

PDB-FT/PDB-1R Fire Trigger

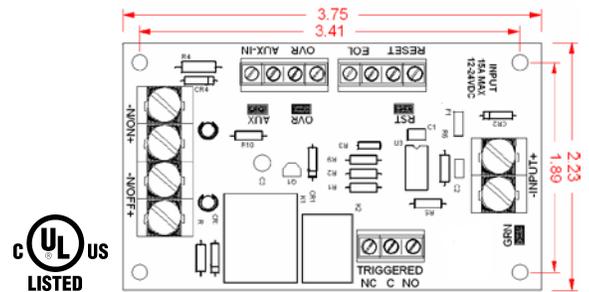
ASSA ABLOY

Installation Instructions and Operating Manual

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Features:

- Non Latching or Latching mode
- 12 or 24VDC Operation
- Reverse polarity protected
- Normally ON & Normally OFF Output
- Output LED's indicate condition
- Form C Contacts Indicates Trigger Status
- 12 Amp Transfer Relay Contacts
- MagnaCare Lifetime Warranty
- UL Listed Sub Assembly for Access Control and Burglar Alarm Systems



Description

When installed in accordance with the National Electrical Code, ANSI/NFPA 70; Canadian Electrical Code, or any other applicable code; the PDB-FT transfers the input power from the normally ON output pair “-N/ON+” to the normally OFF output pair “-N/OFF+” when triggered. The unit is triggered when the supervised (EOL), end of line resistor is opened or shorted. The triggered form C user contacts indicate the state of the trigger. A typical application of the PDB-FT is to place a distribution board on one or both of the outputs, one of our power supplies on the Input, then connecting the EOL at a fire alarm panel to transfer the power from one distribution board to another when the Fire alarm panel is in the alarm condition. The transferred power would be used to unlock doors, shut down air systems, or return elevators to an exit floor.

Specifications / Instructions

Input Power “-INPUT+”: 2 Pos. Terminal block with self clamping screws will accept multiple 12awg wires – Operates with a UL 294 or 603 or ULC S318 or ULC S533 power supply via a 12 or 24vdc input. The input current is 70ma to control relays plus whatever output load is. The positive side of the power is connected to the swing arm of the transfer relay which directs the power to the proper output.

Output Power: 4 Pos. Terminal block will accept multiple 12awg wires. “-N/ON+” are normally ON output power. This output is ON when the PDB-FT is not triggered. “-N/OFF+” is normally OFF. This output is ON when this unit is triggered. The transfer relay is rated at 4A@12v and 4A@24vdc.

Power LED's: A red led above each output indicates which output is ON.

Input Trigger EOL: 2 Pos. Terminal block will accept 14-28awg wire. This input must see the 2.2K ohm end of line resistor to be in the normal set condition. A change in resistance of + or – 60% will cause the trigger relays to drop out in the Triggered mode. This change in resistance is caused by the supervised wire between the EOL at the

Fire panel and the PDB-FT being shorted or opened. The EOL supervises the pair of wires.

Input Trigger OVR: 2 Pos. Terminal block - Will accept 14-28awg wire. This pair is normally closed, can be connected to an override switch. When OVR is open, unit will trigger.

Input Trigger AUX-IN: 2 Pos. Terminal block will accept 14-28awg wire. This pair is normally closed and can be connected to an auxiliary device. When AUX-IN is open, unit will trigger.

RESET: 2 Pos. Terminal block will accept 14-28awg wire. When this pair is shorted, input triggers do not latch. If pair is open, the input triggers will latch until alarm is corrected and RESET is momentary closed to reset trigger.

Jumpers RST – OVR – AUX are jumpers with handles to short adjacent terminal blocks that are not used. You may move the jumper to one header to open short to enable adjacent terminals.

Jumper GRN is used to enable ground supervision in the inputs. If the jumper is connected to both headers, and the mounting hole adjacent to jumper is connected to ground with a star washer, a ground on any of the input triggers will cause a trigger.

Trigger Status Terminal block - Will accept 14-28awg wire. Form C Contact with a 120 VAC, 24VDC 3 Amp resistive load rating will indicate the condition of trigger. C and NO are normally open in the normal energize not triggered state. C and NC are normally closed in the normal energized not triggered state. These contacts may be used to provide feedback to the FACP or other annunciating devices. Proper wire gauge shall be used based on output load.

The PDB-FT is available as a module or mounted in an enclosure with any of our DC Power Supplies.

Module dimensions 2.23”W x 3.75”L x .8”H
Mounting holes dimensions 1.89” x 3.41”
Weight: 2.2oz

UL Approvals for PDB-FT

UL 294 – Access Control System Unit: Line Security Level I, Endurance Test Level IV, Standby Power Level I, Attack Test Level I
UL 603 – Power supplies for Use with Burglar-Alarm Systems ULC
S318 – Power supplies for Burglar Alarm Systems
ULC S533 – Standard for Egress Door Securing and Releasing Devices

Note: for UL compliance the subassembly shall be installed in a UL Listed 294 or 603 or ULC-S533 or ULC-S318 enclosure.