thermostat OFF, did you explain the set fan speed to the user. | |
| Did you hand the operation manual over to the user? | |
| Have you checked that there is no generation of abnormal noise (i.e., noise resulting from contamination or missing parts)? | |
| Is the printed circuit board switch not on the emergency (EMG.) side?<br>The switch is factory set to the normal (NORM.) side. | |
| If an optional accessory is in use, did you check the operation of the optional accessory and make field settings as needed? | |
| Have you explained failure examples of **3. CHOOSING AN INSTALLATION SITE**? | |

**Items to be checked at time of delivery**

| Test items | Check |
|---|---|
| Did you explain about operations while showing the operation manual to the user? | |
| Did you hand the operation manual over to the user? | |

**Points for explanation about operations**

The items with ⚠ WARNING and ⚠ CAUTION marks in the operation manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask the users to read the operation manual.

**Note to the installer**

Be sure to instruct customers how to properly operate the unit (especially operating different functions, and adjusting the temperature) by having them carry out operations while looking at the manual.

## 3. CHOOSING AN INSTALLATION SITE

**Hold the hangers at 4 locations to move the indoor unit when unpacking or after unpacked, and do not apply force to the piping (refrigerant and drain) and air outlet flange.**
**If the temperature and humidity in the ceiling is likely to exceed 86°F (30°C), RH80%, use the additional insulation stick to the indoor unit.**
**Use the insulation such as glass wool or polyethylene that has thickness of 3/8 inch (10mm) or more. However, keep the insulated outside dimension smaller than the ceiling opening so that the unit may go through the opening at installation.**

**(1) Select the installation location that meets the following conditions and get approval of the user.**

- Where the cool and warm air spreads evenly in the room.
- Where there are no obstacles in the air passage.
- Where drainage can be ensured.
- Where the ceiling's lower surface is not remarkably inclined.
- Where there is sufficient strength to withstand the mass of the indoor unit. (If the strength is insufficient, the indoor unit may vibrate and get in contact with the ceiling and generate unpleasant chattering noise.)
- Where a space sufficient for installation and service can be ensured. **(Refer to Fig. 1 and Fig. 2)**
- Where the piping length between the indoor and the outdoor units is ensured within the allowable length. (Refer to the installation manual attached to the outdoor unit.)
- Where there is no risk of flammable gas leak.

[ Installation Space Requirements ]

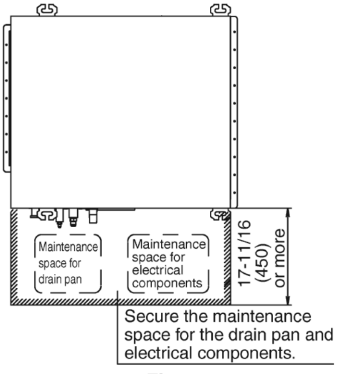



**Fig. 1** unit: inch (mm)

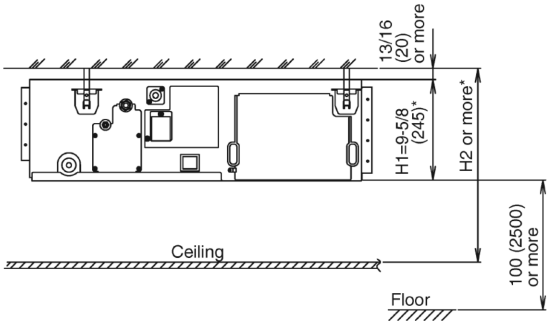



**Fig. 2** unit: inch (mm)

- * Dimension H1 indicates the product height.
- * Secure a downward slope of at least 1/100 specified in **7. DRAIN PIPING WORK** and determine dimension H2.

**<Failure example>**
If there is an obstacle in the airflow path or proper installation space is not provided, the indoor unit will cause air volume reduction and take in air blown out of the indoor unit, thus resulting in performance degradation or turning the thermostat OFF frequently.

**⚠ CAUTION**

- Install the indoor and outdoor units, power supply wiring, remote controller wiring and transmission wiring at least 1 meter away from televisions or radios to prevent image interference or noise.
  (Depending on the radio waves, a distance of 1 meter may not be sufficient to eliminate the noise.)
- Install the indoor unit as far as possible from fluorescent lamps.
  If a wireless remote controller kit is installed, the transmission distance may be shorter in a room where an electronic lighting type (inverter or rapid start type) fluorescent lamp is installed.

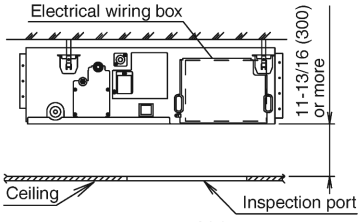
**(2) Use suspension bolts to install the unit.**
Check whether or not the ceiling is strong enough to support the weight of the unit. If there is a risk that the ceiling is not strong enough, reinforce the ceiling before installing the unit.

## 4. PREPARATION BEFORE INSTALLATION

**(1) Check the relation of location between the ceiling opening and the indoor unit suspension bolts. (unit: inch (mm))**

- Provide one of the following service spaces for the maintenance and inspection of the electrical wiring box and drain pump or for other services.

1. Inspection ports 1 and 2 (17-11/16 inch (450mm) × 17-11/16 inch (450mm)) (Fig. 3-2) and a minimum space of 11-13/16 inch (300mm) at the bottom of the product (Fig. 3-1).
2. Inspection port 1 (17-11/16 inch (450mm) × 17-11/16 inch (450mm)) on the electrical wiring box side and inspection port 2 on the bottom of the product. (Fig. 4, arrow A-1)
3. Inspection port 3 on the bottom of the product and on the bottom side of the electrical wiring box. (Fig. 4, arrow A-2)




< In the case of (1)-1 > unit: inch (mm)

**Fig. 3-1**

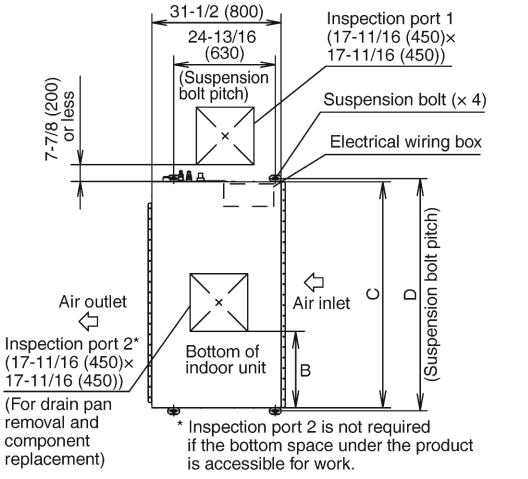
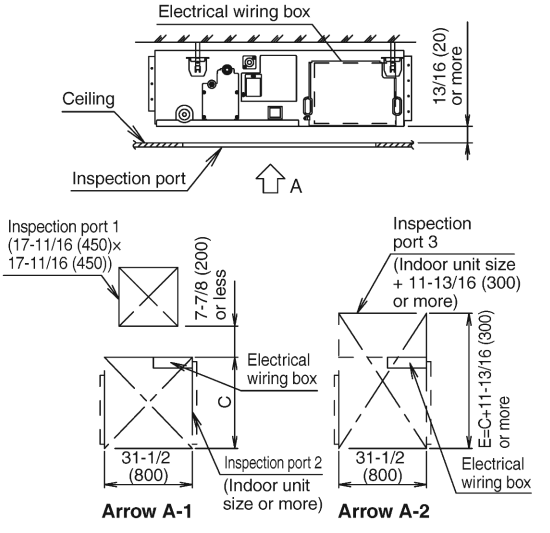



**Fig. 3-2** unit: inch (mm)




< In the case of (1)-2, 3 >

**Fig. 4** unit: inch (mm)

Table 1 unit: inch (mm)

| | B | C | D | E |
|---|---|---|---|---|
| 09/12 class | 1-15/16 (50) | 39-3/8 (1000) | 40-7/8 (1038) | 51-3/16 (1300) |
| 15/18/24 class | (0) | 27-9/16 (700) | 29-1/16 (738) | 39-3/8 (1000) |

**(2) Mount canvas ducts to the air outlet and inlet so that the vibration of the indoor unit will not be transmitted to the ducts or ceiling. Furthermore, attach sound absorbing material (thermal insulation material) to the duct inner walls and anti-vibration rubber to the suspension bolts (refer to 8. DUCT WORK).**

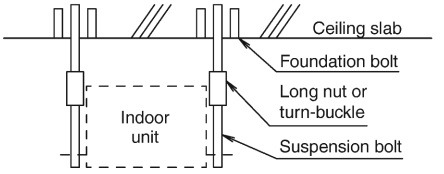
**(3) The indoor unit is set to standard external static pressure.**

- If external static pressure is higher or lower than the standard set value, the remote controller may be used to make on-site setting change in the external static pressure.
  Refer to **10. FIELD SETTING**.

**(4) Open installation holes**
**(in the case of installation onto the existing ceiling).**
- Open the installation holes on the ceiling of the installation location, and work on the refrigerant piping, drain piping, remote controller wiring, and wiring between the indoor and outdoor units to the piping connection port and wiring connection port of the indoor unit (refer to each piping and wiring procedure items).
- Ceiling framework reinforcement may be required in order to keep the ceiling horizontal and prevent ceiling vibration after opening the ceiling holes. For details, consult your building and upholstery work contractors.

**(5) Install the suspension bolts.**
- Use M8 or M10 bolts for hanging the indoor unit. Use hole-in-anchors for the existing bolts and embedded inserts or foundation bolts for new bolts, and fix the indoor unit firmly to the building so that it may withstand the mass of the unit. In addition, adjust clearance (1-15/16 inch (50mm) - 3-15/16 inch (100mm)) from the ceiling in advance.

<Installation examples>




Note) Components shown in the figure above are all local procurement.

**(6) In the case of changing the preset suction to underside suction, replace the chamber cover and the suction flange. (Refer to Fig. 5)**
1. Remove the suction flange and chamber cover.
2. Replace the suction flange and the chamber cover.

**⚠ CAUTION**
- Secure a sufficient maintenance space for the drain pan and electrical components before installing the indoor unit.
- Secure a sufficient maintenance space for the filter chamber, and peripheral components before installing the indoor unit.

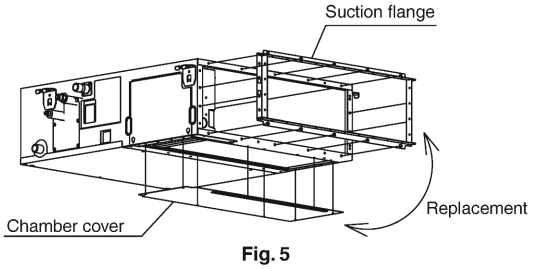



**Fig. 5**

## 5. INDOOR UNIT INSTALLATION

**Depending on the optional parts, it may be easier to attach them before installing the indoor unit. Refer to also the installation manual attached to the optional parts.**
**As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.**

**(1)** Install the indoor unit temporarily.
- Fix the hanger to the suspension bolt. Make sure to securely fix the hanger with the nut and the washer for hanger bracket (11) from the upper and lower side. **(Refer to Fig. 6)** If the washer fixing plate (9) is used, the upper side washer for hanger bracket (11) may be protected from falling off. **(Refer to Fig. 7)**

[ Fix the hanger ]

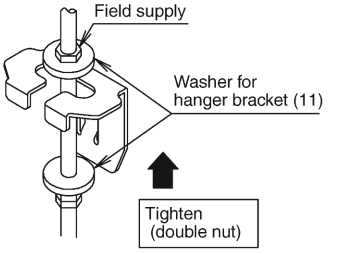



**Fig. 6**

[ Washer fixing ]

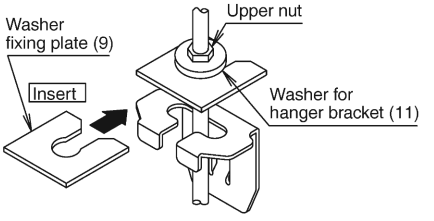


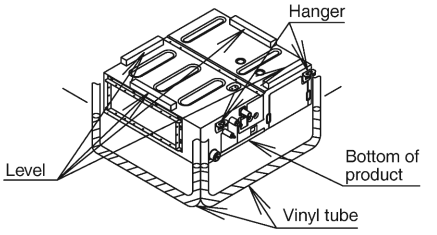

**Fig. 7**

- Keep the air outlet covered with a protective sheet to prevent weld spatter and other foreign materials from entering the indoor unit and damaging the resin drain pan. (If holes or cracks are generated in the resin drain pan, water can leak.)

**(2)** Adjust the height of the unit.

**(3)** Check the unit is horizontally level. **(Refer to Fig. 8)**

**(4)** Remove the washer fixing plate (9) used for preventing the washer for hanger bracket (11) from dropping and tighten the upper side nut.




[Maintaining horizontality]

**Fig. 8**

**⚠ CAUTION**

- **Install the indoor unit leveled.**
  If the indoor unit is inclined and the drain piping side gets high, it may cause malfunction of float switch and result in water leakage.
- **Attach nuts on the upper and lower side of hanger.**
  If there is no upper nut and the lower nut is over-tightened, the hanger and the top plate will deform and cause abnormal sound.
- **Do not insert materials other than that specified into the clearance between the hanger and the washer for hanger bracket (11).**
  Unless the washers are properly attached, the suspension bolts may come off from the hanger.

**⚠ WARNING**

**The indoor unit must be securely installed on a place that can withstand the mass.**
If the strength is insufficient, the indoor unit may fall down and cause injuries.

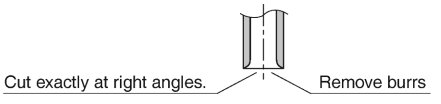
## 6. REFRIGERANT PIPING WORK

**Refer to the installation manual for the outdoor unit also.**

- Carry out insulation of both gas and liquid refrigerant piping securely. If not insulated, it may cause water leakage. For gas piping, use insulation material of which heat resistant temperature is not less than 230°F (110°C).
  For use under high humidity, strengthen the insulation material for refrigerant piping. If not strengthened, the surface of insulation material may sweat.

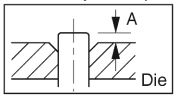
**(1) Flaring the pipe end**

1. Cut the pipe end with a pipe cutter.
2. Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
3. Put the flare nut on the pipe.
4. Flare the pipe.
5. Check that the flaring has been done correctly.



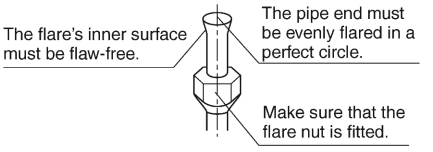

Flaring

Set exactly at the position shown below.




| | Flare tool for R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.02in (0-0.5mm) | 0.04-0.06in (1.0-1.5mm) | 0.06-0.08in (1.5-2.0mm) |

Check




**⚠ WARNING**

- **Do not apply mineral oil to the flare.**
- **Prevent mineral oil from getting into the system as this would reduce the service life of the units.**
- **Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.**
- **Never install a dryer to this R410A unit in order to guarantee its service life.**
- **The drying material may dissolve and damage the system.**
- **Incomplete flaring may result in refrigerant gas leakage.**

**⚠ CAUTION**

- **Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)**
- **Use a pipe cutter and flare suitable for the type of refrigerant.**
- **To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.) (Refer to Fig. 10)**
- **Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.**
- **Protect the open end of the pipe against dust and moisture.**
- **Do not allow anything other than the designated refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.**
- **Use only the flare nuts attached to the air conditioner. If other flare nuts are used, it may cause refrigerant leakage.**

**(2) Refrigerant piping**

1. To prevent gas leakage, apply refrigeration machine oil only to the inner surface of the flare. (Use refrigeration oil for R410A)
2. Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.
   - Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage. **(Refer to Fig. 9)**

| Flare nut tightening torque | | | |
|---|---|---|---|
| Gas side | | | Liquid side |
| 3/8 inch (9.5mm) | 1/2 inch (12.7mm) | 5/8 inch (15.9mm) | 1/4 inch (6.4mm) |
| 24.1-29.4ft•lbf (32.7-39.9N•m) | 36.5-44.5ft•lbf (49.5-60.3N•m) | 45.6-55.6ft•lbf (61.8-75.4N•m) | 10.4-12.7ft•lbf (14.2-17.2N•m) |

- The refrigerant is pre-charged in the outdoor unit.

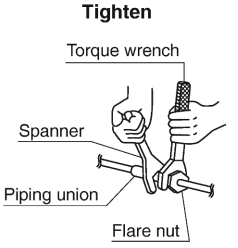



**Fig. 9**

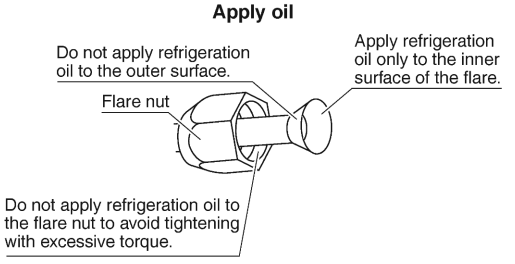



**Fig. 10**

**⚠ CAUTION**

**Do not have oil adhere to the screw fixing part of resin parts.**
If oil adheres, it may weaken the strength of screwed part.

**Do not tighten flare nuts too tight.**
If a flare nut cracks, the refrigerant may leak.

**Insulation of field piping must be carried out up to the connection inside the casing.**
If the piping is exposed to the atmosphere, it may cause sweating, burn due to touching the piping, electric shock or a fire due to the wiring touching the piping.

- After leak test, referring to **Fig. 11**, insulate both the gas and liquid piping connection with the attached fitting insulation (4) and (5) to prevent the pipings from getting exposed.
  Then, tighten both the ends of insulating material with the clamp (8).
- Wrap the sealing pad (Medium) (7) around the fitting insulation (4) and (5) (flare nut section), both the gas and liquid piping.
- Make sure to bring the seam of fitting insulation (4) and (5) to the top.

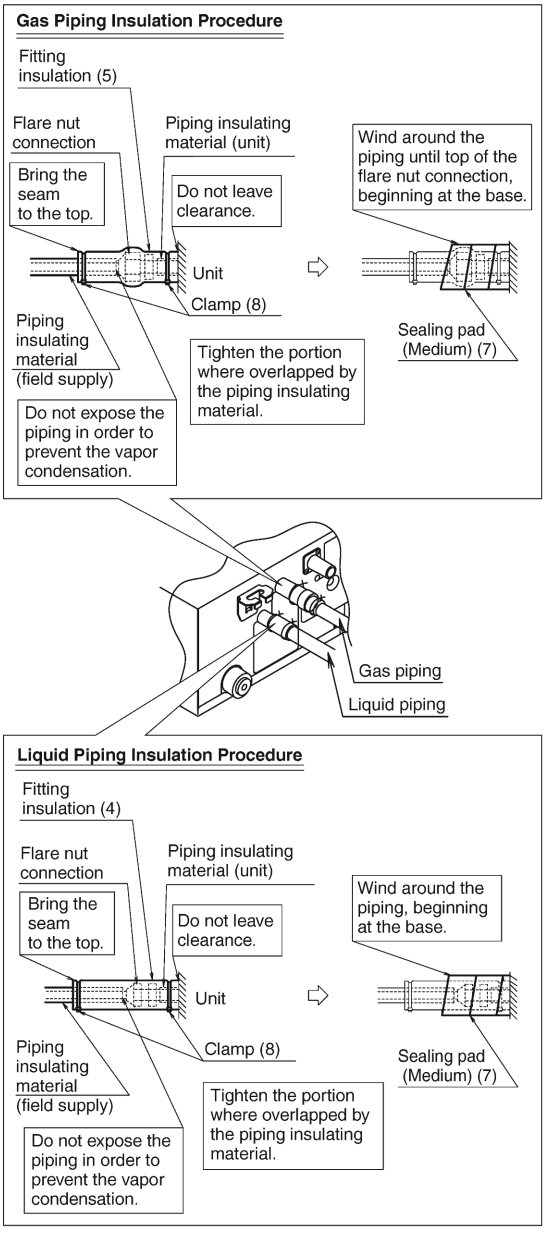



**Fig. 11**

**NOTE**

1. In case of refrigerant shortage due to forgetting additional refrigerant charge etc., it will result in malfunction such as does not cool or does not heat.
   Refer to the outdoor unit installation manual or technical document for refrigerant piping.

## 7. DRAIN PIPING WORK

**(1) Carry out drain piping.**

Carry out drain piping so that drainage is ensured.

- Select the piping diameter equal to or larger than (except for riser) that of the connection piping (polyvinyl chloride piping, nominal diameter 1 inch (25mm), outside diameter 1-1/4 inch (32mm)).
- Install the drain piping as short as possible with downward inclination of 1/100 or more and without such that air may not stagnate. **(Refer to Fig. 12)** (It may cause abnormal sound such as bubbling noise.)

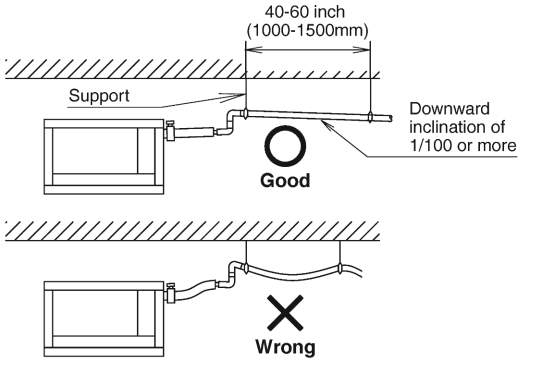



**Fig. 12**

**⚠ CAUTION**

If drain stagnates in the drain piping, the piping may be clogged.

- If sufficient downward inclination cannot be ensured, carry out upward drain piping.
- Install supports at a distance of 40 to 60 inch (1000 to 1500mm) so that the piping may not deflect. **(Refer to Fig. 12)**
- Make sure to use the attached drain hose (2) and the clamp metal (1).
  Insert the drain hose (2) into the drain socket up to the point where the socket diameter becomes larger.
  Put the clamp metal (1) to the taped hose end and tighten the clamp metal (1) with torque 10.6~13.3lbf • ft (120~150 N·cm).

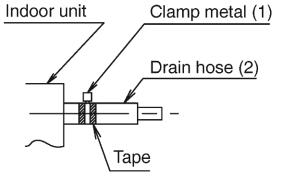


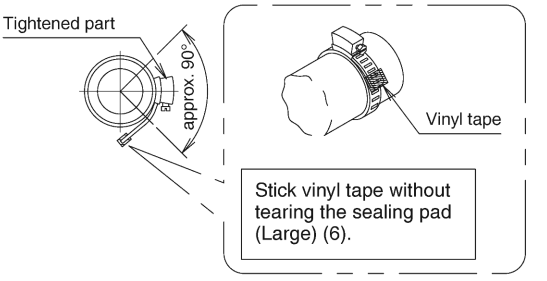

**Fig. 13**

**⚠ CAUTION**

- Do not tighten the clamp metal (1) with the torque more than the specified value.
  The drain hose (2), the socket or the clamp metal (1) may be damaged.

- Wrap the vinyl tape around the end of the clamp metal (1) so that the sealing pad (Large) (6) to be used at the next process may not be damaged with the clamp end or bend the tip of the clamp metal (1) inward as shown. **(Refer to Fig. 14)**

**<In case of sticking vinyl tape>**




**<In case of bending the tip>**

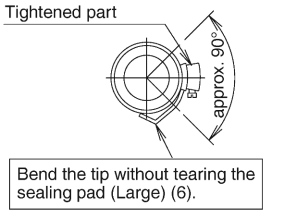



**Fig. 14**

**< Caution to be taken when carrying out upward drain piping (Refer to Fig. 15) >**

- The maximum height of the drain riser is 29-9/16 inch (675mm). Since the drain pump mounted on this indoor unit is a high head type, from the characteristic point of view, the higher the drain riser the lower the draining noise.
  Therefore, the drain riser of 11-13/16 inch (300mm) or higher is recommended.
- For upward drain piping, keep the horizontal piping distance of 11-13/16 inch (300mm) or less between the drain socket root to the drain riser.

unit: inch (mm)

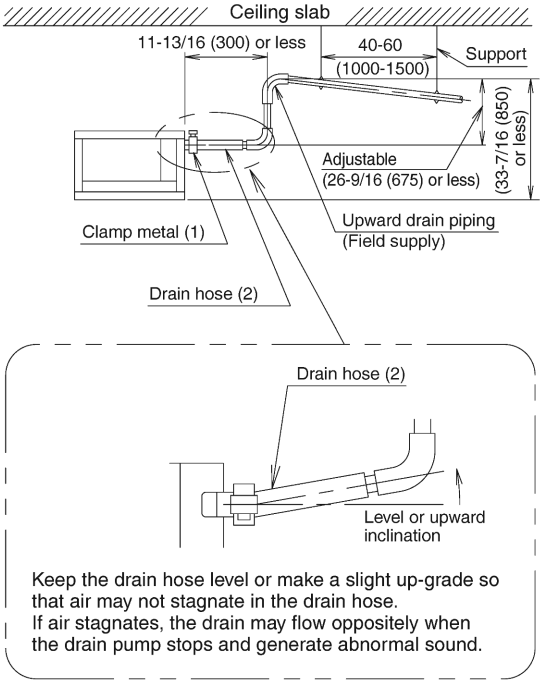



**Fig. 15**

**⚠ CAUTION**

- To avoid the attached drain hose (2) getting excessive force, do not bend nor twist it.
  It may cause water leakage.
- As for drain piping connection, do not connect the drain hose directly to a sewage that gives off ammonia odor.
  (The ammonia in the sewage may go through the drain piping and corrode the heat exchanger of the indoor unit.)
- In case of centralized drain piping, carry out piping work according to the procedure shown in the following **Fig. 16**.

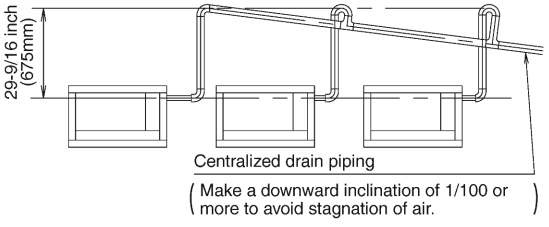


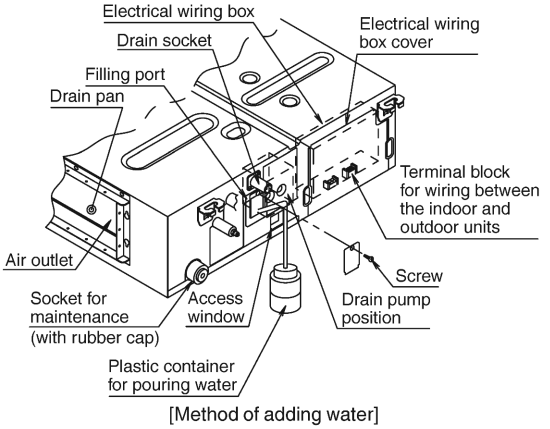

**Fig. 16**

- As for the size of centralized drain piping, select the size that meets the capacity of indoor units to be connected. (Refer to the technical document)
- Positioning the upward drain piping at an angle may cause float switch malfunction and lead to water leakage.
- While replacing with new indoor unit, use the attached new drain hose (2) and the clamp metal (1).
  If an old drain hose or a clamp metal is used, it may cause water leakage.

**(2) After piping work is finished, check if drainage flows smoothly.**

**[When the electric wiring work is finished]**

- Gradually pour 1/4 gal of water from the inspection port at the bottom of the drain socket on the left side of the drain socket into the drain pan giving caution to avoid splashing water on the electric components such as drain pump and confirm drainage by operating the indoor unit under cooling mode according to **10. FIELD SETTING**. **(Refer to Fig. 17)**




[Method of adding water]

**Fig. 17**

**[When the electric wiring work is not finished]**

- The electric wiring works (including grounding) must be carried out by a qualified electrician.
- If a qualified person is not present, after the electric wiring work is finished, check the drainage according to the method specified in **[When the electric wiring work is finished]**.
  1. Open the electrical wiring box cover and connect the ground wiring to the ground terminal.
  2. Make sure the electrical wiring box cover is closed before turning on the power supply.
     - Throughout the whole process, carry out the work giving caution to the wiring around the electrical wiring box so that the connectors may not come off.
  3. Gradually pour 1 litre of water from the air outlet on the left side of the drain socket into the drain pan giving caution to avoid splashing water on the electric components such as drain pump. **(Refer to Fig. 17)**
  4. When the power supply is turned on, the drain pump will operate. Drainage can be checked at the transparent part of the drain socket.
     (The drain pump will automatically stop after 10 minutes.)
     The drainage of water can be confirmed with water level change in the drain pan through the access window.
     - Do not connect the drain piping directly to the sewage that gives off ammonia odor.
       The ammonia in the sewage may go through the drain piping and corrode the heat exchanger of the indoor unit.
     - Do not apply external force to the float switch. (It may result in malfunction)
     - Do not touch the drain pump.
       Touching the drain pump may cause electric shock.
  5. Turn off the power supply after checking drainage, and remove the power supply wiring.
  6. Attach the electrical wiring box cover as before.

**(3) Sweating may occur and result in water leakage. Therefore, make sure to insulate the following 2 locations (drain piping that laid indoors and drain sockets).**

- Use the provided sealing pad (large) (6), and perform the thermal insulation of the clamp metal (1) and drain hose (2) after checking the drainage of water. **(Refer to Fig. 18)**

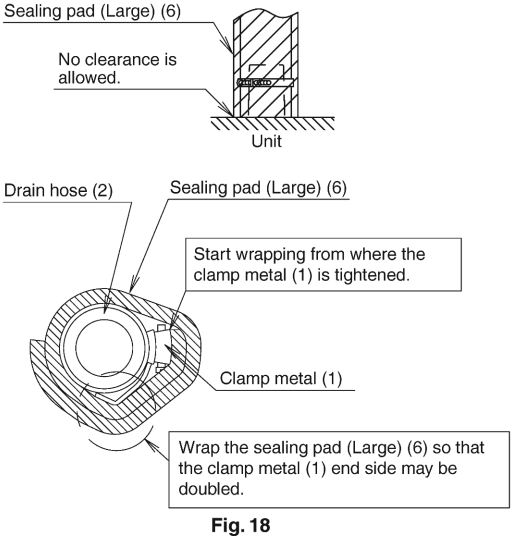



**Fig. 18**

## 8. DUCT WORK

**Pay the utmost attention to the following items and conduct the duct work.**

- Check that the duct is not in excess of the setting range of external static pressure for the unit. (Refer to the technical datasheet for the setting range.)
- Attach a canvas duct each to the air outlet and air inlet so that the vibration of the equipment will not be transmitted to the duct or ceiling.
  Use a sound-absorbing material (insulation material) for the lining of the duct and apply vibration insulation rubber to the suspension bolts.
- At the time of duct welding, perform the curing of the duct so that the sputter will not come in contact with the drain pan for the filter.
- If the metal duct passes through a metal lath, wire lath, or plate of a wooden structure, separate the duct and wall electrically.
- Be sure to heat insulate the duct for the prevention of dew condensation. (Material: Glass wool or styrene foam; Thickness: 1 inch (25mm))
- Be sure to attach the field supply air filter to the air inlet of the unit or field supply inlet in the air passage on the air suction side. (Be sure to select an air filter with a duct collection efficiency of 50 weight percent.)
- Explain the operation and washing methods of the locally procured components (i.e., the air filter, air inlet grille, and air outlet grille) to the user.
- Locate the air outlet grille on the indoor side for the prevention of drafts in a position where indirect contact with people.
- The air conditioner incorporates a function to adjust the fan to rated speed automatically. **(10. FIELD SETTING)**
  Therefore, do not use booster fans midway in the duct.

**Connection method of ducts on air inlet and outlet sides.**

- Connect the field supply duct in alignment with the inner side of the flange.
- Connect the flange and unit with the duct flange connection screw (3).
- Wrap aluminium tape around the flange and duct joint in order to prevent air leakage.

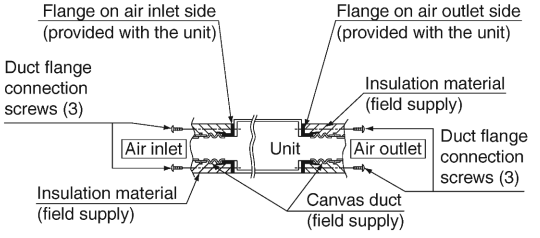



**Fig. 19**

**⚠ CAUTION**

Connect the flange and unit with the flange connection screw (3) regardless of whether the duct is connected to the air inlet side.

## 9. ELECTRIC WIRING WORK

### 9-1 GENERAL INSTRUCTIONS

- Make certain that all electric wiring work is carried out by qualified personnel according to the applicable legislation and this installation manual, using a separate dedicated circuit.
  Insufficient capacity of the power supply circuit or improper electrical construction may lead to electric shock or a fire.
- Make sure to install a ground fault circuit interrupter.
  Failure to do so may cause electric shock and a fire.
- Do not turn on the power supply (branch switch, branch overcurrent circuit breaker) until all the works are finished.
- Multiple number of indoor units are connected to one outdoor unit. Name each indoor unit as A-unit, B-unit ….. and the like. When these indoor units are wired to the outdoor unit, always wire the indoor unit to the terminal indicated with the same symbol on the terminal block. If the wiring and the piping are connected to the different indoor units and operated, it will result in malfunction.
- Make sure to ground the air conditioner.
  Grounding resistance should be according to applicable legislation.
- Do not connect the ground wiring to gas or water pipings, lightning conductor or telephone ground wiring.
  - Gas piping .....Ignition or explosion may occur if the gas leaks.
  - Water piping .....Hard vinyl tubes are not effective grounds.
  - Lightning conductor or telephone ground wiring .....
    Electric potential may rise abnormally if struck by a lightning bolt.
- For electric wiring work, refer to also the “WIRING DIAGRAM” attached to the electrical wiring box cover.
- Carry out wiring between the outdoor units, indoor units and the remote controllers according to the wiring diagram.
- Carry out installation and wiring of the remote controller according to the “installation manual” attached to the remote controller.
- Do not touch the Printed Circuit Board assembly. It may cause malfunction.

**⚠ WARNING**

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

**⚠ CAUTION**

- When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When doing the wiring, make sure the wiring is neat and does not cause the electrical wiring box cover to stick up, then close the cover firmly.
- Outside the unit, separate the low voltage wiring (remote controller wiring) and high voltage wiring (wiring between units, ground, and other power wiring) at least 2 in. so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

## 9-2 WIRING EXAMPLE

For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

**Confirm the system type.**

- **Multi system:** 2 through 6 (The number of connectable units will vary according to model) indoor units connect to 1 outdoor unit. The indoor unit is controlled by remote controller connected to each indoor unit.

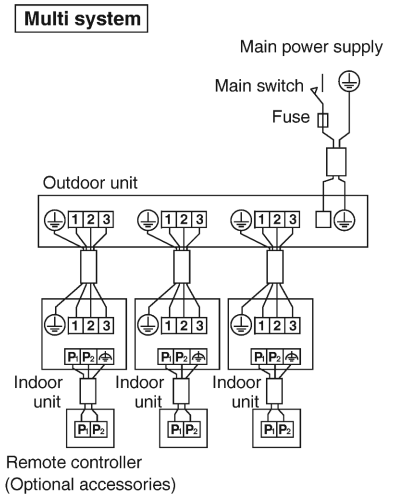



**Fig. 20**

**NOTE**

1. All transmission wiring except for the remote controller wires is polarized and must match the terminal symbol.
2. In case a shielding wire is to be used, connect a shielded portion with the ⏚ of a remote controller terminal block. (Also, connect the ground for the remote control to a grounded metal part.)

## 9-3 SPECIFICATION FOR FIELD WIRE

Table 2

| | Wire | Size | Length (ft.) |
|---|---|---|---|
| Wiring between units | Wire size and length must comply with local codes. | – | – |
| Remote controller wiring | Sheathed (2 wire) | AWG 18 - 16 | Max.1640* |
| Wiring to ground terminal | Wire size and length must comply with local codes. | – | – |

* This will be the total extended length in the system when doing group control.

## 9-4 WIRING CONNECTION METHOD

### ⚠ CAUTION FOR WIRING

- For connection to the terminal block, use ring type crimp style terminals with insulation sleeve or insulate the wirings properly.

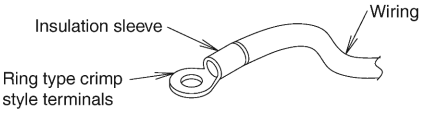



**Fig. 21**

- Connect the terminal as shown in Fig. 22. When installing a single core wire.
- Do not carry out soldering finish when stranded wirings are used. (Otherwise, the loosening of wiring may result in abnormal heat radiation.)

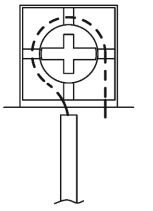


**Fig. 22**

(Abnormal heating may occur if the wirings are not tightened securely.)

- Use the required wirings, connect them securely and fix these wirings securely so that external force may not apply to the terminals.
- Use a proper screw driver for tightening the terminal screws. If an improper screw driver is used, it may damage the screw head and a proper tightening cannot be carried out.
- If a terminal is over tightened, it may be damaged. Refer to the table shown below for tightening torque of terminals.

Table 3 unit: lbf • ft (N • m)

| | Tightening torque |
|---|---|
| Terminal block for remote controller (6P) | 0.58 - 0.72 (0.79 - 0.98) |
| Terminal block for power supply (4P) | 0.87 - 1.06 (1.18 - 1.44) |

- Do not carry out soldering finish when stranded wirings are used.

### ⚠ WARNING

- When wiring, form the wirings orderly so that the electrical wiring box cover can be securely fastened. If the electrical wiring box cover is not in place, the wirings may come out or be sandwiched by the box and the lid and cause electric shock or a fire.

**(1) Remove the electrical wiring box cover.**

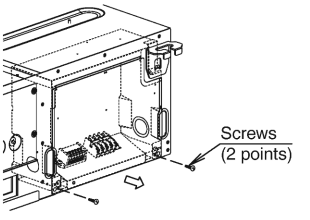



**Fig. 23**

**(2) Attach the conduit to the conduit mounting plate (12).**

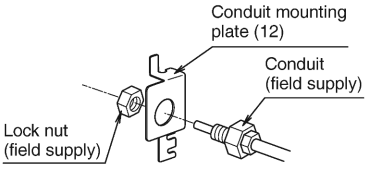



**Fig. 24-1**

- Attach the wire sealing pad (small) (10) to the conduit, the wiring between the indoor and outdoor units, and the ground wiring.

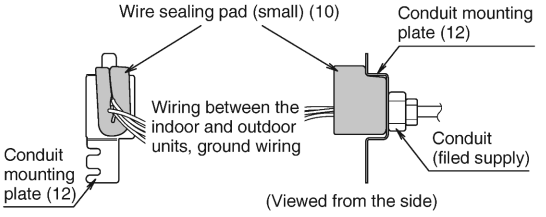



**Fig. 24-2**

- Loosen the screws (2 points) in part A.

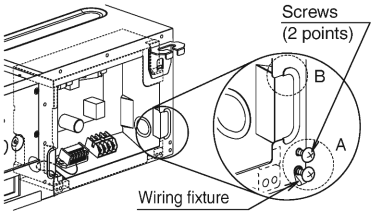



**Fig. 24-3**

- Insert the hook part of the conduit mounting plate (12) into part B and secure the conduit mounting plate (12) with the screws loosened (2 points).

**NOTE**

Remove the wiring fixture if you have difficulty performing this step.

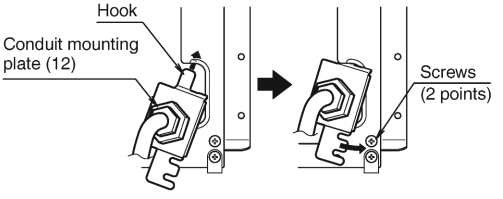



**Fig. 24-4**

**(3) Connect the wiring into the electrical wiring box through the wiring intake beside the electrical wiring box.**

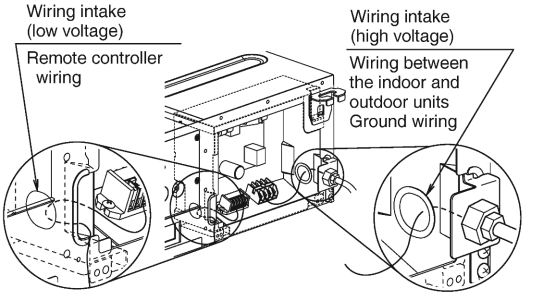



**Fig. 25**

**(4) Follow the instructions below and perform wiring in the electrical wiring box.**

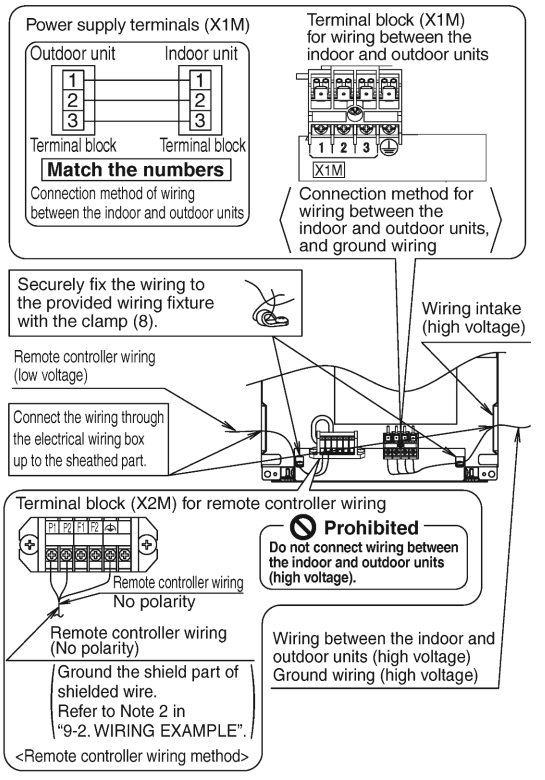



**Fig. 26**

**NOTE**

Secure the wiring between the wiring intake and conduit with the clamp (8) so that the wiring will not become loose.

**(5) Mount the electrical wiring box cover and wrap the wire sealing pad (small) (10) so that the wiring through hole will be covered by the sealing pad.**

- Seal the clearance around the wirings with putty or insulating material (field supply).
  (If insects and small animals get into the indoor unit, short-circuiting may occur inside the electrical wiring box.)

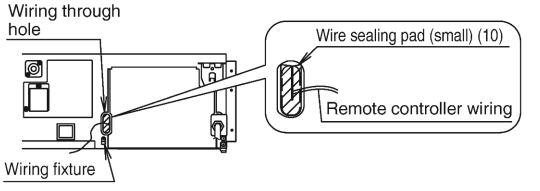



**Fig. 27**

**(6) Securely fix each wiring with the provided clamp material (8).**

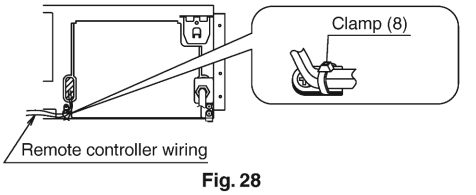



**Fig. 28**

- See the installation manual supplied with the outdoor unit.

## 10. FIELD SETTINGS

**CAUTION**

Before carrying out field setting, check the items mentioned in **1. Items to be checked after the installation work is completed** on page 3.

- Check if all the installation and piping works for the air conditioner are completed.
- Check that the outside panel and piping cover of the indoor and outdoor units are closed.

**< FIELD SETTINGS >**

**After turning on the power supply, carry out field setting from the remote controller according to the installation state.**

- Carry out setting at 3 places, “Mode No.”, “FIRST CODE No.” and “SECOND CODE No.”.
  The settings shown by ▭ in the following tables indicate those when shipped from the factory.
- The method of setting procedure and operation is shown in the installation manual attached to the remote controller.

  **NOTE**
  - Though setting of “Mode No.” is carried out as a group, if you intend to carry out individual setting by each indoor unit or confirmation after setting, carry out setting with the Mode No. shown in the parenthesis().
- Ask the user to keep the manual attached to the remote controller together with the operation manual.
- Do not carry out settings other than those shown in the table.
- Settings are performed by selecting “Mode No.”, “FIRST CODE No.”, and “SECOND CODE No.”.

### 10-1 SETTINGS FOR EXTERNAL STATIC PRESSURE

- Make settings in either method (a) or method (b).

  **(a) Make settings with Air volume automatic adjustment function.**
  “Air volume automatic adjustment” function: The air volume is adjusted to the rated air volume automatically.

**CAUTION**

- Be sure to check that the external static pressure is within the specification range before making settings. The external static pressure will not be automatically adjusted and air volume insufficiency or water leakage may result if the external static pressure is outside the range. (Refer to the technical document for the setting range of external static pressure.)

**(1)** Check that the electrical wiring and duct work have been completed.
(If the closing damper is set midway, be sure to check that the damper is opened. Furthermore, check that the air passage on the suction side is provided with an air filter (field supply)).

**(2)** If air conditioner has more than one air outlet and air inlet, be sure to make adjustments so that the air volume ratio of each air outlet and the corresponding air inlet will conform to the designed air volume ratio.
In that case, set the operating mode to “Fan”. (In the case of changing the air volume, press the fan speed button on the remote controller and change the current selection to “High”, “Medium”, or “Low”.)

**(3)** Make settings to adjust the air volume automatically.
After setting the operating mode to “Fan”, set the air conditioner to field setting mode with the operation of the air conditioner stopped. Select Mode No. [21] (11 in the case of batch settings), select FIRST CODE No. “7”, and set the SECOND CODE No. to “03”.
Return to the “Basic screen” (“Normal mode” if a wireless remote controller is used), and press the ON/OFF button. The operation lamp is lit, and the indoor unit will go into fan operation for air volume automatic adjustments (at which time, do not adjust the opening of the air outlet or inlet). The air volume adjustments will automatically terminate approximately 1 to 15 minutes after the indoor unit comes into operation, and the operation lamp will be OFF and the indoor unit will come to a stop.

Table 4

| Mode No. | FIRST CODE No. | Setting content | SECOND CODE No. | | |
|---|---|---|---|---|---|
| | | | 01 | 02 | 03 |
| 11(21) | 7 | Air volume adjustment | OFF | Air volume adjustment completion | Air volume adjustment start |

**CAUTION**

- If airflow pathway changes, such as duct and air outlet changes, are made after air volume adjustments, be sure to make “Air volume automatic adjustment” again.
- If airflow pathway changes, such as duct and air outlet changes, are made after **11. TRIAL OPERATION AND TESTING** or air conditioner relocation, contact your dealer.

**(b) Select external static pressure with the remote controller.**
Check with Mode No. [21] per indoor unit that the SECOND CODE No. for the above "Air volume adjustment" is set to "01" (OFF). (The SECOND CODE No. is factory set to "01" (OFF).) Change the SECOND CODE No. by referring to the table below according to the external static pressure of the duct to be connected.

Table 5 09/12 class

| External static pressure | Mode No. | FIRST CODE No. | SECOND CODE No. |
|---|---|---|---|
| 30Pa | 13(23) | 6 | 03 |
| 40Pa | | | 04 |
| 50Pa | | | 05 |
| 60Pa | | | 06 |
| 70Pa | | | 07 |
| 80Pa | | | 08 |
| 90Pa | | | 09 |
| 100Pa | | | 10 |
| 110Pa | | | 11 |
| 120Pa | | | 12 |
| 130Pa | | | 13 |
| 140Pa | | | 14 |
| 150Pa | | | 15 |

Table 5 15/18/24 class

| External static pressure | Mode No. | FIRST CODE No. | SECOND CODE No. |
|---|---|---|---|
| 50Pa | 13(23) | 6 | 05 |
| 60Pa | | | 06 |
| 70Pa | | | 07 |
| 80Pa | | | 08 |
| 90Pa | | | 09 |
| 100Pa | | | 10 |
| 110Pa | | | 11 |
| 120Pa | | | 12 |
| 130Pa | | | 13 |
| 140Pa | | | 14 |
| 150Pa | | | 15 |

### 10-2 SETTING WHEN AN OPTIONAL ACCESSORY IS ATTACHED

- For setting when attaching an optional accessory, refer to the installation manual attached to the optional accessory.

### 10-3 SETTING FILTER SIGN

- A message to inform the air filter cleaning time will be indicated on the remote controller.
- Set the SECOND CODE No. shown in the Table 6 according to the amount of dust or pollution in the room.
- The periodical filter cleaning time can be shortened depending on the environment.

Table 6

| Contamination | Hours until indication | Mode No. | FIRST CODE No. | SECOND CODE No. |
|---|---|---|---|---|
| Normal | Approx. 2500 hrs | 10(20) | 0 | 01 |
| More contaminated | Approx. 1250 hrs | | | 02 |
| With indication | | | 3 | 01 |
| No indication* | | | | 02 |

* Use "No indication" setting when cleaning indication is not necessary such as the case of periodical cleaning being carried out.

### 10-4 REMOTE CONTROL SETTINGS

**<In the case of using a wireless remote controller>**

- In the case of using a wireless remote controller, address settings for the wireless remote controller are required. For settings, refer to the installation manual provided with the wireless receiver kit.

## 11. TRIAL OPERATION AND TESTING

### 11-1 TRIAL OPERATION AND TESTING

- Trial operation should be carried out in either COOL or HEAT operation.

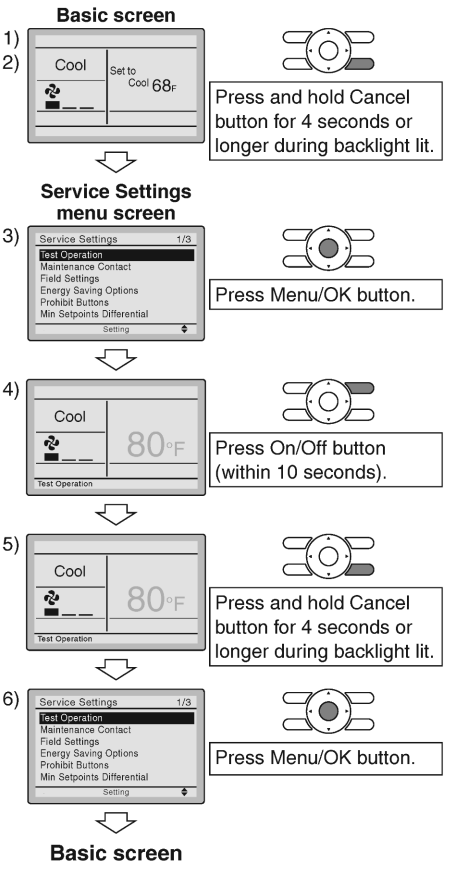
1. **Measure the supply voltage and make sure that it is within the specified range.**
2. **In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.**
3. **Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, are working properly.**
   - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
4. **After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).**
   - When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.

   Refer to **For wired remote controller** on page 16.

   Refer to **For wireless remote controller** on page 17.

**For wired remote controller**

1) Set to COOL or HEAT operation using the remote controller.
2) Press and hold Cancel button for 4 seconds or longer. Service settings menu is displayed.
3) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and “Test Operation” is displayed at the bottom.
4) Press On/Off button within 10 seconds, and the test operation starts.
   Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature setpoint and room temperature.
   - In the case of above-mentioned procedures 3) and 4) in reverse order, test operation can start as well.
5) Press and hold Cancel button for 4 seconds or longer in the basic screen.
   Service settings menu is displayed.
6) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and normal operation is conducted.
   - Test operation will stop automatically after 15-30 minutes. To stop the operation, press On/Off button.



**For wireless remote controller**

1) Press MODE and select the COOL or HEAT operation.
2) Press /TEST twice. "Test" is displayed.
3) Press ON/OFF within 10 seconds, and the test operation starts.

   Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature setpoint and room temperature.
   - In the case of above-mentioned procedures 1) and 2) in reverse order, test operation can start as well.
   - Test operation will stop automatically after 15 - 30 minutes.
     To stop the operation, press ON/OFF .
   - Some of the functions cannot be used in the test operation mode.

**Precautions**

1) Refer to "**11-2 HOW TO DIAGNOSE FOR MALFUNCTION**" if the unit does not operate properly.

## 11-2 HOW TO DIAGNOSE FOR MALFUNCTION

- If the air conditioner does not operate normally after installing the air conditioner, a malfunction shown in the table below may happen.

| Wired remote controller display | Description |
|---|---|
| No display | • Power outage, power voltage error or open-phase<br>• Incorrect wiring (between indoor and outdoor units)<br>• Indoor PC-board assembly failure<br>• Remote controller wiring not connected<br>• Remote controller failure<br>• Open fuse or tripped circuit breaker (outdoor unit) |
| "Checking the connection. Please stand by." * | • Indoor PC-board assembly failure<br>• Wrong wiring (between indoor and outdoor units) |

* "Checking the connection. Please stand by" will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

■ Diagnose with the display on the liquid crystal display remote controller.

**With the wired remote controller**

When the operation stops due to a malfunction, operation lamp blinks, and the malfunction code is indicated on the liquid crystal display. In such a case, diagnose the fault contents by referring to Error History in the service settings menu.
In the case of group control, the unit No. is displayed so that the indoor unit with the trouble can be identified.

**With the wireless remote controller**

(Refer also to the operation manual attached to the wireless remote controller)
When the operation stops due to a malfunction the display on the indoor unit blinks. In such a case, diagnose the fault contents with the error code which can be found by following procedures.

1) Press the INSPECTION/TEST OPERATION button, " " is displayed and " 0 " blinks.
2) Press the TEMPERATURE SETTING button and find the unit No. which stopped due to trouble.

   Number of beeps
   3 short beeps..... Perform all the following operations
   1 short beep ..... Perform (3) and (6)
   1 long beep..... No trouble

3) Press the OPERATION MODE SELECTOR button and upper figure of the error code blinks.
4) Continue pressing the TEMPERATURE SETTING button until it makes 2 short beeps and find the upper code.
5) Press the OPERATION MODE SELECTOR button and lower figure of the error code blinks.
6) Continue pressing the TEMPERATURE SETTING button until it makes a long beep and find the lower code.
   • A long beep indicate the error code.

### 11-3 MALFUNCTION CODE

- For places where the malfunction code is written in white, the " " indication is not displayed. Though the system continues operating, be sure to inspect the system and make repairs as necessary.
- Depending on the type of indoor or outdoor unit, the malfunction code may or may not be displayed.

| Malfunction code | Descriptions and measures | Remarks |
|---|---|---|
| A1 | Indoor Printed Circuit Board failure | |
| A3 | Drain level abnormal | |
| A5 | High pressure control or freeze-up protector | |
| A6 | Indoor fan motor overload, over current, lock | |
| | Indoor Printed Circuit Board connection failure | |
| A8 | Indoor unit power supply voltage abnormal | |
| AJ | Capacity setting failure | Capacity setting adapter or capacity data error, or disconnection of the capacity setting adapter, failure to connect the adapter, or the capacity is not set to the data-retention IC. |
| C1 | Transmission error between indoor Printed Circuit Board (Master) and indoor Printed Circuit Board (Slave) | |
| C4 | Indoor heat exchanger liquid pipe temperature sensor malfunction | Abnormal stop is applied depending on the model or condition. |
| C5 | Indoor heat exchanger condenser / evaporator temperature sensor malfunction | Abnormal stop is applied depending on the model or condition. |
| C9 | Suction air thermistor malfunction | Abnormal stop is applied depending on the model or condition. |
| CJ | Remote controller air thermistor malfunction | Remote controller thermo does not function, but body thermo operation is enabled. |
| E0 | Action of safety device (Outdoor unit) | |
| E1 | Outdoor Printed Circuit Board failure (Outdoor unit) | |
| E5 | Compressor motor lock malfunction (Outdoor unit) | |
| E6 | Compressor motor lock by over current (Outdoor unit) | |
| E7 | Outdoor fan motor lock malfunction (Outdoor unit) | |
| | Outdoor fan instant overcurrent malfunction (Outdoor unit) | |
| E8 | Input overcurrent (Outdoor unit) | |
| EA | Cooling/heating switch malfunction (Outdoor unit) | |
| F3 | Discharge piping temperature malfunction (Outdoor unit) | |
| F6 | High pressure control (in cooling) (Outdoor unit) | |
| F8 | Operation halt due to compressor internal temperature abnormality | |
| H0 | Sensor fault for inverter (Outdoor unit) | |
| H6 | Operation halt due to faulty position detection sensor | |
| H8 | CT abnormality (Outdoor unit) | |
| H9 | Outdoor air thermistor system malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| J3 | Discharge piping thermistor system malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| J6 | Outdoor heat exchanger distributor liquid piping thermistor malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| L3 | Reactor thermistor malfunction (Outdoor unit) | |
| L4 | Overheated heat-radiating fin (Outdoor unit) | Inverter cooling failure. |
| L5 | Instantaneous overcurrent (Outdoor unit) | The compressor engines and turbines may be experiencing a ground fault or short circuit. |

| | | |
|---|---|---|
| P4 | Heat-radiating fin thermistor malfunction (Outdoor unit) | Abnormal stop is applied depending on the model or condition. |
| U0 | Suction piping temperature abnormal (Outdoor unit) | The refrigerant may be insufficient. Abnormal stop is applied depending on the model or condition. |
| U2 | Power voltage malfunction (Outdoor unit) | The inverter open-phase or main circuit condenser may be malfunctioning. Abnormal stop is applied depending on the model or condition. |
| U4 UF | Transmission error (between indoor and outdoor units) | Wiring error between indoor and outdoor unit. Or Indoor and outdoor Printed Circuit Board failure. |
| U5 | Transmission error (between indoor and remote controller units) | Transmission between indoor unit and remote controller is not performed properly. |
| U7 | Transmission error of the inverter module | |
| UA | Field setting error | System setting error of the simultaneous on/off multi-split type. |
| UE | Transmission error (between indoor unit and centralized remote controller) | |
| UC | Remote controller address setting error | |

**⚠ CAUTION**

After test operation is completed, check the items mentioned in the clause 2 **2. Items to be checked at time of delivery** on page 4.
If the interior finish work is not completed when the test operation is finished, for protection of the air conditioner, ask the user not operate the air conditioner until the interior finish work is completed.
If the air conditioner is operated, the inside of the indoor units may be polluted by substances generated from the coating and adhesives used for the interior finish work and cause water splash and leakage.

**⚠ To the operator carrying out test operation**

After test operation is completed, before delivering the air conditioner to the user, confirm that the electrical wiring box cover is closed.
In addition, explain the power supply status (power supply ON/OFF) to the user.

## 12.2 <BRC1E73> Wired Remote Controller

# 1. Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.
All phases of the field-installation, including, but not limited to, electrical, piping, safety, etc. must be in accordance with manufacturer's instructions and must comply with national, state, provincial and local codes.
Read these **SAFETY CONSIDERATIONS** carefully before installing the remote controller.
After completing the installation, ensure that the remote controller operates properly during the startup operation.
Train the customer to operate and maintain the remote controller. Inform customers that they should store this Installation Manual with the Operation Manual for future reference.
Always use a licensed installer or contractor to install this product. Improper installation can result in electrical shock, fire, or explosion.
Meanings of **WARNING, CAUTION**, and **NOTE** Symbols.

| | |
|---|---|
| ⚠ **WARNING** | Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. |
| ⚠ **CAUTION** | Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.<br>It may also be used to alert against unsafe practices. |
| ⚠ **NOTE** | Indicates situations that may result in equipment or property-damage accidents only. |

| ⚠ WARNING |
|---|
| Only qualified personnel must carry out the installation work. |
| Consult your Daikin dealer regarding relocation and reinstallation of the remote controller.<br>Improper installation work may result in electric shocks or fire. |
| Electrical work must be performed in accordance with relevant local and national regulations and with instructions in this installation manual.<br>Improper installation may cause electrical shocks or fire. |
| Use only specified accessories and parts for installation work.<br>Failure to use specified parts may result in electric shocks, fire, or the unit falling. |
| Do not disassemble, reconstruct, or repair.<br>Electric shock or fire may occur. |
| Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires.<br>Improper connections or installation may result in fire. |
| Before touching electrical parts, confirm the power-off to the unit. |

## ⚠ CAUTION

Keep water out of the remote controller.
To avoid electric shock due to entry of water or insects, fill the wiring through-hole with putty.
Do not wash the remote controller with water as it may result in electrical shocks or fire.

Do not touch the remote controller buttons with wet fingers.
Touching the buttons with wet fingers can cause an electric shock.

Do not install the remote controller in the following locations:
(a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
Plastic parts may deteriorate.
(b) Where corrosive gas, such as sulfurous acid gas, is produced.
(c) Near machinery emitting electromagnetic waves.
Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
(d) Where flammable gas may leak, where there is carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions can cause a fire.
(e) High temperature area or direct flame.
Overheating and/or fire can occur.
(f) Moist area, where there is exposure to water. If water enters the inside of the remote controller, it may cause electric shock and electrical components may fail.

## ⚠ NOTE

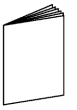
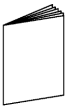
Install the control wires for the indoor and the remote controller at least 3.5 feet (1 meter) away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet (1 meter) may not be sufficient to eliminate the noise.

When remote controller's temperature sensor is used, select the installation location as per the following:
- A place where average temperature in the room can be detected.
- A place where it is not exposed to direct sunlight.
- A place where it is far away from any heat source.
- A place where it is not affected directly by outside air.

3

# 2. Accessories

The following accessories are included.

| Drywall screw | Drywall anchor | Wire tie | Operation manual | Installation manual | Wiring retainer |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| (2 pcs.) | (2 pcs.) | (1 pc.) | (1 pc.) | (1 pc.) | (1 pc.) |

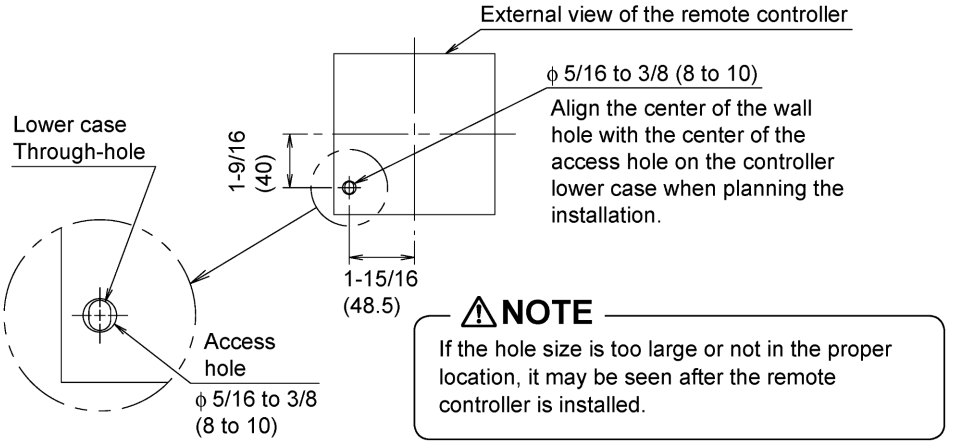
# 3. Remote Controller Installation Procedure

## 3-1 Determine where to install the remote controller.

Make sure to follow the **Safety Considerations** when determining the location.

## 3-2 If the control wire for the remote controller is to be routed from the rear, consider the location of the access hole in the lower case for making a hole in the wall.

[Unit : inch (mm)]




**⚠NOTE**

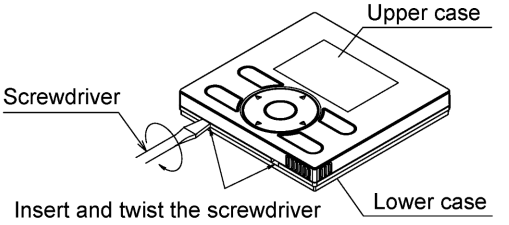
If the hole size is too large or not in the proper location, it may be seen after the remote controller is installed.

## 3-3 Remove upper case.

Insert a screwdriver in the recess of lower case to remove the upper case (2 points).

Remote controller printed-circuit board is installed on the upper case. Be careful not to damage the printed-circuit board with the screwdriver.

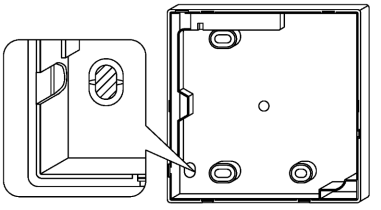
Be careful not to let dust or moisture touch the printed-circuit board.




Insert and twist the screwdriver lightly for removal.

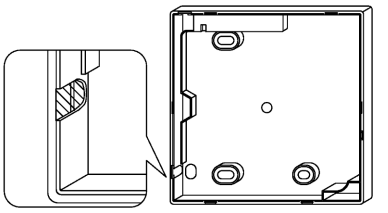
## 3-4 Determine the location where the wiring will enter the remote controller (back, left side, top left, top center).

