Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

MODEL COMPATIBILITY:

Compatible with Light Commercial models: 3 to 12.5 ton High Efficiency (DR* series),15 to 25 ton Standard Efficiency (DB* series)

SPECIFICATIONS:

Model	0130M00579	0130M00580
Description	Daikin iLINQ DDC Controller - Standard	Daikin iLINQ DDC Controller - with MHGRH Control
Dimensions	12.4 x 5.2 x 2.8 inches	
Operating Conditions	-4°F to 140°F, 90% RH non-condensing	
Storage Conditions	-22°F to 158°F, 90% RH non-condensing	
Supply Voltage	Dedicated class 2 transformer 24VAC (+10/-15%), 45 VA	
Wring specs	18 to 22 AWG twisted pair or shielded cable for all sensor installations	
Temperature Inputs	Type III thermistor, 10K Ω @ 77°F	
Analog Inputs (AI)	0 – 10VDC, Input Precision ±0.3% Full Scale	
Number of AIs	8	10
Digital Inputs (DI)	24VAC (+10/-15%) 50/60HZ, Absorbed Current: 5mA	
Number of DIs	14	18
Analog Outputs (AO)	0 – 10Vdc, External Power Supply:24VAC (+10/-15%), Precision: ±2% Full Scale, Resolution: 8 Bit, Maximum Load: 10mA	
Number of AOs	4	6
Digital Outputs (DO)	8A/250VAC Resistive Load	
Number of DOs	13	18
USB Type “B” Port	1 for Programming, Setup, and Advanced Diagnostics	
USB Type “A” Port	1 for Transferring files	
Ethernet Ports	2 autocross 10/100 MBPS port for BACnet/IP communication and Web Interface	
BACnet/IP Communication	Built-in BACnet/IP (Ethernet port)	
BACnet MS/TP Communication	Built-in RS485 port, Baud rate select from 9600, 19200, 38400 (Default), 57600, and 76800	
LonWorks Communication	Optional communication card (0130M00584) required	
Compliance	UL Listed / CUL Listed BTL Certified (B-BC) California Title 24 certified economizer control	

PRODUCT IMAGE:

Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

OPTIONS:

Type	Name	Part Number	Function
Module	MHGRH Expansion Module	0130M00581	Used for 0130M00580 only DDC Controller expansion module for control of the Modulating Hot Gas Reheat (MHGRH) valve
	LonWorks Communication Card	0130M00584	Communication card allowing connection of the DDC Controller to a LonWorks network
Sensors	Space CO_2 Sensor	0130L00225	Sensor installed on wall to monitor space CO_2 level. A CO_2 sensor is required for demand control ventilation. Sensor output range 0-10Vdc, 0-2000ppm
	Duct CO_2 Sensor	0130L00220	Sensor installed in return air duct to monitor space CO_2 level. A CO_2 sensor is required for demand control ventilation. Sensor output range 0-10Vdc, 0-2000ppm
	Duct Temperature Sensor 4"	0130L00222	Sensor installed in return air or supply air duct to monitor temperature. When installed in the return air duct, this sensor can be used in place of the wall mounted temperature sensor. Sensor type is 10KΩ Type III Thermistor
	Duct Temperature Sensor 8"	0130L00228	
	Duct Temperature and Humidity Sensor	0130L00221	Sensor installed in return air duct to monitor space temperature and humidity level. This sensor can be used in place of the wall mounted temperature and humidity sensor. Temperature sensor type 10KΩ Type III Thermistor. Humidity sensor range 0-10Vdc, 0-100%RH
	Outdoor Air Temperature Sensor	0130L00227	Sensor installed to monitor outdoor air temperature. Senor type 10KΩ Type III Thermistor
	Outdoor Air Temperature and Humidity Sensor	0130L00223	Sensor installed to monitor outdoor temperature and humidity levels. This sensor can be used in place of the outdoor temperature sensor when humidity must also be monitored. Temperature sensor type 10KΩ Type III Thermistor. Humidity sensor range 0-10Vdc, 0-100%RH
	Space Temperature Sensor	0130L00226	Sensor installed on wall to monitor space temperature. This sensor also provides local setpoint adjustment and a temporary occupancy override button. Sensor type 10KΩ Type III Thermistor
	Space Temperature and Humidity Sensor	0130L00224	Sensor installed on wall to monitor space temperature and humidity levels. This sensor can be used in place of the wall mounted temperature sensor when humidity must also be monitored. This sensor also provides local setpoint adjustment and a temporary occupancy override button. Temperature sensor type 10KΩ Type III Thermistor. Humidity sensor range 0-10Vdc, 0-100%RH

Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

FEATURES:

- Packaged RTU control:
  - Single speed, two speed, and variable (5) speed blower configurations
  - Blower proving switch software interlock
  - 1 or 2 stages of heating with PID control load calculation
  - Gas, electric stages, electric with SCR control, and heat pump heating configurations
  - 1 or 2 stages of cooling with PID control load calculation
  - 1, 2 or 4 compressors with pressure switch feedback and alarms
  - Lead / lag compressor priority rotation based on runtime
  - Independent defrost of condenser coils
  - Demand defrost interval calculation
- Staged auxiliary electric heat during defrost or when heat pump heating is locked out
- Dehumidification using Modulating Hot Gas Reheat (MHGRH)
- Low suction pressure freeze protection on units with MHGRH dehumidification
- Low ambient condenser fan control on units with MHGRH dehumidification
- Demand control ventilation
- Exhaust fan enable
- Dirty filter alarm
- Emergency shutdown interlock and alarm
- Remote start/stop
- Load shedding
- Local time scheduling, including weekly and holiday events
- Automatic daylight savings time adjustment
- Optimal start / optimal stop
- Onboard trend log storage can be exported to .csv file for analysis
- Live trend logs viewable via web interface
- Selectable TSTAT mode allowing for connection to standard TSTAT, bypassing some of the DDC control logic
- BACnet MS/TP or BACnet IP communication
- LonWorks communication with optional field installed module
- Web interface for commissioning or monitoring through any web browser
- Onboard LCD display for local commissioning or monitoring

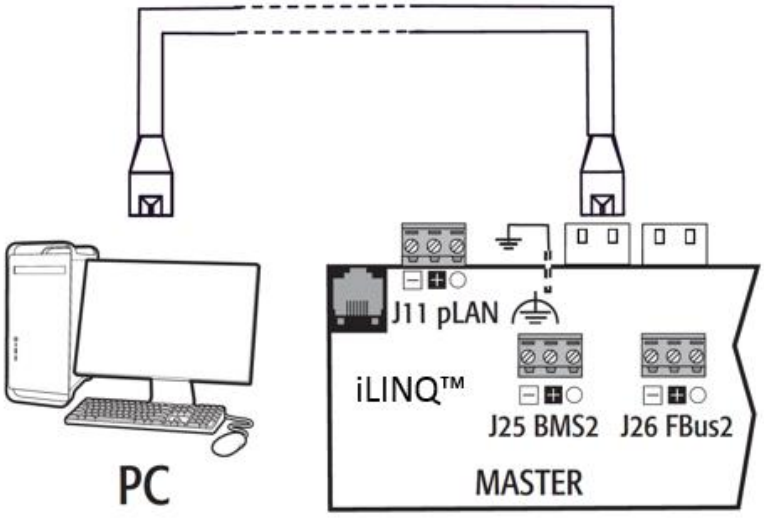
Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

