EDUS041701





Engineering Data

Split Type Air Conditioners

- Cooling Only / Heat Pump -

FTX-N Series







Split Type Air Conditioners FTX-N Series

Cooling Only	FTX30NVJU FTX36NVJU	RK30NMVJU RK36NMVJU
Heat Pump	FTX30NVJU FTX36NVJU	RX30NMVJU RX36NMVJU

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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			
FTX30NVJU	RK30NMVJU				
FTX36NVJU	RK36NMVJU				
FTX30NVJU	RX30NMVJU	1 phase, 208 - 230 V, 60 Hz			
FTX36NVJU	RX36NMVJU				

Note: Power Supply Intake ; Outdoor Unit

2. Functions

Category	Functions	FTX30/36NVJU RK30/36NNJU	FTX30/36NVJU RX30/36NMVJU	Category	Functions	FTX30/36NVJU RK30/36NMVJU	FTX30/36NVJU RX30/36NMVJU
Basic	Inverter (with inverter power control)	• •		Health &	Air-purifying filter		—
Functions	Operation limit for cooling		er to	Cleanliness	Titanium apatite deodorizing filter	•	•
	Operation limit for heating	Ρ.	. 22		Air filter (prefilter)	•	•
	PAM control	•	•		Wipe-clean flat panel	•	•
	Standby electricity saving	•	•		Washable grille	—	—
Compressor	Oval scroll compressor	—	—		MOLD PROOF operation	—	—
	Swing compressor	•	•		Good-sleep cooling operation	—	—
	Rotary compressor	—	—	Timer	WEEKLY TIMER	•	•
	Reluctance DC motor	•	•		Count up-down ON/OFF timer	—	
Comfortable	Power-airflow flap (horizontal blade)	—	—		24-hour ON/OFF TIMER	•	•
Airflow	Power-airflow dual flaps	•	•		NIGHT SET mode	•	•
	(horizontal blade)	•		Worry Free	Auto-restart (after power failure)	•	•
	Power-airflow diffuser	—	—	(Reliability & Durability)	Self-diagnosis (R/C, LED)	•	•
	Wide-angle louvers (vertical blade)	•	•		Wiring error check function	—	—
	Auto-swing (up and down)	•	•		Anti-corrosion treatment of outdoor heat	•	
	Auto-swing (right and left)	•	•		exchanger	•	•
	3-D airflow	•	•	Flexibility	Multi-split/split type compatible indoor	_	
	COMFORT AIRFLOW operation	•	•		unit		
Comfort	Auto fan speed	•	•		H/P, C/O compatible indoor unit	•	•
Control	Indoor unit quiet operation	•	•		Flexible power supply correspondence	—	
	NIGHT QUIET mode (automatic)	—	—		Chargeless	32.8 ft	
	OUTDOOR UNIT QUIET operation (manual)	•	•		Either side drain (right or left)	(10 m)	(10 m)
	INTELLIGENT EYE operation	•	•		Power selection	_	
	Quick warming function	_	•	1	Low temperature cooling operation		- 10
	Hot-start function	_	•	1	(–10°C) (14°F)	● ★ 1	• ★ 2
	Automatic defrosting	_	•		°E/°C changeover B/C temperature	_	_
Operation	Automatic operation	_	•	1	°F/°C changeover R/C temperature display (factory setting: °F)	•	•
	Program dry function	•	•	Remote	Remote control adaptor	_	
	Fan only	•	•	Control	(normal open-pulse contact) (option)	•	•
Lifestyle	POWERFUL operation (non-inverter)	—	_		Remote control adaptor	-	_
Convenience	POWERFUL operation (inverter)	•	•		(normal open contact) (option)	•	•
	Priority-room setting	—	—	1	DIII-NET compatible (adaptor) (option)	٠	•
	COOL/HEAT mode lock	—	—	Remote	Wireless	٠	•
	HOME LEAVE operation	—	—	Controller	Wired (option)	•	•
	ECONO operation	•	٠	T			
	Indoor unit On/Off button	•	٠	T			
	Signal receiving sign	•	•			1	1
	R/C with back light	•	٠	T			1
	Temperature display	_					

Note: • : Available

- : Not available

★1 Extend operation range to -30°C (-22°F) with an air direction adjustment grille (sold separately).

★2 Extend operation range to -20°C (-4°F) with an air direction adjustment grille (sold separately).

3. Specifications

3.1 Cooling Only

60 Hz, 208 - 230 V

	Indoor Unit		FTX30NVJU	FTX36NVJU					
Model	Outdoor Unit		RK30NMVJU	RK36NMVJU					
	Rated	Btu/h	31.400 - 31.400	33,200 - 34,400					
Capacity	Min. ~ Max.	Btu/h	10,200 - 10,200 ~ 31,400 - 31,400	10,200 - 10,200 ~ 33,200 - 34,400					
Running Current (Rated)		A	15.7 - 14.2	17 - 17					
Rated W		W	3,188 - 3,188	3,458 - 3,780					
Power Consumption	Min. ~ Max.	Ŵ	610 - 610 ~ 3,188 - 3,188	620 - 620 ~ 3,458 - 3,780					
Power Factor (Rated)	With West	%	97.6 - 97.6	97.8 - 96.7					
SEER / HSPF		70	17.50	15.90					
COP (Rated)		W/W	_	—					
EER (Rated)		Btu/W·h	9.85	9.6 - 9.1					
22.1 (1.0.004)	Liquid	in. (mm)	φ 1/4 (φ 6.4)	φ 1/4 (φ 6.4)					
Piping Connections	Gas	in. (mm)	φ 5/8 (φ 15.9)	φ 1/ 1 (φ 0.1) φ 5/8 (φ 15.9)					
r iping connociono	Drain	in. (mm)	φ 5/8 (φ 16)	φ 5/8 (φ 16)					
Heat Insulation	Dian		Both Liquid and Gas Pipes	Both Liquid and Gas Pipes					
Max. Interunit Piping Le	enath	ft (m)	98-3/8 (30)	98-3/8 (30)					
Max. Interunit Height D		ft (m)	65-5/8 (20)	65-5/8 (20)					
Chargeless	literence	ft (m)	32-13/16 (10)	32-13/16 (10)					
Amount of Additional C	harge of	oz/ft							
Refrigerant	and ye of	(g/m)	0.32 (30)	0.32 (30)					
Indoor Unit		,	FTX30NVJU	FTX36NVJU					
Front Panel Color			White	White					
	Н		890 (25.2)	915 (25.9)					
	М	cfm	727 (20.6)	742 (21.0)					
Airflow Rate	L	(m ³ /min)	572 (16.2)	572 (16.2)					
	SL	1 1	512 (14.5)	512 (14.5)					
	Type	1	Cross Flow Fan	Cross Flow Fan					
Fan	Speed	Steps	5 Steps, Quiet, Auto	5 Steps, Quiet, Auto					
Air Direction Control	opoou	otopo	Right, Left, Horizontal, Downward	Right, Left, Horizontal, Downward					
Air Filter			Removable. Washable. Mildew Proof	Removable, Washable, Mildew Proof					
Running Current (Rate	d)	Α	0.8 - 0.7	0.8 - 0.8					
Power Consumption (F		Ŵ	90.0 - 90.0	95.0 - 95.0					
Power Factor (Rated)	latou)	%	56.2 - 55.9	55.7 - 55.1					
Temperature Control		70	Microcomputer Control	Microcomputer Control					
Dimensions (H × W × I	ור	in. (mm)	13-3/8 × 47-1/4 × 10-3/16 (340 × 1,200 × 259)	13-3/8 × 47-1/4 × 10-3/16 (340 × 1,200 × 259)					
Packaged Dimensions		in. (mm)	13-7/16 × 51-9/16 × 16-7/8 (342 × 1,310 × 429)	13-7/16 × 51-9/16 × 16-7/8 (342 × 1,310 × 429)					
Weight (Mass)	(11×11×12)	Lbs (kg)	38 (17)	38 (17)					
Gross Weight (Gross N	lass)	Lbs (kg)	49 (22)	49 (22)					
Sound Pressure Level	,	dB(A)	53/47/40/37	54 / 47 / 40 / 37					
Outdoor Unit		ub(ri)	RK30NMVJU	RK36NMVJU					
Casing Color			Ivory White	Ivory White					
	Туре		Hermetically Sealed Swing Type	Hermetically Sealed Swing Type					
Compressor	Model		2YC63AAXD	2YC63AAXD					
00110103001	Motor Output			1,920					
	Type		FVC50K	FVC50K					
Refrigerant Oil	Charge	oz (L)	30.44 (0.900)	30.44 (0.900)					
	Type	02 (Ľ)	R-410A	R-410A					
Refrigerant	Charge	Lbs (kg)	3.64 (1.65)	3.64 (1.65)					
	1	cfm							
Airflow Rate	н	(m ³ /min)	2,528 (71.6)	2,811 (79.6)					
Fan Type			Propeller	Propeller					
Running Current (Rated) A		Α	14.93 - 13.50	16.18 - 16.25					
Power Consumption (Rated) W			3,098 - 3,098	3,363 - 3,685					
Power Factor (Rated) %		%	99.8 - 99.8	99.9 - 98.6					
Starting Current A			15.70	17.00					
Dimensions $(H \times W \times D)$ 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)					
Packaged Dimensions		in. (mm)	31-7/8 × 41-9/16 × 18-1/4 (810 × 1,056 × 464)	31-7/8 × 41-9/16 × 18-1/4 (810 × 1,056 × 464)					
Weight (Mass)	, ,	Lbs (kg)	133 (60)	133 (60)					
Gross Weight (Gross N	Mass)	Lbs (kg)	142 (64)	142 (64)					
Sound Pressure Level		dB(A)	56	59					
Drawing No.		<u> </u>	3D107929	3D107930					
			02.0.020	30107930					

Notes:

1. SL: The Quiet fan level of the airflow rate setting.

Cooling Indoor; 80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB) Conversion Formulae 0utdoor; 95.0°FDB (35°CDB) / 75°FWB (23.9°CWB) kcal/h = kW × 860 Bitring L conth 25 ft (7.5 m)				
Cooling			$Btu/h = kW \times 3412$	
Piping Length	25 ft (7.5 m)		$ctm = m^3/min \times 35.3$	l

3.2 Heat Pump

60 Hz, 208 - 230 V

	Indoor Unit		FTX30	NVJU	FTX36NVJU				
Model	Outdoor Unit		RX30N	IMVJU	RX36NMVJU				
			Cooling	Heating	Cooling	Heating			
	Rated	Btu/h	31,400 - 31,400	34,800 - 34,800	33,200 - 34,400	35,200 - 36,000			
Capacity	Min. ~ Max.	Btu/h	10,200 - 10,200 ~ 31,400 - 31,400	10,200 - 10,200 ~ 34,800 - 34,800	10,200 - 10,200 ~ 33,200 - 34,400	10,200 - 10,200 ~ 35,200 - 36,000			
Running Current (Rated			15.7 - 14.2	17.3 - 15.6	17 - 17	18.1 - 17			
Power Consumption	Rated	W	3,188 - 3,188	3,490- 3,490	3,458 - 3,780	3,686 - 3,799			
	Min. ~ Max.	W	610 - 610 ~ 3,188 - 3,188	690 - 690 ~ 3,490 - 3,490	620 - 620 ~ 3,458 - 3,780	690 - 690 ~ 3,686 - 3,799			
Power Factor (Rated)		%	97.6 - 97.6	97.0 - 97.3	97.8 - 96.7	97.9 - 97.2			
SEER / HSPF			17.50	9.30	15.90	9.20			
COP (Rated)		W/W		2.92		2.80 - 2.78			
EER (Rated)	Linudal	Btu/W⋅h	9.85	-	9.6 - 9.1				
Dining Connections	Liquid Gas	in. (mm)	φ 1/4 + Ε/Ω ((\$ 6.4)			
Piping Connections	Drain	in. (mm)		φ 15.9) (+ 10)		φ 15.9) (+ 10)			
Heat Insulation	Drain	in. (mm)		(¢ 16) nd Gas Pipes		(
	un atta	ft (ma)							
Max. Interunit Piping Le Max. Interunit Height D		ft (m)	98-3/			8 (30)			
0	Inerence	ft (m)	65-5/	()		8 (20)			
Chargeless Amount of Additional C	harran of	ft (m) oz/ft	32-13/	16 (10)	32-13/	16 (10)			
Refrigerant	narge of	(g/m)	0.32	(30)	0.32	2 (30)			
Indoor Unit		(9,117)	FTX3	NVJU	FTX36	5NVJU			
Front Panel Color				nite		hite			
	Н		890 (25.2)	960 (27.2)	915 (25.9)	960 (27.2)			
	M	cfm	727 (20.6)	791 (22.4)	742 (21.0)	791 (22.4)			
Airflow Rate	L	(m³/min)	572 (16.2)	629 (17.8)	572 (16.2)	629 (17.8)			
	SL		512 (14.5)	544 (15.4)	512 (14.5)	544 (15.4)			
_	Туре	1		low Fan	Cross Flow Fan				
Fan	Speed	Steps		Quiet, Auto	5 Steps, Quiet, Auto				
Air Direction Control				ontal, Downward	Right, Left, Horizontal, Downward				
Air Filter			3 , ,	able, Mildew Proof	Removable, Washable, Mildew Proof				
Running Current (Rated	d)	Α	0.77 - 0.70	0.82 - 0.75	0.82 - 0.75	0.82 - 0.75			
Power Consumption (R	/	W	90.0 - 90.0	95.0 - 95.0	95.0 - 95.0	95 - 95			
Power Factor (Rated)	,	%	56.2 - 55.9	55.7 - 55.1	55.7-55.1 55.7-55.1				
Temperature Control		1	Microcomp	uter Control	Microcomputer Control				
Dimensions (H × W × D))	in. (mm)	13-3/8 × 47-1/4 × 10-3/	(16 (340 × 1,200 × 259)	13-3/8 × 47-1/4 × 10-3/16 (340 × 1,200 × 259)				
Packaged Dimensions	$(H \times W \times D)$	in. (mm)	13-7/16 × 51-9/16 × 16-	7/8 (342 × 1,310 × 429)	13-7/16 × 51-9/16 × 16-7/8 (342 × 1,310 × 429)				
Weight (Mass)	· · ·	Lbs (kg)	38	(17)	38 (17)				
Gross Weight (Gross N	lass)	Lbs (kg)	49	(22)	49	(22)			
Sound Pressure Level	H/M/L/SL	dB(A)	53 / 47 / 40 / 37	53 / 46 / 38 / 35	54 / 47 / 40 / 37	53 / 46 / 38 / 35			
Outdoor Unit	•		RX30N	IMVJU	RX36N	MVJU			
Casing Color			Ivory	White	Ivory White				
	Туре		Hermetically Se	aled Swing Type	Hermetically Sealed Swing Type				
Compressor	Model		2YC63	BAAXD	2YC63AAXD				
	Motor Output	W	1,9	920	1,920				
Refrigerant Oil	Туре		FVC	50K	FVC	C50K			
	Charge	oz (L)	30.44	(0.900)	30.44	(0.900)			
Refrigerant	Туре			10A		10A			
neiligeran	Charge	Lbs (kg)	3.64	(1.65)	3.64	(1.65)			
Airflow Rate	н	cfm (m³/min)	2,528 (71.6)	2,274 (64.4)	2,811 (79.6)	2,352 (66.6)			
Fan	Туре		Prop	eller	Prop	beller			
Running Current (Rated) A		Α	14.93 - 13.50	16.48 - 14.85	16.18 - 16.25	17.28 - 16.25			
		W	3,098 - 3,098	3,395 - 3,395	3,363 - 3,685	3,591 - 3,704			
Power Factor (Rated) %		%	99.8 - 99.8	99.0 - 99.4	99.9 - 98.6 99.9 - 99.1				
Starting Current A		A	17	.30		.10			
		in. (mm)	28-15/16 × 34-1/4 × 12	2-5/8 (735 × 870 × 320)		2-5/8 (735 × 870 × 320)			
Packaged Dimensions	$(H \times W \times D)$	in. (mm)	31-7/8 × 41-9/16 × 18-	1/4 (810 × 1,056 × 464)	31-7/8 × 41-9/16 × 18-	1/4 (810 × 1,056 × 464)			
Weight (Mass)		Lbs (kg)	133	(60)		(60)			
Gross Weight (Gross N	lass)	Lbs (kg)	142	(64)	142	(64)			
Sound Pressure Level		dB(A)	56	58	59	59			
Drawing No.			2010	7927	2D10	07928			

