

## Distribution Panel Mount Surge Protective Device (SPD)

### APPLICATION

Cat. No. 57000 with removable modules is designed for installation at the service entrance and at branch panels, or as dedicated TVSS for critical equipment.

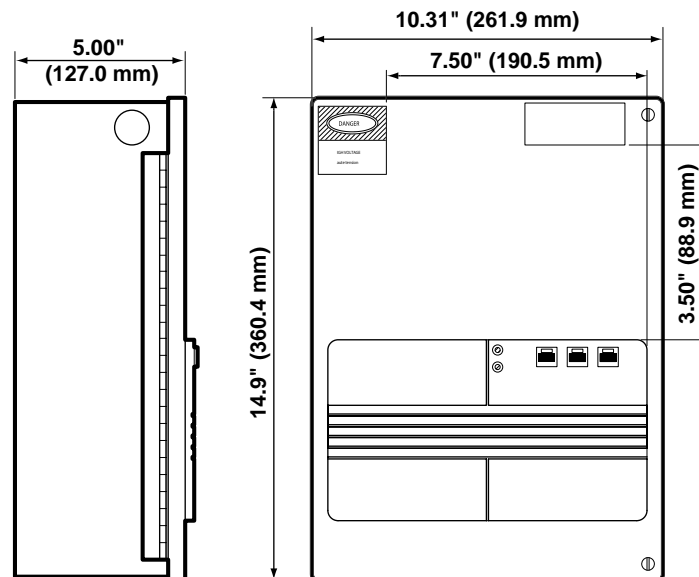
### TYPICAL SPECIFICATION

Cat. No. 57000 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 features indicator lights, a status relay and an audible alarm for monitoring power and surge suppression, and replaceable modules that deliver redundant protection. The 57000 has been tested to ANSI/IEEE C62.45 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. 57120-CM3

### DIMENSIONAL DRAWINGS



Cat. No3. 57000 and 57000-C



57000 SERIES

Cat. No.	Number of Modules & Cat. Nos.	Rating Operating Frequency @ 50, 60Hz	Maximum Continuous Operating Voltage (MCOV) (L-N)	Maximum Single-Pulse Transient Energy (10x1000µs) Joules	Maximum Single-Pulse Surge Current Voltage (8x20µs)
57120-M3	(3) 120 (1) 8120-GN	120/208V AC, 3-phase WYE, 5-wire (4-wire + ground)	150	3600	150kA
57220-IM3	(3) 220 (1) 8250-GN	220/380V AC, 3-phase WYE, 5-wire (4-wire + ground)	250	4900	150kA
57240-DM3	(3) 7240	240V AC, 3-phase DELTA, 4-wire (3-wire + ground)	250	4410	150kA
57277-M3	(3) 7277 (1) 8320-GN	277/480V AC, 3-phase WYE, 5-wire (4-wire + ground)	320	6400	150kA
57346-M3	(3) 7346 (1) 8385-GN	346/600V AC, 3-phase WYE, 5-wire (4-wire + ground)	385	8000	150kA
57480-DM3	(3) 7480	480V AC 3-phase, DELTA, 4-wire (3-wire + ground)	550	8640	150kA
57600-DM3	(3) 7600	600V AC 3-phase, DELTA, 4-wire (3-wire + ground)	680	9900	150kA

57000-C SERIES WITH BUILT-IN SURGE COUNTER

Cat. No.	Number of Modules & Cat. Nos.	Rating Operating Frequency @ 50, 60Hz	Maximum Continuous Operating Voltage (MCOV) (L-N)	Maximum Single-Pulse Transient Energy (10x1000µs) Joules	Maximum Single-Pulse Surge Current Voltage (8x20µs)
57120-CM3	(3) 120 (1) 8120-GN	120/208V AC, 3-phase WYE, 5-wire (4-wire + ground)	150	3600	150kA
57277-CM3	(3) 7277 (1) 8320-GN	277/480V AC, 3-phase WYE, 5-wire (4-wire + ground)	320	6400	150kA
57346-CM3	(3) 7346 (1) 8385-GN	346/600V AC, 3-phase WYE, 5-wire (4-wire + ground)	385	8000	150kA



