■ Surge Protection
For Business-Critical Continuity™

Edco PC642 Series

Zone/Loop/Data

Edco PC642 Series Surge Suppressor

The Edco PC642 Series surge suppressor is a two-pair pair (four wire) module implementing three-stage hybrid technology. This module addresses over-voltage transients with gas tubes and silicon avalanche components. In addition, sneak and fault currents are mitigated with resettable fuses (PTCs). The PTCs increase resistance several orders of magnitude when over-currents exceed safe levels. A normal state resumes when over-currents are removed. The ability to self-restore in this manner significantly increases suppressor performance and survivability.

The Edco PC642 card edge module is gold-plated, double sided and is designed to mate with the the Edco 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. Terminals 1 or 10 of the PCB1B must be attached to Building-Approved Ground per Edco Technical Bulletin # 2015.

EDCO PCB1B BASE SOLD SEPARATELY

Features

UL® 497B

- Three-stage hybrid protection
- Sneak/fault current protection
- Resettable fuses – PTCs
- Low capacitance option
- Plug-in module
- Requires Edco PCB1B base
- Fast response time
- UL listed 497B
- PC642PTU (Pass Thru Unit) available for troubleshooting
- 5 year warranty

General Technical Specifications

Operating Voltage	5, 12, 18, 24, 30, 36, 43, 52, 180 VDC
Clamping Voltage	8, 15, 20, 30, 36, 43, 50, 60, 200 VDC
Operating Current	0.15 A
Peak Surge Current	10 kA (8 x 20 μs)
Frequency Range	0 to 20 MHz
Insertion Loss	< 0.1 dB at 20 MHz
SPD Technology	GDT, SAD, w/Series PTC
Connection Type	Terminal block w/compression lugs Terminals accept up to 10 AWG
Operating Temperature	-40°C to +85°C
Dimensions (Inches)	2H x 1W x 2.5L (PC642 + PCB1B Base)
Weight	1 oz
Certifications	UL 497B, ISO 9001:2000

Caution: *The hybrid design of this product includes series resistance. Do not place this product in service on any signal line capable of supplying more than 150 milliamperes continuously.*

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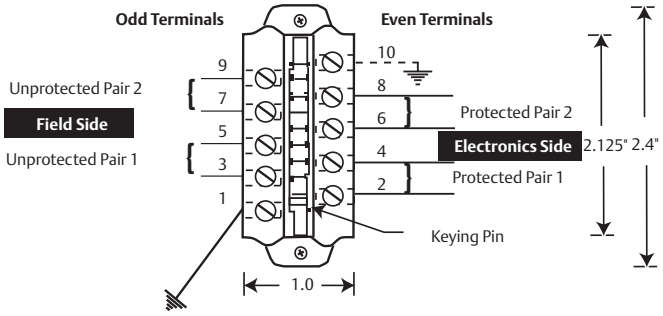
Installation Instructions

Terminal Assignments

PCB1B:



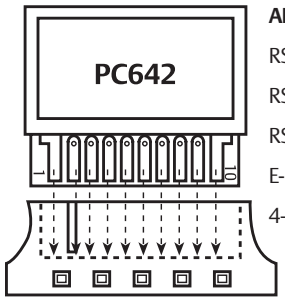
Ground Terminal 1 or 10 to Building Approved Ground.

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

Read and Understand These Instructions:
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.

Ordering Information



PCB1B

APPLICATION:	
RS485, RS422:	PC642C-008LC & PCB1B
RS423, Token Ring:	PC642C-008LC & PCB1B
RS232:	PC642C-020 & PCB1B
E-NET, 10 BASE T:	PC642C-030LC & PCB1B
4–20ma:	PC642C-036 & PCB1B

How to Specify the Appropriate Model

PC642C - ☐☐☐☐

VOLTAGE CLAMP

8 Volts	0	0	8
15 Volts	0	1	5
20 Volts	0	2	0
30 Volts	0	3	0
36 Volts	0	3	6
43 Volts	0	4	3
50 Volts	0	5	0
60 Volts	0	6	0
*200 Volts	2	0	0

(no suffix)	stage 2 clamp each line-to-ground
D	stage 2 clamp line-to-line only
X	stage 2 clamp line-to-line and each line to ground
LC	low capacitance option stage 2 clamp line-to-line and each line to ground

•Not UL Listed

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