Notes:

1. SL: The Quiet fan level of the airflow rate setting.

2.	The data are based on the conditions shown in the table below.								
	Cooling	Indoor ; 80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB)							
	Cooling	Outdoor ; 95.0°FDB (35°CDB) / 75°FWB (23.9°CWB)							
	Heating	Indoor ; 70.0°FDB (21.1°CDB) / 60.0°FWB (15.6°CWB)							
	Healing	Outdoor ; 47.0°FDB (8.33°CDB) / 43.0°FWB (6.11°CWB)							
	Piping Length	25 ft (7.5 m)							

Conversion Formulae
$kcal/h = kW \times 860$ Btu/h = kW × 3412 cfm = m ³ /min × 35.3

4. Dimensions

4.1 Indoor Unit

FTX30/36NVJU



4.2 Outdoor Unit

RK(X)30/36NMVJU



5. Wiring Diagrams

5.1 Indoor Unit

FTX30/36NVJU



5.2 Outdoor Unit

RK(X)30/36NMVJU



6. Piping Diagrams

6.1 Indoor Unit

FTX30/36NVJU



6.2 Outdoor Unit

6.2.1 Cooling Only

RK30/36NMVJU



6.2.2 Heat Pump

RX30/36NMVJU



7. Capacity Tables

7.1 Cooling Only

FTX30NVJU + RK30NMVJU

AFR	25.22
BF	0.34

60 Hz, 208 V

Temp: Celsius

TC, SHC, PI: kW

IND	DOR		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	8.10	5.71	1.83	8.10	5.71	2.39	8.10	5.71	2.92	8.10	5.71	3.15	7.39	5.33	3.13	5.92	4.59	2.64	
16.0	22.0	9.95	6.38	1.95	9.83	6.31	2.46	8.97	5.86	2.93	8.55	5.64	3.17	7.79	5.27	3.13	6.33	4.58	2.64	
18.0	25.0	11.11	6.94	2.00	10.25	6.51	2.47	9.40	6.09	2.95	8.97	5.88	3.18	8.20	5.53	3.13	6.74	4.88	2.64	
19.4	26.7	11.32	7.18	2.01	10.46	6.77	2.48	9.61	6.36	2.95	9.18	6.16	3.19	8.40	5.81	3.13	6.94	5.19	2.64	
22.0	30.0	11.95	6.86	2.03	11.10	6.49	2.50	10.24	6.13	2.97	9.81	5.96	3.21	9.01	5.63	3.13	7.55	5.08	2.64	
24.0	32.0	12.37	6.63	2.04	11.52	6.29	2.52	10.66	5.96	2.99	10.24	5.80	3.22	9.41	5.50	3.13	7.95	4.99	2.64	

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

INDO	DOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
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
57.2	68.0	27.65	19.47	1.83	27.65	19.47	2.39	27.65	19.47	2.92	27.65	19.47	3.15	25.20	18.18	3.13	20.21	15.67	2.64
60.8	71.6	33.96	21.76	1.95	33.53	21.53	2.46	30.62	20.00	2.93	29.16	19.26	3.17	26.58	17.98	3.13	21.60	15.62	2.64
64.4	77.0	37.89	23.68	2.00	34.98	22.20	2.47	32.06	20.77	2.95	30.60	20.08	3.18	27.97	18.85	3.13	22.98	16.64	2.64
67.0	80.0	38.61	24.51	2.01	35.70	23.08	2.48	32.78	21.70	2.95	31.40	21.03	3.19	28.66	19.84	3.13	23.68	17.70	2.64
71.6	86.0	40.78	23.42	2.03	37.86	22.15	2.50	34.95	20.92	2.97	33.49	20.32	3.21	30.74	19.23	3.13	25.75	17.33	2.64
75.2	89.6	42.22	22.62	2.04	39.31	21.46	2.52	36.39	20.33	2.99	34.93	19.79	3.22	32.12	18.76	3.13	27.14	17.02	2.64

60 Hz, 230 V

Temp: Celsius

TC, SHC, PI: kW

IND	OOR							0	UTDOO	R TEMP	ERATU	RE (°CD	B)						
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	8.10	5.71						5.71	2.92	8.10	5.71	3.15	7.70	5.49	3.39	6.26	4.76	2.92
16.0	22.0	9.95	6.38	1.95	9.83	6.31	2.46	8.97	5.86	2.93	8.55	5.64	3.17	8.12	5.43	3.40	6.67	4.74	2.92
18.0	25.0	11.11	6.94	2.00	10.25	6.51	2.47	9.40	6.09	2.95	8.97	5.88	3.18	8.54	5.68	3.42	7.08	5.02	2.92
19.4	26.7	11.32	7.18	2.01	10.46	6.77	2.48	9.61	6.36	2.95	9.18	6.16	3.19	8.75	5.97	3.42	7.28	5.33	2.92
22.0	30.0	11.95	6.86	2.03	11.10	6.49	2.50	10.24	6.13	2.97	9.81	5.96	3.21	9.39	5.78	3.44	7.89	5.21	2.92
24.0	32.0	12.37	6.63	2.04	11.52	6.29	2.52	10.66	5.96	2.99	10.24	5.80	3.22	9.81	5.64	3.46	8.29	5.11	2.92

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

IND	OOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
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	27.65	19.47	1.83	27.65	19.47	2.39	27.65	19.47	2.92	27.65	19.47	3.15	26.26	18.73	3.39	21.38	16.24	2.92
60.8	71.6	33.96	21.76	1.95	33.53	21.53	2.46	30.62	20.00	2.93	29.16	19.26	3.17	27.70	18.53	3.40	22.76	16.16	2.92
64.4	77.0	37.89	23.68	2.00	34.98	22.20	2.47	32.06	20.77	2.95	30.60	20.08	3.18	29.14	19.39	3.42	24.14	17.14	2.92
67.0	80.0	38.61	24.51	2.01	35.70	23.08	2.48	32.78	21.70	2.95	31.40	21.03	3.19	29.86	20.37	3.42	24.84	18.19	2.92
71.6	86.0	40.78	23.42	2.03	37.86	22.15	2.50	34.95	20.92	2.97	33.49	20.32	3.21	32.03	19.74	3.44	26.91	17.76	2.92
75.2	89.6	42.22	22.62	2.04	39.31	21.46	2.52	36.39	20.33	2.99	34.93	19.79	3.22	33.47	19.25	3.46	28.30	17.42	2.92

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

- shows nominal (rated) capacities and power input.
 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.)
 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)
 Airflow rate (AFR) and bypass factor (BF) are tabulated above table.

FTX36NVJU + RK36NMVJU

AFR	25.92
BF	0.34

60 Hz, 208 V

Temp: Celsius

TC, SHC, PI: kW

INDO	DOR							0	UTDOO	R TEMP	ERATU	RE (°CD	B)						
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	8.33	5.87	1.99	8.33	5.87	8.33	5.87	3.16	8.33	5.87	3.42	7.55	5.45	3.14	6.02	4.69	2.64	
16.0	22.0	10.23	6.55	2.10	10.23	6.55	2.66	9.56	6.20	3.18	9.10	5.96	3.44	7.98	5.40	3.14	6.45	4.68	2.64
18.0	25.0	11.83	7.35	2.17	10.92	6.88	2.68	10.01	6.43	3.19	9.55	6.21	3.45	8.41	5.67	3.14	6.89	5.00	2.64
19.4	26.7	12.06	7.60	2.18	11.15	7.14	2.69	10.24	6.71	3.20	9.78	6.49	3.46	8.63	5.97	3.14	7.10	5.32	2.64
22.0	30.0	12.73	7.25	2.20	11.82	6.85	2.71	10.91	6.46	3.23	10.46	6.27	3.48	9.27	5.80	3.14	7.75	5.22	2.64
24.0	32.0	13.18	7.00	2.22	12.27	6.63	2.73	11.36	6.28	3.24	10.91	6.10	3.50	9.71	5.66	3.14	8.18	5.13	2.64

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

INDO	DOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
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	28.42	20.01	1.99	28.42	20.01	2.62	28.42	20.01	3.16	28.42	20.01	3.42	25.75	18.61	3.14	20.55	15.99	2.64
60.8	71.6	34.90	22.36	2.10	34.90	22.36	2.66	32.62	21.15	3.18	31.06	20.35	3.44	27.22	18.43	3.14	22.02	15.97	2.64
64.4	77.0	40.37	25.08	2.17	37.26	23.48	2.68	34.15	21.93	3.19	32.60	21.18	3.45	28.70	19.35	3.14	23.49	17.05	2.64
67.0	80.0	41.14	25.92	2.18	38.03	24.38	2.69	34.92	22.88	3.20	33.20	22.16	3.46	29.43	20.38	3.14	24.23	18.15	2.64
71.6	86.0	43.44	24.75	2.20	40.34	23.38	2.71	37.23	22.05	3.23	35.68	21.40	3.48	31.64	19.78	3.14	26.44	17.80	2.64
75.2	89.6	44.98	23.90	2.22	41.87	22.64	2.73	38.77	21.42	3.24	37.21	20.83	3.50	33.12	19.32	3.14	27.92	17.50	2.64

60 Hz, 230 V

Temp: Celsius

TC, SHC, PI: kW

IND	OOR							0	UTDOO	R TEMP	ERATU	RE (°CD	B)						
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	8.33	5.87	2.21	8.33	5.87	2.90	8.33	5.87	3.46	8.33	5.87	3.74	7.74	5.55	3.43	6.11	4.73	2.89
16.0	22.0	10.23	6.55	2.30	10.23	6.55	2.92	9.85	6.35	3.48	9.38	6.11	3.75	8.18	5.50	3.43	6.55	4.72	2.89
18.0	25.0	12.19	7.54	2.37	11.26	7.05	2.93	10.32	6.58	3.49	9.85	6.35	3.77	8.63	5.77	3.43	6.99	5.04	2.89
19.4	26.7	12.43	7.79	2.38	11.49	7.31	2.94	10.55	6.86	3.50	10.08	6.63	3.78	8.85	6.07	3.43	7.22	5.37	2.89
22.0	30.0	13.12	7.43	2.41	12.18	7.01	2.97	11.25	6.60	3.53	10.78	6.41	3.81	9.51	5.89	3.43	7.88	5.27	2.89
24.0	32.0	13.59	7.17	2.42	12.65	6.79	2.98	11.71	6.41	3.54	11.24	6.23	3.82	9.96	5.75	3.43	8.33	5.18	2.89

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

IND	OOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
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	28.42	20.01	2.21	28.42	20.01	2.90	28.42	20.01	3.46	28.42	20.01	3.74	26.40	18.95	3.43	20.83	16.13	2.89
60.8	71.6	34.90	22.36	2.30	34.90	22.36	2.92	33.62	21.68	3.48	32.02	20.84	3.75	27.92	18.77	3.43	22.35	16.12	2.89
64.4	77.0	41.61	25.74	2.37	38.41	24.06	2.93	35.20	22.45	3.49	33.60	21.66	3.77	29.43	19.69	3.43	23.86	17.21	2.89
67.0	80.0	42.40	26.57	2.38	39.20	24.95	2.94	35.99	23.39	3.50	34.40	22.63	3.78	30.19	20.71	3.43	24.62	18.31	2.89
71.6	86.0	44.78	25.36	2.41	41.57	23.92	2.97	38.37	22.53	3.53	36.77	21.86	3.81	32.46	20.10	3.43	26.89	17.97	2.89
75.2	89.6	46.36	24.47	2.42	43.16	23.15	2.98	39.96	21.88	3.54	38.35	21.26	3.82	33.98	19.63	3.43	28.41	17.67	2.89

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

- shows nominal (rated) capacities and power input.
 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.)
 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)
 Airflow rate (AFR) and bypass factor (BF) are tabulated above table.

