



MOM5C - Multi Output Power Distribution Module for Access Control

Rev. 012100

Overview:

The MOM5C multi output power distribution module 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 which 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 for Access Control System Units (UL294), Standard for Safety for Fire Protective Signaling Systems (UL1481)
- NYC Department of Buildings Approved (MEA)
- California State Fire Marshal Approved (CSFM)
- NFPA72 compliant.



- Output relay indicates that unit is triggered. (Form "C" contact rated 1 amp @ 28VDC).

Visual Indicators:

- Red LED's indicate condition of each power output.
- Power & input trigger LED's.

Supervision:

- Fire Alarm Panel or Access Control System trigger inputs. (NO or NC supervised trigger input and polarity reversal trigger input).
- Power fail supervision relay (Form "C" contact rated 1 amp @ 28VDC).

Special Features:

- Will interface with most UL Listed Power Supplies

Enclosure Dimensions:

8"H x 7.25"W x 3.5"D

Input:

- 12VDC or 24VDC from power supply.

Output:

- 12VDC or 24VDC selectable outputs.
- Five (5) individual power limited class 2 outputs.
- Current limit is 2 amp @ 12VDC or 24VDC per output.

Current Draw:

Input Voltage	Stand-by	Alarm
12VDC	0.024 amp	0.066 amp
24VDC	0.026 amp	0.074 amp

Installation Instructions:

1. Mount unit in desired location. Mark and predrill holes in the wall to line up with the top two keyholes in the enclosure. Install two upper fasteners and screws in the wall with the screw heads protruding. Place the enclosure's upper keyholes over the two upper screws, level and secure. Mark the position of the lower two holes. Remove the enclosure. Drill the lower holes and install the two fasteners. Place the enclosure's upper keyholes over the two upper screws. Install the two lower screws and make sure to tighten all screws (*Enclosure Dimensions, pg. 4*).
2. Connect the DC of the power supply to the terminals marked [-DC Input +] carefully observing polarity.
3. Connect door strikes (fail-secure) positive to terminals marked [1 thru 5 Pos. (+) DC Output (Alarm)] and negative to [NEG1] thru [NEG5] (*fig. 7, pg. 4*).
4. Connect mag locks, door holders (fail-safe) positive to terminals marked [6 thru 10 Pos. (+) DC Output (Stand-by)] and negative to [NEG1] thru [NEG5] (*fig. 7, pg. 4*).
5. To trigger the MOM5C from a FACP connect signaling circuit of FACP to terminals marked [- INPUT +]. Polarity is shown in alarm condition. Connect the wires on opposite sides of the screw.
6. To trigger the MOM5C using a supervised dry contact connect a 2.2K resistor in series to terminals marked [TRIGGER] for a NC (Normally Closed) trigger input or connect a 2.2K resistor in parallel to terminals marked [TRIGGER] for NO (Normally Open) trigger input (*fig. 7, pg. 4*).
7. Connect the auxiliary devices that are to be triggered by the MOM5 to terminals marked [Dry Output]:
For Normally Open operation connect wires to the terminals marked [NO & C].
For Normally Closed operation connect wires to the terminals marked [NC & C].
Note: This relay will energize when the MOM5C is triggered.
8. Connect trouble reporting device to the terminals marked [Power Fail].
For Normally Open operation connect wires to the terminals marked [NO & C].
For Normally Closed operation connect wires to the terminals marked [NC & C].
Note: This relay will switch when power is lost to the MOM5C.

LED Diagnostic Table:

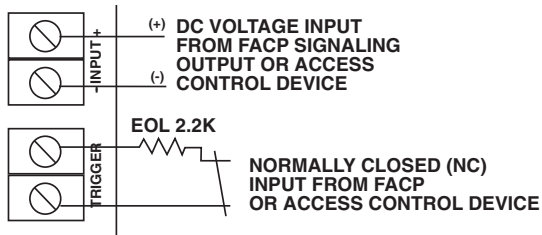
LED	ON	OFF
Power (Green)	Normal operation.	Loss of power to MOM5.
Trigger (Green)	MOM5 triggered (alarm condition).	MOM5 in stand-by (non-alarm condition).
Outputs (Red)	Output tripped due to a short circuit or overload condition.	Normal operation.

