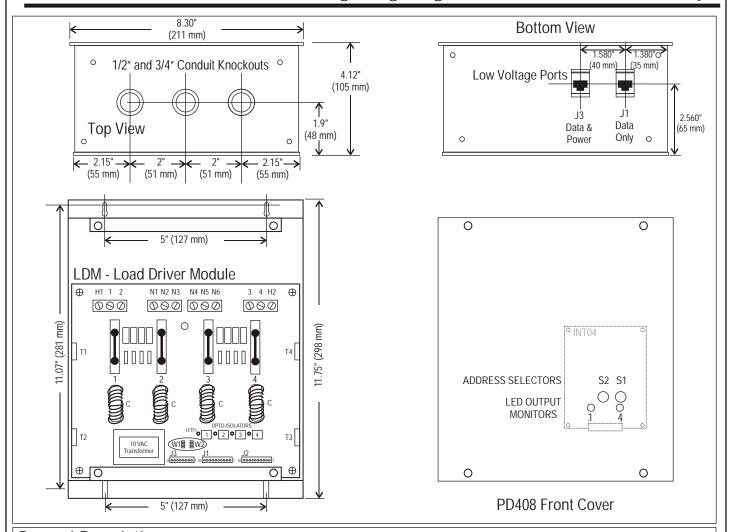
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PD408

Four Zone Dimmer Pack - Page 1



General Description

The PD408 dimmer pack contains four solid-state dimmers. Each dimmer is rated for a maximum load of 960 Watts at 120 VAC. Power is fed to the PD408 from two 20 Amp. breakers on the same power phase. The dimmers are triggered by a separate firing board (INT04). The INT04 is a microprocessor based control board with a nonvolatile memory chip, a communications chip, and a regulated DC power supply. The INT04 also contains, address selectors, LED output monitors and other support circuitry. The microprocessor is driven by powerful distributed intelligence software which handles all control and communications functions. The memory chip holds all of the PD408's pertinent information and settings which include low and high trim levels for each of the four outputs. The PD408 does not rely on any shared data source and functions independently of any other system component and without a central system controller. The PD408 communicates with Protocol system stations and controllers over a single twisted-pair of wires and can be connected anywhere on the system network bus. This adds convenience and versatility by allowing PD408 dimmers to be installed close to their loads and/or service panels.

General Features

- Distributed Intelligence.
- Modular and Compact Design
- Twisted-pair Balanced Line Communications.
- Daisy Chain, T-tap, or Star Data Configurations.
- Software Configurable.
- Automatic 50/60 Hz Detection
- Dimming Disable Jumper.
- Powerful Built-in Diagnostics.

Control & Diagnostics

- Set Load Intensity Level.
- Save/Recall Presets.
- Blink Load.
- Set Load Max. & Min. Trims.
- View Max. & Min. Trim Settings
- View Current Output Levels.
- View ID and Code Version.
- Default to Factory settings.
- Save Settings in memory.
- Download Configuration File.
- Check Status.

Physical and Electrical Specifications

Enclosure: 16 Gauge Aluminum.
Weight: 4.5 Lbs. (2 Kgs.)
Power Feed: 2 x 20 Amp. Feeds.

Voltage Feed: 120 VAC, 50/60Hz, Single Phase.
Output Rating: 4 x 960 Watts at 120 VAC.
Output Triacs: Max. Rating 40 A-400 VAC
Connector: 12-position screw terminal block.
Data Network: RS485 Compliant, Proprietary

Protocol.

Data Retention: 10 years, no batteries required. ESD Protection: 15 KV on data input and output.

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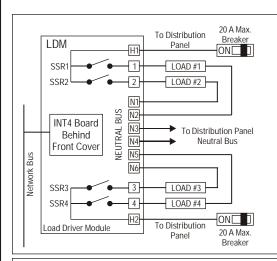
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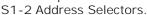
PD408

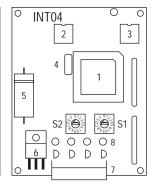
Four Zone Dimmer Pack - Page 2



INT4 Circuit Legend

- 1 Microprocessor.
- 2 Nonvolatile Memory.
- 3 Communications Chip.
- 4 Quartz Crystal.
- 5 Power Supply Capacitor.
- 6 Voltage Regulator.
- 7 Signal & Power Connector.
- 8 Output LED Monitors.





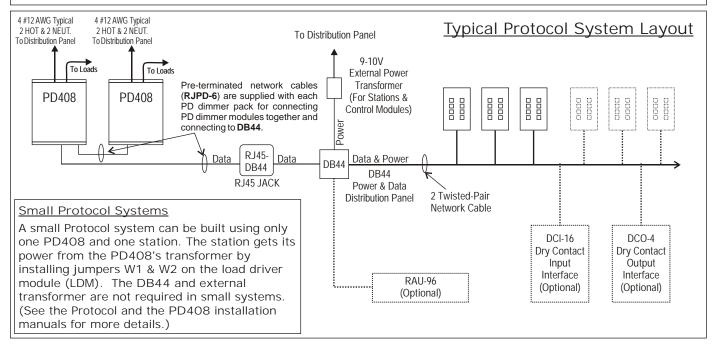
Functional Block Diagram

Mounting Requirements

Surface mount the dimmer pack in a well ventilated area. Allow 2" of side clearance for proper air circulation. Installation clearance shall meet local and/or NEC code requirements. Enclosures may be attached to the wall or other mounting surface by holes in the heat sink flanges. Refer to the drawing on the front side of this sheet for the proper dimensions. Conduit shall be pulled to the top of the dimmer packs.

Wiring Notes

- 1 DO NOT EXCEED 960 W per dimmer output.
- 2 All wiring between the control stations, dimmers, and other system controllers (network bus) is low voltage (NEMA Class 2) and may be run with two twisted pair #18 AWG wire. Control network bus may be Carol Cable #C3362 unless otherwise required. Consult the Protocol Hardware Installation manual, appendix E, for maximum wire length.
- 3 When system is fed by 120V/208V three phase service, the 2 breakers must be on the same power phase. The voltage from any input terminal to neutral must not be greater than 120 VAC.
- 4 PD408 may be fed by two 20 A breakers and may have up to four separately dimmed loads.
- 5 Please refer to the PD408 and Protocol system installation manuals for complete wiring information.
- 6 CAUTION: DO NOT attempt to parallel outputs to increase capacity.
- 7 Installations must conform to local and/or NEC code requirements.
- 8 Power for all control stations of a system must be on the same phase. bus may be Carol Cable #C3362 unless otherwise required. Consult the Protocol Hardware Installation manual, appendix E, for maximum wire length.
- 9 RJPD-6' RJ45 Daisy-Chain Network Cable is supplied with each PD408 to connect to other PD Series units.



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