7.2 **Heat Pump**

FTX30NVJU + RX30NMVJU

60 Hz, 208 V

Cooling	
AFR	25.22
BF	0.34

Temp: Celsius

TC, SHC, PI: kW

INDO	OOR							0	UTDOO	R TEMP	ERATUR	RE (°CD	B)						
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	8.10	5.711.838.105.712.396.381.959.836.312.46					8.10	5.71	2.92	8.10	5.71	3.15	7.39	5.33	3.13	5.92	4.59	2.64
16.0	22.0	9.95	6.38	1.95	9.83	6.31	2.46	8.97	5.86	2.93	8.55	5.64	3.17	7.79	5.27	3.13	6.33	4.58	2.64
18.0	25.0	11.11	6.94	2.00	10.25	6.51	2.47	9.40	6.09	2.95	8.97	5.88	3.18	8.20	5.53	3.13	6.74	4.88	2.64
19.4	26.7	11.32	7.18	2.01	10.46	6.77	2.48	9.61	6.36	2.95	9.18	6.16	3.19	8.40	5.81	3.13	6.94	5.19	2.64
22.0	30.0	11.95	6.86	2.03	11.10	6.49	2.50	10.24	6.13	2.97	9.81	5.96	3.21	9.01	5.63	3.13	7.55	5.08	2.64
24.0	32.0	12.37	6.63	2.04	11.52	6.29	2.52	10.66	5.96	2.99	10.24	5.80	3.22	9.41	5.50	3.13	7.95	4.99	2.64

Temp: Fahrenheit

TC, SHC: kBtu/h PI: kW

INDO	DOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
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	27.65	19.47	1.83	27.65	19.47	2.39	27.65	19.47	2.92	27.65	19.47	3.15	25.20	18.18	3.13	20.21	15.67	2.64
60.8	71.6	33.96	21.76	1.95	33.53	21.53	2.46	30.62	20.00	2.93	29.16	19.26	3.17	26.58	17.98	3.13	21.60	15.62	2.64
64.4	77.0	37.89	23.68	2.00	34.98	22.20	2.47	32.06	20.77	2.95	30.60	20.08	3.18	27.97	18.85	3.13	22.98	16.64	2.64
67.0	80.0	38.61	24.51	2.01	35.70	23.08	2.48	32.78	21.70	2.95	31.40	21.03	3.19	28.66	19.84	3.13	23.68	17.70	2.64
71.6	86.0	40.78	23.42	2.03	37.86	22.15	2.50	34.95	20.92	2.97	33.49	20.32	3.21	30.74	19.23	3.13	25.75	17.33	2.64
75.2	89.6	42.22	22.62	2.04	39.31	21.46	2.52	36.39	20.33	2.99	34.93	19.79	3.22	32.12	18.76	3.13	27.14	17.02	2.64

Heating AFR

27.2

Temp: Celsius TC, PI: kW

INDOOR					0	UTDOO	R TEMP	ERATUF	RE (°CW	B)				
EDB	-1	5	-1	0	-	5	()	e	6	1	0	1	8
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.86	2.53	5.84	2.66	6.82	2.79	7.79	2.92	10.55	3.41	11.47	3.53	13.32	3.76
21.1	4.56	2.60	5.54	2.73	6.52	2.86	7.50	2.99	10.20	3.49	11.12	3.60	12.96	3.83
22.0	4.44	2.63	5.42	2.76	6.40	2.88	7.38	3.01	10.06	3.52	10.98	3.64	12.82	3.87
24.0	4.32	2.65	5.30	2.78	6.28	2.91	7.26	3.04	9.92	3.55	10.84	3.67	12.68	3.90
25.0	4.26	2.67	5.24	2.80	6.22	2.93	7.20	3.06	9.85	3.57	10.77	3.68	12.61	3.91
27.0	4.14	2.70	5.12	2.83	6.10	2.96	7.08	3.08	9.71	3.60	10.63	3.72	12.47	3.94

Temp: Fahrenheit

TC: kBtu/h

PI: kW

INDOOR					0	UTDOO	R TEMP	ERATUF	RE (°FW	B)				
EDB	5	5	1	4	2	3	3	2	4	3	5	0	6	4
°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	16.57	2.53	19.91	2.66	23.25	2.79	26.59	2.92	36.00	3.41	39.15	3.53	45.44	3.76
70.0	15.55	2.60	18.89	2.73	22.23	2.86	25.57	2.99	34.80	3.49	37.95	3.60	44.23	3.83
71.6	15.14	2.63	18.48	2.76	21.82	2.88	25.17	3.01	34.32	3.52	37.47	3.64	43.75	3.87
75.2	14.74	2.65	18.08	2.78	21.42	2.91	24.76	3.04	33.84	3.55	36.99	3.67	43.27	3.90
77.0	14.53	2.67	17.87	2.80	21.21	2.93	24.55	3.06	33.60	3.57	36.74	3.68	43.03	3.91
80.6	14.12	2.70	17.46	2.83	20.80	2.96	24.14	3.08	33.12	3.60	36.26	3.72	42.55	3.94

60 Hz, 230 V

Cooling	
AFR	25.22
BF	0.34

Temp: Celsius

TC, SHC, PI: kW

IND	OOR							0	UTDOO	R TEMP	ERATU	RE (°CD	B)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC PI TC 5.71 2.39 8.10			SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	8.10	5.71	1.83	8.10	5.71	2.39	8.10	5.71	2.92	8.10	5.71	3.15	7.70	5.49	3.39	6.26	4.76	2.92
16.0	22.0	9.95	6.38	1.95	9.83	6.31	2.46	8.97	5.86	2.93	8.55	5.64	3.17	8.12	5.43	3.40	6.67	4.74	2.92
18.0	25.0	11.11	6.94	2.00	10.25	6.51	2.47	9.40	6.09	2.95	8.97	5.88	3.18	8.54	5.68	3.42	7.08	5.02	2.92
19.4	26.7	11.32	7.18	2.01	10.46	6.77	2.48	9.61	6.36	2.95	9.18	6.16	3.19	8.75	5.97	3.42	7.28	5.33	2.92
22.0	30.0	11.95	6.86	2.03	11.10	6.49	2.50	10.24	6.13	2.97	9.81	5.96	3.21	9.39	5.78	3.44	7.89	5.21	2.92
24.0	32.0	12.37	6.63	2.04	11.52	6.29	2.52	10.66	5.96	2.99	10.24	5.80	3.22	9.81	5.64	3.46	8.29	5.11	2.92

Temp: Fahrenheit TC, SHC: kBtu/h

PI: kW

IND	OOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	27.65	19.47	1.83	27.65 19.47 2.39 2				19.47	2.92	27.65	19.47	3.15	26.26	18.73	3.39	21.38	16.24	2.92
60.8	71.6	33.96	21.76	1.95	33.53	21.53	2.46	30.62	20.00	2.93	29.16	19.26	3.17	27.70	18.53	3.40	22.76	16.16	2.92
64.4	77.0	37.89	23.68	2.00	34.98	22.20	2.47	32.06	20.77	2.95	30.60	20.08	3.18	29.14	19.39	3.42	24.14	17.14	2.92
67.0	80.0	38.61	24.51	2.01	35.70	23.08	2.48	32.78	21.70	2.95	31.40	21.03	3.19	29.86	20.37	3.42	24.84	18.19	2.92
71.6	86.0	40.78	23.42	2.03	37.86	22.15	2.50	34.95	20.92	2.97	33.49	20.32	3.21	32.03	19.74	3.44	26.91	17.76	2.92
75.2	89.6	42.22	22.62	2.04	39.31	21.46	2.52	36.39	20.33	2.99	34.93	19.79	3.22	33.47	19.25	3.46	28.30	17.42	2.92

Heating

27.2

AFR Temp: Celsius TC, PI: kW

INDOOR					0	UTDOOI	R TEMP	ERATU	RE (°CW	B)				
EDB	-1	5	-1	0	-	5	(C	e	6	1	0	1	8
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.86	2.53	5.84	2.66	6.82	2.79	7.79	2.92	10.55	3.41	11.47	3.53	13.32	3.76
21.1	4.56	2.60	5.54	2.73	6.52	2.86	7.50	2.99	10.20	3.49	11.12	3.60	12.96	3.83
22.0	4.44	2.63	5.42	2.76	6.40	2.88	7.38	3.01	10.06	3.52	10.98	3.64	12.82	3.87
24.0	4.32	2.65	5.30	2.78	6.28	2.91	7.26	3.04	9.92	3.55	10.84	3.67	12.68	3.90
25.0	4.26	2.67	5.24	2.80	6.22	2.93	7.20	3.06	9.85	3.57	10.77	3.68	12.61	3.91
27.0	4.14	2.70	5.12	2.83	6.10	2.96	7.08	3.08	9.71	3.60	10.63	3.72	12.47	3.94

Temp: Fahrenheit TC: kBtu/h

PI: kW

INDOOR					0	UTDOO	R TEMP	ERATU	RE (°FW	B)				
EDB	Ę	5	1	4	2	3	3	2	4	3	5	0	6	4
°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	16.57	2.53	19.91	2.66	23.25	2.79	26.59	2.92	36.00	3.41	39.15	3.53	45.44	3.76
70.0	15.55	2.60	18.89	2.73	22.23	2.86	25.57	2.99	34.80	3.49	37.95	3.60	44.23	3.83
71.6	15.14	2.63	18.48	2.76	21.82	2.88	25.17	3.01	34.32	3.52	37.47	3.64	43.75	3.87
75.2	14.74	2.65	18.08	2.78	21.42	2.91	24.76	3.04	33.84	3.55	36.99	3.67	43.27	3.90
77.0	14.53	2.67	17.87	2.80	21.21	2.93	24.55	3.06	33.60	3.57	36.74	3.68	43.03	3.91
80.6	14.12	2.70	17.46	2.83	20.80	2.96	24.14	3.08	33.12	3.60	36.26	3.72	42.55	3.94

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

- shows nominal (rated) capacities and power input.
 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.)
 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)
 Airflow rate (AFR) and bypass factor (BF) are tabulated above table.

FTX36NVJU + RX36NMVJU

60 Hz, 208 V

Cooling	
AFR	25.92
BF	0.34

Temp: Celsius

TC, SHC, PI: kW

INDO	DOR							0	UTDOO	R TEMP	ERATU	RE (°CD	B)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC PI TC 5.87 2.62 8.33			SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	8.33	5.87	1.99	8.33	5.87	2.62	8.33	5.87	3.16	8.33	5.87	3.42	7.55	5.45	3.14	6.02	4.69	2.64
16.0	22.0	10.23	6.55	2.10	10.23	6.55	2.66	9.56	6.20	3.18	9.10	5.96	3.44	7.98	5.40	3.14	6.45	4.68	2.64
18.0	25.0	11.83	7.35	2.17	10.92	6.88	2.68	10.01	6.43	3.19	9.55	6.21	3.45	8.41	5.67	3.14	6.89	5.00	2.64
19.4	26.7	12.06	7.60	2.18	11.15	7.14	2.69	10.24	6.71	3.20	9.78	6.49	3.46	8.63	5.97	3.14	7.10	5.32	2.64
22.0	30.0	12.73	7.25	2.20	11.82	6.85	2.71	10.91	6.46	3.23	10.46	6.27	3.48	9.27	5.80	3.14	7.75	5.22	2.64
24.0	32.0	13.18	7.00	2.22	12.27	6.63	2.73	11.36	6.28	3.24	10.91	6.10	3.50	9.71	5.66	3.14	8.18	5.13	2.64

Temp: Fahrenheit

TC, SHC: kBtu/h

PI: kW

INDO	DOR							0	UTDOO	R TEMP	ERATU	RE (°FDI	3)						
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	28.42	20.01	1.99	28.42	20.01	2.62	28.42	20.01	3.16	28.42	20.01	3.42	25.75	18.61	3.14	20.55	15.99	2.64
60.8	71.6	34.90	22.36	2.10	34.90	22.36	2.66	32.62	21.15	3.18	31.06	20.35	3.44	27.22	18.43	3.14	22.02	15.97	2.64
64.4	77.0	40.37	25.08	2.17	37.26	23.48	2.68	34.15	21.93	3.19	32.60	21.18	3.45	28.70	19.35	3.14	23.49	17.05	2.64
67.0	80.0	41.14	25.92	2.18	38.03	24.38	2.69	34.92	22.88	3.20	33.20	22.16	3.46	29.43	20.38	3.14	24.23	18.15	2.64
71.6	86.0	43.44	24.75	2.20	40.34	23.38	2.71	37.23	22.05	3.23	35.68	21.40	3.48	31.64	19.78	3.14	26.44	17.80	2.64
75.2	89.6	44.98	23.90	2.22	41.87	22.64	2.73	38.77	21.42	3.24	37.21	20.83	3.50	33.12	19.32	3.14	27.92	17.50	2.64

Heating

AFR 27.2

Temp: Celsius

TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE (°CWB)												
EDB	-1	5	-1	0	-	5	()	e	6	1	0	1	8
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.91	2.67	5.91	2.81	6.90	2.94	7.89	3.08	10.68	3.60	11.61	3.72	13.47	3.97
21.1	4.61	2.74	5.60	2.88	6.59	3.02	7.58	3.15	10.32	3.69	11.25	3.81	13.12	4.05
22.0	4.49	2.77	5.48	2.91	6.47	3.05	7.46	3.18	10.18	3.72	11.11	3.84	12.97	4.08
24.0	4.37	2.80	5.36	2.94	6.35	3.08	7.34	3.21	10.04	3.75	10.97	3.87	12.83	4.12
25.0	4.31	2.82	5.30	2.95	6.29	3.09	7.28	3.23	9.96	3.77	10.90	3.89	12.76	4.13
27.0	4.19	2.85	5.18	2.98	6.17	3.12	7.16	3.26	9.82	3.80	10.75	3.92	12.62	4.17

Temp: Fahrenheit

TC: kBtu/h

PI: kW

INDOOR		OUTDOOR TEMPERATURE (°FWB)												
EDB	Ę	5	1	4	2	3	3	2	4	3	5	0	6	4
°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	16.77	2.67	20.15	2.81	23.53	2.94	26.91	3.08	36.43	3.60	39.61	3.72	45.97	3.97
70.0	15.74	2.74	19.12	2.88	22.49	3.02	25.87	3.15	35.20	3.69	38.39	3.81	44.75	4.05
71.6	15.32	2.77	18.70	2.91	22.08	3.05	25.46	3.18	34.73	3.72	37.91	3.84	44.27	4.08
75.2	14.91	2.80	18.29	2.94	21.67	3.08	25.05	3.21	34.24	3.75	37.42	3.87	43.78	4.12
77.0	14.70	2.82	18.08	2.95	21.46	3.09	24.84	3.23	34.00	3.77	37.18	3.89	43.54	4.13
80.6	14.29	2.85	17.67	2.98	21.05	3.12	24.43	3.26	33.51	3.80	36.69	3.92	43.05	4.17

60 Hz, 230 V

Cooling							
AFR	25.92						
BF	0.34						

Temp: Celsius

TC, SHC, PI: kW

IND	OOR		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	8.33	5.87	2.21	8.33	5.87	2.90	8.33	5.87	3.46	8.33	5.87	3.74	7.74	5.55	3.43	6.11	4.73	2.89
16.0	22.0	10.23	6.55	2.30	10.23	6.55	2.92	9.85	6.35	3.48	9.38	6.11	3.75	8.18	5.50	3.43	6.55	4.72	2.89
18.0	25.0	12.19	7.54	2.37	11.26	7.05	2.93	10.32	6.58	3.49	9.85	6.35	3.77	8.63	5.77	3.43	6.99	5.04	2.89
19.4	26.7	12.43	7.79	2.38	11.49	7.31	2.94	10.55	6.86	3.50	10.08	6.63	3.78	8.85	6.07	3.43	7.22	5.37	2.89
22.0	30.0	13.12	7.43	2.41	12.18	7.01	2.97	11.25	6.60	3.53	10.78	6.41	3.81	9.51	5.89	3.43	7.88	5.27	2.89
24.0	32.0	13.59	7.17	2.42	12.65	6.79	2.98	11.71	6.41	3.54	11.24	6.23	3.82	9.96	5.75	3.43	8.33	5.18	2.89

