



MOM5

UL Listed Sub-Assembly

Multi-Output Power Distribution Module



Overview:

Altronix MOM5 is a UL Listed Sub-Assembly multi-output power distribution module that converts one (1) non power-limited DC voltage input to five (5) power-limited outputs. Each output will route power to a variety of access control hardware and devices that includes Mag Locks, Electric Strikes, Magnetic Door Holders, etc. These outputs will operate in both Fail-Safe and Fail-Secure modes. Controlled trigger input is achieved through normally open [NO] or normally closed [NC] supervised input or the polarity reversal from an FACP (Fire Alarm Control Panel). A form "C" dry output relay will enable HVAC Shutdown, Elevator Recall or trigger auxiliary devices.

Specifications:

Agency Listings:

- UL Listed Sub-Assembly for Access Control System Units (UL 294) and Power Supplies for Fire Protective Signaling Systems (UL 1481). ULC-S318-96 - Power Supplies for Burglar Alarm Systems.
- Also suitable for Access Control.
- NFPA72 compliant.

Input:

- Fire Alarm Panel or Access Control System trigger inputs, [NO] or [NC] supervised trigger input and polarity reversal trigger input (rated 9-30VDC).

Outputs:

- Five (5) individual Class 2 Rated PTC protected power-limited outputs (auto-resettable).
- 12VDC or 24VDC operation.

Outputs (cont'd):

- Current limit is 2A @ 12VDC or 24VDC per output.

PTC Ratings:

- PTCs are rated @ 2A/250V.

Visual Indicators:

- Red LEDs indicate condition of each power output.
- Power and input trigger LEDs.

Supervision:

- Power fail supervision relay (Form "C" contact rated 1A @ 28VDC).

Additional Features:

- Output relay indicates that unit is triggered (Form "C" contact rated 1A @ 28VDC).
- Interfaces with most DC Power Supplies.

Board Dimensions (W x L x H approx.):

3.5" x 5.25" x 1"
(88.9mm x 133.4mm x 25.4mm)

Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/NFPA 72/ANSI, The Canadian Electrical Code, Part 1, and with all local codes and authorities having jurisdiction. Product is intended for indoor use only.

1. Refer to Sub-Assembly Installation Instructions for mounting Rev. MS050913.
2. Connect the DC output of the UL Listed power supply to the terminals marked [- DC INPUT +] carefully observing polarity.
3. Connect door strikes (Fail-Secure) positive to terminals marked [POS. (+) DC OUTPUT (ALARM)] [1] through [5] and negative to [NEG. 1] through [NEG. 5].
4. Connect door holders (fail-safe) positive to terminals marked [POS. (+) DC OUTPUT (STANDBY)] [6] through [10] and negative to [NEG. 1] through [NEG. 5].
5. To trigger the MOM5 from a FACP connect signaling circuit of FACP to terminals marked [-INPUT+] (*Fig. 1 - 7, pgs. 3 - 4*). Polarity is shown in alarm condition. Put wires coming to each terminal on different sides of the screw.
6. To trigger the MOM5 using a supervised dry contact connect the 2.2K resistor to terminals marked [TRIGGER] in series for a [NC] trigger input and in parallel for N.O. trigger input.
7. Connect the auxiliary devices that are to be triggered by the MOM5 to the terminals marked [NO & C] for normally open outputs and terminals marked [NC & C] for normally closed output. This relay will energize when the MOM5 is triggered.

8. Connect trouble reporting device to the terminals marked [POWER FAIL]. Connect to the [NO & C] for normally open and [NC & C] for normally closed output (*Fig. 3 - 7, pgs. 3 - 4*). This relay will switch when power is lost to the MOM5.

Note: This product is a UL Listed Sub-Assembly for use with Altronix UL Listed power supplies as indicated in the installation manuals for the power supply.

