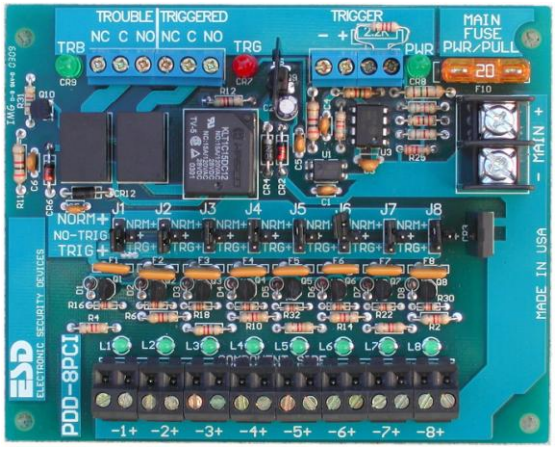
PDB-8C1R DC Power Distribution with Supervised Interface Module

Distributed Power Control Interface for Fire, Access, HVAC, Elevator, and Security

Features:

- **8 Power Limited Outputs with Auto-Resetting Circuit Breakers**
- **Each Output is Individually Selectable to Turn On, Turn Off, or always ON when Triggered**
- **Outputs can be triggered with:**
  1. **Voltage or Reverse polarity (opto isolated)**
  2. **N/O or N/C switch with supervised EOL**
- **Form C Contacts (TRIGGERED) and Red LED (TRG) Indicate Trigger Status**
- **Form C Contacts (TROUBLE) and Green LED (TRB) Indicate:**
  1. **One of the output circuit breakers is tripped**
  2. **Main Fuse Blown or no power on input**
- **Operates with 12.6 or 25.2VDC**
- **Each Output pair has a Removable Terminal Block**
- **Each Output has a Green Status LED**
- **Main Power has Green Status LED**
- **Main Power Pull and Fuse**
- **Lifetime Warranty**
- **UL Listed Sub Assembly for Access Control and Burglar Alarm Systems**



Description

The PDB-8C1R power distribution control interface converts a main non-power limited DC power source to 8 power-limited outputs that can be controlled by a (FACP) Fire Alarm Control Panel. Each output can be selectively set (J1-J8) to turn ON or to Turn OFF when triggered by the panel. The FACP or other control system can interface to the PDB-8C1R with either of two or both supervised trigger inputs. One trigger is activated with a reverse polarity voltage from a FACP. This trigger is fully isolated with an optical isolator. The other trigger is an (EOL) 2.2K End Line Resister input which will accept a (N/O) Normally Open switch or a (N/C) Normally Closed switch.

When triggered, the Trigger Transfer Relay removes power from the NORM + buss and transfers it to the TRIG + buss. Jumpers J1-J8 determines which buss each output is connected to. The triggered form C contacts also drop off normal when triggered and the Red (TRG) LED turns on. These contacts can be used to daisy chain other PDB-8C1R, latch, or provide feedback to a system.

The Trouble Form C Relay drops off Normal if any one of the PTC circuit breakers is tripped, or main power/fuse is lost. The Green (TRB) LED is ON during normal operation, it goes off with trouble. All three relays are Fail-Safe, energized in the normal condition.

Each output has a Green LED that is on when the associated output is ON.

Typical applications for a Fire Alarm System would include adding remote Bells and enunciators, closing dampers, turning off HVAC fans, unlocking fail secure and fail safe doors, and or returning elevators to first floor. The installation instructions illustrate these applications.

Specifications	
Input Voltage	10.5 to 12.4vdc or 22.7 to 25.2vdc
Output Voltage	virtually the same as Input
Current, Typical, with No Output Load	90-160mA
Outputs 1–8 continuous duty each	1.23 Amps
Voltage Trigger	20% < Input min. 30vdc max.
Voltage Trigger isolation	Optical
EOL (End of Line) Trigger	Trip +-50% of 2.2K Ω
Transfer Relay Contacts	15Amps
Trouble Form C Contacts	2A 120vac/1A 220vac
Triggered Form C Contacts	2A 120vac/1A 220vac

UL Approvals

UL 294 – Access Control System Unit
UL 603 – Power supplies for Use with Burglar-Alarm Systems
ULC S318-96 – Power supplies for Burglar Alarm Systems
ULC S533-02 – Standard for Egress Door Securing and Releasing Devices

Doc.# 500-33050 Rev A Installation specifications subject to change without notice

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