Temp: Fahrenheit

. TC, SHC: kBtu/h

PI: kW

IND	OOR		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	28.42	20.01	2.21	28.42	20.01	2.90	28.42	20.01	3.46	28.42	20.01	3.74	26.40	18.95	3.43	20.83	16.13	2.89
60.8	71.6	34.90	22.36	2.30	34.90	22.36	2.92	33.62	21.68	3.48	32.02	20.84	3.75	27.92	18.77	3.43	22.35	16.12	2.89
64.4	77.0	41.61	25.74	2.37	38.41	24.06	2.93	35.20	22.45	3.49	33.60	21.66	3.77	29.43	19.69	3.43	23.86	17.21	2.89
67.0	80.0	42.40	26.57	2.38	39.20	24.95	2.94	35.99	23.39	3.50	34.40	22.63	3.78	30.19	20.71	3.43	24.62	18.31	2.89
71.6	86.0	44.78	25.36	2.41	41.57	23.92	2.97	38.37	22.53	3.53	36.77	21.86	3.81	32.46	20.10	3.43	26.89	17.97	2.89
75.2	89.6	46.36	24.47	2.42	43.16	23.15	2.98	39.96	21.88	3.54	38.35	21.26	3.82	33.98	19.63	3.43	28.41	17.67	2.89

Heating

AFR 27.2

Temp: Celsius

TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE (°CWB)												
EDB	-1	5	-1	0	-	5	()	6	6	1	0	1	8
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	5.03	2.75	6.04	2.89	7.06	3.03	8.07	3.17	10.92	3.71	11.88	3.84	13.79	4.09
21.1	4.72	2.83	5.73	2.97	6.75	3.11	7.76	3.25	10.56	3.80	11.51	3.92	13.42	4.17
22.0	4.60	2.86	5.61	3.00	6.62	3.14	7.64	3.28	10.41	3.83	11.37	3.96	13.28	4.21
24.0	4.47	2.89	5.48	3.03	6.50	3.17	7.51	3.31	10.27	3.87	11.22	3.99	13.13	4.24
25.0	4.41	2.90	5.42	3.05	6.44	3.19	7.45	3.33	10.20	3.88	11.15	4.01	13.06	4.26
27.0	4.29	2.94	5.30	3.08	6.31	3.22	7.33	3.36	10.05	3.92	11.00	4.04	12.91	4.29

Temp: Fahrenheit

TC: kBtu/h

PI: kW

INDOOR		OUTDOOR TEMPERATURE (°FWB)												
EDB	Ę	5	1	4	2	3	3	2	4	3	5	0	6	4
°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	17.16	2.75	20.62	2.89	24.08	3.03	27.53	3.17	37.27	3.71	40.53	3.84	47.04	4.09
70.0	16.10	2.83	19.56	2.97	23.02	3.11	26.48	3.25	36.00	3.80	39.29	3.92	45.80	4.17
71.6	15.68	2.86	19.14	3.00	22.60	3.14	26.05	3.28	35.53	3.83	38.79	3.96	45.30	4.21
75.2	15.26	2.89	18.71	3.03	22.17	3.17	25.63	3.31	35.04	3.87	38.29	3.99	44.80	4.24
77.0	15.04	2.90	18.50	3.05	21.96	3.19	25.42	3.33	34.79	3.88	38.04	4.01	44.55	4.26
80.6	14.62	2.94	18.08	3.08	21.54	3.22	25.00	3.36	34.29	3.92	37.54	4.04	44.05	4.29

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

- shows nominal (rated) capacities and power input.
 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.)
 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)
 Airflow rate (AFR) and bypass factor (BF) are tabulated above table.

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

<--- line : cooling capacity>

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.



Note: The graph shows the factor when additional refrigerant of the proper quantity is charged.

8. Operation Limit

RK30/36NMVJU





Notes: 1, The graphs are based on the following conditions, - Equivalent piping length 25ft - Level difference Oft - Air flow rate High

2,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 is a human), Refer to the installation manual in detail of setting,

Sound Level 9.

Measuring Location 9.1



Notes: 1. Operation sound is measured in an anechoic chamber.

2. The operation sound measuring method is based on JIS standard.

9.2 **Indoor Unit**

FTX30NVJU



1000 2000

4000 8000

500 1000 2000 4000 8000

OCTAVE BAND CENTER FREQUENCY (Hz)

250

63 125

9.3 **Outdoor Unit**

9.3.1 **Cooling Only RK30NMVJU**



9.3.2 Heat Pump RX30NMVJU





RX36NMVJU



RK36NMVJU



10. Electric Characteristics

Unit Con	nbination		Power Supply	Compressor	OFM		IFM			
Indoor Unit	Outdoor Unit	Hz - Volts	Voltage Range	MCA	MFA	RLA	W	FLA	W	FLA
FTX30NVJU	RK30NMVJU	60 - 208	MAX. 60 Hz, 253 V	17	20	16.25	93	0.60	64	0.37
FIX30INVJU	RK30INIVIVJU	60 - 230	MIN. 60 Hz, 187 V	17	20	10.25	93	0.62	64	0.37
FTX36NVJU	RK36NMVJU	60 - 208	MAX. 60 Hz, 253 V	17	20	16.25	123	0.83	64	0.37
LIY2011AD		60 - 230	MIN. 60 Hz, 187 V	17	20	10.25	123	0.65	04	0.37
FTX30NVJU	RX30NMVJU	60 - 208	MAX. 60 Hz, 253 V	19.8	20	18.25	93	0.62	64	0.37
FIX30INVJU	RASUNIVIVJU	60 - 230	MIN. 60 Hz, 187 V	19.6	20	16.20	93	0.62	04	0.37
		60 - 208	MAX. 60 Hz, 253 V	10.0	20	10.05	100	0.00	64	0.07
LIY20IAAD	FTX36NVJU RX36NMVJU	60 - 230	MIN. 60 Hz, 187 V	19.8	20	18.25	123	0.83	64	0.37

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.
- Maximum allowable voltage variation between phases is 2%.
 Select wire size based on the larger value of MCA.
- 4. Instead of a fuse, use a circuit breaker.

5. 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.)

11.Installation Manual

11.1 Indoor Unit

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1. Trial operation and testing

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:

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
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.
Indicates situations that may result in equipment or property-damage accidents only.

- 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.

MARNING -

- 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 fuse, a circuit breaker, a disconnect or a GFCI.
- 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.

- 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
- (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.

- The indoor unit should be positioned where the unit and interunit 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 fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

Accessories



Choosing an Installation Site

Before choosing the installation site, obtain user approval.

1. Indoor unit

The indoor unit should be positioned in a place where:

- 1) the restrictions on the installation requirements specified in "Indoor Unit Installation Diagram" on page 4 are met,
- 2) both the air inlet and air outlet are unobstructed,
- 3) the unit is not exposed to direct sunlight,
- 4) the unit is away from sources of heat or steam,
- 5) there is no source of machine oil vapor (this may shorten the indoor unit service life),
- 6) cool/warm air is circulated throughout the room,
- 7) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
- 8) no laundry equipment is nearby.

2. Wireless remote controller

- 1) Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 23ft (7m)).
- 2) Configure the jumper. Configure according to the type of unit (heat pump or cooling only) the user purchased. The default setting is heat pump.
 For heat pump (outdoor unit model: RX)
 - No change to jumper setting is required.
 - For cooling only (outdoor unit model: RK) Cut the address jumper (J8) inside the remote controller.



3

Indoor Unit Installation Diagram

A CAUTION

- Do not hit or violently push the INTELLIGENT EYE sensor. This can lead to damage and malfunction.
- Do not place large objects near the INTELLIGENT EYE sensor. Also keep heating units or humidifiers outside the sensor's detection area.



Indoor Unit Installation

1. Installing the mounting plate

The mounting plate should be installed on a wall which can support the weight of the indoor unit. 1)Temporarily secure the mounting plate to the wall, make sure that the plate is completely level, and mark the drilling points on the wall.

2)Secure the mounting plate to the wall with screws.

Recommended mounting plate retention spots and dimensions



2. Drilling a wall hole and installing wall embedded pipe

MARNING

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material to prevent condensation.
 - 1) Drill a feed-through hole with a $\phi3\text{-}1/8$ inch (80mm) diameter through the wall at a downward angle toward the outside.
- 2) Insert a wall embedded pipe into the hole.
- 3) Insert a wall hole cover into wall pipe.
- 4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.



3. Installing the indoor unit

3-1. Right-side, right-back, or right-bottom piping

- 1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.
- 2) Wrap the refrigerant pipes and drain hose together with an insulation tape.

be stripped first, bundle wire ends with adhesive tape.)

3) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the A mounting plate hooks, using the △ markings at the top of the indoor unit as a guide.

5) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and then through the back of the indoor unit. Pull them through the front side. Bend the ends of tie wires upward for easier work in advance. (If the inter-unit wire ends are to

4) Open the front panel, then open the service lid. (Refer to "Service lid" on page 4.)





6) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the (A) mounting plate hooks. Make sure that the wires do not catch on the edge of the indoor unit.

3-2. Left-side, left-back, or left-bottom piping



4. Wiring

Refer to the installation manual for the outdoor unit also.

MARNING -

- 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.

Indoor Unit Installation

A CAUTION

When connecting the connection wire to the terminal block using a single core wire, be sure to perform curling.

Problems with the installation may cause heat and fires.

- As shown in the illustration on the right-hand side, insert the wires including the ground wire into the conduit and secure them with lock nut onto the conduit mounting plate.
- 2) Insert the wires including the ground wire into (K) tube.
- 3) Strip wire ends (9/16 inch (15mm)).
- Match wire colors with terminal numbers on indoor and outdoor unit's terminal blocks and firmly screw wires to the corresponding terminals.
- 5) Connect the ground wires to the corresponding terminals.
- 6) Pull the wires and check that the wires are securely fixed to the terminal block.
- 7) In case of connecting to an adapter system, run the remote controller cable and attach the S21.
- (Refer to "4. When connecting to an HA system" on page 9.)
- 8) Shape the wires so that the service lid fits securely, then close service lid.









5. Drain piping

1) Connect the drain hose, as described on the right.

- 2) Remove the air filters and pour some water into the drain pan to check the water flows smoothly.
- 3) If drain hose extension or embedded drain piping is required, use appropriate parts that match the hose front end.





- When drain hose requires extension, obtain an extension hose with an inner diameter of 5/8 inch (16mm).
 Be sure to thermally insulate the indoor section of the extension hose.
- When connecting a rigid polyvinyl chloride pipe (nominal diameter 1/2 inch (13mm)) directly to the drain hose attached to the indoor unit as with embedded piping work, use any commercially available drain socket (nominal diameter 1/2 inch (13mm)) as a joint.







Refrigerant Piping Work

MARNING -

- · Do not apply mineral oil on flared part.
- 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 the 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.

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.

2. Refrigerant piping

CAUTION



flaw-free

- 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.



2-1. Caution on piping handling

· Protect the open end of the pipe against dust and moisture.

• All pipe bends should be as gentle as possible. Use a pipe bender for bendina.

2-2. 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. 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)	13/32 inch (10mm) Min.
Liquid sid	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.



Flaring

Check

Conventional flare tool

The pipe end must be evenly flared

Make sure that the flare nut is fitted.

Wing-nut type (Imperial-type)

0.059-0.079 inch (1.5-2.0mm)

Clutch-type (Rigid-type)

0.039-0.059 inch (1.0-1.5mm)

in a perfect circle.

lare tool for R410A

Clutch-type

0-0.020 inch (0-0.5mm)

Rair

Set exactly at the position shown below

The flare's inner surface must be

X

Die



Installation Tips

1. Removing and installing the front panel

Removal method

- 1) Grip the panel tabs on each side of the front panel and open.
- 2) Slide the front panel to either the left or right and pull it toward you to disengage one of the front panel shafts.
- 3) Disengage the front panel shaft on the other side in the same manner.
- 4) After disengaging both front panel shafts, pull the front panel toward yourself and remove it.

Installation method

Align the front panel shaft of the front panel with the grooves of grille, and push all the way in, then close slowly.

Push the center of the lower panel surface firmly to engage the tabs.

2. Removing and installing the front grille

Removal method

- 1) Remove the front panel and air filters.
- 2) Remove 6 screws from the front grille.
- 3) Remove 3 front grille fixtures from the front grille.
- 4) In front of the OOO mark on the front grille, there are 4 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.

When there is insufficient work space because the unit is close to ceiling

Place both hands under the center of the front grille, and while pushing up, pull it toward you.

- Installation method
 - 1) Install the front grille and firmly engage the upper hooks (4 locations).
 - 2) Install 6 screws of the front grille.
 - 3) Install 3 front grille fixtures of the front grille.
 - 4) Install the air filters and then mount the front panel.

3. How to set the different addresses

When 2 indoor units are installed in one room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the 2 units. When cutting the jumper, be careful not to damage any of the surrounding parts.

- 1) Remove the front grille. (6 screws, 3 front grille fixtures)
- 2) Remove the metal plate electrical wiring box cover. (4 tabs) (See Fig.1)
- 3) Cut the address jumper (JA) on the printed circuit board. (See Fig.2)
- 4) Cut the address jumper (J4) in the remote controller. (See Fig.3)
 - Do not cut jumper (J8). (Jumper (J8) is cut to switch over the system to cooling only.)
- 5) Replace the metal electrical wiring box cover.
- 6) Replace the front grille.



2) Pull toward

you.

4. When connecting to an HA system

- 1) Remove the front grille. (6 screws, 3 front grille fixtures)
- 2) Remove the metal plate electrical wiring box cover. (4 tabs) (See Fig.1)
- 3) Attach the connection cord to the S21 connector and pull the harness out through the notched part in the figure. (See Fig.4)
- 4) Replace the electrical wiring box cover as it was, and pull the harness around, as shown in the figure. (See Fig.5)
- 5) Replace the front grille.
















Trial Operation and Testing

1. Trial operation and testing

- Trial operation should be carried out in either COOL or HEAT operation.
- 1-1. Measure the supply voltage and make sure that it is within the specified range.
- 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.
- 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the louvers, are working properly.
 - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- 1-4. 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.
 - 1) Press (b) to turn on the system.
 - 2) Press both of and at the same time.
 - 3) Press , select ", and press more for confirmation.
 - Trial operation will stop automatically after about 30 minutes.
 To stop the operation, press (0).
 - Some of the functions cannot be used in the trial operation mode.
- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	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	
Only specified wires are used for all wiring, and all wires are connected correctly.	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	
Indoor unit properly receives remote controller commands.	No operation	
Remote controller jumper setting is correct for the type of unit (heat pump or cooling only).	Remote controller malfunctioning	

11.2 Outdoor Unit

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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:

A DANGER ·······	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MWARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	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.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.
A DANGER	

A 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.
- 1

- 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 fuse, a circuit breaker, a disconnect or a GFCI.
- 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.