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 +	Applying voltage to terminals marked [- Input +] from the FACP signaling circuit in polarity shown will yield the same results as initiating trigger (mentioned above).
NEG1 thru NEG5	Supplies constant negative (-) voltage.
POS (+) DC OUTPUT (ALARM)	Supplies positive (+) voltage when either input trigger is activated.
POS (+) DC OUTPUT (STANDBY)	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 the terminals marked [C and NO] will close and the terminals marked [C and NC] will open. 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, and terminals marked [NC and C] are closed. A occurrence of trouble condition causes terminals marked [NO and C] to closed and [NC and C] to open.

Typical Application Diagrams:

Fig. 1 - MOM5C module shown with wet and/or dry normally closed trigger inputs (Non-Latching):



MOM5C module shown with wet and/or dry normally open trigger inputs (Non-Latching):

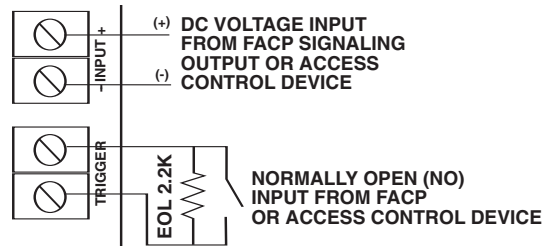
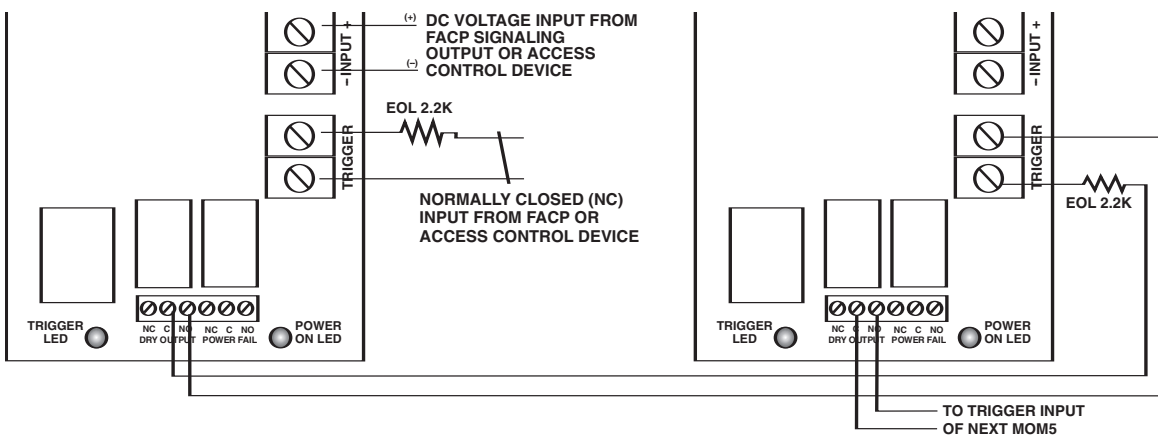


Fig. 2 - Two (2) or more MOM5C modules shown with wet and/or dry normally closed trigger inputs (Non-Latching):



Typical Application Diagrams:

Fig. 3 - Two (2) or more MOM5C modules shown with wet and/or dry normally open trigger inputs (**Non-Latching**):