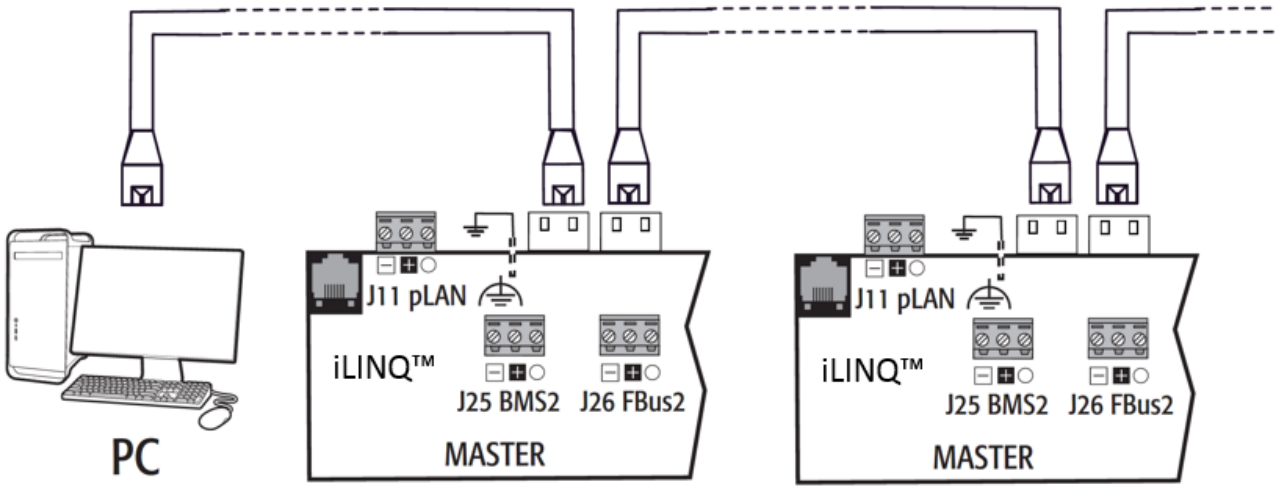
Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

SYSTEM DIAGRAM:

- Ethernet Network (Web Interface or BACnet/IP Communication):
  - The controller can be connected to a network switch or PC individually



  - Multiple controller can be daisy-chained together to a network switch or PC utilizing the second Ethernet port.

