

AC SURGE PROTECTOR

SURGITRON® I

MODELS 1456-45, 1456-80, 1456-85


480Y/277V, 3 ϕ , 4 Wire + Ground

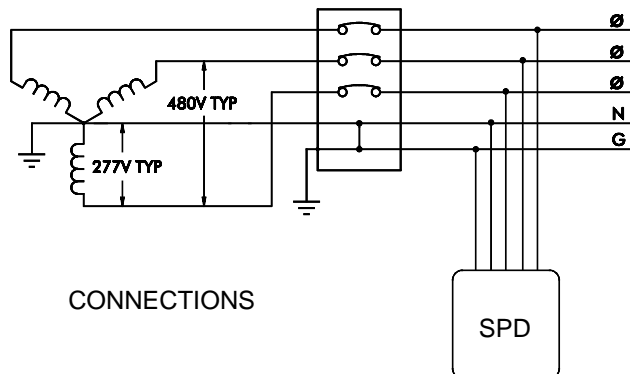
- SPD Category and Type: Service entrance or distribution panel, permanently connected. All models are suitable for U.S. service entry / main switchboard applications. Model 1456-80 is recommended for subpanels or for service entry when TNS neutral grounding is practiced.
- Technology: Matrix of individually fused metal oxide varistors housed in replaceable modules.
- Features: Cover LEDs indicate status of modules. Models 1456-80/85 have relay contacts for remote monitoring.
- Options: Stainless steel NEMA 4X cabinet: add **-4X** to model number. Surge Event Counter: add **-S** to model no.
- Remote Monitor and Audible Alarm: separately order P/N 1260-97.
- Connection Means: In parallel (shunt) directly across mains or through 60 A (min) switch or breaker.
- Cable Size for Connections, contractor supplied: AWG 6 - 2/0
- Upstream Overcurrent Device: None required
- Internal Overcurrent Protection: 100 kAIC
- Maximum Continuous Operating Voltage, L-N, 50 or 60 Hz: 293 Vac
- Protection Modes:

1456-45, 1456-85	L-N, N-G
1456-80	L-N, L-G, N-G
- Varistor MCOV: 300 Vac
- Nominal Varistor Voltage at 1 mAdc: 470 V
- Leakage, L-G at 277 Vac: <2000 μ A
- Maximum Surge Current, Single Pulse, 8/20 μ s, per phase per mode: 120 kA
- Suppression Voltage, L-(N+G) using ANSI/IEEE C62.41 Waveshapes:

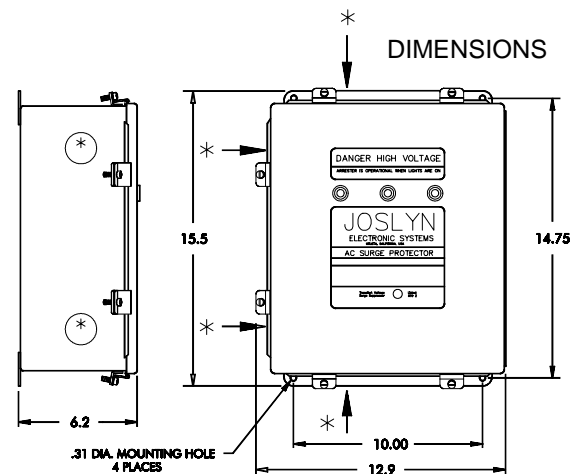
200 A, 100 kHz (6 kV)	720 V
500 A, 100 kHz (6 kV)	760 V
500 A, 8/20 μ s (6 kV)	690 V
3 kA, 8/20 μ s (6 kV)	780 V
10 kA, 8/20 μ s (20 kV)	920 V
20 kA, 8/20 μ s (20 kV)	1420 V
- UL 1449 Suppression Voltage:

1456-80 L-N, L-G 800V, N-G 700V	1456-45 / 85 L-N, N-G 700 V
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- Surge Energy Capability, 10/1000 μ s, total: 18,200 joules
- Surge Life, L-(N+G), 277 Vac applied:

3 kA, 8/20 μ s	200,000 times
10 kA, 8/20 μ s	6,000 times
20 kA, 8/20 μ s	500 times
- Relay Contacts (1456-80/85), dual Form C (DPDT): minimum 1 mA, 5 Vdc; maximum 5 A, 240 Vac or 28 Vdc
- Component Response Time: <1 ns
- Operating Temperature: -40 to +85 C
- Max Operating Altitude: 5000 meters
- Shipping Weight: 13 kg
- Warranty: 5 years
- Safety Approvals: UL and cUL Listed per UL1449 and Canadian codes, File No. E74944
-  **RUS** USDA-RUS Accepted, Section gi, 5.5.2



CONNECTIONS



* POSSIBLE LOCATIONS FOR CONDUIT HOLES METAL NEMA 4 (IP66) ENCLOSURE