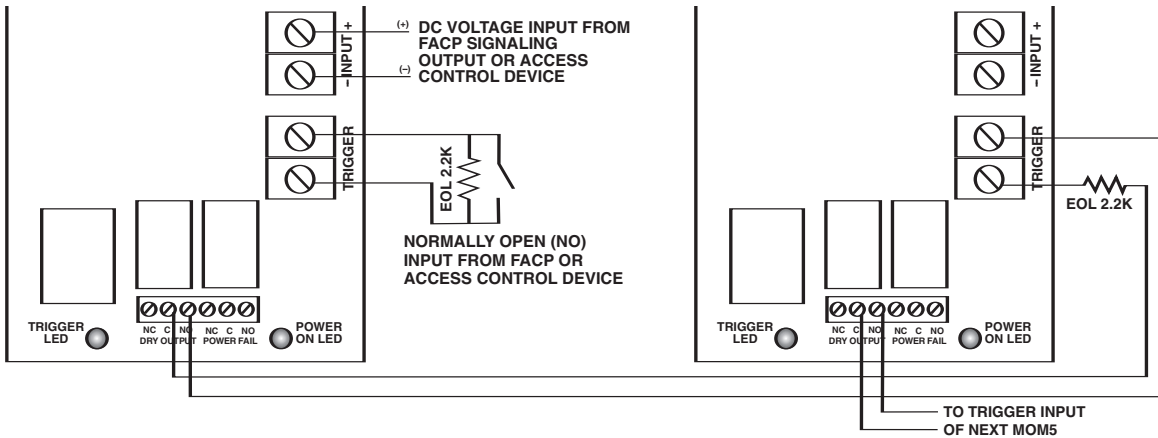
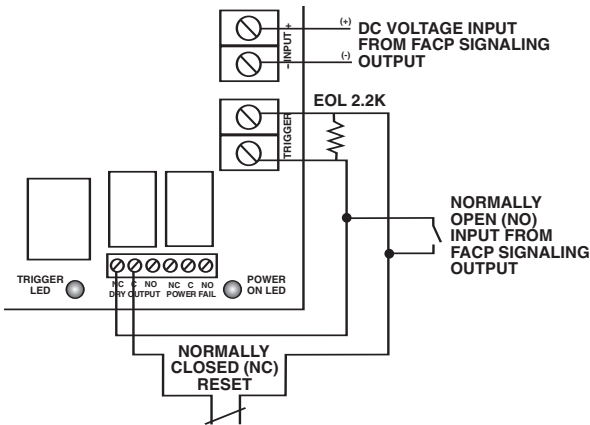


Fig. 4 - MOM5C module shown with with wet and/or dry normally closed fire alarm trigger inputs (**Latching with Manual Reset**):



MOM5C module shown with with wet and/or dry normally open fire alarm trigger inputs (**Latching with Manual Reset**):

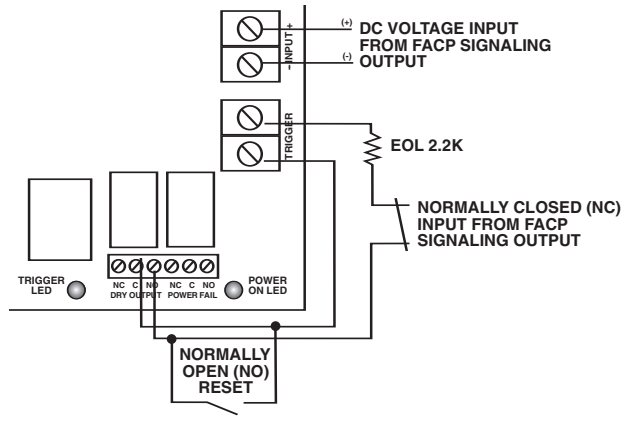


Fig. 5 - Two (2) MOM5C modules shown with wet and/or dry normally closed fire alarm trigger inputs (**Latching with Manual Reset**):