LED Diagnostic Table:

| LED | ON | OFF |
|------------------------|--|---|
| Power (Green) | Normal operation. | Loss of power to MOM5. |
| Trigger (Green) | MOM5 triggered (alarm condition). | MOM5 in stand-by (non-alarm) condition. |
| Outputs (Red) | Output tripped due to a short circuit or overload condition. | Normal operation. |

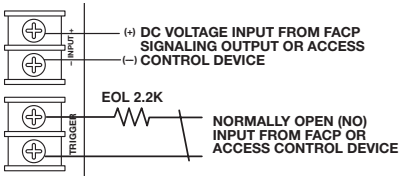
Terminal Identification:

| Terminal Legend | Function/Description |
|---------------------------------|---|
| - DC Input + | 12VDC or 24VDC from power supply. |
| Trigger | This circuit is supervised by a 2.2K EOL resistor. Initiating a short or open will cause power to be dropped to all terminals marked Pos. (+) DC output (stand-by) and supply power to all terminals marked Pos (+) DC output (alarm). |
| Input Neg (-), Pos (+) | Applying voltage to terminals marked Neg (-) input Pos (+) FACP signaling output in polarity shown will yield the same results as initiating trigger (mentioned above). |
| Neg (-) 1 through 5 | Supplies constant negative (-) voltage. |
| Pos (+) DC output (alarm) | Supplies positive (+) voltage when dry input or fire alarm (wet) trigger input. |
| Pos (+) DC output (stand-by) | Supplies positive (+) voltage in normal condition. Power is removed when either input trigger is activated. |
| NC, C, NO Dry output | When the MOM5 is triggered terminals marked [C] and [NO] will open and the terminals marked [C] and [NC] will close. This output is used to trip auxiliary devices, e.g. HVAC Shutdown, Elevator Recall etc. |
| NC, C, NO Power Fail | Form "C" contacts used for signaling when no voltage is present at [- DC input +] terminals. Under normal conditions terminals marked [NO] and [C] are open, [NC] and [C] are closed. An occurrence of trouble condition causes terminals marked [NO] and [C] to close and terminals marked [NC] and [C] to open. |

Typical Application Diagrams:

Fig. 1

MOM5 module shown with wet and/or dry normally closed trigger inputs (**Non-Latching**):



MOM5 module shown with wet and/or dry normally open trigger inputs (**Non-Latching**):

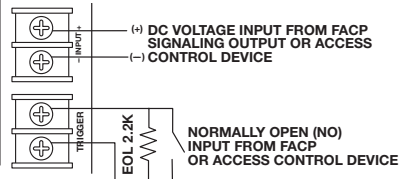


Fig. 2

Two (2) or more MOM5 modules shown with wet and/or dry normally closed trigger inputs (**Non-Latching**):

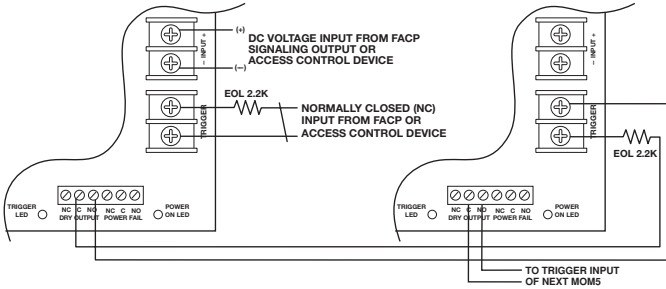


Fig. 3

Two (2) or more MOM5 modules shown with wet and/or dry normally open trigger inputs (**Non-Latching**):

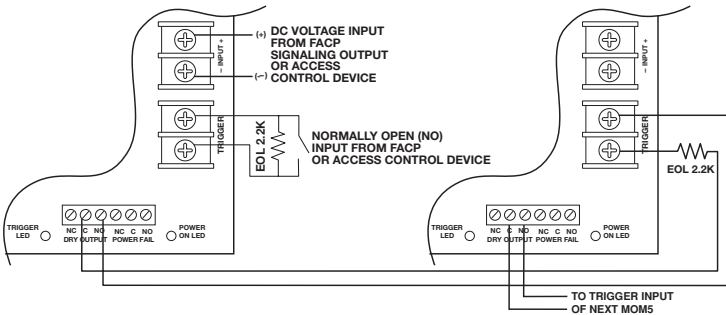
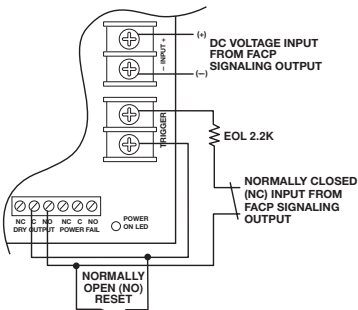


