

P3PC-5

Specification Sheet

Multi Output Power Distribution Module

# **DESCRIPTION**

The P3PC-5 multiple output power distribution module converts one (1) power limited DC voltage input into five (5) power limited outputs.

Each output can be used for a variety of access control devices which include Mag locks, electric strikes, magnetic door holders, etc. Outputs switch together and will operate in both fail-safe and fail-secure modes. Activation 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 can be used to trigger auxiliary devices.



# **FEATURES / SPECIFICATIONS**

- Five (5) individual power limited outputs.
- Individual LED's indicate presence of power at each output.
- NFPA72 compliant.
- 12VDC or 24VDC operation.
- Class 2 outputs.
- Current limit is 2.5Amps @ 12VDC or 24VDC per output

- Power and input trigger LED's.
- Interfaces with most DC power supplies
- Fire alarm panel or access control system trigger inputs.
- Power fail supervision relay (Form "C" contact rated 1AMP @ 28VDC/115VAC).
- Board dimensions: 5.125" (L) x 3.375" (W) x .875 ' (H).
- Lifetime warranty

## **INSTALLATION INSTRUCTIONS**

**NOTE:** All installations to be performed by a qualified personal in accordance with NEC and local codes.

- 1. Connect the DC of the power supply to the terminals marked [- DC input +] carefully observing polarity.
- 2. Connect door strikes (fail-secure) positive to terminals marked [1 thru 5 Pos. (+) DC Output (Alarm)] and negative to [NEG. 1' thru 'NEG. 5].
- 3. Connect door holders (fail-safe) positive to terminals marked [6 thru 10 Pos. (+) DC Output (Stand-by)] and negative to [NEG. 1' thru NEG. 5].
- 4. To trigger the P3PC-5 from a FACP, connect signaling circuit of FACP to inputs marked [NEG. (-)] and [POS. (+)] input. Polarity is shown in alarm condition. Put wires coming to each terminal on different sides of the screw.
- 5. To trigger the P3PC-5 using a supervised dry contact, connect the 2.2K Ohm resistor in series for a N.C. trigger input or parallel for N.O. trigger input.
- 6. Connect the auxiliary devices that are to be triggered by the P3PC-5 to the terminals marked [N.O. & C] for normally open outputs and terminals marked N.C. & C for normally closed output. *NOTE:* This relay will energize when the P3PC-5 is triggered.
- 7. Connect trouble reporting device to the terminals marked [Power Fail]. Connect to the N.O. & C for normally open or [N.C.& C] for normally closed output. *NOTE:* This relay will switch when power is lost to the P3PC-5.



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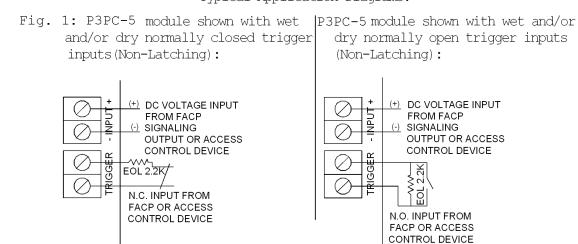
**LED Diagnostic Table:** 

LED	ON	OFF
Power (Green)	Normal operation.	Loss of power to P3PC-5.
Trigger (Green)	P3PC-5 triggered (alarm condition).	P3PC-5 in standby (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	12 or 24VDC from power supply.	
Trigger	This circuit is supervised by a 2.2 K EOL resistor. Initiating a short or open will cause power to be dropped to all terminals marked Pos. ( ) DC output standby) 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 thru 5	Supplies constant negative (—) voltage.	
Pos ( ) DC output(alarm)	Supplies positive ( ) voltage when dry input or fire alarm (wet) trigger input.	
Pos ( ) DC output (standby)	Supplies positive ( ) voltage in normal condition. Power is removed when either input trigger is activated.	
N.C., C, N.O.	When the P3PC-5 is triggered the C and N.O. terminals will close and the	
Dry output C and N.C. terminals will open. This output is used to trip auxiliary devices. e.g. HVAC Shutdown, Elevator Recall etc		
N.C., C, N.O. Power Fail	Form "C" contacts used for signaling when no voltage is present at — DC input terminals. Under normal conditions, terminals N.O. and C are open, N.C. and C are closed. A occurance of trouble condition causes N.O. and C to closed and N.C. and C to open.	

#### Typical Application Diagrams:





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#### Typical Application Diagrams:

Fig 2.Two(2) or more P3PC-5 modules shown with wet and/or dry normally closed trigger inputs (Non-Latching):

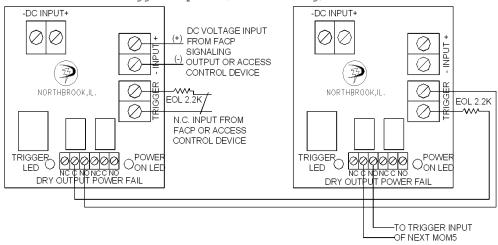


Fig 3.Two(2) or more P3PC-5 modules shown with wet and/or dry normally open trigger inputs (Non-Latching):

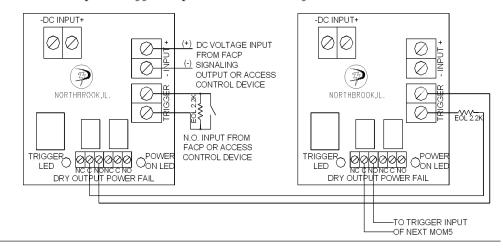
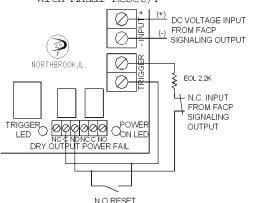
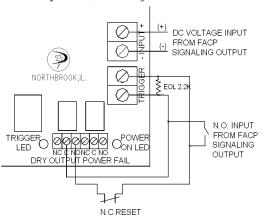


Fig 4. P3PC-5 modules shown with wet and/or dry normally closed fire alarm trigger inputs (Latching with Mnual Reset):



P3PC-5 modules shown with wet and/or dry normally open fire alarm trigger inputs (Latching with Mnual Reset):







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Fig 5. Two (2) P3PC-5 modules shown with wet and/or dry normally closed fire alarm trigger inputs (Latching with Manual Reset):

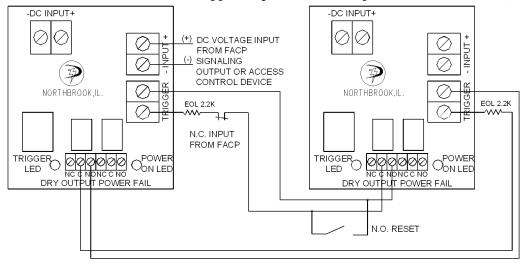


Fig 6. Two (2) P3PC-5 modules shown with wet and/or dry normally open fire alarm trigger inputs (Latching with Manual Reset):