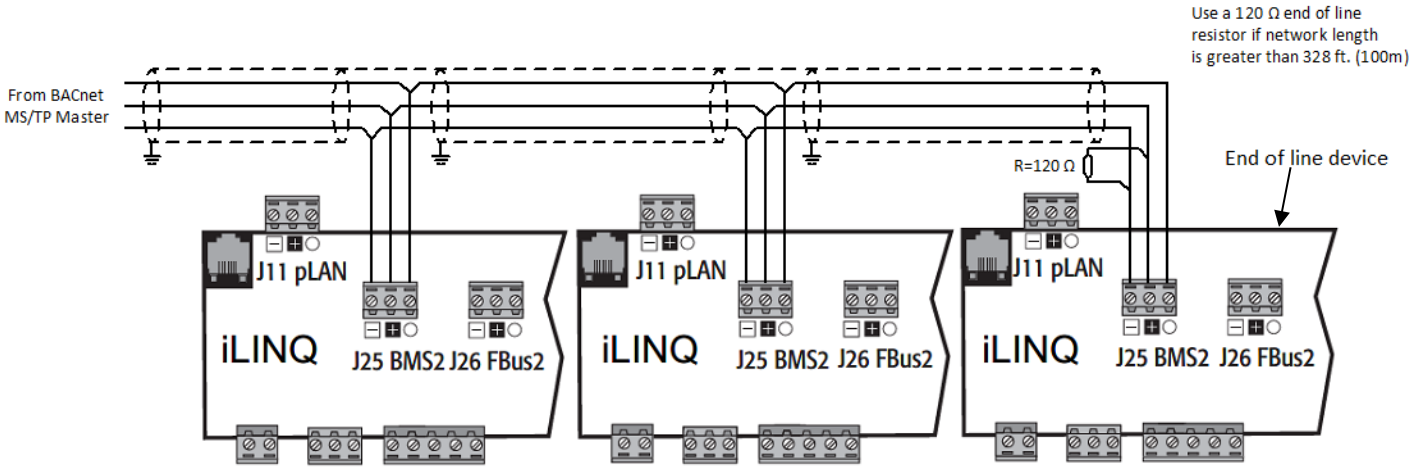


- BACnet MS/TP Network

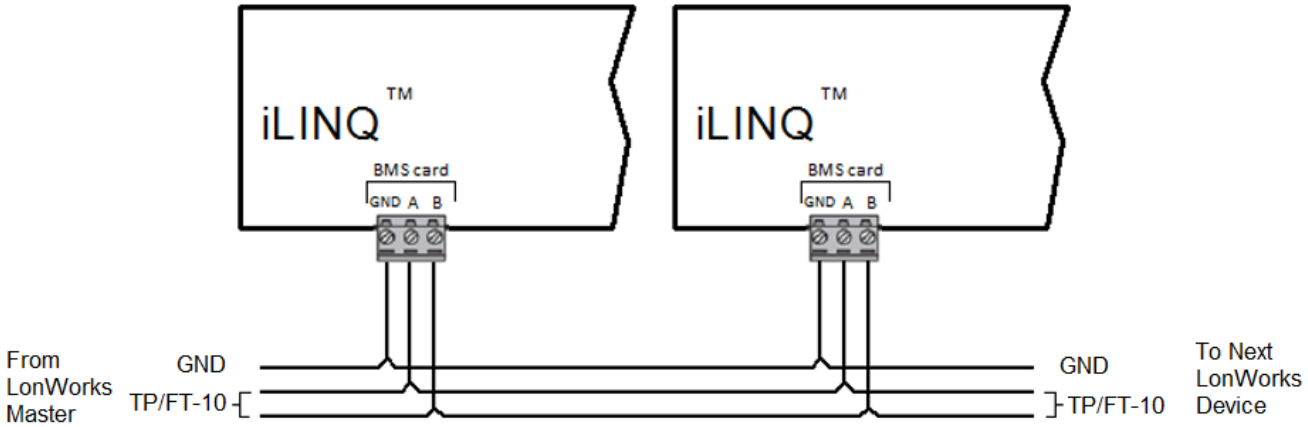
Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:



- LonWorks Network



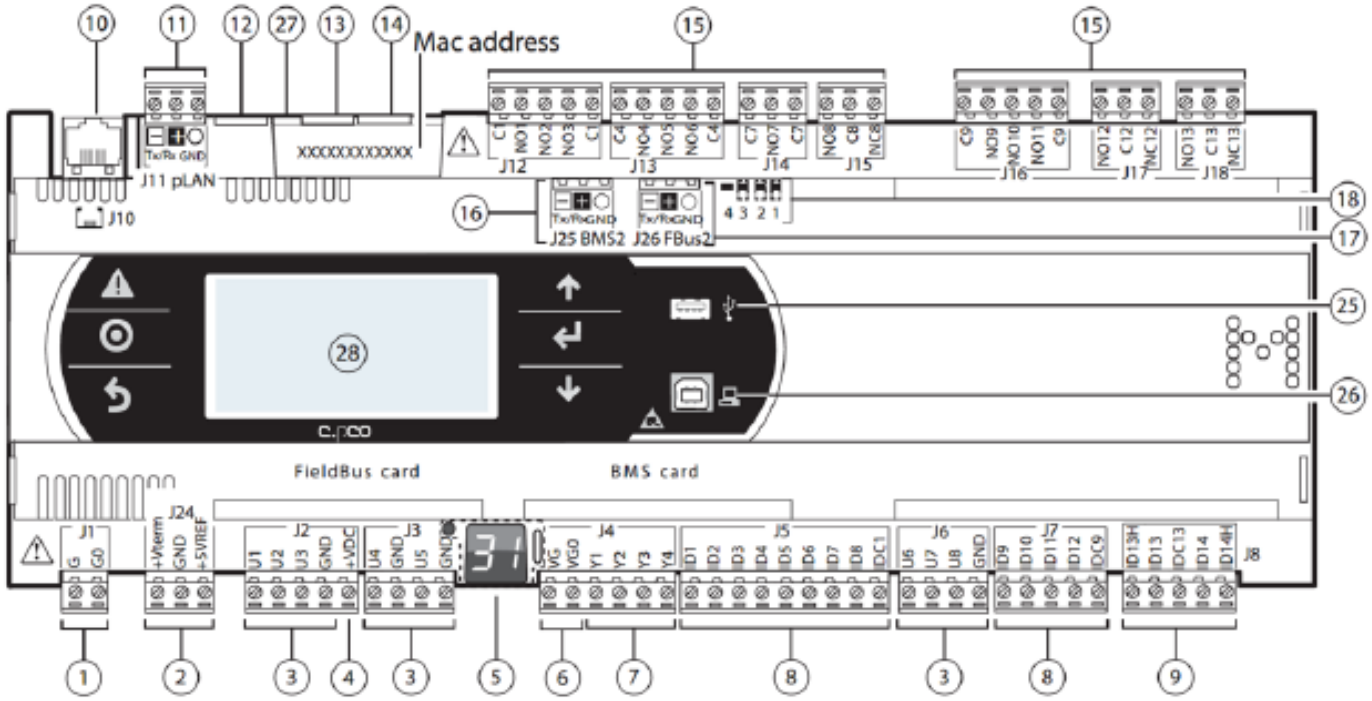
Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