- 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 fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

Accessories

(A) Installation manual	1	B Drain socket* This is at the bottom of the packaging.	1
© Drain cap (1)*	6	Drain cap (2)*	3
E Warranty	1	*Only for heat pump m	odels.

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.

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.





/ Install the unit high enough off the ground to prevent burying in snow.

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



Installation Space Requirements

- · Position the unit on a horizontal surface. Any tilt in the unit (front to back, right to left) 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.





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 in "2. Drain work".

2. Drain work (only for heat pump models)

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



1111₁₂,....

frame in

ŧ/ 777



3. Flaring the pipe end

- 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.
 - 1) Cut the pipe end with a pipe cutter.
 - 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 po	SITIO	1 snown below.		
I VA		Flare tool for R410A	Convent	ional flare tool
	$ \rangle$	Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
	А	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)

4. Refrigerant piping

ACAUTION

- 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 tigh	tening tor	que
Gas	side		Liquid side
5/8 inch	(15.9mm)		1/4 inch (6.4mm)
45-5/8-5	5-5/8lbf • ft		10-1/2-12-3/4lbf • ft
(61.8-75	5.4N • m)		(14.2-17.2 N • m)
Width across flats	11/16 inch (17m	m)	1-3/16 inch (30mm)
Valve cap tightening torque	10-1/2 – 12-5/8lbf (14.2-17.2N ∙ n		16-5/8−20-1/4lbf • ft (22.5-27.5N • m)
	Service port cap	tightening	y torque
	8-10-7/8lbf • ft	(10.8-14.7	′N • m)



Outdoor Unit Installation

5. Pressure test and evacuating system

- 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.



- 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.
- 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 a few minutes to make sure that the compound pressure gauge pointer does not swing
- back.)*16) 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.

- B) 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).

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. 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)	13/32 inch
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)	(10mm) Min.

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





Wiring

- 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 fuse, a circuit breaker, a disconnect or a GFCI.
- 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.



 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.



- · 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.



[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.



Facility Setting (cooling at low outdoor temperature)

Make sure to turn the power OFF before removing the service lid.

- 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 condensation from the indoor unit outlet vent.
- Activating the facility setting sets the indoor fan tap to the highest position. Notify the user about this.
- When the outdoor temperature is below -4°F (-20°C) and if SW6-2 in step 2) below is turned on, for the purpose of protecting the compressor, it may take up to 3 hours for operation to begin while the system warms up.

This function is designed for facilities such as equipment or computer rooms. It is never to be used in a residence or office where people occupy the space.

1) Turning on SW5-3 on the PCB 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.



2) Only for cooling models

If the unit is to be operated in outdoor temperatures down to $-22^{\circ}F$ ($-30^{\circ}C$), turn on SW6-2 on the PCB, in addition to the settings in step 1) above. If the outdoor temperature falls below $-22^{\circ}F$ ($-30^{\circ}C$) the unit will stop operating and will only restart once the temperature rises above $-22^{\circ}F$ ($-30^{\circ}C$).



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 ON/OFF switch

- Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)
- · Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch.

■Using the indoor unit's remote controller

- 1) Press Mode and select the COOL operation.
- 2) Press (b) to turn on the system.
- 3) Press , ^{temp} , ^{temp} and Mode at the same time.
- 4) Press Temp , select " 7 ", and press Mode for confirmation.
- Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press (0)

Hexagonal vrench Liquic stop va Close Gas Valve cap Service po

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	
Indoor unit properly receives wireless remote control commands.	No operation	

12. Operation Manual

Read Before Operation

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:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
A WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	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.
<u>∧</u> 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 remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- 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.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.

– 🕂 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.

— 🕂 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 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.
 - Locations such as hot springs where there is a lot of sulfur in the air.
 - 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:
 - Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
 - 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.

Names of Parts





Names of Parts







Preparation Before Operation

Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure. Please observe the following precautions and use safely.

- If the alkaline solution from the batteries should get in the eyes, do not rub the eyes. Instead, immediately flush the eyes with tap water and seek the attention of a medical professional.
- · Keep batteries out of reach of children. In the event that batteries are swallowed, seek the immediate attention of a medical professional.
- Do not expose batteries to heat or fire. Do not disassemble or modify batteries. The insulation or gas release vent inside the battery may be damaged, resulting in battery leakage, rupturing, or heating.
- · Do not damage or peel off labels on the batteries.

Position \oplus and ⊖ correctly! Grip both sides of the front cover.



Remote

controller holder



To insert the batteries

- **1.** Slide the front cover to take it off.
- 2. Insert 2 dry batteries AAA.LR03 (alkaline).
- **3.** Replace the front cover.

To attach the remote controller holder to a wall

- **1.** Choose a place where the signals reach the unit.
- $oldsymbol{2}$. Attach the holder to a wall, a pillar, or similar location with the screws supplied with the holder.
- **3.** Place the remote controller in the remote controller holder.

Fahrenheit/Celsius display switch



▶ Press and ^{on} (TIMER button) simultaneously for about 5 seconds.

- The temperature will be displayed in Celsius when it is presently displayed in Fahrenheit, and vice versa.
- The switch operation is only possible when the temperature is being displayed.

NOTE

Notes on batteries

- To avoid possible injury or damage from battery leakage or rupturing, remove the batteries when not using the product for long periods of time. • The standard replacement time is about 1 year. Both batteries should be replaced at the same time. Be sure to replace them with new size AAA.
- LR03 (alkaline) batteries. However, if the remote controller display begins to fade and the possible transmission range becomes shorter within a year, replace both batteries as specified above
- The batteries supplied with the remote controller are for initial operation. The batteries may run out in less than 1 year.

Note on remote controller

· Do not drop the remote controller. Do not get it wet.



Note on setting the clock

• If the indoor unit's internal clock is not set to the correct time, the ON/OFF TIMER and WEEKLY TIMER will not operate punctually.

Basic Operation

AUTO · DRY · COOL · HEAT · FAN Operation MODE The air conditioner operates with the operation mode of your choice. From the next time on, the air conditioner will operate with the same operation mode. ON Ĩ**8 /**⁼∣⊲ * To start operation **1.** Press *Mode* and select an operation mode. 15:30 · Each pressing of the button changes the mode setting in sequence <u>آ</u> (¹) * HEAT PUMP model AUTO DRY COOL HEAT FAN Mode) • * **COOLING ONLY** Ð model DRY COOL FAN **2.** Press () • " **ON** " is displayed on the LCD. • The OPERATION lamp lights green. ΞΘ 🗖 🖏 Display To stop operation Press () again. • " ON " disappears from the LCD. • The OPERATION lamp goes off. NOTE Notes on AUTO operation • In AUTO operation, the system selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature and starts the operation • The system automatically reselects setting at a regular interval to bring the indoor temperature to the user-setting level. Note on DRY operation • Eliminates humidity while maintaining the indoor temperature as much as possible. It automatically controls temperature and airflow rate, so manual adjustment of these functions is unavailable.

Basic Operation







COMFORT AIRFLOW / **A**3) **INTELLIGENT EYE Operation**



COMFORT AIRFLOW operation: The airflow direction is upward while in COOL and DRY operation, and downward while in HEAT operation. This function prevents cold or warm air from blowing directly on the occupants in the room.

INTELLIGENT EYE operation: The INTELLIGENT EYE sensor detects human movement. If no one is in the room for more than 20 minutes, the operation automatically changes to energy saving operation.

- Do not place large objects near the INTELLIGENT EYE sensor. Also keep heating units and humidifiers outside the sensor's detection area. This sensor can detect undesirable objects.
- Do not hit or violently push the INTELLIGENT EYE sensor. This can lead to damage and malfunction.

To start operation

Comfort / Sensor Press () and select the desired mode.

- Each time () is pressed, a different setting option is displayed on the LCD.
- When INTELLIGENT EYE is selected, the INTELLIGENT EYE lamp lights green.



• By selecting " 😭 🏩 " from the following icons, the air conditioner will switch to COMFORT AIRFLOW operation combined with INTELLIGENT EYE operation.



• When the flaps (horizontal blades) are swinging, selecting any of the modes above will cause the flaps (horizontal blades) to stop.

To cancel operation



Press 😰 until no icon is displayed.

• If the INTELLIGENT EYE operation was being used, the INTELLIGENT EYE lamp goes off.





د POWERFUL Operation



POWERFUL operation quickly maximizes the cooling (heating) effect in any operation mode. In this mode, the air conditioner operates at maximum capacity.

To start POWERFUL operation



- " 🍄 " is displayed on the LCD.
- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.

To cancel POWERFUL operation



• " 🛟 " disappears from the LCD.

NOTE

Notes on POWERFUL operation	
 Pressing () causes the settings to be canceled, and " () also pressing 	from the LCD.
 POWERFUL operation will not increase the capacity of the air conditione demonstrated. 	er if the air conditioner is already in operation with its maximum capacity
 In COOL, HEAT and AUTO operation To maximize the cooling (heating) effect, the capacity of outdoor unit in The temperature and airflow settings cannot be changed. 	ncreases and the airflow rate becomes fixed at the maximum setting.
– In DRY operation The temperature setting is lowered by 4.5°F (2.5°C) and the airflow rates $\rm A_{2}^{-1}$	te is slightly increased.
 In FAN operation The airflow rate is fixed at the maximum setting. 	
Regarding the combination of POWERFUL and other operation	ons
POWERFUL + COMFORT AIRFLOW	
POWERFUL + ECONO Not available*	
POWERFUL + OUTDOOR UNIT QUIET	*Priority is given to the function of whichever button is pressed last.
	· · · · · · · · · · · · · · · · · · ·

ECONO / OUTDOOR UNIT QUIET



ECONO operation enables efficient operation by limiting the maximum power consumption.

This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit.

OUTDOOR UNIT QUIET operation lowers the noise level of the outdoor unit by changing the frequency and fan speed of the outdoor unit. This function is convenient during the night-time operation.



To start operation

▶ Press ^{Econo/Quiet} and select the desired mode.

• Each time Time is pressed, a different setting option is displayed on the LCD.



To cancel operation



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NOTE

Notes on ECONO operation

• Pressing 🔞 causes the settings to be canceled, and " 🥆 " disappears from the LCD.

• If the power consumption level is already low, switching to ECONO operation will not reduce the power consumption.

Notes on OUTDOOR UNIT QUIET operation

• Even if the operation is stopped by using the remote controller or the indoor unit ON/OFF switch when using OUTDOOR UNIT QUIET operation, "120" will remain displayed on the remote controller.

• OUTDOOR UNIT QUIET operation will not reduce the frequency nor fan speed if they already are operating at reduced levels.

• This operation is performed with lower power and therefore may not provide a sufficient cooling (heating) effect.

Possible combinations of ECONO / OUTDOOR UNIT QUIET operation and basic operations

		С	peration mod	le	
	AUTO	DRY	COOL	HEAT	FAN
ECONO	✓	✓	✓	✓	-
OUTDOOR UNIT QUIET	✓	-	✓	✓	-

FF ON/OFF TIMER Operation

Timer functions are useful for automatically switching the air conditioner on or off in the morning or at night. You can also use the ON TIMER and OFF TIMER together.

To use ON TIMER operation

• Check that the clock is correct. If not, set the clock to the present time. Page 10

1. Press ____



" **5:00** " is displayed on the LCD. " ON " blinks.

• " • " and day of the week disappear from the LCD.

2. Press until the time setting reaches the point

you like.

• Each pressing of either button increases or decreases the time setting by 10 minutes. Holding down either button changes the setting rapidly.

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3. Press again.

- " ON " and setting time are displayed on the LCD.
- The TIMER lamp lights orange. Page 5



To cancel ON TIMER operation

Press Cancel .

- " ON " and setting time disappear from the LCD.
- " () " and day of the week are displayed on the LCD.
- The TIMER lamp goes off.

NOTE

Notes on TIMER operation

- When TIMER is set, the present time is not displayed.
- When using the ON/OFF TIMER to start/stop operation, the actual operation start/stop time may differ from the time set. (Maximum of about 10 minutes)
- The ON/OFF TIMER remembers the time set previously.
- The ON TIMER will begin operation in the settings used previously for operation mode, temperature, airflow rate, and airflow direction.

In the following cases, set the timer again.

- After the circuit breaker has turned off.
- After a power failure.
- · After replacing the batteries in the remote controller.



WEEKLY TIMER Operation

Up to 4 timer settings can be saved for each day of the week. This is convenient to adapt the WEEKLY TIMER to your family's life style.

Setting example of the WEEKLY TIMER

The same timer settings are used from Monday through Friday, while different timer settings are used for the weekend.



• Up to 4 reservations per day and 28 reservations per week can be set using the WEEKLY TIMER. The effective use of the copy mode simplifies timer programing.

• The use of ON-ON-ON settings, for example, makes it possible to schedule operating mode and set temperature changes. Furthermore, by using OFF-OFF-OFF settings, only the turn off time of each day can be set. This will turn off the air conditioner automatically if you forget to turn it off.



WEEKLY TIMER Operation



6. Press to select the desired time.

- The time can be set between 0:00 and 23:50 in 10-minute intervals.
- To return to the ON/OFF TIMER mode setting, press
- Proceed to STEP 9 when setting the OFF TIMER.

7. Press

- The time will be set
- " O WEEKLY " and the temperature blink.

8. Press we to select the desired temperature.

- The temperature can be set between 50°F (10°C) and 90°F (32°C). COOL or AUTO: The unit operates at 64°F (18°C) even if it is set at 50°F (10°C) to 63°F (17°C). ▶Page 12 HEAT or AUTO : The unit operates at 86°F (30°C) even if it is set at 87°F (31°C) to 90°F (32°C). ▶Page 12 Beck
- To return to the time setting, press
- The set temperature is only displayed when the mode setting is on.

9. Press

- Check for a receiving tone and that the OPERATION lamp blinks twice.
- The TIMER lamp lights orange.
- Temperature and time are set in the case of ON TIMER operation, and the time is set in the case of OFF TIMER operation.
- The next reservation screen will appear.
- To continue further settings, repeat the procedure from STEP 4.