### 3-4-1 Back outlet



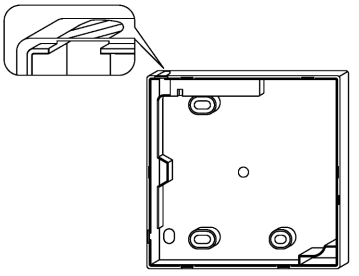
Cut off resin area (notched area).

### 3-4-2 Left outlet



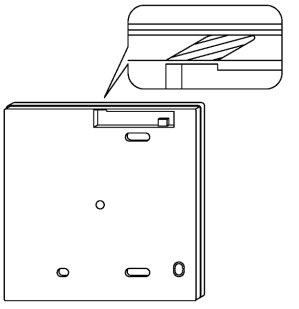
Cut the plastic at the notched area and remove any remaining burrs.

### 3-4-3 Top left outlet



Cut the plastic at the notched area and remove any remaining burrs.

### 3-4-4 Top center outlet



Cut the plastic at the notched area and remove any remaining burrs.

## 3-5 Install wiring.

**⚠NOTE**

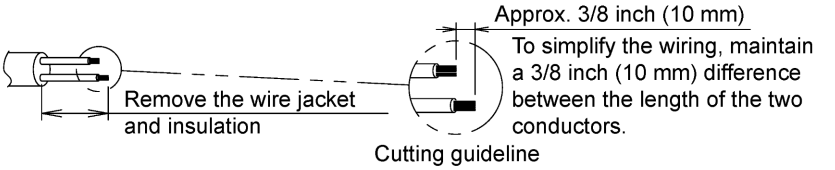
1. Switch box and control wiring are filed supplied.
2. Do not touch the remote controller printed-circuit board.

Wiring Specifications

| | |
|---|---|
| Wiring Type | Non-shielded, 2-conductor, stranded copper wire |
| Wiring Size | AWG-18 |
| Wiring Length | Maximum 1640 feet (500 m) |

5

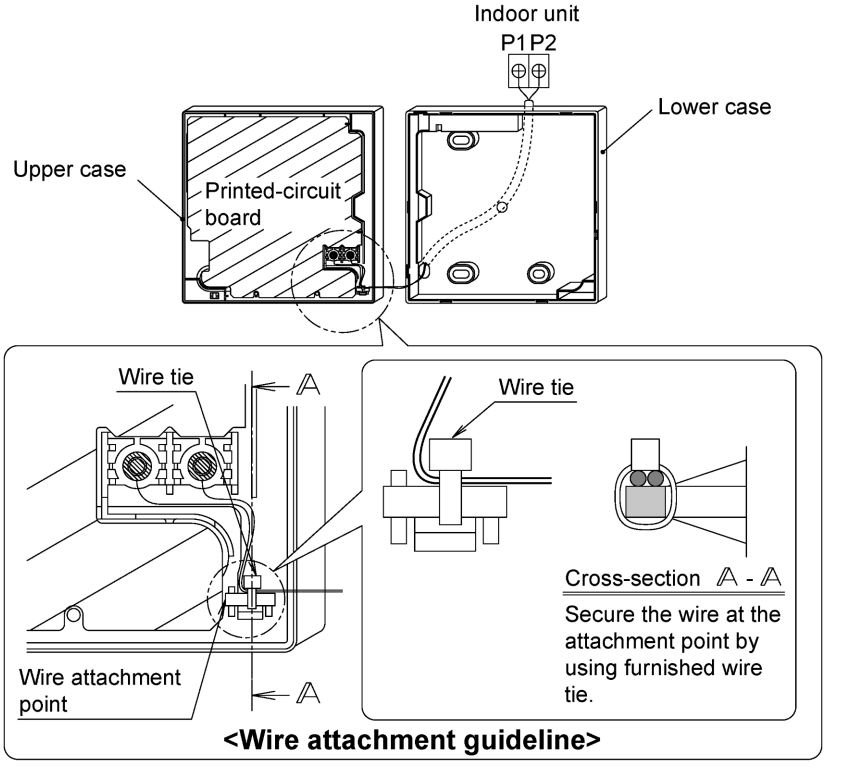
Prepare the wiring for connection to the remote controller following these instructions:



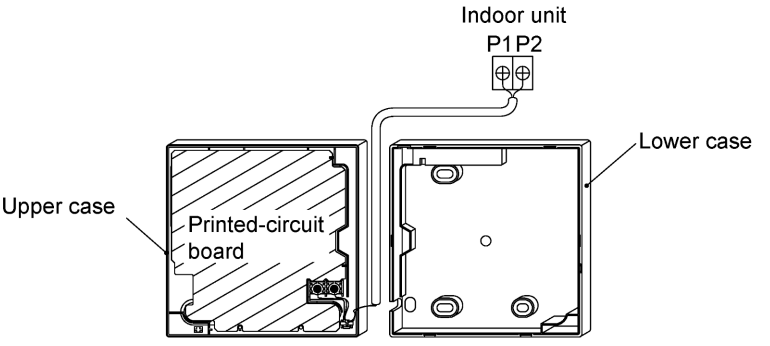

Length of jacket to be removed:
- Approx. 6 inch (150 mm) for top left outlet
- Approx. 8 inch (200 mm) for top center outlet

Connect the terminals (P/P1, N/P2) of the remote controller to the terminals (P1, P2) of the indoor unit. (P1 and P2 are not polarity sensitive.)

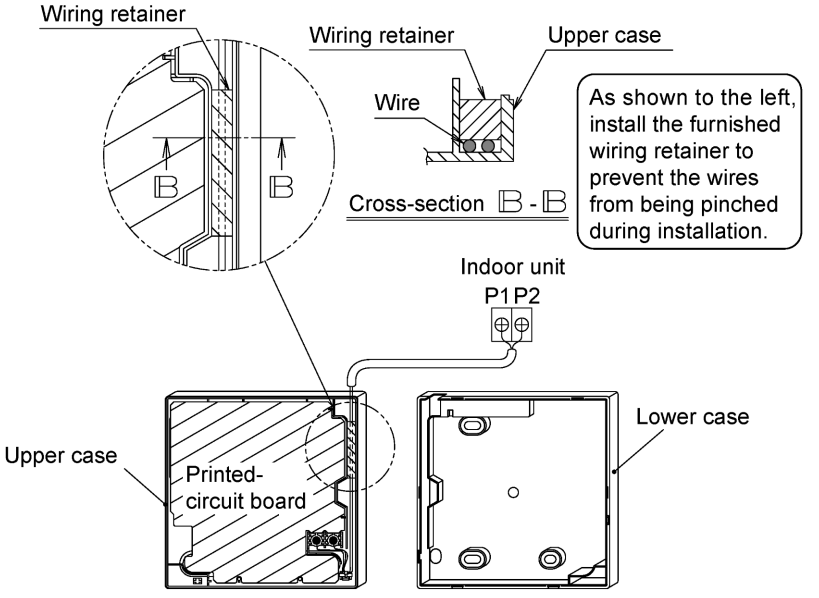
### 3-5-1 Back outlet



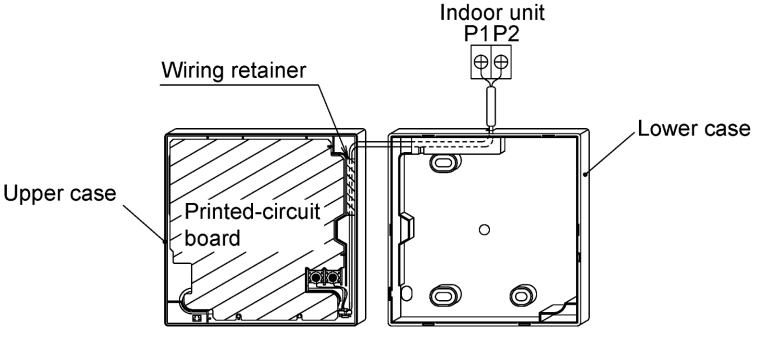
### 3-5-2 Left outlet




### 3-5-3 Top left outlet




### 3-5-4 Top center outlet



**⚠NOTE**

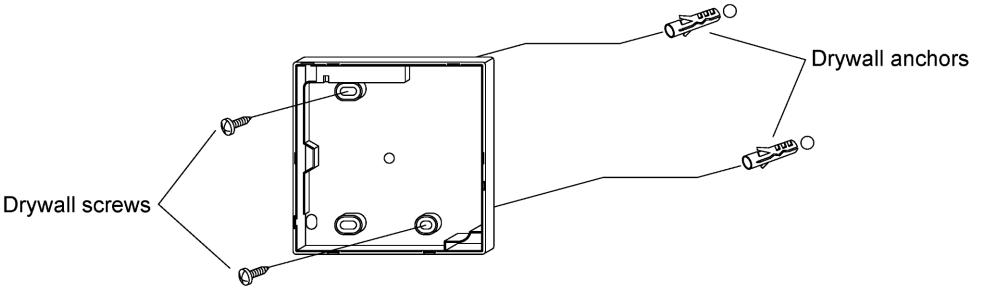
- To prevent electrical noise and possible communication errors, avoid installing the remote controller wiring parallel to or in the vicinity of line voltage circuits.

## 3-6 Installation procedure for the lower case.

When wiring the remote controller through the top center or rear access points, attachment of the wire to the lower case is required before it is wall mounted. Closely follow the wiring procedures.

### 3-6-1 Wall installation

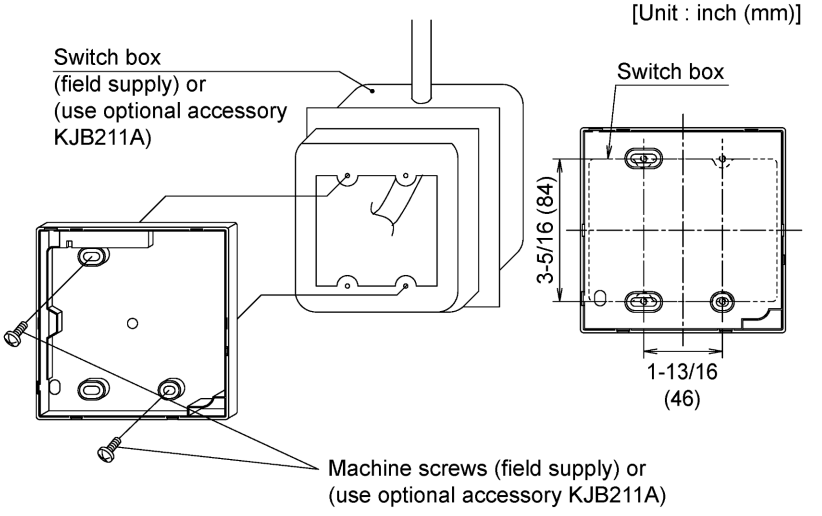
Secure by using furnished drywall anchors and screws (2 pcs.).




### 3-6-2 Switch box installation

Secure by using field supplied machine screws (2 pcs.).

[Unit : inch (mm)]

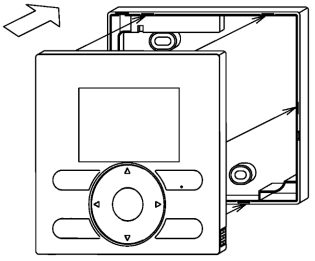



**⚠NOTE**

- Install the control on a flat surface only.
- To prevent deformation of the lower case, avoid over-tightening the installation screws.

## 3-7 Install the upper case.

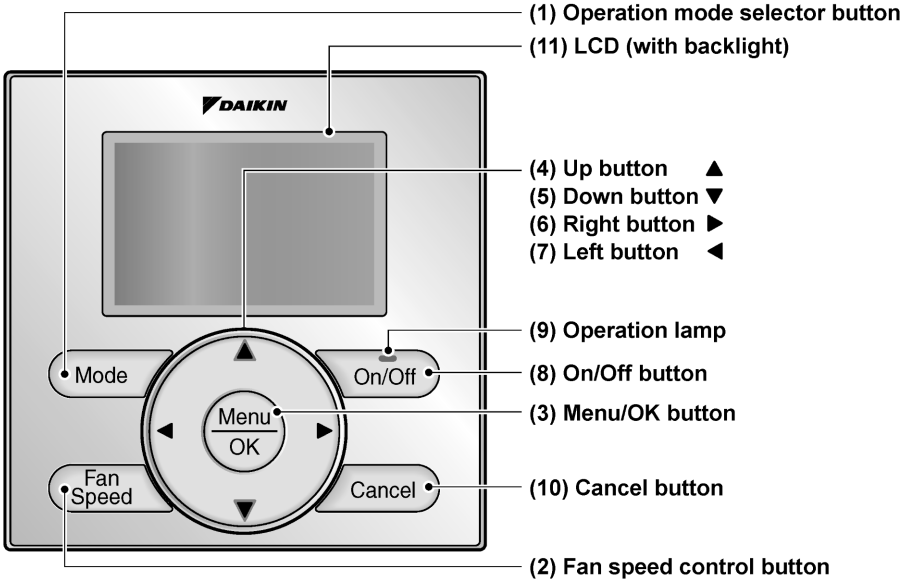
- Align the upper case with tabs of the lower case (6 points), insert and install the upper case.
- Install the wiring with care to prevent pinching.
- Peel off the protective membrane which overlays the upper case.



9

# 4. Functions and Menu Items of Remote Controller Buttons

## 4-1 Functions and menu items




**(1) Operation mode selector button**
Used to change the mode.

**(2) Fan speed control button**
Used to change the fan control.

**(3) Menu/OK button**
- Used to access the main menu. (For details of the main menu, see the operation manual.)
- Used to enter the item selected.

**Main Menu**

| |
|---|
| ∗Airflow Direction |
| ∗Individual Airflow Direction |
| ∗Ventilation |
| Schedule |
| Off Timer |
| Celsius / Fahrenheit |
| Filter Auto Clean |
| Maintenance Information |
| Configuration |
| Current Settings |
| Clock & Calendar |
| Daylight Saving Time |
| Language |

∗Depending on connected model

**(4) Up button ▲**
- Used to raise the setpoint temperature.
- The previous menu items will be highlighted. (The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

**(5) Down button ▼**
- Used to lower the setpoint temperature.
- Items below the currently selected item will be highlighted. (The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

**(6) Right button ▶**
- Used to highlight items to the right of the currently selected item.
- Display contents are changed to next screen per page.

**(7) Left button ◀**
- Used to highlight items to the left of the currently selected item.
- Display contents are changed to previous screen per page.

**(8) On/Off button**
Press once to operate, and press once again to stop.

**(9) Operation lamp**
Green lamp lights up during operation. The lamp will flash if a malfunction occurs.

**(10) Cancel button**
- Used to return to the previous screen.
- Press and hold this button for 4 seconds or longer to display service settings menu.

**(11) LCD (with backlight)**
The backlight will illuminate for approximately 30 seconds by pressing any operation button.

**Service Settings menu**

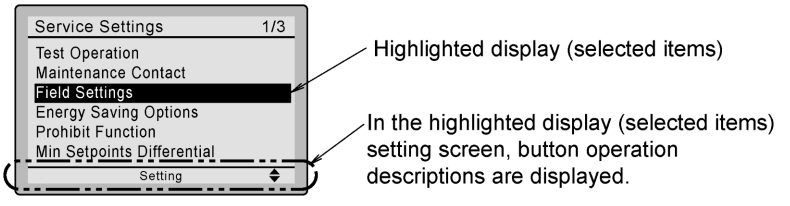
| |
|---|
| Test Operation |
| Maintenance Contact |
| Field Settings |
| ∗Energy Saving Options |
| Prohibit Function |
| Min Setpoints Differential |
| ∗Outdoor unit AirNet Address |
| Error History |
| ∗Indoor Unit Status |
| ∗Outdoor Unit Status |
| Forced Fan ON |
| Switch Main Sub Controller |
| Filter Indicator |
| ∗Brush/Filter Ind. |
| ∗Disable Filter Auto Clean |

∗Depending on connected model

**⚠NOTE**
- Operate the button while the backlight is illuminated.
- When one indoor unit is controlled by two remote controllers (main / sub) only the first controller to be accessed by the user will illuminate it's backlight.

## 4-2 Button menu display descriptions

**<Service settings menu screen>**



# 5. Power-on

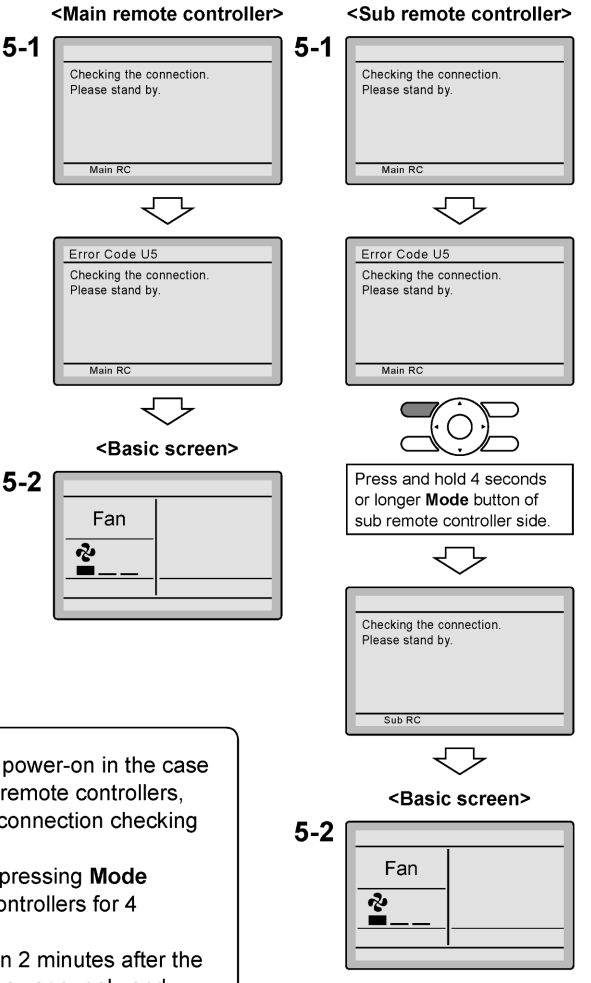
- Check for completion of indoor/outdoor unit wiring.
- Ensure that covers have been replaced on electrical component boxes for both indoor and outdoor units prior to restoring power.

**5-1** The following message is displayed after power-on.
**Checking the connection.**
**Please stand by.**

When the above message is displayed, the backlight will not be ON.

**In the case that 1 indoor unit is controlled by 2 remote controllers:**

Make sure to set the sub remote controller when the above message is displayed. Hold **Mode** button for 4 seconds or longer to set.
When the display is changed from "Main RC" to "Sub RC" the setting is completed.




**5-2** Basic screen is displayed.

**NOTE**

If sub remote controller is not set at power-on in the case of one indoor unit controlled by two remote controllers, **Error Code: U5** is displayed in the connection checking screen.
Select the sub remote controller by pressing **Mode** button of either one of the remote controllers for 4 seconds or longer.
If the basic screen is not displayed in 2 minutes after the "Sub RC" is displayed, shut off the power supply and check the wiring.

**NOTE**

When selecting a different language, refer to **Chapter 12. Language**.
(See page 21.)

# 6. Field Settings

**6-1** Press and hold **Cancel** button for 4 seconds or longer.
Service settings menu is displayed.

**6-2** Select Field Settings in the Service Settings menu, and press **Menu/OK** button.
Field settings screen is displayed.

**6-3** Highlight the mode, and select desired "Mode No." by using ▲▼ (Up/Down) button.

**6-4** In the case of setting per indoor unit during group control (When Mode No. such as 20 , 21 , 22 , 23 , 25 are selected), highlight the unit No. and select "Indoor unit No." to be set by using ▲▼ (Up/Down) button.
(In the case of group setting, this operation is not needed.)

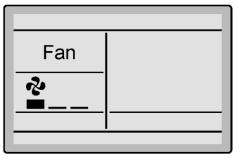
> In the case of individual setting per indoor unit, current settings are displayed. And, SECOND CODE NO. " - " means no function.

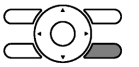
**6-5** Highlight SECOND CODE NO. of the FIRST CODE NO. to be changed, and select desired "SECOND CODE NO." by using ▲▼ (Up/Down) button. Multiple identical mode number settings are available.

> In the case of setting for all indoor units in the remote control group, available SECOND CODE NO. is displayed as " ∗ " which means it can be changed.
> When SECOND CODE NO. is displayed as " - ", there is no function.

<Basic screen>

6-1

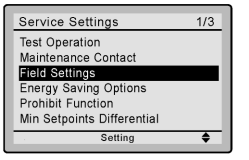


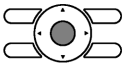



Press and hold **Cancel** button for 4 seconds or longer during backlight lit.

<Service settings menu screen>

6-2



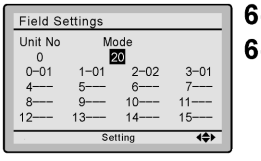



Press **Menu/OK** button.

<Service settings screen>

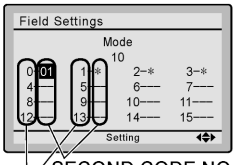
In the case of individual setting per indoor unit

6-3
6-4
6-5

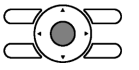



In the case of group total setting

6-3
6-5




SECOND CODE NO.
FIRST CODE (SW) NO.



Press **Menu/OK** button.

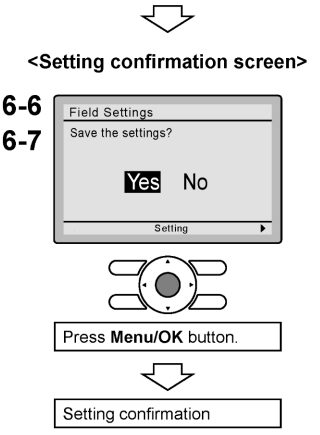
**6-6** Press **Menu/OK** button. Setting confirmation screen is displayed.

**6-7** Select Yes and press **Menu/OK** button. Setting details are determined and field settings screen returns.

**6-8** In the case of multiple setting changes, repeat "**6-3**" to "**6-7**".

**6-9** After all setting changes are completed, press **Cancel** button twice.

**6-10** Backlight goes out, and [**Checking the connection. Please stand by.**] is displayed for initialization. After the initialization, the basic screen returns.




## NOTE

- Installation of optional accessories on the indoor unit may require changes to field settings. See the manual of the optional accessory.
- For field setting details related to the indoor unit, see installation manual shipped with the indoor unit.

| Mode No. (Note 1) | First Code No. | Description | Second Code No. (Note 2) (Items in bold are factory default settings) | | | |
|---|---|---|---|---|---|---|
| | | | 01 | 02 | 03 | 04 |
| 10 (20) | 2 | Priority of thermistor sensors for space temperature control | The return air thermistor is primary and the remote controller thermistor is secondary. | The remote controller thermistor is not utilized. Only the return air thermistor will be utilized. | Only the remote controller thermistor will be utilized. | ———— |
| | 5 | Room temperature value reported to multizone controllers | Return air thermistor | Thermistor designated by 10-2 above (Note 3) | ———— | ———— |
| 12 (22) | 2 | Thermo-on/off deadband (Note 4) | 2F (1C) | 1F (0.5C) | ———— | ———— |
| 1c | 1 | Thermistor sensor for auto changeover and setback control by the remote controller | Utilize the return air thermistor | Utilize the remote controller thermistor | ———— | ———— |
| | 3 | Access permission level setting | Level 2 | Level 3 | ———— | ———— |
| 1e | 2 | Setback availability | N/A | Heat only | Cool only | Cool/Heat |

Notes) 1. Field settings are normally applied to the entire remote control group, however if individual indoor units in the remote control group require specific settings or for confirmation that settings have been established, utilize the mode number in parenthesis.
2. Any features not supported by the connected indoor unit will not be displayed.
3. When mode 10-2-01 is selected, only the return air temperature value is reported to the multizone controller.
4. The actual default deadband value will depend upon the indoor unit model.

# 7. Test Operation

**Also see installation manuals furnished with the indoor unit and the outdoor unit.**

- Verify that the wiring of the indoor unit and the outdoor unit is completed.
- Ensure that covers have been replaced on electrical component boxes for both indoor and outdoor units prior to restoring power.
- After refrigerant piping, drain piping and electric wiring are completed, clean inside of the indoor unit and decorative panel.
- Perform the test operation according to following procedure.
- To protect the compressor, apply power to the outdoor unit at least 6 hours prior to test operation.
- Set the remote controller display mode to standard or detailed display mode. Refer to Operation Manual for the setting method.

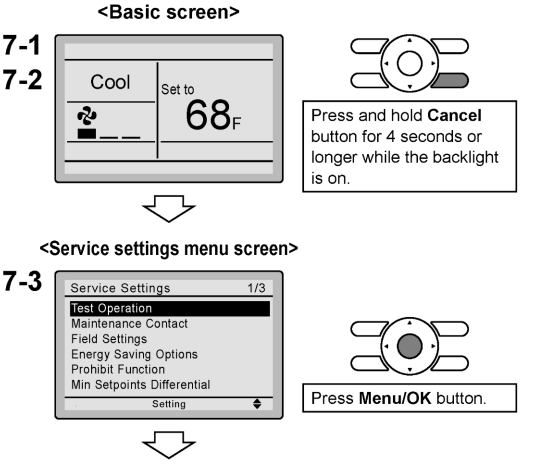
## Notes for backlight

- The backlight will be ON for 30 seconds by pressing any button.
- The initial push of the button will only turn on the backlight. While the backlight is turned on, the buttons assigned functionality will be available.

**7-1** Set the operation mode to cooling by using the remote controller.

**7-2** Press and hold **Cancel** button for 4 seconds or longer. Service settings menu is displayed.

**7-3** Select Test Operation in the service settings menu, and press **Menu/OK** button. Basic screen returns and message “Test Operation” is displayed at the bottom.



**7-4** Press **On/Off** button within 10 seconds, and the test operation starts. Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool regardless of the temperature setpoint and room temperature.
* Note) In the case of above-mentioned procedures **7-3** and **7-4** in reverse order, test operation can start as well.

**7-5** Press **Menu/OK** button in the basic screen. Main menu is displayed.

**7-6** In the case of a model having airflow direction function, select Airflow Direction in the main menu and check that airflow direction is actuated according to the setting. For operation of airflow direction setting, see the operation manual.

**7-7** After the operation of airflow direction is confirmed, press **Menu/OK** button. Basic screen returns.

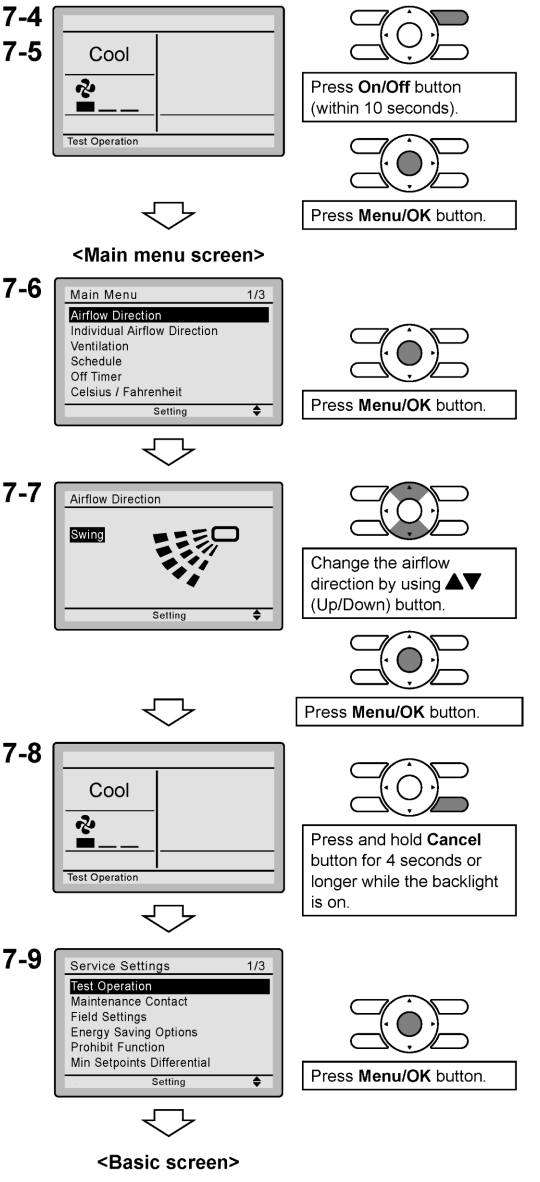
**7-8** Press and hold **Cancel** button for 4 seconds or longer in the basic screen.
Service settings menu is displayed.

**7-9** Select Test Operation in the service settings menu, and press **Menu/OK** button. Basic screen returns and normal operation is conducted.
* Note) The test operation will automatically finish in 30 minutes.

**7-10** Check the functions according to the operation manual.

**7-11** When the decorative panel is not installed, shut off the power supply after the test operation finishes.

- If construction activities are planned within the space following the test operation procedure, recommend to the customer that the indoor unit is not operated to prevent contamination from paints, drywall dust and other airborne materials.



**⚠NOTE**

- If operation is not possible due to a malfunction, refer to following **Failure diagnosis method** .
- After the test operation finishes, check whether the error code history is displayed on the maintenance information screen of the main menu according to the following procedure.

**7-12** Press **Menu/OK** button in the basic screen. Main menu screen is displayed.

**7-13** Select Maintenance Information in the main menu, and press **Menu/OK** button.

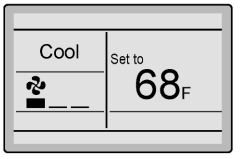
**7-14** Maintenance information screen is displayed. Check whether the error code history is displayed on the screen.

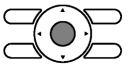
* If no error code history is displayed following this procedure the system has normally completed the test operation mode.

**7-15** If the error code history is displayed, conduct the failure diagnosis referring to <Error code list> in the installation manual of the indoor unit.
After the failure diagnosis finishes, press and hold **On/Off** button for 4 seconds or longer in the maintenance information screen to erase the error code history.

<Basic screen>

7-12

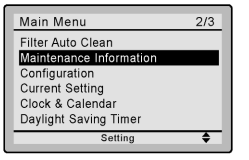


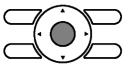



Press **Menu/OK** button.

<Main menu screen>

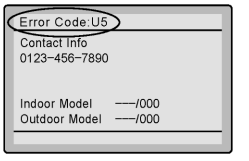
7-13

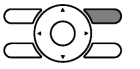


Press **Menu/OK** button.

7-14
7-15

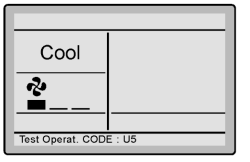


Press and hold **On/Off** button for 4 seconds or longer during backlight lit.

## Failure diagnosis method

- Whenever the remote controller display is blank or displays [**Checking the connection. Please stand by.**], troubleshoot the system with the items in the Description column of the following table.
- If an error occurs, **CODE** is displayed on the LCD as shown to the right. Conduct the failure analysis referring to <Error code list> in the installation manual of the indoor unit.
  When the unit No. which detected the error during group control is confirmed, refer to **Chapter 8: Procedure for Checking Error History**.



| Remote controller display | Description |
|---|---|
| No display | ● Power outage, power voltage error or open-phase<br>● Incorrect wiring (between indoor and outdoor units)<br>● Indoor printed-circuit board assembly failure<br>● Remote controller wiring not connected<br>● Remote controller failure<br>● Open fuse or tripped circuit breaker (outdoor unit) |
| Checking the connection.<br>Please stand by. ＊ | ● Indoor printed-circuit board assembly failure<br>● Wrong wiring (between indoor and outdoor units) |

＊ [**Checking the connection. Please stand by.**] will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

# 8. Procedure for Checking Error History

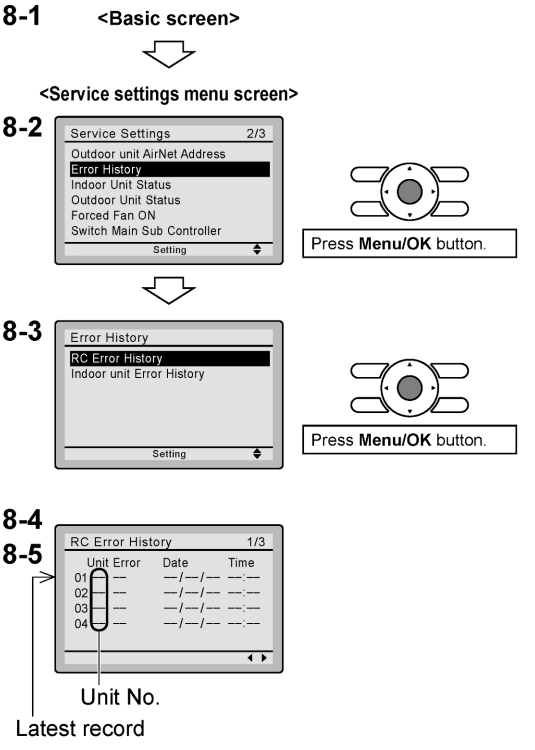
**8-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.

**8-2** Select Error History in the service settings menu, and press **Menu/OK** button. The error history menu screen is displayed.

**8-3** Select RC Error History in the error history menu, and press **Menu/OK** button.
Error codes and unit No. can be confirmed in the RC error history screen.

**8-4** In the error history, the 10 most recent items are displayed in order of occurrence.

**8-5** Press **Cancel** button in the RC error history screen 3 times.
The basic screen returns.



# 9. Adding Maintenance Contact Information

- Registration of the maintenance contact.

**9-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen.
Service settings menu is displayed.

**9-2** Select Maintenance Contact in the service settings menu, and press **Menu/OK** button. Maintenance contact menu screen is displayed.

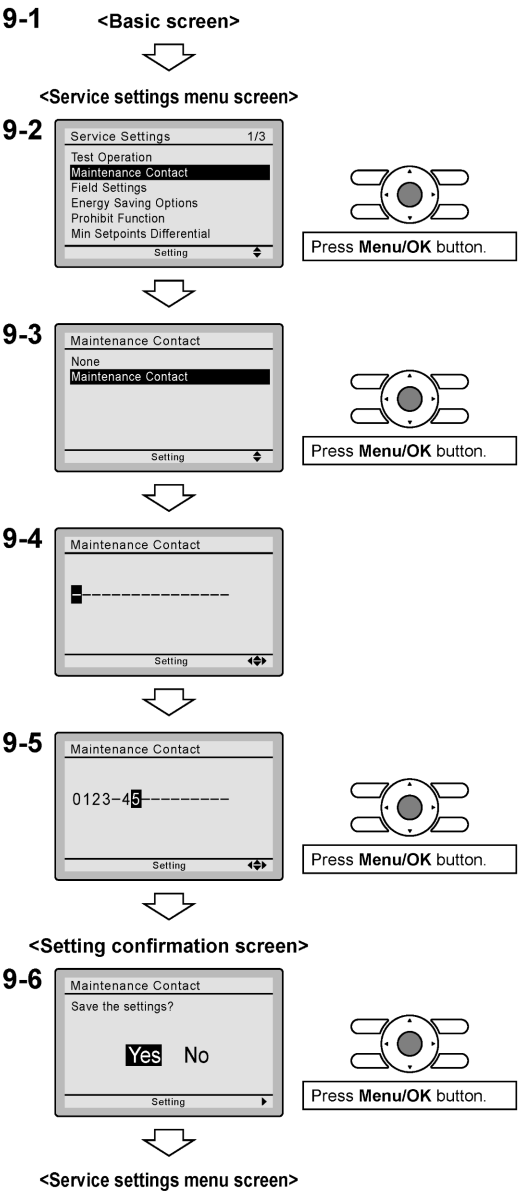
**9-3** Select Maintenance Contact , and press **Menu/OK** button.

**9-4** Enter the telephone number.
Scroll through the numbers by using ▲▼ (Up/Down) buttons. Start from the left side. Blank digits should remain as " - ".

**9-5** Press **Menu/OK** button.
Setting confirmation screen is displayed.

**9-6** Select Yes and press **Menu/OK** button.
Setting details are saved and service settings menu screen returns.

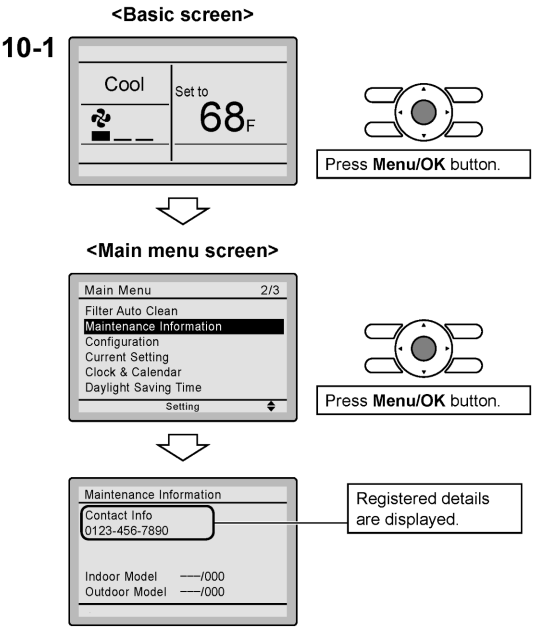
**9-7** Press **Cancel** button once.
The basic screen returns.



# 10. Confirming Registered Details

**10-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select Maintenance Information in the main menu, and press **Menu/OK** button.

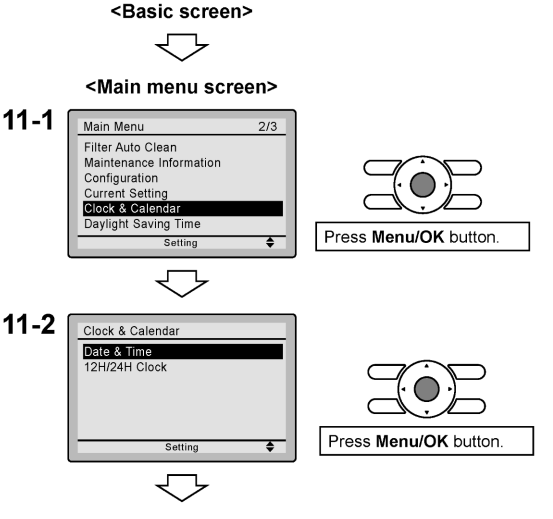
**10-2** Press **Cancel** button twice.
The basic screen returns.




# 11. Clock & Calendar

**11-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select Clock & Calendar in the main menu, press **Menu/OK** button.

**11-2** Press ▲▼ buttons to select Date & Time on the clock & calendar screen.
* The date & time screen will appear when **Menu/OK** button is pressed.

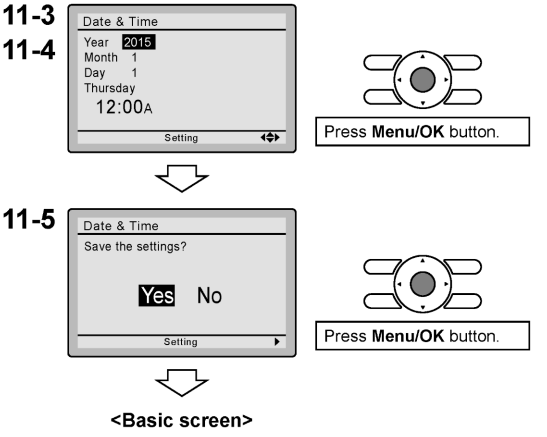


**11-3** Select **year**, **month**, **day** and **time** by using ◀▶ (Left/Right) button and set by using ▲▼ (Up/Down) button in the date & time screen. Press and hold the button for continuous change of the numeric value.
* Day of the week is set automatically.

**11-4** Press **Menu/OK** button.
Setting confirmation screen is displayed.

**11-5** Select Yes and press **Menu/OK** button.
Setting details are saved and basic screen returns.

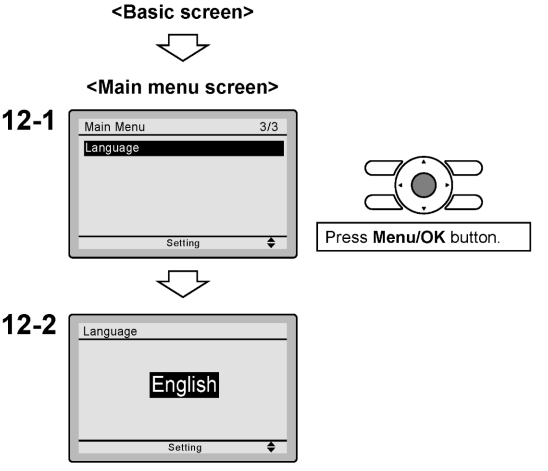
* If power outage exceeds 48 hours, reset is needed.




# 12. Language

**12-1** Press **Menu/OK** button in the basic screen.
Main menu is displayed.
Select Language in the main menu, press **Menu/OK** button.

**12-2** Press ▲▼ (Up/Down) buttons to select **Language** on the language screen.
**English/Français/Español**
Press **Menu/OK** button.






3P243521-7L

# 12.3 <BRC082A43> Wireless Remote Controller

Wireless Remote Controller Kit — Installation manual

## CONTENTS



## 1. SAFETY CONSIDERATIONS

Please read these “SAFETY CONSIDERATIONS” carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term “appliances not accessible to the general public”.

Meaning of warning, caution and note symbols.

⚠ **WARNING** ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.

⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

**⚠ WARNING**

- **Perform installation work in accordance with this installation manual.**
  Improper installation may result in electric shocks or fire.
- **Be sure to use only the specified accessories and parts for installation work.**
  Failure to use the specified parts may result in, electric shocks, fire or the unit falling.
- **Before touching electrical parts, turn off the unit.**
- **Do not touch the switch with wet fingers.**
  Touching a switch with wet fingers can cause electric shock.

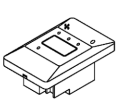
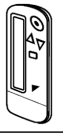
**⚠ CAUTION**

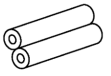
- **Refer also to the installation manuals attached to the indoor unit and the decoration panel.**
- **Confirm that the following conditions are satisfied prior to installation.**
  Ensure that nothing interrupts the operation of the wireless remote controller. (Ensure that there is neither a source of light nor fluorescent lamp near the receiver. Also, ensure that the receiver is not exposed of direct sunlight.)
  Ensure that the operation display lamp and other indicators are easy to see.
- **The installation position of this receiver is one corner of the decoration panel. Therefore, confirm that its position is set so that the signal from the wireless remote controller can be easily transmitted and its display can be easily seen.**
- **If both this kit and fresh air intake kit are installed, only one duct chamber shall be used. Refer to the installation manual of the fresh air intake kit (optional hand book).**

## 2. BEFORE INSTALLATION

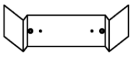
### 2-1 ACCESSORIES

**Check if the following accessories are included with the unit.**

| Name | (1) Receiver | (2) Wireless remote controller | (3) Remote controller holder |
|---|---|---|---|
| Quantity | 1 pc. | 1 pc. | 1 pc. |
| Shape |  |  |  |

| Name | (4) Dry cell battery LR03 (AM4) | (5) Unit No. label | (6) Screw for installing remote controller holder |
|---|---|---|---|
| Quantity | 2 pcs. | 1 pc. | 2 pcs. |
| Shape |  |   |  M3.5 |

| Name | (7) Mounting screw (Black) | (8) Mounting screw | (9) Paper pattern printing |
|---|---|---|---|
| Quantity | 2 pcs. | 2 pcs. | 1 pc. |
| Shape |  M4 |  M5 |  3-15/16x1-15/16 (in.) |

| Name | (10) Winged bar | (11) Operation manual | (12) Installation manual |
|---|---|---|---|
| Quantity | 1 pc. | 1 pc. | 1 pc. |
| Shape |  |  |  |

### 2-2 NOTE TO THE INSTALLER

Be sure to instruct the customer how to properly operate the system showing him/her the attached operation manual.

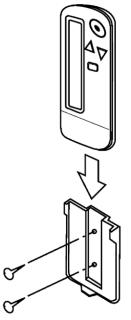
## 3. REMOTE CONTROLLER INSTALLATION

**<Installing wireless remote controller>**

- Do not throw the remote controller or impose large shocks. Also, do not store where it may be exposed to moisture or direct sunlight.

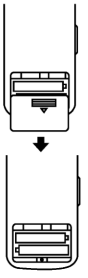
- When operating, point the transmitting part of the remote controller in the direction of the receiver.
- The direct transmitting distance of the remote controller is approximately 23 ft..
- The signal cannot be transmitted if something such as curtains blocks the receiver and the remote controller.
- **Installing to a wall or a pillar**

1. Fix the remote controller holder (3) with the screws (6).
2. Slide the remote controller (2) into the remote controller holder (3) from the top.



- **How to put the dry cell batteries**

1. Remove the back cover of the remote controller (2) to the direction pointed by the arrow mark.
2. Put the dry cell batteries.
   Use two LR03<AM4> dry cell batteries (4).
   Put the dry cell batteries (4) correctly to fit their (+) and (–).
3. Close the back cover as before.



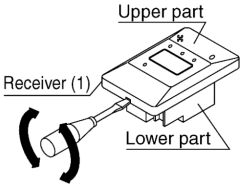
## 4. RECEIVER INSTALLATION

**CAUTION**

- Do not install more than 3 receivers in the vicinity of one another.
- With 4 or more units, there is always the possibility of malfunction.

**4-1. Preparations before installation**

Remove the upper part of the receiver (1).
- Insert the screwdriver (–) here and gently work off the upper part of the receiver (1).




**4-2. Determination of address and MAIN/SUB remote controller**

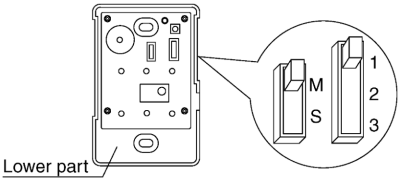
If setting multiple wireless remote controllers to operate in 1 room, perform address setting for the receiver and the wireless remote controller. If setting multiple wired remote controllers in 1 room, change the MAIN/SUB switch of the receiver.

**4-3. Setting procedure**

- Setting the receiver
  Set the wireless address switch (SS2) on the PC-board according to the table below.

| Unit No. | No.1 | No.2 | No.3 |
|---|---|---|---|
| Wireless address switch (SS2) | 1 ■ 2 3 | 1 2 ■ 3 | 1 2 3 ■ |

The side painted black indicates the switch knob position.




**CAUTION**

Change the setting so that the internal electronic equipments are not damaged with a pen etc.

When using both a wired and a wireless remote controller for 1 indoor unit, the wired controller should be set to MAIN. Therefore, set the MAIN/SUB switch (SS1) of the receiver to SUB.

| | MAIN | SUB |
|---|---|---|
| MAIN/ SUB switch (SS1) | M ■ S | M S ■ |

**4-4. Receiver installation**

**WARNING**

Be sure to turn off the power before installation.

**CAUTION**

**<Precautions on transmission wiring>**

1. When wiring, run the wiring away the power supply wiring in order to avoid receiving electric noise (external noise).
2. When wiring, refer to the wiring diagram of indoor unit (attached to indoor unit) as well.

WIRING SPECIFICATION

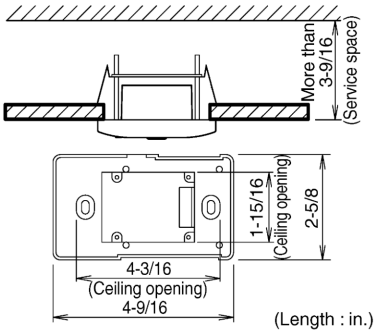
| | |
|---|---|
| Wiring type | Sheathed wire (2 wire) |
| Size | AWG18-16 |
| Wiring length | Max 650 ft. (See Note) |

**NOTE**

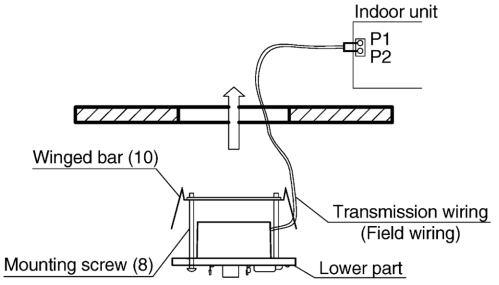
Keep wires to less than 650 ft. total when using 2 remote controllers (wired or wireless) and when not.

### 4-5. Attaching the receiver (for ceiling installation)

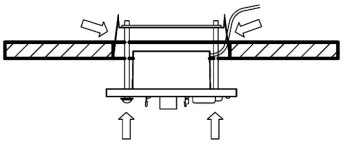
1. Prepare the ceiling for the receiver.
   - Open a hole in the ceiling for the receiver. (Use paper pattern printing (9)).



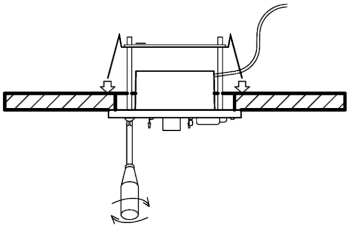

2. Wire the indoor unit and fix the lower part.
   - Install the winged bar (10) to the lower part and fit the part with the screws (8). Then, wire (field supplied) accordingly. (Connect the P1 and P2 terminals on the rear of the lower part to the P1 and P2 terminals on the indoor unit. The P1 and P2 terminals have no polarity.)




   - Insert the lower part into the opening in the ceiling, first by pressing the wings inward to fit the hole and then by pushing from the screws (8) until it sits flat on the ceiling.

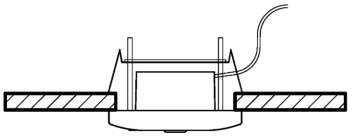


   - Tighten the screws (8) until the lower part is fixed in place.

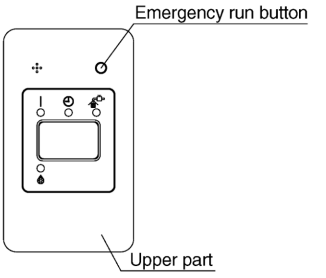


(Tighten both screws (8) evenly. Overtightening may deform the case and possibly make it harder to install the upper part.)

   - Attach the upper part of receiver (1).

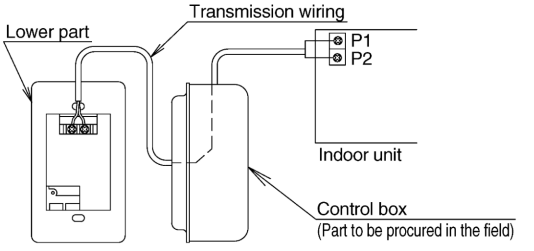


(Install the upper part on the lower part being careful parts are facing in the correct direction. After installation, turn on the power, and test emergency run button.)



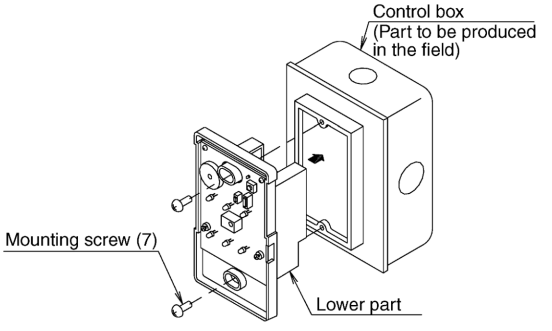

### 4-6 Attaching the receiver (for wall mounting)

1. Wire the indoor unit.

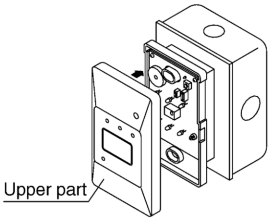


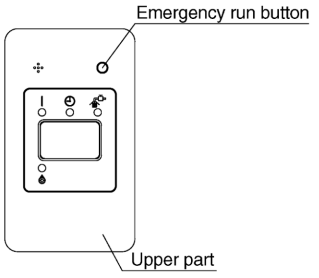

(Connect the P1 and P2 terminals on the rear of the lower part to the P1 and P2 terminals on the indoor unit. Neither of the terminals is polarized, so it is not important if connections are crossed.)

2. Fix the lower part.
   - Install the lower part on the control box (field supplied part). (Select as flat a place as possible to install the lower part. Also, be aware of the fact that overtightening the screws (7) may deform the case and possibly make it harder to install the upper part.)



3. Attach the upper part of remote controller.
   (Install the upper part on the lower part being careful parts are facing in the correct direction. After installation, turn on the power, and test emergency run button.)



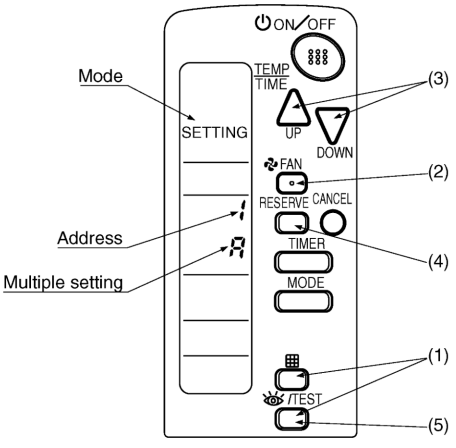




**NOTE**

1. The control box and wiring are not included.
2. Do not directly touch the PC-board with your hand.

**4-7. Setting the address of wireless remote controller (It is factory set to "1".)**

<Setting from the remote controller>




(1) Hold down the " ▦ " button and the " /TEST " button for at least 4 seconds to get the FIELD SET MODE. (Indicated in the display area in the figure at top.)

(2) Press the " FAN " button and select a multiple setting (A/b). Each time the button is pressed the display switches between "A" and "b".

(3) Press the " △ UP " button and " ▽ DOWN " button to set the address.

→ 1 → 2 → 3 → 4 → 5 → 6 ↩

Address can be set from 1 to 6, but set it from 1 to 3 and to same address as the receiver. (The receiver does not work with address from 4 to 6.)

(4) Press the " RESERVE " button to enter the setting.

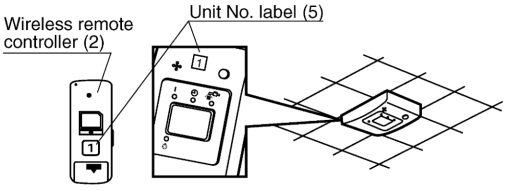
(5) Push the " /TEST " button to quit the FIELD SET MODE and return to the normal display.

<Multiple settings A/b>

When the indoor unit is being operating by outside control (central remote controller, etc.), it sometimes does not respond to ON/OFF and temperature setting commands from this remote controller. Check what setting the customer wants and make the multiple setting as shown below.

| Remote controller | | Indoor unit | |
|---|---|---|---|
| Multiple setting | Remote controller display | To control other air conditions and units | For other than on left |
| A: Standard | All items displayed. | Commands other than ON/OFF and temperature setting accepted. (1 LONG BEEP or 3 SHORT BEEPS emitted) | |
| b: Multi System | Operations remain displayed shortly after execution | All commands accepted. (2 SHORT BEEPS) | |

**4-8. Stick the Unit No. label on the receiver and the back of the wireless remote controller.**

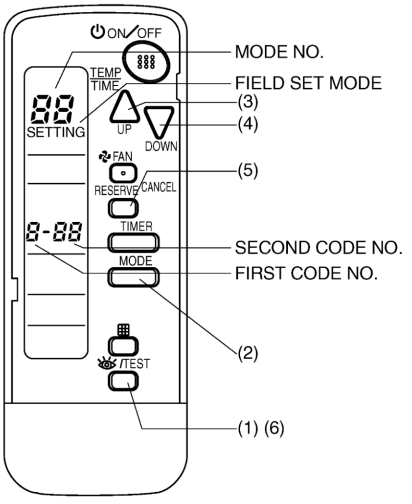



**CAUTION**

Set the Unit No. of the receiver and the wireless remote controller to be equal. If the settings differ, the signal from the remote controller cannot be transmitted.

## 5. FIELD SETTING

If optional accessories are mounted on the indoor unit, the indoor unit setting may have to be changed. Refer to the instruction manual (optional hand book ) for each optional accessory.




**Procedure**

(1) When in the normal mode, press the " /TEST " button for at least 4 seconds, and the FIELD SET MODE is entered.

(2) Select the desired MODE NO. with the " MODE " button.

(3) Push the " UP " button and select the FIRST CODE NO..

(4) Push the " DOWN " button and select the SECOND CODE NO..

(5) Push the" RESERVE "button and the present settings are set.

(6) Push the " /TEST " button to quit the FIELD SET MODE and return to the normal display.

(Example) If the time to clean air filter is set to "Filter Contamination-Heavy", set Mode No. to "10", FIRST CODE NO. to "0", and SECOND CODE NO. to "02".

| MODE NO. | FIRST CODE NO. | DESCRIPTION OF SETTING | |
|---|---|---|---|
| 10 | 0 | Filter Contamination-Heavy/Light (Setting for spacing time of display time to clean air filter) (Setting for when filter contamination is heavy, and spacing time of display time to clean air filter is to be halved) | Long-life type |
| | | | Standard type |
| | 3 | Spacing time of display time to clean air filter count (Setting for when the filter sign is not to be displayed) | |
| 12 (VRV system) | 1 | ON/OFF input from outside (Set to enable starting/stopping from remote.) | |
| | 2 | Thermostat differential changeover (Set when using remote controller thermostat sensor.) | |

| MODE NO. | FIRST CODE NO. | SECOND CODE NO. | | | | |
|---|---|---|---|---|---|---|
| | | 01 | | 02 | | 03 |
| 10 | 0 | Light | Approx. 2,500 hours | Heavy | Approx. 1,250 hours | — |
| | | | Approx. 200 hours | | Approx. 100 hours | |
| | 3 | Display | | Do not display | | — |
| 12 (VRV system) | 1 | Forced OFF input | | ON/OFF | | — |
| | 2 | 2°F | | 1°F | | — |

**NOTE**

The SECOND CODE NO. is factory set to "01".
Do not use any settings not listed in the table.
For group control with a wireless remote controller, initial settings for all the indoor units of the group are equal. (For group control, refer to the installation manual attached to the indoor unit for group control.)

## 6. TEST OPERATION

- Perform test operation according to the instructions in the installation manual attached to the indoor unit.
- After refrigerant piping, drain piping, and electric wiring, operate according to the table to protect the unit.

**CAUTION**

1. Refer to a malfunction code in the installation manual attached to the outdoor unit if it does not operate.
2. Refer to the installation manual attached to the outdoor unit for individual operation system types.

| Order | Operation |
|---|---|
| (1) | Open gas side stop valve. |
| (2) | Open liquid side stop valve. |
| (3) | Electrify crank case heater for 6 hours. |
| (4) | Set to cooling with the remote controller and push " ON/OFF " button to start operation. |
| (5) | Push" /TEST "button twice and operate in TEST OPERATION MODE for 3 minutes. |
| (6) | Push" SWING "button and confirm its operation. |
| (7) | Push" /TEST "button and operate normally. |
| (8) | Confirm its function according to the operation manual. |

## 12.4 Outdoor Unit

# Contents



# Safety Considerations

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.
Instruct the user on how to operate and maintain the unit.
Inform users that they should store this installation manual with the operation manual for future reference.
Always use a licensed installer or contractor to install this product.
Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

### ⚠ DANGER

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

### ⚠ WARNING

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

**⚠ CAUTION**

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.

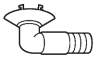
  (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

  (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors. This unit is for indoor use.
- Do not install the air conditioner or heat pump in the following locations:
  (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  Plastic parts may deteriorate and fall off or result in water leakage.
  (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  Corroding copper pipes or soldered parts may result in refrigerant leakage.
  (c) Near machinery emitting electromagnetic waves.
  Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
  (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled.
  Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

**⚠ NOTE**

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 604 psi, the wall thickness of field-installed pipes should be selected in accordance with the relevant local, state, and national regulations.

# Accessories

| | | | | | |
|---|---|---|---|---|---|
| Ⓐ Installation manual | | 1 | Ⓑ Drain socket  This is at the bottom of the packaging. | | 1 |
| Ⓒ Drain cap (1)  | 09/12 class | 4 | Ⓓ Drain cap (2)  | 09/12 class | 2 |
| | 15/18/24 class | 6 | | 15/18/24 class | 3 |
| Ⓔ Warranty | | 1 | | | |

# Precautions for Selecting a Location

1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
2) Choose a location where the hot air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
4) There must be sufficient space to carry the unit into and out of the site.
5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
6) The site must not be prone to flammable gas leaks in the surrounding area.
7) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
8) Since water will flow from the drain of the outdoor unit, do not place under the unit anything which must be kept away from moisture.

**NOTE**
Cannot be installed suspended from a ceiling or stacked.

**⚠CAUTION**

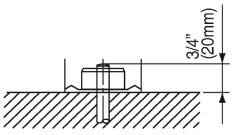
When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.


3

# Precautions on Installation

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all separately available.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.

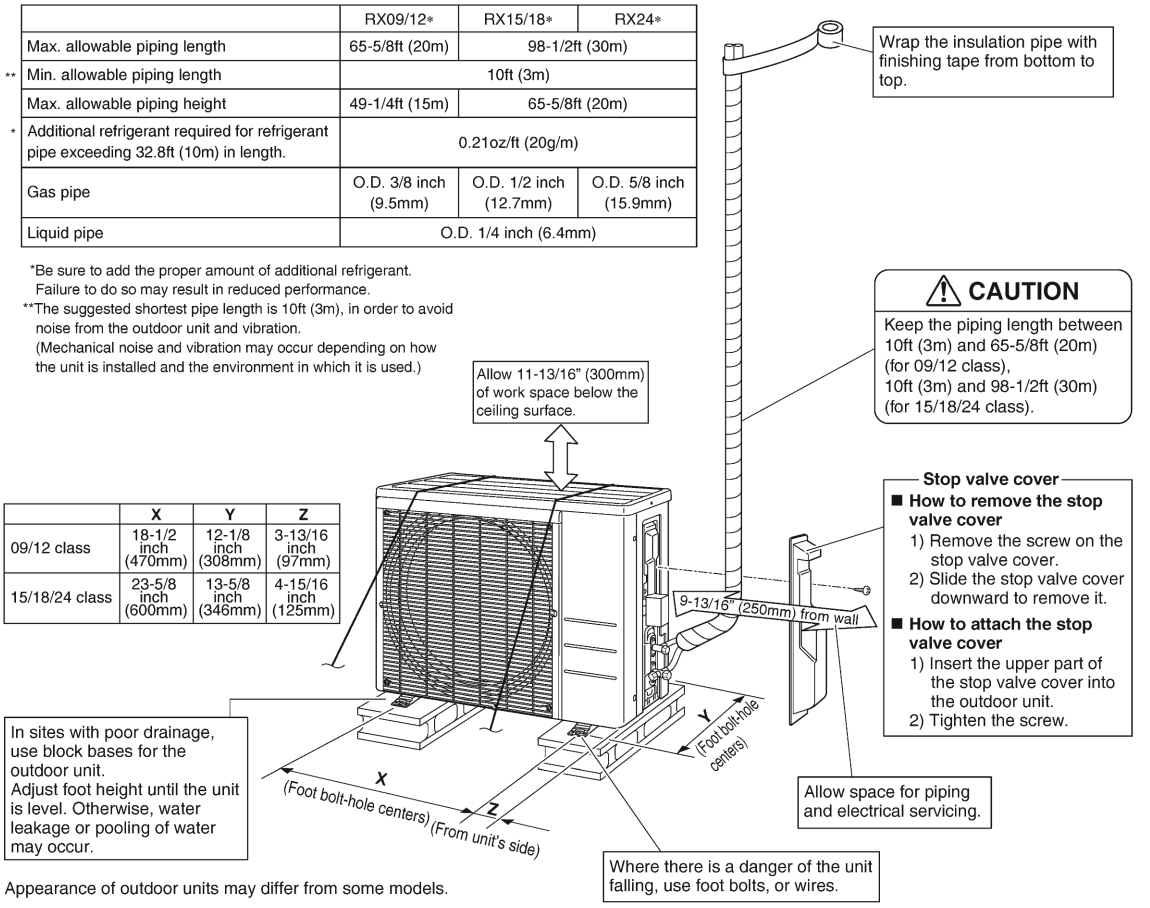



# Outdoor Unit Installation Diagram

| | | RX09/12* | RX15/18* | RX24* |
|---|---|---|---|---|
| | Max. allowable piping length | 65-5/8ft (20m) | 98-1/2ft (30m) | |
| ** | Min. allowable piping length | 10ft (3m) | | |
| | Max. allowable piping height | 49-1/4ft (15m) | 65-5/8ft (20m) | |
| * | Additional refrigerant required for refrigerant pipe exceeding 32.8ft (10m) in length. | 0.21oz/ft (20g/m) | | |
| | Gas pipe | O.D. 3/8 inch (9.5mm) | O.D. 1/2 inch (12.7mm) | O.D. 5/8 inch (15.9mm) |
| | Liquid pipe | O.D. 1/4 inch (6.4mm) | | |

*Be sure to add the proper amount of additional refrigerant. Failure to do so may result in reduced performance.
**The suggested shortest pipe length is 10ft (3m), in order to avoid noise from the outdoor unit and vibration. (Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.)

| | X | Y | Z |
|---|---|---|---|
| 09/12 class | 18-1/2 inch (470mm) | 12-1/8 inch (308mm) | 3-13/16 inch (97mm) |
| 15/18/24 class | 23-5/8 inch (600mm) | 13-5/8 inch (346mm) | 4-15/16 inch (125mm) |



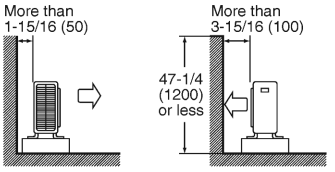

Appearance of outdoor units may differ from some models.

