

SurgeFree™



MODEL

300LS

Service Entrance Protection

The 300LS Series offer robust protection at the entrance of large, Cat. C facilities. The 300LS has an I_{peak} of 300,000A/phase (8 x 20microsecond waveform). Seven times redundant protection paths/phase ensures continuous protection, even in an unlikely fault situation. Twenty-year, no-nonsense warranty; free protection modules for life. Series features mix and match options for a customized protector at stock prices. (See below for options.)

FEATURES

- 300LS: I_{peak}=300,000A/Phase (8 x 20μs waveform)
- Meets UL1449 2nd Ed - 1996, NEMA LS1-1992
- Seven times redundant protection paths per phase
- Employs new 40kA high headroom varistors with built in high-speed thermal disconnect
- Solid copper bus bar construction
- Field-replaceable modules
- EMI/RFI noise filtering
- Continuously monitored protection circuits
- Internal and external status indicators
- NEMA 4, Powder Coated Steel Enclosure

Mix & Match!

Options Available: Internal Disconnect • Upgradable Diagnostics: Surge Event Counter, Beeper, & Status Relay (1 Form C Contacts) • NEMA 4X Enclosure • Low Impedance Micro-Z cable (8 or 10AWG) • Flush Mount Kit

Surge Current/Phase (8/20μs): 1 Event - 300kA.
 Surge Life/Phase (8/20μs): 10,000 Events: 13kA.
 Status Indicators: LED Status Indicators (internal & external)
 Modes of Protection: L-N, L-G, L-L, N-G
 Operating Altitude: 13,000ft. (4000m)
 Temp. (Operating/Storage): -40° to +70°C/-40° to +85°C
 Enclosure: NEMA 4, 14 gauge steel
 Dimensions: 17" x 15" x 6" (432 x 381 x 153mm)
 Mounting: 17.75" x 13 1/4" ID - 4 holes
 (451 x 330mm/7.9mm ID) - 4 holes
 Weight: 35 lbs. (16.7kg)



I_{peak}=300,000A

UL 1449, 2nd Ed. Listed
 Including the requirements of Feb 9, 2007



20-Year Warranty
Lifetime Module Replacement

Filter Attenuation MIL STD 220A (50 Ohm):	120 VAC	220 VAC	240 VAC	277 VAC	347 VAC	480 VAC
	-30db	25kHz	25kHz	25kHz	50kHz	50kHz
-40db	125kHz	180kHz	180kHz	100kHz	100kHz	100kHz
-50db	210kHz	210kHz	210kHz	180kHz	170kHz	170kHz
-60db	250kHz	250kHz	250kHz	200kHz	190kHz	190kHz

Specifications

- ANSI/IEEE C62.41-2002
- IEC 61643-1-1998
- UL 1449, 2nd Ed.
including requirements
of Feb 9, 2007

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Model 300LS

Model 300LS	Service	Higher Headroom MOVs VAC	UL SVR 500A 8x20 μ s	6kV (1.2x50 μ s) 3kA (8x20 μ s)	20kV (1.2x50 μ s) 10kA (8x20 μ s)
-120S	120VAC, 1 ϕ , 2W+Gnd	180	500	520	614
-120T	120/240VAC, 1 ϕ , 3W+Gnd	180	500	520	614
-120Y	120/208, 3 ϕ , 4W+Gnd, Wye	180	500	520	614
-220Y	220/380, 3 ϕ , 4W+Gnd, Wye	390	1000	1008	1164
-240Y	240/415, 3 ϕ , 4W+Gnd, Wye	390	1000	1008	1164
-277Y	277/480, 3 ϕ , 4W+Gnd, Wye	390	1000	1008	1164
-347Y	347/600, 3 ϕ , 4W+Gnd, Wye	460	1200	1280	1450
-240DCT*	240/120/120, 3 ϕ , 4W+Gnd	390/180	1000/500	1008/520	1164/614
-240D	240, 3 ϕ , 3W+Gnd, Delta	390	1000	1008	1164
-480D	480, 3 ϕ , 3W+Gnd, Delta	620	1500	1566	1766
-600D	600, 3 ϕ , 3W+Gnd, Delta	750	1800	1776	1970

* High-leg Delta Center Tapped

Energy Absorption (8/20 μ s) in joules: 17,664 - 75,600J

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.

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