



Panel Mounted Multi-Phase Surge Protective Device (SPD)

APPLICATION

Cat. No. 42000 is designed for installation in industrial and commercial facilities at service entrance or branch panels. All models protect against high-energy, high-voltage transient surges.

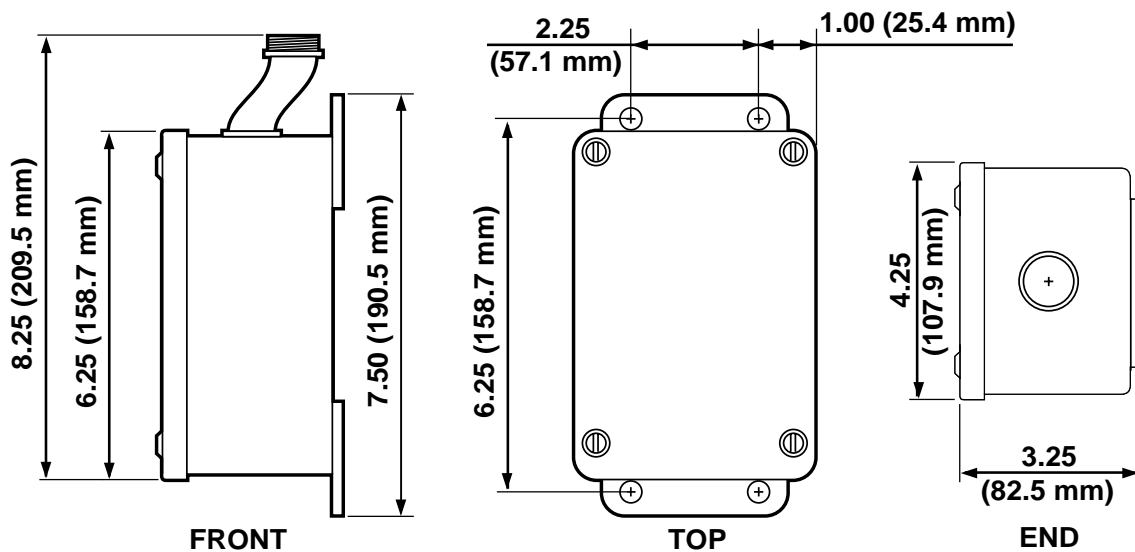
TYPICAL SPECIFICATION

Cat. No. 42000 is designed for use where a multi-phase, transient voltage surge suppressor (TVSS) is specified. Its parallel-operated design features 40mm-diameter, metal-oxide varistors and EMI/RFI filter circuitry equipped with high-voltage-rise capacitors for harmonic tolerance. It incorporates indicator lights and an audible alarm for monitoring power and surge suppression status as well as a dry contact for remote monitoring. Three-phase units are suitable for both WYE and DELTA AC power systems. Only the Cat. No. 42120-001 is a single-phase surge suppressor. The 42000 has been tested to ANSI/IEEE C62.41 standards for Category A, B and C environments and is UL 1449 (2nd Edition) Listed. It is also backed by Leviton's Limited Ten-Year Warranty.



Cat. No. 42120-001

DIMENSIONAL DRAWINGS



Cat. No. 42000 Series



Panel Mounted Multi-Phase Surge Protective Device (SPD)

42000 Series

PERFORMANCE SPECIFICATIONS

Cat. No.	Rating Operating Frequency @ 50, 60Hz	MCOV* (L-N)	MCOV* (L-L)	Max. Single-Pulse Transient Energy per phase (10x1000µs) Joules	Max. Single-Pulse Surge Current NM/CM per phase (8x20µs)
42120-001	120/240V AC single-phase	150	270	720	80kA
42120-DY3	120/208V AC 3-phase WYE, 220V AC 3-phase DELTA	150	270	1440	80kA
42277-DY3	277/480V AC 3-phase WYE, 220/380V AC 3-phase WYE, 240V AC 3-phase DELTA, 480V AC 3-phase DELTA	320	540	2560	80kA
42347-DY3	347/600V AC 3-phase WYE	420	660	3640	80kA
42412-DS3	120/240V AC Hi-Leg, Split-Phase DELTA	150	250	1210	80kA

*Maximum Continuous Operating Voltage

CLAMPING PERFORMANCE

Specification	42120-001 L-N/L-L/N-G	42120-DY3 L-N/L-L/N-G	42277-DY3 L-N/L-L/N-G	42347-DY3 L-N/L-L/N-G	42412-DS3 L-L/HiL-G/L-N(CT)/HiL-N
Cat. B3 combination wave (6kV/3kA) peak clamping voltage	532/832/514	532/832/514	996/1570/920	1100/2200/1100	925/1250/520/725
UL 1449 Suppressed Voltage Ratings (SVR) [†]	500/700/500	500/700/500	900/1500/800	1200/2000/1000	800/1000/400/700

[†]Suppressed Voltage Ratings (SVR) assigned at 6-inch lead length with 6kV/500A impulse in accordance with UL 1449 (2nd Edition)

EM1/RFI NOISE REJECTION

All Cat. No. 42000 SPD's	Normal Mode	Common Mode
Evaluation Bandwidth	10kHz – 10MHz	10kHz – 10MHz
Noise Rejection @ 50 Ohms	30 – 40dB	30 – 40dB

PHYSICAL SPECIFICATIONS

Housing	NEMA Type 3R steel enclosure
Physical Dimensions (approx.)	6.25" (158.8mm) x 4.25" (108.0mm) x 3.25" (82.6mm)
Mounting	Flush mount into 3/4" panel knockout or use flanges to surface mount
Operating Temperature Range	-10° to 60°C
Storage Temperature Range	-20° to 85°C
Relative Humidity	5% to 95% non-condensing
Altitude	Up to 3600m (11,800 ft.)

AGENCY APPROVALS: • Listed UL 1449 Standard (2nd Edition) • CSA Certified

PRODUCT MAINTENANCE

Real-time diagnostics monitor power and surge suppression status of each phase. If protection is lost, the green LED will no longer illuminate, red "fault" LED will illuminate, and the alarm will sound—the unit should be replaced. If unit is located where LED warning is not easily observable, remote diagnostics may be used. Unit is equipped with remote-monitoring dry contacts rated 5 Amps, 120/240V AC via three, color-coded 18AWG leads rated 600V AC.

FEATURES

- Normal and common mode protection (line to neutral, line to line, and line to ground) for WYE and DELTA configured, 3-phase AC systems (Cat. No. 42120-001 rated for 120/240V AC single-phase systems)
- Real-time diagnostics monitor power and suppression status for each phase and provide both LED indicators and an audible alarm.
- Clamping envelope tracks contour of the AC sine wave
- Equipped with dry contacts for remote diagnostics



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