We connect and protect

Electronic Track Signal Protector

The nVent ERICO Electronic Track Signal Protector series provides transient protection from surges induced or conducted onto low-voltage signal circuits for trackside signaling equipment. The series of surge-protection devices is ideal for protecting DC-responsive track relays, train-detection systems, microprocessor-based train-control and indication circuits, train inspection systems, communications systems, highway crossing controls and other operationally sensitive systems.

nVent ERICO Electronic Track Signal Protector devices help ensure that surges do not pose a safety threat in the event of component failure. Indicators on the device help safeguard the device against shorts and provide status indication at a glance. The device cover is marked with the operating voltage and part number, which allows easy identification as to proper application.

FEATURES

- Includes hybrid technology comprised of gap-type voltage switching and varistor-type voltage clamping components
- Designed with a fail-safe, isolated from ground failure modes as required for critical signal circuits
- Protects sensitive electronic equipment in exposed locations
- Epoxy coating helps ensure stability of operation under adverse conditions and in locations of high humidity
- Exceeds the AREMA® specifications for both arrestor and equalizer applications
- Provides a 50 kA 8/20 maximum surge rating for protection that is suitable for exposed trackside equipment

SPECIFICATIONS

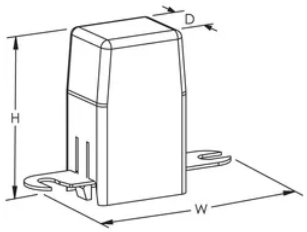
Catalog Number	**ETSP33050**	**ETSP330170**
Nominal System Voltage (Un)	50 VDC 35 VAC	170 VDC 120 VAC
Max Continuous Operating Voltage (Uc)	90 VDC 65 VAC	220 VDC 150 VAC
Voltage Protection Level (Up)	300 V @ 3 kA	550 V @ 3 kA
Nominal Discharge Current (In), L+L-PE		20kA 8/20 µs
Max Discharge Current (Imax), L+L-PE	50kA 8/20 µs	50kA 8/20 µs
Leakage Current @ Un	1 nA Max	1 nA Max

Catalog Number	ETSP33050	ETSP330170
Frequency	5 MHz Max	5 MHz Max
Protection Modes	Two Mode, L1-PE and L2-PE	Two Mode, L1-PE and L2-PE
Technology	Metal Oxide Varistor (MOV) Gas Discharge Tube (GDT)	Metal Oxide Varistor (MOV) Gas Discharge Tube (GDT)
Connection Type	AREMA® Stud-Type Terminals – 2 Post Terminal Block	AREMA® Stud-Type Terminals – 2 Post Terminal Block
Status Indication	Dual spring thermal disconnect	Dual spring thermal disconnect
Enclosure Material	UL® 94V-0 Thermoplastic	UL® 94V-0 Thermoplastic
Enclosure Rating	IP 20 NEMA®-1	IP 20 NEMA®-1
Humidity	0 - 90	0 - 90
Temperature	-40 to 80 °C	-40 to 80 °C
Depth (D)	25mm	25mm
Height (H)	75 mm	75 mm
Width (W)	55 mm	55 mm
Unit Weight	0.1 kg	0.1 kg
Complies With	ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C IEC® 61643-1 Class II AREMA® requirements	ANSI®/IEEE® C62.41.2-2002 Cat A, Cat B, Cat C IEC® 61643-1 Class II AREMA® requirements
Color	Transparent	Yellow

ADDITIONAL PRODUCT DETAILS

Frequency @ 3 dB / 120 Ω.

DIAGRAMS



WARNING

nVent products shall be installed and used only as indicated in nVent's product instruction sheets and training materials. Instruction sheets are available at www.nvent.com and from your nVent customer service representative. Improper

installation, misuse, misapplication or other failure to completely follow nVent's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death and/or void your warranty.

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