

## Power Amplifier / Security / Alarm PHC Series



The **PHC Series** is designed to protect two pairs of wires specifically for alarm and security systems where operating currents can be as high as 5 Amps. Electrically, **the PHC Series** is a rugged series hybrid implementing a staged complement of MOV's, copper wire wound inductors and Silicon Avalanche Diodes. This design reduces series resistance to 0.02 Ohms per pair.

The **PHC** modules plug into a base assemble (**PCB1B**). The base assembly can be mounted to any flat surface, and should be located as close as practical to the protected equipment.



The **PHC** card edge module is gold-plated, double sided and is designed to mate with the **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 using 12 or 10 AWG solid wire.

### FEATURES

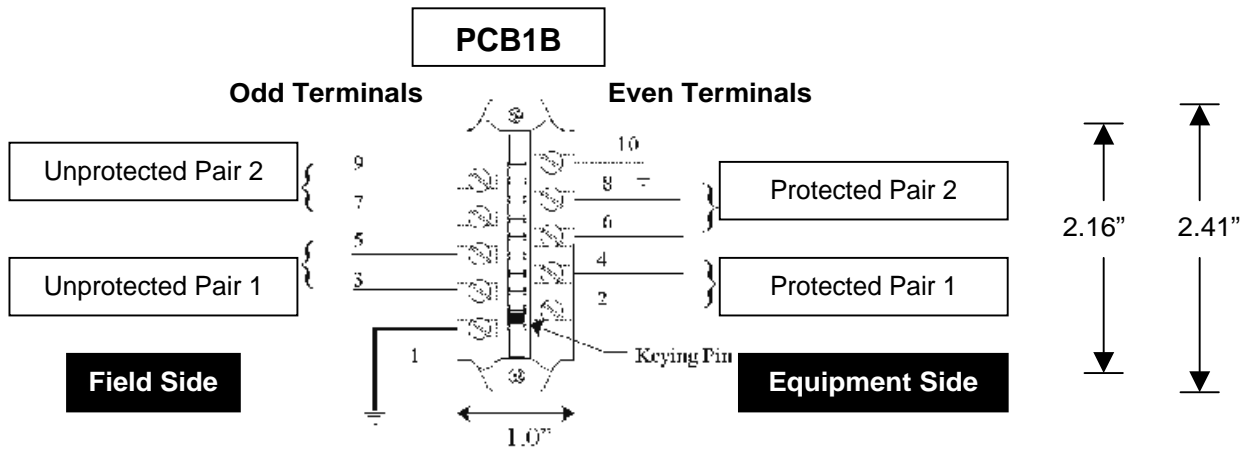
- Lightning Protection for Low Voltage Data Signal Lines
- Three-Stage Protection
- Differential Protection
- Common Mode Protection
- Plug-in Module / Requires PCB1B Base
- Automatic Recovery
- Fast Response Time
- Continuous Current up to 5 Amps
- UL Listed 497B

**Caution:** Do not place this product in service on any signal line capable of supplying more than 5 Amps continuously.

### SPECIFICATIONS

Peak Surge Current (10 times):  
 8x20μs .....5kA  
 Life Expectancy:  
 8x20μs (2kA) ..... 50 occurrences (Typ)  
 Response Time ..... <1ns  
 Voltage Clamp... 15, 20, 30, 43, 60, 100 or 150V  
 Technology..... SAD Hybrid  
 Resistance ..... .02Ω (typical)  
 Series Inductance.....136μh total (per pair)  
 Operating Temperature ..... -40°C to +85°C  
 Weight ..... 8 oz.  
 Dimensions PC642 and PCB1B:  
 H x W x L ..... 1.8" x 1.0" x 2.4"  
 Acceptable Wire Sizes.....26 to 10 AWG

## TERMINAL ASSIGNMENTS



Ground Terminal **1** or **10** (internally tied together) to Building Approved Ground. (See EDCO Tech Bulletin #2015)

**Note:** PCB1B Base accepts 26 to 10 AWG

## ORDERING INFORMATION

PHC-

**APPLICATION:**

**24V Horn, Strobe, Bell:**  
**PHC-043 & PCB1B**

**70V Speaker Lines:**  
**PHC-SP70 & PCB1B**

- Voltage Clamp
- 15 Volts.....**015**
  - 20 Volts.....**020**
  - 30 Volts.....**030**
  - 43 Volts.....**043**
  - 60 Volts.....**060**
  - \*100 Volts.....**SP70**
  - \*150 Volts....**130RMS** (for 120V SIGNAL Lines)
- \* = Not UL Listed