

HS-30A 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 **Active Tracking Network** (ATN®) enhanced sine wave tracking surge protective device
- Application — Dedicated ac power circuits, ≤30 amps, feeding variable speed drives, process controllers, PLCs, power supplies, microprocessor-based loads, CNCs and a wide variety of other mission-critical and general-purpose individual loads
- Warranty — 10-Year Free Replacement
- Unit Listings — Recognized components under UL® 1449 Second Edition, UL® 1283
- Manufacturer Qualifications — ISO® 9001:1994 Quality System Certification BSI FM 30833

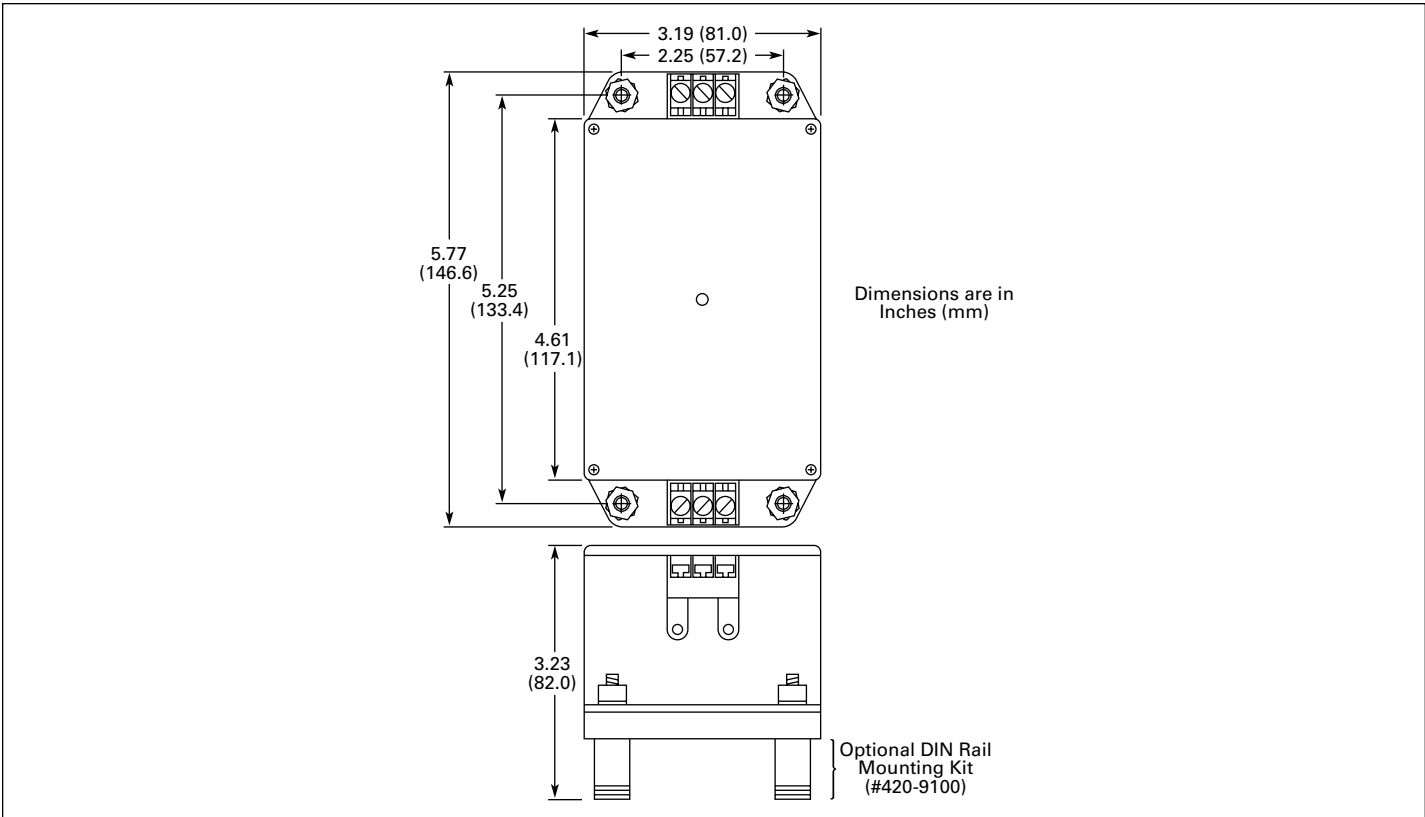
Mechanical and Electrical Features

- Enclosure — ABS Plastic UL® 94-5VA
- Connection — Wire clamping box terminals
 - Minimum 18 AWG (0.8 mm²) wire size
 - Maximum 10 AWG (5.0 mm²) wire size
- Weight — ≈1 lb (0.45 kg)
- Operating Temperature — -40°F (-40°C) to +140°F (+60°C)
- Circuit Description — Multi-stage hybrid network utilizing circuit encapsulation and Advanced Surge Path Technology
- 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 |
|-------|--------|---------|-------|--------|-------------------------------|
| 3 dB | 21 dB | 38 dB | 36 dB | 15 dB | 47 dB @ 16 kHz |

- Maximum Continuous Operating Current — 30 Amps rms up to 250 volts
- Short Circuit Current Rating — 200 kAIC when protected by Class R, 30 Amp fuse



Performance Data

| Available Models | Peak Surge Current Phase/Mode | 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 | UL 1449-2 Suppressed Voltage Ratings |
| cRU _{US} HS-120-30A | 80 kA/40 kA | 48 – 150 Vac | L-N L-G, N-G | L-N L-G, N-G | L-N L-G, N-G | L-N |
| | | 48 – 200 Vdc | 30 70, 50 | 240 340, 140 | 430 420, 430 | 400 400, 400 |
| cRU _{US} HS-250-30A | 80 kA/40 kA | 120 – 275 Vac | L-N L-G, N-G | L-N L-G, N-G | L-N L-G, N-G | L-N |
| | | 120 – 300 Vdc | 60 90, 50 | 400 520, 140 | 760 790, 770 | 800 800, 800 |

* Test environment: Positive polarity. Tested with ac power applied. All units tested at terminals, time base = 1 ms. All measurements referenced from zero volts per NEMA® LS-1.

Innovative technology is a registered service mark of Eaton Corporation.
 Active Tracking Network (ATN) is a registered trademark of Eaton Corporation.
 UL is a federally registered trademark of Underwriters Laboratories Inc.
 ISO is the registered trademark and sole property of the International Organization for Standardization.
 NEMA is the registered trademark and service mark of the National Electrical Manufacturers Association.

Eaton Corporation
Innovative Technology TVSS Products
 1000 Cherrington Parkway
 Moon Township, PA 15108-4312
 USA
 Phone: 1-800-647-8877
 Web: www.eatonelectrical.com/itvss



©2004–2007 Eaton Corporation
 All Rights Reserved
 Printed in USA
 Form No. PS01006042E / Z2990
 February 2007