Fig. 4

MOM5 module shown with wet and/or dry normally closed fire alarm trigger inputs



MOM5 module shown with wet and/or dry normally open fire alarm trigger inputs

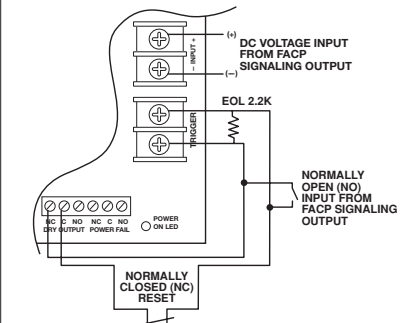


Fig. 5

Two (2) MOM5 modules shown with wet and/or dry normally closed fire alarm trigger inputs
(Latching with Manual Reset):

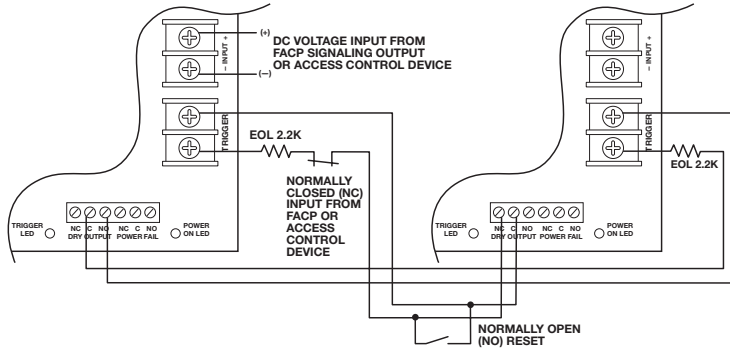


Fig. 6

Two (2) MOM5 modules shown with wet and/or dry normally open fire alarm trigger inputs
(Latching with Manual Reset):

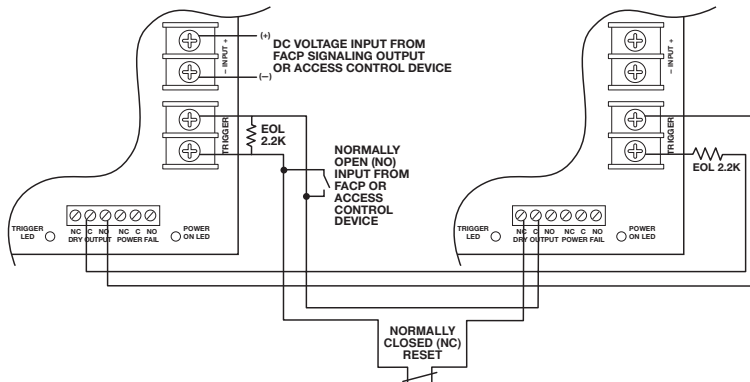
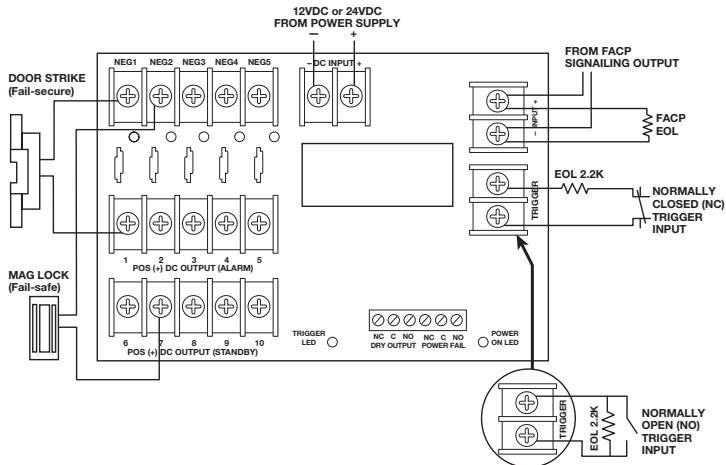


Fig. 7



Altronix is not responsible for any typographical errors.

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