I/O LAYOUT:

- IO Layout Medium (0130M00579):

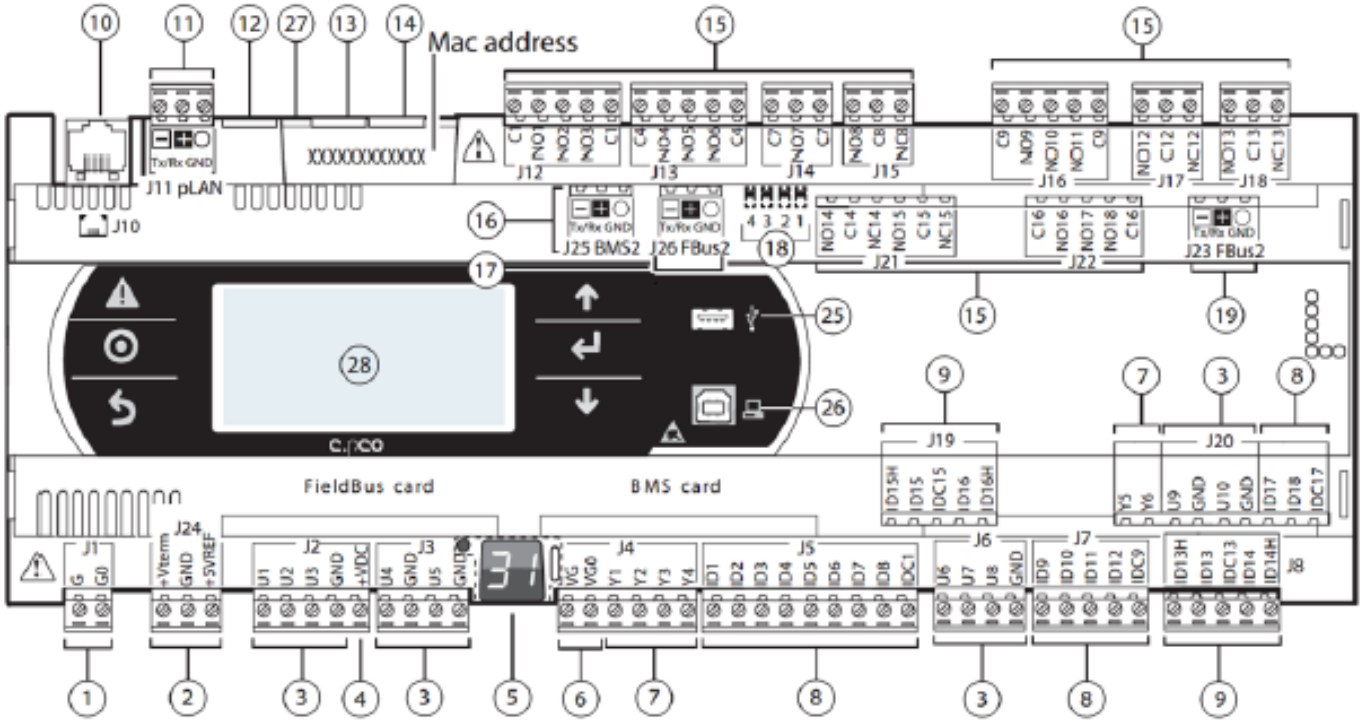


Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

- IO Layout Large (0130M00580):



REF	DESCRIPTION	REF	DESCRIPTION
1	Power Connector [G(+), G0(-)]	13	Ethernet Port 1
2	+VTERM: Terminal Power Supply +5VREF: 5VDC Probe Power Supply	14	Ethernet Port 2
3	Analog Inputs	15	Relay Outputs
4	+VDC: 24VDC Power For Active Probes	16	BMS Port
5	pLAN Address LED	17	Fieldbus Port
6	24VAC Power Input For Analog Outputs	18	Fieldbus/BMS Jumpers
7	Analog Outputs	19	Fieldbus Port
8	Digital Inputs	25	USB Host Port
9	Digital Inputs	26	USB Device Port
10	pLAN Connection For Room Terminal	27	Earth Ground Connection
11	pLAN Connection For Room Terminal	28	Display and Keypad
12	Reserved		

