

Surge Protective Device

Technical Documentation



ACCESSORY SOLD SEPARATELY

The **ASCO Model 173** surge suppressor is a dual pair (four wire) module implementing Metal Oxide Varistor technology.

The Model 173 card edge module is gold-plated, double sided and is designed to mate with the ASCO PCB1B gold-plated female terminal connector (sold separately). When snapped together, the data circuits “pass thru” the protector in a serial fashion from the four “Field Side” terminals to the four “Electronics Side” terminals.

Key Specs

- **Voltage:** 0-30 VDC
- **Current:** 4 Amp
- **Connection:** Modular; Hardwire into base
- **Mounting:** Punch into keyed base/DIN

*See Ordering Information for model number selection

General Technical Specifications

Operating Voltage	30 VDC
Clamping Voltage	35 VDC
Operating Current	4 A
Peak Surge Current	500 A
Frequency Range	0 to 20 MHz
Insertion Loss	< 0.1 dB @ 20 MHz
SPD Technology	Metal Oxide Varistor (MOV) w/Fuse
Connection Type	Terminal block w/compression lugs
Operating Temperature	- 40°C to + 85°C
Dimensions (in / mm)	2.0" H x 1.0" W x 2.5" L (Model 173 + Base) [50.8 x 25.4 x 63.5 mm]
Weight (oz/kg)	1 oz [0.03 kg]
Warranty	5 years

Caution

Do not place this product in service on any signal line capable of supplying more than 4 Amp continuously.

Attention

Ne pas placer ce produit dans le service sur une ligne de signal capable de fournir en permanence plus de 4 Amp.

DANGER!

Only qualified personnel should install or service this system. Electrical safety pre-cautions must be followed when installing or servicing this equipment. To prevent risk of electrical shock, turn off and lock out all power sources to the unit before making electrical connections or servicing.

Seulement le personnel qualifié doit installer ou maintenir ce système. Des précautions de sécurité en électricité doivent être suivies lors de l'installation ou de la maintenance de cet équipement. Pour éviter tout risque de choc électrique, débranchez et verrouillez toutes les sources d'alimentation de cet équipement avant de.

Features

- Lightning protection for data signal lines
- Modes of protection, (L-G, L-L)
- Plug-in module
- Low series resistance
- Fast response time
- 5 year warranty

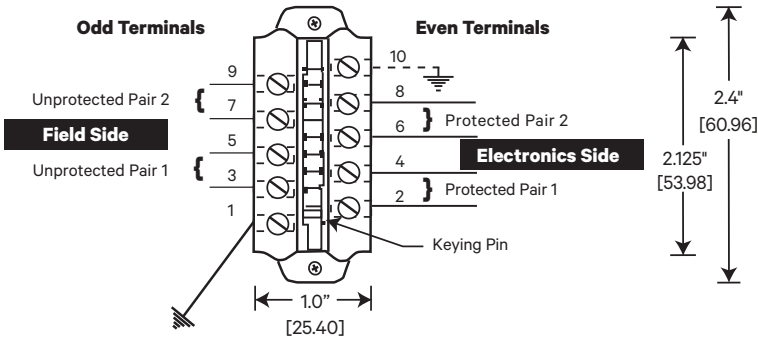
Certifications

- UL 497B

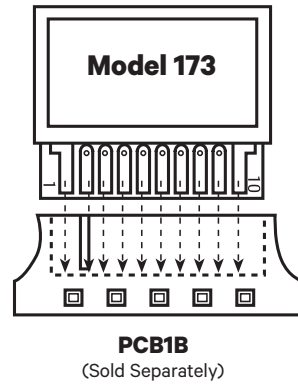
Installation Instructions

DRAWING 1

PCB1B Accessory Terminal Assignments



DRAWING 2



Ground Terminal 1 or 10 to Building Approved Ground (preferably AC Power safety ground).

NOTE: DO NOT daisy chain grounds. NOT intended for shield termination. Install ground in accordance with all applicable codes.

Read and Understand These Instructions

Note:

- These protectors are intended for indoor use on communication loop circuits which have been isolated from the Public Switch Telephone Network.
- The communication loop circuits shall not be exposed to accidental contact with the electric light or power conductors.
- The protectors shall be installed per the applicable requirements of the National Electric Code, ANSI/NFPA 70.
- Measure DC operating voltage of system to insure it does not exceed the rating of the selected surge device (0-30 VDC depending on the device).

Installation:

1. Turn off power to circuit to be protected prior to installation.
2. Screw mounting base #PCB1B (ordered separately) in desired location preferably as close to protected equipment as possible and in close proximity to a building approved grounding point using (2) #4 screws. PCB1B may also be DIN rail mounted using optional DIN clip assembly #PCDIN (ordered separately).
3. Attach field side pairs (26-10 AWG) to positions 3/5 and 7/9, attach electronics side pairs (26-10 AWG) to positions 2/4 and 6/8. Attach ground wire (10 AWG) to positions 1 or 10 on base. See Drawing 1. Torque wires to 44 lbf/in [8 kgf/cm].
4. Insert 173 module into keyed PCB1B base. See Drawing 2.
5. Apply power to protected circuit.

Ordering Information

MODEL <i>Former Model Name</i>	OPERATING VOLTAGE	CLAMPING VOLTAGE
173D035S500MPCNO <i>Edco PCM-039</i>	30 VDC	35 VDC
ACCESSORIES <i>Former Accessory Name</i>		
PCB1B <i>PCB1B-WKEY</i>	Wiring Base, Plug-in Socket	
PCDIN <i>11604KIT-PC</i>	DIN Mounting Kit for PCB1B	
PTU <i>PC642PTU</i>	Pass Through Module for Troubleshooting	