# Installation Space Requirements

- Position the unit on a horizontal surface. Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.

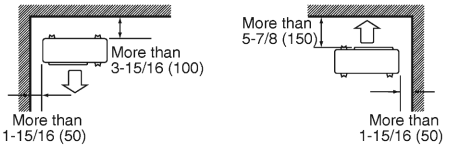
**09/12 class**

Wall facing one side



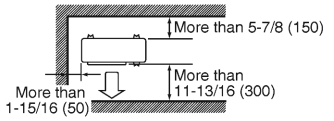

Side view

Walls facing two sides




Top view

Walls facing three sides

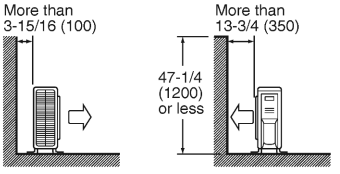



Top view

unit: inch (mm)

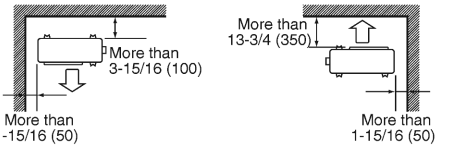
**15/18/24 class**

Wall facing one side



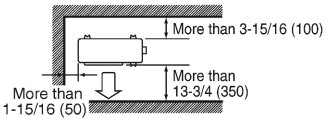

Side view

Walls facing two sides




Top view

Walls facing three sides




Top view

unit: inch (mm)

# Outdoor Unit Installation

## 1. Installing the outdoor unit

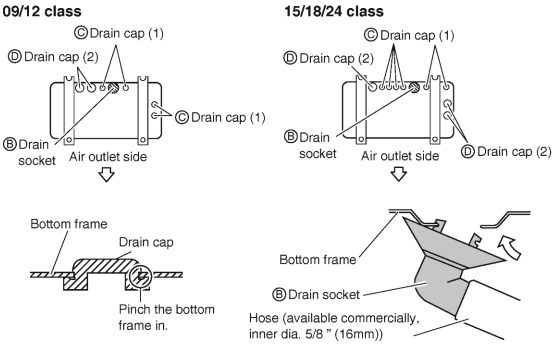
1) When installing the outdoor unit, refer to "**Precautions for Selecting a Location**" and the "**Outdoor Unit Installation Diagram**".
2) If drain work is necessary, follow the procedures on the next page.

5

## 2. Drain work

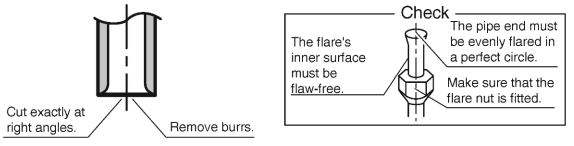
- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.
- In cold areas, do not use a drain socket, drain caps (1,2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)

1) Attach Ⓒ drain cap (1) and Ⓓ drain cap (2).
2) Attach Ⓑ drain socket.
   - When attaching Ⓑ drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



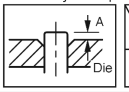

## 3. Flaring the pipe end

1) Cut the pipe end with a pipe cutter.
2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
3) Put the flare nut on the pipe.
4) Flare the pipe.
5) Check that the flaring has been done correctly.




Flaring

Set exactly at the position shown below.




| | Flare tool for R410A | Conventional flare tool | |
|---|---|---|---|
| | Clutch-type | Clutch-type (Rigid-type) | Wing-nut type (Imperial-type) |
| A | 0-0.020 inch (0-0.5mm) | 0.039-0.059 inch (1.0-1.5mm) | 0.059-0.079 inch (1.5-2.0mm) |

### ⚠ WARNING

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Incomplete flaring may result in refrigerant gas leakage.

## 4. Refrigerant piping

### ⚠ CAUTION

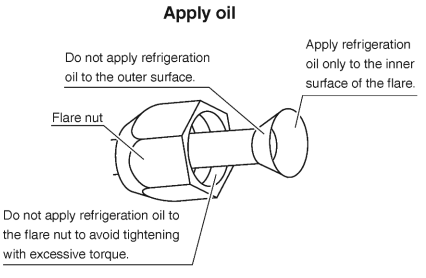
- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.

- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.

| Flare nut tightening torque | | | |
|---|---|---|---|
| Gas side | | | Liquid side |
| 3/8 inch (9.5mm) | 1/2 inch (12.7mm) | 5/8 inch (15.9mm) | 1/4 inch (6.4mm) |
| 24-1/8 – 29-1/2lbf • ft (32.7-39.9N • m) | 36-1/2 – 44-1/2lbf • ft (49.5-60.3N • m) | 45-5/8 – 55-5/8lbf • ft (61.8-75.4N • m) | 10-1/2 – 12-3/4lbf • ft (14.2-17.2 N • m) |

| Width across flats | 11/16 inch (17mm) | 3/4 inch (19mm) | 7/8 inch (22mm) | 1-1/16 inch (27mm) |
|---|---|---|---|---|
| Valve cap tightening torque | 10-1/2–12-5/8lbf • ft (14.2-17.2N • m) | 12-5/8–15-3/8lbf • ft (17.1-20.9N • m) | 16–20-1/4lbf • ft (21.6-27.4N • m) | 35-3/8–44-1/8lbf • ft (48-59.8N • m) |

| Service port cap tightening torque |
|---|
| 8 – 10-7/8lbf • ft (10.8-14.7N • m) |



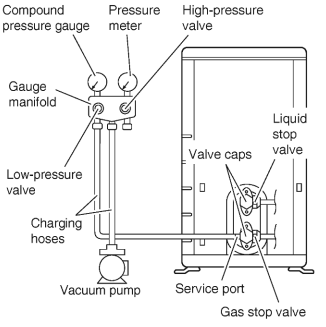
# Outdoor Unit Installation

## 5. Pressure test and evacuating system

**⚠WARNING**

- Make sure that air or any matter other than refrigerant (R410A) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R410A, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- Use a vacuum pump for R410A exclusively. Using the same vacuum pump for different refrigerants may damage the vacuum pump or the unit.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.




1) Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 550psi (3.8MPa) (do not pressurize more than 550psi (3.8MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
3) Fully open the gauge manifold's low-pressure valve (Lo) and completely close its high-pressure valve (Hi). (High-pressure valve will require no further operation.)
4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
5) Close the gauge manifold's low-pressure valve (Lo) and stop vacuum pump. (Maintain this condition for 4-5 minutes to make sure that the compound pressure gauge pointer does not swing back.)*1
6) Remove the valve caps from the liquid stop valve and gas stop valve.
7) Turn the liquid stop valve's rod 90° counter-clockwise with a hexagonal wrench to open the valve. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.
8) Disconnect the charging hose from the gas stop valve's service port, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rod further than it can go.)
9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques. Refer to **"4. Refrigerant piping"** on page 6 for details.

*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint. Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

7

# 6. Refilling refrigerant

Check the type of refrigerant to be used on the machine nameplate.

**Precautions when adding R410A**

**Fill from the liquid pipe in liquid form.**

R410A is a mixed refrigerant, so adding it in gas form may cause the refrigerant composition to change, preventing normal operation.

1) Before filling, check whether the cylinder has a siphon attached or not. (It should have something like “liquid filling siphon attached” displayed on it.)

Filling a cylinder with an attached siphon

Stand the cylinder upright when filling.

(There is a siphon pipe inside, so the cylinder need not be upside-down to fill with liquid.)

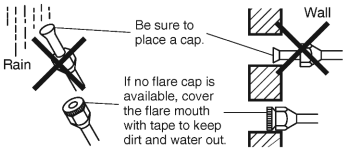
Filling other cylinders

Turn the cylinder upside-down when filling.

- Be sure to use the R410A tools to ensure pressure and to prevent foreign objects entering.

# 7. Refrigerant piping work

## 7-1. Cautions on pipe handling




- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

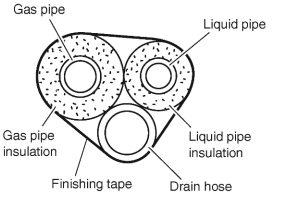
## 7-2. Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
  Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
  Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

| | Piping size | Minimum bend radius | Piping thickness | Thermal insulation size | Thermal insulation thickness |
|---|---|---|---|---|---|
| Gas side | O.D. 3/8 inch (9.5mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 15/32-19/32 inch (12-15mm) | 13/32 inch (10mm) Min. |
| | O.D. 1/2 inch (12.7mm) | 1-9/16 inch (40mm) or more | | I.D. 9/16-5/8 inch (14-16mm) | |
| | O.D. 5/8 inch (15.9mm) | 1-15/16 inch (50mm) or more | 0.039 inch (1.0mm) (C1220T-O) | I.D. 5/8-13/16 inch (16-20mm) | |
| Liquid side | O.D. 1/4 inch (6.4mm) | 1-3/16 inch (30mm) or more | 0.031 inch (0.8mm) (C1220T-O) | I.D. 5/16-13/32 inch (8-10mm) | |

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

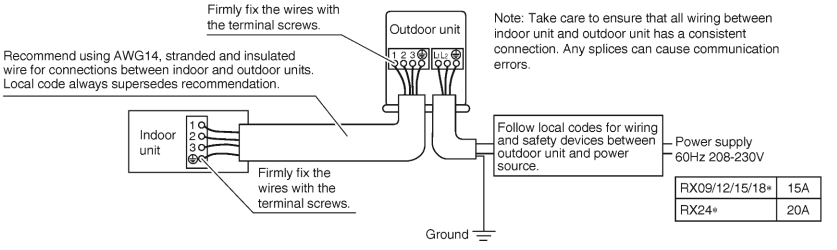


# Wiring

**⚠WARNING**

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

- Do not turn on the circuit breaker until all work is completed.
  1) Strip the insulation from the wire (3/4 inch (20mm)).
  2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws. The screws are packed with the terminal block.

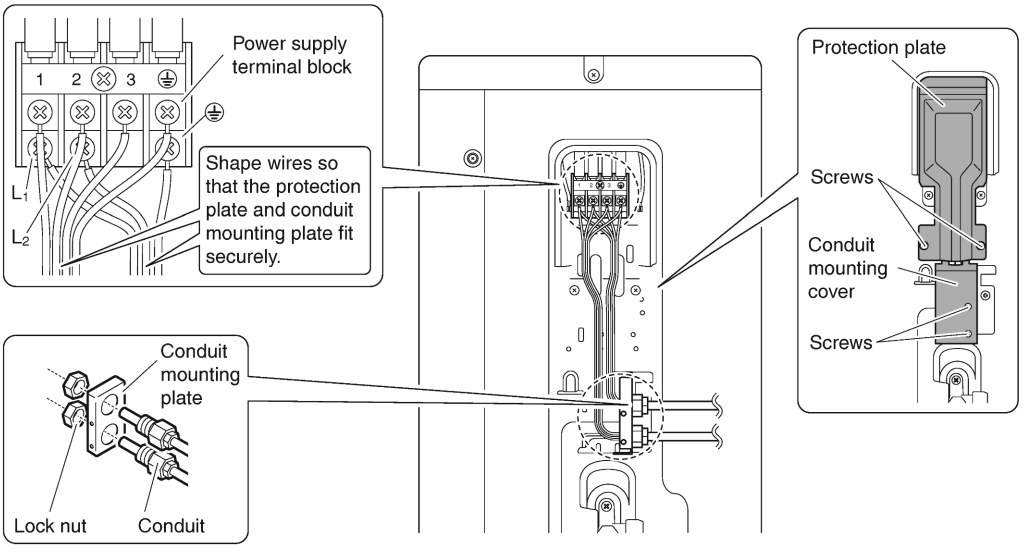



### 09/12 class

[Method of mounting conduit]

- A protection plate is fixed for protection from the high-voltage section.

1) Dismount the stop valve cover by removing the screw.
2) Dismount the protection plate by removing the 2 screws.
3) Dismount the conduit mounting cover by removing the 2 screws.
4) Pass wires through the conduit and secure them with a lock nut.
5) After completing the work, reattach the stop valve cover, the conduit mounting cover, and the protection plate to its original position.

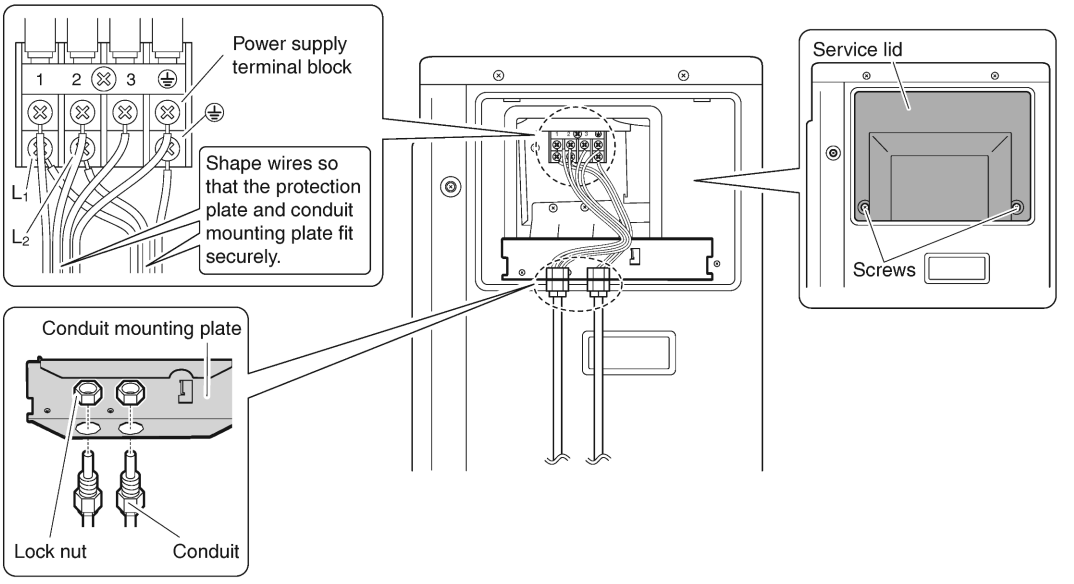



9

### 15/18/24 class

[Method of mounting conduit]

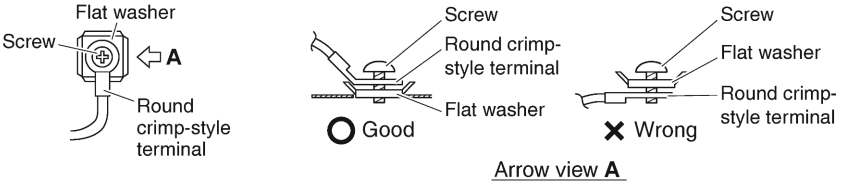
1) Dismount the service lid by removing the 2 screws.
2) Pass wires through the conduit and secure them with a lock nut.
3) After completing the work, reattach the service lid to its original position.



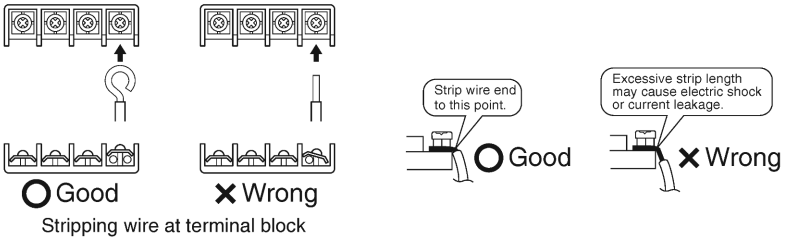

## ⚠ CAUTION

**Precautions to be taken for power supply wiring**

- When using stranded wires, make sure to use the round crimp-style terminal for connection to the power supply terminal block.


- When connecting the inter-unit wires to the terminal block using a single core wire, be sure to curl the end of the lead. Improper work may cause heat and fires.



# Facility Setting (cooling at low outdoor temperature)

**This function is limited only for facilities (the target of air conditioning is equipment (such as computer)). Never use it in a residence or office (the space where there is a human).**

■ Cutting jumper 6 (J6) on the circuit board will extend the operation range to 14°F (–10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to –4°F (–20°C). In these cases, the unit will stop operating if the outdoor temperature falls below –4°F (–20°C), restarting once the temperature rises above this level.

1) Remove the top plate of the outdoor unit. (09/12 class: 3 screws, 15/18/24 class: 6 screws)
2) Remove the front plate. (09/12 class: 4 screws, 15/18/24 class: 8 screws)
3) Cut the jumper (J6) of the PCB inside.

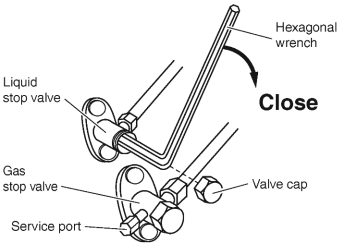
**⚠CAUTION**

- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used. A humidifier might cause dew jumping from the indoor unit outlet vent.
- Cutting jumper 6 (J6) sets the indoor fan tap to the highest position. Notify the user about this.

# Pump Down Operation

**In order to protect the environment, be sure to pump down when relocating or disposing of the unit.**

1) Remove the valve cap from the liquid stop valve and gas stop valve.
2) Carry out forced cooling operation.
3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.
5) Attach the valve cap once procedures are complete.

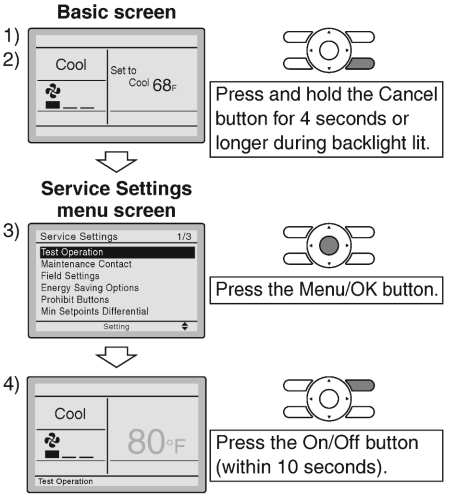



## Forced cooling operation

■**Using the indoor unit's remote controller**

[For wired remote controller]

1) Set to COOL operation using the remote controller.
2) Press and hold the Cancel button for 4 seconds or longer. Service settings menu is displayed.
3) Select Test Operation in the service settings menu, and press the Menu/OK button. Basic screen returns and "Test Operation" is displayed at the bottom.
4) Press the On/Off button within 10 seconds, and the forced cooling operation starts.
   - Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the On/Off button.



[For wireless remote controller]

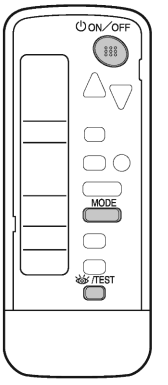
1) Press MODE and select the COOL operation.

2) Press /TEST twice. “Test” is displayed.

3) Press ON/OFF within 10 seconds, and the forced cooling operation starts.

- Forced cooling operation will stop automatically after about 15 minutes.

  To stop the operation, press ON/OFF .




# Trial Operation and Testing

## 1. Trial operation and testing

Refer to the installation manual for the indoor unit.

## 2. Test items

| Test items | Symptom | Check |
|---|---|---|
| Indoor and outdoor units are installed properly on solid bases. | Fall, vibration, noise | |
| No refrigerant gas leaks. | Incomplete cooling/heating function | |
| Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated. | Water leakage | |
| Draining line is properly installed. | Water leakage | |
| System is properly grounded. | Electrical leakage | |
| The specified wires are used for inter-unit wiring. | No operation or burn damage | |
| Indoor or outdoor unit’s air inlet or air outlet are unobstructed. | Incomplete cooling/heating function | |
| Stop valves are opened. | Incomplete cooling/heating function | |
| Check that the connector of the lead wires of the decoration panel is connected securely. | Louvers do not move | |
| Indoor unit properly receives wireless remote control commands. | No operation | |

# 13. Operation Manual

## Contents



## Safety Considerations

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump.
Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit.
Inform users that they should store this operation manual with the installation manual for future reference.
Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

⚠ **DANGER** ····· Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** ····· Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ····· Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ····· Indicates situations that may result in equipment or property-damage accidents only.

**⚠ DANGER**

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

**⚠ WARNING**

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Never touch the internal parts of the controller. To check and adjust internal parts, contact your dealer.
- Be sure to establish a ground.
  Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete grounding may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install a ground fault circuit interrupter.
  Failure to install a ground fault circuit interrupter may result in electric shock or fire.

**⚠ CAUTION**

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
  Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
  Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.
- For care and cleaning, call service personnel.

# Safety Considerations

**⚠ NOTE**

- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in a water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  a. Places with a mist of mineral oil, such as cutting oil.
  b. Locations such as coastal areas where there is a lot of salt in the air.
  c. Locations such as hot springs where there is a lot of sulfur in the air.
  d. Locations such as factories where the power voltage varies a lot.
  e. In cars, boats, and other vehicles.
  f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  g. Locations where equipment produces electromagnetic waves.
  h. Places with an acid or alkaline mist.
  i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  a. Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.

FFP001-U

This is an appliance that is not accessible to the general public.

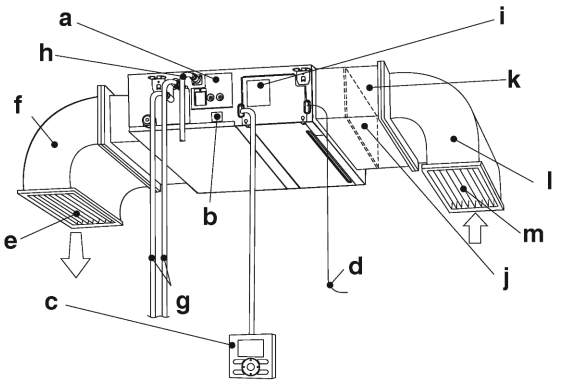
## Precautions relating to area surrounding the indoor and outdoor units

■ Be sure to follow the instructions below.

- The indoor unit is at least 3.3ft (1m) away from any television or radio set (unit may cause interference with the picture or sound).
- Refrain from using the units in areas prone to high levels of oily smoke, such as a kitchen. Water leakage may result.

# Names of Parts

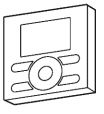
## Indoor Unit



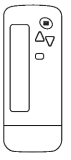

| | | | |
|---|---|---|---|
| **a** | Drain discharge device (built-in) | **g** | Refrigerant piping |
| **b** | Drain pan inspection window | **h** | Drain piping |
| **c** | Remote controller (Wired type)<br>The appearance of the remote controller may differ between different models. | **i** | Model name (Model name plate) |
| | | **j** | Air filter (Sold separately) |
| | | **k** | Suction filter chamber (Sold separately) |
| **d** | Wiring between the indoor and outdoor units | **l** | Suction duct (Field supply) |
| **e** | Air outlet grille (Field supply) | **m** | Suction grille (Field supply) |
| **f** | Exhaust duct (Field supply) | | |

### Remote controller

**Wired type**



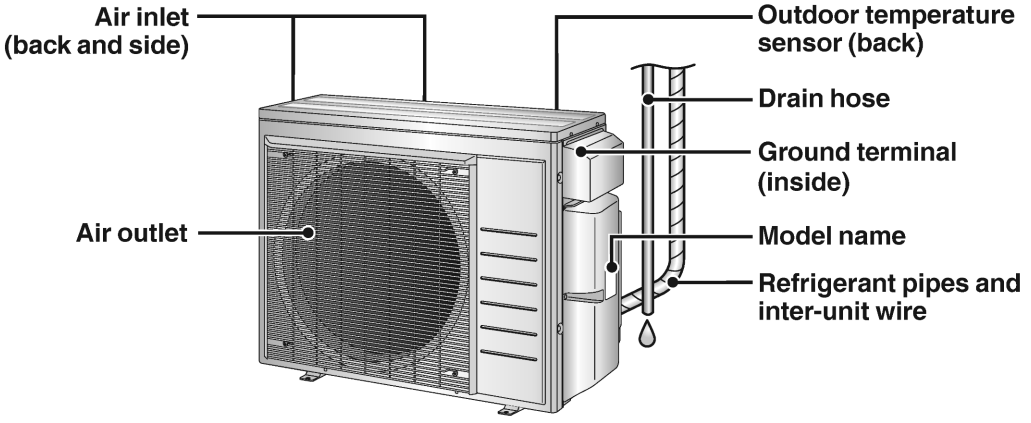
**Wireless type**



- For details on remote controller operation, refer to the operation manual included with the remote controller.

## Outdoor Unit

- The appearance of the outdoor unit may differ between different models.



# Care and Cleaning

## ⚠ CAUTION

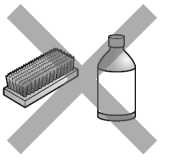
- Only a qualified service person is allowed to perform maintenance.
- Before cleaning, be sure to stop the operation and turn off the circuit breaker.
- Do not touch the aluminium fins of the indoor unit. If you touch those parts, this may cause an injury.

## ■ How to clean the air filter

When the remote controller indicates “Time to clean filter”, clean the air filter.
- It indicates after running for a certain time.

## NOTE

**For cleaning, do not use any of the following:**
- Volatile liquid such as benzene, gasoline and thinner
- Polishing compounds
- Rough materials such as a scrubbing brush
- You may change the time of indication “Time to clean filter”.



**If the indoor unit is used in a space where the air is too contaminated, ask your local dealer for solution.**

| Contamination | Time until indication is displayed |
|---|---|
| Normal | 2500 hours (equivalent to one year) |
| More contaminated | 1250 hours (equivalent to a half year) |

- If it becomes difficult to remove contamination from the air filter, replace the air filter. (Air filter for replacement is a separately sold accessory.)
- Do not remove the air filter except when cleaning. Unnecessary handling may damage the filter. (This product is not provided with an air filter as a standard accessory.)
- Do not attach objects other than the genuine air filter (e.g., kitchen paper) to the air inlet. Otherwise, the performance of the air conditioner will be degraded, and icing or water leakage may result.
- This product is a ceiling mounted duct type air conditioner.
  **Installing under roof**
  If the air filter (sold separately) is used, request a special contractor for the cleaning of the air filter.
  **Not installing under roof**
  Always use the long-life filter chamber (sold separately). Be sure to request your dealer for the installation of the long-life chamber. For the methods of mounting, dismounting, and cleaning the air filter, refer to the manual provided with the air filter.
- **Be sure to use the separately sold filter chamber.**
  Request your dealer for the installation of the filter chamber.
- Be sure to clean the air filter at the beginning of the cooling or heating season. (A decrease in the airflow volume of the air conditioner will result and the performance of the air conditioner will be degraded if the air filter is clogged with dust or dirt.)

Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.

**After completing cleaning and installing an air filter, turn off the indication of “Time to clean filter” on the remote controller.**
- Press the FILTER SIGN RESET button.
- The indication can be turned off while the unit is either operating or stopped.

## ■ How to clean air outlet, outside panels and remote controller

### 1. Clean with soft cloth.

### 2. When it is difficult to remove stains, use water or neutral detergent.

**NOTE**

- **Do not wash the suction grille with water of 122°F (50°C) or higher. It may cause discoloration and deformation.**
- **When drying the suction grille, do not heat it with fire. It may cause burning.**
- **Do not use substances such as gasoline, benzene, thinner, polishing powder and liquid insecticide sold in the market. It may cause discoloration and deformation.**

## ■ Prior to a long period of non-use

### 1. Operate the FAN mode for several hours on a fine day to dry out the inside.

1) Press the “MODE” selector button and select “FAN” operation.
2) Press the “ON/OFF” button and start operation.

### 2. After operation stops, turn off the circuit breaker for the room air conditioner.

### 3. Clean the air filters and reattach them. Page 7

### 4. To prevent battery leakage, take out the batteries from the remote controller. (Only for the wireless remote controller)

## ■ We recommend periodical maintenance

- In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a specialist.
- For specialist maintenance, please contact the dealer where you bought the air conditioner.
- The maintenance cost must be borne by the user.

# Troubleshooting

Before making an inquiry or a request for repair, please check the following.
If the problem persists, consult your dealer.

**Not a problem**
This case is not a problem.

**Check**
Please check again before requesting repairs.

| Case | Description / what to check |
|---|---|
| **Operation does not start soon.**<br>• When ON/OFF button was pressed soon after operation was stopped.<br>• When the mode was reselected. | • This is to protect the air conditioner. You should wait for about 3 minutes. |
| **Air does not come out.** | ■ **In HEAT operation**<br>• The air conditioner is warming up. Wait for about 1 to 4 minutes.<br>• During defrosting operation, hot air does not flow out of the indoor unit.<br>■ **When the air conditioner operates immediately after the circuit breaker is turned on**<br>• The air conditioner is preparing to operate. Wait for about 3 to 20 minutes. |
| **The HEAT operation stops suddenly and a flowing sound is heard.** | • The system is taking away the frost on the outdoor unit. You should wait for about 4 to 12 minutes. |
| **The outdoor unit emits water or steam.** | ■ In HEAT mode<br>• The frost on the outdoor unit melts into water or steam when the air conditioner is in defrost operation.<br>■ In COOL or DRY mode<br>• Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips. |
| **Mist comes out of the indoor unit.** | ■ This happens when the air in the room is cooled into mist by the cold airflow during cooling operation. |
| **The indoor unit gives out odor.** | ■ This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the airflow. (If this happens, we recommend you to have the indoor unit washed by a technician. Consult your dealer where you bought the air conditioner.) |
| **The outdoor fan rotates while the air conditioner is not in operation.** | ■ After operation is stopped:<br>• The outdoor fan continues rotating for another 1 minute for system protection.<br>■ While the air conditioner is not in operation:<br>• When the outdoor temperature is very high, the outdoor fan starts rotating for system protection. |
| **The operation stopped suddenly. (OPERATION lamp is on.)** | ■ For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes. |
| **The air conditioner does not operate. (OPERATION lamp is off.)** | • Hasn't the circuit breaker turned OFF or a fuse blown?<br>• Isn't it a power failure?<br>• Are batteries set in the remote controller?<br>• Is the timer setting correct? |
| **Cooling (Heating) effect is poor.** | • Are the air filters clean?<br>• Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units?<br>• Is the temperature setting appropriate?<br>• Are the windows and doors closed?<br>• Are the airflow rate and the air direction set appropriately? |
| **Operation stops suddenly. (OPERATION lamp flashes.)** | • Are the air filters clean?<br>• Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units?<br>Clean the air filters or take all obstacles away and turn the circuit breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still blinks, call your dealer where you bought the air conditioner. |

| Case | Description / what to check |
|---|---|
| **An abnormal functioning happens during operation.** | • The air conditioner may malfunction with lightning or radio waves. Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller. |

**Notes on the operating conditions**

- If operation continues under any conditions other than those listed in the table,
  - A safety device may activate to stop the operation.
  - Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

| Mode | Operating conditions |
|---|---|
| **COOL / DRY** | Outdoor temperature: 50-115°F (10-46°C)<br>Indoor temperature: 64-90°F (18-32°C)<br>Indoor humidity: 80% max. |
| **HEAT** | Outdoor temperature: [RX]: 5-75°F (–15-24°C)<br>[RXL]: –13-75°F (–25-24°C)<br>Indoor temperature: 50-86°F (10-30°C) |

## ■ Call your dealer immediately

### ⚠ WARNING

**When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.**

- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

**Do not attempt to repair or modify the air conditioner by yourself.**

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- **The power cord is abnormally hot or damaged.**
- **An abnormal sound is heard during operation.**
- **The circuit breaker cuts off the operation frequently.**
- **A switch or a button often fails to work properly.**
- **There is a burning smell.**
- **Water leaks from the indoor unit.**

Turn off the circuit breaker and call your dealer.

**■ After a power failure**

- The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

**■ Lightning**

- If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

## ■ Disposal requirements

- Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.



C: 3P500431-1

## 13.1 With <BRC1E73> Wired Remote Controller

# Safety Considerations

The original instructions are written in English. All other languages are translation of the original instructions.
Read these **SAFETY CONSIDERATIONS** carefully before operating the remote controller.
Train the customer to operate and maintain the remote controller.
Inform customers that they should store this Operations Manual with the Installation Manual for future reference.
Meanings of **WARNING and CAUTION** Symbols:

| | |
|---|---|
| ⚠ **WARNING** | Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. |
| ⚠ **CAUTION** | Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.<br>It may also be used to alert against unsafe practices. |
| ⚠ **NOTE** | Indicates situations that may result in equipment or property-damage accidents only. |

- The following pictograms are used in this manual.

| | | | |
|---|---|---|---|
|  | Never do. |  | Always follow the instructions given. |
|  | Keep water and moisture away. |  | Keep wet hands away. |

| ⚠ **WARNING** | |
|---|---|
|  | • **Do not modify or repair the remote controller.**<br>Consult your Daikin dealer for any modification or for repairs. |
|  | • **Do not relocate or reinstall the remote controller by yourself.**<br>Improper installation may result in electric shocks or fire.<br>Consult your Daikin dealer to relocate or for any reinstallation. |
|  | • **Do not use flammable materials (e.g., hairspray or insecticide) near the remote controller.**<br>Do not clean the product with organic solvents such as paint thinner.<br>The use of organic solvents may cause cracking, damaging the product, causing electric shocks, or fire. |
|  | • **Consult the dealer if the remote controller was submerged under water due to a natural disaster, such as a flood or hurricane.**<br>**Do not operate the remote controller at this time or a malfunction, electric shock, or fire can occur.** |

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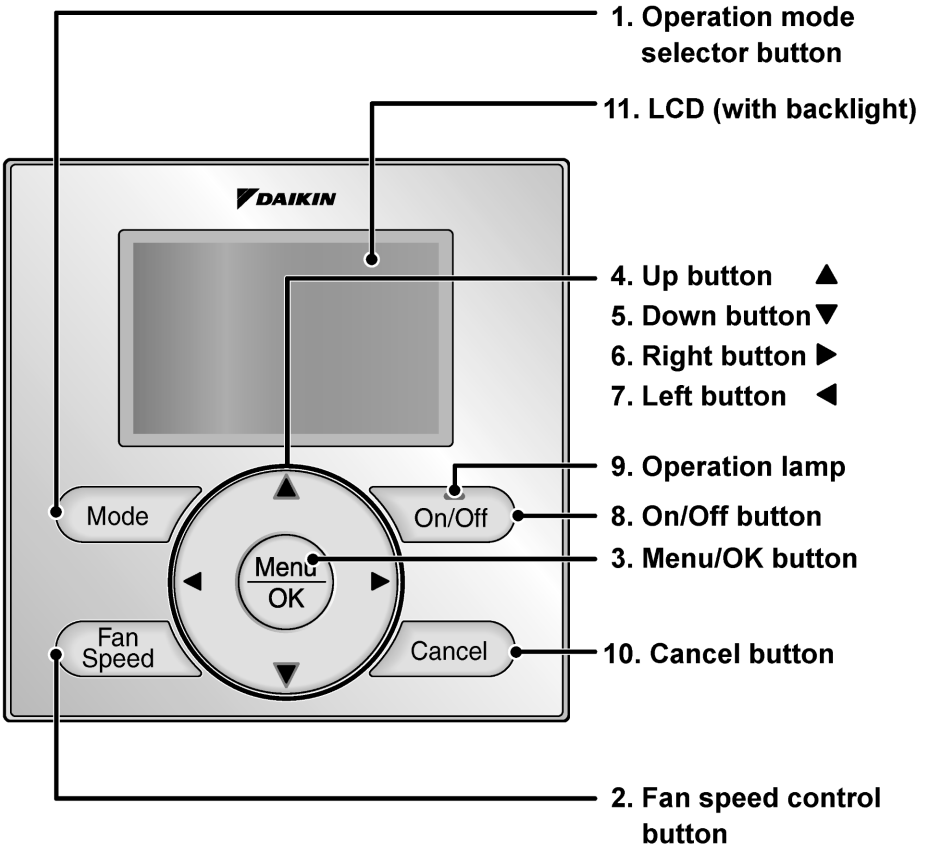
## ——Items to be Strictly Observed——

| ⚠CAUTION | |
|---|---|
|  | • **Do not allow children to play with the remote controller to avoid causing damage to the product.** |
|  | • **Never disassemble the remote controller.**<br>Touching the interior parts may result in electric shocks or fire.<br>Consult your Daikin dealer for internal inspections and adjustments. |
|  | • **Do not touch the remote controller buttons with wet fingers.**<br>**Touching the buttons with wet fingers can cause an electric shock.** |
|  | • **Do not wash the remote controller.**<br>Doing so may cause electric leakage and result in electric shocks or fire. |
|  | • **Never let the remote controller to get wet.**<br>Water can cause damage to the remote controller, and may cause an electric shock or fire. |

| ⚠NOTE | |
|---|---|
|  | • **Never press the button of the remote controller with a hard and pointed object.**<br>The remote controller may be damaged. |
|  | • **Never pull or twist the electric wire of the remote controller.**<br>It may cause the unit to malfunction. |
|  | • **Do not wipe the remote controller with benzine, thinner, chemical dustcloth, etc.**<br>The remote controller may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the remote controller clean. And wipe it with another dry cloth. |

# Button Locations and Descriptions




**Functions other than basic operation items (i.e., On/Off, Operation Mode, Fan Speed, and Setpoint) are set from the menu screen.**

**NOTE**

- **Do not install the remote controller in places exposed to direct sunlight, the LCD will be damaged.**
- **Do not pull or twist the remote controller cord, the remote controller may be damaged.**
- **Do not use objects with sharp ends to press the buttons on the remote controller, damage may result.**

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## 1. Operation mode selector button

- Press this button to select the operation mode of your preference. **(See page 10.)**
  * Available modes vary with the indoor unit model.

## 2. Fan speed control button

- Press this button to select the fan speed of your preference. **(See page 11.)**
  * Available fan speeds vary with the indoor unit model.

## 3. Menu/OK button

- Used to enter the main menu. **(See page 20 for the menu items.)**
- Used to enter the selected item.

## 4. Up button ▲

- Used to raise the setpoint.
- The item above the current selection will be highlighted. (The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

## 5. Down button ▼

- Used to lower the setpoint.
- The item below the current selection will be highlighted. (The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

## 6. Right button ▶

- Used to highlight the next items on the right-hand side.
- Each screen is scrolled in the right-hand direction.

## 7. Left button ◀

- Used to highlight the next items on the left-hand side.
- Each screen is scrolled in the left-hand direction.

## 8. On/Off button

- Press this button and system will start.
- Press this button again to stop the system.

## 9. Operation lamp

- This lamp illuminates solid green during normal operation.
- This lamp flashes if an error occurs.

## 10. Cancel button

- Used to return to the previous screen.

## 11. LCD (with backlight)

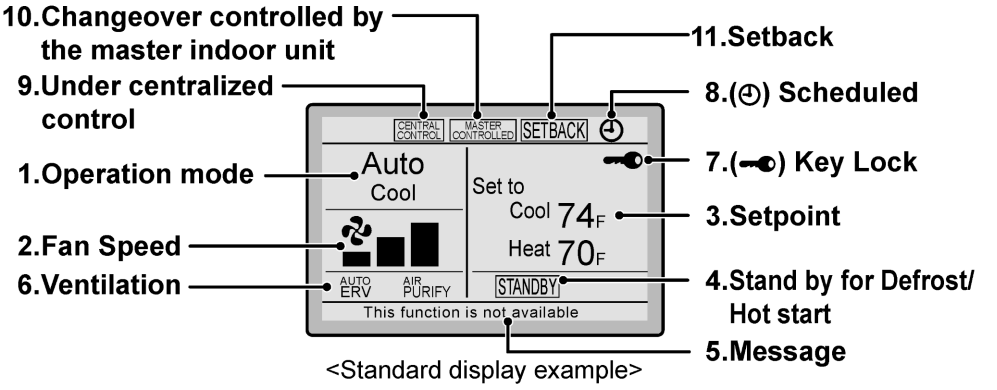
- The backlight will be illuminated for approximately 30 seconds by pressing any button.
- If two remote controllers are used to control a single indoor unit, only the controller accessed first will have backlight functionality.

# Names and Functions

## Liquid Crystal Display

- Three types of display mode (Standard, Detailed and Simple) are available.
- Standard display is set by default.
- Detailed and Simple displays can be selected in the main menu. **(See page 40.)**

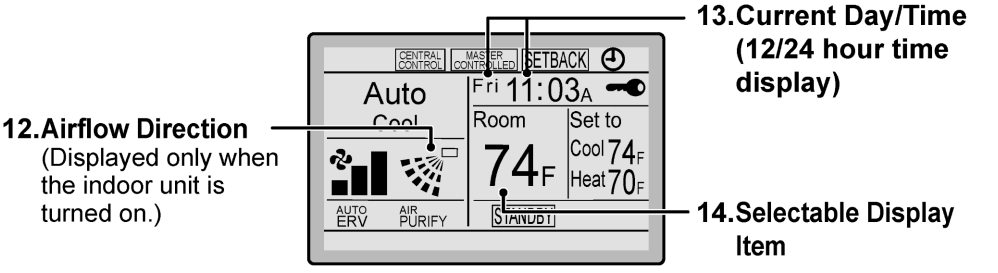
### Standard display



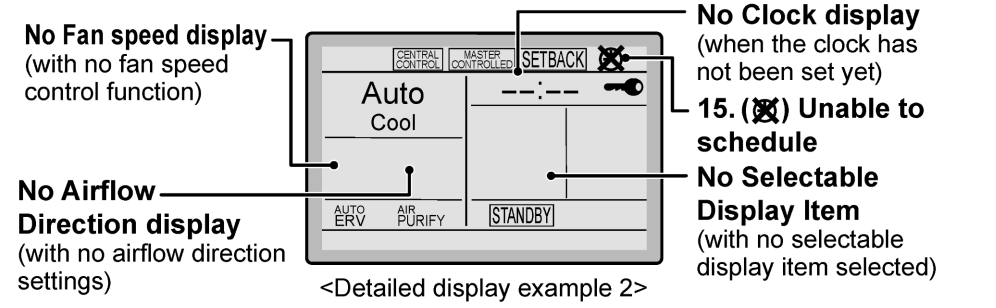

<Standard display example>

### Detailed display

■ **The airflow direction, clock, and selectable item appear on Detailed display screen in addition to the items appearing on Standard display.**



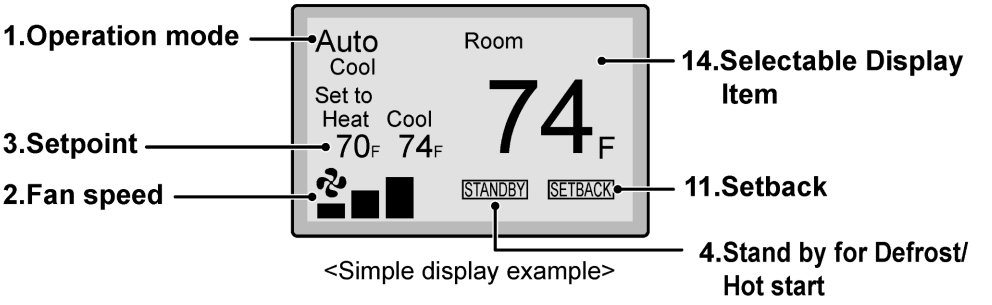

<Detailed display example 1>




<Detailed display example 2>

6

**Simple display**




<Simple display example>

**Note for all display modes**

- Depending on the field settings, while the indoor unit is stopped, OFF may be displayed instead of the operation mode and/or the setpoint may not be displayed.

7

# Names and Functions

## 1. Operation mode

- Used to display the current operation mode: Cool, Heat, Vent, Fan, Dry or Auto.
- In Auto mode, the actual operation mode (Cool or Heat) will be also displayed.
- Operation mode cannot be changed when OFF is displayed.
  Operation mode can be changed after starting operation.

## 2. Fan Speed

- Used to display the fan speed that is set for the indoor unit.
- The fan speed will not be displayed if the connected model does not have fan speed control functionality.

## 3. Setpoint

- Used to display the setpoint for the indoor unit.
- Use the Celsius/Fahrenheit item in the main menu to select the temperature unit (Celsius or Fahrenheit).

## 4. Stand by for Defrost/Hot start

**“ STANDBY ” (See page 12.)**

**If ventilation icon is displayed in this field:**

- Indicates that an energy recovery ventilator (ERV) is connected.
  For details, refer to the Operation Manual of the ERV.

## 5. Message

**The following messages may be displayed.**
**“This function is not available”**

- Displayed for a few seconds when an Operation button is pressed and the indoor unit does not provide the corresponding function.
- In a remote control group, the message will not appear if at least one of the indoor units provides the corresponding function.

**“Error: Push Menu button”**
**“Warning: Push Menu button”**

- Displayed if an error or warning is detected **(see page 50)**.

**“Time to clean filter”**
**“Time to clean element”**
**“Time to clean filter & element”**

- Displayed as a reminder when it is time to clean the filter and/or element **(see page 48).**

## 6. Ventilation

- Displayed when an energy recovery ventilator is connected.
- **Ventilation Mode icon.“** AUTO ERV ERV BYPASS **”**
  These icons indicate the current ventilation mode (ERV only) (AUTO, ERV, BYPASS).
- **Air Purify ICON “** AIR PURIFY **”**
  This icon indicates that the air purifying unit (Optional) is in operation.

## 7. Key Lock (See page 19.)

- Displayed when the key lock is set.

## 8. Scheduled (See page 30.)

- Displayed if the Schedule or Off timer is enabled.

## 9. Under Centralized control “ CENTRAL CONTROL ”

- Displayed if the system is under the management of a multi-zone controller (Optional) and the operation of the system through the remote controller is limited.

## 10. Changeover controlled by the master indoor unit “ MASTER CONTROLLED ”

(VRV only)

- Displayed when another indoor unit on the system has the authority to change the operation mode between cool and heat.

### 11. Setback " SETBACK " (See page 14.)

- The setback icon flashes when the unit is turned on by the setback control.

### 12. Airflow Direction "↙"

- Displayed when the airflow direction and swing are set **(see page 23)**.
- If the connected indoor unit model does not include oscillating louvers this item will not be displayed.

### 13. Current Day/Time (12/24 hour time display)

- Displayed if the clock is set **(see page 42)**.
- If the clock is not set, " -- : -- " will be displayed.
- 12 hour time format is displayed by default.
- Select 12/24 hour time display option in the main menu under "Clock & Calendar".

### 14. Selectable Display Item

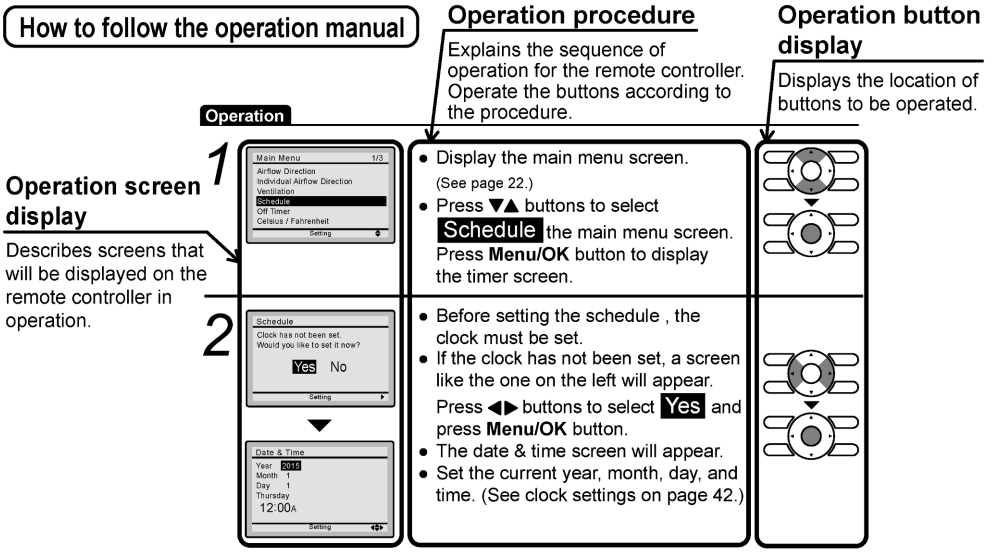
- Room temperature is selected by default.
- For other choices see page 41.

### 15. ⊠ Unable to schedule

- Displayed when the clock needs to be set.
- The schedule function will not work unless the clock is set.

# Basic Operation

## Cool/Heat/Auto/Fan Operation (SkyAir and VRV)

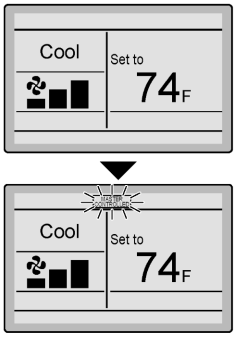



### Preparation

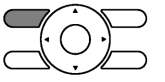
- For mechanical protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

### Operation

**1**




- Press **Mode** button several times until the desired mode Cool, Heat, Fan, or Auto mode is selected.



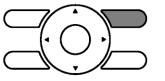
*Unavailable operation modes are not displayed.

**Note**

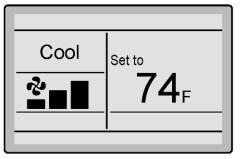
- Both heat and cool mode may not be selected if the unit is master controlled. See page 16 if MASTER CONTROLLED icon flashes.

## 2


- Press **On/Off** button.
  The Operation lamp will illuminate solid green and the system will start operating.

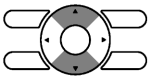


## 3

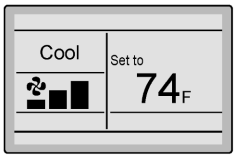


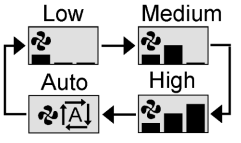

- The setpoint will increase by 1°F (or 1°C) when ▲ button is pressed and decrease by 1°F (or 1°C) when ▼ button is pressed.

  * Setpoint is not available in fan or dry mode.

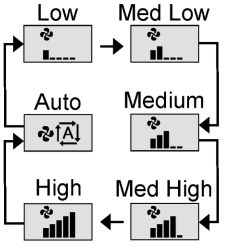


## 4




three fan speeds

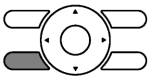



five fan speeds

- To change the fan speed, press **Fan Speed** button and select the fan speed from;
  - Low/High/Auto for two-speed
  - Low/Medium/High/Auto for three-speed
  - Low/Med Low/Medium/Med High/High/Auto for five-speed

  depending on the indoor unit model.

  * Auto cannot be selected if the indoor unit does not have Auto Fan speed function.
  * The system may change the fan speed automatically for equipment protection purposes.
  * The system may turn off the fan when the room temperature is satisfied.
  * It is normal for a delay to occur when changing the fan speed.
  * If the Auto is selected for the fan speed, the fan speed varies automatically based on the difference between setpoint and room temperature.



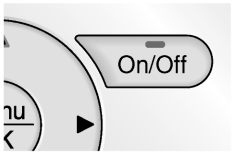
# Basic Operation

**5**

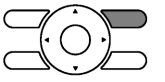
● Adjust Airflow Direction from the main menu
(see page 23).

*If the connected indoor unit does not have oscillating louvers, this function will not be available.

**6**




● When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



*When the system is stopped while in the heating mode, the fan will continue to operate for approximately one minute to remove residual heat from the indoor unit.

**Note**
● To prevent condensation water damage or system failure, do not shut off the power supply to the indoor unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the indoor unit.

## Characteristics of Heat Mode

**The system automatically controls the following operating modes to prevent the reduction of heating capacity and space comfort.**

**Defrost operation**

● The system will automatically go into defrost operation to prevent frost accumulation at the outdoor unit and subsequent loss of heating capacity.
● The indoor unit fan will stop, and " STANDBY " will be displayed on the remote controller.
● The system will finish the Defrost operation and return to normal usually within six to eight minutes. It won't last for more than ten minutes.

**Hot start**

● When the system starts heating operation, the indoor unit fan will operate with a delay in order to prevent a cold draft.
(In that case, " STANDBY " will be displayed on the remote controller.)

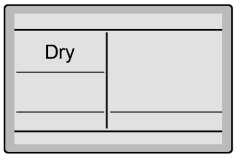
# Dry Mode

## Preparation

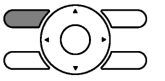
- For equipment protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.
- The dry mode may not be selected if the remote controller is master controlled and the system is not already in the cooling mode of operation. (see page 18 for details)

### Operation

**1**



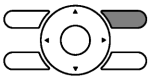

- Press **Mode** button several times until the Dry mode is selected.



*The dry mode may not be available depending on the type of indoor unit.

**2**


- Press **On/Off** button.
  The Operation lamp will illuminate solid green and the system will start operating.



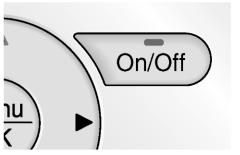
*In Dry mode, the system maintains automatic temperature and fan speed control. Therefore, temperature setpoint or fan speed settings are not available while the indoor unit is in the Dry mode.

**3**

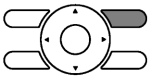
- Adjust Airflow Direction from the main menu (see page 23).

*If the connected indoor unit does not have oscillating louvers, this function will not be available.

# Basic Operation

4 

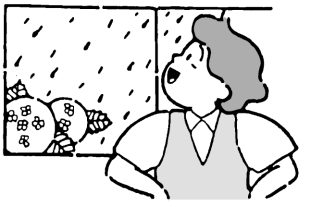

● When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



**Note**
- To prevent condensation water damage or system failure, do not shut off the power supply to the indoor unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the indoor unit.

## Characteristic of Dry mode

The Dry mode dehumidifies the space at reduced cooling capacity to prevent the room temperature from dropping to an uncomfortable level.



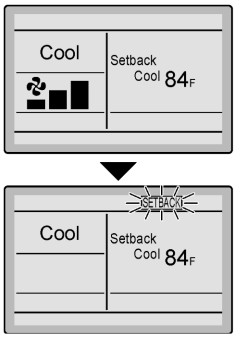
## Setback

The Setback function can be used to maintain the space temperature in an assigned range for an unoccupied period.

**Note**
- When enabled, the Setback mode becomes active when the indoor unit is turned off by either the user, a schedule event or an off timer.
- This function is not available by default. It can be enabled by the system installer.

**Operation**

1




- The setback icon flashes when the unit is turned on by the setback control.

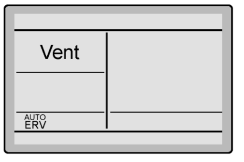
## Ventilation Mode When the Indoor Unit is Interlocked with Energy Recovery Ventilator

### Preparation

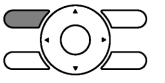
- For equipment protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

**Operation**

1




- When operating the energy recovery ventilator (ERV) between seasons without the indoor unit, set the control to ventilation mode.



2

- Changes to the ventilation mode are made from the main menu.

  *Ventilation Mode: Auto, ERV, and Bypass

3

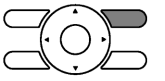
- Changes to the ventilation rate are made from the main menu.

  *Ventilation Rate: Low or High

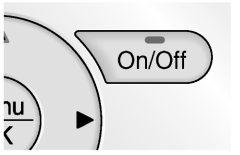
# Basic Operation

**4**

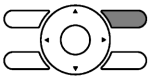

- Press **On/Off** button.
  The Operation lamp will illuminate solid green and the system will start operating.



**5**




- When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.

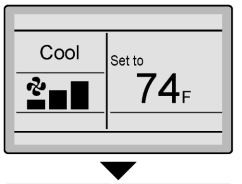


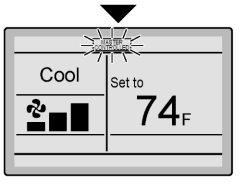
## Setting the Cool / Heat Changeover Master

**(VRV only)**

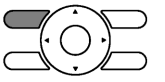
**Setting Changes** See page 18 for an explanation of the cool/heat changeover master indoor unit.

**1**




- Press **Mode** button on the remote controller of the changeover master indoor unit for at least four seconds while the backlight is illuminated.



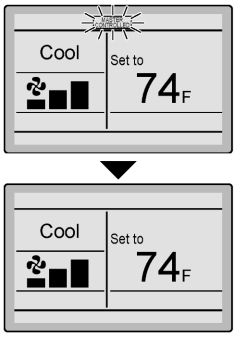
- The "MASTER CONTROLLED" icon on each remote controller for the indoor units connected to the same outdoor unit or Branch Selector unit will start flashing.

  * Vent mode setting changes are possible regardless of the cool/heat changeover master indoor unit.
  * If the outdoor unit is configured as cool/heat changeover master, all remote controllers serving the associated indoor units will display its "MASTER CONTROLLED" icon.

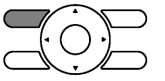
- Set the cool/heat changeover master indoor unit as outlined below.

**Selection Settings** The icon " MASTER CONTROLLED " will flash on all remote controllers when the power is turned ON for the first time.

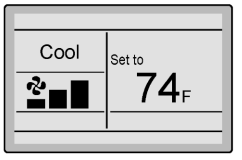
2



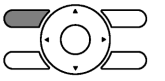

- Press **Mode** button on the remote controller of the indoor unit which is to serve as the cool/heat changeover master.
  The remote controller for the changeover master indoor unit is established and the MASTER CONTROLLED icon is no longer displayed.
  Other remote controllers in the system (indoor units served by the same outdoor unit or indoor units served by the same branch selector unit) will now display the MASTER CONTROLLED icon.



3




- Press **Mode** button on the remote controller of the indoor unit designated as the cool/heat changeover master (the remote controller not displaying the MASTER CONTROLLED icon) repeatedly until the desired mode is selected. The display will change to **Fan**, **Dry**, **Auto**, **Cool**, **Heat** each time the button is pressed.
- Simultaneously, the other indoor units on the system will follow suit and change modes to reflect the new mode selected at the changeover master remote controller.



# Basic Operation

## Cool / Heat Mode Selection Availability

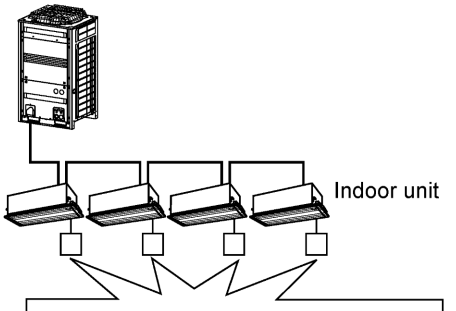
- "Cool", "Heat", and "Auto" are all only available for selection on the cool/heat changeover master indoor unit. The following table indicates the available operating modes of the other indoor units on the system based upon the selected mode of the master indoor unit.

| When the master indoor unit is set to | The other indoor units in the system can be set to | | | |
|---|---|---|---|---|
| | Cool | Dry | Heat | Fan |
| Cool mode | ✓ | ✓ | | ✓ |
| Dry mode | ✓ | ✓ | | ✓ |
| Heat mode | | | ✓ | ✓ |
| Fan mode | | | | ✓ |
| Auto mode (Cooling operation) | ✓ | ✓ | | ✓ |
| Auto mode (Heating operation) | | | ✓ | ✓ |

## Precautions for Selecting the Cool / Heat Changeover Master Indoor Unit

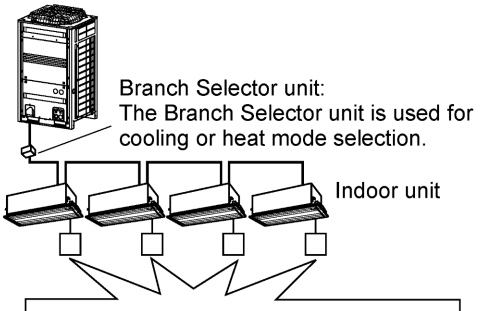
- The cool/heat changeover master must be set for a single indoor unit in the following applications

**(2-Pipe Heat Pump System)**




| **A number of indoor units are connected to a single outdoor unit.** |
|---|
| Set any one of the indoor units as the cool/heat changeover master. |

**(3-Pipe Heat Recovery System)**

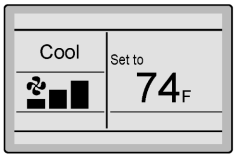



| **A number of indoor units are connected to a single Branch Selector unit.** |
|---|
| Set any one of the indoor units as the cool/heat changeover master. |

# Key Lock

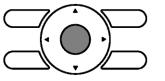
**Operation** Confirm and cancel Key Lock settings in the basic display screen.

1

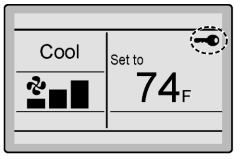



Basic screen

- Press **Menu/OK** button for at least four seconds while the backlight is illuminated.



2




- "🔑" is displayed.
  All buttons are disabled when the keys are locked.
- To cancel the key lock mode, continue pressing **Menu/OK** button for at least four seconds while the backlight is illuminated.

# Quick Reference

## ■The main menu has the following items.

| Menu item | | Description | Reference page |
|---|---|---|---|
| **Airflow Direction** | | **Used to configure airflow direction settings.**<br>● The airflow direction louver is automatically operated up and down (left and right).<br>● The fixed airflow directions are configurable for five positions.<br>* This function is not available on all indoor unit models. | 23 |
| **Individual Airflow Direction** (depends on indoor unit model) | **Louver Setting** | Set the airflow direction individually for each of the 4 louvers.<br>● Maximum 16 units (unit 0 till 15). | 25 |
| | **Louver Setting List** | Setting table for louver. | 26 |
| | **Reset All Louvers Position** | Reset all louvers to factory default setting. | 27 |
| **Ventilation** (Ventilation operation settings for energy recovery ventilator) | **Ventilation Rate** | Used to set “Low” or “High” | 28 |
| | **Ventilation Mode** | Used to set Auto, ERV, or Bypass. | 29 |
| **Schedule** | **Daily Patterns** | ● Day settings are selected from four patterns, i.e., “7Days”, “Weekday/Sat/Sun”, “Weekday/Weekend”, and “Everyday”. | 31 |
| | **Settings** | ● Set the startup time and operation stop time.<br>ON: Startup time, cooling and heating temperature setpoints can be configured.<br>OFF: Operation stop time, cooling and heating setback temperature setpoints can be configured.<br>( ––: Indicates that the setback function is disabled for this time period. )<br>__: Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.<br>● Up to five actions can be set for each day. | 32 |
| **Off Timer** | | **Used to set the run-time for the indoor unit using this controller.**<br>● Possible to set in 10 minute increments from 30 to 180 minutes. | 35 |
| **Celsius / Fahrenheit** | | ● Used to select whether temperature values will be displayed in Celsius or Fahrenheit. | — |

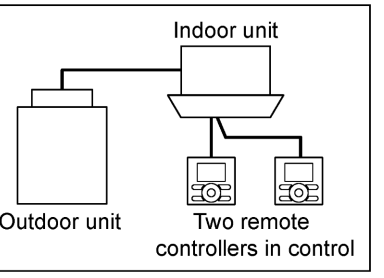
| Menu item | | Description | Reference page |
|---|---|---|---|
| **Filter Auto Clean** | | Set the time when the filter needs to be automatically cleaned. For the detailed operation refer to the Operation Manual of the self cleaning decoration panel. | — |
| **Maintenance Information** | | Used to display the maintenance information. | 37 |
| **Configuration** | **Draft Prevention** (Only available with Occ. sensor installed indoor unit model) | The draft prevention function can be **enabled** or **disabled**.<br>When enabled, the Occ. sensor will adjust the louver's position to prevent air blowing directly on occupant. | 38 |
| | **Contrast Adjustment** | Used to make LCD contrast adjustment. | 39 |
| | **Display** | **Used to set the display mode.**<br>● Display mode<br>Standard, Detailed, or Simple display<br>● Detailed and Simple displays provide the selectable display item among Room Temp, System, None or Outside Air Temp. | 40 |
| **Current Settings** | | ● Used to display a list of current settings for available items. | 42 |
| **Clock & Calendar** | **Date & Time** | **Used to configure date and time settings and corrections.**<br>● The default time display is 12H.<br>● The clock will maintain accuracy to within ±30 seconds per month.<br>● If there is a power failure for a period not exceeding 48 hours, the clock will continue working with the built-in backup power supply. | 42 |
| | **12H/24H Clock** | The time can be displayed in either a 12 hour or a 24 hour time format. | 45 |
| **Daylight Saving Time** | | Used to adjust the clock in observance of daylight saving time. | 45 |
| **Language** | | The display language can be selected between **English**, **Francais**, or **Espanol**. | 48 |

Note: Available setting items vary with the indoor unit model.

