

Field Modules

DFM-400/404/440

Description

The DFM-400/404/440 provide remotely expandable I/O to Delta's BACnet® Controllers. These field modules provide 4 universal inputs, in three different output configurations, and are capable of communicating on Delta's LINKnet network or directly on an RS-485 BACnet MS/TP network (DFM-400 model only).

When connected to a LINKnet network the DFM-400/404/440 provides remote input and programmable output capabilities to the controller. When connected on the MS/TP network (DFM-400 only) the modules function as independent BACnet devices with inputs accessible over the BACnet MS/TP network.



Application

The DFM-400/404/440 suits a diverse range of application needs where additional inputs and outputs are required, or where a small number of I/O's are remotely located.

Features

- ▶ Native BACnet device (DFM-400 only) supporting communication on an RS-485 BACnet MS/TP network
- ▶ Supports communicating on LINKnet
- ▶ Easy-to-mount housing
- ▶ Derived Network Addressing (DNA) for simple integration into a standard network architecture
- ▶ Extended temperature range for extreme ambient situations

Specifications

BACnet Device Profile
BACnet Application Specific Controller (B-ASC)

Inputs

- 4 Universal Inputs (10-bit) supporting:
- 0-5 VDC
 - 0-10 VDC
 - 10 kΩ Thermistor
 - 4-20 mA
 - Dry Contact (using 10 kΩ Thermistor jumper setting)

Outputs

DFM-400: None

DFM-404: 4 Binary TRIAC outputs, 0.5 A @ 24 VAC, jumper selection for internal or external power on binary outputs, LED status indication

DFM-440: 4 Analog outputs (0-10 V), max 20 mA, LED status indication

Device Addressing

Set via DIP switches and jumpers

Connectors

Removable screw-type terminal connectors

Wiring Class

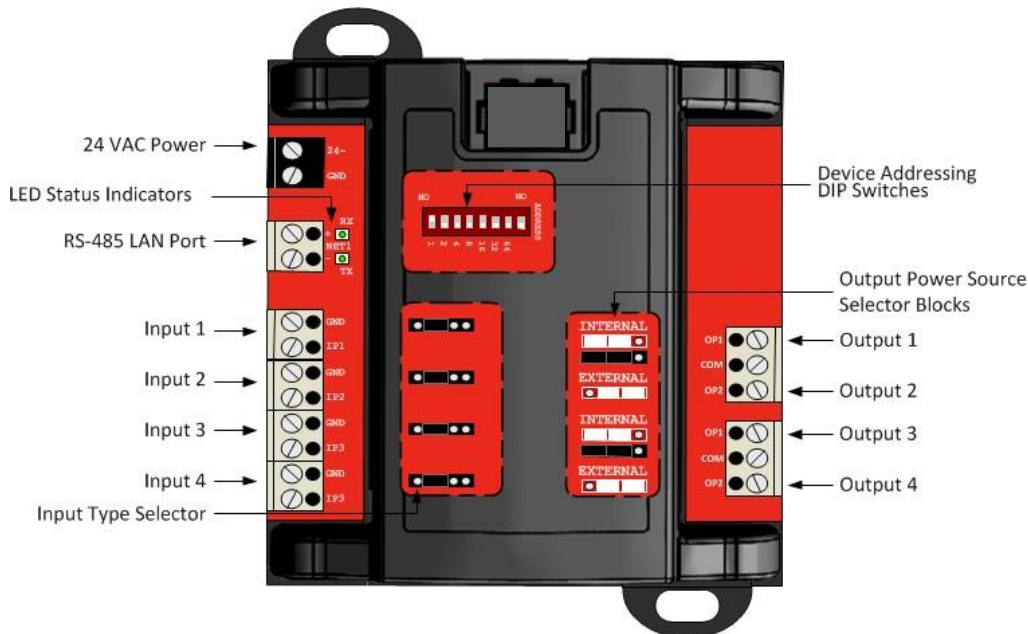
Class 2

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Field Modules

DFM-400/404/440: Board Layout Diagram (404 shown)



Specifications (Continued)

Power
24 VAC 50/60 Hz

DFM-400:
4 VA Max

DFM-404:
4 VA (Outputs externally powered)
52 VA (Outputs internally powered)

DFM-440:
6 VA Max

Technology
8-bit processor with internal A/D, Flash and RAM

Communications Ports

RS-485 Port
Delta LINKnet up to 76800 bps, max 12 devices on LINKnet with no more than 2 DFM devices
or
RS-485 Port (DFM-400 only)
BACnet MS/TP up to 76800 bps, max of 99 devices per port

Ambient
-40° to 140°F (-40° to 60°C), with enclosure
10 to 90% RH (non-condensing)

Note: Internal electronics rated from -40° to 85°

Dimensions
4¼ x 45/16 x 11/16 in. (10.7 x 11 x 4.9 cm) with housing

Weight
0.362 lb. (164 g) with housing

Compliance
CE
FCC

Listings
UL 916 Listed
UL 864 Listed for UL 864 product numbers

Ordering

Order the DFM-4xx with the desired options according to the following product numbers:
Note: Maximum of 2 LINKnet I/O Boards on any LINKnet network.

DFM-400	Connects to LINKnet or BACnet MS/TP (jumper setting), 4 universal inputs
DFM-404	Connects to LINKnet, 4 universal inputs, 4 binary outputs
DFM-440	Connects to LINKnet, 4 universal inputs, 4 analog outputs
DFM-400-UL864-340	DFM-400 with UL 864 listing
DFM-404-UL864-340	DFM-404 with UL 864 listing
DFM-440-UL864-340	DFM-440 with UL 864 listing

Accessories

DZNR-768	RS-485 BACnet MS/TP, 4-port network repeater*
TRM-768	Delta Network Terminator for BACnet MS/TP*

* UL 864 versions available

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