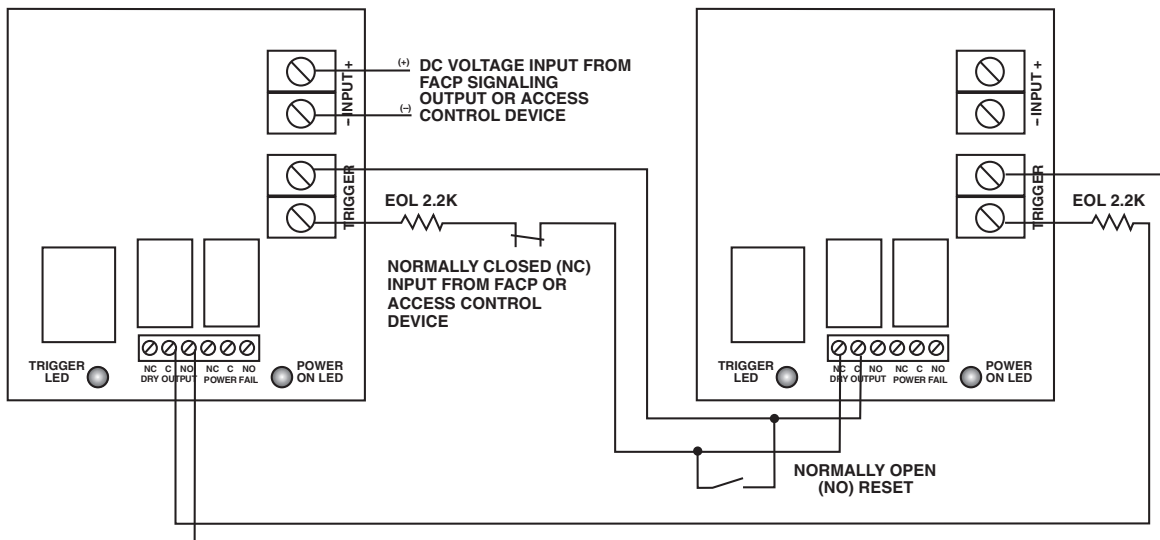


Fig. 6 - Two (2) MOM5C modules shown with wet and/or dry normally open fire alarm trigger inputs (**Latching with Manual Reset**):