## Sub Remote Controller Menu Items

If two remote controllers are connected to a single indoor unit, the following menu items are not set in the sub remote controller. In this case, the following items should be configured in the main remote controller.

- Individual Airflow Direction
- Schedule
- Off timer
- Setback
- Draft Prevention



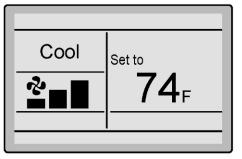
# Menu Options

## Navigating the Main Menu Screen

### ■Display Method for Main Menu

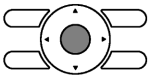
**Operation**

**1**

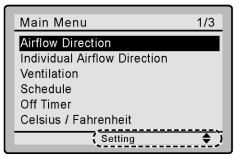


Basic screen

● Press **Menu/OK** button.



**2**



Main menu screen

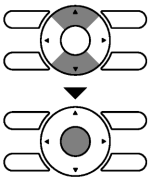
● The main menu screen is displayed.

⇦ Instructions for navigating the main menu will appear.

**3**

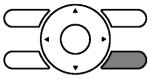
● Selecting items from the main menu.

1. Press ▼▲ buttons to select the desired item to be set.
2. Press **Menu/OK** button to display the details for the selected item.



**4**

● To go back to the basic screen from the main menu, press **Cancel** button.



**Note**

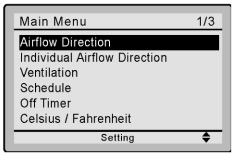
● If a button is not pressed for 5 minutes during configuration, the controller will automatically revert to the basic screen.

# Airflow Direction

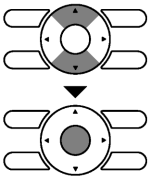
## ■Configuring Airflow direction

**Operation**

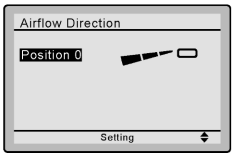
**1**




- Display the main menu screen.
  (See page 22.)
- Press ▼▲ buttons to select Airflow Direction and press **Menu/OK** button.

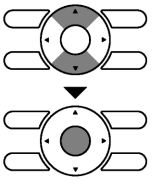


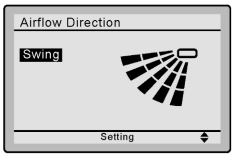
**2**



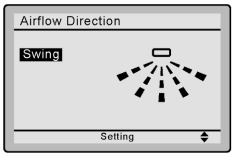

(1) Adjusting method when there is single airflow direction.

- Select the desired airflow direction from Position 0 , Position 1 , Position 2 , Position 3 , Position 4 , Swing or Auto using ▼▲ buttons.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.





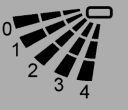

Airflow direction setting (up/down)



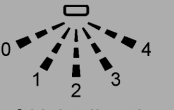

Airflow direction setting (left/right)

**Note**

- The airflow directions appear on the screen as follows:




Up/down direction




Left/right direction

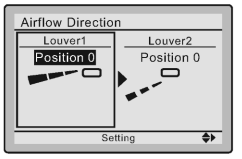
0 : Position 0
1 : Position 1
2 : Position 2
3 : Position 3
4 : Position 4

**Notice**

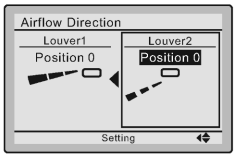
These operation and screen are example of single airflow direction type indoor unit.
It is different from Single flow cassette model.

# Menu Options

**3**

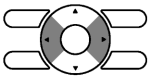



When front/back direction is selected




When left/right direction is selected

(2) Adjusting method for selecting dual airflow directions.

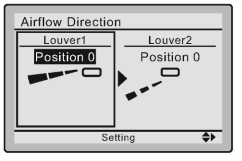


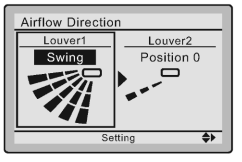
- Press ◀▶ buttons, to select front/back or left/right direction setting.

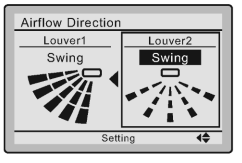
**Notice**

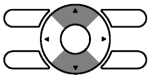
These operation and screen are example of dual airflow directions type indoor unit (Single flow cassette model).

**4**

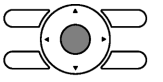


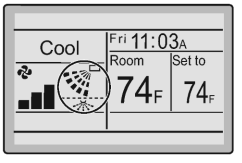



- Select the desired airflow direction from **Position 0** , **Position 1** , **Position 2** , **Position 3** , **Position 4** , **Swing** or **Auto** using ▼▲ buttons.
- Selecting **Swing** will cause the airflow direction louver to swing position 0 to 4.
- Setting **Auto** is not available when left/right direction is selected.



- Press **Menu/OK** button to confirm the settings and return to the basic screen.

**5**




Basic screen
(Detailed display)

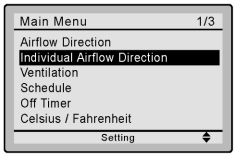
- If dual airflow directions are set, then the dual airflow direction icons are displayed in the basic screen.

# Individual Airflow Direction

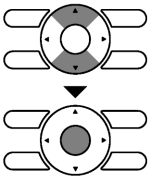
## ■Louver Setting

**Operation**

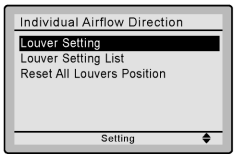
1



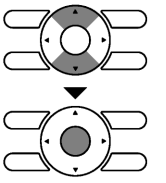

- Display the main menu screen.
  (See page 22.)
- Select **Individual Airflow Direction** and press **Menu/OK** button.



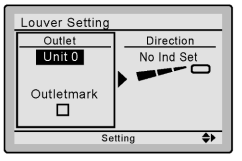
2



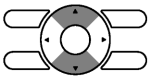

- Select **Louver Setting** and press **Menu/OK** button.

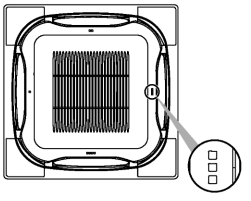


3




- Use ▼▲ buttons to select the unit and outlet mark.
- Maximum 16 units for each group (unit 0 till 15) can be selected.

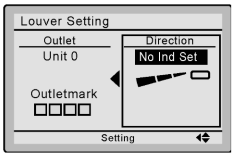




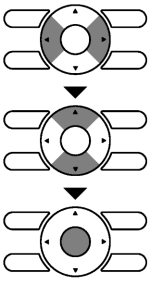
**Note**
In case of four outlets (cassette type), you can control each one of the four louvers individually (the following marks are beside each air outlet: □, □□, □□□, □□□□).

# Menu Options

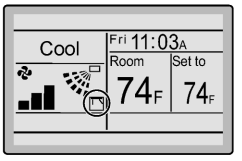
**4**




- Press ◀▶ button to select the airflow direction.
- Use ▼▲ buttons to change the airflow direction to the following:
  No Ind Set , Position 0 , Position 1 , Position 2 , Position 3 , Position 4 , Swing or Blocked .
  No Ind Set : No Individual Louver Setting.
  Blocked : Individual airflow is blocked.
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



**5**



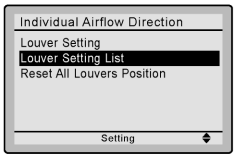

Basic screen
(Detailed display)

- If individual airflow direction is set, then the individual airflow direction icon is displayed in the basic screen.

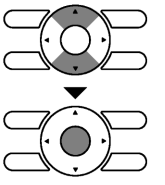
## ■Louver Setting List

**Operation**

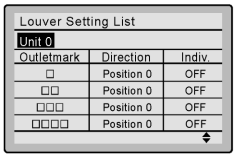
**1**



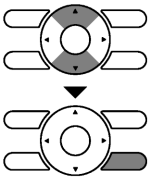

- Display the individual airflow direction screen. (See page 25.)
- Press ▼▲ buttons to select Louver Setting List and press **Menu/OK** button.



**2**



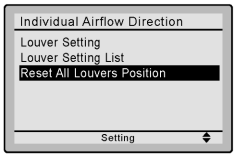

- A table shows the current settings. Press ▼▲ buttons to go to the next unit.
- Press **Cancel** button to return to the previous menu.



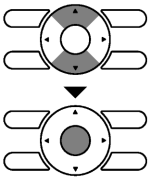
## ■Reset All Louvers Position

**Operation**

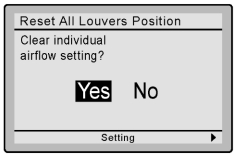
1



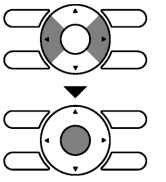

- Display the individual airflow direction screen.
  (See page 25.)
- Press ▼▲ buttons to select **Reset All Louvers Position** and press **Menu/OK** button.



2




- Press ◀▶ buttons to select **Yes** .
- Press **Menu/OK** button to confirm the reset and to return to the basic screen.

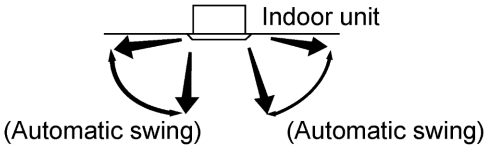


## Operational Details and Functions

### There are two types of airflow direction settings.

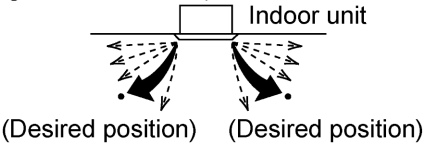
**Airflow direction swing**

The louvers automatically oscillate up and down.




**Airflow direction**

You can select from one of five fixed directions. (This has no relation to the angle of the louvers.)




### Movement of airflow direction louver

Under the operating conditions shown next, airflow direction is controlled automatically. Actual operation may be different than what is displayed on the remote controller.

# Menu Options

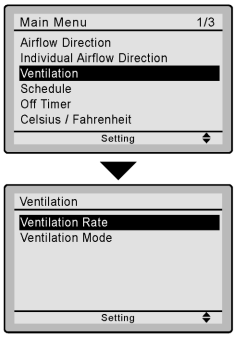
| | |
|---|---|
| **Operating condition** | ● Room temperature is higher than the remote controller's setpoint (in heating operation).<br>● When defrosting (in heating operation).<br>(The airflow discharges horizontally to avoid creating a draft for the room occupants.)<br>● Under continuous operation with the airflow discharging horizontally. |

## Ventilation

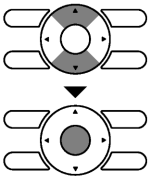
### ■Ventilation screen display properties

**Operation**

1



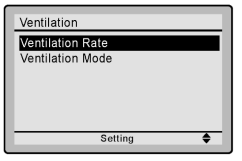

● Display the main menu screen.
(See page 22.)
● Press ▼▲ buttons to select **Ventilation** on the main menu screen.
(For models with no ventilation function, **Ventilation** will not be displayed on the main menu screen.)
Press **Menu/OK** button to display the ventilation screen.



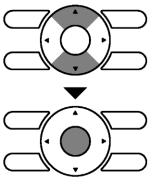
### ■Changing the ventilation rate

**Operation**

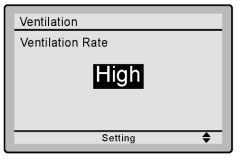
1




● Navigate to the ventilation screen
(see above).
● Press ▼▲ buttons to select **Ventilation Rate** on the ventilation screen.
Press **Menu/OK** button to display the ventilation rate screen.

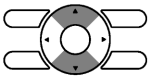


2



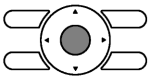

- Press ▼▲ buttons to toggle between the **Low** and **High** settings.

  * Only modes that can be set are displayed.



3

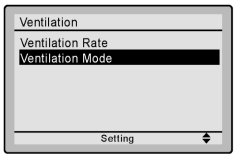
- Selecting and confirming the desired ventilation rate will take you back to the basic screen.
  (Pressing **Cancel** button takes you back to the previous screen without changing the ventilation rate.)



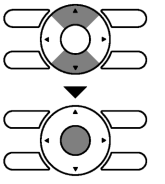
## ■Changing the ventilation mode

**Operation**

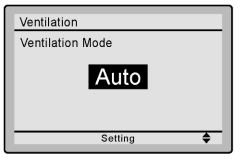
1



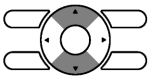

- Display the ventilation screen.
  (See page 28.)
- Press ▼▲ buttons to select **Ventilation Mode** on the ventilation screen.
  Press **Menu/OK** button to display the ventilation mode screen.



2



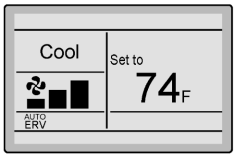

- Pressing ▼▲ buttons cycles through the settings in the order shown below.



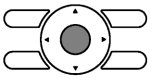
**Auto** ◂▸ **ERV** ◂▸ **Bypass**

* Only modes that can be set are displayed.

# Menu Options

3 


- Selecting and confirming the desired ventilation mode will take you back to the basic screen.
  (Pressing **Cancel** button takes you back to the previous screen without changing the ventilation mode. )



## Ventilation Mode

**Auto mode** — Using information from the indoor unit (cool, heat, fan, and setpoint) and the energy recovery ventilator unit (indoor and outdoor temperatures), the ventilation mode is automatically changed between ERV and Bypass.

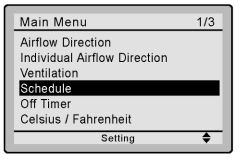
**ERV mode** — Outside air is passed through the ERV core and is supplied to the conditioned space.

**Bypass mode** — Outside air is supplied to the conditioned space without passing through the ERV core.

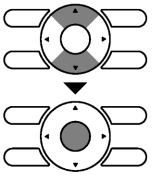
# Schedule

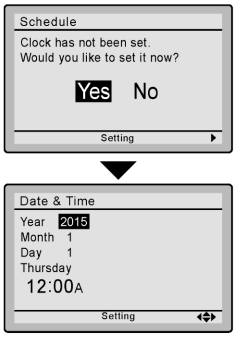
## ■Setting the schedule

**Operation** The schedule will disappear when a multizone controller is connected, but can be re-enabled by the system installer.

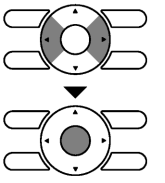
1 


- Display the main menu screen.
  (See page 22.)
- Press ▼▲ buttons to select Schedule . Press **Menu/OK** button to display the schedule screen.

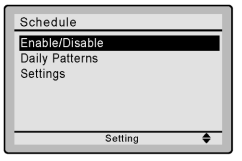




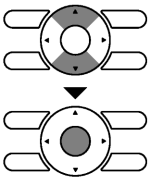

- Before setting the schedule, the clock must be set.
- If the clock has not been set, a screen like the one on the left will appear. Press ◀▶ buttons to select **Yes** and press **Menu/OK** button.
- The date & time screen will appear.
- Set the current year, month, day, and time. (See clock settings on page 42.)



**2**



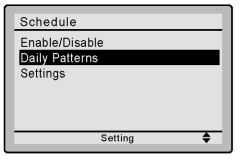

- Press ▼▲ buttons to select the desired function on the schedule screen and press **Menu/OK** button.



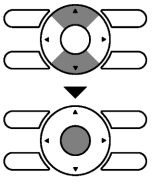
## ■Daily Patterns

**Operation**

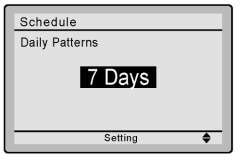
**1**



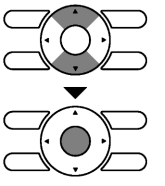

- The schedule screen will appear.
- Press ▼▲ buttons to select **Daily Patterns** on the schedule screen. The daily patterns screen will appear when **Menu/OK** button is pressed.



**2**

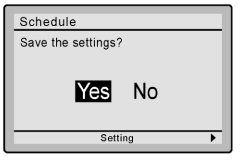



- Press ▼▲ buttons to select **7 Days**, **Weekday/Sat/Sun**, **Weekday/Weekend** or **Everyday** on the daily patterns screen. The confirmation screen will appear when **Menu/OK** button is pressed.

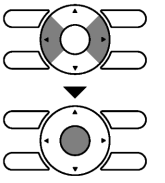


# Menu Options

**3**



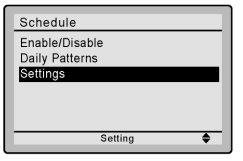

- Press ◀▶ buttons to select Yes on the confirmation screen.
  Pressing **Menu/OK** button enters the daily patterns in the schedule and takes you back to the main menu screen.



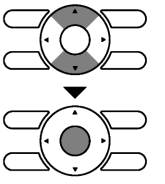
## ■Settings

**Operation**

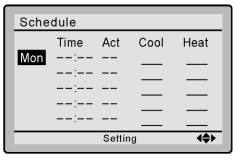
**1**




- The schedule screen will appear.
- Press ▼▲ buttons to select Settings on the schedule screen.
  The settings screen will appear when **Menu/OK** button is pressed.

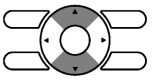


**2**

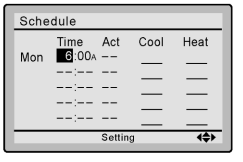


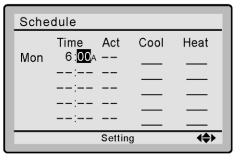

- Press ▼▲ buttons to select the day to be set.

* It cannot be selected in the case of EVDY .

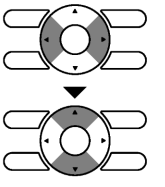


**3**

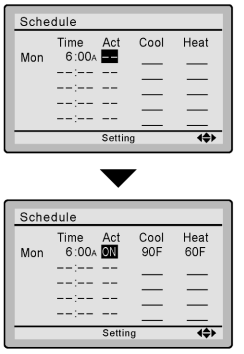


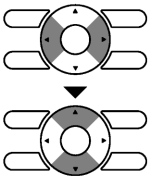

- Input the time for the selected day.
- Press ◀▶ buttons to move the highlighted item and press ▼▲ buttons to input the desired operation start time.
  Each press of ▼▲ buttons moves the numbers by 1 hour or 1 minute.



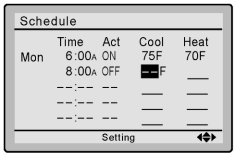
## 4




- Press ◀▶ buttons to move the highlighted item and press ▼▲ buttons to configure ON/OFF/-- settings.
  --, ON, or OFF changes in sequence when ▼▲ buttons are pressed.



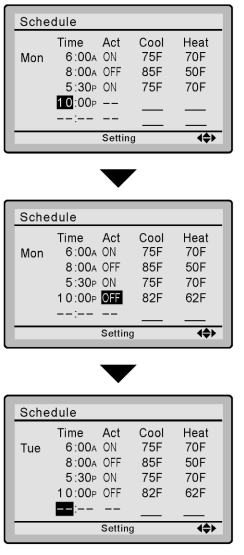
ON: The temperature setpoints can be configured.
OFF: The setback temperature setpoints can be configured.
– –: The temperature setpoints and setback temperature setpoints become disabled.




- The cooling and heating temperature setpoints for both ON and OFF (Setback) are configured.

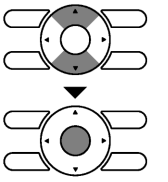
__: Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.
––: Indicates that the setback function is disabled for this time period.

## 5

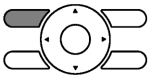



A maximum of five actions per day can be set.

- Press **Menu/OK** button when settings for each day are completed. The confirmation screen will appear.

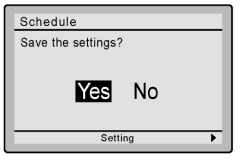


To copy the settings for the previous day, press **Mode** button so that the existing settings will be copied.
Example: The contents for Monday are copied by pressing **Mode** button after selecting Tuesday.

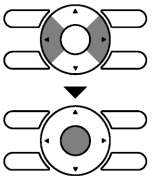


# Menu Options

6



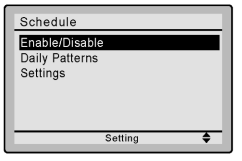

- Press ◀▶ buttons to select **Yes** on the confirmation screen.
  Pressing **Menu/OK** button confirms the settings for each day and takes you back to the basic screen.



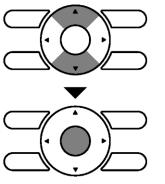
## Enabling or disabling the schedule

**Operation**

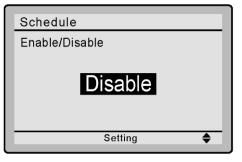
1



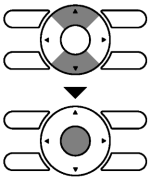

- Display the schedule screen.
  (See page 30.)
- Press ▼▲ buttons to select **Enable / Disable** on the schedule screen.
  Press **Menu/OK** button to display the enable/disable screen.



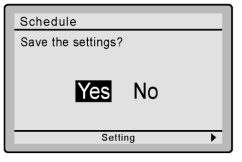
2



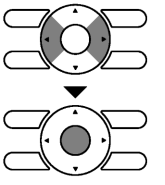

- Press ▼▲ buttons to select **Enable** or **Disable** on the enable/disable screen.
  Press **Menu/OK** button after selecting the item. The confirmation screen is displayed.



3




- Press ◀▶ buttons to select **Yes** on the confirmation screen.
  Pressing **Menu/OK** button confirms the enable/disable setting for the schedule and takes you back to the basic screen.

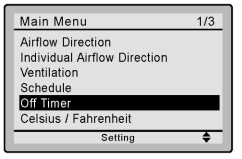


# Off Timer

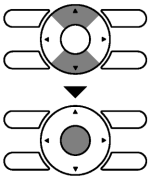
## ■Configuring and Confirming the Off Timer settings

**Operation**

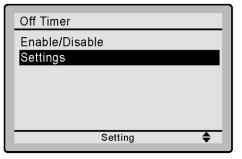
**1**



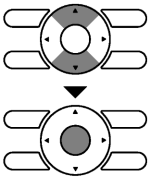

- Display the main menu screen.
  (See page 22.)
- Press ▼▲ buttons to select the Off Timer on the main menu screen. Press **Menu/OK** button to display the off timer screen.



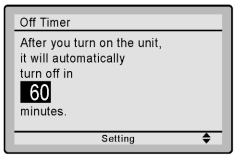
**2**



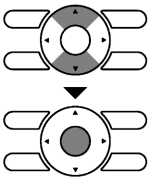

- Press ▼▲ buttons to select Settings on the off timer screen. Press **Menu/OK** button to display the configuration screen.



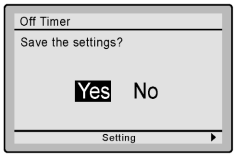
**3**



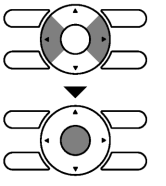

- Use ▼▲ buttons to set the time from operation start until the unit automatically stops.
  Selections can be made in increments of 10 minutes from 30 to 180 minutes.
  Holding down the button causes the number to change continuously.
- Select the desired time and press **Menu/OK** button.
  The confirmation screen will appear.



**4**




- Press ◀▶ button to select Yes on the confirmation screen.
  Pressing **Menu/OK** button confirms the off timer and takes you back to the basic screen.

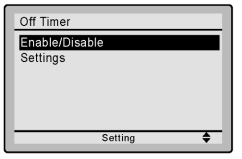


# Menu Options

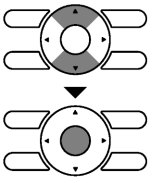
## Enabling or disabling the off timer

**Operation**

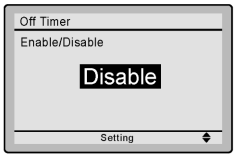
1



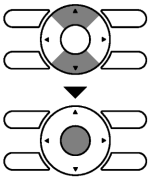

- Navigate to the off timer screen.
  (See page 35.)
- Press ▼▲ buttons to select Enable/Disable on the off timer screen. Press **Menu/OK** button to display the enable/disable screen.



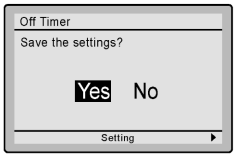
2



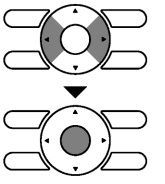

- Press ▼▲ buttons to select Enable or Disable on the enable/disable screen. Press **Menu/OK** button after selecting the item. Then the confirmation screen is displayed.



3




- Press ◀▶ button to select Yes on the confirmation screen. Pressing **Menu/OK** button confirms the enable/disable for the off timer and takes you back to the basic screen.

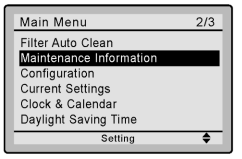


# Maintenance Information

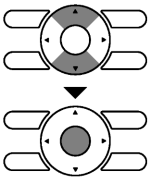
## ■Displaying the service contact and model information

**Operation**

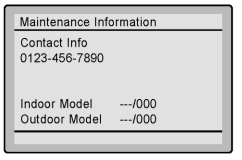
1




- Display the main menu screen.
  (See page 22.)
- Press ▼▲ buttons to select Maintenance Information on the main menu screen and press **Menu/OK** button.



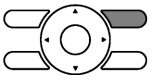
2




- The phone number for the contact is displayed at the top of the screen.
  (If it has not yet been entered, it will not be displayed.)
- The model information of the indoor and outdoor units for your product will be displayed on the bottom of the screen.
  (For some models the product code may be displayed. )

* The model name will not be displayed if the indoor unit PCB has been replaced.

* The error code history may also be displayed. If the Operation lamp is not flashing, the unit is working properly.
The error code history is no longer displayed if you press **On/Off** button for more than 4 seconds.



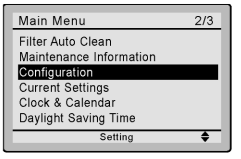
# Menu Options

## Configuration

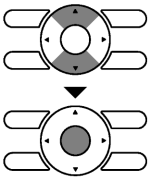
### ■Draft Prevention

**Operation**

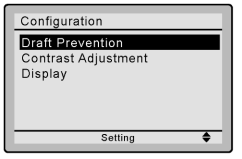
**1**



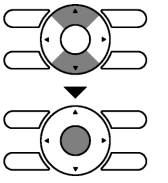

- Display the main menu screen. (See page 22.)
- Press ▼▲ buttons to select Configuration and press **Menu/OK** button.



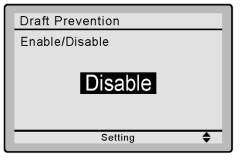
**2**



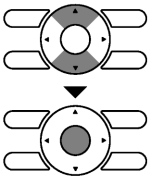

- Press ▼▲ buttons to select Draft Prevention and press **Menu/OK** button.



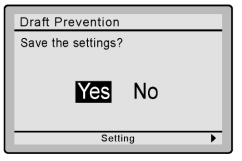
**3**



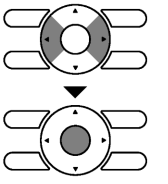

- Press ▼▲ buttons to select Enable or Disable .
- The confirmation screen will appear when **Menu/OK** button is pressed.



**4**



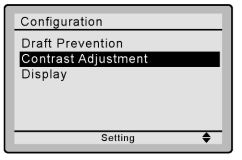

- Press ◀▶ buttons to select Yes .
- Press **Menu/OK** button to confirm the settings and to return to the basic screen.



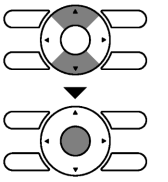
## ■Contrast Adjustment

**Operation**

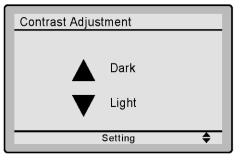
1



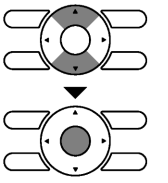

- Navigate to the configuration screen.
(See page 38.)
- Press ▼▲ buttons to select Contrast Adjustment on the configuration screen.
Press **Menu/OK** button to display the contrast adjustment screen.



2




- On the contrast adjustment screen press ▼▲ buttons until you reach the desired contrast.
After setting, press **Menu/OK** button and return to the basic screen.



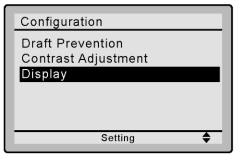
# Menu Options

## ■Display

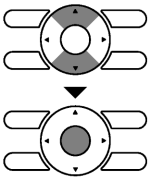
## Display Mode

**Operation**

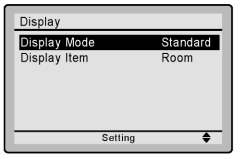
1



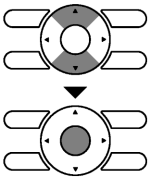

- Navigate to the configuration screen. (See page 38.)
- Press ▼▲ buttons to select Display on the configuration screen. Press **Menu/OK** button to display the display screen.



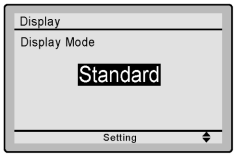
2




- Press ▼▲ buttons to select Display Mode on the display screen. Press **Menu/OK** button to display the display mode screen.

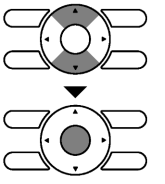


3




- Press ▼▲ buttons to select Standard, Detailed or Simple on the display screen.
- Press **Menu/OK** button to confirm the settings and return to the basic screen.

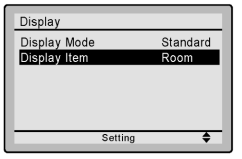
* Refer to **Display Item** to change the selectable display item for Detailed and Simple display modes. (See page 41.)



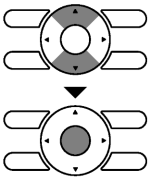
# Display Item

**Operation**

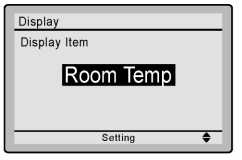
1



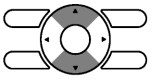

- Navigate to the display screen.
  (See page 40.)
- Press ▼▲ buttons to select **Display Item** on the display screen. Press **Menu/OK** button to display the display item screen.



2




- Pressing ▼▲ buttons displays the following.



**Room Temp** ◂▸* **System**
*** Outside Air Temp** ◂▸ **None**

* Some models may not display these items even if they are selected.

- Be sure to read the following notes regarding display of room temperature and outside air temperature.

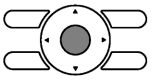
**Room Temp**

..... The temperature at the remote controller.
The temperature that is detected may be affected by the location of the remote controller.

**Outside Air Temp**

..... The temperature at the outdoor unit.
The temperature that is detected may be affected by factors such as the location of the unit (for example, if it is in direct sunlight) and unit operation during defrosting.

- After setting, press **Menu/OK** button to confirm settings and return to the basic screen.



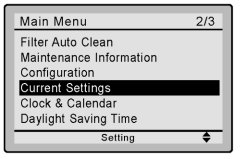
# Menu Options

## Current Settings

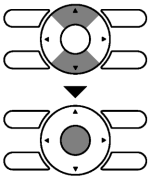
### ■Confirming the current settings

**Operation**

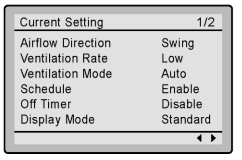
1



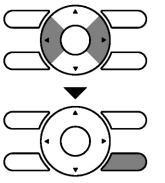

- Display the main menu screen. (See page 22.)
- Press ▼▲ buttons to select Current Settings on the main menu screen and press **Menu/OK** button.



2




- A list showing the current setting status will appear.
  Press ◀▶ buttons to go to the next item.
- Pressing **Cancel** button takes you back to the main menu screen.



Display items

| | |
|---|---|
| Airflow Direction | Off Timer |
| Ventilation Rate | Display Mode |
| Ventilation Mode | Display Item |
| Schedule | Filter Auto Clean |

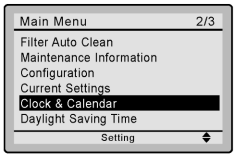
* Display items may differ depending on the model. Only the items that can be set are displayed.

## Clock & Calendar

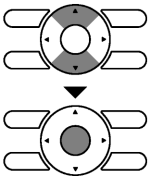
### ■Date & Time

**Operation**

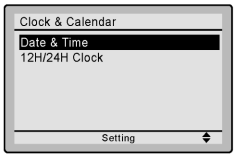
1



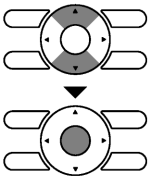

- Display the main menu screen. (See page 22.)
- Press ▼▲ buttons to select Clock & Calendar on the main menu screen.
  Press **Menu/OK** button to display the clock & calendar screen.



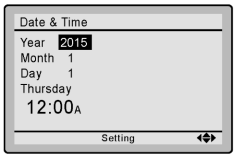
**2**



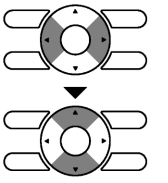

- Press ▼▲ buttons to select Date & Time on the clock & calendar screen.
  Press **Menu/OK** button to display the date & time screen.



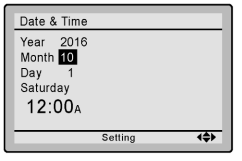
**3**



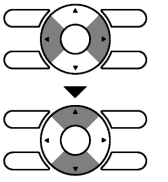

- Select **Year** with ◀▶ buttons.
  Change the year with ▼▲ buttons.
  Holding down the button causes the number to change continuously.



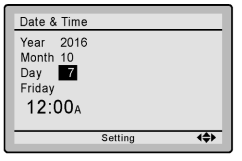
**4**



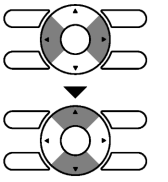

- Select **Month** with ◀▶ buttons.
  Change the month with ▼▲ buttons.
  Holding down the button causes the number to change continuously.



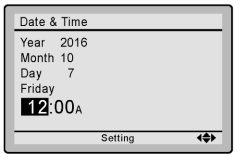
**5**



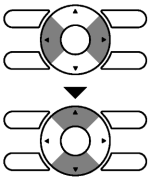

- Select **Day** with ◀▶ buttons.
  Change the day with ▼▲ buttons.
  Holding down the button causes the number to change continuously.
  Days of the week change automatically.



**6**

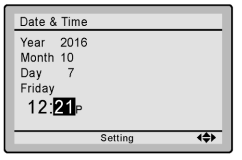



- Select **Hour** with ◀▶ buttons.
  Change the hour with ▼▲ buttons.
  Holding down the button causes the number to change continuously.

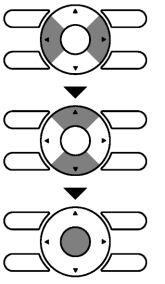


# Menu Options

7



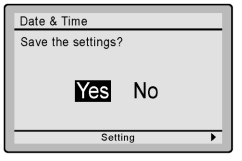

- Select **Minute** with ◀▶ buttons.
  Change the minute with ▼▲ buttons.
  Holding down the button causes the number to change continuously.
- Press **Menu/OK** button.
  The confirmation screen will appear.



Note:

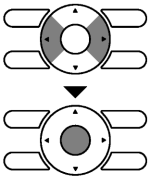
The date can be set between January 1, 2015 and December 31, 2099.

8




- Press ◀▶ button to select Yes on the confirmation screen.
  Press **Menu/OK** button to confirm the clock and return to the basic screen.

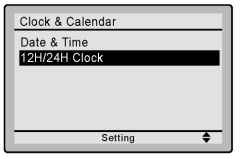
*When setting the schedule, the display returns to the settings screen.



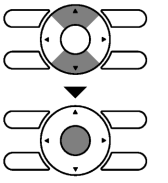
## ■12H/24H CLOCK

**Operation**

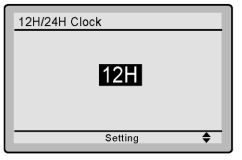
1




- Display the clock & calendar screen. (See page 42.)
- Press ▼▲ buttons to select 12H/24H Clock on the clock & calendar screen. The 12H/24H clock screen will appear when **Menu/OK** button is pressed.

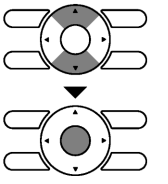


2

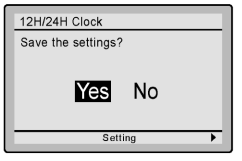



By default, the time display is set to the 12H format.

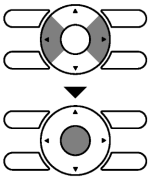
- Press ▼▲ buttons to select 12H 24H on the 12H/24H clock screen.
- The confirmation screen will appear when **Menu/OK** button is pressed.



3




- Press ◀▶ buttons to select Yes on the confirmation screen. Pressing **Menu/OK** button confirms the 12H or 24H and takes you back to the basic screen.



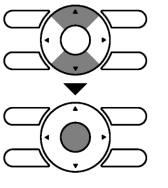
# Daylight Saving Time

## ■How to display Daylight Saving Time

**Operation**

1


- Display the main menu screen. (See page 22.)
- Press ▼▲ buttons to select Daylight Saving Time on the main menu screen. Press **Menu/OK** button to display the daylight saving time screen.

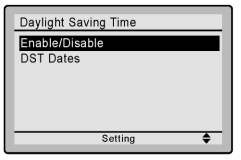


# Menu Options

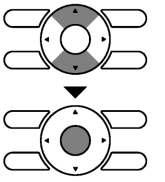
## Enabling or disabling Daylight Saving Time

**Operation**

1

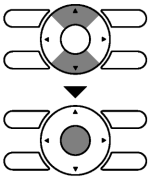



- Display the daylight saving time screen. (See page 45.)
- Press ▼▲ buttons to select Enable/Disable on the daylight saving time screen. Press **Menu/OK** button to display the enable/disable screen.

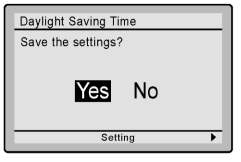


2

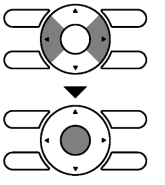

- Press ▼▲ buttons to select Enable or Disable on the enable/disable screen.
- Press **Menu/OK** button to display the setting confirmation screen.



3



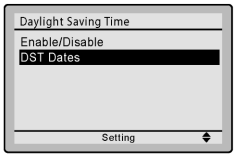

- Press ◀▶ buttons to select Yes on the setting confirmation screen. Pressing **Menu/OK** button confirms the daylight saving time enable/disable setting and takes you back to the basic screen.



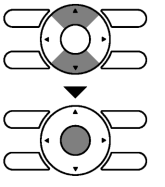
## Setting the date

**Operation**

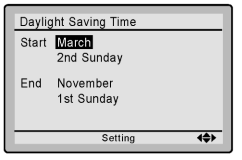
1

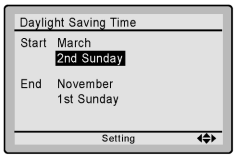



- Display the daylight saving time screen. (See page 45.)
- Press ▼▲ buttons to select DST Dates on the daylight saving time screen. Press **Menu/OK** button to display the duration setting screen.

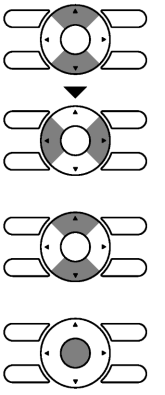


2

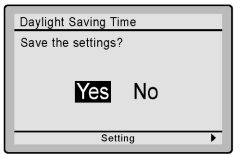


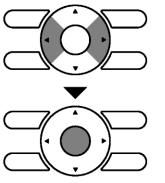

- Press ▼▲ buttons to select the start month and the end month.
- Press ◀▶ buttons to select a week. Press ▼▲ buttons to select the start week and the end week.
- After setting the Start and End dates, press **Menu/OK** button to display the setting confirmation screen.



3




- Press ◀▶ buttons to select Yes on the setting confirmation screen. Pressing **Menu/OK** button confirms the Daylight Saving Time settings and takes you back to the basic screen.



## When Daylight Saving Time is enabled

When the time in the remote controller reaches 2:00 a.m. on the specified start date, the clock is automatically set forward by one hour. When the time in the remote controller reaches 2:00 a.m. on the end date, the clock is automatically set back by one hour.

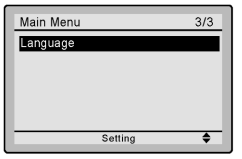
# Menu Options

## Language

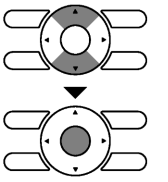
### ■Selectable Languages

**Operation**

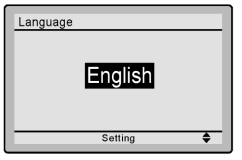
1



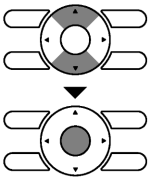

- Display the main menu screen. (See page 22.)
- Press ▼▲ buttons to select Language on the main menu screen and press **Menu/OK** button.



2




- Press ▼▲ buttons to select the preferred language on the language screen. **English/Français/Español** are available.
- Press **Menu/OK** button to confirm the settings and return to the basic screen.

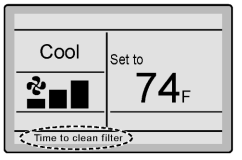


# Maintenance

## Reset Filter Indicator

**Operation**

1

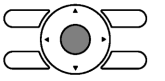



- When it is time to clean or replace the filter, one of the following messages will be displayed on the bottom of the basic screen.
  **Time to clean filter**
  **Time to clean filter & element**
  **Time to clean element**
  *This is not displayed when Simple display is set.

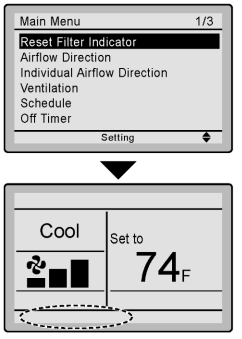
- Wash, clean, or replace the filter or element.
  For details, refer to the operation manual supplied with the indoor unit.

2

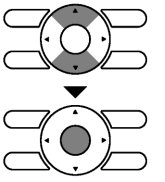
- Reset the filter indicator when the filter or element is cleaned or replaced.
- Press **Menu/OK** button.
  The main menu screen will be displayed.



3




- Press ▼▲ buttons to select Reset Filter Indicator on the main menu screen and press **Menu/OK** button.



- The displayed message “Time to clean filter” is no longer displayed on the basic screen when the filter sign is reset.

## Maintaining the Unit and LCD Display

- Wipe the LCD and surface of the remote controller with a dry cloth when they become dirty.
- If the dirt on the surface cannot be removed, soak the cloth in neutral detergent diluted with water, squeeze the cloth tightly, and clean the surface. Wipe the surface with a dry cloth.

**Note**

- Do not use any paint thinner, organic solvent, or strong acid.

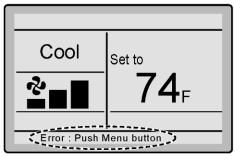
# Reference Information

## Error Code Display

### ■Contact your Daikin dealer in the following cases

**Operation**

1



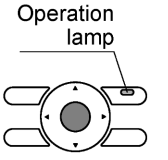

- If an error occurs, either one of the following items will flash in the basic screen.

**Error: Push Menu button**

*The Operation lamp will flash.
*For Simple display, the message is not displayed, and only the Operation lamp flashes.

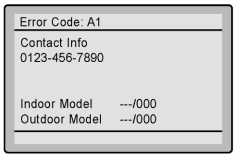
**Warning: Push Menu button**

*The Operation lamp will not flash.
*For Simple display, the message is not displayed, and the Operation lamp does not flash, either.




- Press **Menu/OK** button.

2




- The error code will flash and the service contact and model name or code may be displayed.
- Notify your Daikin dealer of the Error code and model name or code.

# After-sale Service

## ⚠ Warning

- **Do not relocate or reinstall the remote controller by yourself.**
  Improper installation may result in electric shocks or fire.
  Consult your Daikin dealer.

## ■Advise your Daikin Dealer of the following items

- Model name
- Date of installation
- Failure conditions: As precise as possible.
- Your address, name, and telephone number

## ■Repairs after Warranty Period

Consult your Daikin dealer.

## ■Inquiry about After-sale Service

Contact your Daikin dealer.



3P243520-7Q

## 13.2 With <BRC082A43> Wireless Remote Controller

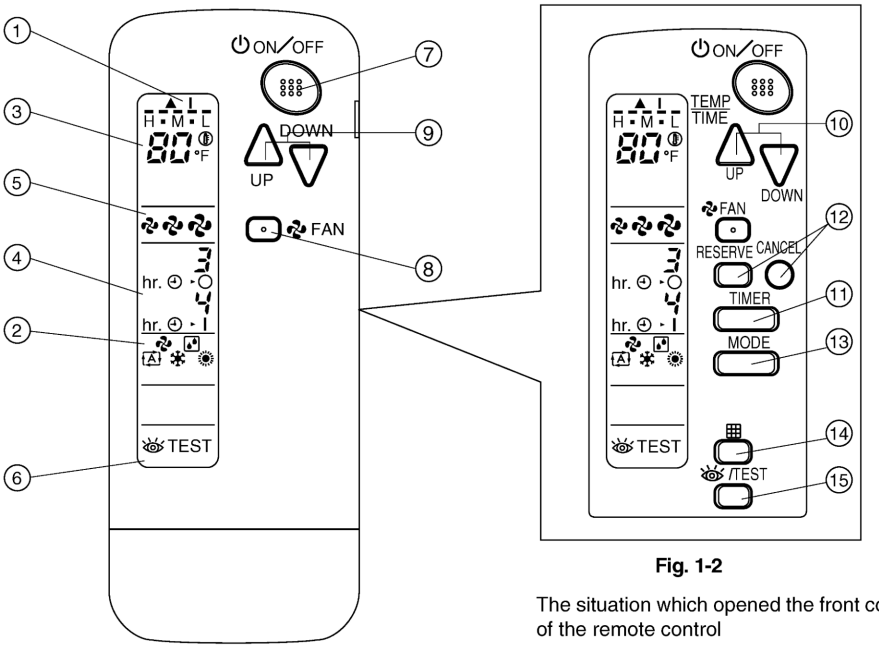



Fig. 1-1

Fig. 1-2

The situation which opened the front cover of the remote control

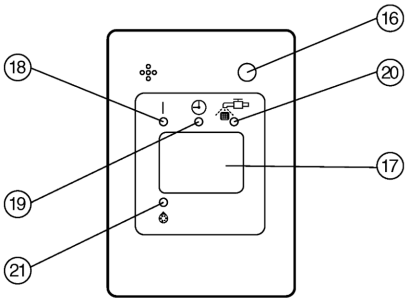


Fig. 1-3

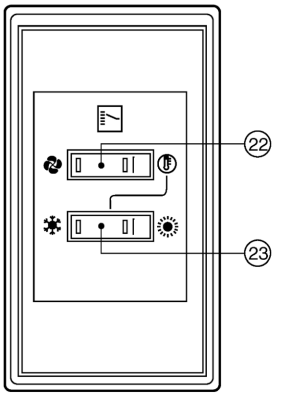


Fig. 2

COOL/HEAT CHANGEOVER REMOTE CONTROL SWITCH

3

## CONTENTS



## 1. SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this operation manual along with the installation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".
Meaning of warning, caution and note symbols.

⚠ **WARNING** ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.

⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

**⚠ WARNING**

- **It is not good for your health to expose your body to the air flow for a long time.**
- **In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.**
- **Ask your dealer for installation of the air conditioner.** Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- **Ask your dealer for improvement, repair, and maintenance.** Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- **Do not put a finger, a rod or other objects into the air inlet or outlet. As the fan is rotating at high speed, it will cause injury.**
- **Ask your dealer to move and reinstall the air conditioner.** Incomplete installation may result in a water leakage, electric shock, and fire.
- **Do not touch the switch with wet fingers.** Touching a switch with wet fingers can cause electric shock.
- **Do not operate the air conditioner with a wet hand.** Otherwise, you could receive an electric shock.

**⚠ CAUTION**

- **Do not use the air conditioner for other purposes.** In order to avoid any quality deterioration, do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- **To avoid oxygen deficiency, ventilate the room sufficiently if equipment with burner is used together with the air conditioner.**
- **Do not allow a child to mount on the unit or avoid placing any object on it.** Falling or tumbling may result in injury.
- **Do not let children play on and around the unit.** If they touch the unit carelessly, it may result in injury.
- **Do not place a flower vase and anything containing water.** Water may enter the unit, causing an electric shock or fire.
- **Do not operate the air conditioner when using a room fumigation - type insecticide.** Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- **Never use flammable spray such as hair spray, lacquer or paint near the unit.** It may cause a fire.

## 2. NAMES AND FUNCTIONS OF THE OPERATING SECTION (Fig. 1-1~3, 2)

| | |
|---|---|
| 1 | **DISPLAY " ▲ " " I " (SIGNAL TRANSMISSION)** |
| | This lights up when a signal is being transmitted. |
| 2 | **DISPLAY " " " " " " " " " " (OPERATION MODE)** |
| | This display shows the current OPERATION MODE. For VRV system, " " is not installed. |
| 3 | **DISPLAY " " (SET TEMPERATURE)** |
| | This display shows the set temperature. |
| 4 | **DISPLAY " " (PROGRAMMED TIME)** |
| | This display shows PROGRAMMED TIME of the system start or stop. |
| 5 | **DISPLAY " " " " " " (FAN SPEED)** |
| | This display shows the set fan speed. |
| 6 | **DISPLAY " TEST " (INSPECTION/ TEST OPERATION)** |
| | When the INSPECTION/TEST OPERATION BUTTON is pressed, the display shows the system mode is in. |
| 7 | **ON/OFF BUTTON** |
| | Press the button and the system will start. Press the button again and the system will stop. |

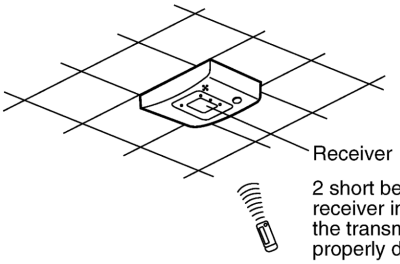
| | |
|---|---|
| 8 | **FAN SPEED CONTROL BUTTON** |
| | Press this button to select the fan speed, HIGH, MEDIUM or LOW, of your choice. |
| 9 | **TEMPERATURE SETTING BUTTON** |
| | Use this button for SETTING TEMPERATURE. (Operates with the front cover of the remote controller closed.) |
| 10 | **PROGRAMMING TIMER BUTTON** |
| | Use this button for programming “START and/or STOP” time. (Operates with the front cover of the remote controller opened.) |
| 11 | **TIMER MODE START/STOP BUTTON** |
| | Refer to page 7. |
| 12 | **TIMER RESERVE/CANCEL BUTTON** |
| | Refer to page 7. |
| 13 | **OPERATION MODE SELECTOR BUTTON** |
| | Press this button to select OPERATION MODE. |
| 14 | **FILTER SIGN RESET BUTTON** |
| | Refer to the section of MAINTENANCE in the operation manual attached to the indoor unit. |
| 15 | **INSPECTION/TEST OPERATION BUTTON** |
| | This button is pressed for inspection or test operation. Do not use for normal operation. |
| 16 | **EMERGENCY OPERATION SWITCH** |
| | This switch is readily used if the remote controller does not work. |
| 17 | **RECEIVER** |
| | This receives the signals from the remote controller. |
| 18 | **OPERATING INDICATOR LAMP (Red)** |
| | This lamp stays lit while the air conditioner runs. It flashes when the unit is in trouble. |
| 19 | **TIMER INDICATOR LAMP (Green)** |
| | This lamp stays lit while the timer is set. |
| 20 | **AIR FILTER CLEANING TIME INDICATOR LAMP (Red)** |
| | Lights up when it is time to clean the air filter. |
| 21 | **DEFROST LAMP (Orange)** |
| | Lights up when the defrosting operation has started. (For cooling only type this lamp does not turn on.) |
| 22 | **FAN/AIR CONDITIONING SELECTOR SWITCH** |
| | Set the switch to “ ” (FAN) for FAN and “ ” (A/C) for HEAT or COOL. |
| 23 | **COOL/HEAT CHANGEOVER SWITCH** |
| | Set the switch to “ ” (COOL) for COOL and “ ” (HEAT) for HEAT. |

**⚠ NOTE**

- For the sake of explanation, all indications are shown on the display in Fig. 1-1 contrary to actual running situations.
- Fig. 1-2 shows the remote controller with the front cover opened.
- Fig. 2 shows this remote controller can be used in conjunction with the one provided with the VRV system.
- If the air filter cleaning time indicator lamp lights up, clean the air filter as explained in the operation manual provided with the indoor unit.
  After cleaning and reinstalling the air filter, press the filter sign reset button on the remote controller. The air filter cleaning time indicator lamp on the receiver will go out.
- The DEFROST lamp will flash when the power is turned on. This is not a malfunction.

## 3. HANDLING FOR WIRELESS REMOTE CONTROLLER

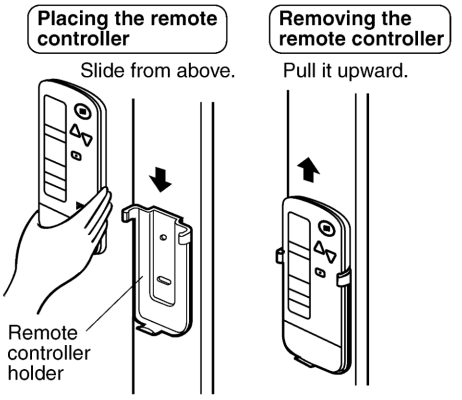
- **Precautions in handling remote controller**
- **Direct the transmitting part of the remote controller to the receiving part of the air conditioner.**
  If something blocks the transmitting and receiving path of the indoor unit and the remote controller as curtains, it will not operate.




- **Transmitting distance is approximately 23 ft..**
- **Do not drop or get it wet.**
  It may be damaged.
- **Never press the button of the remote controller with a hard, pointed object.**
  The remote controller may be damaged.
- **Installation site**
  It is possible that signals will not be received in rooms that have electronic fluorescent lighting. Please consult with the salesman before buying new fluorescent lights.
  If the remote controller operated some other electrical apparatus, move that machine away or consult your dealer.

**Placing the remote controller in the remote controller holder**

Install the remote controller holder to a wall or a pillar with the attached screw. (Make sure it transmits.)

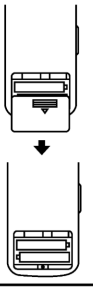



**How to put the dry cell batteries**

(1) Remove the back cover of the remote controller to the direction pointed by the arrow mark.

(2) Put the dry cell batteries.
Use two LR03<AM4> dry cell batteries. Put the dry cell batteries correctly to fit their (+) and (–).

(3) Close the back cover as before.



**When to change batteries**

Under normal use, batteries last about 1 year. However, change them whenever the indoor unit doesn't respond or responds slowly to commands, or if the display becomes dark.

**CAUTION**

- Replace all batteries at the same time, do not use new and old batteries intermixed.
- In case the remote controller is not used for a long time take out all batteries in order to prevent liquid leak of the battery.

**IN THE CASE OF CENTRALIZED CONTROL SYSTEM**

If the indoor unit is under centralized control, it is necessary to switch the remote controller's setting.
In this case, contact your dealer.

## 4. OPERATION PROCEDURE

- Contact your dealer to confirm your system type.
- To protect the unit, turn on the main power switch 6 hours before operation.
- If the main power supply is turned off during operation, operation will restart automatically after the power turns back on again.

### COOLING, HEATING, AUTOMATIC, FAN, AND PROGRAM DRY OPERATION

Operate in the following order.

- AUTOMATIC OPERATION can be selected only by Heat pump system or Heat recovery system.

**⟨⟨FOR SYSTEMS WITHOUT COOL/HEAT CHANGEOVER REMOTE CONTROL SWITCH (Fig. 1-1~2 on page 3)⟩⟩**

**1** MODE **OPERATION MODE SELECTOR**

**Press OPERATION MODE SELECTOR button several times and select the OPERATION MODE of your choice as follows.**

- COOLING OPERATION ..... " ❄ "
- HEATING OPERATION ..... " ☀ "
- AUTOMATIC OPERATION ..... " A "
  - In this operation mode, COOL/HEAT changeover is automatically conducted.
  - For VRV system, " A " is not installed.
- FAN OPERATION ..... " 🌀 "
- DRY OPERATION ..... " 💧 "
  - The function of this program is to decrease the humidity in your room with the minimum temperature decrease.
  - The microchip automatically determines TEMPERATURE and FAN SPEED.
  - This system does not go into operation if the room temperature is below 60°F.

**2** ON/OFF **ON/OFF**

**Press ON/OFF button.**

OPERATING INDICATOR lamp lights up or goes off and the system starts or stops OPERATION.

**NOTE**

- Do not turn off power immediately after the unit stops. Then, wait no less than 5 minutes.
  Water is leaking or there is something else wrong with the unit.

**⟨⟨FOR SYSTEMS WITH COOL/HEAT CHANGEOVER REMOTE CONTROL SWITCH (Fig. 2 on page 3)⟩⟩**

**1** **OPERATION MODE SELECTOR**

**(1) Select OPERATION MODE with the COOL/HEAT CHANGEOVER REMOTE CONTROL SWITCH as follows.**

- COOLING OPERATION ..... "
- HEATING OPERATION ..... "
- FAN OPERATION ..... "
- DRY OPERATION ..... "

- See "FOR SYSTEM WITHOUT COOL/HEAT CHANGEOVER REMOTE CONTROL SWITCH" for details on dry operation.

**(2)Press OPERATION MODE SELECTOR button several times and select “ ”.**
(This operation is only available during dry operation.)

## 2 ON/OFF

**Press ON/OFF button.**
OPERATING INDICATOR lamp lights up or goes off and the system starts or stops OPERATION.

**NOTE**

- Do not turn off power immediately after the unit stops. Then, wait no less than 5 minutes.
  Water is leaking or there is something else wrong with the unit.

### [EXPLANATION OF HEATING OPERATION]

**DEFROST OPERATION**

- As the frost on the coil of an outdoor unit increase, heating effect decreases and the system goes into DEFROST OPERATION.
- The fan operation stops and the DEFROST lamp of the indoor unit goes on.
- After 6 to 8 minutes (maximum 10 minutes) of DEFROST OPERATION, the system returns to HEATING OPERATION.

**Heating capacity & Outdoor air temperature**

- Heating capacity drops as outdoor air temperature lowers. If feeling cold, use another heater at the same time as this air conditioner.
- Hot air is circulated to warm the room. It will take some time from when the air conditioner is first started until the entire room becomes warm. The internal fan automatically turns at low speed until the air conditioner reaches a certain temperature on the inside. In this situation, all you can do is wait.
- If hot air accumulates on the ceiling and feet are left feeling cold, it is recommended to use a circulator. For details, contact the place of purchase.

## ADJUSTMENT

For programming TEMPERATURE and FAN SPEED, follow the procedure shown below.

### TEMPERATURE SETTING

**Press TEMPERATURE SETTING button and program the setting temperature.**

Each time this button is pressed, setting temperature rises 1°F.

Each time this button is pressed, setting temperature lowers 1°F.

**In case of automatic operation**

Each time this button is pressed, setting temperature shifts to “H” side.

Each time this button is pressed, setting temperature shifts to “L” side.

[°F]

| | H | • | M | • | L |
|---|---|---|---|---|---|
| Setting temperature | 77 | 73 | 71 | 70 | 66 |

- The setting is impossible for fan operation.

**NOTE**

- The setting temperature range of the remote controller is 60°F to 90°F.

### FAN SPEED CONTROL

**Press FAN SPEED CONTROL button.**
High, Medium or Low fan speed can be selected.
The microchip may sometimes control the fan speed in order to protect the unit.

## PROGRAM TIMER OPERATION

Operate in the following order.

- The timer is operated in the following 2 ways.
  Programming the stop time ( )
  .... The system stops operating after the set time has elapsed.
  Programming the start time ( )
  .... The system starts operating after the set time has elapsed.
- The timer can be programmed a maximum of 72 hours.
- The start and the stop time can be simultaneously programmed.

### 1 TIMER MODE START/STOP

**Press the TIMER MODE START/STOP button several times and select the mode on the display.**
The display flashes.
For setting the timer stop .... “ ”
For setting the timer start .... “ ”

### 2 PROGRAMMING TIMER

**Press the PROGRAMMING TIMER button and set the time for stopping or starting the system.**

When this button is pressed, the time advances by 1 hour.

When this button is pressed, the time goes backward by 1 hour.

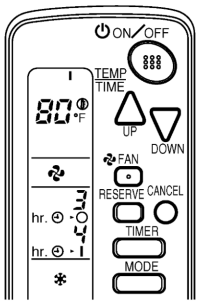
### 3 TIMER RESERVE

**Press the TIMER RESERVE button.**
The timer setting procedure ends.
The display changes from flashing light to a constant light.

### 4 TIMER CANCEL

**Press the TIMER CANCEL button to cancel programming.**
The display vanishes.

**For example.**




When the timer is programmed to stop the system after 3 hours and start the system after 4 hours, the system will stop after 3 hours and then 1 hour later the system will start.

**NOTE**

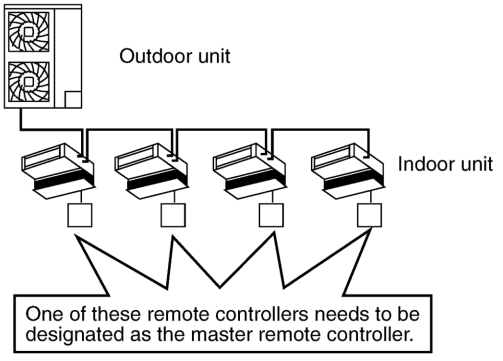
- After the timer is programmed, the display shows the remaining time.

## HOW TO SET MASTER REMOTE CONTROLLER (For VRV system)

- When the system is installed as shown below, it is necessary to designate the master remote controller.

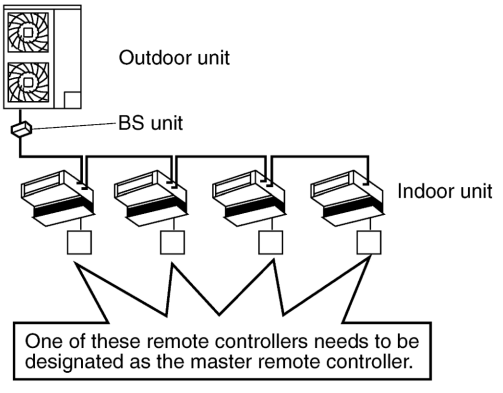
■ **For Heat pump system**

When 1 outdoor unit is connected with several indoor units.




■ **For Heat recovery system**

When 1 BS unit is connected with several indoor units.

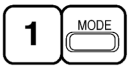



- Only the master remote controller can select HEATING, COOLING or AUTOMATIC OPERATION.

When the indoor unit with master remote controller is set to "COOL", you can switch over operation mode between "FAN", "DRY" and "COOL".
When the indoor unit with master remote controller is set to "HEAT", you can switch over operation mode between "FAN" and "HEAT".
When the indoor unit with master remote controller is set to "FAN", you cannot switch operation mode.
1 long beep ..... When attempting settings than that consented above.
Only with Heat recovery system, you can set the indoor unit to AUTOMATIC. Attempting to do so.

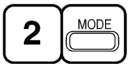
**How to designate the master remote controller**

Operate in the following order.




**Continuously press the OPERATION MODE SELECTOR button for 4 seconds.**

The displays showing " ⏲ " of all slave indoor unit connected to the same outdoor unit or BS unit flash.

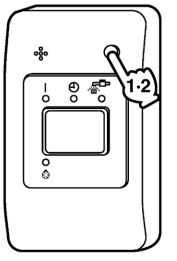



**Press the OPERATION MODE SELECTOR button to the indoor unit that you wish to designate as the master remote controller. Then designation is completed. This indoor unit is designated as the master remote controller and the display showing " ⏲ " vanishes.**

- To change settings, repeat steps (1) and (2).

## EMERGENCY OPERATION

When the remote controller does not work due to battery failure or the absence there of, use this switch which is located beside the discharge grille on the indoor unit. When the remote controller does not work, but the battery low indicator on it is not lit, contact your dealer.




**[START]**

**1 Press the EMERGENCY OPERATION switch.**

The machine runs in the previous mode.

**[STOP]**

**2 Press the EMERGENCY OPERATION switch again.**

## PRECAUTIONS FOR GROUP CONTROL SYSTEM OR 2 REMOTE CONTROLLERS CONTROL SYSTEM

This system provides 2 other control systems beside individual control (1 remote controller controls 1 indoor unit) system. Confirm the following if your unit is of the following control system type.

■ **Group control system**
1 remote controller controls up to 16 indoor units.
All indoor units are equally set.

■ **2 remote controllers control system**
2 remote controllers control 1 indoor unit.
(In case of group control system, 1 group of indoor units)
The unit follows individual operation.

