M500DMR1
Multiple Input-output Module

General

The Systemsensor`s M500DMR1 multi output-input module can use with PTW-3300 and PTW-3300S Fire Alarm Control Panels (FACPs).

The addressable module is intended for use in intelligent, two wire loops. It includes two individual relay control modules and two Class B monitor modules. Each relay output is intended for Form C switching applications which do not require wiring supervision for the load circuit. Each monitor input provides an interface between a fire alarm control panel and one or more normally open contact-type devices. Each relay output has its own green LED. Each monitored input has its own bi-color LED, which can be controlled by the control panel.

Features

- Powered by SLC loop directly, no external power required.
- Mounts in standard junction boxes (4.0"/10.16 cm square, 2.125"/5.398 cm deep).
- Integral LEDs flash green during normal operation (a programmable option) and latch on steady red to indicate alarm.
- Compatible with all PTW-3300 and CLIP series Fire Alarm Control Panels (FACPs).
- Addressable-analog communication.
- Sleek, low-profile design.
- Two-wire SLC connection.
- Rotary, decimal addressing (1-99 on CLIP systems, 1-159 on FlashScan systems).
- Addresses can be viewed and changed without electronic programmers.

Specifications

- **Operating Temperature:** 32°F to 120°F (0°C to 49°C).
- **Relative Humidity:** 10% – 93% non-condensing.
- **Shipping Weight:** 6.3 oz. (196 g).
- **Dimension:** 4.275 in W x 4.675 in H x 1.4 in D

ELECTRICAL SPECIFICATIONS

- **Normal Operating Voltage:** 15 to 32 VDC.
- **Maximum Current Draw:** 24 mA (4 LEDs on).
- **Average Operating Current:** 1300µA.
- **Relay Contact Ratings:** 3A at 30 VDC.
- **EOL Resistance:** 47K Ohms (monitor inputs only).
- **Maximum IDC wiring resistance:** 1500 Ohms.
- **Maximum IDC Voltage:** 10.2 Volts.
- **Maximum IDC Current:** 450µA.

Sample System Options

See installation instructions shipped with the module, and the SLC Wiring Manual for complete details. To ensure proper operation, these modules shall be connected to listed compatible system control panels only.

Mount on a standard junction box (4.0"/10.16 cm square) which is at least 2.125"/5.398 cm deep.

- Terminal screws are provided for "in and out" wiring.
- Installation instructions are provided with each module.
- Surface-mount box is available as an option.
- Addressing:
– Module base address=Relay Output #1
– Module base address +1=Monitor Input #1
– Module base address +2=Relay Output #2
– Module base address +3=Monitor Input #2

Each module can use up to four (4) addresses. The base address selected with the rotary address switches will be assigned to relay output #1 from 00 to 156. The module will automatically assign the next three addresses as appropriate to monitored input #1, relay output #2, and monitored input #2.

DIP switch settings can disable relay output #2 or monitored input #2 and free up those addresses. (NOTE: This will affect addressing; see installation manual for details.)

NOTE: The inputs and outputs on M500DMR-1 provide Style B (Class B) circuits ONLY. Style D (Class A) circuits are NOT supported in any application.

Agency Listings and Approvals

These listings and approvals apply to the modules specified in this document. In some cases, certain modules or applications may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- **UL Listed:** S3705
- **FM Approved.**

Product Line Information

M500DMR1: FlashScan® Multiple Input-output Module.

SMB500: Surface mounting kit

DNR/DNRW: Duct detector housing.