Display

10. Press $\stackrel{\diamond}{=}$ to complete the setting.

- "OWEEKLY " is displayed on the LCD and WEEKLY TIMER operation is activated.
- A reservation made once can be easily copied and the same settings used for another day of the week. Refer to Copy mode. Page 24

NOTE

Notes on WEEKLY TIMER operation

- Do not forget to set the clock on the remote controller first. Page 10
- The day of the week, ON/OFF TIMER mode, time and set temperature (only for ON TIMER mode) can be set with the WEEKLY TIMER.
- When set to ON TIMER mode, operation will begin in the settings used previously for operation mode, temperature, airflow rate, and airflow direction. • WEEKLY TIMER and ON/OFF TIMER operation cannot be used at the same time. The ON/OFF TIMER operation has priority if it is set while WEEKLY TIMER is still active. The WEEKLY TIMER will enter the standby state, and "OWEEKLY" will disappear from the LCD. When the ON/
- OFF TIMER is up, the WEEKLY TIMER will automatically become active. • Turning off the circuit breaker, power failure, and other similar events will render operation of the indoor unit's internal clock inaccurate. Reset the clock. Page 10
- _____ can be used only for the time and temperature settings. It cannot be used to go back to the reservation number.



WEEKLY TIMER Operation



Confirming a reservation

• The reservation can be confirmed.



1. Press 👛

• The day of the week and the reservation number of the current day will be displayed.

2. Press to select the day of the week and the reservation number to be confirmed.

- Pressing select displays the reservation details.
- To change the confirmed reserved settings, select the reservation number and press The mode is switched to setting mode. Proceed to Setting mode STEP 4. Page 22

3. Press $\stackrel{\diamond}{=}$ to exit the confirmation mode.

• " OWEEKLY " is displayed on the LCD and WEEKLY TIMER operation is activated.

To deactivate WEEKLY TIMER operation

Press while " WEEKN " is displayed on the LCD.

- " @ WEEKLY " disappears from the LCD.
- The TIMER lamp goes off.
- To reactivate the WEEKLY TIMER operation, press again.
- If a reservation deactivated with is activated once again, the last reservation mode will be used.

NOTE

If not all the reservation settings are reflected, deactivate the WEEKLY TIMER operation once. Then press again to reactivate the WEEKLY TIMER operation.
TIMER Operation



CAUTION Before cleaning, be sure to stop the op Do not touch the aluminum fins of the ii	eration and turn off the circuit breaker. Indoor unit. If you touch those parts, this may cau	use an injury.
Quick reference		
Cleaning parts		
Front panel		
• Wipe it with a soft damp cloth.		
	(° (° (° (° (° (° (° (° (° (° (° (° (° (
Air filter	ATAATA	TETT
Vacuum dust or wash the filter.		
Once every 2 weeks		
Titanium apatite photoca	talytic air-purifying filter	Indoor unit and
Vacuum dust or replace the filter. [Cleaning]	[Replacement]	remote controllerWipe them with a soft cloth.
Once every 6 months	Once every 3 years	If dirty
Prage 50	(Prage SU)	
Notes on cleaning		
For cleaning, do not use any of the • Water hotter than 104°F (40°C)	following:	
 Water hotter than 104°F (40°C) Volatile liquid such as benzine, gasoline Polishing compounds 	and thinner	

Care

▲ CAUTION • When removing or attaching the front panel, stand on a solid, stable base and take care not to fall. . When removing or attaching the front panel, support the panel securely with your hand to prevent it from falling. Front panel **1.** Open the front panel. **3.** Clean the front panel. · Grip the panel tabs on each side of the front panel • Wipe it with a soft damp cloth. and open. • Only neutral detergent may be used. washing. Panel tab **4.** Attach the front panel. way in. Front pane shaft Groove **2.** Remove the front panel. 1) Slide the front panel to either the left or right and pull it toward you to disengage one of the front æ a panel shafts.



- 2) Disengage the front panel shaft on the other side in the same manner.
- 3) After disengaging both front panel shafts, pull the front panel toward yourself and remove it.

- In case of washing the panel with water, wipe it with a dry soft cloth, and let it dry in the shade after
- Align the front panel shaft on the left and right of the front panel with the grooves, then push them all the



5. Close the front panel slowly.

· Press the front panel at both sides and in the central area.



· Make sure that the front panel is securely fixed.

Care

Care and Cleaning

Air filter

1. Open the front panel. Page 28

2. Pull out the air filters.

• Push the filter tab at the center of each air filter a little upwards, then pull it down.



3. Wash the air filters with water or clean them with a vacuum cleaner.

• It is recommended to clean the air filters every 2 weeks.



If the dust does not come off easily

- Wash the air filters with neutral detergent thinned with lukewarm water, then let them dry in the shade.
- Be sure to remove the titanium apatite photocatalytic air-purifying filter. Refer to "Titanium apatite photocatalytic air-purifying filter" on the next page.



4. Set the filters as they were.

5. Close the front panel slowly.



Prior to a long p	eriod of non-use
1) Press Mode and se 2) Press () and start	
2. After operat air condition	ion stops, turn off the circuit breaker for the room ner.
<i>3.</i> Clean the ai	r filters and reattach them.
4. To prevent to remote cont	pattery leakage, take out the batteries from the roller.
■ We recommend	periodical maintenance tions, the inside of the air conditioner may get foul after several seasons of use, resulting in poo
	nended to have periodical maintenance by a qualified contractor in addition to regular cleaning t
performance. It is recomn the user.	nended to have periodical maintenance by a qualified contractor in addition to regular cleaning b aintenance, please contact the dealer where you bought the air conditioner.
performance. It is recomn the user.	



In COOL or DRY operation

Moisture in the air condenses into water on the cool surface of the outdoor unit piping and drips.



Troubleshooting

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

 \checkmark

Not a problem This case is not a problem.



Check

Please check again before requesting repairs.

The air conditioner does not operate

Case	Description / what to check		
OPERATION lamp is off.	 Has the circuit breaker been tripped or the fuse blown? Is there a power failure? Are batteries set in the remote controller? 		
OPERATION lamp is blinking.	• Turn off the power with the circuit breaker and restart operation with the remote controlle If the OPERATION lamp is still blinking, check the error code and consult your dealer.		

The air conditioner suddenly stops operating

Case	Description / what to check	
OPERATION lamp is on.	• To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes.	
OPERATION lamp is blinking.	 Are the air filters dirty? Clean the air filters. Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit? Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. Page 36 	

The air conditioner does not stop operating

Case	Description / what to check	
The air conditioner continues operating even after operation is stopped.	 Immediately after the air conditioner is stopped The outdoor unit fan continues rotating for about another 1 minute to protect the system. While the air conditioner is not in operation When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system. 	

Case **Description / what to check** In HEAT operation \checkmark • The air conditioner is warming up. Wait for about 1 to 4 minutes. Air does not come out. • During defrosting operation, hot air does not flow out of the indoor unit. When the air conditioner operates immediately after the circuit breaker is turned on • The air conditioner is preparing to operate. Wait for about 3 to 10 minutes. ■ Is the airflow rate setting appropriate? ? • Is the airflow rate setting low, such as "Indoor unit quiet" or "Airflow rate 1"? Increase the Air does not come out / airflow rate setting. Air comes out. ■ Is the set temperature appropriate? Is the adjustment of the airflow direction appropriate? . Is there any furniture directly under or beside the indoor unit? Is there any turniture directly under or beside the intool unit: Is the air conditioner in ECONO operation or OUTDOOR UNIT QUIET operation? Page 18 Is the air filter dirty? Air comes out. • Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit? • Is a window or door open? • Is an exhaust fan turning?

The room does not cool down / warm up

Mist comes out

Case	Description / what to check	
Mist comes out of the indoor unit.	• This happens when the air in the room is cooled into mist by the cold airflow during COOL or other operation.	

Remote controller

Case	Description / what to check	
The unit does not receive signals from the remote controller or has a limited operating range.	 The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Page 3 Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult your dealer if that is the case. The remote controller may not function correctly if the transmitter is exposed to direct sunlight. 	
LCD is faint, is not working, or the display is erratic.	The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Prage 9	
Other electric devices start operating.	• If the remote controller activates other electric devices, move them away or consult your dealer.	

Air has an odor

Case	Description / what to check	
The air conditioner gives off an odor.	The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer.	

Others

Case	Description / what to check	
The air conditioner suddenly starts behaving strangely during operation.	• The air conditioner may malfunction due to lightning or radio. If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller.	
HEAT operation cannot be selected, even though the unit is heat pump model.	Check that the jumper (J8) has not been cut. If it has been cut, contact your dealer.	
The ON/OFF TIMER does not operate according to the settings.	Check if the ON/OFF TIMER and the WEEKLY TIMER are set to the same time. Change or deactivate the settings in the WEEKLY TIMER. Page 21	

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) Indoor temperature: 64-90°F (18-32°C) Indoor humidity: 80% max.	
HEAT	Outdoor temperature: 5-75°F (-15-24°C) Indoor temperature: 50-86°F (10-30°C)	

Troubleshooting

■ Call your dealer immediately

- 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, a fuse, or the GFCI 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.



After a power failure

• The air conditioner automatically resumes operation in about 3 minutes. Please 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.



	CODE	MEANING		
	00	NORMAL		
SYSTEM	U0	REFRIGERANT SHORTAGE		
STOTEM	U2	OVER-VOLTAGE DETECTION		
	U4	SIGNAL TRANSMISSION ERROR (BETWEEN INDOOR AND OUTDOOR UNIT)		
	A1	INDOOR UNIT PCB ABNORMALITY		
INDOOR	A5	FREEZE-UP PROTECTION OR HEATING PEAK-CUT CONTROL		
UNIT	A6	FAN MOTOR (DC MOTOR) ABNORMALITY		
UNIT	C4	INDOOR HEAT EXCHANGER THERMISTOR ABNORMALITY		
	C9	ROOM TEMPERATURE THERMISTOR ABNORMALITY		
	EA	FOUR WAY VALVE ABNORMALITY		
	E1	OUTDOOR UNIT PCB ABNORMALITY		
	E5	OL ACTIVATION (COMPRESSOR OVERLOAD)		
	E6	COMPRESSOR LOCK		
	E7	DC FAN LOCK		
	F3	DISCHARGE PIPE TEMPERATURE CONTROL		
OUTDOOR	HO	COMPRESSOR SYSTEM SENSOR ABNORMALITY		
UNIT	H6	POSITION SENSOR ABNORMALITY		
UNIT	H8	DC VOLTAGE / CURRENT SENSOR ABNORMALITY		
	H9	OUTDOOR TEMPERATURE THERMISTOR ABNORMALITY		
	J3	DISCHARGE PIPE THERMISTOR ABNORMALITY		
	J6	OUTDOOR HEAT EXCHANGER THERMISTOR ABNORMALITY		
	L4	RADIATION FIN TEMPERATURE RISE		
	L5	OUTPUT OVERCURRENT DETECTION		
	P4	RADIATION FIN THERMISTOR ABNORMALITY		

NOTE

A short beep and 2 consecutive beeps indicate non-corresponding codes.
To cancel the code display, hold down for about 5 seconds. The code display also clears if no button is pressed for 1 minute.

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Quick Reference



3P457796-1

13. Optional Accessories

13.1 Option List

13.1.1 Indoor Unit

	Option Name		Model Name
1	Wired remote controller +1		BRC944B2
0	2 Wired remote controller cord (shielded wire)	Length 9.8 ft (3 m)	BRCW901A03
2		Length 26.3 ft (8 m)	BRCW901A08
3	Wireless LAN connection adaptor		BRP072A43
4	Wiring adaptor for timer clock / remote controller ★2 (normal open pulse contact / normal open contact)		KRP413AB1S
5	Central remote controller ★3		DCS302C71
6	Unified ON/OFF controller ★3		DCS301C71
7	Schedule timer controller ★3		DST301BA61
8	Interface adaptor for DIII-NET (residential air conditioner)		KRP928BB2S
9	Titanium apatite deodorizing filter (without frame) $\star 4$		KAF970A48
10	Remote controller loss prevention with chain		KKF910AA4

Notes: ***1** A wired remote controller cord BRCW901A03 or BRCW901A08 is necessary.

- \star 2 Timer clock and other devices ; obtained locally.
- \star 3 An interface adaptor (KRP928BB2S) is also required for each indoor unit.
- ★4 Standard accessory

13.1.2 Outdoor Unit

	Option Name	Model Name
1	Air direction adjustment grille	KPW063A4
2	Back protection wire net	KKG063A42
3	Drain plug ★	KKP937A4
4	Drain pan heater	FTDBHML, KEH063A4E
5	Snow hood (intake side plate)	KPS063A41
6	Snow hood (intake rear plate)	KPS063A44
7	Snow hood (outlet)	KPS063A47

Note: ★ Standard accessory for heat pump model

13.2 <BRC944B2> Wired Remote Controller

13.2.1 Installation Manual

- 1. No switch box or staple is supplied. Prepare them locally.
- 2. No remote controller cord is supplied. Prepare the optional remote controller cord 4 wire.
- 3. Be sure to turn off the power to any apparatus connected prior to mounting.
- 4. Prior to mounting equipment, touch something metallic such as a doorknob to remove static electricity from your body. Never touch the remote controller board or the adapter board.
- 5. Keep the wiring away from any other power source lines to avoid electric noise (external noise).
- 6. Select a flat surface, wherever possible, to mount the remote controller. To prevent deformation of the cases, do not overtighten the mounting screws.

1. Securing the remote controller lower case

Insert a bladed screwdriver into the concave (凹) in the remote controller lower case to remove the upper case assembly (two locations).

The remote controller board is located on the upper case. Take care not to scratch the board with the screwdriver.



 Exposed mounting Secure the remote controller lower case with the two supplied wood screws.

Wood screws (\phi3.5mm x 16mm) <

(2) Embedded mounting

Secure the remote controller lower case with the two supplied machine screws.





Catch the lower hook first.

During mounting of the remote controller cord, be careful not to pinch or otherwise damage the wires. (Remote controller cord 4 wire)

5. Temperature indication change

To change from Celsius temperature indication to Fahrenheit one



← See Operation Manual

3P202923-2B

Controller Commands and their Corresponding Functions





Preparation before Operation

Setting Temperature Indication change

Temperature indication can be changed between Celsius and Fahrenheit before use.





To change from Fahrenheit temperature indication to Celsius one

2 Press and hold down ^{⊕ TEMP} at the same time for 5 seconds while the Fahrenheit temperature is indicated.



Automatic.DRY.Cooling.Heating Operation

Select your desired operation mode.

Once preset, the system can get restarted in the same operation mode.



■ To stop the operation:

Press ON/OFF again.

The run indicator lamp goes out.

Automatic operation

 In Automatic, the temperature setting and operation mode (DRY, Cooling or Heating) are automatically selected according to the room temperature and outdoor temperature at the time of starting operation.

(DRY operation)

• In this mode, humidity is removed from the air.



Operation Setting mode to be adjusted	Automatic	Cooling	Heating	DRY
© TEMP (Temperature)	Temperat Reco Cooling Heating	Temperature cannot be adjusted.		
<pre></pre>	Five levels	Airflow rate cannot be adjusted.		