**NOTE**

- Cannot have 2 remote controllers control system with only wireless remote controllers. (It will be a 2 remote controllers control system having 1 wired and 1 wireless remote controllers.)
- Under 2 remote controllers control system, wireless remote controller cannot control timer operation.
- Only the operating indicator lamp out of 3 other lamps on the indoor unit display functions.
- Contact your dealer in case of changing the combination or setting of group control and 2 remote controllers control systems.

## 5. NOT MALFUNCTION OF THE AIR CONDITIONER

**The following symptoms do not indicate air conditioner malfunction.**

■ **THE SYSTEM DOES NOT OPERATE**

- **The system does not restart immediately after the ON/OFF button is pressed.**
  If the OPERATING INDICATOR lamp lights, the system is in normal condition. It does not restart immediately because a safety device operates to prevent overload of the system. After 3 minutes, the system will turn on again automatically.
- **The system does not restart immediately when TEMPERATURE SETTING button is returned to the former position after pushing the button.**
  It does not restart immediately because a safety device operates to prevent overload of the system. After 3 minutes, the system will turn on again automatically.
- **If the reception beep is rapidly repeated 3 times. (It sounds only 2 times when operating normally.)**
  Control is set to the optional controller for centralized control.
- **If the DEFROST lamp on the indoor unit's display is lit when heating is started.**
  This indication is to warn against cold air being blown from the unit. There is nothing wrong with the equipment.

■ **The unit stops operation from time to time.**

- **With "U4" "U5" displayed on the remote controller, the unit stops, but it resumes operation in a few minutes.**
  Since electric noises produced from other equipment than the air conditioner interrupt communication between the units, the unit stops operation.
  If these electric noises subside, operation is restarted automatically.

■ **COOLING / HEATING changeover is impossible.**

- **If the indoor unit emits a receiving sound "1 long beep".**
  It is because the indoor unit under the control of operation changeover is set to the mode that cannot be selected.

■ **Display Indicates only a part.**

- **Even if the unit is in operation, the display shows only operational indication. Even if the indication is shown, the indication other than operation disappears after a while.**
  It is because the remote controller is set to multi-system.

■ **Display disappears or shows all indication.**

- **It happens when the button of the remote controller is pressed.**
  It is because the battery is dead.

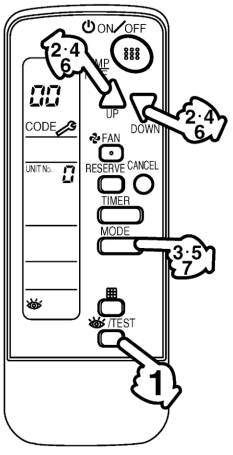
■ **No favorable cooling is achieved.**

- **The unit is in DRY OPERATION.**
  DRY OPERATION is carried out to perform operation such that the room temperature is not decreased as much as possible.

## 6. HOW TO DIAGNOSE TROUBLE SPOTS

■ **EMERGENCY STOP**

When the air conditioner stops in emergency, the run lamp on the indoor unit starts blinking. Take the following steps yourself to read the malfunction code that appears on the display. Contact your dealer with this code. It will help pinpoint the cause of the trouble, speeding up the repair.




1 TEST

**Press the INSPECTION/TEST OPERATION button to select the inspection mode " 0 ".**

" 0 " appears on display and blinks. "UNIT No." lights up.

2 DOWN UP

**Press PROGRAMMING TIMER button and change the unit number.**

Press to change the unit number until the indoor unit beeps and perform the following operation according to the number of beeps.

**Number of beeps**

3 short beeps..... Perform all steps from (3) to (6).

1 short beep..... Perform (3) and (6) steps.

1 long beep ..... Normal state

3 MODE

**Press OPERATION MODE SELECTOR button.**

" 0 " on the left-hand of the malfunction code blinks.

4 DOWN UP

**Press PROGRAMMING TIMER button and change the malfunction code.**

Press until the indoor unit 2 beeps.

5 MODE

**Press OPERATION MODE SELECTOR button.**

" 0 " on the right-hand of the malfunction code blinks.

6 DOWN UP

**Press PROGRAMMING TIMER button and change the malfunction code.**

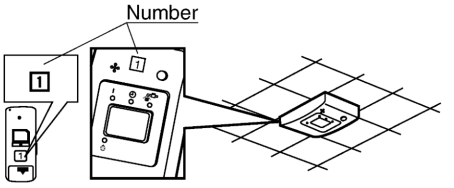
Press until the indoor unit makes 1 long beep.
The malfunction code is fixed when the indoor unit makes 1 long beep.

7 MODE **Reset of the display**

**Press OPERATION MODE SELECTOR button to get the display back to the normal state.**

■ **IN CASE BESIDES EMERGENCY STOP**

- **The unit does not operate at all.**
  - Check if the receiver is exposed of sunlight or strong light. Keep receiver away from light.
  - Check if there are batteries in the remote controller. Place the batteries.
  - Check if the indoor unit number and wireless remote controller number are equal.




Operate the indoor unit with the remote controller of the same number.
Signal transmitted from 1 remote controller of a different number cannot be accepted. (If the number is not mentioned, it is considered as "1".)

■ **The system operates but it does not sufficiently cool or heat.**

- If the set temperature is not proper. (See page 7)
- If the FAN SPEED is set to LOW SPEED. (See page 7)

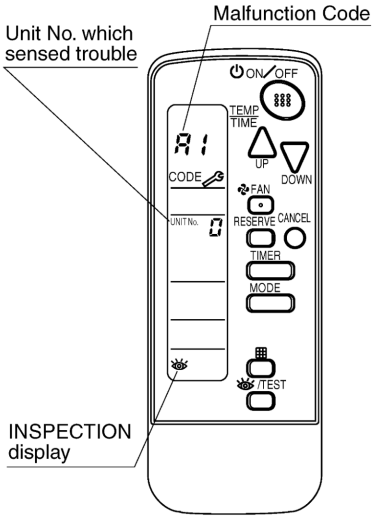
**Contact the place of purchase in the following case.**

**WARNING**

When you detect a burning odor, shut OFF power immediately and contact the place of purchase. Using the equipment in anything but proper working condition can result in equipment damage, electric shock or fire.

## [Trouble]

■ **The OPERATING INDICATOR lamp of the indoor unit is flashing and the unit does not work at all.**




Check the malfunction code (A1 - UF) on the remote controller and contact the place of purchase. (Refer to indoor unit installation manual.)

# 14. Options

## 14.1 Option List

### 14.1.1 Indoor Unit

| | Option Name | | 09/12 Class | 15/18/24 Class |
|---|---|---|---|---|
| 1 | Remote controller (required) | Wired type | BRC1E73 | |
| | | Wireless type | BRC082A43 | |
| 2 | High efficiency filter | 65% | KAFP632B56 | KAFP632B80 |
| | | 90% | KAFP633B56 | KAFP633B80 |
| 3 | Longlife filter | | KAFP631B56 | KAFP631B80 |
| 4 | Filter chamber | | KDDFP63B56 | KDDFP63B80 |
| 5 | Central remote controller | | DCS302C71 | |
| 6 | Unified ON/OFF controller | | DCS301C71 | |
| 7 | Schedule timer controller | | DST301BA61 | |
| 8 | Service panel | White | KTBJ25K56W | KTBJ25K80W |
| | | Fresh white | KTBJ25K56F | KTBJ25K80F |
| | | Brown | KTBJ25K56T | KTBJ25K80T |
| 9 | Air discharge adaptor | | KDAP25A56A | KDAP25A71A |
| 10 | Shield plate for side plate | | KDBD63A160 | |
| 11 | Remote sensor | | KRCS01-4B | |
| 12 | Remote controller loss prevention with chain | | KKF910A4 | |

### 14.1.2 Outdoor Unit

| | Option Name | 09/12 Class | 15/18/24 Class |
|---|---|---|---|
| 1 | Air direction adjustment grille | KPW937E4 | KPW063A4 |
| 2 | Back protection wire net | KKG067A41 | KKG063A42 |
| 3 | Drain plug ★ | KKP937A4 | |
| 4 | Drain pan heater | FTDBHMS, FTDBHML, KEH067A41E, KEH063A4E | |
| 5 | Snow hood (intake side plate) | KPS067A41 | KPS063A41 |
| 6 | Snow hood (intake rear plate) | KPS067A42 | KPS063A44 |
| 7 | Snow hood (outlet) | KPS067A44 | KPS063A47 |

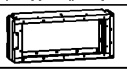
**Note:** ★ Standard accessory

## 14.2 <KDDFP63B56/80> Filter Chamber

**Precaution**

- This product can be mounted to air conditioners of ceiling mounted duct connection type.
- Mount the product after checking the model name of the indoor unit with the table on the right.
- Refer to the operation manual and installation manual for the indoor unit as well at the time of the installation of this product.
- Use of long-life filters
  Long-life filter can be washed and used again. On completion of installation, advise the customer of the cleaning interval and removal method of the filters by using the operation manual for the indoor unit and this installation manual.
- Use of high-performance filters
  High-performance filters cannot be washed in water for reuse. On completion of installation, advise the customer of the replacing interval of the filters by using the operation manual for the indoor unit.

**Parts** Make sure that the following parts are provided with the product

| Name | | Filter Chamber | Screws | Installation manual |
|---|---|---|---|---|
| Shape | |  |  M5×16 |  |
| Quantity | KDDFP63B36 | 1 | 12 | 1 (This copy) |
| | KDDFP63B56 | | 14 | |
| | KDDFP63B80 | | 18 | |
| | KDDFP63B160 | | 26 | |
| | KDDF63B160B | | 28 | |

**Combination table** The use of the chamber requires each filter as an optinal accessory.

| Model name | Hi-performance filter (Optional accessory) | Long-life filter (Optional accessory) |
|---|---|---|
| KDDFP63B36 | KAFP632B36 or KAFP633B36 | KAFP631B36 |
| KDDFP63B56 | KAFP632B56 or KAFP633B56 | KAFP631B56 |
| KDDFP63B80 | KAFP632B80 or KAFP633B80 | KAFP631B80 |
| KDDFP63B160 | KAFP632B160 or KAFP633B160 | KAFP631B160 |
| KDDF63B160B | KAF632B160B or KAF633B160B | KAF631B160B |

KAFP632B36・KAFP632B56・KAFP632B80・KAFP632B160・KAF632B160B
・・・65%(Colorimeter method)
KAFP633B36・KAFP633B56・KAFP633B80・KAFP633B160・KAF633B160B
・・・90%(Colorimeter method)

### ❶ Before installation 《Do not throw away the required accessories until the installation of the product is completed.》

(1) Decide the carry-in route.
(2) Caryy the product into the place of installation without unpacking the product.
If it is avoidable to unpack and carry in the product, pay the utmost attention to handle the product.

### ❷ Selecting Place of Installation 《Refer to the installation manual provided to the indoor unit as well.》

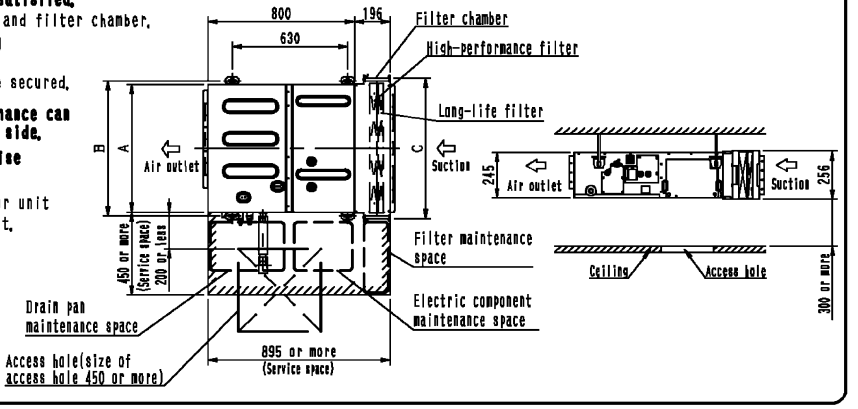
**(1) Select the place of installation with the consent of customer, provide that the following conditions are satisfied.**
- A place bearing the weight of the indoor unit and filter chamber.
- A place where the lower surface of the ceiling does not lean remarkably.
- A place where an installation workplace can be secured.

**(2) The service cover of the filter for maintenance can be removed from either left- or right-hand side.**

**(3) Install an access hole for the filter service space as shown on the right.**
- Refer to the installation manual for the indoor unit and provide a service space for the indoor unit.

(Unit : mm)

| Unit name | A | B | C |
|---|---|---|---|
| KDDFP63B36 | 550 | 588 | 618 |
| KDDFP63B56 | 700 | 738 | 768 |
| KDDFP63B80 | 1000 | 1038 | 1068 |
| KDDFP63B160 | 1400 | 1438 | 1468 |
| KDDF63B160B | 1550 | 1588 | 1618 |

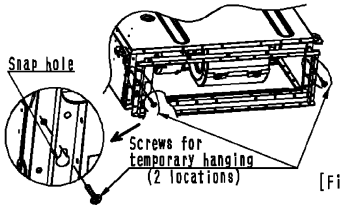



### ❸ Preparation before installation 《Refer to the installation manual provided to the indoor unit as well.》

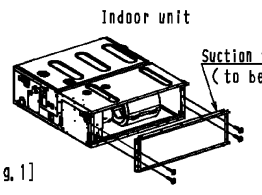
**(1) Remove the suction flange of the indoor unit. [Fig. 1]**
- Remove 8 screws used for fixing the suction flange except for 2 fixing screws in the upper side of the snap hole ( 2 screws for temporary hanging)
- Loosen screws for temporary hanging remove the suction flange.

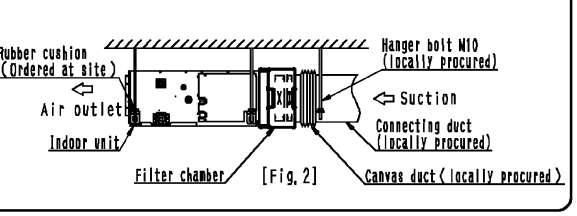
**(2) In the case of connecting the site-duct to the air outlet of the air conditioner body and to the air inlet of the filter chamber, fit the canvas duct (locally procured) to the suction flange so that vibration of the machine body may not transmitted to the duct and the ceiling. [Fig. 2]**
- Install the connected ducts with suspension bolts (locally procured) so that the weight of the connected duct will not be imposed on the suction flange.
- Moreover, apply an adsorption material (thermal insulator) to the inner wall of the on-site duct and attach vibration isolation rubber to the suspension bolts for the indoor unit.
- In the case of connecting the local duct to the air inlet side of the filter chamber, mount the dismounted suction flange to the air inlet side of the filter chamber with the screws removed from the indoor unit and those provided to the indoor unit.

**<Precaution>**
**Check that the duct is installed securely, or otherwise air leakage may result.**



[Fig. 1]



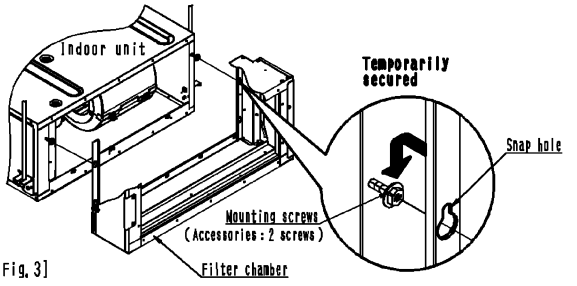



[Fig. 2]

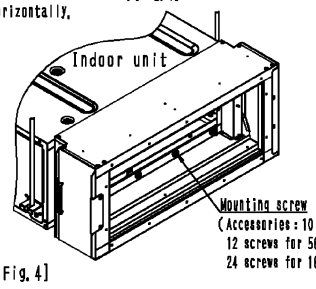
## ④Installation of Filter Chamber

**Filter chamber mounted to the indoor unit can be hung on the suspension bolts.**

(1) Thread the screw part of the indoor unit where the filter chamber is fixed in advance. [Fig. 3]
(2) Hang the chamber temporarily from inside with the screws fixed in the snap hole.
(3) Tighten 2 temporarily secured screws after tightening the provided mounting screws(10 screws for 36-class, 12 screws for 56-class, 16 screws for 80-class, 24 screws for 160-class and 26 screws for 160B-class) in all the screw holes in the chamber. [Fig. 4]
(4) Use an appropriate tool such as a spirit level and install the indoor unit and filter chamber horizontally.



[Fig. 3]



[Fig. 4]

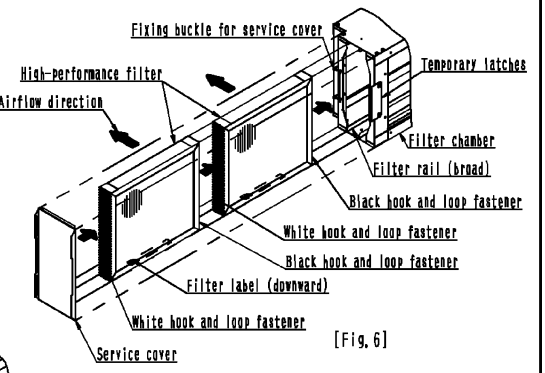
## ⑤Filter mounting procedure

### High-performance filter

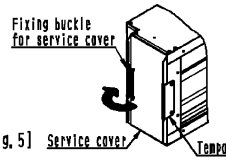
**There is no difference in mounting method between the 65% type and 90% type.**

(1) Remove the service cover. Remove the fixing buckle for the service cover and rotate the service cover until the service cover is released from the tabs of the temporary latches. [Fig. 5]
(2) Insert the first sheet (provided with black hook and loop fastener) according to the wide filter rail with the filter label faced downward while checking that the airflow direction is in conformity with the direction of the arrows. [Fig. 6]
(3) After the first filter is perfectly inserted, insert the next filter (on the white hook and loop fastener side ; Fig. 6) and secure the filter with hook and loop fastener.
(4) After inserting the filter all the way into the filter chamber, mount the service cover in the reverse order mentioned in (1) of filter mounting procedure.
(2 filters for 36-class, 2 filters for 56-class, 3 filters for 80-class, 4 filters for 160-class, 5 filters for 160B-class)

<Precaution>
**Check that the fixing buckle securely locks the service cover. Otherwise air leakage may result.**



[Fig. 6]

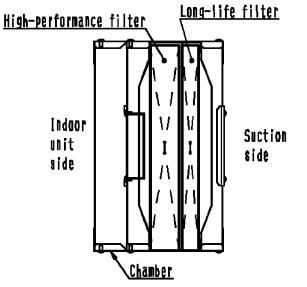


[Fig. 5]

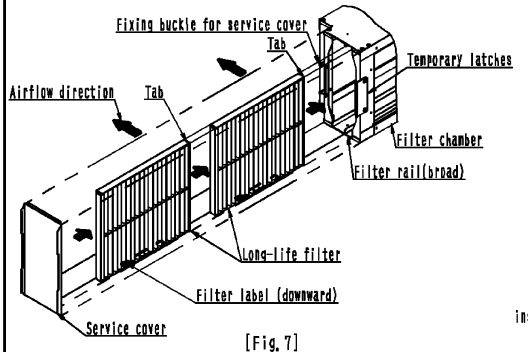
### Long-life filter

(1) Remove the service cover. Remove the fixing buckle for the service cover and rotate the service cover until the service cover is released from the tabs of the temporary latches. [Fig. 5]
(2) Insert the filter according to the filter rail with the filter label faced downward while checking that the airflow direction is in conformity with the direction of the arrow. [Fig. 7]
(3) Be sure to hook the next filter to the tab of the first filter and insert the net filter when more than half the first filter is inserted. [Fig. 8]
(4) After inserting the filter all the way into the filter chamber, mount the service cover in the reverse order mentioned in (1) of filter mounting procedure.
(2 filters for 36-class, 2 filters for 56-class, 3 filters for 80-class, 4 filters for 160-class, 5 filters for 160B -class)

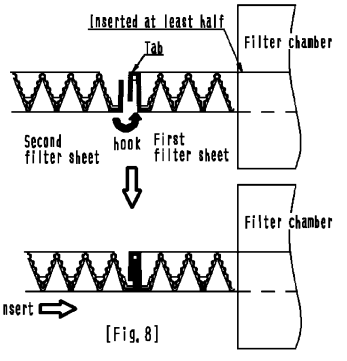
<Precaution>
**Check that the fixing buckle securely locks the service cover. Otherwise air leakage may result.**



**Position of each filter in chamber side view (Before mounting a service cover)**

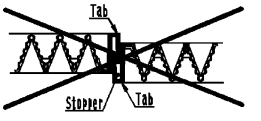


[Fig. 7]



[Fig. 8]

<Precaution>
**If the filters are different to each other direction, the stoppers will obstruct the engagement of the filter with the tabs. Therefore, the filters cannot be inserted into the filter chamber.**




3P399856-1B

# 14.3 <DCS302C71> Central Remote Controller

## 14.3.1 Installation Manual

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

⚠ **WARNING** ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION** ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

### ⚠WARNING

**Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
Improper installation may result in water leakage, electric shocks or fire.

**Perform installation work in accordance with this installation manual.**
Improper installation may result in water leakage, electric shocks or fire.

**Be sure to use only the specified accessories and parts for installation work.**
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

**Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
Improper installation work may result in the equipment falling and causing accidents.

**Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

**Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
Improper connections or installation may result in fire.

**When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

**Before touching electrical parts, turn off the unit.**

**Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
Incomplete grounding may result in electric shocks.

**When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.**

**Do not reconstruct or change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**Install an leak circuit breaker, as required.**
If an leak circuit breaker is not installed, electric shock may result.

**Do not install the air conditioner or the remote controller in the following locations:**
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

### ⚠CAUTION

**Be very careful about product transportation.**

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

### ⚠NOTE

**Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

**Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps.(inverter or rapid start types)**
Install the indoor unit as far away from fluorescent lamps as possible.

**This unit is a class A product.**
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

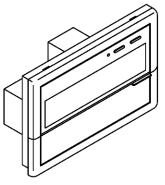
**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# ❶ COMPONENTS

Check the following components are included in this optional accessory before installation.

| | |
|---|---|
| Installation screw (M4 × 16) | 4 |
| Operation manual | 1 |
| Installation manual | 1 |
| Installation table | 1 |

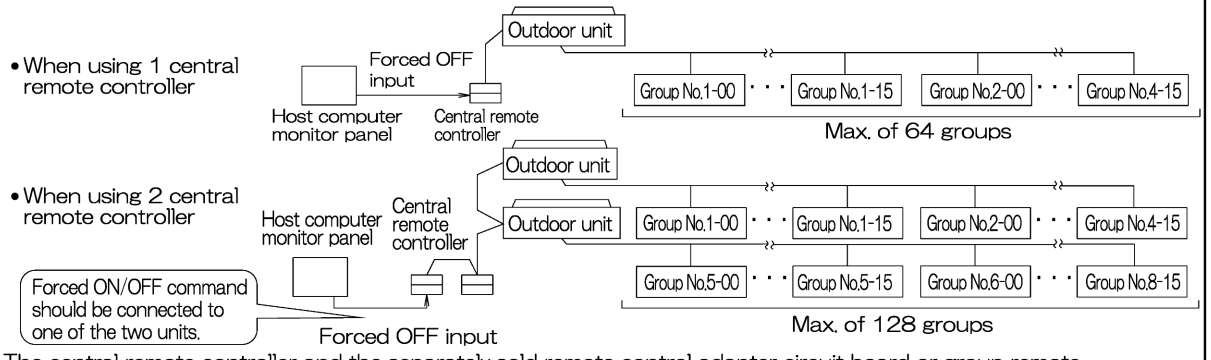
Body



When using this optional accessory an electric parts box of KJB311A is required.
For installation, a steel electric parts box to be embedded is mandatory.

# ❷ SYSTEM CONFIGURATION

With the central remote controller, unified operation/stop is possible with up to a maximum 64 groups of indoor units.
When using 2 central remote controllers, unified operation is possible with up to a maximum 128 groups.
With this optional accessory, setting of control modes including operation, stop, operation controlled by timer, and ON/OFF control possible/impossible by remote controller can be set individually by zones while it enables to control and display the operation state such as set temperature.
It can be connected with the external key system, host computer monitor panel, etc., through forced OFF input (no-voltage normally open contactor).
A zone is a one or more groups together. In general, the same settings are used throughout a zone.



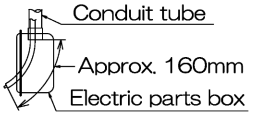

The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together. See the D-BACS design guide for details.

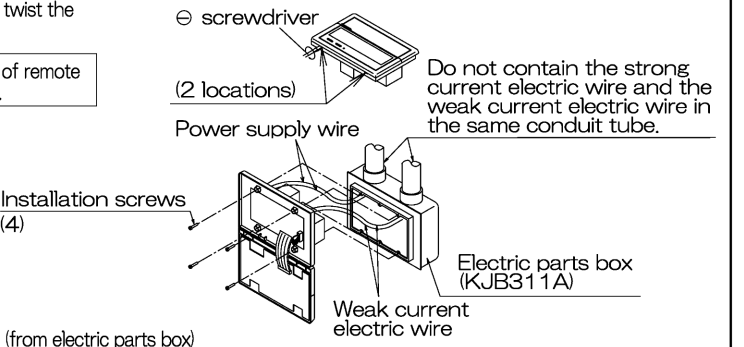
# ❸ INSTALLATION

(1) Open the upper part of remote controller.
Insert a ⊖ screwdriver(2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

(2) Open the upper part of remote controller and install the Electric parts box with the attached installation screws (M4 x 16).




NOTE) Suitable length of the electric wire is about 160mm. (from electric parts box)
If it is difficult to contain a long wiring, strip the sheathed part of the wiring.

## ❹ INITIAL SETTING

Setting (1) through (3) are initialized when power is turned ON, therefore complete settings BEFORE activating the power. (The positions of connectors and switches used for settings in this section are shown in Fig. 1.)

(1) Connector for setting master controller (X1A) (Provided with connector at factory set)

- When using only 1 central remote controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple central remote controllers, or using the central remote controller in conjunction with the optional controllers for centralized control, makes settings as indicated in the below table.

| Pattern of connection of optional controllers for centralized control | | | Connector for setting master controller (X1A) Setting, Removed | | |
|---|---|---|---|---|---|
| Central remote controller | Unified ON/OFF controller | Schedule timer | Central remote controller | Unified ON/OFF controller | Schedule timer |
| 1 to 4 | | | Set one to "Used" and all the rest to "Not used" | Set all to "Not used" | |
| | 1 to 16 | | | | "Not used" |
| | | 1 | | | |
| | | 1 | | | "Not used" |

(Remove all the connectors for the central remote controller, the on/off controller, and the schedule timer when using the unit together with the Ve-UP controller, the master station II, the DMS interface, the payment management unit, or the parallel interface station.)

(2) Address setting

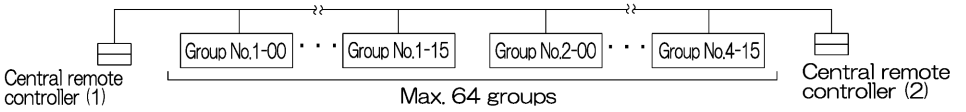
Two central remote controllers can be used as shown in ❷ SYSTEM CONFIGURATION, to control anywhere up to a max. 128 groups of indoor units. In this case, group address must be set. This is done with the switch for setting each address (SS3).

| SS3 setting | Indoor unit address |
|---|---|
| SETTING EACH ADDRESS 5-00 ~ 8-15 (1-00 ~ 4-15) | To control indoor units from group Nos. 1-00 through 4-15 |

| SS3 setting | Indoor unit address |
|---|---|
| SETTING EACH ADDRESS 5-00 ~ 8-15 (1-00 ~ 4-15) | To control indoor units from group Nos. 5-00 through 8-15 |

(3) MAIN/SUB changeover switch setting

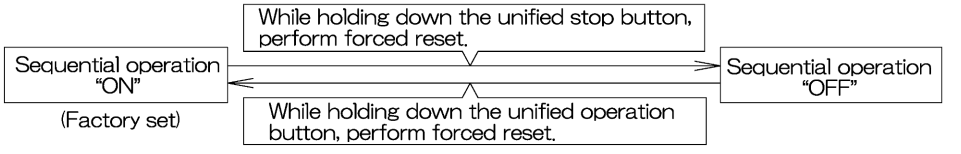
With two central remote controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.




One of the two central remote controllers (1) · (2) is set to "MAIN" while the other is set to "SUB".

(4) Setting of the sequential operation function

The central remote controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to "ON.") To switch sequential operation ON or OFF, set as follows.




NOTE: The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

(5) Forced reset switch

When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)

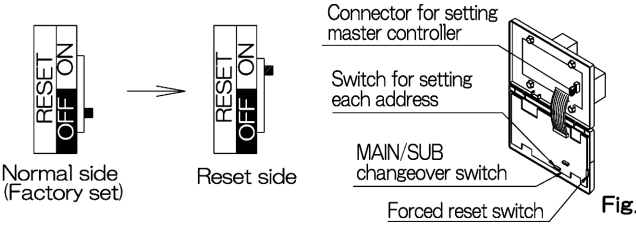
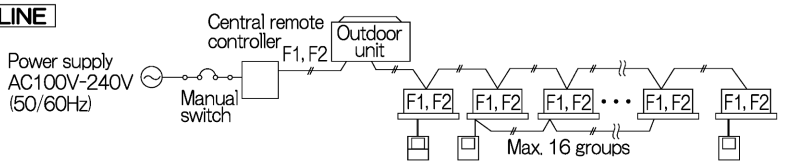


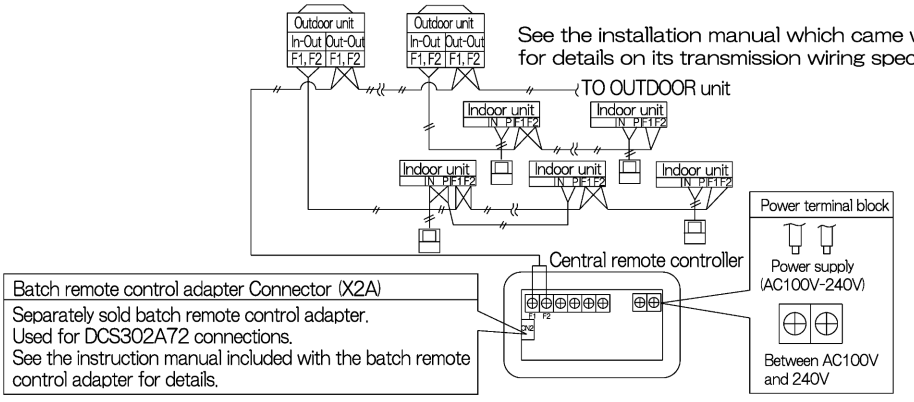

Fig. 1

# 5 ELECTRIC WIRING

## WIRING OUTLINE




## WIRING TO THE INDOOR UNIT AND OUTDOOR UNIT




Wiring specifications

| | |
|---|---|
| Power supply wiring | 2mm² |
| Transmission wiring for control | 0.75 – 1.25 mm² sheathed vinyl cord or cable (balanced type) – maximum length 1000 m (total overall wiring length 2000 m) |
| Manual switch | 10A or 15A |

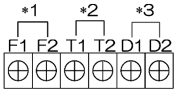
Wire the indoor units to the outdoor units and between all power, indoor units, and remote controllers. See the instruction manual included with the indoor and outdoor units for details.

CONTROL TERMINAL STRIP

*1 For connecting Indoor unit (F1, F2)

*2 Forced OFF input (T1, T2)
None of the indoor units connected to the forced OFF input contact (non-voltage contact with minimal current) willoperate when it is shut off.
Use only contactors which guarantee the minimum applicable load DC 16V, 10mA.


NOTE) Use instantanecous contactor of over 200m sec. energizing time, when necessary.




*3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301B61) separately sold. For details, refer to the installationmanual of the schedule timer.

Wire *2 and *3 only when necessary.

(NOTE)
Do not connect the power supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

## 6 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

(1) Turn ON the power of the indoor unit and central remote controller.
(Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
(When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "88".)

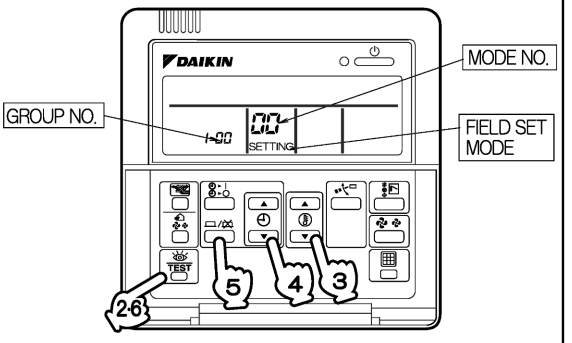
(2) While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.

(3) Select the MODE No. "00 " with the " " button.

(4) Use the " " button to select the group No. for each group.
(Group numbers increase in the order of 1-00,1-01,...1-15, 2-00,...8-15.)

(5) Press " " to set the selected group No.

(6) Press " TEST " to return to the NORMAL MODE.




NOTES)
- For simplified remote controller, see the installation table.
- See the instruction manuals which came with the Ventiair and adapters (i.e., multi-purpose adapters) for details on their Group No. settings.

NOTICE Enter the group No. and installation place of the indoor unit into the installation table in the operation manual. Be sure to keep the operation manual for maintenance.

## 7 TEST OPERATION (Perform a test operation in the individual screen before registering zones.)

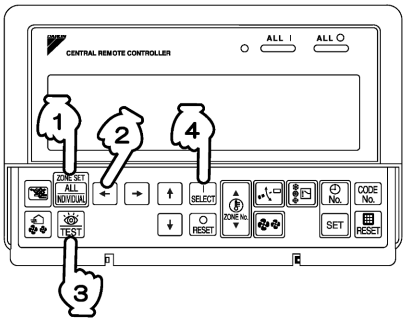
Before starting test operation, check that the power is supplied to the indoor and outdoor units, and central remote controller.

(1) Select the display "INDIVIDUALLY"
Press " " button to display "INDIVIDUALLY"

(2) Select the group to be tested.
Select the group No. with " " " " " " " " button.

(3) Press " TEST " button to select the test operation mode.
" TEST " is displayed.
" HOST " is displayed on the remote controller.

(4) Press " SELECT " button within 10 seconds after entering into the test operation mode.
Operation the unit for 30 minutes.
When pressing the " RESET " button, the unit stops operating.
If the operation lamp flashes, it indicates a malfunction.
Call the group of flashing display, confirm malfunction code, and check the source of malfunction.
(The operation manual lists all error codes, so refer to it.)




NOTES
- For test operation, refer to the installation manual of the outdoor unit.
- After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of "88 ", check the following points.
  - Check that setting of the connector for setting master controller is correct.
  - Check that the group No. for centralized control has been set.

1P124687-1A

## 14.3.2 Operation Manual

# BEFORE USE

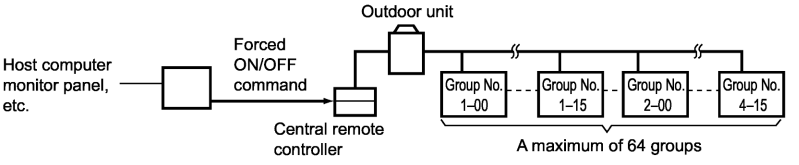
### ■ GENERAL DESCRIPTION OF SYSTEM

This central remote controller can monitor and control up to 64 indoor unit groups.
Using two central remote controllers allows monitoring and controlling of up to 128 indoor unit groups.

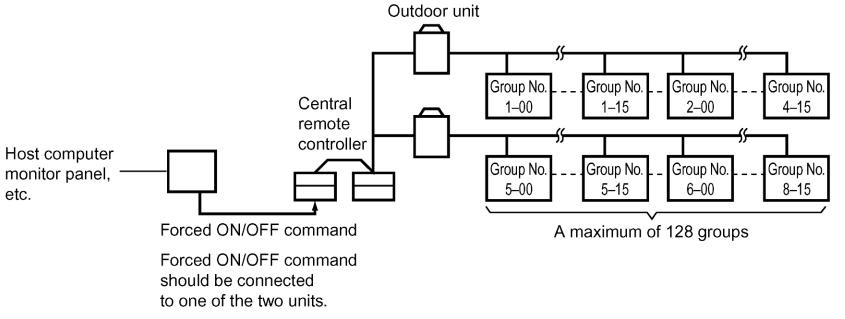
Main Functions

1. Batch starting and stopping of indoor units connected to the central remote controller.
2. Handling of operation settings such as start/stop, timer operation, remote controller prohibition/permission, etc., and operation status settings such as temperature.
3. Operation status monitoring of operation mode, set temperature, etc.
4. Can be connected to an external central monitor panel and key system using the forced stop input (non-voltage a connector).

- When using 1 central remote controller




- When using 2 central remote controllers

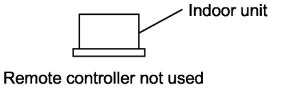



(The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together.)

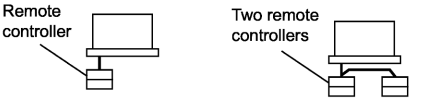
* GROUP OF INDOOR UNIT refers to the below.

1. A single indoor unit without remote controller

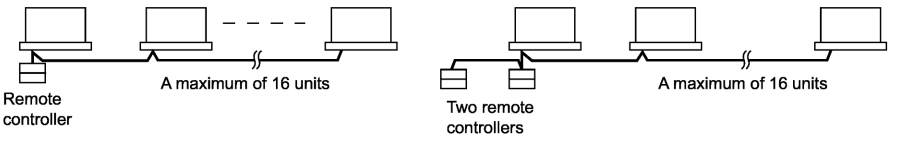
**1.** A single indoor unit without remote controller




**2.** A single indoor unit controlled by one or two remote controllers

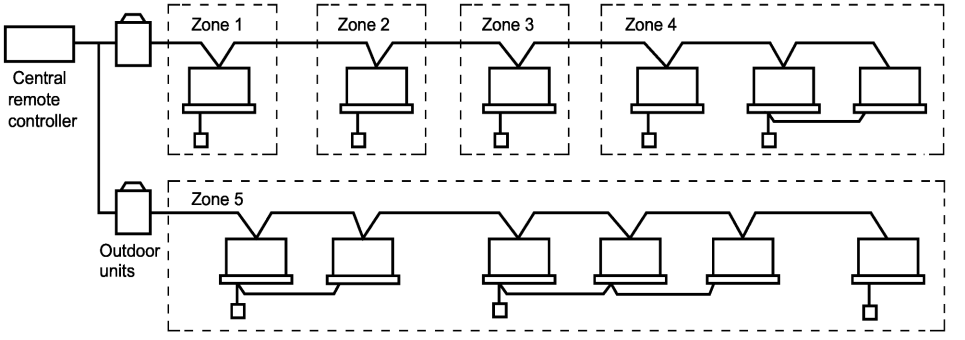



**3.** Maximum of 16 indoor units, group-controlled by one or two remote controllers




1

* Zone control from the central remote controller
Zone control is available from the central remote controller. With it, it is possible to make unified settings for multiple groups, so setting operations are greatly simplified.




- Any setting you make within a given zone will apply to all groups in the said zone.
- A maximum of 64 zones can be set from a single central remote controller. (Each zone contains a maximum of 64 groups.)
- Zones can be set randomly from the central remote controller.

## SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly.
After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of danger, warning, caution and note symbols.

⚠ **DANGER** ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

⚠ **WARNING** .... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION** .... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE**..... Indicates situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

### ⚠ DANGER

- **Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death.** Turn off the power and contact your dealer immediately for instructions.
- **Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.**
- **Safely dispose of the packing materials.** Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death due to suffocation.

### ⚠ WARNING

- **Ask your dealer for installation of the air conditioner.** Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- **Ask your dealer for improvement, repair, and maintenance.** Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- **Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**
- **Ask your dealer to move and reinstall the air conditioner or the remote controller.** Incomplete installation may result in a water leakage, electric shock, and fire.
- **Never let the indoor unit or the remote controller get wet.** It may cause an electric shock or a fire.

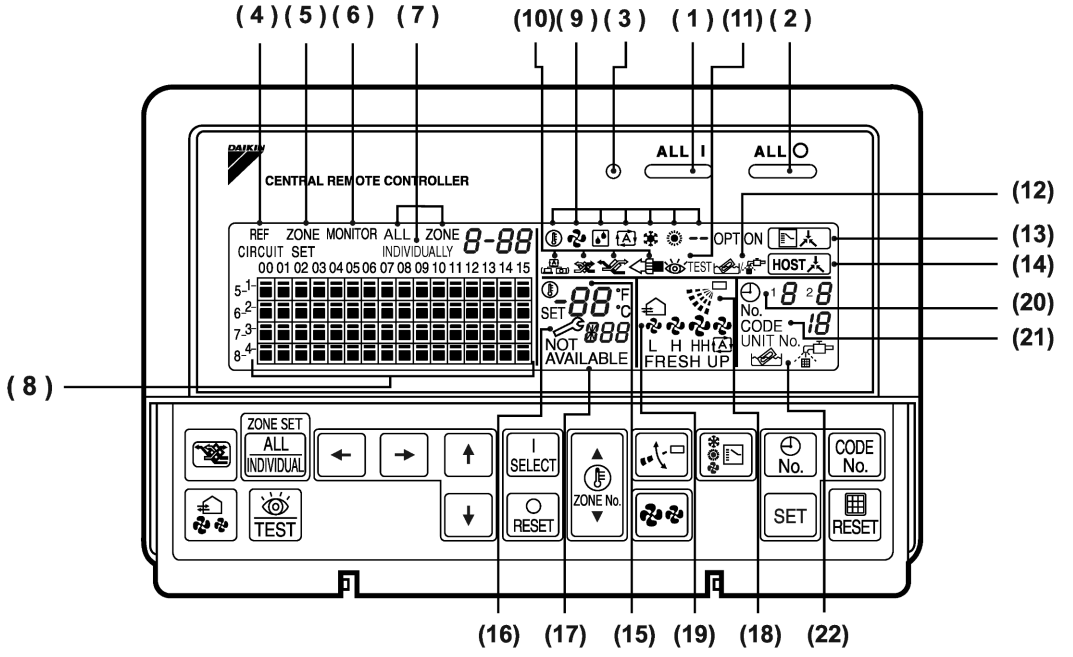



Fig. 1

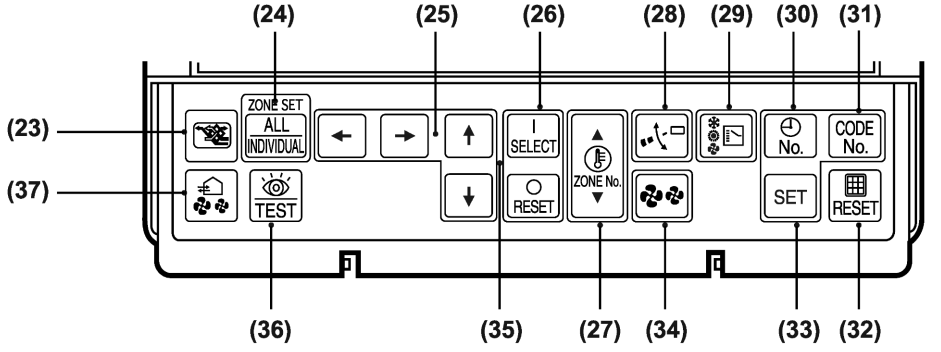



Fig. 2

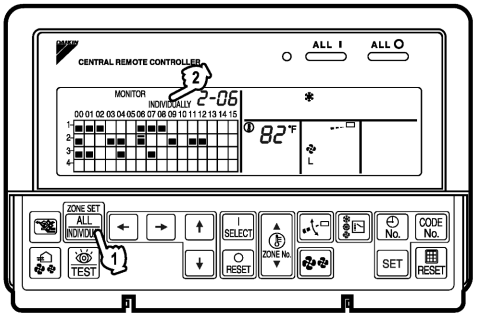



Fig. 3

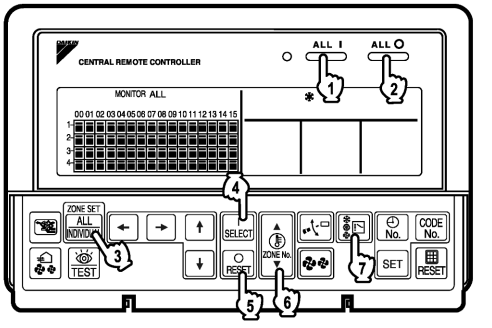



Fig. 4

3

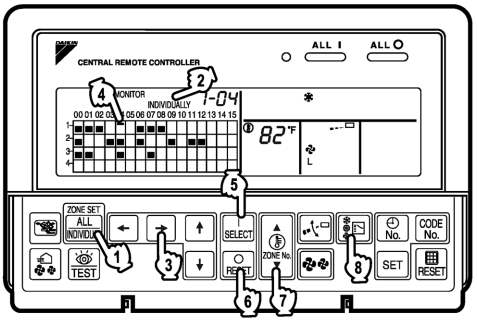



Fig. 5

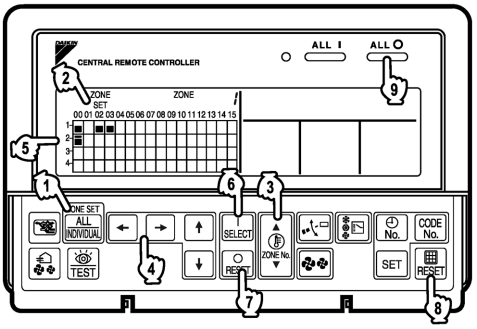



Fig. 6

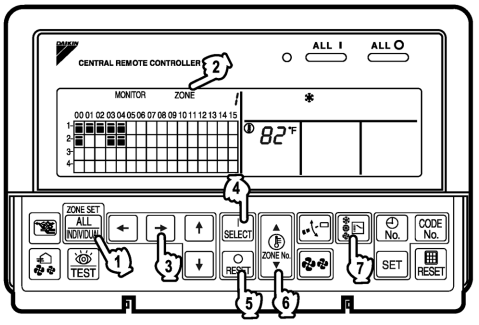



Fig. 7

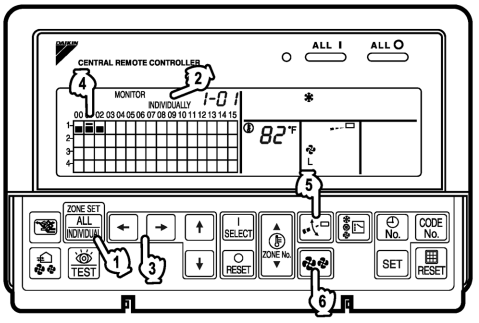



Fig. 8

- **Never use flammable spray such as hair spray, lacquer or paint near the unit.**
  It may cause a fire.
- **Do not allow children to play on or around the unit as they could be injured.**
- **Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
  Use of wire or copper wire may cause the unit to break down or cause a fire.
- **Never inspect or service the unit by yourself.**
  Ask a qualified service person to perform this work.
- **Cut off all electric waves before maintenance.**
- **Do not wash the air conditioner or the remote controller with excessive water.**
  Electric shock or fire may result.
- **Do not touch the switch with wet fingers.**
  Touching a switch with wet fingers can cause electric shock.
- **Never touch the internal parts of the controller.**
  Do not remove the front panel because some parts inside are dangerous to touch. In addition, some parts may be damaged by touching. For checking and adjusting internal parts, contact your dealer.
- **Check the unit stand for damage on a continuous basis, especially if it had been in use for a long time.**
  If left in a damaged condition the unit may fall and cause injury.
- **Placing a flower vase or other containers with water or other liquids on the unit could result in a shock hazard or fire if a spill occurs.**

**⚠ CAUTION**

- **Avoid placing the controller in a spot splashed with water.**
  Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.
- **Do not operate the air conditioner when using a room fumigation - type insecticide.**
  Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- **Do not turn off the power immediately after stopping operation.**
  Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
- **The appliance is not intended for use by young children or infirm persons without supervision.**
- **The remote controller should be installed in such a way that children cannot play with it.**

**⚠ NOTE**

- **Never press the button of the remote controller with a hard, pointed object.**
  The remote controller may be damaged.
- **Never pull or twist the electric wire of the remote controller.**
  It may cause the unit to malfunction.
- **Do not place the controller exposed to direct sunlight.**
  The LCD display may get discolored, failing to display the data.
- **Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
  The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.
- **Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# CONTENTS

## FEATURES AND FUNCTIONS

■ **Operation menu**
This central remote controller can operate and stop machines by either group or zone.
Batch operation and batch stop functions are also available. When used in combination with the schedule timer (optional accessory), timer operation and stop functions are available.

See page 8—12.

■ **Various operation modes.**
You can operate the system from both this unit and the remote controller, so to enable various operation control patterns. Twenty different operation modes are available including five operation patterns:

1. Start/stop: remote controller prohibition, remote controller stop-only permission, central priority, after-press priority, remote controller permission timer
2. Operation modes: remote controller prohibition, remote controller permission
3. Set temperature: remote controller prohibition, remote controller permission

See page 13—15.

■ **Zone control for simpler setting procedures**
You can control a maximum of 64 groups of indoor units by using this central remote controller. You don't have to repeat the same setting operations by group because you can make each of the following settings by zone.
A functions is available for setting all groups in one batch.

- Operation mode
- Control mode
- Setting temperature
- Programming time No. (Used in conjunction with the schedule timer)

See page 8—16.

■ **Monitoring all indoor unit information**
The following information can be displayed by group.

- Operation information such as operation mode, set temperature, etc., for indoor units
- Maintenance information such as cleaning signs for filters or elements
- Error codes and other malfunction diagnosis information

See page 16—21.

■ **Function of refrigerant system display**
This display helps you understand, at a glance, the indoor units sharing the same outdoor unit and the particular indoor unit among them that is set as the master remote controller.

See page 20.

- Room air conditioners and multi-purpose air conditioners may also be connected by using separately-sold adapter boards.
  This may limit functionality, so consult the manuals that come with each adapter board.

## NAMES AND FUNCTIONS OF THE OPERATING SECTION (Fig. 1, 2)

| | |
|---|---|
| 1 | **UNIFIED OPERATION BUTTON** |
| | Press to operate all indoor units. |
| 2 | **UNIFIED STOP BUTTON** |
| | Press to stop all indoor units. |
| 3 | **OPERATION LAMP (RED)** |
| | Lit white any of the indoor units under control is in operation. |
| 4 | **“ REF CIRCUIT ” DISPLAY (REFRIGERANT SYSTEM DISPLAY)** |
| | This indication in the square is lit while the refrigerant system is being displayed. |
| 5 | **“ ZONE SET ” DISPLAY (ZONE SETTING)** |
| | The lamp is lit while setting zones. |
| 6 | **“ MONITOR ” DISPLAY (OPERATION MONITOR)** |
| | The lamp is lit while operation is being monitored. |
| 7 | **“ ALL ” “ ZONE ” “ INDIVIDUALLY ” DISPLAY** |
| | The status displays indicates either batch functions or which zone or individual unit (or group) are being used. |
| 8 | **OPERATION MONITOR** |
| | Each square displays the state corresponding to each group. |
| 9 | **“” “” “” “” “” “” “ – – ” DISPLAY (OPERATION MODE)** |
| | Displays operating state. |
| 10 | **“” “” “” “” DISPLAY (VENTILATION CLEANING DISPLAY)** |
| | This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected. |
| 11 | **“ TEST ” DISPLAY (INSPECTION/TEST)** |
| | Pressing the maintenance/test run button (for service) displays this. This button should not normally be used. |
| 12 | **“” DISPLAY (TIME TO CLEAN)** |
| | It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned. |
| 13 | **“” DISPLAY (COOLING/HEATING SELECTION PRIVILEGE NOT SHOWN)** |
| | For zones or individual units (groups) for which this is displayed, cooling and heating cannot be selected. |
| 14 | **“ HOST ” DISPLAY (UNDER HOST COMPUTER INTEGRATED CONTROL)** |
| | While this display is lit up, no settings can be made. It lights up when the upper central machines are present on the same air conditioning network. |
| 15 | **“ SET 88 °F ” DISPLAY (PRESET TEMPERATURE)** |
| | Displays the preset temperature. |
| 16 | **“ U4 ” DISPLAY (MALFUNCTION CODE)** |
| | This displays (flashes) the content of errors when an error failure has occurred. In maintenance mode, it displays the latest error content. |
| 17 | **“NOT AVAILABLE” DISPLAY (NO FUNCTION DISPLAY)** |
| | If a function is not available in the indoor unit even if the button is pressed, “NOT AVAILABLE” is may be displayed for a few seconds. |
| 18 | **“” DISPLAY (FAN DIRECTION SWING DISPLAY)** |
| | This displays whether the fan direction is fixed or set to swing. |
| 19 | **“” “L” “H” “HH” “” “FRESH UP” DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH DISPLAY)** |
| | This displays the set fan strength. |
| 20 | **“ No. ” DISPLAY (TIME NO.)** |
| | Displays the operation timer No. when used in conjunction with the schedule timer. |

7

| | |
|---|---|
| 21 | **“CODE UNIT No. 18” DISPLAY (OPERATION CODE AND UNIT NUMBER DISPLAY)** |
| | The method of operation (remote controller prohibited, central operation priority after-press operation priority, etc.) is displayed by the corresponding code.<br>This displays the numbers of any indoor units which have stopped due to an error. |
| 22 | **“” “” DISPLAY (TIME TO CLEAN AIR CLEANER ELEMENT/ TIME TO CLEAN AIR FILTER)** |
| | Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed. |
| 23 | **VENTILATION MODE BUTTON** |
| | This is pressed to switch the ventilation mode of the total enthalpy heat exchanger. |
| 24 | **ALL/INDIVIDUAL BUTTON** |
| | Pressing this button scrolls through the “all screen”, “zone screen”, and “individual screen”. |
| 25 | **ARROW KEY BUTTON** |
| | This button is pressed when calling an individual indoor unit or a zone. |
| 26 | **ON/OFF BUTTON** |
| | Starts and stops ALL, ZONE, and INDIVIDUAL units. |
| 27 | **TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON)** |
| | This button is pressed when setting the temperature. Select the zone number if any zones have been registered. |
| 28 | **FAN DIRECTION ADJUSTMENT BUTTON** |
| | This button is pressed when setting the fan direction to “fixed” or “swing”. |
| 29 | **OPERATION MODE SELECTOR BUTTON** |
| | This sets the operation mode. The dry setting cannot be done. |
| 30 | **TIME NO. BUTTON** |
| | Selects time No. (Use in conjunction with the schedule timer only). |
| 31 | **CONTROL MODE BUTTON** |
| | Selects control mode. |
| 32 | **FILTER SIGN RESET BUTTON** |
| | This button is pressed to erase the “clean filter” display after cleaning or replacement. |
| 33 | **SET BUTTON** |
| | Sets control mode and time No. |
| 34 | **FAN STRENGTH ADJUSTMENT BUTTON** |
| | Pressing this button scrolls through “weak”, “strong”, and “fast”. |
| 35 | **ZONE SETTING BUTTON** |
| | Zone registration mode can be turned on and off by pressing the start and stop buttons simultaneously for at least four seconds. |
| 36 | **INSPECTION/TEST RUN BUTTON (FOR SERVICE)** |
| | Pressing this button scrolls through “inspection”, “test run”, and “system display”.<br>This button is not normally used. |
| 37 | **VENTILATION STRENGTH ADJUSTMENT BUTTON** |
| | This button is pressed to switch the ventilation strength (“fresh up”) of the total enthalpy heat exchanger. |

(Notes)
1. Please note that all the displays in the figure appear for explanation purposes or when the cover is open.
2. If the unit is used in conjunction with other optional central controllers, the OPERATION LAMP of the unit that is not under operation control may light up and go out a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.

# OPERATION

### ■ Individual screen, all screen, zone screen (Fig. 3)

This controller can perform operations in the individual screen, all screen, or zone screen.

- Individual screen — The individual screen is used when performing group operations.
- All screen — The all screen is used when performing operations for all units at once.
- Zone screen — The zone screen is used when performing zone operations.

**1. ☞① Select the screen by pressing the “ALL/INDIVIDUAL” button.**

☞② Every time the “ALL/INDIVIDUAL” button is pressed, the selection scrolls through INDIVIDUAL → ALL → ZONE.
If nothing is done in the all or zone screens for one minute, it automatically goes to the individual screen.

- If the zone number in the zone screen is displayed as "---," this indicates that no units are registered in a zone.
  Please perform zone registration before proceeding in the zone screen. (See page 9)

### ■ Batch operation and stop method (Fig. 4)

This is for operating or stopping all connected units at once.

**A. What to do when operating or stopping all connected units at once.**

**1. Press either ☞ "ALL ❙" or ☞ "ALL ○".**

- Operation can be performed from the individual screen, the all screen, or the zone screen.
- The "TEMPERATURE ADJUSTMENT" and "OPERATION MODE SELECTOR" buttons cannot be used.
  To set the temperature and operation mode, use B. batch operation.

**B. Batch Operation**

**1. ☞ Press the "ALL/INDIVIDUAL button" to enter the all screen.**

The " ▀ " display lights up on all registered units.

**2. ☞ Press the "SELECT" button.**

The " ■ " display lights up on all connected units.

**☞ Press the "RESET" button.**

The " ▣ " display goes off on all connected units.

Operation and stop in the batch screen are done the same as with the batch operation and batch stop buttons.

**3. ☞ Press the "TEMPERATURE ADJUSTMENT" button.**

The temperature rises 1° every time the (▲) button is pressed.
The temperature drops 1° every time the (▼) button is pressed.

Set to " -- " when you do not wish to use batch setting for the temperature setting.
Setting to 1° above or below the temperature setting range displays " -- ".

**4. ☞ Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.**

Set to " -- " when you do not wish to use batch setting for the operation setting.

### ■ Group operation and stop method (Fig. 5)

This is for operating or stopping connected units in groups.

**[Group operation]**

**1. Press the ☞ "ALL/INDIVIDUAL button" to enter the ☞ individual screen.**

The unit will enter the individual screen automatically if nothing is done for one minute.

**2. ☞ Using the arrow keys, ☞ move the " ▀ " to select the units to operate or stop.**

Keeping the button pressed down will move it rapidly.

The " ▀ " in this screen has selected unit 1-04.

**3. ☞ Press the "SELECT" button.**

The " ■ " display lights up in the group.

**☞ Press the "RESET" button.**

The " ■ " display goes off in the group.

**4. ☞ Press the "TEMPERATURE ADJUSTMENT" button.**

The temperature rises 1° every time the (▲) button is pressed.
The temperature drops 1° every time the (▼) button is pressed.
Temperature adjustment cannot be done if the selected group's air conditioners are in fan mode.

**5. ☞ Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.**

### ■ Registering zones (Fig. 6)

It is possible to set multiple groups as one zone and control each zone separately.
No zones are registered when the unit is shipped from the factory.
Zone registration can be done in the individual screen, all screen, or zone screen.

**[Registration]**

**1. ☞ Pressing the "ALL/INDIVIDUAL" button for four seconds. ☞ Displays ZONE SET.**

Zone Number 1 will be displayed, and if there are any groups already registered in the displayed zone, a " ▣ " will light up on the operation monitor.

**2. ☞Select the Zone Number to be registered using the "ZONE NUMBER" button.**
Keeping the button pressed down will move it rapidly.

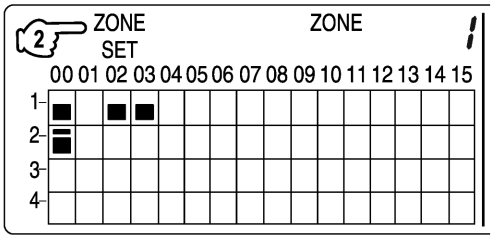
**3. ☞" ▭ " to the group you wish to ☞register using the arrow keys.**
Keeping the button pressed down will move it rapidly.

**4. ☞Press the "SELECT" button to register that group to the zone.**

The " ▣ " display lights up on all the selected units.

**☞Pressing the "RESET" button removes the group from that zone, and " ▣ " goes off.**

Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.




**In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.**

**5. Repeat steps 2 to 4 to register to the next zone.**

**6. Once zone registration is complete, ☞press the "ALL/INDIVIDUAL" button to turn off "ZONE SET" display and return to the individual screen.**
The display returns to the normal screen if nothing is done for one minute when in zone registration mode.

(NOTE)
- It is impossible to register one group to several different zones.
  If this is done, the last zone registered to will be valid.

**[Batch deletion of zone registration]**

**1. ☞Pressing the " ALL ○ " for at least four seconds while ☞pressing the "FILTER SIGN RESET" button when ☞"ZONE SET" is displayed will delete all zone registrations.**
The zone registrations for all units will be lost.

## ■ Zone operation and stop method (Fig. 7)

This is for operating or stopping connected units in zones.

**[Zone operation]**

**1. ☞Press the "ALL/INDIVIDUAL button" to enter the zone screen.**

**2. ☞Using the arrow keys, select the zone number to operate or stop.**

Pressing [←] and [↓] reduces the zone number while [→] and [↑] raise the number.
Keeping the button pressed down will move it rapidly.
- If the zone number is displayed as "---," this indicates that no units are registered in a zone. Please perform zone registration before using a zone. (See page 9)

**3. ☞Press the "SELECT" button.**

The " ▣ " display lights up in the group.

**☞Press the "RESET" button.**

The " ▣ " display goes off in the group.

**4. ☞Press the "TEMPERATURE ADJUSTMENT" button.**
The temperature rises 1° every time the (▲) button is pressed.
The temperature drops 1° every time the (▼) button is pressed.

Set to " -- " when you do not wish to use zone setting for the temperature setting.
Setting to 1° above or below the temperature setting range displays " -- ".

**5. ☞Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.**

Set to " -- " when you do not wish to use zone setting for the operation mode.

### ■ Changing the fan direction and fan strength (Fig. 8)

This changes the fan direction and strength settings in the air conditioner.
Changing the fan direction and strength is done in the individual screen.

**[Registration]**

1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the "▭" to select the units to fan direction adjustment or fan strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "FAN DIRECTION ADJUSTMENT" button.**
   This sets "fixed" or "swing" for the fan direction.
   **Press the "FAN STRENGTH ADJUSTMENT" button.**
   Pressing this button scrolls through "L", "H", and "HH".
   Depending on the indoor unit, only "L" and "H" may be available.

The functions included in the indoor units may vary.
Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

### ■ Changing the ventilation mode and ventilation strength (Fig. 9)

This changes the ventilation mode and strength settings in the total enthalpy heat exchanger.
Changing the ventilation mode and strength is done in the individual screen.

**[Registration]**

1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the "▭" to select the units to ventilation mode or ventilation strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "VENTILATION MODE" button.**
   It will scroll through "AUTO" → "HEAT EXCHANGE" → "BYPASS" → "AUTO".
   **Press the "VENTILATION STRENGTH ADJUSTMENT" button.**
   It will scroll through "L" → "H" → "L FRESH UP" → "H FRESH UP" → "L".
   The fresh up function may not be available depending on the connected unit model.

The functions included in the indoor units may vary.
Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

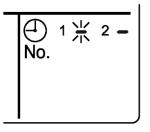
- **Ventilation Mode and Amount**
  If these are changed using the remote controller depending on the unit model, they cannot be displayed on the central remote controller.
  To monitor the ventilation mode and amount, check the values on the remote controller.

### ■ Timer Number Setting (Fig. 10)

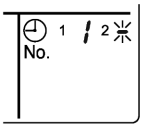
**(Only when used with the schedule timer)**
Using this together with the schedule timer makes it possible to set on and off times four times a day.

**[Registration]**

1. **Pressing the "TIMER NO." button causes the number set for timer number 1 to blink.**
   If no timer setting has been made "–" will be displayed.
   Select the desired timer number by pressing the "TIMER NO." button.

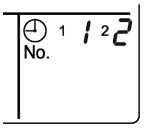



2. **Once the desired timer number is displayed, press the "SET" button.**
   Press the "SET" button within 10 seconds after the timer number is displayed.
   The display will return to how it was after 10 seconds.
   The display for timer number 1 will stop blinking and then timer number 2 will start blinking.



**3. ☞ Select the desired timer number by pressing the "TIMER NO." button.**

Once the desired timer number is displayed, ☞ press the "SET" button.
The display for timer number 2 will stop blinking.




The " No. " display will disappear after 3 seconds.

Select " – " in the timer number when you do not wish to set a timer number.
It is possible to set only one timer number.
(The times for turning the unit(s) on and off twice a day can be set with a single timer number.)

- **Timer Number Setting**
  Group control: select the unit in the individual screen and set the timer number.
  Batch control: set the timer numbers for all connected units.
  Zone control: set the timer numbers for all zone-registered units.
  Call up the zones which you wish to set in the zone screen and set the timer numbers.

- **Since the timer number will be set to after-press priority, the timer number in the last screen set will be valid for the connected units.**

  Example 1
  Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".

  Example 2
  To prevent leaving units on, timer number 1 is set to "5" in the batch screen.
  Setting timer number 1 in zone number 1 to " – " in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.

