

MCG Surge Protection

AC MODEL: PT160 Delta

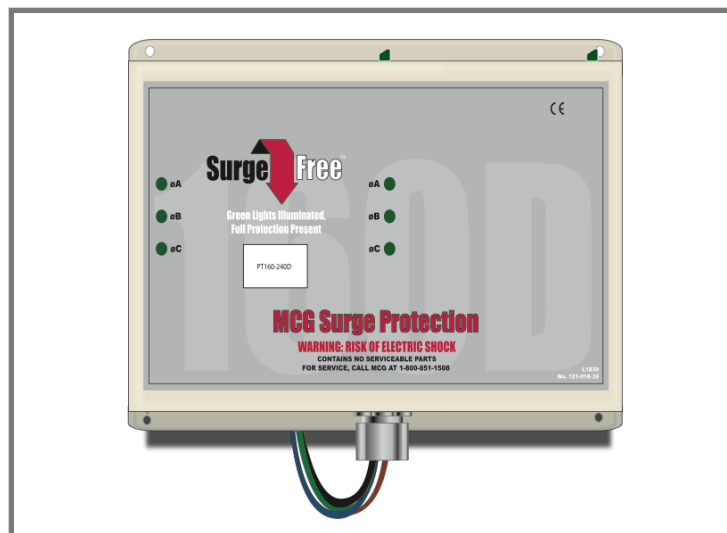
Main / Branch Panel Protection

The reliable PT160 Delta protector is designed to be used at the service entrance of small to medium sized facilities, in motor control centers, or dedicated to a single piece of critical equipment. The unit diverts lightning induced surges generated from loads within a facility. Units employ dual independent protection assemblies rates at 80kA per phase each, packed with 40kA thermally protected protection elements and high headroom varistors.

In the rare event that a protection element fails, protection is maintained due to redundancy within the unit. Comprehensive surge monitoring shows the status of the unit at a glance. The PT160 Delta models come with MCG's 20-year "No Nonsense" warranty.

Features

- I_{peak}: 160,000A/Phase
- Thermally Protected Varistors with Integral Fuse Element
- Redundant - Two Fused Surge Paths Per Phase
- Surge Event Counter Optional
- Dual Remote 1 Form C Relay Contacts with Status LED
- Front Panel Status Monitoring
- 10AWG Connection Cable
- EMI/RFI Filter Standard in the 240D and 480D
- NEMA 1, Powder Coated Steel Enclosure
- DIN-Rail Mounting Kit Available
- Optional outdoor non-metallic enclosure kit -NEMA 4X



$I_{\text{peak}} = 160,000\text{A}$

UL 1449. 4th Ed. Listed

20-Year Warranty

Filter Attenuation

MIL STD 220a (50 Ohm)	240VAC	480VAC
-30db	50kHz	50kHz
-40db	130kHz	130kHz
-50db	195kHz	195kHz
-60db	230kHz	230kHz

Made in the
USA



Specifications

MCG Surge - AC MODEL: PT160 (DELTA)

- ANSI / IEEE C62.41-2002
- IEC 61643-1-1998
- UL 1449, 4th Ed.

SPD Type: Type 2
In: 20kA
Maximum Continuous Operating VAC (MCOV): 115% Rated Line Voltage
Varistor MCOV: 125% Rated Line Voltage Minimum
SCCR: 100kA AIC
Surge Current/Phase (8/20 μ s): 1 Event - 160kA.
Surge Life/Phase(8/20 μ s): 10,000 Events - 6kA
Surge Current/Mode (8/20 μ s): L-L: 160kA; L-G: 160kA
Response Time: <5ns
Status Indicators: LED Status Indicators
Modes of Protection: L-L, L-G
Operating Altitude: 13,000 ft. (4000m)
Temp. (Operating/Storage): -40 degrees to +70 degrees C / -40 degrees to +85 degrees C
Enclosure: NEMA 4, 16 gauge steel. powder coated
Dimensions for PT160D: 13.25" x 9" x 4.25" (336.55mm x 228.60mm x 107.95mm)
Mounting for PT160D: 12" x 8.25"/.220" ID (304.80mm x 209.55mm/5.6mm ID) - 4 holes
Cable Connection: 10AWG (5.27mm²) cable, 3 ft. (91.4cm) provided, except model -120D-400Hz, 8ft (243cm) cable included
Conduit Fitting Hole: 3/4" Compression Connector
Weight: 10 lbs. (4.53kg)
UL File Number: E322161
UL Certification: UL Listed to 1449 4th Edition
UL96A Lightning Protection Master Label Compliant
ARRA Certification: Complies with ARRA 1605 requirements

Model PT160	Service	MOV Voltage (MCOV) VAC	VPR L-G	VPR L-L	Cat. B3** 6kV, 3kA Let-Thru V L-G
-240D	240, 3 ϕ , 3W+Gnd	390	1200	2000	960
-480D	480, 3 ϕ , 3W+Gnd	620	1800	4000	1770
-600D*	600, 3 ϕ , 3W+Gnd	750	n/a	n/a	1920
-120D-400Hz*	120, 3 ϕ , 3W+Gnd	140	n/a	n/a	630

* Not tested to UL1449 **Note: All let-thru levels measured with 6" lead length.

A Note on Headroom: A surge protector responds to increases in voltage. Surge protectors triggered by the nominal line voltage are undesirable, consequently headroom is always factored into surge protector design. Long duration voltage swells occur on power lines and can damage a surge protector, leaving facility equipment vulnerable. By employing higher headroom, continuity of surge protection is guaranteed. This feature is standard in MCG surge protectors. Higher headroom allows varistors to ride out voltage swells while ensuring that let-through voltage remains within CBEMA (now ITIC) guidelines. The CBEMA curve is the most accepted graph worldwide for equipment susceptibility analysis.