# Clamping Data

# 57000 Series

## 57000 SERIES

Cat. No.	Number of Modules & Cat. Nos.	Cat. B3 Combination Wave (6kV/3kA) peak clamping voltage (L-L/L-N/L-G/N-G)	UL 1449 Suppressed Voltage Ratings (SVR) <sup>†</sup> (L-L/L-N/L-G/N-G)
57120-M3	(3) 120 (1) 8120-GN	850/425/850/425	800/400/800/400
57220-IM3	(3) 220 (1) 8250-GN	1350/675/1350/675	1200/600/1200/600
57240-DM3	(3) 7240	675 (L-L only)	700 (L-L only)
57277-M3	(3) 7277 (1) 8320-GN	1850/850/1850/850	1800/800/1800/800
57346-M3	(3) 7346 (1) 8385-GN	2100/1050/2100/1050	2000/1000/2000/1000
57480-DM3	(3) 7480	1400 (L-L only)	1500 (L-L only)
57600-DM3	(3) 7600	1700 (L-L only)	1800 (L-L only)

## 57000-C SERIES WITH BUILT-IN SURGE COUNTER

Cat. No.	Number of Modules & Cat. Nos.	Cat. B3 Combination Wave (6kV/3kA) peak clamping voltage (L-L/L-N/L-G/N-G)	UL 1449 Suppressed Voltage Ratings (SVR) <sup>†</sup> (L-L/L-N/L-G/N-G)
57120-CM3	(3) 120 (1) 8120-GN	850/425/850/425	800/400/800/400
57277-CM3	(3) 7277 (1) 8320-GN	1850/850/1850/850	1800/800/1800/800
57346-CM3	(3) 7346 (1) 8385-GN	2100/1050/2100/1050	2000/1000/2000/1000

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

**Category C3 Testing:** All 57000 devices have been subjected to 1000 sequential Category C3 surges (20kV/10kA) per IEEE C62.45

## EMI/RFI NOISE REJECTION

All Cat. No. 57000 SPD's	Normal Mode	Common Mode
Evaluation Bandwidth	5KHz – 5MHz	5KHz – 5MHz
Noise Rejection @ 50 Ohms	20 – 40dB	20 – 40dB



## PHYSICAL SPECIFICATIONS

Housing	NEMA Type 12 enclosure. Module system board constructed of UL-approved, fire-retardant plastic
Physical Dimensions (approx.)	14" (355.6mm) x 10" (254.0mm) x 5" (127.0mm) enclosure 17" (431.8mm) x 13" (330.2) x 5" (127.0mm) with flush enclosure
Mounting	Surface or flush mount inside electrical closets, branch panels, etc. or adjacent to protected equipment. Modules mount securely on motherboard secured to housing via insulated stand-offs or molded support members and suitable fasteners
Wiring	Feed-through dual lugs rated 100A maximum continuous line current using #3 AWG conductors
Operating Temperature Range	-10° to 60°C
Storage Temperature Range	-20° to 85°C

## AGENCY APPROVALS

- Listed UL 1449 Standard (2nd Edition)
- CSA Certified

## PRODUCT MAINTENANCE

Plug-in module design facilitates module replacement for installation and maintenance without the use of tools or without shutting down AC system power. A series of LED's, a status relay and an audible alarm indicate power and suppression status. Modules provide redundant transient voltage surge suppression (TVSS) to each phase. Failure of any one module will NOT leave any phase unprotected. When failure is indicated, a TVSS circuit has been damaged or lost and the module should be replaced. An optional, Remote Supervisor (Cat. No. 52000-RS) can monitor up to 6 panel-mounted surge devices with both a visual and audible alert.

## FEATURES

- Real-time diagnostics monitor power and suppression status for each phase
- Hybrid suppression circuitry with built-in redundancy provides complete protection for all phases—even if one module fails
- All module contacts are keyed to prevent mismatching when replacement modules are installed
- Dual-stage fusing protects primary and secondary TVSS circuits
- Clamping envelope tracks contour of the AC sine wave
- 57000-C models provide a built-in surge counter on the front panel
- Equipped with optically isolated dry contacts rated 5A 120/240V AC for remote monitoring



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