  If a timer number is set incorrectly by accident, redo the setting in the desired screen.

- **What happens when the timer number on time and off time are set to the same time**

  When the on time and off time are set to the same time for the same timer number, operation does not change.
  When the on time and off time are set to the same time for different timer numbers, the off time is given priority.

When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

## ■ Setting the Operation Code (Fig. 11)

**[Registration]**

**1. ☞ Pressing the "CONTROL MODE" button causes the currently set operation code to blink.**
Call up the desired code number by pressing the ☞ "CONTROL MODE" button.
Scroll through the code numbers.

**2. ☞ Once the code number is displayed, press the "SET" button.**
The display will stop blinking.
The operation code display will disappear after 3 seconds.

**[The Operation Code Setting]**

Group control: select the unit in the individual screen and set the operation code.
Batch control: set the operation code for all connected units.
Zone control: set the operation code for all zone-registered units.
Call up the zones which you wish to set in the zone screen and set the operation code.

Since the operation code will be set for after-press priority, setting the operation code in the zone and individual screens after setting the operation code in the batch screen, will cause the operation codes set afterwards to be valid.

## OPERATION MODE

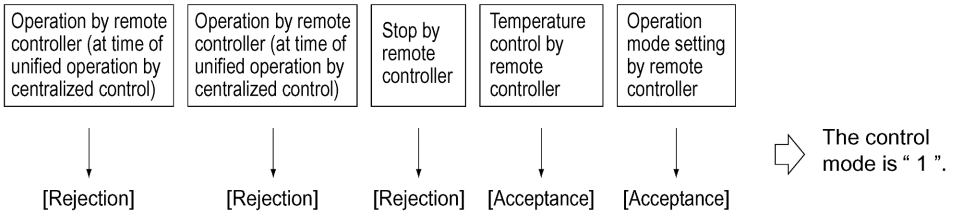
The following five operation control modes can be selected along with the temperature setting and operation mode by remote controller, for a total of twenty different modes. These twenty modes are set and displayed with control modes of 0 to 19. (For further details, see **EXAMPLE OF OPERATION SCHEDULE** on the next page.)

- ON/OFF control impossible by remote controller..... Use this mode when operating and stopping from the central remote controller only. (ON/OFF control by the remote controller is disabled.)
- Only OFF control possible by remote controller ..... Use this mode when executing the operation only by the central remote controller, and executing only the stop by remote controller.
- Centralized ..... Use this mode when executing the operation only by the central remote controller, and executing start/stop freely by remote controller during the preset hours.
- Individual ..... Use this mode when executing start/stop both by central remote controller and remote controller.
- Timer operation possible by remote controller..... Use this mode when executing start/stop by remote controller during the preset hours, and not starting operation by the central remote controller at the programmed time of system start.

### [HOW TO SELECT THE CONTROL MODE]

- Select whether to accept or to reject the operation from the remote controller regarding the operation, stop, temperature setting and operation mode setting, respectively, and determine the particular control mode from the rightmost column of the table below.

  Example

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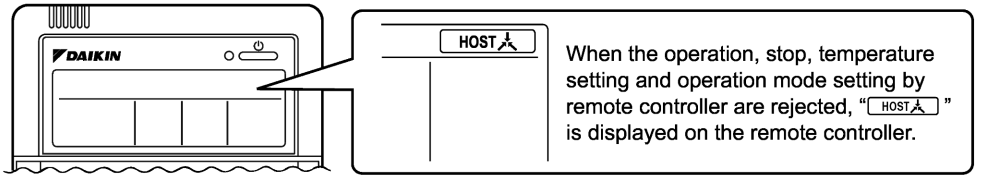
| Operation mode | Control by remote controller | | | | | Control mode |
|---|---|---|---|---|---|---|
| | Operation | | Stop | Tempera-ture control | Operation mode setting | |
| | Unified operation, individ-ual operation by central remote controller, or opera-tion controlled by timer | Unified stop, individual stop by central remote controller, or timer stop | | | | |
| ON/OFF control impossible by remote controller | Rejection (Example) | Rejection (Example) | Rejection (Example) | Rejection | Acceptance | 0 |
| | | | | | Rejection | 10 |
| | | | | Acceptance (Example) | Acceptance (Example) | 1 (Example) |
| | | | | | Rejection | 11 |
| Only OFF control possible by remote controller | | | Acceptance | Rejection | Acceptance | 2 |
| | | | | | Rejection | 12 |
| | | | | Acceptance | Acceptance | 3 |
| | | | | | Rejection | 13 |
| Centralized | Acceptance | | | Rejection | Acceptance | 4 |
| | | | | | Rejection | 14 |
| | | | | Acceptance | Acceptance | 5 |
| | | | | | Rejection | 15 |
| Individual | | Acceptance | | Rejection | Acceptance | 6 |
| | | | | | Rejection | 16 |
| | | | | Acceptance | Acceptance | 7 |
| | | | | | Rejection | 17 |
| Timer operation possible by remote controller | Acceptance (During timer at ON position only) | Rejection (During timer at OFF position) | | Rejection | Acceptance | 8 |
| | | | | | Rejection | 18 |
| | | | | Acceptance | Acceptance | 9 |
| | | | | | Rejection | 19 |

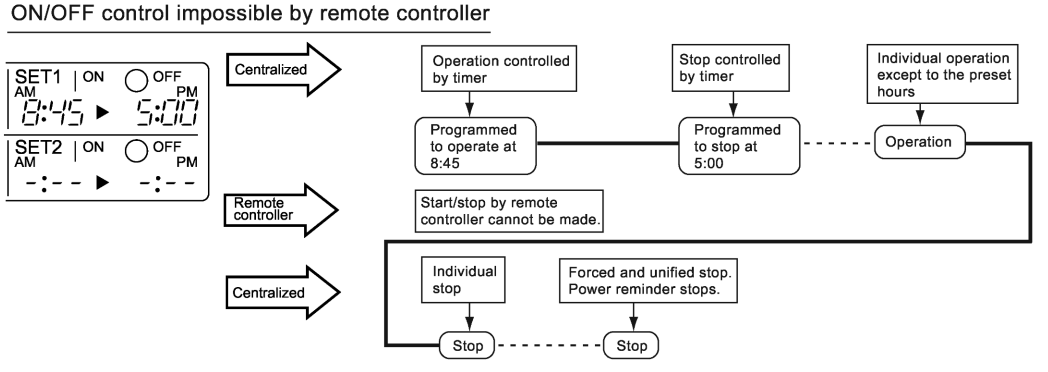
Note) Do not select the timer operation possible without the remote controller. In this case, timer operation is disabled.

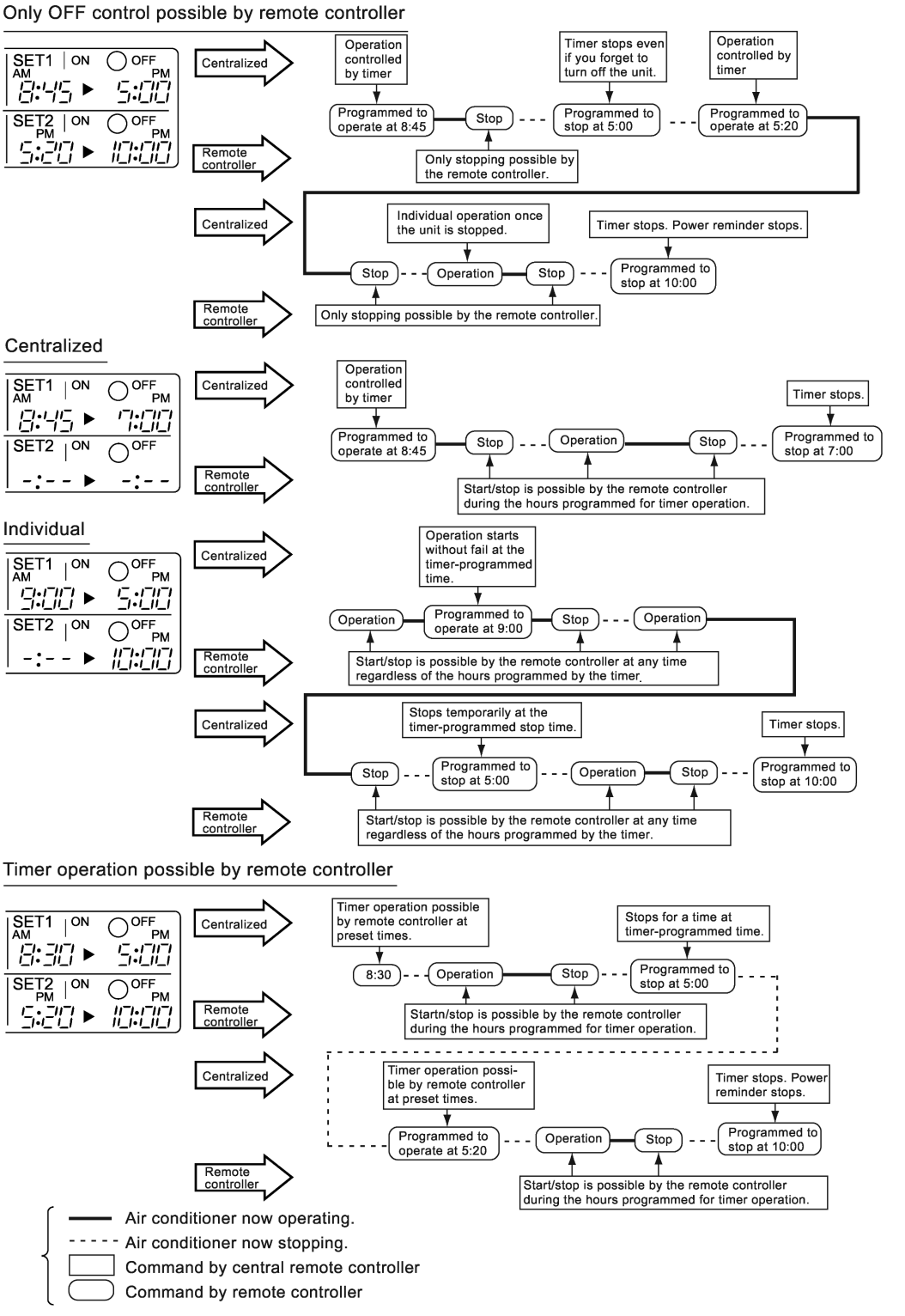



**EXAMPLE OF OPERATION SCHEDULE**

Operation schedule is possible only in conjunction with the schedule timer (optional accessory).

**Liquid crystal display of schedule timer**




Only OFF control possible by remote controller
SET1 ON OFF AM PM
SET2 ON OFF PM PM
Centralized
Remote controller
Operation controlled by timer
Programmed to operate at 8:45
Stop
Only stopping possible by the remote controller.
Timer stops even if you forget to turn off the unit.
Programmed to stop at 5:00
Operation controlled by timer
Programmed to operate at 5:20
Individual operation once the unit is stopped.
Operation
Timer stops. Power reminder stops.
Programmed to stop at 10:00
Only stopping possible by the remote controller.
Centralized
SET1 ON OFF AM PM
SET2 ON OFF
Operation controlled by timer
Programmed to operate at 8:45
Stop
Operation
Timer stops.
Programmed to stop at 7:00
Start/stop is possible by the remote controller during the hours programmed for timer operation.
Individual
SET1 ON OFF AM PM
SET2 ON OFF PM
Operation starts without fail at the timer-programmed time.
Operation
Programmed to operate at 9:00
Start/stop is possible by the remote controller at any time regardless of the hours programmed by the timer.
Stops temporarily at the timer-programmed stop time.
Programmed to stop at 5:00
Timer stops.
Programmed to stop at 10:00
Timer operation possible by remote controller
SET1 ON OFF AM PM
SET2 ON OFF PM PM
Timer operation possible by remote controller at preset times.
8:30
Operation
Stop
Stops for a time at timer-programmed time.
Programmed to stop at 5:00
Startn/stop is possible by the remote controller during the hours programmed for timer operation.
Timer operation possible by remote controller at preset times.
Programmed to operate at 5:20
Timer stops. Power reminder stops.
Programmed to stop at 10:00
Start/stop is possible by the remote controller during the hours programmed for timer operation.
Air conditioner now operating.
Air conditioner now stopping.
Command by central remote controller
Command by remote controller

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## ■ Setting operation mode (Fig. 12)

**[Registration]**

**1. ☞ Press the OPERATION MODE SELECTOR BUTTON. Each time you press this button, the display rotates as shown on the below list.**

- **List of operations which can be set**
  In the below list, " ○ " refers to the acceptable setting, while " × " refers to the not acceptable setting.

| Display | **A**: Zones and groups with no " " display. Setting | Contents of setting |
|---|---|---|
| | × | |
| | ○ | Can be set in individual zones or groups |
| | ○ ∗1 | Can be set in individual zones or groups |
| | ○ | Can be set in individual zones or groups |
| | ○ | Can be set in individual zones or groups |
| or or | ○ ∗1 | Can be set in individual zones or groups ∗3 |
| | ○ ∗1 | Can be set in individual zones or groups |
| | ○ | Select this display if you don't wish to set by zone. |

| Display | **B**: Zones and groups with a " " display. Setting | Contents of setting |
|---|---|---|
| | ○ | To be set by zone ∗2 |
| | ○ | Can be set in individual zones or groups |
| | × | |
| | × | The displays are shown by group ∗4 |
| | × | The displays are shown by group ∗4 |
| or or | ○ ∗1 | Can be set in individual zones or groups ∗3 |
| | ○ ∗1 | Can be set in individual zones or groups |
| | ○ | Select this display if you don't wish to set by zone. |

∗1: Setting may not be acceptable depending on the type of indoor unit with which this unit is connected.
∗2: In zone control, the units run in temperature adjustment mode (heating or cooling) for the outdoor system for the groups registered to those zones. Heating or cooling selection is not available.
∗3: or or
Changing the ventilation mode cannot be done in the zone screen. Changing the ventilation mode should be done in the individual screen.
∗4: In group control, the units run in temperature adjustment mode (heating or cooling) for the group outdoor system. Heating or cooling selection is not available.

- **The Zone consists of the following two cases.**

**A. Zone without display " "**
The group with master remote controller setting exists in this zone.
Setting the master remote controller enables cool/heat selection.
Operations other than cool/heat operations can also be set for some operations. For further details, see the list on the left.

**B. Zone with display " "**
No group with master remote controller setting exists in this zone.
The cool/heat selection is not available because the master remote controller has not been set.
Some operations other than cool/heat operations can be set. For further details, see the list in the left.

See page 20 if the display " " is flashing.

- Fan operation can be performed for each zone using the central remote controller even if there is no cooling/heating selection right during cooling or heating. Also, if a Ventiair is connected in the zone, ventilation and ventilation cleaning operation is possible. See the included operating manuals for details.
- When the indoor unit is in heat operation, change the setting to FAN operation through the central remote controller; then, you can switch the fan speed to the extremely low fan speed. Warm air may blow if any other indoor unit belonging to the same system is in heat operation.
- The indoor fan stops during defrost/hot start.
- DRY cannot be set from the central remote controller.

## ■ Group monitoring (Fig. 13)

Utilize the group monitor function in each of the following cases:
1. Check the malfunction code. (See the next page.)
2. Check the group that requires cleaning of the air filter and air cleaner element. (See page 21.)
3. Change the setting of the master remote controller. (See page 20.)
4. Check the group(s) sharing the same outdoor unit. Or, check the particular group(s) with the master remote controller setting. (See page 20.)
5. Check the conditions of other individual groups.

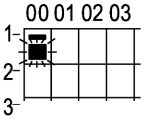
**When in zone screen**
The zone screen will revert to the individual screen automatically if nothing is done in it for one minute.

**[Registration]**

1. ☞ **Press the "ALL/INDIVIDUAL" button to switch to the** ☞ **"INDIVIDUAL" screen.**
2. ☞ **Using the arrow key,** ☞ **move the "▭" to select the unit to be monitored.**
   Keeping the button pressed down will move it rapidly.
   ☞ The "▭" lights up and the status of that unit is displayed in the LCD. The cursor in the screen Fig. 13 has selected unit 2-06.

## ■ Error diagnosing function (Fig. 14)

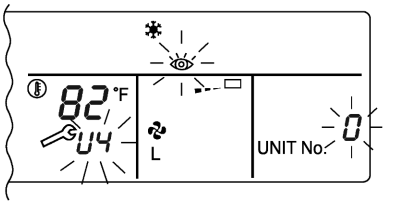
This central remote controller is provided with a diagnosing function, for when an indoor unit stops due to malfunction. In case of actuation of a safety device, disconnection in transmission wiring for control or failure of some parts, the operation lamp, inspection display and unit No. start to flash; then, the malfunction code is displayed. Check the contents of the display, and contact your DAIKIN dealer because the above signs can give you the idea on the trouble area.




The display " ▬ " flashes under the group No. where the indoor unit that has stopped due to malfunction.

**[Registration]**

1. ☞ **Press the ARROW KEY BUTTON to call up the group that has stopped due to malfunction.**
   ☞ The unit No. ☞ the malfunction code is flashing because of an error failure.




| Operation lamp | Maintenance display | Unit No. | Malfunction code | Error content |
|---|---|---|---|---|
| ☼ | ● | ◑ | **64** | Indoor air thermistor error |
| ☼ | ● | ◑ | **65** | Outdoor air thermistor error |
| ☼ | ● | ◑ | **68** | HVU error (Ventiair dust-collecting unit) |
| ☼ | ● | ◑ | **6A** | Dumper system error |
| ◑ | ◑ | ◑ | 6A | Dumper system error + Thermistor error |
| ☼ | ● | ◑ | **6F** | Simple remote controller error |
| ☼ | ● | ◑ | **6H** | Door switch (Ventiair dust-collecting unit), relay harness fault (Ventiair dust-collecting/humidifier unit) |
| ◑ | ◑ | ◑ | 94 | Ventiair internal transmission error (between total enthalpy – fan unit) |
| ◑ | ◑ | ◑ | A0 | Indoor unit · external safety device error |
| ◑ | ◑ | ◑ | A1 | Indoor unit · BEV unit (Sky-Air connection unit) PC board assembly fault |
| ☼ | ● | ◑ | **A1** | Indoor unit · PC board assembly fault |
| ◑ | ◑ | ◑ | A3 | Indoor unit · Drain level error (33H) |
| ◑ | ◑ | ◑ | A6 | Indoor unit · Fan motor (51F) lock, overload |
| ☼ | ● | ◑ | **A7** | Indoor unit · Fan direction adjustment motor (MA) error |
| ◑ | ◑ | ◑ | A9 | Indoor unit · BEV unit, electric expansion valve motor (20E) error |
| ☼ | ● | ◑ | **AF** | Indoor unit · Malfunctioning drain |
| ☼ | ● | ◑ | **AH** | Indoor unit · Dust-collector error |
| ◑ | ◑ | ◑ | AJ | Indoor unit · Insufficient capacity setting, address setting fault |

| | | | | |
|---|---|---|---|---|
| ☼ | ☼ | ☼ | C4 | Indoor unit · Liquid piping thermistor (Th2) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ☼ | ☼ | C5 | Indoor unit · BEV unit, gas piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ☼ | ☼ | C9 | Indoor unit · Intake air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ☼ | ☼ | CA | Indoor unit · Outlet air thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ☼ | **CJ** | Indoor unit · remote controller sensor error |
| ☼ | ☼ | ☼ | E0 | Outdoor unit · Safety device operation |
| ☼ | ☼ | ☼ | E1 | Outdoor unit · PC board assembly fault |
| ☼ | ● | ☼ | **E1** | Outdoor unit · PC board assembly fault |
| ☼ | ☼ | ☼ | E3 | Outdoor unit · High-pressure switch fault |
| ☼ | ☼ | ☼ | E4 | Outdoor unit · Low-pressure switch fault |
| ☼ | ☼ | ☼ | E9 | Outdoor unit · Electric expansion valve motor (20E) error |
| ☼ | ● | ☼ | **EC** | Heat source unit · Intake water temperature inter-lock operation (fan operation) |
| ☼ | ☼ | ☼ | EF | Outdoor unit · Ice thermal storage unit error |
| ☼ | ☼ | ☼ | F3 | Outdoor unit · Discharge piping temperature error |
| ☼ | ● | ☼ | **H3** | Outdoor unit · High-pressure switch operation |
| ☼ | ☼ | ☼ | H4 | Outdoor unit · Low-pressure switch operation |
| ☼ | ☼ | ☼ | H9 | Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ☼ | **H9** | Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ☼ | **HC** | Outdoor unit · Water temperature sensor system error |
| ☼ | ● | ☼ | **HF** | Ice thermal storage unit error, ice thermal storage controller error, error in outdoor unit during ice thermal storage operation |
| ☼ | ☼ | ☼ | HJ | Outdoor unit · water system fault |
| ☼ | ☼ | ☼ | J1 | Outdoor unit · pressure sensor error |
| ☼ | ☼ | ☼ | J3 | Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ● | ☼ | **J3** | Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ☼ | ☼ | J5 | Outdoor unit · Intake piping thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ☼ | ☼ | J6 | Outdoor unit · Heat exchange thermistor (Th2) error |
| ☼ | ● | ☼ | **J6** | Outdoor unit · Heat exchange thermistor (Th2) error Error (faulty connection, cut wire, short circuit, fault) |
| ☼ | ☼ | ☼ | J7 | Outdoor unit · Header thermistor (Th6) error |
| ☼ | ☼ | ☼ | JA | Outdoor unit · Discharge piping pressure sensor error |
| ☼ | ☼ | ☼ | JC | Outdoor unit · Intake piping pressure sensor error |
| ☼ | ☼ | ☼ | JF | Outdoor unit · Oil temperature sensor (Th5) system error |
| ☼ | ● | ☼ | **JH** | Outdoor unit · Oil temperature sensor (Th5) system error |
| ☼ | ☼ | ☼ | L0 | Outdoor unit · Inverter system fault |
| ☼ | ☼ | ☼ | L4 | Outdoor unit · Inverter cooler fault |
| ☼ | ☼ | ☼ | L5 | Outdoor unit · Ground circuit for compressor motor, short circuit, or power unit short circuit |

| | | | | |
|---|---|---|---|---|
| ◑ | ◑ | ◑ | L6 | Outdoor unit · Ground circuit for compressor motor, short circuit |
| ☼ | ◑ | ◑ | L8 | Outdoor unit · Compressor overload, compressor motor wire disconnection |
| ◑ | ◑ | ◑ | L9 | Outdoor unit · Compressor lock |
| ◑ | ◑ | ◑ | LA | Outdoor unit · Power unit error |
| ◑ | ◑ | ◑ | LC | Outdoor unit · Transmission error between inverter and outdoor control unit |
| ☼ or ● | ◑ | ◑ | M1 | Central controller: PC board fault |
| ☼ or ● | ◑ | ◑ | M8 | Transmission error between central controllers |
| ☼ or ● | ◑ | ◑ | MA | Central controller: Incorrect combination |
| ☼ or ● | ◑ | ◑ | MC | Central controller: Address setting fault |
| ◑ | ● | ◑ | **P0** | Insufficient gas (thermal storage) |
| ◑ | ◑ | ◑ | P1 | Outdoor unit · Power voltage imbalance, phase loss |
| ◑ | ◑ | ◑ | P4 | Outdoor unit · Power unit temperature sensor error |
| ☼ | ● | ◑ | **U0** | Pressure drop due to insufficient refrigerant, electric expansion valve fault, etc. |
| ◑ | ◑ | ◑ | U1 | Reversed or lost phase |
| ◑ | ◑ | ◑ | U2 | Power voltage error, momentary electrical stoppage |
| ◑ | ◑ | ◑ | U4 | Transmission error between indoor unit/BEV unit and outdoor/BS unit, Transmission error between outdoor unit and BS unit |
| ◑ | ◑ | ◑ | U5 | Transmission error between remote controller and indoor control unit |
| ● | ☼ | ● | U5 | Remote controller board fault or remote controller setting fault |
| ◑ | ◑ | ◑ | U6 | Transmission error between indoor units |
| ◑ | ◑ | ◑ | U7 | Transmission error between outdoor units<br>Transmission error between outdoor unit and ice thermal storage unit |
| ☼ | ● | ◑ | **U7** | Transmission error between outdoor units<br>(cooling/heating batch, low-noise operation) |
| ◑ | ◑ | ● | U8 | Transmission error between master remote controller and slave remote controller (slave remote controller error)<br>Incorrect combination of indoor unit and remote controller within a single system (model) |
| ◑ | ◑ | ◑ | U9 | Transmission error between indoor unit/BEV unit and outdoor unit within a single system<br>Transmission error between BS unit and indoor unit/BEV unit and outdoor unit within a single system |
| ◑ | ◑ | ◑ | UA | Incorrect combination of indoor, BS, and outdoor units within a single system (model, number of units, etc.)<br>Incorrect combination of indoor unit and remote controller (remote controller in question) BS unit connection position fault |
| ☼ | ● | ☼ | **UC** | Central control group numbers overlap |
| ◑ | ◑ | ◑ | UE | Transmission error between indoor unit and central controller |
| ◑ | ◑ | ◑ | UF | Unset system, incorrect settings between BEV unit and indoor unit |
| ◑ | ◑ | ◑ | UH | System fault |

▬ error codes (in outline font) do not display “maintenance” and the system will run, but please check the content of the display and contact your dealer.

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## ■ Setting master remote controller (Fig. 15)

You must set the master remote controller of the operation mode for one of the indoor units, if two or more such indoor units with the remote controller are connected with the outdoor unit where the operation modes such as cool/heat operation and FAN operation can be set by remote controller and central remote controller.

### 1. Preparations

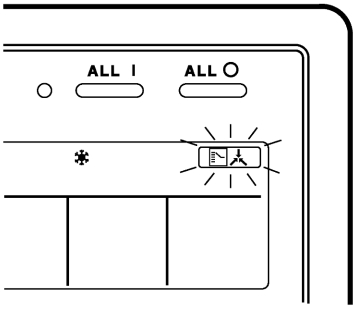
**When you want to fix settings**

- **Check the particular group with the master remote controller setting for the refrigerant system you wish to reset. (See the below.)**
- **Call up the group without the display "[ ]" (See page 16.)**

  **Hold the OPERATION MODE SELECTOR BUTTON down for about four seconds while the above group is being called up.**

  **The display "[ ]" flashes on the liquid crystal display of the remote controller for all the groups sharing the same outdoor unit or BS unit.**

  When you turn on the power switch for the first time, the display"[ ]" flashes.




### 2. Setting selection right

**Pall up the desired group to set the master remote controller, and press the OPERATION MODE SELECTOR BUTTON. The master remote controller is set for this group, and the display "[ ]" goes out. The display "[ ]" appears for the other groups.**

Setting is finished now.

**When switching operation**

**● In case of operation switch**

**Call up the zone including the group with the setting of master remote controller.**

**(Zone without the display "[ ]")**

**Press the OPERATION MODE SELECTOR BUTTON several times, and switch to the desired operation mode.**

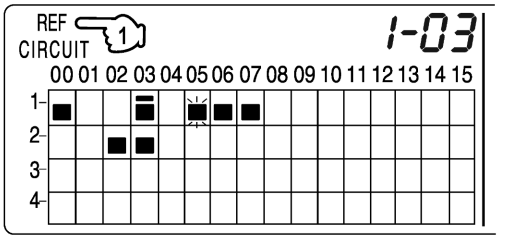
**Each time you press it, the display is switched to " " " " " " and " " in sequence.**

**NOTE**

- However, the displays " " " " and "VENTILATION MODE" may apper in some zones, depending on the type on indoor unit with which they are connected.
  (VENTILATION MODE)
  or or

**[System Display]**

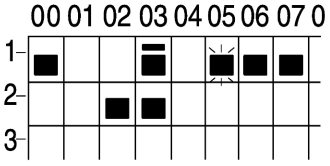
1. Test run mode is necessary to display the system display.
2. In order to turn on test run mode, select the appropriate air conditioner on the individual screen with the cursor and then set its operation mode to either cooling or heating. (It makes no difference if the air conditioner is running or not running while this operator is being performed.)
3. Press the "inspection/test run" button twice to put it into test run mode.
4. Pressing the "inspection/test run" button for four or more seconds in test run mode will display the "REF CIRCUIT."



Call the unit whose system you wish to look up using the arrow keys.

The " ▣ " on all groups in the same system as the displayed group will light up.

Of those, the " ▣ " display in all groups which have cooling/heating selection privilege will blink.




**In this example, individual units 1-00, 1-03, 1-05, 1-06, 1-07, 2-02, and 2-03 are in the same system, and 1-05 has the cooling/heating selection privilege.**

To look up other systems, call up all the units you wish to look up using the arrow keys.

Pressing the inspection/test run button one more time gets rid of the system display and ends it.

The unit will enter the individual screen automatically if nothing is done for one minute in the system display screen.

This function may not be available for all connected outdoor units, in which case "REF CIRCUIT" will blink. It will also not be correctly displayed if DIII-NET extension ADP is used.

### ■ Display of time to clean (Fig. 16)

This central remote controller displays the time to clean the air filter or air cleaner element for each group or any given group by utilizing two types of signs. The display " 🧽/🔧 " tells the time to clean the air filter or the air cleaner element of some group.

**If a cleaning sign is displayed**

A filter or element in some group is ready to be cleaned.

**1. ☞1 Press the ARROW KEY BUTTON, and search the groups displaying " 🧽 " or " 🔧 " (The group may be plural.)**

**Clean or change the air filter or air cleaner element.**

For further details, see the operation manual attached to each indoor unit. (Clean or change the air filter or air cleaner element of all the groups displaying " 🧽 " or " 🔧 ".)

**2. ☞2 Press the FILTER SIGN RESET BUTTON, and the display " 🧽/🔧 " disappears. (Including all the groups where the air filter has been cleaned.)**

**NOTE**

Be sure to check the display ☞3 " 🧽/🔧 " has disappeared at this point. The appearance of the above display is a sign that the air filter or air cleaner element of some group still needs cleaning.

# INSTALLATION TABLE

When installing the equipment, mark the zone No. of each group and installation location in the below table.

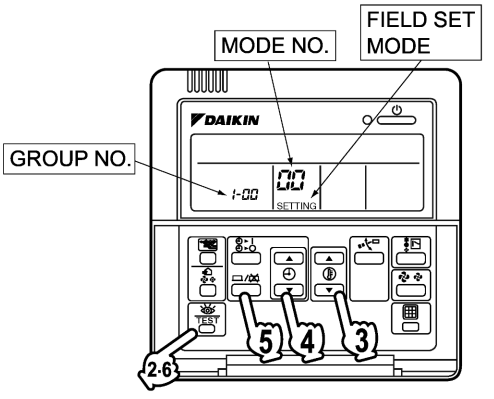
**Setting group No.**
(Setting is not possible unless power is activated to both the central remote controller and indoor unit.)

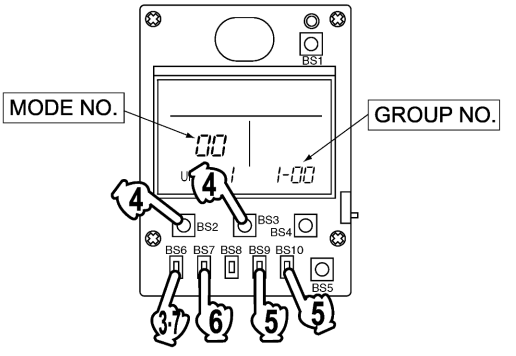
**Operated by remote controller**

1. Activate power to both the central remote controller and indoor unit.
2. While in the normal mode, hold down the "TEST" button for a minimum of 4 seconds. The unified ON/OFF controller will enter the FIELD SET MODE.
3. Select the MODE No. "00" with the "▲▼" button.
4. Use the "▲▼" button to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
5. Press "SET" to set the selected group No.
6. Press "TEST" to return to the NORMAL MODE.

**Operated by simplified remote controller**

1. Activate power to both the central remote controller and indoor unit.
2. Remove the upper part of the remote controller.
3. Press the BS6 BUTTON (field set) on the PC board. The controller will enter the FIELD SET MODE.
4. Select the MODE No. "00" with the BS2 BUTTON and BS3 BUTTON (temperature setting).
5. Use the BS9 BUTTON (set A) and BS10 BUTTON (set B) to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
6. Press BS7 BUTTON (set/cancel) to set the selected group No.
7. Press BS6 BUTTON (field set) to return to the NORMAL MODE.

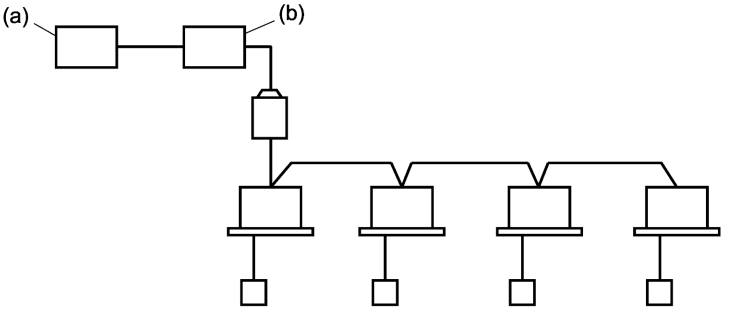



| Zone No. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |
| Zone No. | | | | | | | | | | | | | | | | |
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |

| Zone No. | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |
| Zone No. | | | | | | | | | | | | | | | | |
| Group No. | –00 | –01 | –02 | –03 | –04 | –05 | –06 | –07 | –08 | –09 | –10 | –11 | –12 | –13 | –14 | –15 |
| Indoor unit Quantity of units Controlled by | | | | | | | | | | | | | | | | |
| Location | | | | | | | | | | | | | | | | |

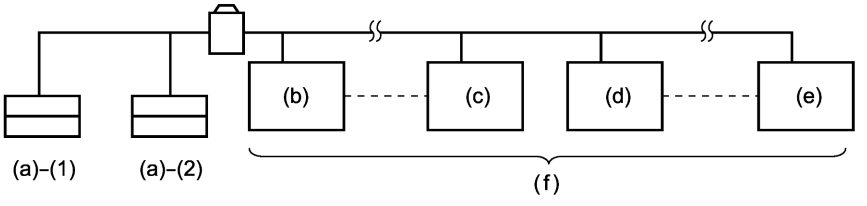
## OPTIONAL ACCESSORIES




You can perform the normal operation, take off the malfunction contact point and unified start/stop by contact point, all by connecting this unit with the unification adaptor for computerized control. For further details, ask your DAIKIN dealer.

(a) Unification adaptor for computerized control (b) Central remote controller

## DOUBLE CENTRAL REMOTE CONTROLLERS




With two central remote controllers, centralized control (indoor units) is possible from different locations.

(a) Central remote controller (b) Group No. 1 – 00 (c) Group No. 1 – 15 (d) Group No. 2 – 00
(e) Group No. 4 – 15 (f) A maximum of 64 groups

Note)

- For control alignment and settings for double central remote controllers, contact your dealer.

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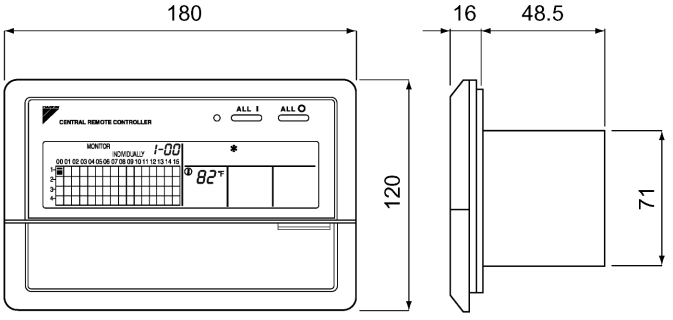
# SPECIFICATIONS

## ■ Specifications

| | |
|---|---|
| Power supply | 1 ~ 50/60Hz, 100V – 240V |
| Power consumption | Max. 8W |
| Forced ON/OFF input | Continuous “a” contact<br>Contact current: approximately 10mA |
| Size | 180 (W) × 120 (H) × 64.5 (D) |
| Weight | 420g |

## ■ Outline drawings




When using this unit an electric parts box of KJB311A is required.
For installation, a steel electric parts box to be embedded is mandatory.

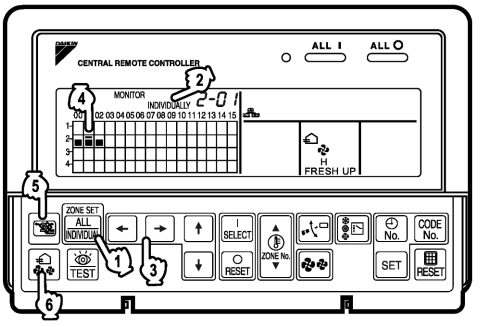



Fig. 9

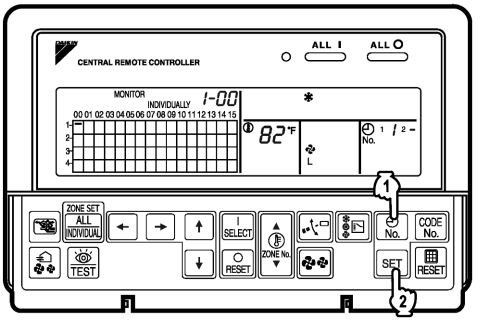



Fig. 10

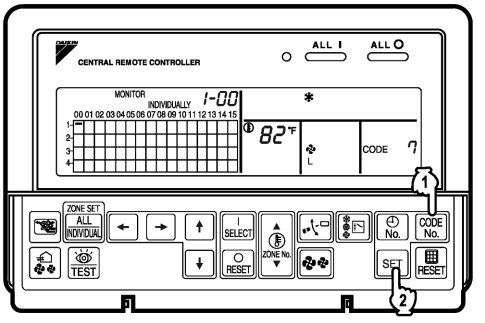



Fig. 11

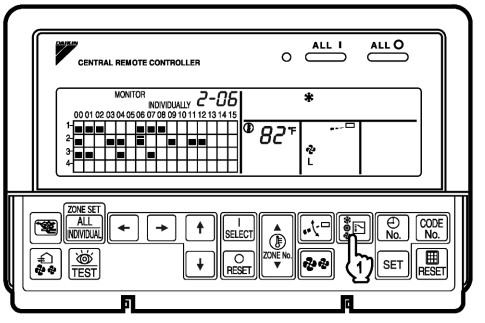



Fig. 12

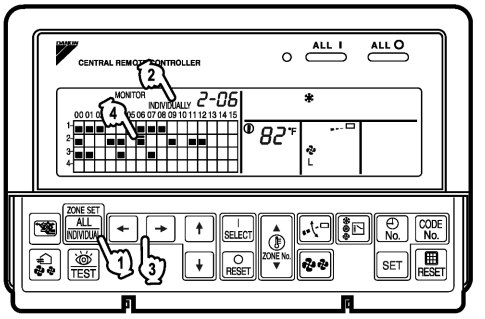



Fig. 13

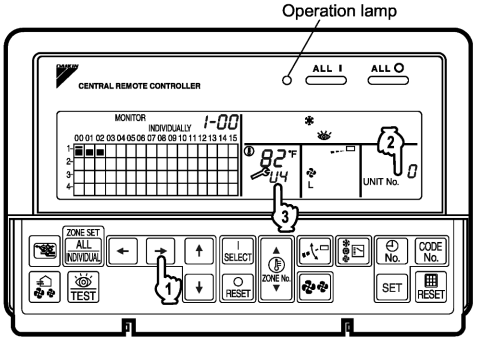



Fig. 14

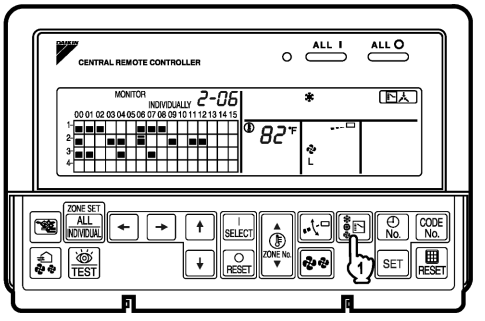



Fig. 15

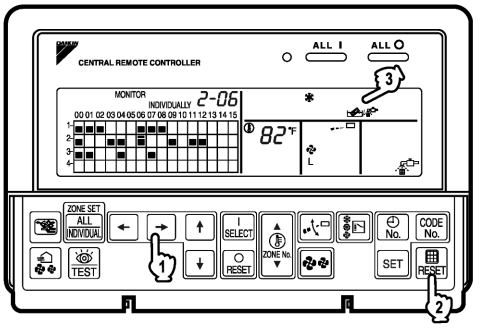



Fig. 16



3P124623-1E

# 14.4 <DCS301C71> Unified ON/OFF Controller

## 14.4.1 Installation Manual

Please read these “SAFETY CONSIDERATIONS” carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term “appliances not accessible to the general public”.

Meaning of warning, caution and note symbols.

⚠ **WARNING....** Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION.....** Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
⚠ **NOTE.....** Indication situation that may result in equipment or property-damage-only accidents.

### ⚠ WARNING

**Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
Improper installation may result in water leakage, electric shocks or fire.

**Perform installation work in accordance with this installation manual.**
Improper installation may result in water leakage, electric shocks or fire.

**Be sure to use only the specified accessories and parts for installation work.**
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

**Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
Improper installation work may result in the equipment falling and causing accidents.

**Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

**Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
Improper connections or installation may result in fire.

**When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

**Before touching electrical parts, turn off the unit.**

**Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
Incomplete grounding may result in electric shocks.

**When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.**

**Do not reconstruct or change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**Install an leak circuit breaker, as required.**
If an leak circuit breaker is not installed, electric shock may result.

**Do not install the air conditioner or the remote controller in the following locations:**
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

### ⚠ CAUTION

**Be very careful about product transportation.**

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

### ⚠ NOTE

**Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

**Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. (inverter or rapid start types)**
Install the indoor unit as far away from fluorescent lamps as possible.

**This unit is a class A product.**
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

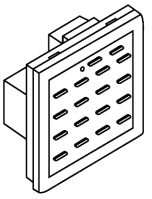
**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

## 1 COMPONENTS

Check the following components are included in this optional accessory before installation.

| | |
|---|---|
| Installation screw (M4 x 16) | 2 |
| Operation manual | 1 |
| Installation manual | 4 |
| Installation table | 4 |
| Switch display sticker | 1 |

Body

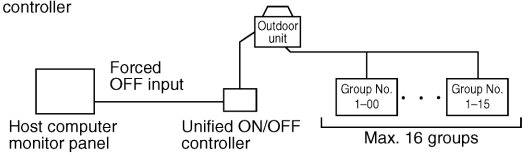


When using this optional accessory an electric parts box of KJB212A is required.
For installation, a steel electric parts box to be embedded is mondatory.

## 2 SYSTEM CONFIGURATION

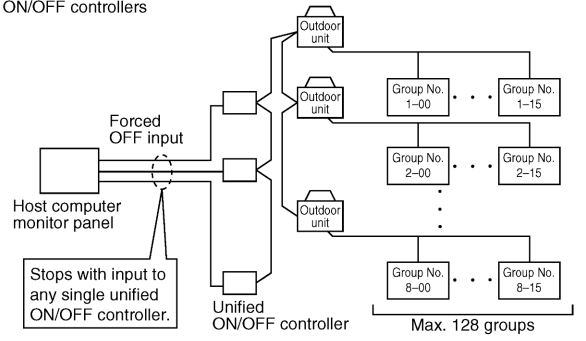
This unified ON/OFF controller enables individual and unified operation/stop for a maximum of 16 groups of indoor units.
With 2 to 8 unified ON/OFF controllers, individual and unified control is possible with up to a maximum 128 groups of indoor units.

● When using 1unified ON/OFF controller



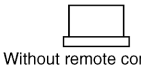

(This optional accessory can not be used in conjunction with wiring adapter for electrical appendices (optional accessory).)

● When using 2 to 8 unified ON/OFF controllers

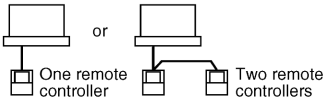



The goups of indoor units are as follows:

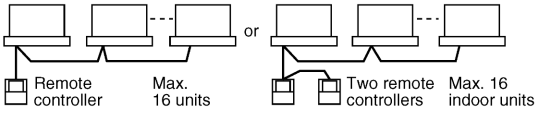
1 One indoor unit without remote controller




2 One indoor unit controlled by one or two remote controllers




3 A maximum of 16 indoor units controlled in groups by one or two remote controllers



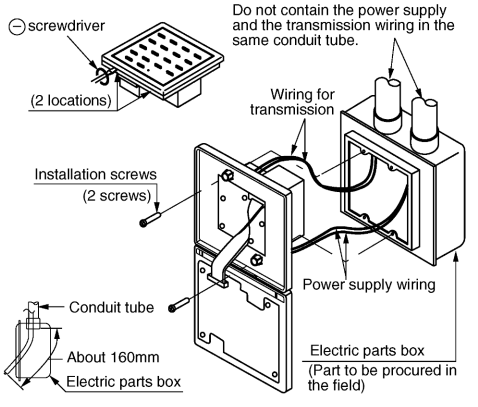

## 3 INSTALLATION

1 Open the upper part of remote controller.
Insert a ⊖ screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

PC board is attached with both the upper and lower part of remote controller.
Do not damage the board with the screwdriver.

2 Open the upper part of remote controller and install the electric parts box (part to be procured in the field) with the attached installation screws (M4 x 16).

NOTE) Suitable length of the electric wire is about 160mm from the inlet of the electric parts box. If it is difficult to contain a long wiring, strip the sheathed part of the wiring.



## 4 INITIAL SETTING

Setting ① through ③ are initialized when power is turned ON, therefore complete settings BEFORE activating the power.

1 Connector for setting master controller (X1A) (Provided with connector at factory set)
- When using 1 unified ON/OFF controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple unified ON/OFF controllers, or using the unified ON/OFF controller in conjunction with other optional controllers for centralized control, makes settings as indicated in the right table.

| Pattern of connection of optional controllers for centralized control | | | Connector for setting master controller (X1A) Settings | | |
|---|---|---|---|---|---|
| Unified ON/OFF controller | Central remote controller | Schedule timer | Unified ON/OFF controller | Central remote controller | Schedule timer |
| 1 to 16 | | | Set one to "Used" and all the rest to "Not used". | | |
| | 1 to 4 | | Set all to "Not used". | (Note) | |
| | | 1 | Set one to "Used" and all the rest to "Not used". | | "Not used" |
| | 1 to 4 | 1 | Set all to "Not used". | (Note) | "Not used" |

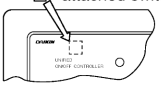
(Note) For instructions on how to set the connector for setting master controller on the central remote controller, see the installation manual provided with the central remote controller.

2 Switch for setting each address (DS1)
These switches are used to set group control address.
Groups Nos. 1–00 through 1–15 are grouped in the same control group when the unit is shipped from the factory.

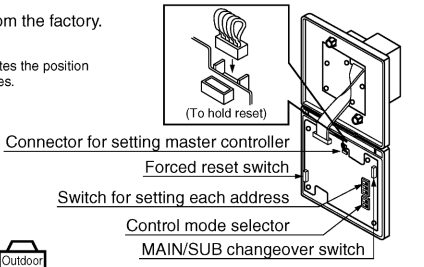
| Each Address | 1-00 ~ 1-15 | 2-00 ~ 2-15 | 3-00 ~ 3-15 | 4-00 ~ 4-15 | 5-00 ~ 5-15 | 6-00 ~ 6-15 | 7-00 ~ 7-15 | 8-00 ~ 8-15 |
|---|---|---|---|---|---|---|---|---|
| DS1 setting | DS1 ON 1 2 3 Set each address (Factory setting) | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address | DS1 ON 1 2 3 Set each address |

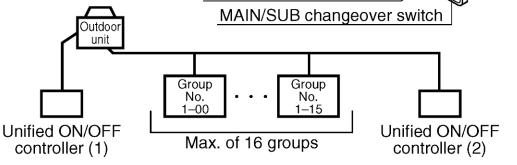
NOTE) ■ indicates the position of switches.

After setting, attach the number seal applicable to respective control range of the attached switch display sticker, as shown in the diagram below.



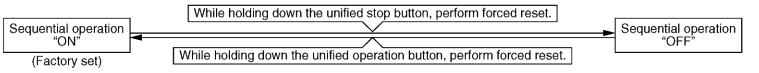
(Example)
In the case of 1-00 to 1-15, attach 1 .




3 MAIN/SUB changeover switch setting
With two unified ON/OFF controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.
One of the two unified ON/OFF controllers (1)·(2) is set to "MAIN" while the other is set to "SUB".

4 Setting of the sequential operation function
The unified ON/OFF controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to "ON.")
To switch sequential operation ON or OFF, set as follows.



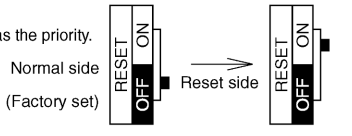

NOTE: The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

5 Control mode selector (DS2)
The following four patterns of control mode can be set.

| Control mode | Individual | Centralized | Timer operation possible by remote controller | ON/OFF control impossible by remote controller |
|---|---|---|---|---|
| Content | Operation/stop is controlled by both unified ON/OFF controller and remote controller. | After operated by unified ON/OFF controller, operation/stop is freely controlled by remote controller until stopped by unified ON/OFF controller. | When used in conjunction with schedule timer, operation/stop is controlled freely by remote controller during the set time but operation is not available when schedule timer is ON. | Operation/stop is controlled by unified ON/OFF controller only. (This unit can not be operated/stopped by remote controller.) |
| DS2 setting | (Factory set) DS2 ON 1 2 CONTROL MODE | DS2 ON 1 2 CONTROL MODE | DS2 ON 1 2 CONTROL MODE | DS2 ON 1 2 CONTROL MODE |

NOTES) • ■ indicates the position of switches.
- Set control mode before turning power supply ON.
- When used in conjunction with central remote controller, the control modes of the central remote controller has the priority.

6 Forced reset switch (SS1)
When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)

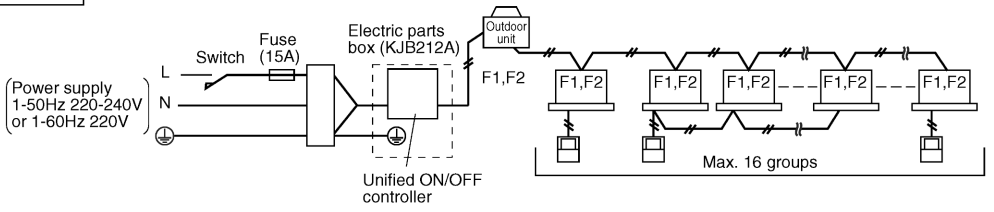


# 5 ELECTRIC WIRING

## GENERAL INSTRUCTIONS

- All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- Use copper conductors only.
- All field wiring and components must be provided by licensed electrician.
- Unit shall be grounded in compliance with the applicable local and national codes.
- Fit the power supply wiring with a fuse and a switch.
- After wiring work, check power to the equipment shuts OFF when switch is shut OFF.

## WIRING OUTLINE



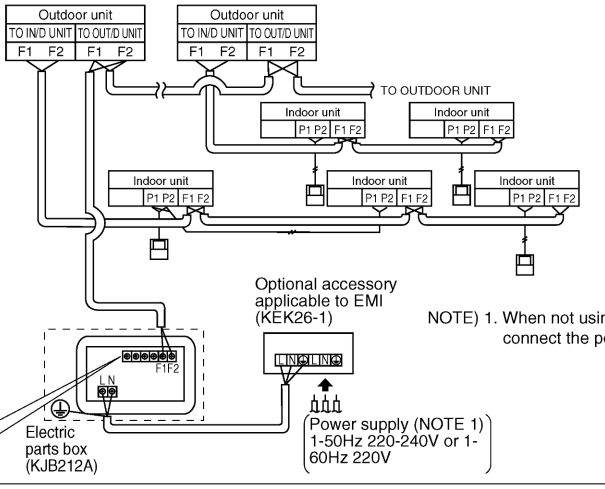

**Wiring specification**

| | Type | Size |
|---|---|---|
| Power supply wiring | H05VV-U3G | (NOTE 1) |
| Transmission wiring | Sheathed wire (2 wire) (NOTE 2) | 0.75 – 1.25mm² |

NOTES) 1. The size of power supply wiring must comply with the applicable national and local codes.
2. Allowable length of transmission wiring is as follows.
Max. 1000m (Total wiring length: 2000m)

Connect the wiring between indoor and outdoor units, indoor/outdoor units and power supply, and indoor units and remote controllers.
For details, refer to the installation manuals of indoor and outdoor units.

## WIRING TO THE INDOOR UNIT AND OUTDOOR UNIT

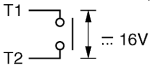



NOTE) 1. When not using the optional accessory applicable to EMI (KEK26-1), connect the power supply wiring directly to the unified ON/OFF controller.

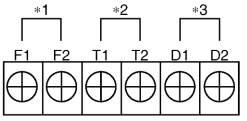
CONTROL TERMINAL STRIP

∗1 For connecting indoor unit (F1, F2)

∗2 Forced OFF input (T1, T2)
While the forced OFF input (no voltage contactor, for micro current) is ON (energized), all the connected indoor units are stopped and can not be operated.
Use only contactors which guarantee the minimum applicable load ⎓ 16V, 10mA.




NOTE) Use instantaneous contactor of over 200msec. energizing time, when necessary.




∗3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301B51•61 optional accessory). For details, refer to the installation manual of the schedule timer.
Wire ∗2 and ∗3 only when necessary.

(NOTE)
Do not connect the power supply wiring (220 to 240V) to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

## 6 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

1 Turn ON the power of the indoor unit and unified ON/OFF controller. (Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of " " flashing (an interval of ON, ON, and OFF).

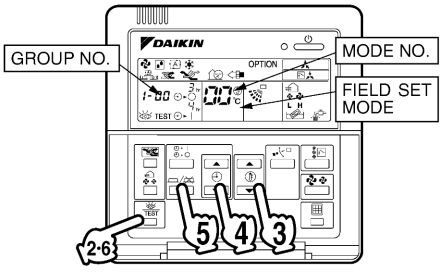
2 While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.

3 Select the MODE No. " 00 " with the " " button.

4 Use the " " button to select the group No. for each group.
(Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 8-15.)

5 Press " " to set the selected group No.

6 Press " TEST " to return to the NORMAL MODE.




NOTES) • For simplified remote controller, see the installation table.
• For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE Enter the group No. and installation place of the indoor unit into the attached installation table.
Be sure to keep the installation table with the operation manual for maintenance.

## 7 CONFIRMING OPERATION

Before starting test operation, supply power to the indoor units, outdoor units, and unified ON/OFF controller and press the ON/OFF BUTTON.
If the operation lamp flashes, it indicates a malfunction in the indoor unit of the applicable group.
If the display of " " flashes, it indicates a malfunction in the optional controllers for centralized control. Check for such malfunctions.

NOTES
- For test operation of indoor and outdoor units, refer to the installation manual attached with the outdoor unit.
- After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of " " flashing, check the following points.
  • Check that setting of the connector for setting master controller is correct.
  • Check that the group No. for centralized control has been set.

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## 14.4.2 Operation Manual

Please read these “SAFETY CONSIDERATIONS” carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term “appliances not accessible to the general public”

Meaning of warning, caution and note symbols.

⚠ **WARNING** ..... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION** ..... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

### ⚠ WARNING

**In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.**

**Ask your dealer for installation of the air conditioner.**
Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.

**Ask your dealer for improvement, repair, and maintenance.**
Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

**Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment.**
**Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**

**Ask your dealer to move and reinstall the air conditioner or the remote controller.**
Incomplete installation may result in a water leakage, electric shock, and fire.

**Never let the indoor unit or the remote controller get wet.**
It may cause an electric shock or a fire.

**Never use flammable spray such as hair spray, lacquer or paint near the unit.**
It may cause a fire.

**Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
Use of wire or copper wire may cause the unit to break down or cause a fire.

**Never inspect or service the unit by yourself.**
Ask a qualified service person to perform this work.

**Cut off all electric waves before maintenance.**

**Do not wash the air conditioner or the remote controller with excessive water.**
Electric shock or fire may result.

**Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.**
If the gas leaks out and stays around the air conditioner, a fire may break out.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

### ⚠ CAUTION

**After a long use, check the unit stand and fitting for damage.**
If they are left in a damaged condition, the unit may fall and result in injury.

**Do not allow a child to mount on the unit or avoid placing any object on it.**
Falling or tumbling may result in injury.

**Do not let children play on and around the unit.**
If they touch the unit carelessly, it may result in injury.

**Do not place a flower vase and anything containing water.**
Water may enter the unit, causing an electric shock or fire.

**Never touch the internal parts of the controller.**
Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen.
For checking and adjusting the internal parts, contact your dealer.

**Avoid placing the controller in a spot splashed with water.**
Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

**Do not operate the air conditioner when using a room fumigation - type insecticide.**
Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

**The appliance is not intended for use by young children or infirm persons without supervision.**

**The remote controller should be installed in such away that children cannot play with it.**

### ⚠ NOTE

**Never press the button of the remote controller with a hard, pointed object.**
The remote controller may be damaged.

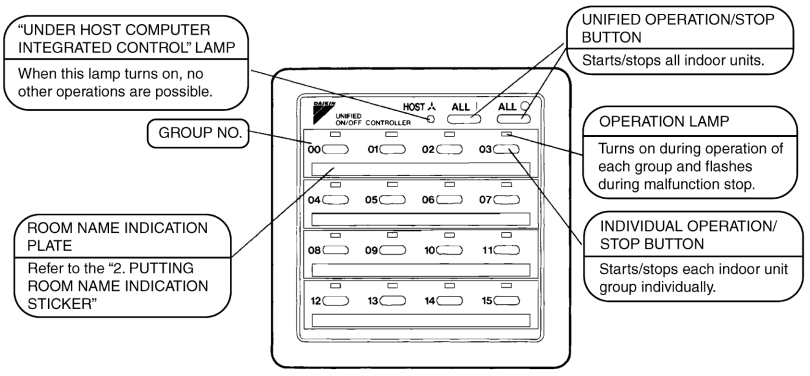
**Never pull or twist the electric wire of the remote controller.**
It may cause the unit to malfunction.

**Do not place the controller exposed to direct sunlight.**
The LCD display may get discolored, failing to display the data.

**Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

## 1 NAMES AND FUNCTIONS



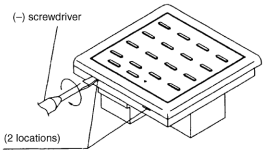

〈〈**NOTE**〉〉

- When using unified ON/OFF controller with other optional controllers for centralized control, "OPERATION LAMP" of the equipment which is not operated may turn on or off after several minutes.
  This state occurs due to signal communications and is not a failure.
- Do not open the upper part of remote controller except when rewriting the indication sticker or selecting control modes.

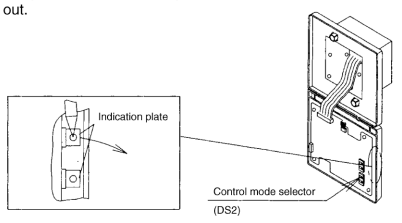
## 2 PUTTING ROOM NAME INDICATION STICKER

① Open the upper part of remote controller.
Insert a (–) screwdriver into the recess between the upper and lower part of remote controller (at 2 locations) and twist the screwdriver lightly.

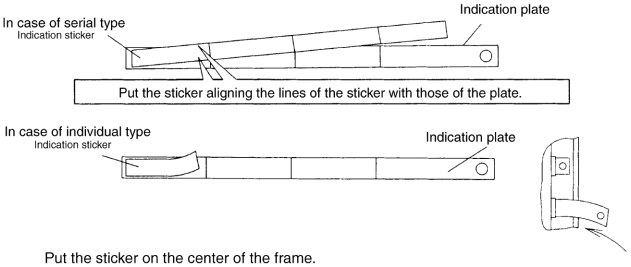
PC board is attached both the upper and lower part of remote controller. Do not damage the board with the screwdriver.




② Pull out the room name indication plate.
Insert the point of a mechanical pencil etc, into the hole of the indication sticker to pull it out.




③ Put the attached indication sticker on the room name indication plate.



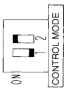
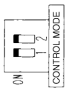

Put the sticker on the center of the frame.
Write the room name in the frame of the sticker with a ball point pen or a felt-tip pen (oil-base).

④ Reinstall the plate as it were, with checking the correct direction.

⑤ Close the upper part of remote controller.

## 3 SELECTING CONTROL MODES

The following four patterns of control mode can be set.

| Control mode | Individual | Centralized | Timer operation possible by remote controller | ON/OFF control impossible by remote controller |
|---|---|---|---|---|
| Content | Operation/stop is controlled by both unified ON/OFF controller and remote controller. | After operated by unified ON/OFF controller,operation/stop is freely controlled by remote controller until stopped by unified ON/OFF controller. | When used in conjunction with schedule timer, operation/stop is controlled freely by remote controller during the set time but operation is not available when schedule timer is ON. | Operation/stop is controlled by unified ON/OFF controller only. Indoor units can not be operated/ stopped by remote controller. |
| DS2 setting |  |  |  |  |



NOTE: • ■ indicates the position of switches.
• Set control modes before turning power supply on.
• When used in conjunction with central remote controller, the control modes of the central remote controller has the priority.

## 4 DISPLAY OF MALFUNCTION

Flashing of lamps indicates malfunctions. Contact your Daikin dealer.
When turning power supply on, all lamps may light and UNDER HOST COMPUTER INTEGRATED CONTROL lamp may flash and not accept the operation for about on minute. These conditions are not malfunctions.

| States of lamps | Contents of malfunctions |
|---|---|
| Flashing of operation lamp | Indicates malfunctions in the indoor unit in the group where the operation lamp is flashing. |
| Flashing of UNDER HOST COMPUTER INTEGRATED CONTROL lamp | Indicates malfunctions in optional controllers for centralized control. |

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## 14.5 <DST301BA61> Schedule Timer Controller

Enables you to connect and control weekly schedule for up to 128 indoor units all together.


- Simultaneous control of up to 128 indoor units is managed by a week schedule.
- The start and stop time for twice a day can be set for the week in increments of 1 minute.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- If used together with a central remote controller, you can set up to 8 schedule patterns which can be distributed among zones as desired using the central remote controller.
- Is equipped with a compensation function for power failure up to 48 hours.
- Features thin design of a mere 16 mm in thickness. (Uses JIS recessed box for 2.)
- Wiring can be up to 1 km in length. Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

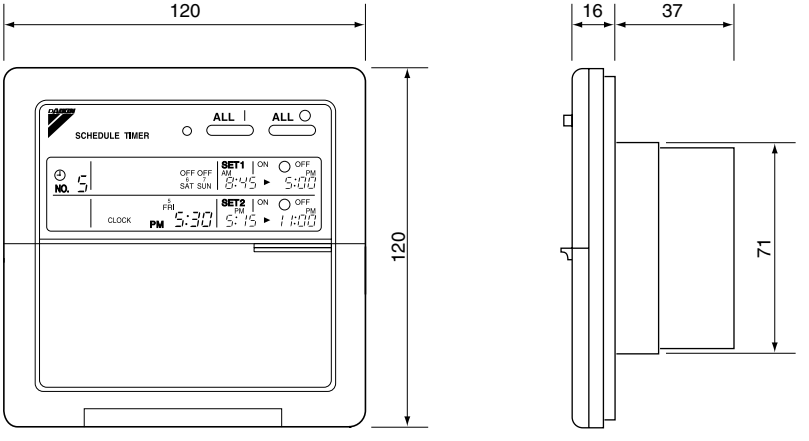
### 14.5.1 Specifications / Dimensions

## SPECIFICATIONS

**■ Specifications**

| | |
|---|---|
| Display of time | 12-hour digital display |
| Clock cycle type | Quartz clock type |
| Clock accuracy | Within ±30 sec./month (environmental temperature from 15˚C to 35˚C) |
| Timer programming | Two pairs of programmed time for both system start and system off can be set in units of minute for each day of the week |
| Power failure compensation time | Approximately 48 hours for a single occurrence of power failure (clock with No. of programmed time) |
| Size | 120 (W) × 120 (H) × 53 (D) mm (Width/Height/Depth) |
| Weight | Approximately 210g |

**■ Outline drawings**




Specifications and appearance subject to change without notice.

## 14.5.2 Installation Manual

Please read these “SAFETY CONSIDERATIONS” carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term “appliances not accessible to the general public”.

Meaning of warning, caution and note symbols.

⚠ **WARNING** .....Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ **CAUTION** .....Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
⚠ **NOTE** ..... Indication situation that may result in equipment or property-damage-only accidents.

### ⚠ WARNING

**Ask your dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself.**
Improper installation may result in water leakage, electric shocks or fire.

**Perform installation work in accordance with this installation manual.**
Improper installation may result in water leakage, electric shocks or fire.