■ To adjust the temperature and airflow rate:

• When the unit runs in the cooling or heating mode at a low airflow rate, the cooling or heating effect may be insufficient.

■ To adjust the airflow direction:

(🖙 page 9)

(Heating operation)

- Since the heating operation is performed by taking the heat from outdoor into the room, the heating capacity decreases as the outdoor temperature lowers. If the room is not heated sufficiently, it is recommended to use other heating appliance at the same time.
- Since the air conditioner heats the whole room by circulating hot air, it takes some time to heat the entire room completely.
- If the outdoor unit gets frosted during heating operation, the heating capacity is decreased. In this case, the unit starts defrosting operation.
- No hot air comes out of the indoor unit during defrosting operation.

Adjusting Airflow Direction

Adjust the airflow direction for maximum comfort.

To adjust the Airflow Direction

Press during operation.

• Each time the button is pressed, the airflow direction louvers change their movement.



■ Wall Mounted Types (without horizontal swing function)



Adjustment of horizontal airflow direction

• The automatic moving range of the horizontal airflow direction louvers varies depending on the operation mode.



- In fixing the horizontal airflow direction, keep the horizontal airflow direction louvers tilted downward in the heating mode, and keep them nearly horizontal level in the cooling or DRY mode. This will enhance the cooling and heating effect.
- On the air conditioners with vertical and horizontal swing function, be sure to adjust the airflow directions using the remote controller. Do not forcibly adjust louvers by hand or a malfunction may occur.

■ Wall Mounted Type (with horizontal swing function)



• The vertical and horizontal louvers cannot move at the same time.

Duct Connected Type (without swing function)

This function cannot be used.



Timer Operation

The Timer Operation feature automatically turns off operation when you go to sleep and turns it back on when you wake up.

Use the DAILY Timer mode on weekdays, and the ONE TIME timer mode on weekends.

To select the ONE TIME timer mode:



- Before starting the timer operation, make sure the current time is correct. If not, set the clock correctly. (□ page 5)
- In making time settings, --:-- is displayed to make it easy to disable the timer too.
- If one minute has passed before making any timer setting, the previous timer settings are reintroduced and the timer is on standby.

In this case, use the $\overset{\text{SET}}{\frown}$ (time setting) button and make your desired timer settings.

- When the ON timer is programmed, the system starts one hour (maximum) earlier so that the temperature set by the remote controller is reached just in time.
- When the ONE TIME timer is programmed, the current time is no longer displayed.

ONE TIME timer

Once the timer has been activated and then deactivated, it is in the OFF mode. The ON or OFF timers can be programmed.









DAILY timer

After programming, the system starts and stops each day at the preset times. Two pairs of time settings can be programmed.

(Example: 8:00 ~ 10:00, and 18:00 ~ 23:00)



ONE TIME /DAILY to select the DAILY timer.



2 Make the ON and OFF time settings. • Take the steps from ① to ⑧. Program example: 8:00 ~ 10:00, and 18:00 ~ 23:00

Setti	Procedure	Press SET	Press UP DOWN timer setting.
Timer	ON time setting ● When the timer 1 is not used, save the setting as ⊕ +		
	OFF time setting		
Timer	ON time setting ● When the timer 2 is not used, save the setting as ⊕ - !		
- 2 -	OFF time setting		

3 Press **SET** . The DAILY timer is now programmed.



Cleaning

Cleaning the remote controller

• Wipe it clean with soft, dry cloth.

Do not use any water hotter than 40°C (104°F), or volatile liquids such as benzine, gasoline and thinner, polishing powder, or anything hard such as a scrub brush.





<BRP072A43> Wireless LAN Connection Adaptor 13.3



[About the SSID and KEY]

• The [SSID] and [KEY] shown on the B serial number sticker are necessary when connecting the air conditioner and a smartphone via wireless LAN

[Sticker attachment area] Attach the

B serial number sticker to the

sticker attachment area and keep safe.









	uring Connection Settings (All types
 The customer is responsible for providing the followin Smartphone or tablet PC (Supported OS: Android 4.0.3 or later; iOS 7.0 of Internet line and communicating device (Modem/router or a similar device) Wireless LAN access point (The corresponding channel for the wireless LA [DAIKIN Mobile Controller] (No Cost) 	or later.)
Installation method of online controller	E se l'Alessa d'Alesta
For Android Phones/Tablets (1) Open the [Google Play]. (2) Search for [Daikin Comfort Control]. (3) Follow the directions on the screen to install.	For iPhones/iPads (1) Open the [App Store]. (2) Search for [Daikin Comfort Control]. (3) Follow the directions on the screen to install.
	<u></u>
Configuring C	Connection Settings (1) (All types
eck whether the router to be used sup	oports WPS.
VPS is supported \Rightarrow Proceed to Simple setup If V	WPS is not supported \Rightarrow Proceed to Advanced setup
imple setup	
Check that the [POWER] lamp is contin	uously lit and the [RUN] lamp
 Is blinking. If the [POWER] lamp is lit and the [RUN] lamp is not l adapter for about 2 seconds to prompt the [RUN] lam about 30 seconds.) 	lit, hold down the [MODE] button on the
	button
Press the [WPS] button on the router (• Operation procedures for the [WPS] button vary by ro For details, refer to the instruction manual for the rout	(wireless LAN access point).
 Operation procedures for the [WPS] button vary by ro For details, refer to the instruction manual for the rout Hold down the [SETUP] button on the a The [RUN] lamp will begin to blink more rapidly, and v connection between the router (wireless LAN access 	(wireless LAN access point). buter (wireless LAN access point). ter. adapter for about 2 seconds. will change to a continuous light once a
 Operation procedures for the [WPS] button vary by ro For details, refer to the instruction manual for the rout Hold down the [SETUP] button on the a The [RUN] lamp will begin to blink more rapidly, and will begin to blink more rapidly. 	wireless LAN access point). buter (wireless LAN access point). ter. Adapter for about 2 seconds. will change to a continuous light once a point) and the adapter has been rom step 1 of "Simple setup". procedures in "Advanced setup".

4. Connect the smartphone (tablet PC) and the router (wireless LAN access point).

 A connection can be established by opening the smartphone's Wi-Fi network list, selecting the [SSID] for the router and entering its password.

- 5. Tap the installed app [Daikin Comfort Control] to start it.
 - If the connected air conditioner is listed in the units overview screen, setup is complete. If it is not listed, tap 🖒 (refresh) in the top right corner of the units overview screen.

Note

 If an upgrade is available for your adapter, the notification icon "O" will be displayed on the units overview screen. Tap it to upgrade your firmware.



The following table provides brief descriptions of how to handle problems or uncertainties when you install the product or make connection settings. Check our website for details.			
URL http://daikincomfort.com/DuctlessWireless/FAQ			
When this happens	Explanation and where to check		
[RUN] lamp does not light up (continuously).	 The [RUN] lamp blinks. → Perform Simple setup or Advanced setup again. → Check that the [SSID] and password for the adapter are entered correctly. → Move the router (wireless LAN access point) closer to the adapter. → The smartphone or router (wireless LAN access point) in use may not be supported. Check our website for details. 		

After-sale Service

For inquiries concerning after-sale service, contact your dealer and advise them of the following details:

Model name

Date of installation

- Conditions at the time of failure (as precisely as possible)
- Your address, name, and telephone number

This telecommunication equipment is in compliance with FCC/IC requirements.

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This device complies with Part 15 of FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 8 inches (20cm) or more away from person's body.

Contains FCC ID:VPYLBYD Contains IC: 772C-LBYD

3P427537-1A

13.4 <KRP413AB1S> Wiring Adaptor for Timer Clock / Remote Controller

Safety	Precautions
--------	-------------

- Read these safety precautions carefully before installing the unit, and be sure to install the unit properly.
- This manual classifies precautions to the user into the following two categories. These warnings and cautions are for your safety. Follow them.

Faulty installation can result in death or serious injury.
Faulty installation can result in serious injury, damage to property, or other serious consequences.

• After installation is complete, test the unit to confirm that it is working properly, and instruct the owner its proper use.

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- Installation should be left to the dealer from whom you purchased the unit, or another qualified professionals.
- Install the unit securely according to the installation manual. Faulty installation may lead to electric shock or fire.
- Be sure to use the supplied or specified parts. Using other parts may lead to electric shock or fire.
- Install the unit securely in a location that will support its weight. If installed in a
 poor location or improperly installed, the unit may not work as intended.
- For electrical work, follow local electric standards and the installation manual.
 Faulty installation may lead to fire or electric shock.
- Do not bundle the power cord, or attempt to extend it by splicing it with another cord or by using an extension cord. Do not place any other load on the power circuit used for the unit. Improper wiring may lead to electric shock, heat generation or fire.
- Use dedicated wiring for all electrical connections, and be sure to arrange the wiring so that force applied to the wiring will not damage the terminals. Poor wiring or installation may cause electric shock, heat generation or fire.

- Before installation, unplug the air conditioner to ensure safety. Failure to do so may cause electric shock.
- Static electricity may damage electric components. Before connecting cables and communication lines, and operating the switches, be sure to discharge any electrical charge from your body (by, for example, touching the earth line)
- Do not install the unit in a location where it may be exposed to flammable gases. If gas leaks and build up around the unit, it may catch fire.
- Do not place the wiring close to the power cord, inter-unit cable, or pipes which generate noise. Treat the wiring with care.

1. Functions and Features

- On/Off setting
- Switching between Instantaneous Contact/Normal Contact
- Connection with five-room central controller (KRC72 for oversea model)
- Connection with fan coil remote controller
- Automatic reset after power failure
- Output of normal operation signals/malfunction signals

2. Field Wiring

For interconnecting wiring, use Daikin KDC100A12 cable (not supplied) or other similar cable. Use a vinyl-covered wire or cable with four conductors each with a thickness of 0.2 to 1.25 mm².

Optional cable KDC100A12 (without connectors)

Specifications: $0.2 \text{ mm}^2 \times 4 \text{ core (sheathed)}$

Outer diameter:	ф5.З
Length:	100 m
Colour:	Grey

Note : Keep any wiring for the control unit away from the power cord to prevent electrical noise.








<KRP928BB2S> Interface Adaptor for DIII-NET (Residential Air Conditioner) 13.5



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zms NO 8765 4321

Upper group number switch (SW2-5 to 7)

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ŋ

615

A cable field supply

Service monitor (LED1: green)

When the CPU is working properly, the LED flashes

Remote control all prohibition/permission setting switch (SW3-1)

Momentary contact / constant contac Selection switch (SW3-2)

Japanese unit / Overseas uni Setting switch (SW3-3)

 $\otimes \otimes \otimes \otimes \otimes \otimes \otimes \otimes$

Operation when recovering from a power outage mode switch (SW2-R)

sold re

Supplied connection harnes

Power supply terminal (S8)

Connect an external 12 V DC power supply only when reading the Operating / error display.

Cable available field supply (See the installation manual o

the central remote controller)

Room air conditioner indoor unit

To HA connector (S21)

ntrol code (quadplex) KRCW101A Series

Non polarity

¢₽

Lower group number switch (SW1)

