

## Surge Protective Device

## Technical Documentation



The **PEMCO DRS Series** is a din rail mountable, single pair surge suppression module implementing three-stage hybrid technology. This module addresses over-voltage transients with gas tubes and silicon avalanche components. In addition, sneak 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 DRS Series mounts onto a standard 35mm industrial din rail. There are three “Field Side” and three “Electronics Side” screw terminals. One is reserved for a shield. Three electrically tied ground terminals are provided for grounding the DRS Series unit to Building-Approved Ground. Shield is isolated from ground. Two (2) terminal versions without a shield connection are also available.

### General Technical Specifications

Operating Voltage	6, 12, 15, 24, 30, 35, 43, 52 VDC
Clamping Voltage	8, 15, 22, 30, 36, 43, 50, 60 VDC
Operating Current	0.15 A
Peak Surge Current	10 kA (8x20µs)
Max Current I <sub>p</sub> (Occurrences)	>100 (10x1000µs)
Typical Capacitance	1500pf
Nominal Series Resistance	5 Ω
Response Time	< 1 nanosecond
Operating Temperature	-40°C to 85°C
Certifications	UL 497B
Warranty	5 years

### Caution

Do not place this product in service on any signal line capable of supplying more than 150 mA continuously.

## Key Specs

- **Voltage:** 0-170 VDC
- **Current:** 150 mA
- **Connection:** Hardwire/Terminals  
- accepts up to 12 AWG
- **Mounting:** DIN - 35mm

\*See Ordering Information for model number selection

## Features

- Low-voltage data surge protection
- Three-stage hybrid protection
- Sneak/fault current protection with resettable fuses (PTCs)
- Low profile packaging
- Easy installation
- Fits standard 35mm DIN-Rail

## Certifications

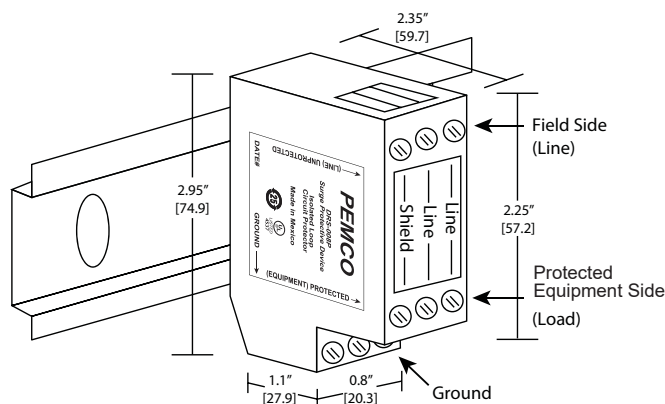
- UL 497B

### DANGER!

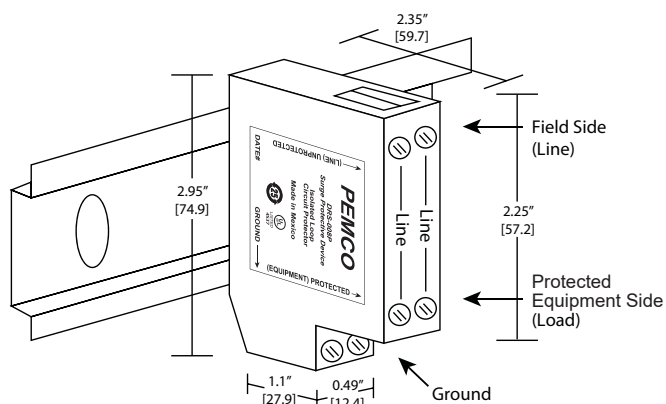
Only qualified personnel should install or service this system. Electrical safety precautions must be followed when installing or servicing this equipment. To prevent risk of electrical shock, turn off and lock out all power sources to the unit before making electrical connections or servicing.

## Installation Instructions

### 3-TERMINAL DEVICE



### 2-TERMINAL DEVICE



Wire Size Range = 22-12 AWG  
Terminal Torque Rating = 0.8 Nm (7 in-lb)

## 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

MODEL	OPERATING VOLTAGE	CLAMPING VOLTAGE
DRS-008P	6 VDC	8 VDC
DRS-015P	12 VDC	15 VDC
DRS-232P	15 VDC	22 VDC
DRS-030P	24 VDC	30 VDC
DRS-036P	30 VDC	36 VDC
DRS-043P	35 VDC	43 VDC
DRS-050P	43 VDC	50 VDC
DRS-060P	52 VDC	60 VDC

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