**Be sure to use only the specified accessories and parts for installation work.**
Failure to use the specified parts may result in water leakage, electric shocks, fire or the unit falling.

**Carry out the specified installation work after taking into account strong winds, typhoons or earthquakes.**
Improper installation work may result in the equipment falling and causing accidents.

**Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local laws and regulations and this installation manual.**
An insufficient power supply capacity or improper electrical construction may lead to electric shocks or fire.

**Make sure that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.**
Improper connections or installation may result in fire.

**When wiring the power supply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid can be securely fastened.**
Improper positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.

**Before touching electrical parts, turn off the unit.**

**Ground the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.**
Incomplete grounding may result in electric shocks.

**When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R410A), such as air.**

**Do not reconstruct or change the settings of the protection devices.**
If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may result.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**Install an earth leak circuit breaker, as required.**
If an earth leak circuit breaker is not installed, electric shock may result.

**Do not install the air conditioner or the remote controller in the following locations:**
(a) where a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen
Plastic parts may deteriorate and fall off or result in water leakage.
(b) where corrosive gas, such as sulfurous acid gas, is produced
Corroding copper pipes or soldered parts may result in refrigerant leakage.
(c) near machinery emitting electromagnetic waves
Electromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or gasoline are handled.
Operating the unit in such conditions may result in fire.

**CISPR 22 Class A Warning.**
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## ⚠ CAUTION

**Be very careful about product transportation.**

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

## ⚠ NOTE

**Install the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image interference or noise.**
(Depending on the radio waves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)

**Remote controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps. (inverter or rapid start types)**
Install the indoor unit as far away from fluorescent lamps as possible.

**This unit is a class A product.**
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# 1 ACCESSORIES

Check the following accessories are included in the kit before installation.

| | | | |
|---|---|---|---|
| Body | 1 | Installation screws (M4 × 16) | 2 |
| Operation manual | 1 | Attached electric wire (for individual use) | 1 |
| Installation manual* | 4 | Crimp style terminal (for individual use) | 2 |

For Installation, a electrical box to be embedded is necessary (part to be procured in the field/with covers).

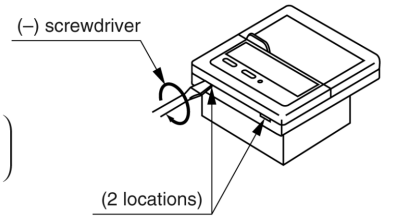
* DST301BA61 includes only one installation manual.

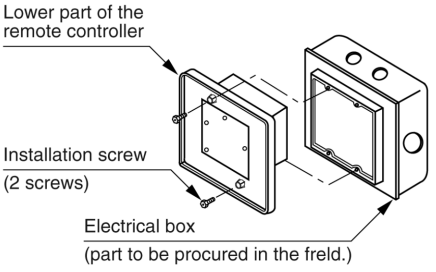
# 2 INSTALLATION AND INITIAL SETTING

**1. Remove the upper part of the remote controller.**

- Insert a (–) screwdriver (2 locations) into the recess between the upper part and the lower part of the remote controller and twist the screwdriver lightly.

  (The PC board is attached with the upper part of the remote controller. Do not damage electric parts with a screwdriver, etc.)




- Attach the lower part to the electrical box (part to be procured in the field) with the provided installation screws.

  (Select a flat face as a installation place. Do not tighten the installation screws excessively not to damage the lower part of the remote controller.)

  For part to be procured in the field electrical box, use KJB212AA (optional accessory).

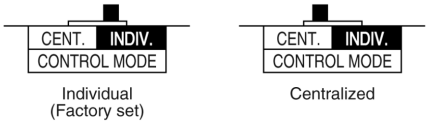
**2. Initial setting**

① Setting connector for individual use (X1A) (Factory set : OFF) (Set for individual use only)

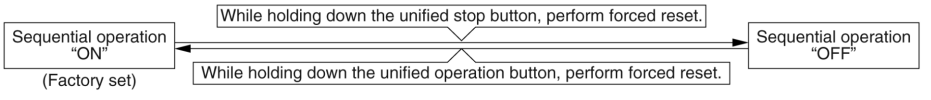
- For individual use of schedule timer
  Insert the connector attached with the body case on the PC board.
- For combined use with other optional controllers for centralized control
  Do not change the factory setting.

② Control mode selector (SS2) (Set for individual use only)
By changing the switch, setting mode of individual and centralized operation is available.

Note) When used with other optional controllers, control mode of central remote controller and unified ON/OFF controller have the priority.

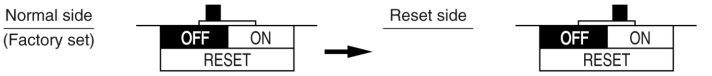


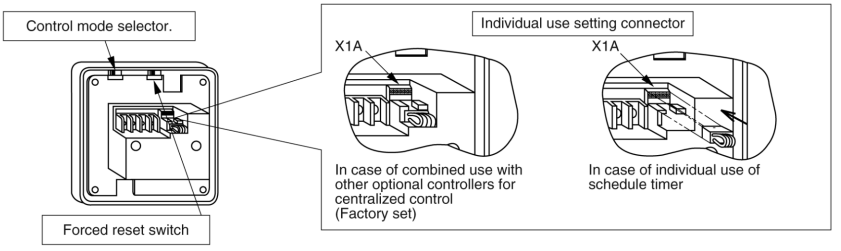

③ Setting of the sequential operation function
The schedule timer is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation.
(Sequential operation is factory set to “ON.”)
To switch sequential operation ON or OFF, set as follows.



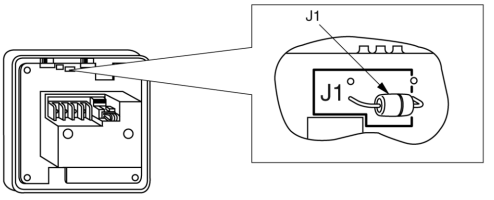

Note) The sequential operation function is designed to reduce the load on the power supply equipment, but does not quarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

④ Forced reset switch (SS1)
When changing the setting of the connector for individual use, etc., the switch can be reset simply by setting it to the reset side once and returning to the normal side. This procedure enables to reset without turning off the power. (Set the normal side at normal operation.)



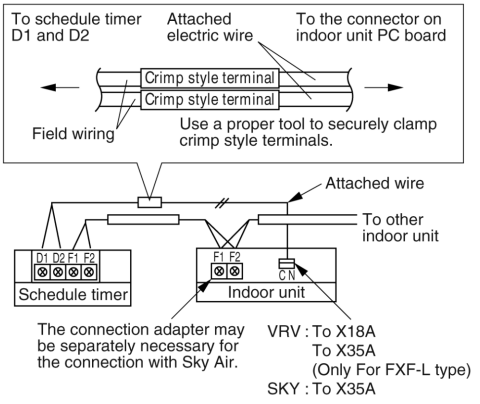




⑤ Setting for special function
When you want to have a programmed operation of a part of indoor units by using only schedule timer, cut off JP1 and supply the power again.
You can have a programmed operation of the indoor units set the address for central control by local remote controller.



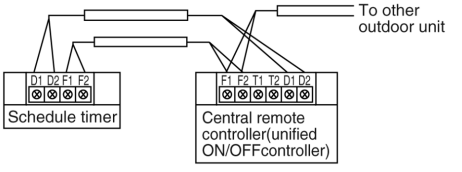

**3. Transmission wiring**

- In case of individual use of schedule timer
  Connect terminals of the schedule timer (F1. F2) with terminals of the indoor unit (F1. F2). Connect terminals of the schedule timer (D1. D2) and the connector on the indoor unit PC board, using the attached electric wire and crimp style terminals.
  Prevent the connection part of crimp style terminal from getting out of the electric parts box of indoor unit.
- In case of combined use with other optional controllers for centralized control
  Connect terminals of the schedule timer (F1, F2, D1, D2) and the terminals of the central remote controller (or unified ON/OFF controller).



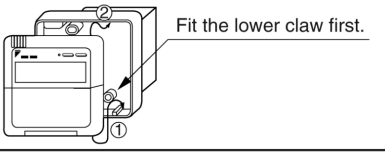

**Wiring specifications**

| | F1, F2 | D1, D2 |
|---|---|---|
| Wiring | Sheathed wire (2-wire) | Sheathed wire (2-wire) |
| Gauge | 0.75 ~ 1.25mm$^2$ | 0.75 ~ 1.25mm$^2$ |
| Length | Max. 1000m | Max. 150m |




**NOTES:**
1. Electrical box and transmission wiring are not attached.
2. Do not touch the PC board with your hand.
3. Keep transmission wiring at least 50 mm away from power supply wiring to avoid malfunctions.

**4. Install the upper part of the remote controller as before.**



## 3 SETTING GROUP NO. FOR CENTRALIZED CONTROL

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

(1) Turn ON the power of the indoor unit and SCHEDULE TIMER.
(Unless the power is ON, no setting can be made.)
Check that the installation and electrical wiring are correct before turning the power supply ON.
(When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "88".)

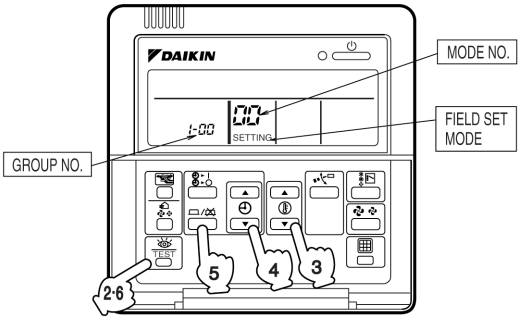
(2) While in the normal mode, hold down the "TEST" button for a minimum of 4 seconds.
The remote controller will enter the FIELD SET MODE.

(3) Select the MODE No. "00" with the "▲▼" button.

(4) Use the "▲▼" button to select the group No. for each group.
(Group numbers increase in the order of 1-00,1-01,···1-15, 2-00,···8-15.)

(5) Press "SET" to set the selected group No.

(6) Press "TEST" to return to the NORMAL MODE.




NOTES)
- In case of individual use of schedule timer
  Group number setting is not necessary. It is automatically set when turning power supply ON.
- See the instruction manuals which came with the Ventiair and adapters (i.e., multi-purpose adapters) for details on their Group No. settings.

NOTICE Be sure to keep the operation manual for maintenance.

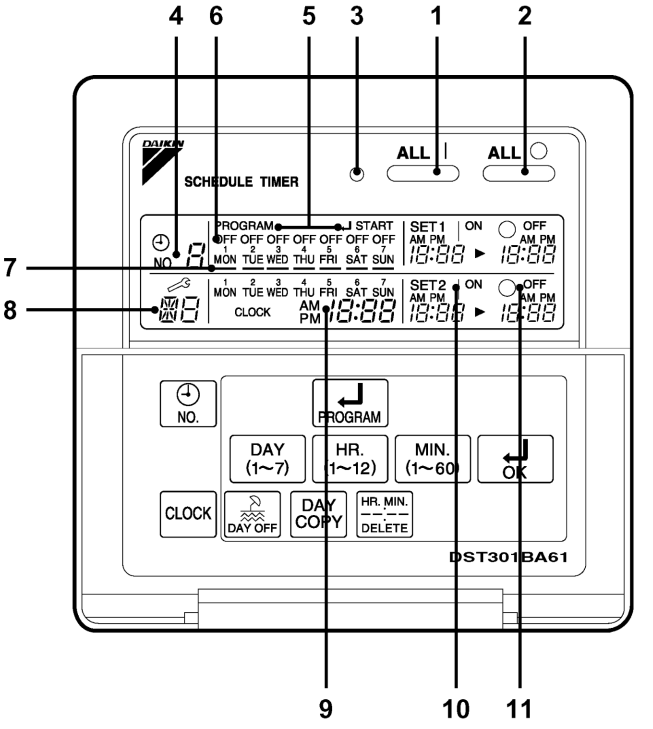
## 4 TEST OPERATION

Refer to the installation manual attached to the outdoor unit.

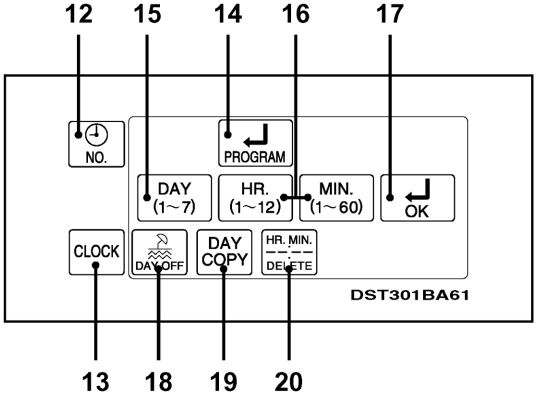
In case the schedule timer is used individually and the wiring is changed after the system has been operated, reset the power after energizing for more than five minutes.
It may not be possible to control the unit from the schedule timer.

3P162015-1A

### 14.5.3 Operation Manual

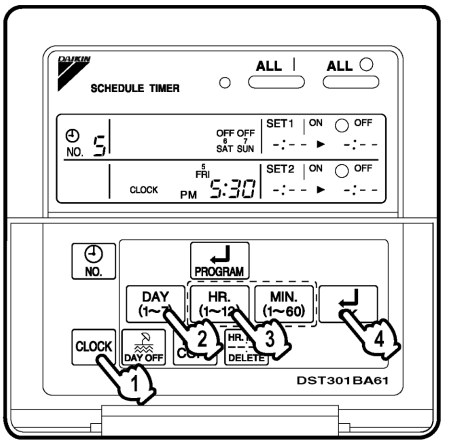



1

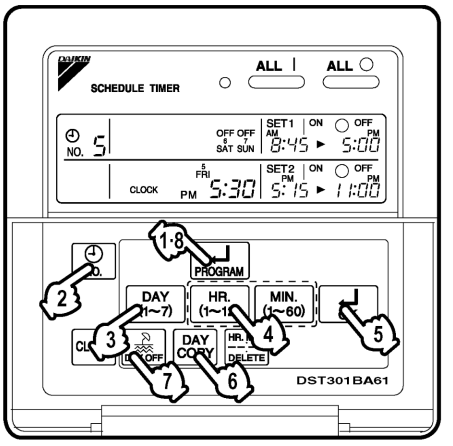



2

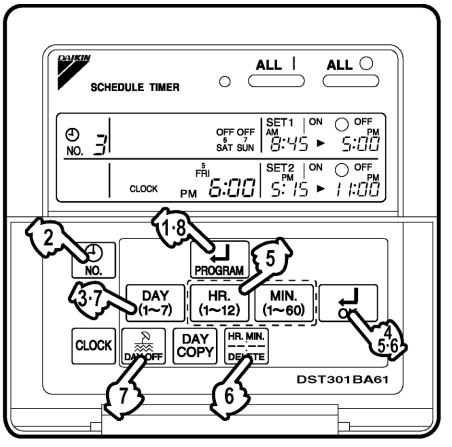
[1]


SCHEDULE TIMER
ALL
ALL
NO.
PROGRAM
DAY (1~7)
HR. (1~12)
MIN. (1~60)
CLOCK
DAY OFF
DAY COPY
HR. MIN. DELETE
DST301BA61

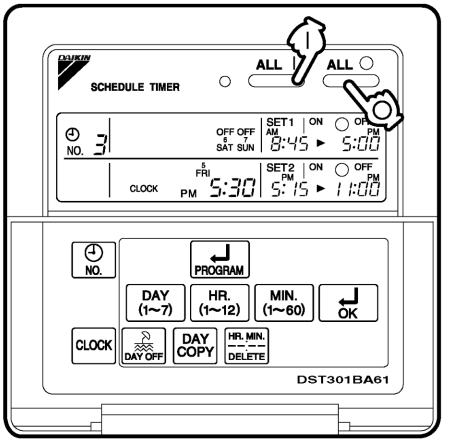
**3**


SCHEDULE TIMER
ALL
ALL
NO.
PROGRAM
DAY (1~7)
HR. (1~12)
MIN. (1~60)
CLOCK
DAY OFF
DAY COPY
HR. MIN. DELETE
DST301BA61

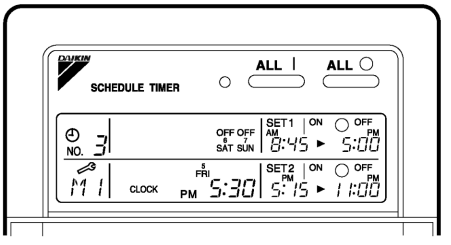
**4**


SCHEDULE TIMER
ALL
ALL
NO.
PROGRAM
DAY (1~7)
HR. (1~12)
MIN. (1~60)
CLOCK
DAY OFF
DAY COPY
HR. MIN. DELETE
DST301BA61

**5**


SCHEDULE TIMER
ALL
ALL
NO.
PROGRAM
DAY (1~7)
HR. (1~12)
MIN. (1~60)
OK
CLOCK
DAY OFF
DAY COPY
HR. MIN. DELETE
DST301BA61

**6**


SCHEDULE TIMER
ALL
ALL
NO.
CLOCK

**7**

[2]

# SAFETY CONSIDERATIONS

Please read these " SAFETY CONSIDERATIONS " carefully before installing air conditioning equipment and be sure to install it correctly.
After completing the installation, make sure that the unit operates properly during the start-up operation.
Please instruct the customer on how to operate the unit and keep it maintained.
Also, inform customers that they should store this installation manual along with the operation manual for future reference.
This air conditioner comes under the term " appliances not accessible to the general public ".

Meaning of warning, caution and note symbols.

⚠ **WARNING**..... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ **CAUTION**..... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

⚠ **NOTE** ..... Indicates situation that may result in equipment or property-damage-only accidents.

**Keep these warning sheets handy so that you can refer to them if needed.**
Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

## ⚠ WARNING

**In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.**

**Ask your dealer for installation of the air conditioner.**
Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.

**Ask your dealer for improvement, repair, and maintenance.**
Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

**Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.**

**Ask your dealer to move and reinstall the air conditioner or the remote controller.**
Incomplete installation may result in a water leakage, electric shock, and fire.

**Never let the indoor unit or the remote controller get wet.**
It may cause an electric shock or a fire.

**Never use flammable spray such as hair spray, lacquer or paint near the unit.**
It may cause a fire.

**Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.**
Use of wire or copper wire may cause the unit to break down or cause a fire.

**Never inspect or service the unit by yourself.**
Ask a qualified service person to perform this work.

**Cut off all electric waves before maintenance.**

**Do not wash the air conditioner or the remote controller with excessive water.**
Electric shock or fire may result.

**Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.**
If the gas leaks out and stays around the air conditioner, a fire may break out.

**Do not touch the switch with wet fingers.**
Touching a switch with wet fingers can cause electric shock.

**CISPR 22 Class A Warning:**
This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

## ⚠ CAUTION

**After a long use, check the unit stand and fitting for damage.**
If they are left in a damaged condition, the unit may fall and result in injury.

**Do not allow a child to mount on the unit or avoid placing any object on it.**
Falling or tumbling may result in injury.

**Do not let children play on and around the unit.**
If they touch the unit carelessly, it may result in injury.

**Do not place a flower vase and anything containing water.**
Water may enter the unit, causing an electric shock or fire.

**Never touch the internal parts of the controller.**
Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen.
For checking and adjusting the internal parts, contact your dealer.

**Avoid placing the controller in a spot splashed with water.**
Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

**Do not operate the air conditioner when using a room fumigation - type insecticide.**
Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

**Safely dispose of the packing materials.**
Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

**Do not turn off the power immediately after stopping operation.**
Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

**The appliance is not intended for use by young children or infirm persons without supervision.**

**The remote controller should be installed in such away that children cannot play with it.**

## ⚠ NOTE

**Never press the button of the remote controller with a hard, pointed object.**
The remote controller may be damaged.

**Never pull or twist the electric wire of the remote controller.**
It may cause the unit to malfunction.

**Do not place the controller exposed to direct sunlight.**
The LCD display may get discolored, failing to display the data.

**Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.**
The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

**Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.**

# CONTENTS



## FEATURES AND FUNCTIONS

■ **Operation controlled by programmed time**
Operating time and stopping time can be set to the minute by each day of the week. The operating and stopping patterns can also be set in schedule according to the time slot given twice a day in tune with the uses.

See page 5—9.

■ **Unified Operation/Stop**
By using this schedule timer, the unified operation/stop of the indoor unit can be executed manually regardless of the No. of programmed time in operation.

See page 9.

- **When used in conjunction with central remote controller (Optional Accessory)**
  The operation controlled by programmed time can be set for up to eight different patterns (timer No. 1 – 8). Each schedule pattern can be also selected.

# NAMES AND FUNCTIONS OF OPERATING SECTION (Fig. 1, 2)

| | |
|---|---|
| 1 | **UNIFIED OPERATION BUTTON “ ALL ”** |
| | Press this button to perform the unified operation regardless of the No. of programmed time. |
| 2 | **UNIFIED STOP BUTTON “ ALL ”** |
| | Press this button to perform the unified stop regardless of the No. of programmed time. |
| 3 | **OPERATION LAMP (RED)** |
| | The light turns on during the operation of the indoor unit. |
| 4 | **DISPLAY “ NO. 8 ” (TIME NO.)** |
| | Displays the time No. only when used in conjunction with the central remote controller. |
| 5 | **DISPLAY “PROGRAM START.” (PROGRAMMING START)** |
| | The light turns on when the timer is programmed. |
| 6 | **DISPLAY “ OFF ” (HOLIDAY SETTING)** |
| | Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day. |
| 7 | **DISPLAY “ — ” (SETTING OF DAYS OF A WEEK)** |
| | Flashes below the day of the week programmed. |
| 8 | **DISPLAY “ ” (MALFUNCTION CODE)** |
| | Displays the contents of malfunction during the stop due to malfunction. |
| 9 | **DISPLAY “ MON TUE WED THU FRI SAT SUN CLOCK AM PM 18:88 ” (PRESENT TIME)** |
| | Displays the present day of the week and time. |
| 10 | **DISPLAY “ AM PM ON 18:88 ” (PROGRAMMED TIME OF SYSTEM START)** |
| | Displays the time programmed to start. |
| 11 | **DISPLAY “ OFF AM PM 18:88 ” (PROGRAMMED TIME OF SYSTEM OFF)** |
| | Displays the time programmed to stop. |
| 12 | **TIME NO. BUTTON “ NO. ”** |
| | See page 5–9. |
| 13 | **CLOCK ADJUSTING BUTTON “ CLOCK ”** |
| | Press this button to set the present time. |
| 14 | **PROGRAMMING START BUTTON “ PROGRAM ”** |
| | Press this button to set or check the No. of programmed time. Press it again after you are through with the program. |
| 15 | **BUTTON FOR SELECTING DAYS OF A WEEK “ DAY (1~7) ”** |
| | Press this button to select the day of the week. |
| 16 | **HOUR/MINUTE BUTTON “ HR. (1~12) MIN. (1~60) ”** |
| | Press this button to adjust the present time and the programmed time. |

| | |
|---|---|
| 17 | **TIMER ON BUTTON “ OK ”** |
| | Press this button to set the present time and the programmed time. |
| 18 | **HOLIDAY SETTING BUTTON “ DAY OFF ”** |
| | Press this button to set holidays. |
| 19 | **BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY “ DAY COPY ”** |
| | Use this button to set the No. of programmed time same as that of the previous day. |
| 20 | **PROGRAM CANCELING BUTTON “ HR. MIN. DELETE ”** |
| | Use this button to set the programmed time to cancel. The display shows “ – ; – – ”. |
| (Note) 1. Please note that all the displays in the figure appear for explanation purpose or when the cover is open. | |

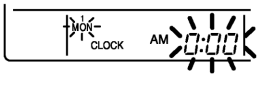
# OPERATION

## ■ Setting present time (Fig. 3)

**(Example) In case of setting Friday, 5:30 p.m.**

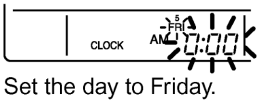
**1. ☞ Press the CLOCK ADJUSTING BUTTON. The present time display flashes.**

(NOTE)
- The present time needs adjusting in case of turning power supply on for the first time or the occurrence of power failure over the period of 48 hours or more.




**2. ☞ Press the BUTTON FOR SELECTING DAYS OF A WEEK. Each time the button is pressed, the day display shifts to the right.**

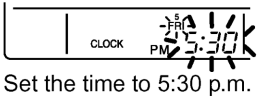
(NOTE)
- The display “ MON ” follows the display “ SUN. ”




Set the day to Friday.

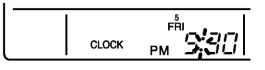
**3. ☞ Set the time with the HOUR/MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.**

(NOTES)
- After becoming “ AM 11:00 ”, when the button is pressed, the display becomes “ PM 0:00 ”.
- After becoming “ 59 ” (minute), when the button is pressed, the display becomes “ 00 ” (minute).




Set the time to 5:30 p.m.

**4. ☞ Press the TIMER ON BUTTON the moment the time signal of TV, radio, telephone, etc. is heard. The mark “ : ” flashes, and the clock starts.**




Press the TIMER ON BUTTON
in tune with the time signal at 5:30 p.m.

(NOTES)
- The clock used is of 12-hour type.
- When you turn power supply on, the system may display “ 88 ” for about one minute and not start to operate after all the liquid crystal displays appear at a time.
- If the CLOCK ADJUSTING BUTTON is pressed by mistake, press it again to return to the original state. As the clock does not stop, the time indicated by the clock is kept correct. In case of power failure within 48 hours, the clock keeps operating by utilizing the built-in battery.

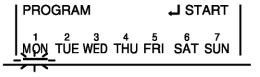
## ■ Setting no. of programmed time (Fig. 4)

**(Example)** **Time No. 5 (to be programmed only when used in conjunction with the central remote controller)**

**Monday to Friday:**
Operating from 8:45 a.m. till 5:00 p.m.
Operating from 5:15 p.m. till 11:00 p.m.

**Saturday and Sunday:**
Setting the whole day stop operation (application for holidays) controlled by programmed time.

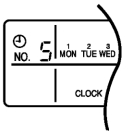
**1. ☞1 Press the PROGRAMMING START BUTTON. Programming is available.**
**The display " PROGRAM ↵START " appears, and the display of days of a week flashes.**




**2. ☞2 Press the TIME No. BUTTON, and select the desired number.**

(NOTE)
- Unless used in conjunction with the central remote controller, The TIME No. is not displayed and can not be selected.

Select the TIME No. 5.




**3. ☞3 Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the proper day of the week. Each time you press it, the flashing display of days of a week shifts to the right.**


Set to Monday.

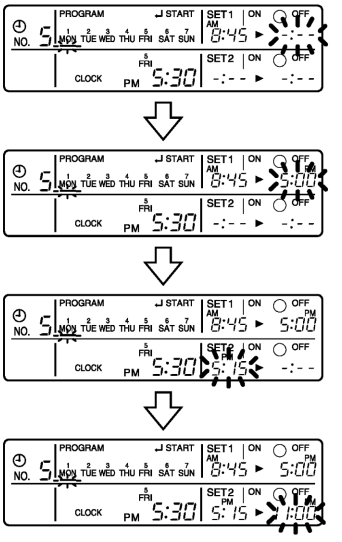
### (1) Setting programmed time

**4. ☞4 Set the programmed time of system start 1 by using the HOUR/ MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.**


Set the "PROGRAMMED TIME OF SYSTEM START 1" at 8:45 a.m.

**5. ☞5 Press the TIMER ON BUTTON, and set the programmed time of system start 1. Each time you press it, the next area to be set flashes.**

(NOTE)
- Set the other programmed time in the same procedure.



**(2) Set the next day of the week.**
Set the day of the week to Tuesday, and copy the program of the previous day (Monday). In the same procedure, set the day of the week to Wednesday through Friday in sequence.

**6. Press the BUTTON FOR SELECTING DAYS OF A WEEK and set the following day. Press the BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY. The same program as that of the immediately preceding day of the week is set.**

(NOTE)
- Repeat each procedure 3 – 5 in the above when not copying the contents of the previous day.

**(3) Holiday setting**

**7. Press the BUTTON FOR SELECTING DAYS OF A WEEK and set one or more days of the week as holiday. Press the HOLIDAY SETTING BUTTON, and the display " OFF " is displayed at the top of the day of the week. If you press it again, the display returns to the original state.**


Set Saturday and Sunday as holidays.

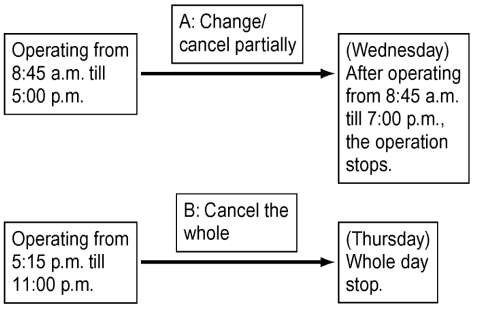
**8. Press the PROGRAMMING START BUTTON, and finish the program setting.**

(NOTES)
- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents up to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- The display " PROGRAM START " and the display of days of a week " — " disappears.
- The flashing display goes off, and the No. of programmed time of the present day is displayed. Then the operation controlled by timer starts.
- The operation controlled by timer is executed even while the program is being set.


This is the end of the setting example.

## ■ Change and cancellation of no. of programmed time (Fig. 5)

**(Example) Time No. 3 (to be set only when used in conjunction with the central remote controller)**

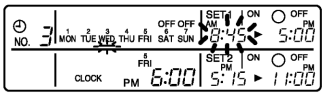



**1. Press the PROGRAMMING START BUTTON. The program setting is ready. The display " PROGRAM START " appears, and the display of days of a week flashes.**

**2. Press the TIME No. BUTTON, and select the desired No.**


Select the time No. 3.

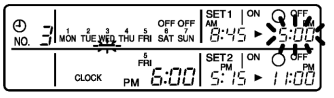
**3. Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the day of the week to be changed. The set No. of programmed time of the day of the week is displayed.**



Set the day to Wednesday.

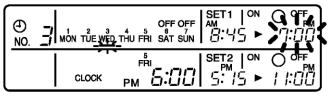
**A. Change/cancel partially**

**4. Press the TIMER ON BUTTON and change, and the display of programmed time flashes. Each time you press it, the next area to be set flashes.**



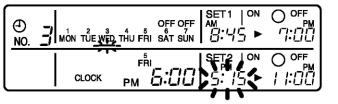
Shift to the display “PROGRAMMED TIME OF SYSTEM OFF 1”.

**5. Press the HOUR/MINUTE BUTTON and change the programmed time. Press the TIMER ON BUTTON, and finalize the setting of change.**

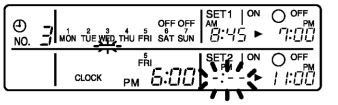


Change the “PROGRAMMED TIME OF SYSTEM OFF 1” to 7:00 p.m.

**6. Press the PROGRAM CANCELING BUTTON, and cancel the programmed time. If you press it again, display returns to the original state. Press the TIMER ON BUTTON to finalize the cancellation.**



Shift to the “PROGRAMMED TIME OF SYSTEM START 2”.

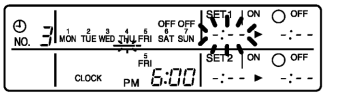


Set the “PROGRAMMED TIME OF SYSTEM START 2” to program cancellation.

In the same procedure, cancel the programmed time of system off 2.

**B. Cancel the whole**

**7. Press the BUTTON FOR SELECTING DAYS OF A WEEK, and shift to the day of the week to be canceled. Then, press the HOLIDAY SETTING BUTTON, the display “ OFF ” appears at the top of the particular day of the week. The programmed time is canceled. If you press the button again, the display returns to the original state.**



Shift the day of the week to Thursday to set as a holiday.

**8. ☞ Press the PROGRAMMING START BUTTON. The program setting is now finished.**

(NOTES)
- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- To continue the change/cancellation, do not press the PROGRAMMING START BUTTON until all change/cancellation are completed.
- The operation controlled by timer is executed even while the program is being set.

## ■ Manual operation (Fig. 6)

This schedule timer enables the operation/stop by pressing the UNIFIED OPERATION/STOP BUTTON in addition to the operation controlled by timer (operation/stop according to the programmed time) at any time.

**1. ☞ Press the UNIFIED OPERATION BUTTON, and the OPERATION LAMP turns on.**

**2. ☞ Press the UNIFIED STOP BUTTON, and the OPERATION LAMP is turned off.**

(NOTES)
- The operation automatically stops according to the programmed time of system off even during the manual operation. In the meantime, the operation starts automatically according to the programmed time of system start even during the stop of operation.
- If the unit is used in conjunction with other optional controllers for centralized control, the OPERATION LAMP of the unit that is not under operation control may be turned on or off a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.

| Operation lamp | |
|---|---|
| ○ Turn on: | The light turns on when any of the indoor units is in operation whether the operation is controlled by timer or by hand. |
| ● Turn off: | The light turns off when all the indoor units stop. |

## ■ Operation control code

Two different types of operation control codes can be selected when this kit is used independently (when not used in conjunction with the central remote controller, unified ON/OFF controller, etc.).

### Individual

In case where the operation/stop is controlled by both schedule timer and remote controller.

### Centralized

The operation is controlled by the schedule timer alone, and the operation/stop is controlled freely with the remote controller during the programmed time.

(NOTES)
- For current settings, contact your DAIKIN dealer.
- To change settings, contact your DAIKIN dealer.
  Do not change settings yourself.

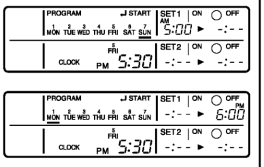
## ■ Error diagnosing function (Fig. 7)

This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there occurs any malfunction in communication, etc. between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there occurs any malfunction in communication with the indoor unit. Check the contents of the display and contact your DAIKIN dealer because the signals give you the idea of the trouble area.

| Operation lamp | Malfunction code | Contents of malfunction |
|---|---|---|
| Turn off | M1 | Failure of PC board of schedule timer.<br>**Fixes**<br>The following causes are possible. Check each one.<br>**1.** PC board problems |
| Turn on or off | M8 | Malfunction of transmission between each optional controllers for centralized control.<br>**Fixes**<br>Check all central devices which are connected (e.g., power supply, transmission wiring, etc.). |
| Turn on or off | MA | Improper combination of optional controllers for centralized control.<br>**Fixes**<br>The following causes are possible. Check each one.<br>**1.** Are all central devices combined correctly?<br>**2.** Is the master central connector attached to two or more central devices?<br>**3.** Are there 128 or more indoor units connected? |
| Turn on or off | MC | Address failure of schedule timer.<br>**Fixes**<br>The following causes are possible. Check each one.<br>**1.** Do the control range addresses in the central remote controller overlap?<br>**2.** Do the control range addresses in the on/off controller overlap?<br>**3.** Are there 2 or more schedule timers connected? |
| Flash | UE | Malfunction of transmission between indoor unit and optional controllers for centralized control.<br>**Fixes**<br>Inspect all indoor units which are displaying an error (e.g., power supply, transmission wiring, etc.). |
| Flash | — | Malfunction in indoor unit (Refer to the malfunction codes of the indoor remote controller, while also read the " CAUTION FOR SERVICING " attached to the indoor unit.) |

# QUESTION AND ANSWER

| Question | Answer |
|---|---|
| It is possible to make settings twice a day, but is it possible to make only the " off " setting? (To avoid forgetting to turn the unit off.) | Yes. Press the PROGRAM CANCELING BUTTON in the " AM PM 10:00 ON " section in order to set it to " OFF ". |

| | |
|---|---|
| Is it possible to set times which straddle days? | Yes, it is possible.<br>Example:<br>Start operation at 5:00 a.m. on Sunday<br>Stop operation at 6:00 p.m. on Monday<br>  <br> |
| The unit does not turn on even though the set “ on ” time has come.<br>(When using the schedule timer alone) | The following causes are possible.<br>**1.** Are the “ on ” time and the “ off ” time set to the same time? |
| The unit does not turn on even though the set “ on ” time has come.<br>(When using the unit with a central remote controller) | The following causes are possible. Check each one.<br>**1.** Was the timer number set with the central remote controller?<br>Was an incorrect timer number set?<br>**2.** Is another timer no. set with the central remote controller set for “ off ” at the same time?<br>**3.** Is the operation code set to “ remote control permission timer ” using the central remote controller or the on/off controller? |
| The unit operates even though that day is set as a holiday.<br>(When using the unit with a central remote controller) | The following causes are possible.<br>**1.** Is another timer number set with the central remote controller set for “ on ” at the same time?<br>(If two timer numbers are set, make sure that the settings for holidays and working days do not overlap between the different timer numbers.) |

| | |
|---|---|
| The TIME NO. is not displayed. | The following causes are possible.<br>**1.** The TIME NO. is not displayed when using the schedule timer alone.<br>(It can be set if using the central remote controller at the same time.) |
| The display remains<br>“  ”<br>even though I push the HOUR/MINUTE BUTTON in the timer program settings.<br> | The following causes are possible.<br>**1.** Is the day set to a holiday? |
| I cannot set “ central management priority ” or “ after-push priority ” with the schedule timer. | The following causes are possible.<br>**1.** Is a central remote controller or on/off controller also installed?<br>∗ **The priority order of the operation codes depends on the central devices which are installed.**<br>The below operation codes are set.<br>• Schedule timer<br>Central remote controller is used as well<br>Operation code of the central remote controller<br>• Schedule timer<br>On/off controller is used as well<br>Operation code of the on/off controller<br>• Schedule timer<br>Central remote controller<br>On/off controller is used as well<br>Operation code of the central remote controller |



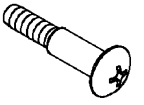
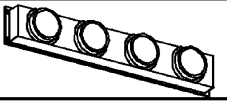
3P124623-5C

## 14.6 <KDAP25A56/71A> Air Discharge Adapter

**Precaution**

- This product can be installed on ceiling mounted duct type air conditioner.
- Refer to the installation manual for the indoor unit as well at the time of installation.

**Parts** Make sure that the following parts are provided with the product.

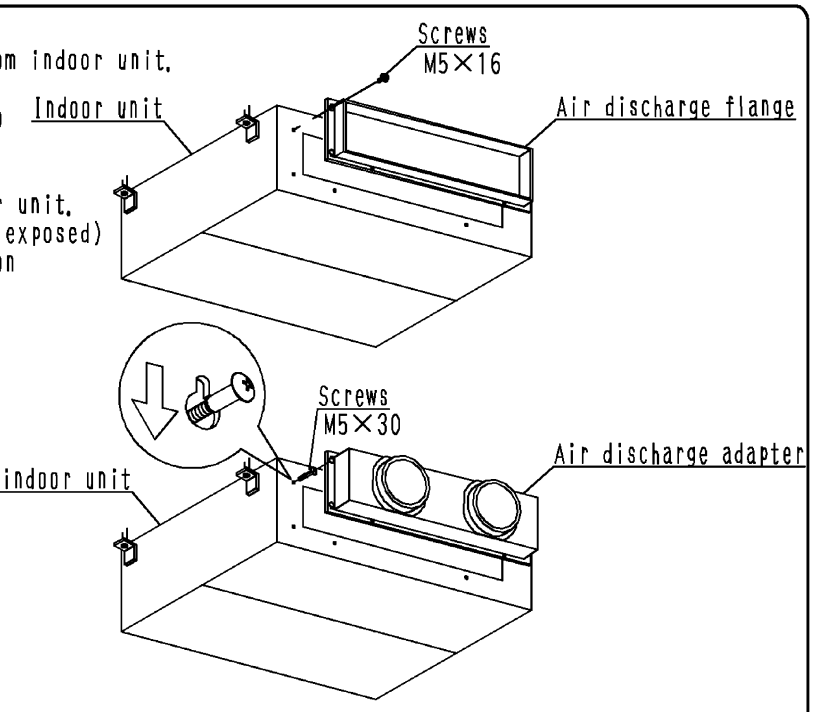
| Name | Air discharge adapter | | Screw | | (Others) |
|---|---|---|---|---|---|
| 36 class |  | 1PC. |  M5×30 | 8PCS. | Installation manual (This copy) |
| 56 class |  | 1PC. | | 8PCS. | |
| 71 class |  | 1PC. | | 8PCS. | |
| 140 class |  | 1PC. | | 12PCS. | |

**Required Tools**

Screw driver +

**Operating procedures**

1. Remove the air discharge flange from indoor unit.
2. Attach the air discharge adapter to the indoor unit.
   - ① Tighten two screws to the indoor unit. (Leave about 20mm of the thread exposed)
   - ② Hang the air discharge adapter on the screws and then tighten all screws definitively.




**Cautions for the installation**

Fasten the screws tightly so as no gap between the indoor unit and the air discharge adapter is made.

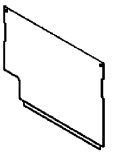
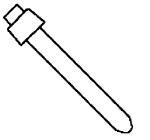
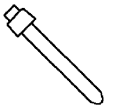
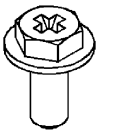
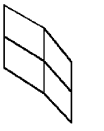
3P399034-1

## 14.7 <KDBD63A160> Shield Plate for Side Plate

**Precaution**

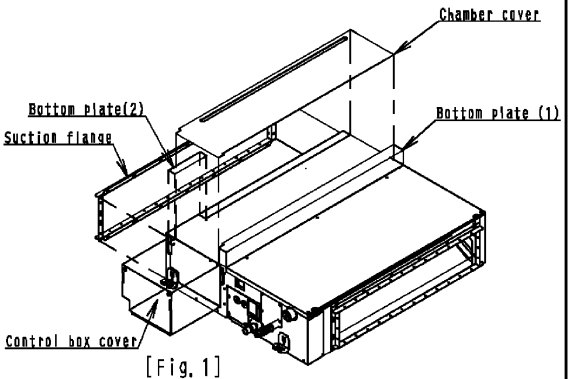
- This kit can be installed to the ceiling mounted duct type air conditioners.
- Install this kit before installing the indoor unit.
- See installation manual attached to the indoor unit as well at the time of installation.

**Parts** • Make sure that the following parts are provided with the product.

| Name | ① Shield Plate for Side Plate | ② Clamp(L) | ③ Clamp(S) | ④ Screw | ⑤ Installation manual |
|---|---|---|---|---|---|
| Quantity | 1 | 1 | 1 | 2 | 1 |
| Shape |  |  |  |  |  (This copy) |

### ① Removal of outside panel

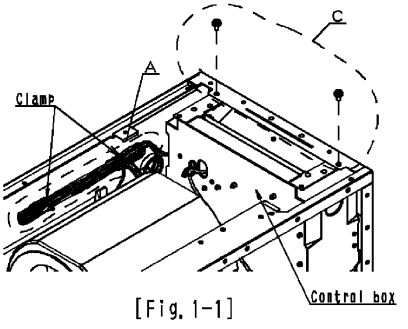
(1) Remove the suction flange, chamber cover, bottom plate(1), bottom plate(2) and control box cover. [Fig. 1]



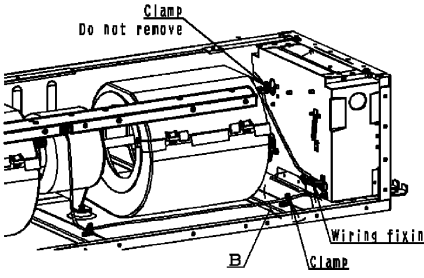

[Fig. 1]

### ② Removing and mounting the control box

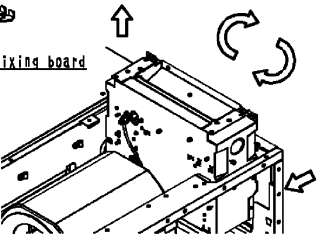
(1) Remove the clamp which fixes the internal wiring (A) of the indoor unit [Fig. 1-1], the clamp which fixes the motor harness (B) and the wiring fixing board. [Fig. 1-2]
(2) Remove screws which fix the control box (C). [Fig. 1-1]
(3) Pull out the control box and invert it. [Fig. 2]




[Fig. 1-1]

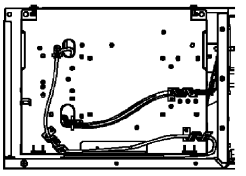


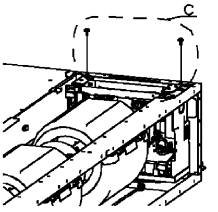

[Fig. 1-2]



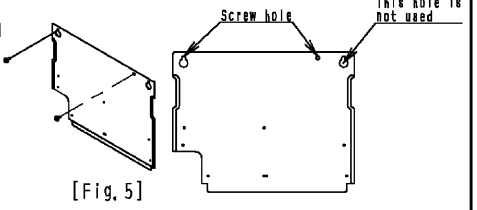
[Fig. 2]

(5) Lay the wires on the back side of the control box in accordance with Fig. 3 and insert the control box to the indoor unit without tangling the wires. [Fig. 3 and 4]
(6) Mount the control box with the screws removed in the process of (2). [Fig. 4-C]
(7) Mount the control box cover using screws removed in the process of ❶ Removal of outside panel. [Fig. 5]
(8) Bundle the extra wires of indoor unit (A) and fix them with clamps (L)② to the cable clamp. Fix the motor harness (B) with clamp (S)③ to the clamp of top panel. [Fig. 6]
(9) Mount the Shield Plate for Side Plate① to the indoor unit using Screw④. [Fig. 7]

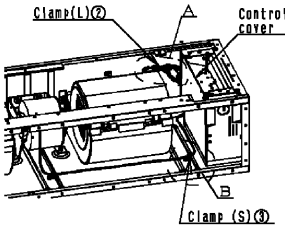

(Side view)
[Fig. 3]



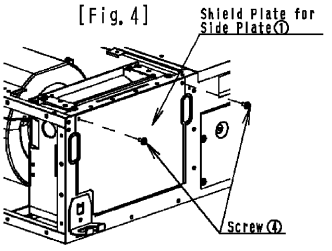
[Fig. 4]



[Fig. 5]

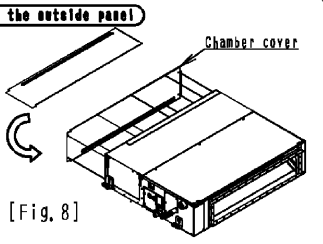


[Fig. 6]

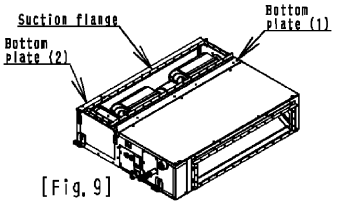


[Fig. 7]

**Mount the outside panel**



[Fig. 8]



[Fig. 9]

(1) Attach the chamber cover which was removed with the screws removed in ❶ Removal of outside panel [Fig. 8]
NOTE) When using the suction flange, mount the bottom plate (1) and (2) with the screws removed in the process of ❶ Removal of outside panel and fix the suction flange with screws after ❸ Electric wiring work is finished. [Fig. 9]

## ❸ Electric wiring work

Refer to Electric wiring work in the installation manual for the indoor unit as well.

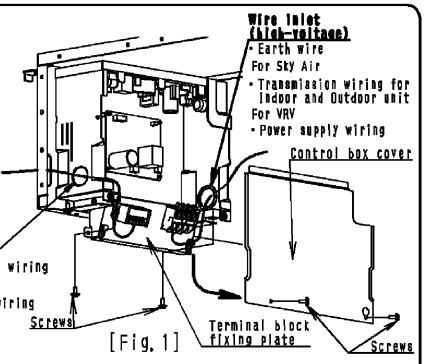
**Wiring method**

⚠ ● Keep the distance of 50mm between the low voltage wiring and the high voltage wiring at anywhere outside the unit. If both the wires are laid down together, they may be affected by electric noise (outside noise) and cause malfunction or failure.

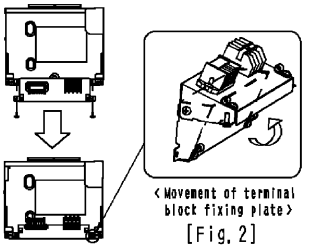
**⚠Warning**

**Trim and lay the wiring neatly and attach the control box cover securely. An electric shock or fire may result if the control box lid catches any wiring or wires push up the lid.**

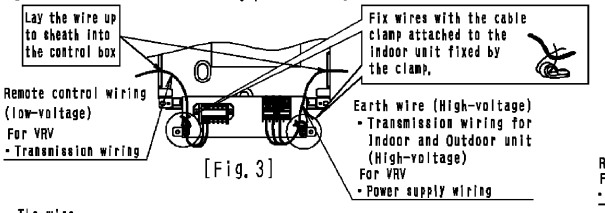
1. Remove the control box [Fig. 1]
2. Remove the botton plate of the control box. When it removed, the terminal block fixing plate becomes movable. [Fig. 2]
3. Lay a wire to inside of the control box through the wire inlet on the side of the control box.
4. **Refer to the ❸ Electric wiring work in the installation manual of the indoor unit for the connection to the terminal block and carry out the wiring work inside the control box.**
5. Wrap the seal material for wiring (S) attached to the indoor unit so that the clearance around the wire penetrating hole can be filled. [Fig. 4]
   - Seal the clearance around the wires with putty and insulating material (field supply). (If insects and small animals get into the unit, short circuiting may occur inside the control box.)
6. Fix each wirings with the clamps attached to the indoor unit. [Fig. 5]
7. Fix the terminal block fixing plate the way it was and attach the control box cover.



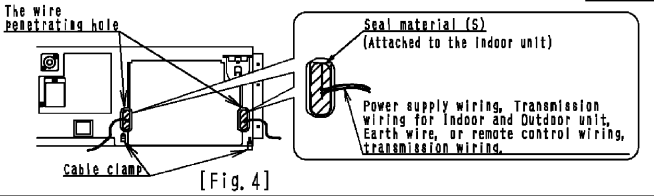
[Fig. 1]



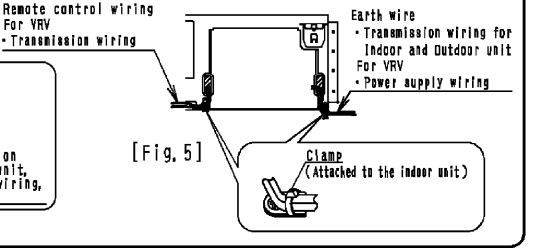
[Fig. 2]



[Fig. 3]



[Fig. 4]



[Fig. 5]

3P400742-1

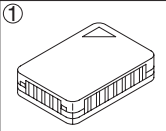
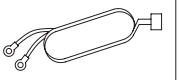
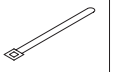
## 14.8 <KRCS01-4B> Remote Sensor

### Notes

- Please check applicable kit model name by catalog etc.
- When installed on SkyAir Round-flow type models, the dehumidification by detection of humidity does not operate.

### Accessories

Check the following accessories.

| Name | Remote sensor (sensor box) | Extension cable (2-core, 12m) | Clamp | Installation manual (this drawing) | Mounting screw (M4x16) |
|---|---|---|---|---|---|
| Shape | ①  | ②  | ③  | ④  | ⑤  |
| Quantity | x 1 | x 1 | x 2 | x 1 | x 2 |

### ❶ Mounting

1) Selection of mounting location.
The thermistor for temperature detection is incorporated into the remote sensor. Select the mounting location taking the following cautions into account.

① Where the average temperature of an air conditioned room can be detected.

② Where it is not exposed to the direct sunlight.

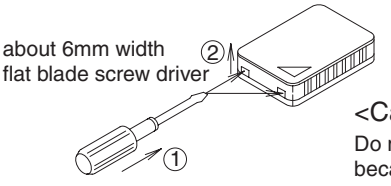
③ Where it is not influenced by other heat sources.

④ Where it is not exposed to the direct discharge air from the air conditioner.

⑤ Where it is not exposed to the outdoor air infiltrated into the room by opening the door.

2) Mounting

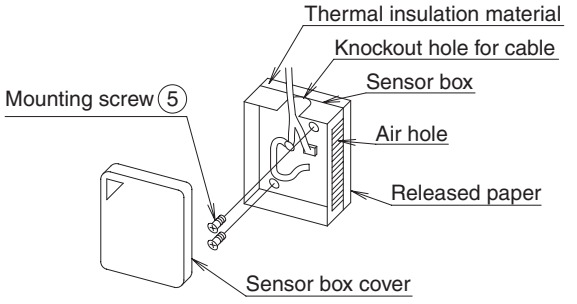
- Remove the cover of the sensor box.

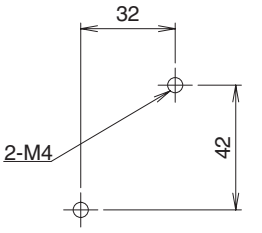



① Insert a flat blade screw driver into the sensor box concave part (2 locations).
② Remove the cover pushing up the nail to the cover of the sensor box.

<Cautions>
Do not push the nail powerfully with a narrow flat blade screw driver, because you may break off the nail.

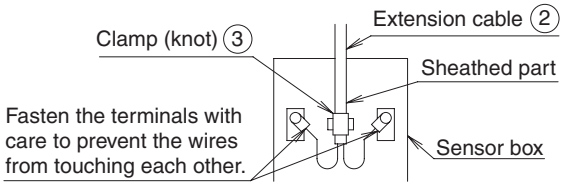
(a) When mounting on the wall

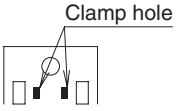



Wall surface mounting holes (unit: mm)

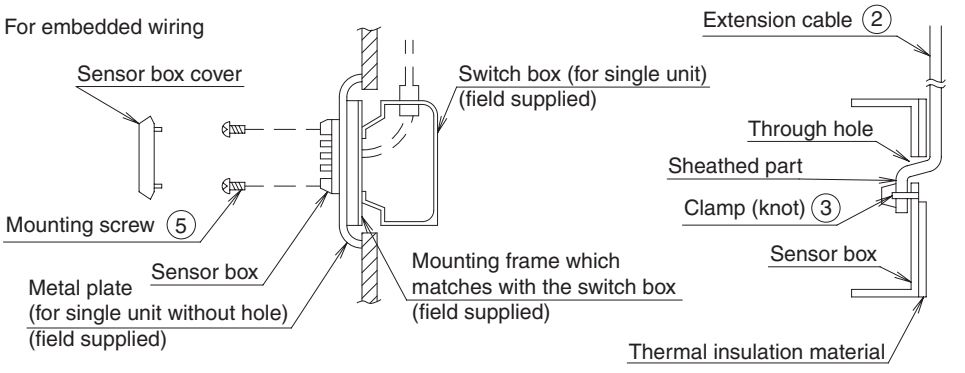
- Break open the knockout hole in the sensor box with a nipper or a similar tool. Pass the extension wires through the hole and fasten the wires to the terminals with screws.
- To avoid tensile force on the terminals, pass the attached clamp through the holes shown in the below right figure and tighten the extension cable with the attached clamp at the sheathed part. (The knot must come to the box inside.)



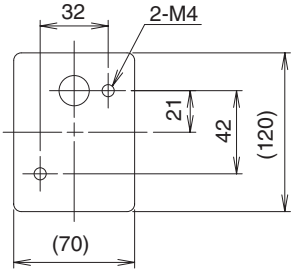




- Screw the sensor box securely to the wall surface with screws M4x16 (2 places).
  If the sensor box cannot be screwed to wall surface, tear off the released paper and mount it on the wall surface.

(b) For embedded wiring




- Pass the extension cable through the switch box cable hole and carry out the wiring.
- Pass the attached clamp through the clamp holes and tighten the extension cable at the sheathed part as shown in the upper right figure.
- Tap M4 screw holes in the metal plate (field supplied) as shown in the right drawing and mount the switch box on the metal plate.




Holes to be tapped in the metal plate on site (unit: mm)

<Cautions>

- When wiring the extension cable, the air holes will not be blocked.
- When the extension cable is longer than necessary, cut it to the appropriate length, peel the insulation, attach the round crimp terminal for M3 (field supplied) and carry out the wiring. The length of insulation to be peeled off is as shown.
  (Work carefully so that the connector side may not be cut.)

## ② Wiring method

Connect the extension cable connector side to the indoor unit PCB (printed circuit board)
For connection to the indoor unit, follow the procedure shown below.

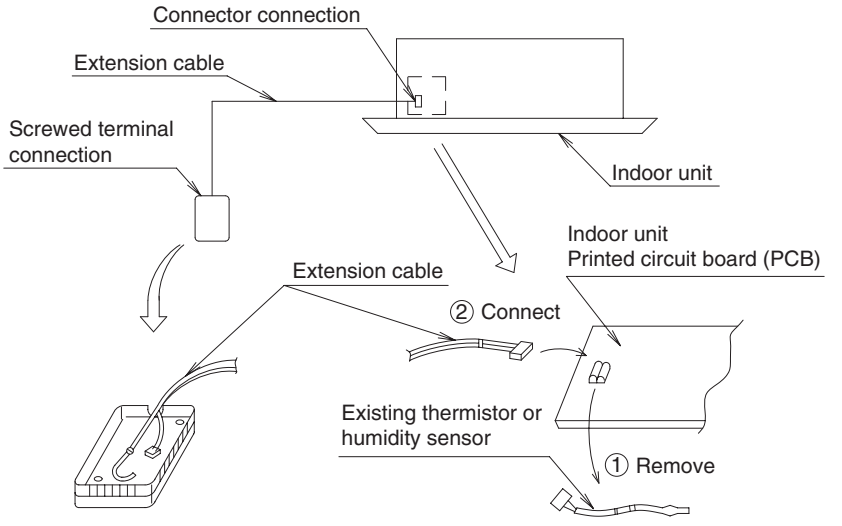
### ⚠ Caution

1) Make sure to turn off the power supply before starting the wiring work and do not turn on until all the work is completed.
   Read also the installation manual and the wiring diagram of the indoor unit when carrying out the work.
2) When wiring the extension cable, do not pass where the extension cable may be affected by the power line or noise.
3) Make sure to securely connect the connectors.
   Defective connection may result in incorrect detection of room temperature or malfunction.
4) Do not splice wires.
5) Since the connector marking of the thermistor for detection of inlet air temperature differ depending on the indoor unit type, make sure to check the indoor unit wiring diagram and follow it correctly.
6) Lay and clamp the extension cable inside the indoor unit switch box just like the low voltage line (cord for remote controller).
   And do not pass where the extension cable inside the indoor unit switch box may be affected by the power line (cord for the indoor unit and the other electric line).

<Procedure>

1) When wiring to the indoor unit PCB, remove the existing thermistor (for detection of inlet air temperature) and then connect the extension cable.
   When doing this work, make sure to check the symbol of connecting address on the PCB whether it is correct or not referring to the wiring diagram.

<For SkyAir and VRV>




2) Lay and clamp the extension cable inside the indoor unit switch box just like the existing thermistor.
   When doing this work, keep a certain distance between the high voltage wiring and the low voltage wiring to avoid error of sensor.
   Provide protection of the existing cable for thermistor without affecting other components.
3) Fit the sensor box cover into the sensor box.

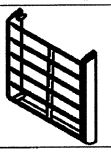
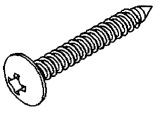
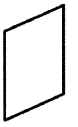
## ③ Operation test after mounting the sensor

Conduct cooling and heating operation test after the sensor is mounted and the wiring is completed.

3K019189-1D

## 14.9 <KPW937E4> Air Direction Adjustment Grille

**Component parts** Be sure to check that the following parts are included before installation.

| Name | ① Air direction adjustment grille | ② Screw | ③ Installation manual |
|---|---|---|---|
| Shape |  |  |  |
| Q'ty | 1 pc. | 4 pcs. | 1 sheet (this sheet) |

**Selection of installation site**

- Use the air direction adjustment grille for installation at a location that fits the following conditions.
  1. When installing the outdoor unit near the neighbouring house.
  2. When changing the airflow direction to prevent exhaust blowing directly onto passersby or garden plants.

**Cautions for usage**

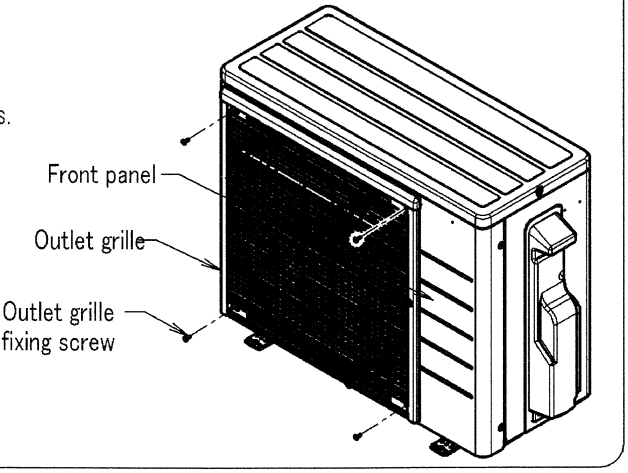
- Be sure to perform the following as installation precautions to ensure correct and safe use of the air direction adjustment grille.
  1. Be sure to stop the operation before installation.
  2. Avoid short-circuits during installation.
  3. When using the unit in areas with snow, install the grille to create a left-right or downward airflow. Do not install the grille to create an upward airflow to prevent snow accumulating in the air outlet of the outdoor unit as this may damage the unit.
  4. Be careful of foreign substances such as dead leaves, which may accumulate on the air outlet after installing the grille to create an upward airflow.
  5. Do not use screws other than those provided. Tighten the screws securely without any looseness.

**Installation of air direction adjustment grille**

- Pitch of the installation screws for the air direction adjustment grille(①) is 434mm in the vertical and horizontal directions.
- Installation can be performed in 4 directions: top, bottom, left and right.
- Temporarily secure the air direction adjustment grille(①) using 4 screws(②), check the installation angle, and then tighten the screws.

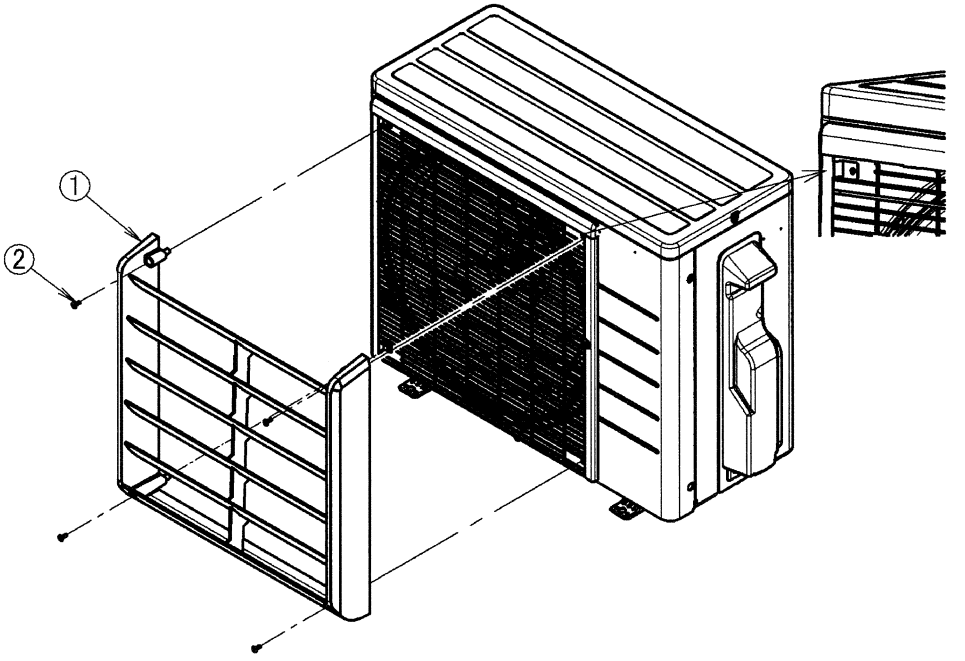
### <Steel wire outlet grille>

1 Remove the 4 outlet grille fixing screws.

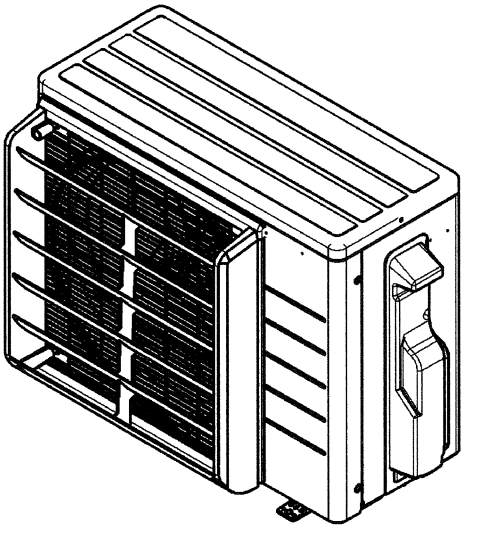


2 Install the air direction adjustment grille(①) attached on the front panel using 4 screws(②).

※ Attach the air direction adjustment grille on top of the outlet grille using the same screws.




