

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.



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

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.

Specifications

BACnet Device Profile

BACnet Application Specific Controller (B-ASC)

Inputs

4 Universal inputs – 10 bit (supporting 0-5v, 0-10v, 10kΩ, 4-20mA)

Outputs

DFM-400: None

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

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

Technology

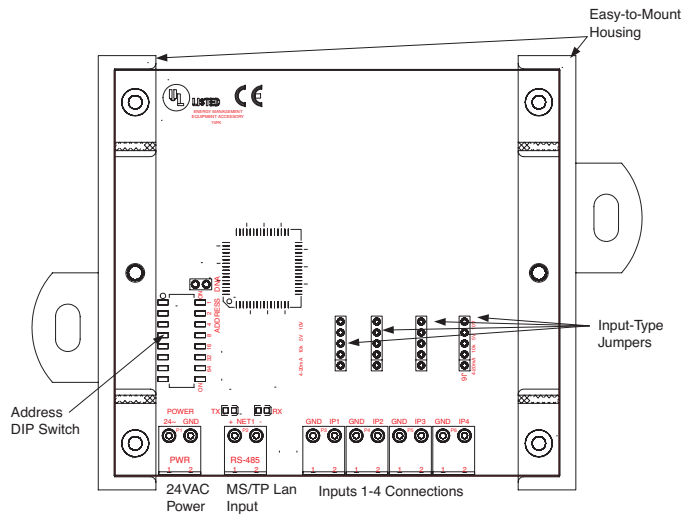
8-bit Processor c/w internal A/D, Flash and RAM

Device Address

LINKnet Connection, set via DIP switch and jumpers, DIP switch address range: 1 to 12

Field Modules

DFM-400/404/440: Board Layout Diagram



Accessories

RPT-768—Delta Network Repeater for BACnet MS/TP

TRM-768—Delta Network Terminator for BACnet MS/TP

Ordering

Order the desired DFM-4xx with the desired options, according to the following product numbers:

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

Note: Maximum of 2 LINKnet I/O Boards on any LINKnet network.

Specifications (Continued)

Communications Ports

LINKnet Connection, Delta LINKnet @ 76800 bps (maximum of 2 devices)

BACnet MS/TP connection @ 9600, 19200, 38400 or 76800 bps(default) (maximum of 99 controllers per BACnet MS/TP segment) (DFM-400 only)

Connectors

Removable screw-type terminal connectors

Wiring Class

Class 2

Power

24 VAC

6 VA

DFM-400: 4 VA

DFM-404: 52 VA

DFM-440: 6 VA

Ambient

-40° - 140°F (-40° - 60°C), with enclosure

10 to 90% RH (non-condensing)

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

Dimensions

5.5 x 4.0 x 1.78 in. (13.75 x 10 x 4.8 cm) with housing

0.38 lb. (171 g) with housing

Approvals/Standards

UL 916 Listed

CE

FCC