



EDCO PCB1B-WKEY BASE SOLD SEPARATELY

Edco™ PC642 Series

Zone/Loop/Data

The Edco™ PC642 Series surge suppressor is a two-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 Edco™ PCB1B-WKEY gold-plated female terminal connector. 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 Edco™ PCB1B-WKEY must be attached to Building-Approved Ground per Edco™ Technical Bulletin # 2015.

Features

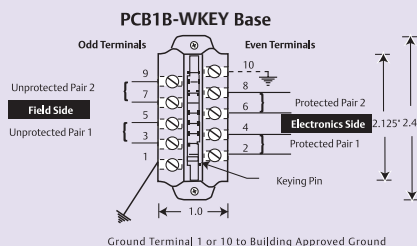
- Three-stage hybrid protection
- Sneak/fault current protection
- Resettable fusing — PTCs
- Low capacitance option
- Plug-in module
- Fast response time
- Requires Edco™ PCB1B-WKEY base
- PC642PTU (Pass Thru Unit) available for troubleshooting
- 5 year warranty

General Technical Specifications

Maximum Continuous Operating Voltage (MCOV)	5-250 VDC
Clamping Voltage	8-300 VDC
Operating Current	150mA
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 + Mounting Base)
Weight	1 oz
Certifications	UL 497B

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.

Terminal Assignments



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

Ordering Information

APPLICATION:	
RS485, RS422:	PC642C-008LC
RS423, Token Ring:	PC642C-008LC
RS232:	PC642C-036LC
E-NET, 10 BASE-T:	PC642C-030LC-036LC
4-20ma:	PC642C-036LC
24 VAC Power	PC642C-043LC

How to Specify the Appropriate Model

Model	Max Operating Voltage	Clamping Voltage (1000V@1mA)
008	5 VDC	8 VDC
036	30 VDC	36 VDC
043	36 VDC	43 VDC
200	43-250 VDC	300 VDC

Code	Protection Type	Applicable Models
LC	Low Capacitance, Line to Line, Line to Ground	008, 036, 043 models only
D	Line to Line protection only	008, 043 models only
	Line to Ground	200 models only