

EPD 12/24Vdc 30A Secondary Protection Device

Features

- Series hybrid TVSS technology
- Universal design for 12V or 24V applications
- 30A series filter
- High surge rating provides a high level of protection and long operational life
- Low let-through voltage
- RFI/EMI filtering
- Status indicator
- AAR terminals
- 5 year limited warranty



Detailed Specifications for ERICO's EPD1224ATAAR 12/24Vdc Secondary Protector

Lightning transients and surges are a major cause of expensive electronic equipment failure and system disruption. The EPD family of Surge Protection Devices (SPD) offer economical and reliable protection from power transients with the convenience of easy installation. EPD's are expressly designed for the railways unique electrical, mechanical and environmental requirements.

The EPD1224ATAAR is designed for use on both 12 and 24Vdc systems. The unique voltage selection link allows the one unit to be used on either 12 or 24V systems. The unit is designed to cater to installations where an additional battery cell may need to be added to gate crossings.

For 0-30A circuits the EPD1224ATAAR is installed in-line. The hybrid design incorporates an EMI/RFI filter that provides efficient noise attenuation to ensure even the most sensitive equipment is protected from noise and transient activity.

To aid in the maintenance of the device, a high reliability status indicator shows that surge protection is operational. If the unit's surge capacity has been exceeded, the indicator will extinguish indicating replacement is required. To maintain the highest operational level of important rail equipment, filtered power is still provided to the load under such a condition.

EPD 12/24Vdc 30A Secondary Protection Device

EPD1224ATAAR 12/24Vdc Secondary Protector

SPECIFICATIONS

Operation:

Model	EPD1224ATAAR	
Nominal Voltage U_n	12Vdc	24Vdc
Distribution System	2 wire	
Max. Cont. Operating Voltage U_c	18V	36V
Max. Load current	30A	

Protection:

Aggregate Surge Rating	20kA 8/20 μ s	
Surge Life	>5,000 6kV/500A impulses	
Protection Modes	+Ve to -Ve	
Technology	Hybrid (MOV/Filter/Silicon) TVSS & series EMI/RFI filter	

Performance:

Voltage Protection Level Up (L-L)		
@ Cat A1, 200A 100kHz	7V	8V
@ Cat B3, 3kA 8/20 μ s	16V	16V
@ 10kA 8/20 μ s	26V	30V
@ 20kA 8/20 μ s	34V	41V

Filtering:

Filtering @100kHz	-65dB
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Indication:

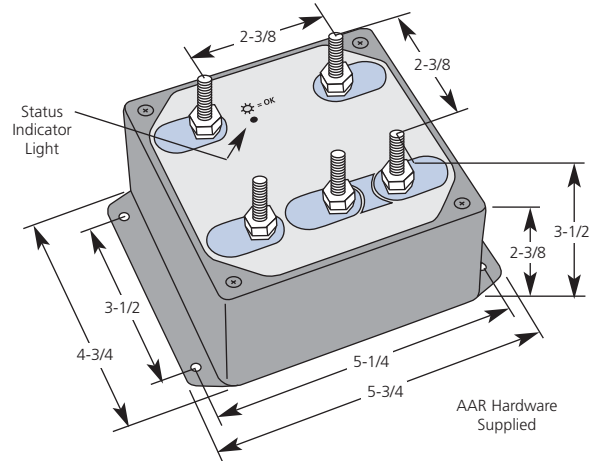
Status	LED status indicator
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Physical Data:

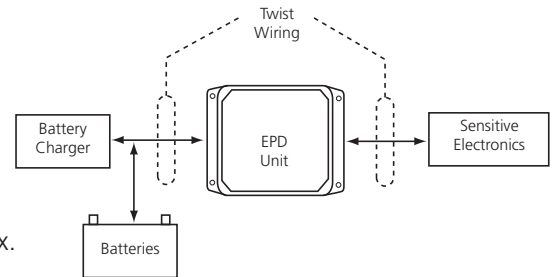
Dimensions	5.5" x 5.75" x 3.5" (140mm x 146mm x 89mm) approx.
Weight	2.5lb (1.1kg) approx.
Enclosure	ABS plastic. UL 94-VA flame rated. NEMA-1
Connection	AAR terminals (#14 x 24 thread)
Mounting	Wall mount
Temperature	-40°C to +70°C (-40°F to +158°F)
Humidity	0 to 90%
Warranty	5 years

Test Standards:

Surge Rated to Meet	AREMA requirements ANSI/IEEE C62.41.1-2002 Cat A, Cat B, Cat C
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INSTALLATION



Install the TVSS series filter as close to the sensitive electronic load as possible. It is important to keep wires short between the equipment and the protector. All power leads should be twisted together and the input and output wire leads separated from each other. The mounting flange design and footprint provides flexibility of placement near the sensitive electronics and allows for easy replacement in existing circuits.

ORDERING INFORMATION

Part Number	Description
EPD1224ATAAR	Secondary TVSS protector for 30A 12 & 24Vdc

Due to a policy of continual product development, specifications are subject to change without notice.

WARNING

ERICO products shall be installed and used only as indicated in ERICO's product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

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