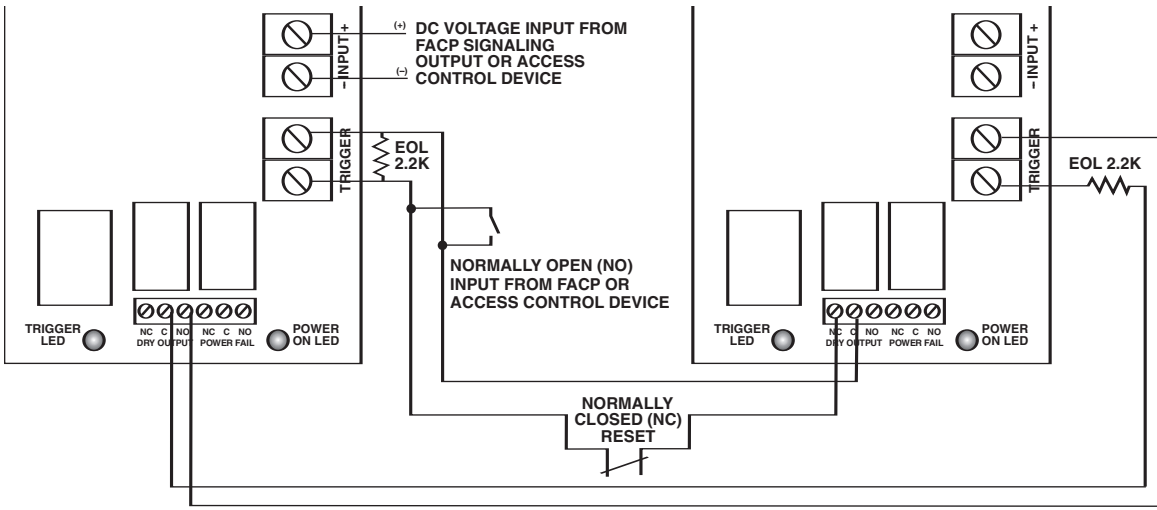
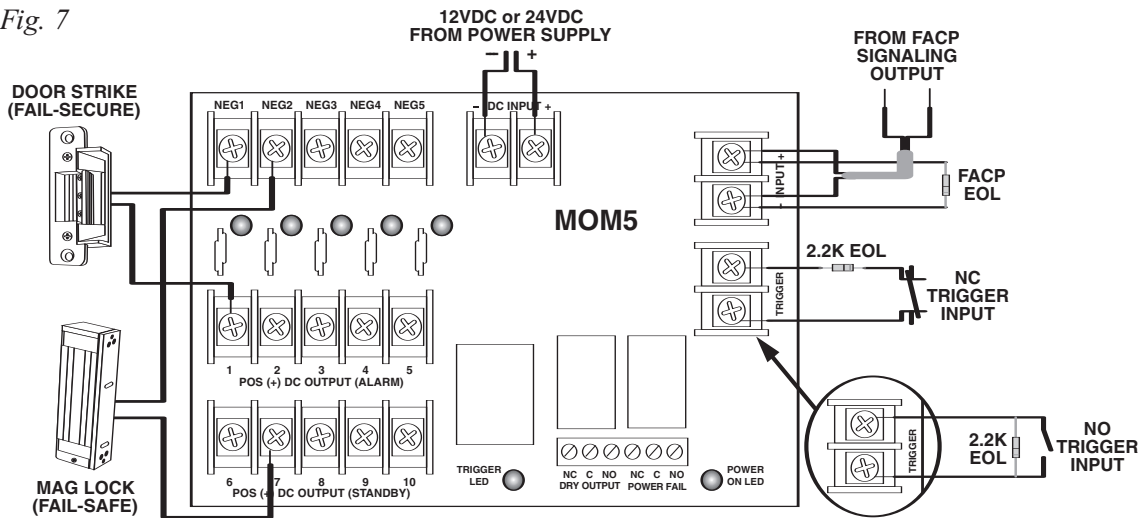
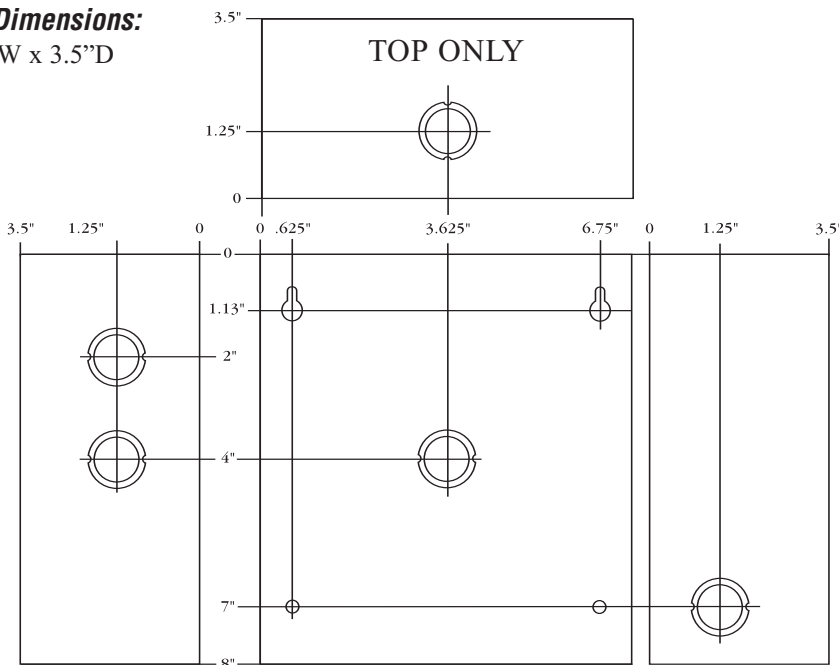


Fig. 7



Enclosure Dimensions:

8"H x 7.25"W x 3.5"D



Altronic is not responsible for any typographical errors.