



HS Model

Introduction

Since 1980, Eaton's Innovative Technology has provided Surge Protective Devices (SPDs) to power quality equipment users around the world. Whatever your electrical surge protection need may be, Eaton's Innovative Technology has a Surge Protective Device to fill it!

General Features

- Description — Series or parallel wired, terminal strip connected, Multi-stage hybrid **A**ctive **T**racking **N**etwork (ATN®) sine wave tracking surge protective device
- Application — Dedicated ac and dc power circuits operating at 5 – 275 Vac/5 – 300 Vdc, ≤10 Amps, feeding variable speed drives, variable frequency drives, process controllers, PLCs, power supplies, microprocessor-based loads, CNCs and a wide variety of other mission-critical and general-purpose loads
- Warranty — 10-Year Free Replacement
- Unit Listings — Recognized components under UL® 1449 Second Edition (certain models, see table other side), UL® 1283 filter, CSA®
- Manufacturer Qualifications — ISO® 9001:1994 Quality System Certification BSI FM 30833

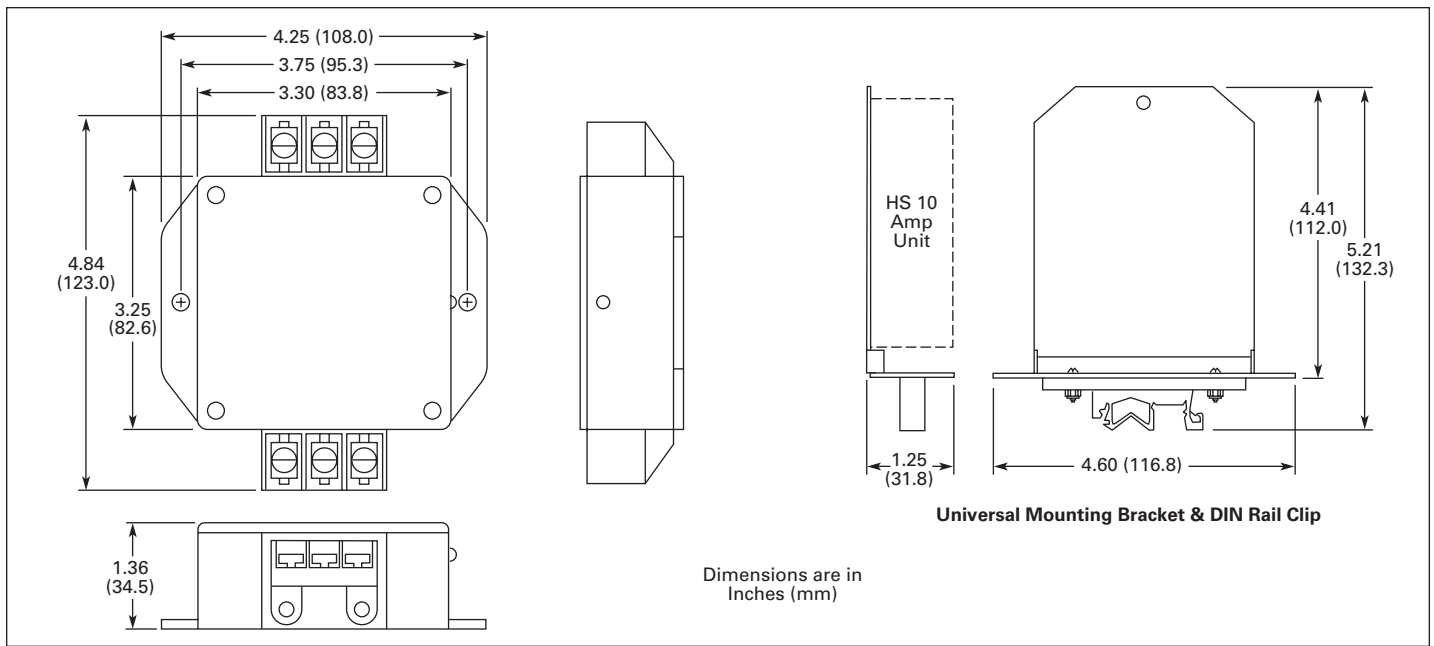
Mechanical and Electrical Features

- Enclosure — ABS Plastic UL® 94-5VA
- Connection — Wire clamping box terminals
 - Minimum 22 AWG (0.34 mm²) wire size
 - Maximum 12 AWG (4.0 mm²) wire size
- Weight — ≈ 1 lb (0.45 kg)
- Operating Temperature — -40°F (-40°C) to +140°F (+60°C)
- Protection Modes — All mode: Dedicated L-N (normal mode), Dedicated L-G, N-G (common mode)
- Input Power Frequency — 0 – 64 Hz (ac)
- Response Time — Active <1 nanosecond



Maximum EMI/RFI Attenuation — Mil-Std-220

1 kHz	10 kHz	100 kHz	1 MHz	10 MHz	Maximum Attenuation Frequency
0 dB	10 dB	29 dB	31 dB	12 dB	33 dB @ 80 kHz

- Maximum Continuous Operating Current — 10 Amps rms up to 250 volts
- Circuit Interrupt — Reference installation instructions for details



Performance Data

Available Models	Peak Surge Current	Nominal System Voltage (ac-Vrms, dc-Vpk)	ANSI/IEEE C62.41-1991 Measured Limiting Voltage *			UL SVR
			A1 Ring Wave 2 kV, 67 A 180° Phase Angle	A3 Ring Wave 6 kV, 200 A 90° Phase Angle	B3/C1 Impulse Wave 6 kV, 3 kA 90° Phase Angle	
			L-N L-G, N-G	L-N L-G, N-G	L-N L-G, N-G	L-N L-G, N-G
** HS-24-10A	25 kA	5 – 30 Vac 5 – 38 Vdc	70 100, 80	120 150, 120	170 210, 220	** N/A
** HS-48-10A	25 kA	24 – 50 Vac 24 – 65 Vdc	80 130, 80	140 170, 150	190 230, 220	** N/A
 HS-120-10A	40 kA	48 – 150 Vac 48 – 200 Vdc	80 150, 80	350 400, 230	480 560, 540	400 400, 400
 HS-250-10A	40 kA	120 – 275 Vac 120 – 300 Vdc	80 140, 80	530 690, 230	830 940, 890	800 800, 800

* Test environment: Positive polarity. HS-24-10A & HS-48-10A tested static, others tested with ac power applied. All units tested at terminals, time base = 1 ms. All measurements referenced from zero volts per NEMA® LS-1.

** Underwriters Laboratories (UL) does not list TVSS products designed to operate below 120 Vrms, static test only, phase angle does not apply.

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