		4.	Swi	tch Settings					1
NOTE				er all the switches ha he power is on are ir		ət.	When using a operation from continuously w	wireless r hen the w	en ire
1) For Overse Room air c	as / Japar onditioner	nese ur s, differ	iit sett ent m	hes on the circuit bo ing (SW3-3) ethods are used for eds to be set.		temperature in	⊖ : permittéd;	× : prohit	oite
	W3-3 sett			What Ha	appens		operating mode	Control	ma
lanan	OFF actory set	•	When	natic" operation is not ava using "automatic" operati oller, the central controller ng) and 25°C. Even if the	ilable from th on using the displays auto	wireless remote matic cooling		ON / OFF	co
0	01			to 25°C after a while. matic" operation is availa		-		is rejected Only OFF	
Overseas	ON				able from the	central controller.	Instantaneous	is accepte	:d
Set these than one u Use SW2- lowever, thes ndependently.	when using nit to the s R for (3) S e settings	g the ce same ni ettings do not	entral umber when need	recovering from a pe to be made when us	ower outag	ge. nedule timer	contact mode	Central pr Last comm Timer ope is accepte remote co	and erat
central control n this case, the group numbers	ler.) schedule tii are automat	mer perf tically se	orms a t. Setti	in conjunction with a In auto address after th ngs made using the sw	e power is t itches will b	urned on, so new e overwritten.	Constant contact mode		/
		-	ction SV	W1 and SW2 in "3. Names			All remote controller actions	_	-
Group NO. Uppe	r settings S	N2		Group NO. Lower	settings SV		are prohibited	Only during	1 t ² -
	5— 4 76 6— 6 76	00	431		4 3 2 1	12 4 3 2 1 13	The remote contr : permitted;	oller permiss	sion
3- A 7 6 5		5 02	4 3	$\begin{array}{c} 2 \\ 2 \\ 2 \\ 1 \\ 2 \\ 1 \\ \end{array} \begin{array}{c} 4 \\ 3 \\ 3 \\ 2 \\ 1 \\ \end{array} \begin{array}{c} 4 \\ 3 \\ 3 \\ 2 \\ 1 \\ \end{array} \begin{array}{c} 4 \\ 3 \\ 3 \\ 2 \\ 1 \\ \end{array} \begin{array}{c} 1 \\ 1 \\ 1 \\ 1 \\ \end{array} $	$\begin{array}{c} 4 & 3 & 2 & 1 \\ 4 & 3 & 2 & 1 \\ 4 & 3 & 2 & 1 \end{array}$	4 3 2 1 14 4 3 2 1	S1 pin operating mode	Intellig	ent
4-	3— 🛛 🗖	03		07	1	15	lasterier ver	Start / stop	op
Use with po	wer failure re	overy se	4 3 : ttings	Set to the side	4321 :ON ∱	:OFF	Constant contact mode Constant contact mode	ON / OFF control is rejected	P P
schedule time	er indepen	dently.		ver source is needed	l when usi	ng the	Instantaneous contact mode	Only OFF control is	þ
				ower outage (SW2-F	3)		Constant contact mode	accepted	þ
This selects power outa where the in of whether	whether t ge occurre ndoor unit switch SW	o restar d during has an 2-R is c	t oper g oper auto s n or o	ration when the powe ation. This setting is start ON / OFF jumpe iff, the operating mod nd remote control pro	r comes ba given priori r. Note also e (NOTE),	ty in cases that regardless set temperature,	Instantaneous contact mode Constant contact mode All remote	Last command priority	þ
	etting			What Hap	pens		controller actions are prohibited	D	oes
SW2-R s		0							
OFF (Factor		<u> </u>		r recovering from a p it was stopped before the now		-	6	Read	0
OFF (Factor ON		Stops	if the uni	it was stopped before the pow		-		.Read	
OFF (Factor ON (NOTE) The fo	bllowing se Mod	Stops	if the uni upply t e the		er outage and	-	The Operating Output specs M1: Turn MF	ı / error siç ≀ 1 ON wh	gna ien
OFF (Factor ON (NOTE) The fc Room air con Models with dehumid	billowing se Mod ditioner humid he difying fun	Stops ettings a e before ower ou eating a	if the uni upply t e the itage	it was stopped before the pow	er outage and	runs if it was running.	The Operating Output specs M1: Turn MF M2: Turn MF and the MR 2 is	ı / error siç ≀ 1 ON wh	gna ien i ci
OFF (Factor ON NOTE) The fc Room air con Models with dehumid	bllowing se Mod ditioner	Stops ettings a e before ower ou eating a ctions.	if the uni upply t e the itage	it was stopped before the pow to the models below. COOLING	er outage and	HEATING	The Operating Output specs M1: Turn MF M2: Turn MF and the MR 2 is KRP928BB2S) / error sig 1 ON wh 2 when a air condition	gna ien i co oni
OFF (Factor ON (NOTE) The for Room air con Models with dehumia Mit dehumia (4) Contact inp	billowing se Mod ditioner humid he difying fun- odels with difying fun ut functior	Stops ettings a e before ower ou ating a ctions.	if the uni upply t e the itage nd gs (SV	it was stopped before the pow to the models below. COOLING	HUN	HEATING HID HEATING HEATING HEATING	The Operating Output specs M1: Turn MF M2: Turn MF and the MR 2 is) / error sig 1 ON wh 2 when a air condition	gna ien i ci
OFF (Factor ON NOTE) The fc Room air con Models with dehumia 4) Contact inp When using S1	billowing se Mod pr ditioner humid he difying fun odels with difying fun tu functior g contact i SW3-1	Stops titings a e before ower out ating a ctions. ction. n setting nput (S SW3-2	if the uni upply t e the itage nd gs (SV	t was stopped before the pow o the models below. COOLING DRY COOLING V3-1 to SW3-2)	HUN wing functi	HEATING HID HEATING HEATING HEATING	The Operating Output specs M1: Turn MF M2: Turn MF and the MR 2 is KRP928BB2S	I / error sig 1 ON wh 2 when a air condition not turned	gna ien i ci
OFF (Factor ON NOTE) The fc Room air con Models with dehumi (4) Contact inp When using S1 operating moi Instantaneous cont	billowing see Mod peditioner humid he difying fun dels with difying fun out function g contact i SW3-1 de setting act g)	Stops ttings a e before ower out ating a ctions. ction. n setting nput (S	if the unit upply t e the itage nd gs (SV 1), cho The oper is revers	t was stopped before the pow to the models below. COOLING DRY COOLING V3-1 to SW3-2) cose one of the follo	eroutage and HUN wing functi	HEATING HEATING HEATING HEATING HEATING	The Operating Output specs M1: Turn MF M2: Turn MF and the MR 2 is KRP928B2S	I / error sig 1 ON wh 2 when a air condition not turned	
OFF (Factor ON (NOTE) The fc Room air con Models with dehumia (4) Contact inp When using S1	ditioner humid he difying fun odels with difying fun odels with difying fun ut function g contact i SW3-1 de setting act g) OFF	Stops ettings a e befor ower ou aating a ctions. ctions. n setting nput (S SW3-2 setting	if the unit ppply t e the tage nd gs (SV 1), ch The operation gs (SV 1), ch Contact Contact Contact Cose to (NOTE 1)	t was stopped before the pow o the models below. COOLING DRY COOLING V3-1 to SW3-2) coose one of the follo What Happens ming status of the air conditioner all by an instanteneous input of corme. Open to cise air condition runs. open air conditioner is stopped	er outage and	HEATING HEATING HEATING HEATING ions. trol mode	The Operating Output specs M1: Turn MF M2: Turn MF MR 2 is KRP928B2S2 S8 \oplus) / error sig 1 ON wh 2 when a air conditi not turned	
OFF (Factor ON NOTE) The fo Models with dehumi 4) Contact inp When using S1 operating mo- Instantaneous cont input (factory settin Constant contact in Remote control all Remote control all	billowing see Mod provide the provided of the	Stops e before ower out ating a ctions. ction. n setting nput (S SW3-2 setting OFF	if the unit pply t te the tage nd gs (SV 1), ch Conset Contact Close to 1 Contact Con	t was stopped before the pow o the models below. COOLING DRY COOLING W3-1 to SW3-2) oose one of the folio What Happens ating status of the air conditioners of more. Open to constituent is stopped	er outage and HUN wing functi Con Last comm ON / OFF cc (operate / st (NOTE 2). All remote are prohibit	HEATING HEATING HEATING HEATING HEATING tons. trol mode and priority	The Operating Output specs M1: Turn MF M2: Turn MF MR 2 is KRP9228B2S S8 \ominus S8 \ominus S8 \ominus S5 M1 (c) M2 (c)	() / error sig 1 ON when a 2 when a air condition in condition of turned () () () () () () () () () () () () () (
OFF (Factor ON (NOTE) The fc Models with dehumic dehumic (4) Contact inp When using S1 operating mo- Instantaneous continput (factory settin Constant contact in Prohibiton/permiss input NOTE1: Since opera Exam NOTE2: Opera NOTE3: If the Exam NOTE3: If the functi timer, (KRP) note t If this 2011,	billowing see Mod Utioner humid he difying fun odels with difying fun unt function g contact i setting at g) OFF unt central ec contact is setting at g) OFF unt central ec contact is on is still To prever 413AB1S) hat it can proved that it c	Stops stops stops stops stating a e before stops stops stops or soft or soft soft soft soft soft soft soft soft	if the unit ppply to the the tage and and and and and and and and	t was stopped before the pow o the models below. COOLING DRY COOLING V3-1 to SW3-2) cose one of the follo What Happens ming status of the air conditionr el by an instantaneous input of cor more. Open to close air condition runs. open air conditionr is stopped 1- Open to close: dition stops. Close to open:	er outage and HUN wing functi Last comm ON / OFF cc (NOTF 2). All remote are prohibi contact is contact is contact ing can be the air con- and the unit ings can be the air con- ang the time sp r, use of the time sp contact is contact is con- tral contra	HEATING HEATING HEATING HEATING HEATING HEATING HEATING hors. trol mode and priority trol mode and priority trol is rejected py timer prohibition) controller actions ted when the lossed. (NOTE 3) Intact status and etimes. difficient is stopped will be running. e changed. e c	The Operating Output specs M1: Turn MF M2: Turn MF MR 2 is KRP9288825 S8 \oplus	e Controller	gn: i c oon

(Minimum applicable load 12 V DC, 1mA or lower)

5.Control Codes

ote controller, the operating codes can be used to limit mote controllers. Three beeps for signal reception will be heard eless remote controller is operated while in central control. ited

			C	Operations from the remote controller							<u>et</u>
S1			"Run" control from the central controller				"Stop" control from the central controller				central ntact inp
operating mode	Control mode	Control code	Run / timer	Stop	Operating mode temperature	Fan direction and fan speed	Run / timer	Stop	Operating mode temperaturet	Fan direction and fan speed	Operations from central controller and contact input
	ON / OFF control	0,1,3	Х	×	0		Х	×	0		
	is rejected	10,11	×	×	×		×	×	×]	
	Only OFF control is accepted	2 12–19	×	0	×		×	0	×		
Instantaneous	Central priority	4	0	0	0		×	0	×		
contact mode	Central priority	5	0	0	0		х	×	0		
	Last command priority	6,7	0	0	0		0	0	0		
	Timer operation is accepted by	8	O*	0*	O*	0	×	0	×	0	
	remote controller	9	O*	0*	0*		×	×	0		0
		2,10-19			×				×	1	
Constant		0,1,3,5-7			0				0		
contact mode		4	×	×	0		×	×	×		
oomaatmode		8			O*				×		
	/	9			O*				0		
All remote controller actions are prohibited			×	×	×	×	×	×	×	×	
*	Only during timer ope	eration									

S1 pin operating mode	Intellig	ent Touch Cor	Operations from the remote controller					
oporating mode	Start / stop Change Change set temperature				Stop	Operating mode temperature	Fan direction and fan speed	Description from southed
Instantaneous contact mode	ON / OFF control is	permitted	permitted/prohibited	×	×	0		
Constant contact mode	rejected	prohibited	permitted/prohibited	×	×	×		
Instantaneous	Only OFF	permitted	permitted	×	×	0		
contact mode			prohibited	×	0	×	0	
contact mode	control is	prohibited	permitted/prohibited		0			
Constant	accepted	permitted	permitted	×	X	0		
contact mode			prohibited		×	×		
contact mode		prohibited	permitted/prohibited	×	· ^	^		
Instantaneous		permitted	permitted/prohibited	0	0	0	1	L
contact mode	Last command	prohibited	permitted/prohibited	×	0	×	1	L
Constant	priority	permitted	permitted/prohibited	×	×	0		
contact mode	r .	prohibited	permitted/prohibited	X	×	×		
All remote controller actions Does not affect settings are prohibited					×	×	×	

Operating / Error Display Signal

nals can be read from the contact output (S5).

en the air conditioner is running. communication error has occurred between the KRP928BB2S iner, or MR 1 is ON and the unit has stopped after an error. ON during a warning.

S8	Power supply for relay (Supply 12 V	(DC oxtornally)
<u></u> ө		DC externally.)
	Operating control panel (Field supply)	
S5 MC (+) M1 (-) M2 (-)	MR1 MR2 MR2 MR2 MR2 MR2 MR2 MR2 MR2	Relay specs (MR1 and MR2) Coil voltage: 12 V DC Coil resistance: 160Ω 10% Wiring length Max: 100m

Combining Equipment

The central controller can be combined with the following devices.								
	Central Remote Controller	ON / OFF controller	Schedule timer	D-BIPS	Contact input	Wired Remote Controller	Wireless Remote Controller	
Central Remote Controller	0	0	0	0	0	0	0	
ON / OFF controller	0	0	0	0	0	0	0	
Schedule timer	0	0	×	×	0	0	0	
D-BIPS	0	0	×	×	0	0	0	
Contact input	0	0	0	0	×	0	0	
Wired Remote Controller	0	0	0	0	0	×	×	
Wireless Remote Controller	0	0	0	0	0	×	0	



3P248024-3D

13.6 <KPW063A4> Air Direction Adjustment Grille



2 Installation of air direction adjustment grille)



3P398171-1

13.7 <KKG063A42> Back Protection Wire Net



2P403095-1

13.8 <FTDBHML, KEH063A4E> Drain Pan Heater

perates properly durir	n siderations carefully before installing the drain pan hea g the start-up operation. WARNING and CAUTION symbols.	ter. After completing	the installation, check if the u
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.		Indicates a potentially hazard situation which, if not avoided may result in minor or modera
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.		injury. It may also be used to alert against unsafe practices
 After completing the All phases of the field manufacturer's instru This product is a hea unit from freezing. 	y should store this installation manual for future reference installation, make sure that the unit operates properly du l-installation, including, but not limited to, electrical, pipin ctions and must comply with national, state, provincial, a ter designed to melt snow that is blown into the product f th a snow-break hood on a high stand if this product is us	ring the startup oper g, and safety, must b nd local codes. from the outside to p	be done in accordance with revent the drain pan of the out
	ĒR		
The temperature of the	heater unit without wearing gloves. be heater unit will become high when the heater is turned on. hit with bare hands will result in burns or injury.		
	ING		
The Incomplete install • Use the supplied Use of other parts cou • Turn off the pow Touching any electrica • Use specified wind	It be installed according to the instructions give ation of the product could result in water leakage, an electric sho or specified installation parts. Id result in the unit becoming loose and falling, water leakage, e er supply at the time of installation. I parts may with the power supply turned on could result in elected es. Connect and fix the wires so that the wires will	ock, or fire. lectric shock, or fire. tric shock. not put improper f	
When wiring and	ed improperly could result in terminal overheating, an electric sh connecting the indoor and outdoor units, care ce on the structures.		wiring so that they will no
	wires. Incomplete cover installation could result in terminal over	heating, an electric sho	ock, or fire.
	ON		
CAUTI Wear protective	gloves at the time of installation.		
CAUTI Wear protective Touching the suction r Do not install the		oosure to inflamn	nable gas leakage.
CAUTI Wear protective Touching the suction r Do not install the If the gas leaks and bu Do not grab the	gloves at the time of installation. nouth or aluminum fin of the outdoor unit may result in injury.		
CAUTI Wear protective Touching the suction r Do not install the If the gas leaks and bu Do not grab the The sharp edge of the O not install the	gloves at the time of installation. nouth or aluminum fin of the outdoor unit may result in injury. Product in places where there is danger of exp iilds up around the unit, it may catch fire. Top plate of the outdoor unit carelessly when re- top plate may cause injury. Poutdoor unit in places where small animals may e and touch the internal parts of the outdoor unit, the outdoor unit	moving the top p ay nest in the out	late.

Accessories								
		EH063A4E FTDBHML		KEH067A41E FTDBHMS	E KEH063A4E FTDBHML			
A Drain pan heater	1	1	E Installation manual (multi-language)	1	1			
M4 piercing screw	3	6	Electric wiring diagram label	1	1			
C Binding band	1	1	G Information label	1	1			
Sealing material		2	Appearance of the (A) drain pa models.	an heater may diffe	er from some			
			l for Installatio					
 Electric drill 	•	ım) drill	 Phillips screwdriver 	 Nippers 				
Some stages in the installation model of outdoor unit. Refer to relevant model. Type A models : RX09/12, F Type B models : RX15/18/24 Type C models : 2/3/4MXS,	the instructions for th 3XN09/12, RXL09/12 4, RXN18/24, RXL15	ne	(P) Electric wiring diagram label	Top plate	•			
1. Remove each co the outdoor unit	omponent of		gr gr	Front plate	G Informa label			
1) Remove the top plate.		For ty	pe B and C models	م م				
 2) Affix the (P) electric wiri where there is enough the back of the top plate 	space available on		Electric wiring	IT THE	- Anti-drip cover			
 Remove the screws from wire mesh if one is fitted (For type B and C mode 	d. (2 screws)		diagram label		•			
4) Remove the front plate.					G Inform			
5) Remove the anti-drip co (For type B and C mode				Front				
6) Affix the G information manufacture's label.			View A					

- 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

riangle : Truss head tapping screw



Protective / wire mesh









3P421082-1C

13.9 <KPS063A41> Snow Hood (Intake Side Plate)







3P436071-1

13.10 <KPS063A44> Snow Hood (Intake Rear Plate)







3P436072-1

13.11 <KPS063A47> Snow Hood (Outlet)







3P436073-1



- 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.