3 Appearance of the air direction adjustment panel following installation.
(When installed with the louvers facing up.)

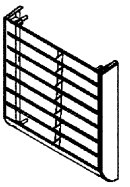
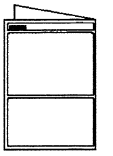


3P397163-1

## 14.10 <KPW063A4> Air Direction Adjustment Grille

**Component parts** Be sure to check that the following parts are included before installation.

Component parts

| Name | ①Air direction adjustment grille | ②Screw | ③Spacer | ④Installation Manual |
|---|---|---|---|---|
| Illustration |  |  |  |  |
| Quantity | 1 pcs. | 4 pcs. | 4 pcs. | 1 sheet(this sheet) |

**Selection of installation site**

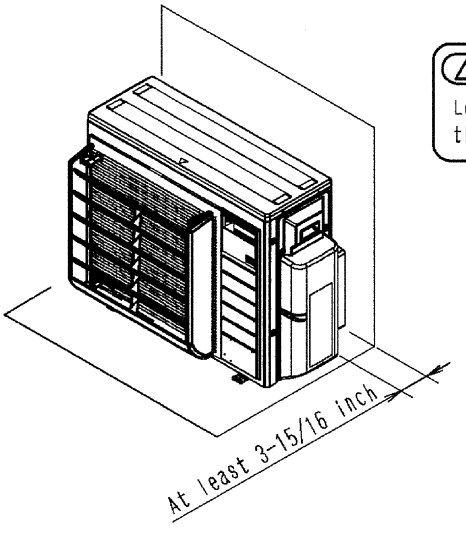
Install only on an outdoor unit in a location that satisfies the following conditions:

- When installing the outdoor unit near the neighbouring house.
- Where you wish to change the exhaust airflow direction because the outdoorunit has been installed facing a road, so that passing people are not exposed to its exhaust air
- When changing the airflow direction to prevent exhaust blowing directly onto passersby or garden plants.

**Cautions for usage**

- Be sure to perform the following as installation precautions to ensure correct and safe use of he air direction adjustment grille.
  1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance purposes.
  2. When installing the product in a location in which it may be exposed to strong winds, install a rollover prevention bracket (sold separately) at the same time.
  3. Tighten screws securely. Failure to do so may result in vibration.

**1 Verifying the amount of space required for installation**



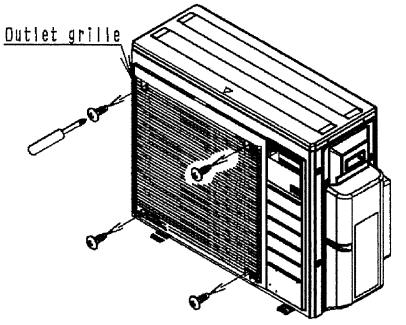

**⚠ Caution**

Leave at least 3-15/16 inch between the rear of the outdoor unit and any obstructions(walls, etc.).

## ❷ Installation of air direction adjustment grille

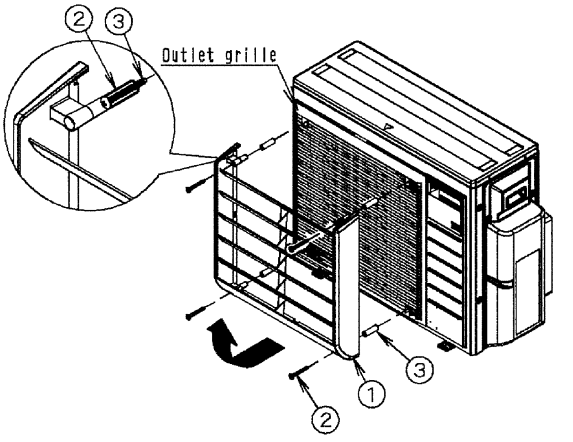
**⚠ Caution**

Install the air direction adjustment grille on top of the outlet grille.
Be sure to install the outlet grille as installing only the air direction adjustment grille would allow a person to reach his or her hand into the outdoor unit far enough to come into contact with the rotating fan.

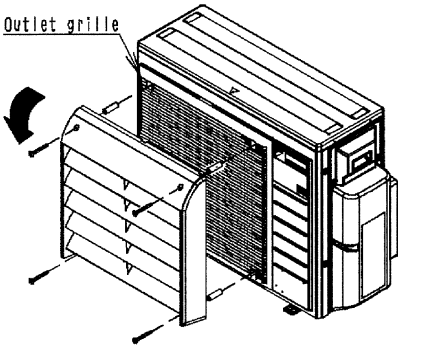



(1)Remove the 4 outlet grille fixing screws.
(2)Referring to the following illustration, attach the outlet grille and air direction adjustment grille, taking care to align them with the air outlet direction.
●Attach the air direction adjustment grille on top of the outlet grille using the same screws.

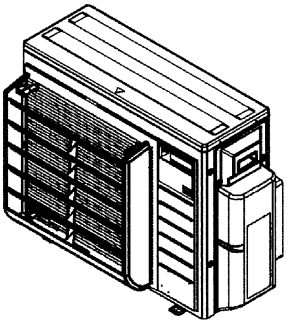
Upward facing




Downward facing



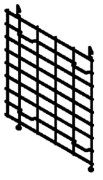
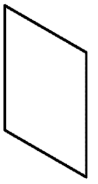

**Appearance of the air direction adjustment grille after installation (when installed with the louvers facing up)**



3P398171-1

## 14.11 <KKG067A41> Back Protection Wire Net

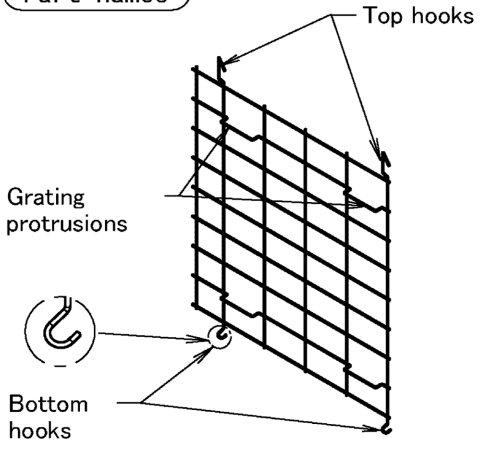
### Component parts

| Name | ① Protection net | ② Installation manual |
|---|---|---|
| Shape |  |  |
| Q'ty | 1pc | 1sheet(this sheet) |

### Caution

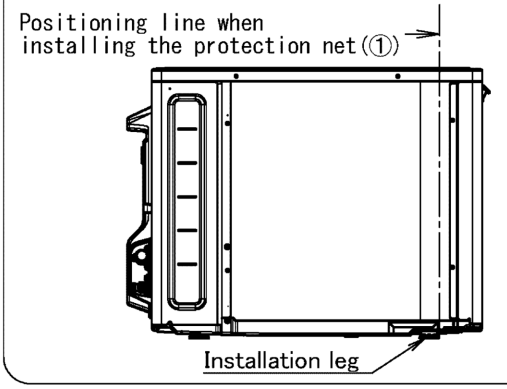
Be sure to wear protection gloves when performing installation work as the fins on the heat exchanger may cause injury.

### Part names



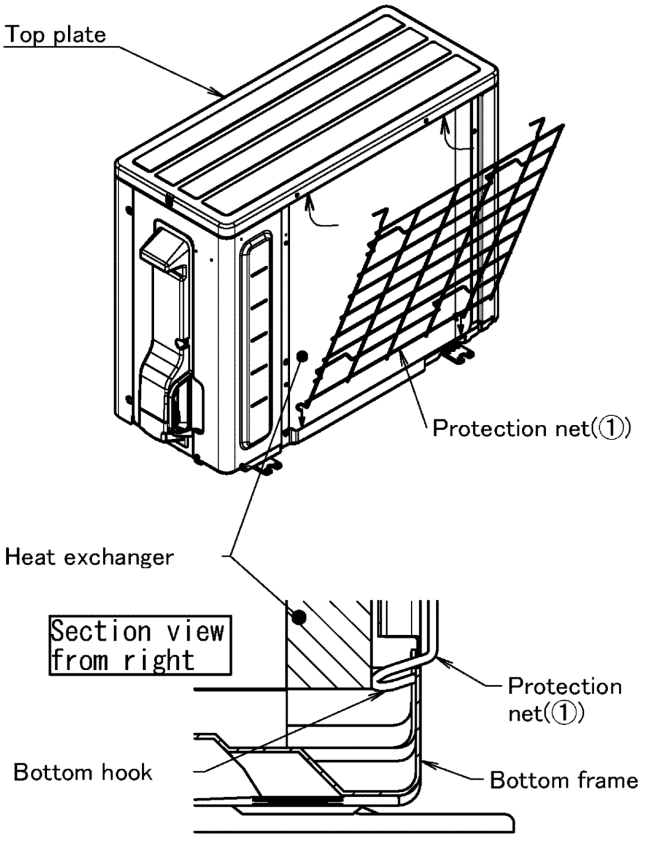

### 1 Verify the location at which the protection net(①) is to be installed.

Attach the protection net(①) so that the vertical grating is aligned with the outside edge of the installation leg on the right side of the outdoor unit.

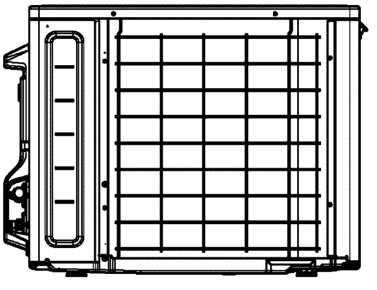



### 2 Attach the protection net(①)

Orient the protection net(①) so that the horizontal grating protrusions are facing the heat exchanger and insert the two bottom hooks between the heat exchanger and the bottom frame.
Insert the two top hooks between the heat exchanger and the top panel while flexing the protection net(①).
※ Be careful not to install the protection net upside down.
Be careful not to damage the heat exchanger's cooling tubes.



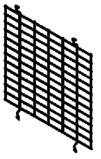

### 3 Appearance of the protection net(①) following installation



3P397444-1

## 14.12 <KKG063A42> Back Protection Wire Net

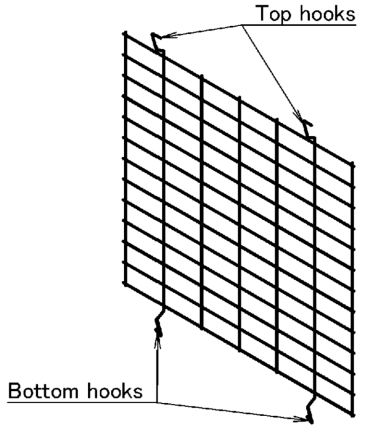
### Component parts

| Name | ① Protection net | ②Installation manual |
|---|---|---|
| Shape |  |  |
| Q'ty | 1pc. | 1sheet (this sheet) |

### Caution

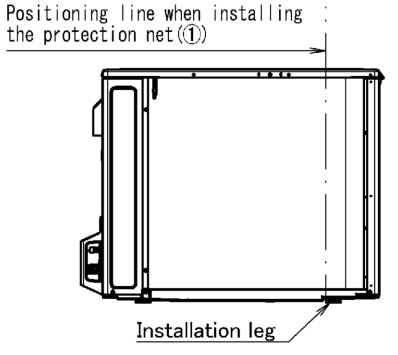
Be sure to wear protection gloves when performing installation work as the fins on the heat exchanger may cause injury.

### Part names




### 1 Verify the location at which the protection net(①) is to be installed.

Attach the protection net(①) so that the vertical grating is aligned with the edge of the installation leg on the right side of the outdoor unit.

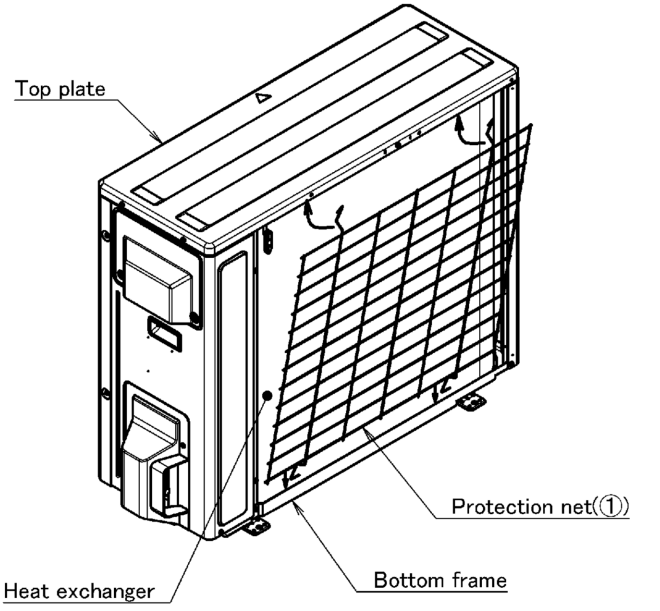



### 2 Attach the protection net(①)

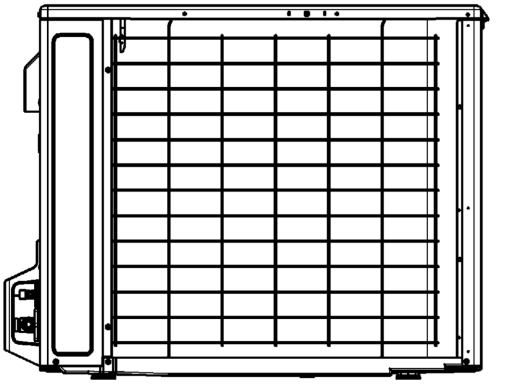
Orient the protection net(①) so that top and bottom hooks are facing the heat exchanger and insert the two bottom hooks between the heat exchanger and the bottom frame.

Insert the two top hooks between the heat exchanger and the top panel while flexing the protection net(①).

※ Be careful not to damage the heat exchanger's cooling tubes.




### 3 Appearance of the protection net(①) following installation



2P403095-1

## 14.13 <FTDBHMS, FTDBHML, KEH067A41E, KEH063A4E> Drain Pan Heater

# Safety Considerations for Installation of Drain Pan Heater

Read these **Safety Considerations** carefully before installing the drain pan heater. After completing the installation, check if the unit operates properly during the start-up operation.

Meaning of **DANGER, WARNING and CAUTION** symbols.

| | | | |
|---|---|---|---|
| ⚠ **DANGER** | Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. | ⚠ **CAUTION** | Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. |
| ⚠ **WARNING** | Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. | | |

- Inform users that they should store this installation manual for future reference.
- After completing the installation, make sure that the unit operates properly during the startup operation.
- All phases of the field-installation, including, but not limited to, electrical, piping, and safety, must be done in accordance with manufacturer's instructions and must comply with national, state, provincial, and local codes.
- This product is a heater designed to melt snow that is blown into the product from the outside to prevent the drain pan of the outdoor unit from freezing.
- Install the product with a snow-break hood on a high stand if this product is used in heavy snow areas.

### ⚠ DANGER

- **Do not touch the heater unit without wearing gloves.**
  The temperature of the heater unit will become high when the heater is turned on.
  Touching the heater unit with bare hands will result in burns or injury.

### ⚠ WARNING

- **Request the dealer or an authorized technician to install the product.**
  Improper installation of the product could result in water leakage, an electric shock, or fire.
- **The product must be installed according to the instructions given in this manual.**
  The Incomplete installation of the product could result in water leakage, an electric shock, or fire.
- **Use the supplied or specified installation parts.**
  Use of other parts could result in the unit becoming loose and falling, water leakage, electric shock, or fire.
- **Turn off the power supply at the time of installation.**
  Touching any electrical parts may with the power supply turned on could result in electric shock.
- **Use specified wires. Connect and fix the wires so that the wires will not put improper force on the terminal junctions.**
  Wires connected or fixed improperly could result in terminal overheating, an electric shock, or fire.
- **When wiring and connecting the indoor and outdoor units, carefully arrange the wiring so that they will not put improper force on the structures.**
  Install covers over the wires. Incomplete cover installation could result in terminal overheating, an electric shock, or fire.

### ⚠ CAUTION

- **Wear protective gloves at the time of installation.**
  Touching the suction mouth or aluminum fin of the outdoor unit may result in injury.
- **Do not install the product in places where there is danger of exposure to inflammable gas leakage.**
  If the gas leaks and builds up around the unit, it may catch fire.
- **Do not grab the top plate of the outdoor unit carelessly when removing the top plate.**
  The sharp edge of the top plate may cause injury.
- **Do not install the outdoor unit in places where small animals may nest in the outdoor unit.**
  If small animals intrude and touch the internal parts of the outdoor unit, the outdoor unit may malfunction, generate smoke, or ignite.
  Advise the user to keep the place clean.
- **Do not touch the heater unit with bare hands.**
  The temperature of the heater unit will become high when the heater is turned on.
  Touching the heater unit with bare hands may result in burns or injury.

# Accessories

| | KEH067A41E FTDBHMS | KEH063A4E FTDBHML |
|---|---|---|
| Ⓐ Drain pan heater | 1 | 1 |
| Ⓑ M4 piercing screw | 3 | 6 |
| Ⓒ Binding band | 1 | 1 |
| Ⓓ Sealing material | 1 | 2 |

| | KEH067A41E FTDBHMS | KEH063A4E FTDBHML |
|---|---|---|
| Ⓔ Installation manual (multi-language) | 1 | 1 |
| Ⓕ Electric wiring diagram label | 1 | 1 |
| Ⓖ Information label | 1 | 1 |

Appearance of the Ⓐ drain pan heater may differ from some models.

# Tools Required for Installation

• Electric drill • ϕ1/8 inch (ϕ3.2mm) drill • Phillips screwdriver • Nippers

# Installation Procedure (1)

**⚠ WARNING**

• Be sure to check that the power supply of the product is turned off.

Some stages in the installation procedure differ by model of outdoor unit. Refer to the instructions for the relevant model.

**Type A models** : RX09/12, RXN09/12, RXL09/12

**Type B models** : RX15/18/24, RXN18/24, RXL15

**Type C models** : 2/3/4MXS, 2/3MXL, RX30/36

## 1. Remove each component of the outdoor unit.

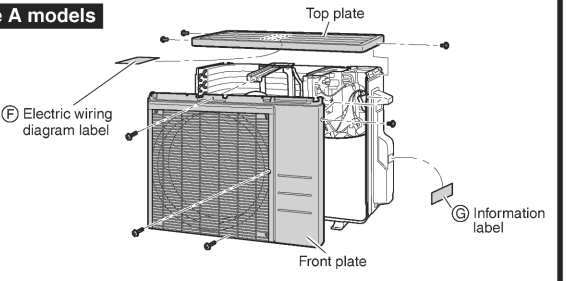
1) Remove the top plate.
2) Affix the Ⓕ electric wiring diagram label where there is enough space available on the back of the top plate.
3) Remove the screws from the protective wire mesh if one is fitted. (2 screws) (For type B and C models only)
4) Remove the front plate.
5) Remove the anti-drip cover. (For type B and C models only)
6) Affix the Ⓖ information label near the manufacture's label.

• The appearance of the outdoor unit and the number of screws may differ from some models.

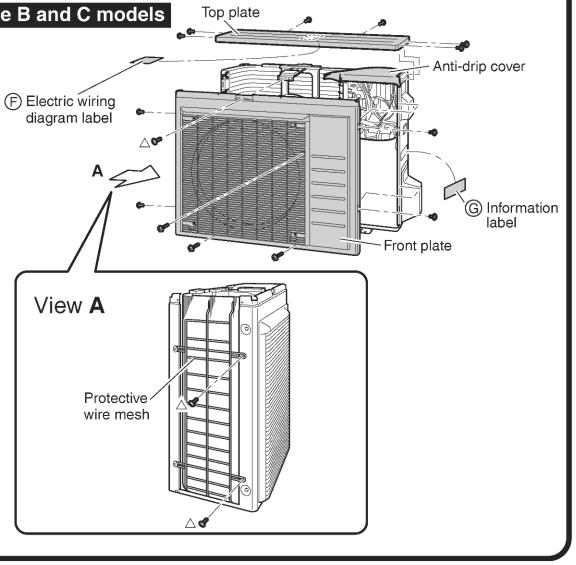
• Screw types for each component are indicated as below.

No icon: Hexagon tapping screw
△ : Truss head tapping screw

**For type A models**



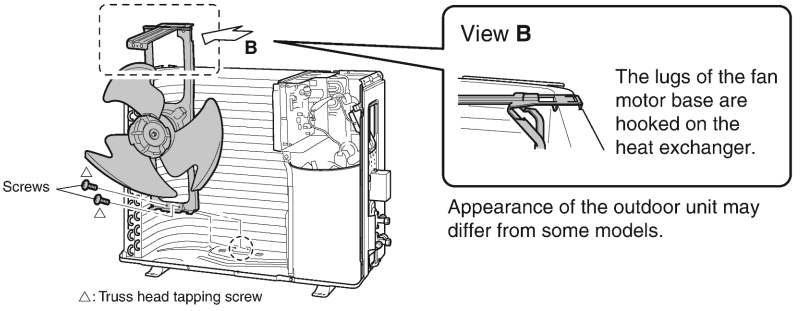

**For type B and C models**



# Installation Procedure (2)

## 2. Remove the fan motor base.

1) Remove the fixing screws at the lower section of the fan motor base. (2 screws)
2) Remove the fan motor base together with the propeller fan and ensure that stress is not placed on the propeller fan when placing them aside.
   - Do not remove the fan motor harness.
   - Ensure that the fan motor harness does not come into contact with the edges of the heat exchanger or other components.




Appearance of the outdoor unit may differ from some models.

## 3. Install the drain pan heater.

**⚠ CAUTION**

- When drilling a hole, be careful not to damage the soundproofing material and other components on the back side.

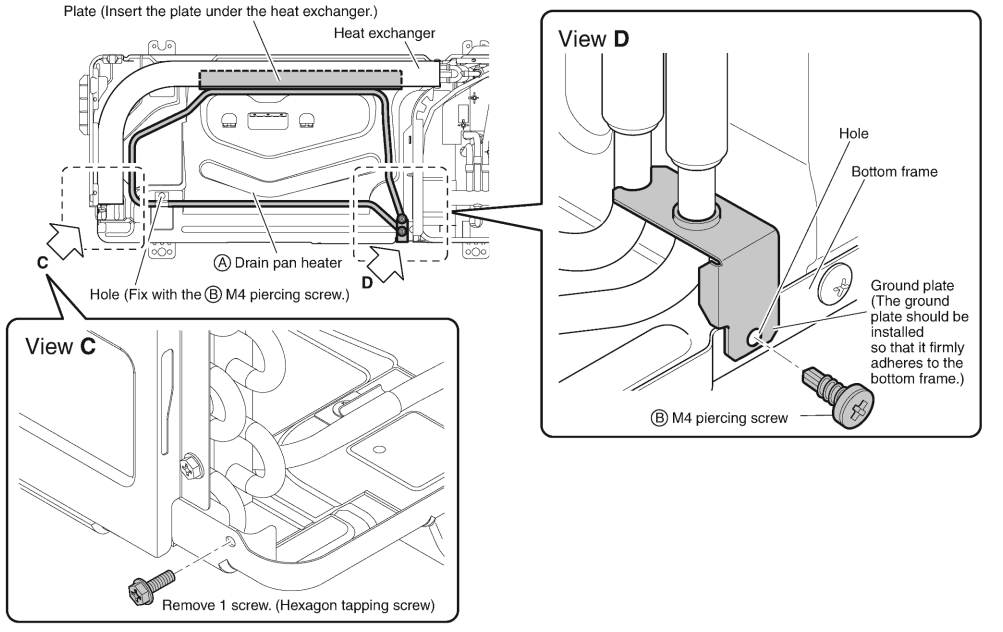
For details, refer to **"Installation Procedure (3)"** also.

1) Remove 1 screw from the bottom frame so that the plates of the Ⓐ drain pan heater can be inserted under the heat exchanger with ease.
2) Lift up the heat exchanger, and insert the plates of the Ⓐ drain pan heater under the heat exchanger.
   - The ground plate of the Ⓐ drain pan heater should be installed so that, in type A models, it firmly adheres to the bottom frame and, in type B and C models, it firmly adheres to the partition plate.
   - Install the Ⓐ drain pan heater in a position where it does not come into contact with the fan motor base.
3) If there are no holes, drill ϕ1/8 inch (ϕ3.2mm) holes in the bottom frame and the partition plate to fix the Ⓐ drain pan heater.
   - Place the actual components to ensure positioning is correct before drilling holes.
   - The holes can be made with the included piercing-screw as well.
4) Fix the Ⓐ drain pan heater with the Ⓑ piercing screws.
5) Reattach the screw that was removed from the bottom frame.

# Installation Procedure (3)

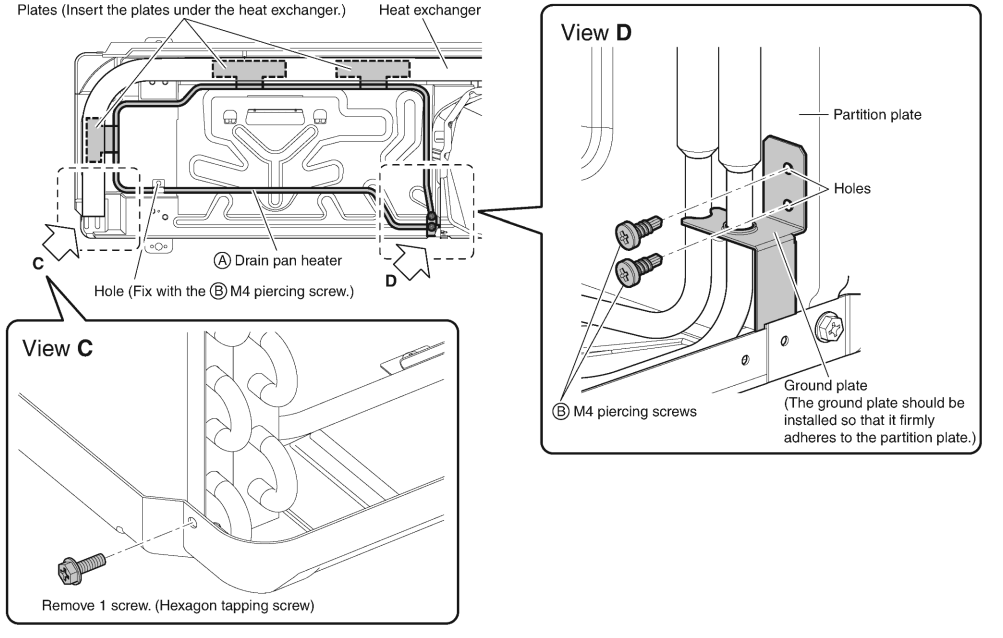
**For type A models**

Location and number of holes
Bottom frame: 2




**For type B and C models**

Location and number of holes
Bottom frame: 1
Partition plate: 2



# Installation Procedure (4)

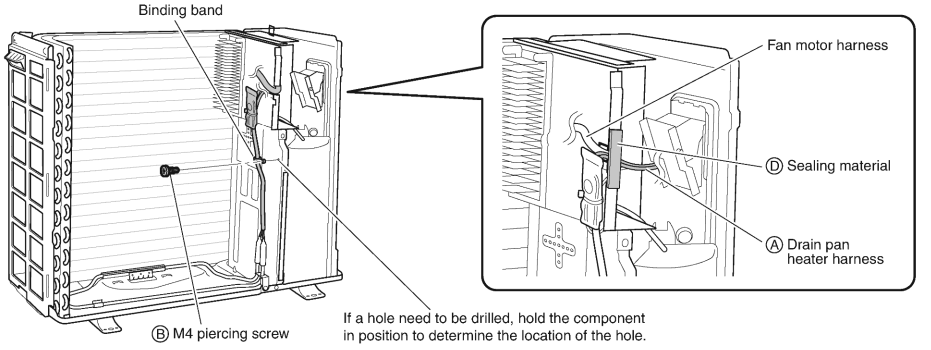
## 4. Route the harnesses.

**⚠ WARNING**

- When drilling a hole, be careful not to damage the soundproofing material and other components on the back side.

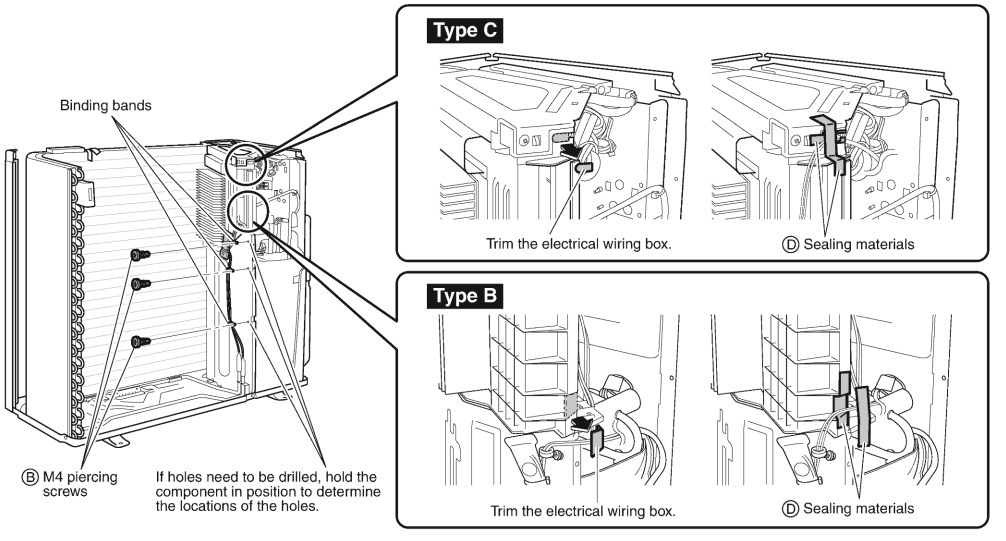
**For type A models**

1) If there is no hole, drill a ϕ1/8 inch (ϕ3.2mm) hole in the partition plate. (1 location)
2) Fix in place the binding band attached to the Ⓐ drain pan heater harness by screwing the Ⓑ M4 piercing screw into the hole. (1 location)
3) Install the fan motor base.
   - Be careful not to confuse screw types. Refer to **"Installation Procedure (2)"**.
4) Place the Ⓐ drain pan heater harness on top of the fan motor harness, and fix it in place with the Ⓓ sealing material.




**For type B and C models**

1) If there are no holes, drill ϕ1/8 inch (ϕ3.2mm) holes in the partition plate. (3 locations)
2) Fix the Ⓐ drain pan heater harness in place by screwing the Ⓑ M4 piercing screws into the holes. (3 locations)
3) Install the fan motor base.
   - Be careful not to confuse screw types. Refer to **"Installation Procedure (2)"**.
4) Trim the electrical wiring box with nippers at the locations shown in the figures, then cover the trimmed edges with the Ⓓ sealing material.
5) Insert the Ⓐ drain pan heater harness into the space that was trimmed, and fix it in place using the Ⓓ sealing material.

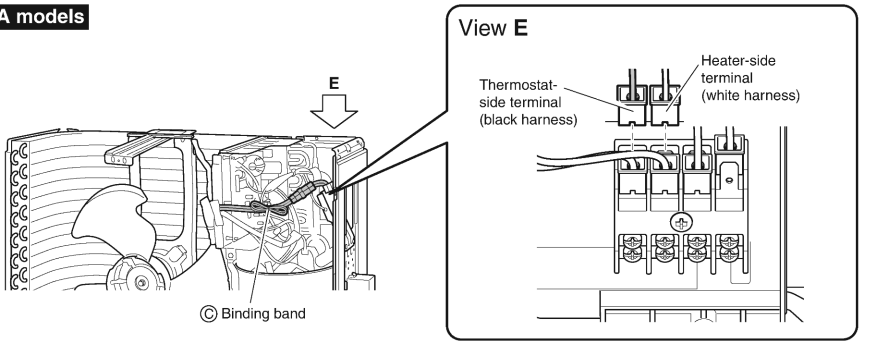


# Installation Procedure (5)

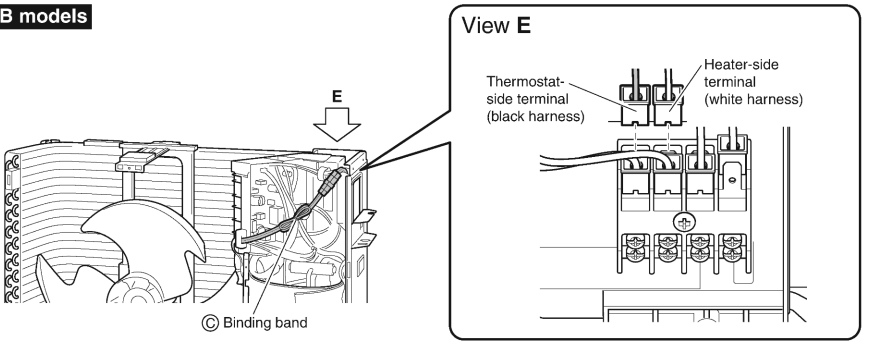
## 5. Connect the faston terminals of the drain pan heater to the terminal block of the outdoor unit.

1) Connect the thermostat-side terminal (black harness) to the leftmost terminal and the heater-side terminal (white harness) to the second leftmost terminal.
   • For type C models, connect to the last terminal block of the terminal blocks in use.
2) Bundle the Ⓐ drain pan heater harness so that there is no slack, and secure it with the Ⓒ binding band. (1 location)
   • Cut the tip of the Ⓒ binding band.

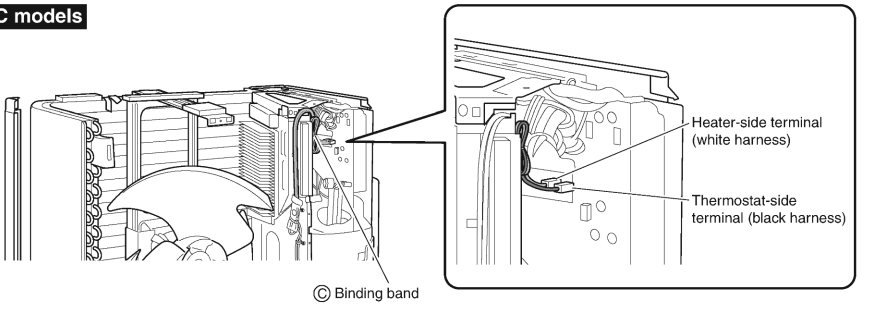
**For type A models**




**For type B models**




**For type C models**




## 6. Install each component to the original position.

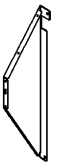
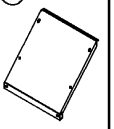
• Be careful not to confuse screw types. Refer to **"Installation Procedure (1) "**.

1) Install the front plate.
2) Install the anti-drip cover.
   (For type B and C models only)
3) Install the top plate.

3P421082-1C

## 14.14 <KPS067A41> Snow Hood (Intake Side Plate)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate (left) | Side plate (right) | Top plate | Front plate | Screws | Piercing screw | Installation Manual |
|---|---|---|---|---|---|---|---|
| Illustration | ①  | ②  | ③  | ④  | ⑤  | ⑥  | ⑦  |
| Quantity | 1 | 1 | 1 | 1 | 8 | 1 | 1 (this document) |

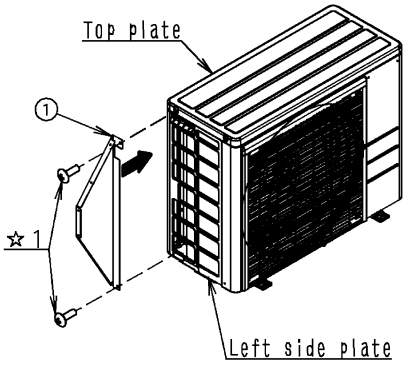
**⚠ Caution** Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠ Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

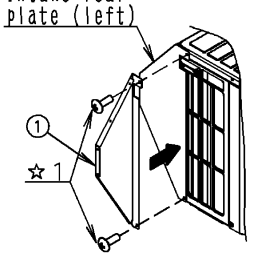
### ❶ Installing the snow hood (intake side plate)

**1** Attach the side plate (left) ①



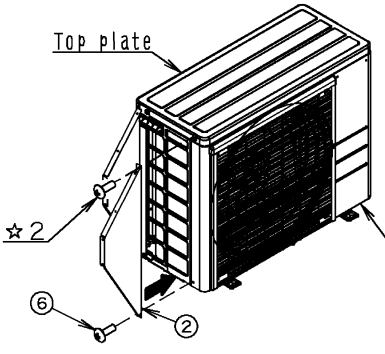

1. Remove the two screws (marked "☆ 1" in the figure) that hold the outdoor unit's top plate, bottom frame, and front plate in place and use them to attach the side plate (left) ①.

**When using with KPS067A42 (snow hood [intake rear plate])**



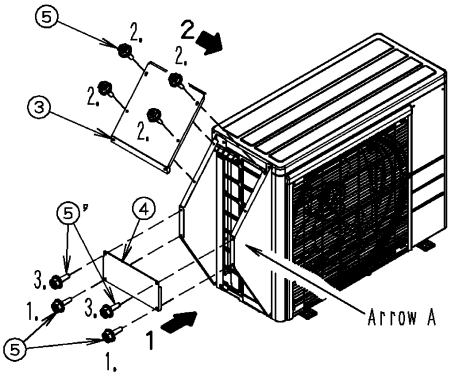

Attach the side plate (left) ① along with the intake rear plate (left) using the same screws, with the side plate (left) ① positioned above the intake rear plate (left). Refer to the figure to the left.

**2** Attach the side plate (right) ②



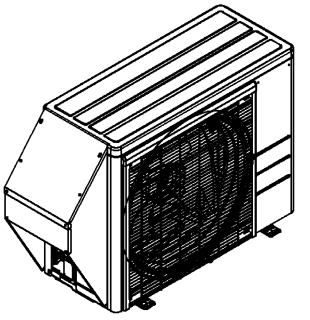

1. Remove the screw (marked "☆2" in the figure) that hold the outdoor unit's top plate, and front plate in place and Use the ⑥ piercing screws supplied with the screws and kit that were removed, install a side plate (right) ②.

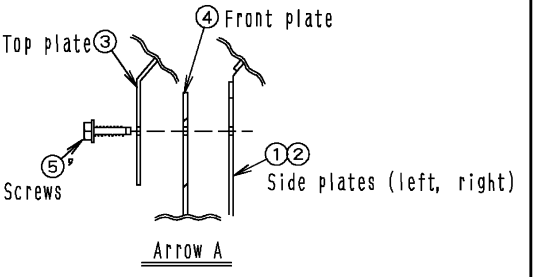
**3 Attach the top plate ③ and front plate④.**




1. Aligning the creases on the left and right sides of the front plate ④ with the outer surfaces of the side plate (left) ① and the side plate (right)②, temporarily secure the front plate ④ in place with the 2 screws⑤.
2. Temporarily secure the top plate ③ from above the front plate ④ with the 4 screws⑤.
3. Temporarily secure the top plate③ and the front plate ④ with the 2 screws⑤'. (See arrow A.)

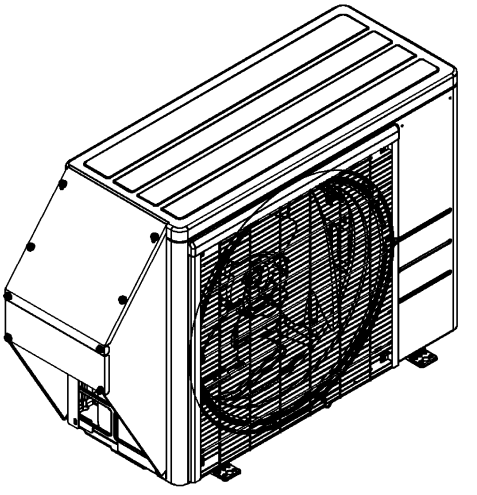
*The side plate (left) (1), side plate (right)②, top plate③, and front plate④should be positioned as shown in the following figure:






4. Securely tighten the 8 screws⑤ with which the plates were temporarily secured in steps 1 ), 2 ), and 3 ).

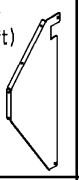
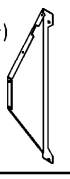
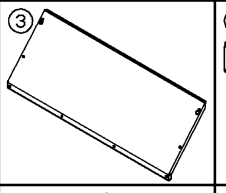
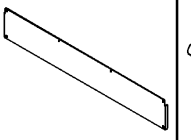
**❷ Appearance of the snow hood (intake side plate) following installation**



3P436077-1

## 14.15 <KPS067A42> Snow Hood (Intake Rear Plate)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate | Side plate | Top plate | Front plate | Screws | Piercing screw | Installation Manual |
|---|---|---|---|---|---|---|---|
| Illustration | ① (Left)  | ② (Right)  | ③  | ④  | ⑤  | ⑥  | ⑦  |
| Quantity | 1 | 1 | 1 | 1 | 8 | 2 | 1 (this document) |

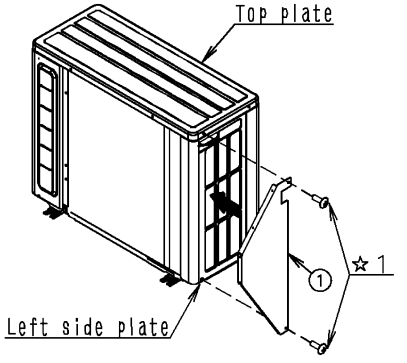
**⚠ Caution** Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠ Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

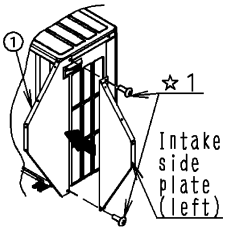
### ❶ Installing the snow hood (intake rear plate)

**1 Attach the side panel (left) ①.**



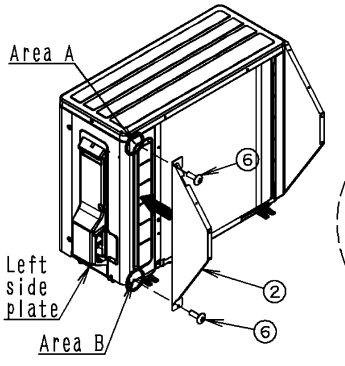

1. Remove the 2 screws (marked "☆1" in the figure) that hold the outdoor unit's top plate, left side plate, and bottom frame and use them to attach the side plate (left) ①.

***When using with KPS067A41 (snow hood [intake side plate])**

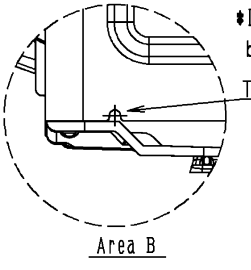



Attach the side plate (left) ① along with **the intake side plate (left)** using the same screws, with the side plate (left) ① positioned below the intake side plate (left). Refer to the figure to the left.

**2 Attach the side plate (right) ②.**

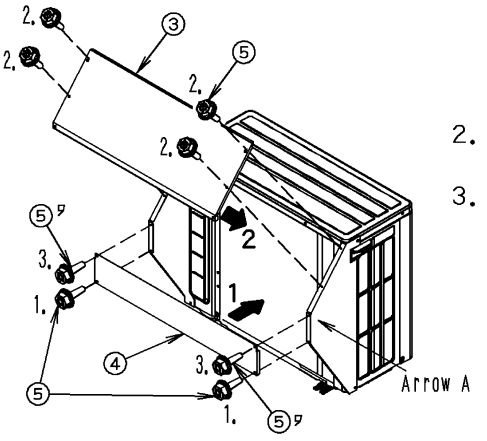



1. Attach by tightening the 1 piercing screw ⑥ into the dowel hole in the right side plate (area A) and the 1 piercing screw ⑥ into the screw hole in the bottom frame (area B).



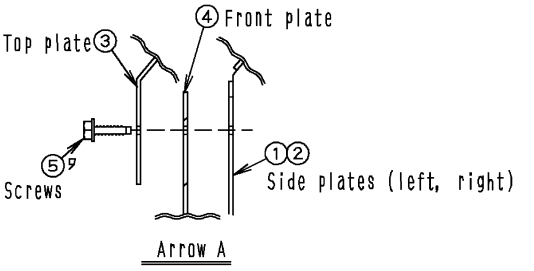

*If using an electric screwdriver, be careful not to overtighten the screws.

3 Attach the top plate ③ and the front plate ④.

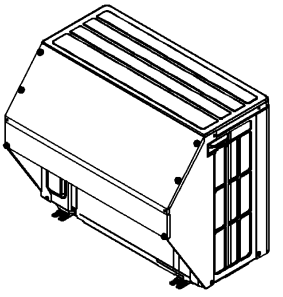



1. Aligning the creases on the left and right sides of the front plate ④ with the outer surfaces of the side plate (left) ① and side plate (right) ②, temporarily secure the front plate ④ in place with the 2 screws ⑤.
2. Temporarily secure the top plate ③ from above the front plate ④ with the 4 screws ⑤.
3. Temporarily secure the top plate ③ and the front plate ④ with the 2 screws ⑤'. (See arrow A.)

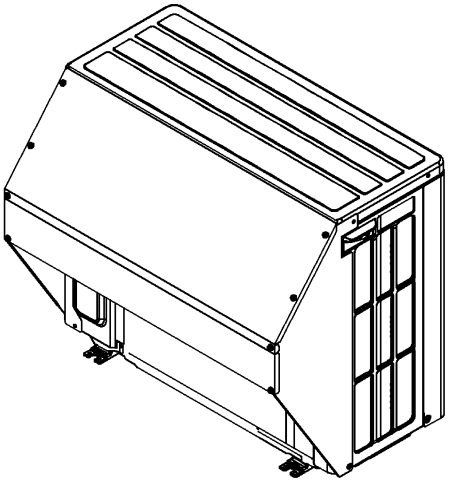
*The side plate (left) (1), side plate (right) ②, top plate ③, and front plate ④ should be positioned as shown in the following figure:




4. Securely tighten the 8 screws ⑤ with which the plates were temporarily secured in steps 1 ), 2 ), and 3 ).



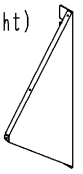
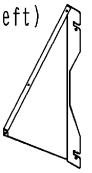
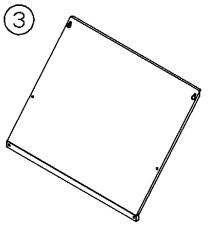
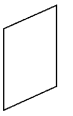
2 Appearance of the snow hood (intake rear plate) following installation



3P436078-1

## 14.16 <KPS067A44> Snow Hood (Outlet)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate | Side plate | Top plate | Screws | Installation Manual |
|---|---|---|---|---|---|
| Illustration | ① (Right)  | ② (Left)  | ③  | ④  | ⑤  |
| Quantity | 1 | 1 | 1 | 6 | 1 (this document) |

**⚠ Caution** Read these safety considerations for installation carefully before installing the product.

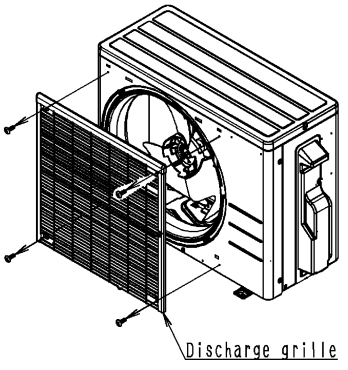
- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠ Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

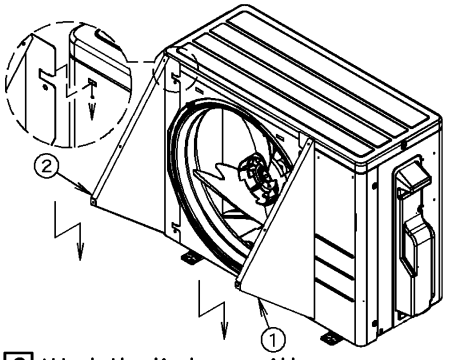
### ❶ Installing the snow hood (outlet)

**1** Remove the discharge grille.

1. Remove the 4 screws that hold the discharge grille, then remove the discharge grille.

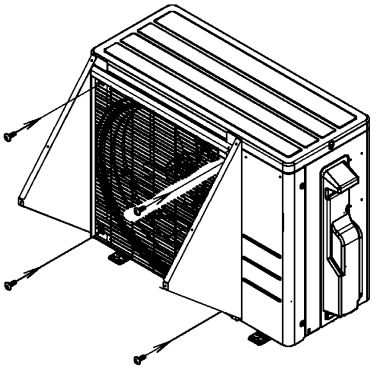


2 Attach the side plate (left) ② and side plate (right) ①.



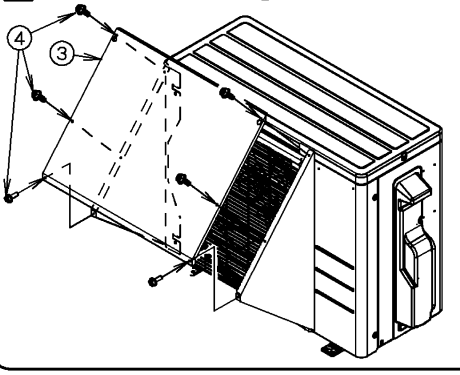

1. Insert the hooks in the side plate (right) ① and side plate (left) ② respectively into the holes provided in the front plate.

3 Attach the discharge grille.



1. When installing the discharge grille removed in [1], jointly tighten the side plate (right) ① and side plate (left) ② with the 2 screws that hold the discharge grille for each plate.

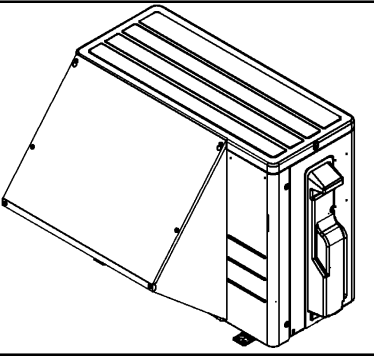
4 Attach the top plate ③




1. Install the top plate ③ using the 6 screws ④ included in the kit.

- Installation is easiest if you start with the hook slot.

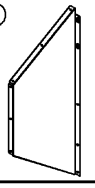
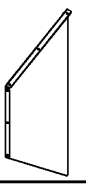
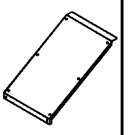
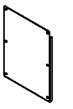
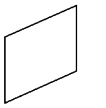
## ② Appearance of the snow hood (outlet) after installation



3P436079-1

## 14.17 <KPS063A41> Snow Hood (Intake Side Plate)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate (right) | Side plate (left) | Top plate | Front plate | Screws | Installation Manual |
|---|---|---|---|---|---|---|
| Illustration | ①  | ②  | ③  | ④  | ⑤  (uantity to use 14) | ⑥  |
| Quantity | 1 | 1 | 1 | 1 | 16 | 1 (this document) |

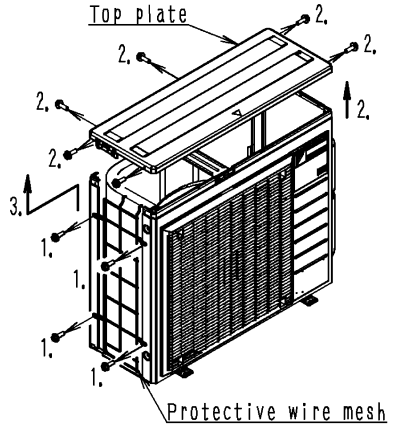
**⚠ Caution** Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠ Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

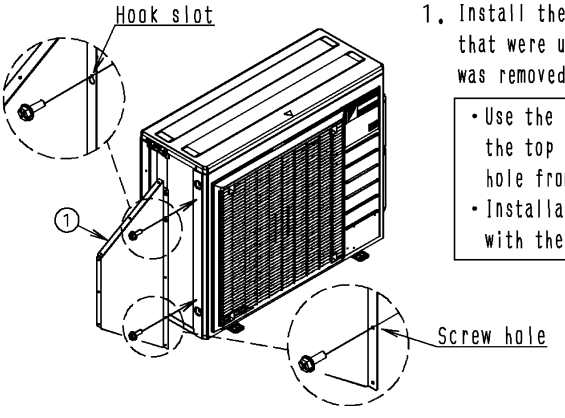
### ① Installing the snow hood (intake side plate)

1 Remove the protective wire mesh




1. Remove the 2 screws that hold the protective wire mesh.
2. Remove the 6 screws that hold the top plate and remove the top plate.
3. Remove the protective wire mesh, being careful of the part that is attached to the heat exchanger.
4. Attach the top plate removed in step 2 using the 6 screws removed in step 2.

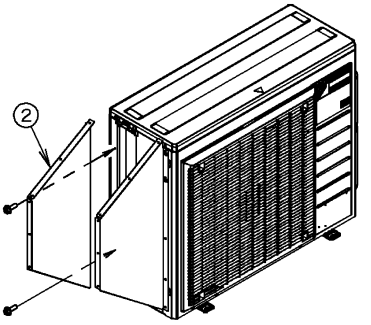
2 Attach the side plate (right) ①




1. Install the side plate (right) ① with the 2 screws that were used in the protective wire mesh that was removed in step 1.

- Use the second hook slot from the top and the 2 screw hole from the bottom.
- Installation is easiest if you start with the hook slot.

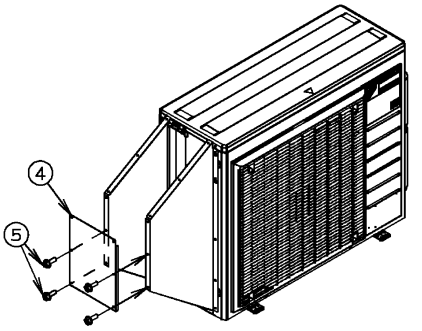
3 Attach the side plate (left) ②.




1. Install the side plate (left) ② with the 2 screws that were used in the protective wire mesh that was removed in step 1 .

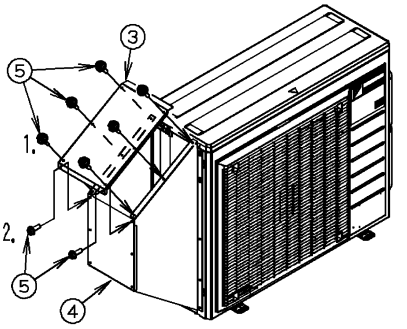
- Use the second hook slot from the top and the 2 screw hole from the bottom.
- Installation is easiest if you start with the hook slot.

4 Attach the front plate ④.



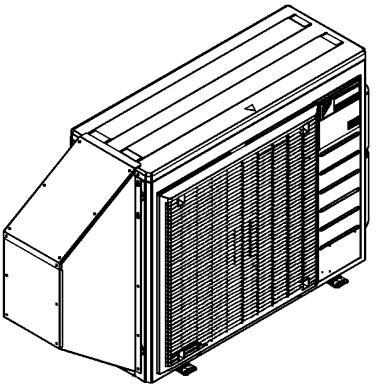

1. Temporarily secure the front plate ④ in place with the 4 screws ⑤.

5 Attach the top plate ③.




1. Attach the top plate ③ with the 6 screws ⑤.
2. Temporarily secure the top plate ③ and the front plate ④ to the side plate (right) ① and the side plate (left) ② with the 2 screws ⑤.
3. Tighten the 12 screws ⑤ that you used to temporarily secure parts in steps 4 and 5 .

## ❷ Appearance of the snow hood (intake side plate) after installation



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## 14.18 <KPS063A44> Snow Hood (Intake Rear Plate)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate | Side plate | Top plate | Front plate | Screws | Piercing screw | Installation Manual |
|---|---|---|---|---|---|---|---|
| Illustration | ① (Right) | ② (Left) | ③ | ④ | ⑤ | ⑥ | ⑦ |
| Quantity | 1 | 1 | 1 | 1 | 14 | 3 | 1 (this document) |

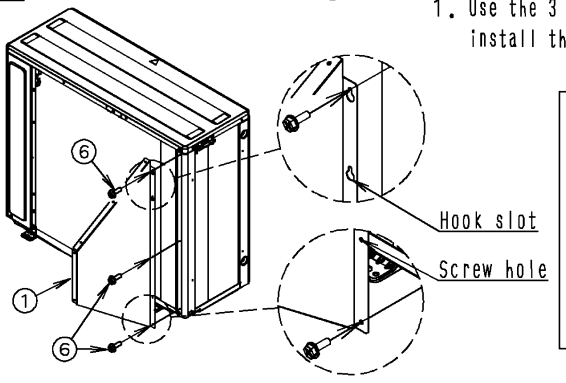
**⚠Caution** Read these safety considerations for installation carefully before installing the product.

●Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠Caution • • • •**
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

### ❶ Installing the snow hood (intake rear plate)

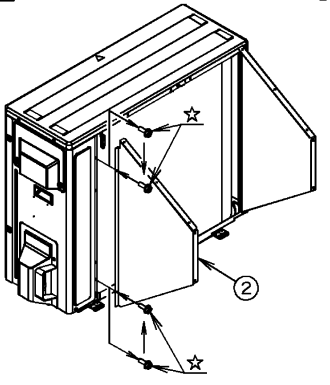
**1 Attach the side plate (right)①.**




1. Use the 3 piercing screws ⑥ included in the kit to install the side plate (right) ①.

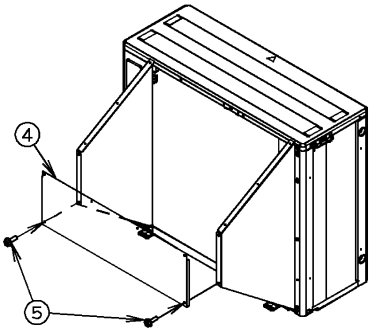
- For the hook slot, use the first hook slot from the top.
- For the screw hole, use the first screw hole from the bottom.
- Installation is easiest if you start with the hook slot.
- Align the screw installation position with the dowel hole.

**2 Attach the side plate (left) ②**



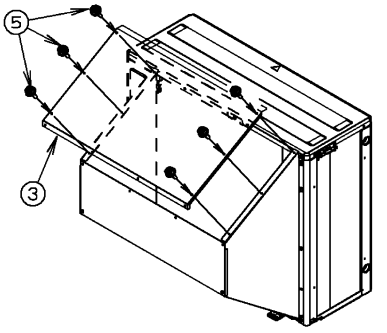

1. Remove the 2 screws (☆) that hold the heat exchanger.
2. Install the side plate (left) ② using the 2 screws removed in step 1.

3 Attach the front plate ④



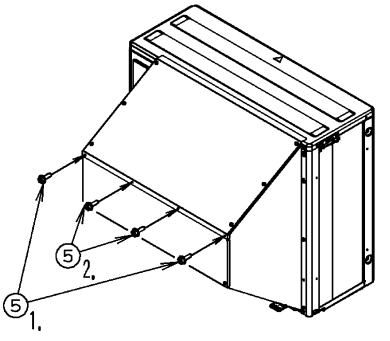

1. Temporarily secure the front plate ④in place with the 2 screws ⑤included in the kit.

4 Attach the top plate ③



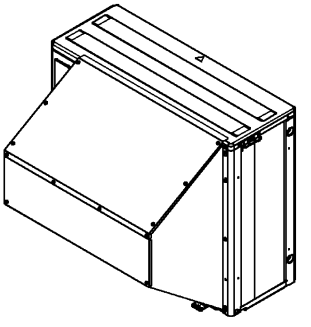

1. Temporarily secure the top plate ③in place with the 6 screws ⑤included in the kit.

5 Attach the top plate ③




1. Temporarily secure the top plate ③ and front plate ④ to the side plate (right) ① and side plate (left) ② with the 2 screws ⑤included in the kit.
2. Temporarily secure the top plate ③to the front plate ④with the 2 screws ⑤ included in the kit.
3. Tighten the 12 screws that you used to temporarily secure parts in steps 3), 4), and 5).

## ❷ Appearance of the snow hood (intake rear plate) after installation



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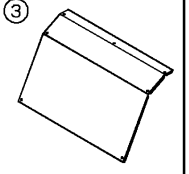
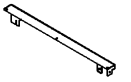
## 14.19 <KPS063A47> Snow Hood (Outlet)

**Parts** Before assembling the product, verify that all of the following parts have been included:

| Name | Side plate | Side plate | Top plate | Installation plate | Screws | Piercing screw | Installation Manual |
|---|---|---|---|---|---|---|---|
| Illustration | ① (Right)  | ② (Left)  | ③  | ④  | ⑤  | ⑥  | ⑦  |
| Quantity | 1 | 1 | 1 | 1 | 8 | 3 | 1 (this document) |

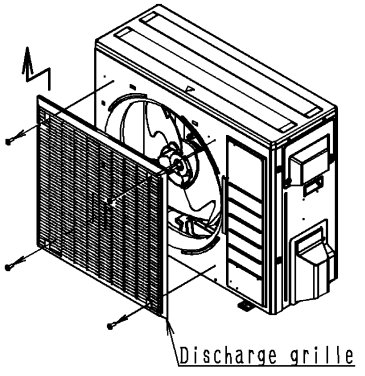
**⚠Caution** Read these safety considerations for installation carefully before installing the product.

- Be sure to observe the following installation precautions to ensure that the product can be used safely:
1. Install the product so that it is situated high enough to allow access to the outdoor unit for maintenance.
2. Installing the product in a location in which it may be exposed to strong winds, secure the outdoor unit with wire or other means.
3. Choose a location where the operating sound will not cause a nuisance to the neighbors of the user.
4. Tighten screws securely. Failure to do so may result in vibration.

**⚠Caution** • • • •
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practises.

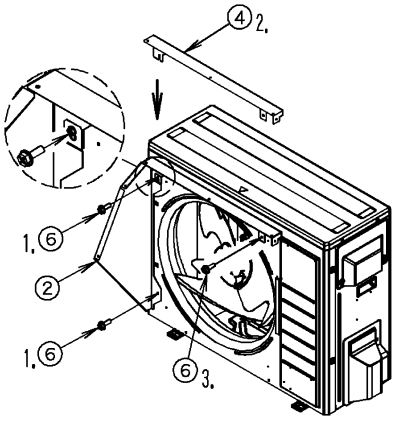
### ❶ Installing the snow hood (outlet)

**[1] Remove the discharge grille.**




1. Remove the 4 screws that hold the discharge grille. (The discharge grille is held with the 4 screws and 2 hooks.)

**[2] Attach the side plate (left) ② and installation plate ④.**

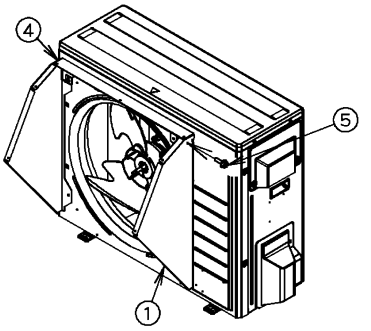



1. Temporarily secure the side plate (left) ② in place with the 2 piercing screw ⑥ included in the kit.

- Installation is easiest if you start with the hook slot.
- Align the screw installation position with the dowel hole.

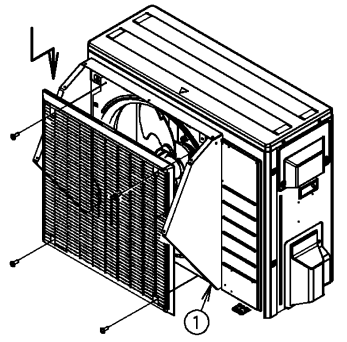
2. Jointly tighten the installation plate ④ with the 1 piercing screw ⑥ temporarily secured in step 1.
3. Install the right side of the installation plate ④ with the 1 piercing screw ⑥.

3 Attach the installation plate④.



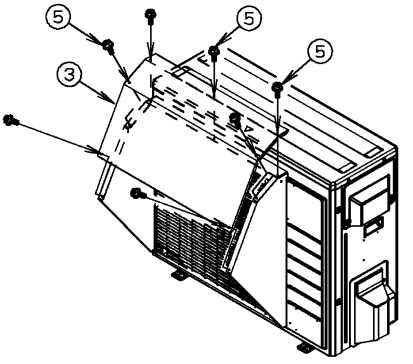

1. Install the side plate (right) ① and installation plate ④ with the 1 screws ⑤ included in the kit.

4 Attach the discharge grille.



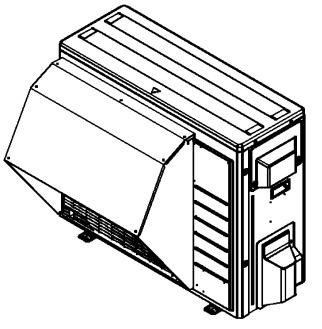

1. When installing the discharge grille removed in [1], jointly tighten the side plate (right) ① with the 2 screws securing the discharge grille. (Secure the discharge grille with the 4 screws and 2 hooks.)

5 Attach the top plate③.




1. Install the top plate ③ with the 7 screws ⑤ included in the kit.

## ❷ Appearance of the snow hood (outlet) after installation



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DAIKIN

**Warning**

- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any enquiries, please contact your local importer, distributor and/or retailer.

**Cautions on product corrosion**

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.

● Specifications, designs and other content appearing in this brochure are current as of December 2017 but subject to change without notice.


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