

DLP-37A and DLP-37A1 with DLM4

Extra Heavy Duty Surge Suppression Device

Multi-wire protection for Instrumentation, Telecom and Telco equipment

1.0 GENERAL

1.1 DESCRIPTION

These specifications describe the electrical and mechanical requirements for a rapid- responding transient voltage surge suppressor. The specified surge protective device shall provide effective high-energy surge diversion of transient over-voltages on Instrumentation, Telecom and Telco conductors, up to 14 pairs. Tested & certified per UL 497. The specified surge protective device shall provide:

- 10,000A (8/20us) surge current/line, ratings must be independently tested & verified.
- Series resistance of each circuit not greater than 2.4 ohms.
- All signal lines protected with respect to chassis ground.
- DLP-37A wires must be terminated to 6/32 screw terminals (provided).
- DLP-37A1 wires must be terminated to 66 punch -down type (provided).
- TWENTY YEAR WARRANTY. Replacement units are sent from factory, located in Deer Park, New York, USA.

1.2 STANDARDS

The specified suppressor shall be designed, manufactured, tested and installed in compliance with:

- Institute of Electrical and Electronic Engineers IEEE-472
- Federal Communications Commission Docket 68
- Bellcore standards 974 and 1089
- National Fire Protection Association (NFPA 20, 70, 75 and 78)
- Underwriters Laboratories (UL-497A and 497B) listed
- CAN/C22.2 No. 8-M1986; CSA Electrical Certification Notice No. 516

1.3 PROTECTED EQUIPMENT ELECTRICAL REQUIREMENTS

1.3.1 Environmental Requirements

A. Operating Requirements:

1. Operating temperature range shall be -40 to +71 degrees C (-40 to +160 degrees F).
2. Storage temperature range shall be -40 to +85 degrees C.
3. Operation shall be reliable in an environment with 0% to 95% non-condensing relative humidity.
4. The system shall be capable of operation up to an altitude of 13,000 feet above sea level.

1.3.2 Electrical Requirements

A. Electrical Requirements:

1. Preferred method of ground connection is protector to protected device, 6" or less.
2. Clamp voltages available shall be 6,25,60 and 200 Volts and the attenuation less than 1 db @ 70 MHz.

3. The transient suppression capability shall be bi-directional and suppress both positive and negative impulses.
4. The suppressor shall be designed so as to minimize the internal surge path impedance. Direct point-to-point internal wiring is inherently inductive and not acceptable. Connection to the protected device shall be constructed as shown in the installation notes for best performance.
5. Equipment shall be as manufactured by MCG Surge Protection; Model: DLP-37A and DLP-37A1 with required protection cards: DLM4 or engineering department approved equal with supporting data.

2.0 MODEM, FACSIMILE, TELCO PROTECTION SYSTEM

A. Protection Cards (DLM4): The protection circuits shall be provided on plug-in, pluck out cards, (4 circuits/card). Maximum 7 cards per unit Each circuit shall be protected by a high-speed avalanche diode and a gas discharge tube. Protector will be made available, with no additional cost to user, UL 497A (fused for accidental crossing of power and signal lines) or UL 497B (no fuse). Care should be taken to adhere to installation notes supplied with protector for optimum protection.

B. Enclosure: No enclosure. Unit offered with base PC board to accommodate 7 DLM cards.

C. Dimensions: Base PC board, DLP-3.7A 4.8"x 7.0"x 0.5"
Base PC board, DLP-3.7A1 4.8"x7.0"x 1.7"
DLM4, 2.52" x 2.29"

3.0 INSTALLATION AND MAINTENANCE

- A. The unit shall be installed in accordance with the manufacturer's printed instruction to maintain warranty. All local and national codes must be observed.
- B. Units shall be installed as close as possible to the device to which it is connected
- C. Detailed installation/maintenance notes shall be provided to insure safety of maintenance personnel.
- D. Repair time should not exceed 5 minutes.

4.0 20 YEAR WARRANTY

Manufacturer to provide 20-year warranty to cover repair or replacement with a new device. Manufacturer to provide no cost replacement of DLP-37A and DLP-37A1. Restrictions apply. See "Warranty & Limitations of Liability", document part No. 299-200-06.