

AC SURGE PROTECTOR SURGITRON® I

MODELS 1452-80, 1452-85
240Δ/120V, 3φ, 4 Wire + Ground
'High Leg' Delta



- SPD Category and Type: Service entrance or distribution panel, permanently connected. All models are suitable for U.S. service entry / main switchboard applications. Model 1452-80 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: Functional status of modules is indicated by LEDs on the cover and rdual elay contacts.
- Options: Stainless steel NEMA 4X cabinet: add **-4X** to model number. Surge Event Counter: add **-S** to model no.
- Connection Means: In parallel (shunt) directly across mains or through 60 A (min) switch or breaker.
- Cable Size for Connections, contractor supplied: AWG 4 - 2/0
- Upstream Overcurrent Device: None required
- Internal Overcurrent Protection: 200 kAIC
- Maximum Continuous Operating Voltage, L-L, 50 or 60 Hz: 275 Vac
- Protection Modes:

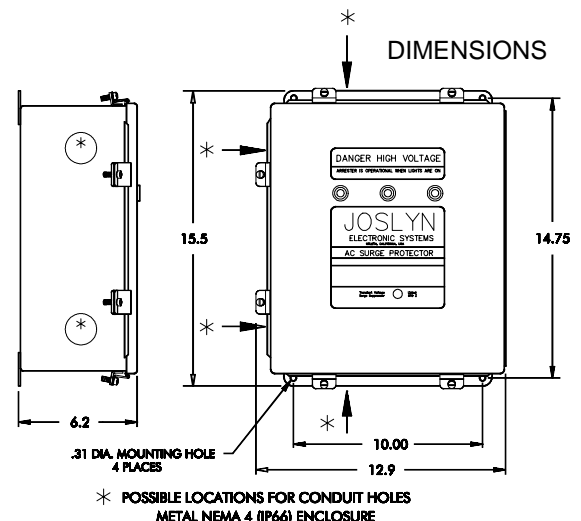
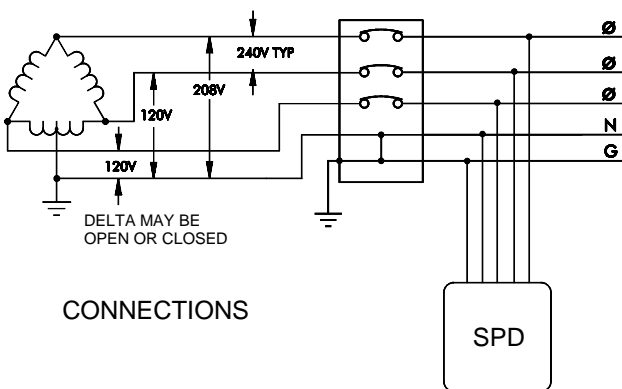
1452-85	L-N, N-G
1452-80	L-N, L-G, N-G
- Leakage, L-G at 240 Vac: <1500 μA
- Maximum Surge Current, Single Pulse, 8/20 μs, per phase per mode:

120 kA
60 kA
- Varistor MCOV:

150 V	φA & C	φB
240 V	150 V	300 Vac
470 V	240 V	470 V
500 V	470 V	720 V
380 V	500 V	760 V
480 V	380 V	710 V
680 V	480 V	780 V
1100 V	680 V	920 V
400 V	1100 V	1420 V
	400 V	800 V
- Nominal Varistor Voltage at 1 mA_{dc}:

200 A, 100 kHz (6 kV)	11,540 joules
500 A, 100 kHz (6 kV)	200,000 times
500 A, 8/20 μs (6 kV)	6,000 times
3 kA, 8/20 μs (6 kV)	500 times
10 kA, 8/20 μs (20 kV)	
20 kA, 8/20 μs (20 kV)	
- UL 1449 Suppression Voltage: minimum 1 mA, 5 V_{dc}; maximum 5 A, 240 Vac or 28 V_{dc}
- Surge Energy Capability, 10/1000 μs, total: <1 ns
- Surge Life, L-(N+G), 240 Vac applied:

3 kA, 8/20 μs	-40 to +85 C
10 kA, 8/20 μs	5000 meters
20 kA, 8/20 μs	13 kg
	5 years
- Relay Contacts, dual Form C (DPDT)
- Component Response Time
- Operating Temperature
- Max Operating Altitude
- Shipping Weight
- Warranty
- Safety Approvals: UL and cUL Listed per UL1449 and Canadian codes, File No. E74944
 RUS USDA-RUS Accepted, Section gi, 5.5.2



TDS14528085(E)