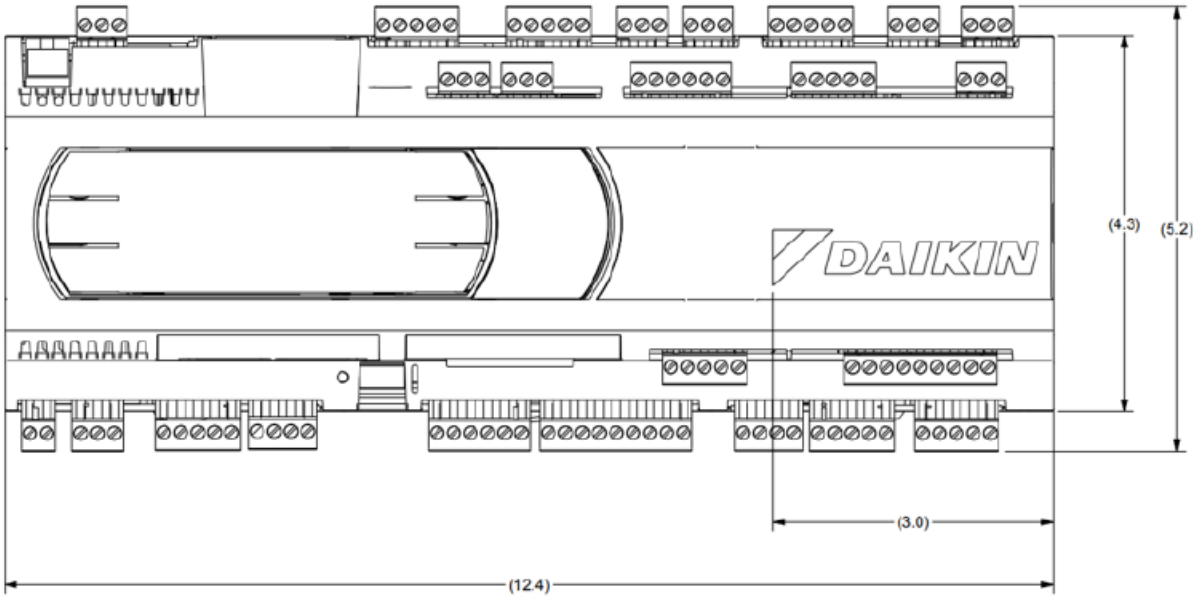
Submittal Data Sheet

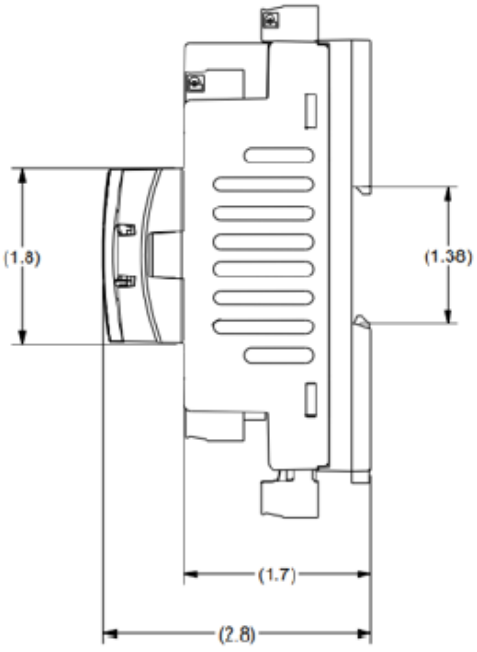
0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

DIMENSIONS:

The physical dimension for the medium and large controllers are the same (inches):





Submittal Data Sheet

0130M00579/0130M00580– Daikin iLINQ DDC Controller

Project Name:	
Location:	Approval:
Engineer:	Date:
Submitted to:	Construction:
Submitted by:	Unit #:
Reference:	Drawing #:

DOCUMENTATION:

Documentation available on www.daikincity.com and/or www.daikinac.com:

- User Manual
- Quick Start Guide
- BACnet Design Guide
- LonWorks Design Guide
- Submittal
- Product Flyer