

EXCLUSIVE  
 I.T. 10 YEAR  
**10**  
 WARRANTY  
 FREE  
 REPLACEMENT

**COMPONENT  
 LEVEL FUSING**

# HS Models



## GENERAL SPECIFICATIONS

**Description:** Series or parallel wired, terminal strip connected, Multi-stage hybrid Active Tracking Network (ATN<sup>®</sup>) 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, micro-processor based loads, CNCs and a wide variety of other mission critical and general purpose individual loads.

**Warranty:** Ten-Year Free Replacement

**Unit Listings:** Recognized components under UL1449 Second Edition (certain models, see table other side), UL1283, CSA

**Manufacturer Qualifications:** ISO 9001:1994 Quality System Certification BSI FM 30833

## MECHANICAL SPECIFICATIONS

**Enclosure:** ABS Plastic UL94-5VA

**Connection:** Wire clamping box terminals; Minimum 22 AWG (0,34 mm<sup>2</sup>) wire size – Maximum 12 AWG (4,0 mm<sup>2</sup>) wire size

**Weight:** ≈ 1 lb (.45 kg)

**Operating Temperature:** -40° F (-40° C) to +140° F (+60° C)

## ELECTRICAL/PERFORMANCE SPECIFICATIONS

**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

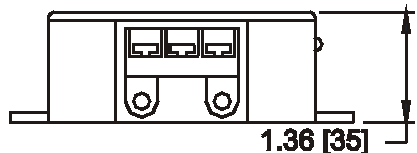
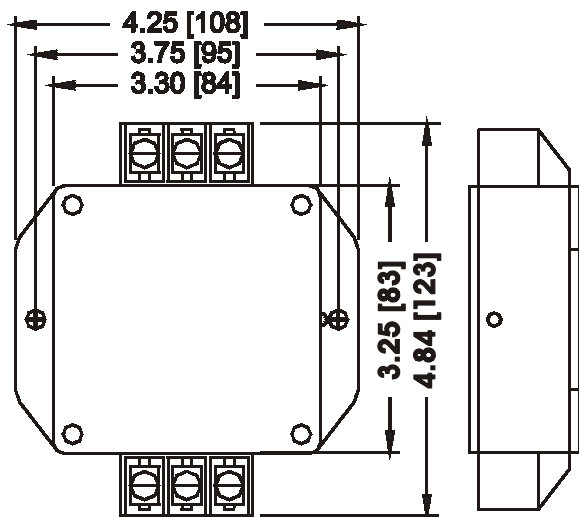
Maximum EMI/RFI Attenuation – Mil-Std-220

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 MHz

**Maximum Continuous Operating Current:** 10 Amps rms up to 250 volts

**Short Circuit Current Rating:** 200 kAIC when protected by class R, 10 Amp fuse

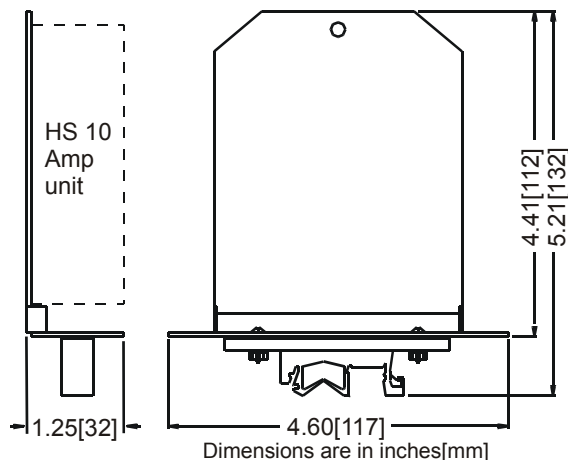
# HS Models



Dimensions are in inches[mm]

IT Part# 420-9000

Universal Mounting Bracket & Din Rail Clip



Dimensions are in inches[mm]

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° Phs Angle	A3 Ring Wave 6 kV, 200 A 90° Phs Angle	B3/C1 Impulse Wave 6 kV, 3 kA 90° Phs Angle	UL 1449-2 Suppressed Voltage Ratings
			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	60 80, 60	170 210, 220	**N/A
**HS-48-10A	25 kA	24-50 VAC 24-65 VDC	80 120, 80	60 110, 70	190 230, 220	**N/A
<b>UL</b> US <b>HS-120-10A</b>	40 kA	48-150 VAC 48-200 VDC	80 120, 60	330 400, 180	450 550, 510	400 400, 400
<b>UL</b> US <b>HS-250-10A</b>	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.