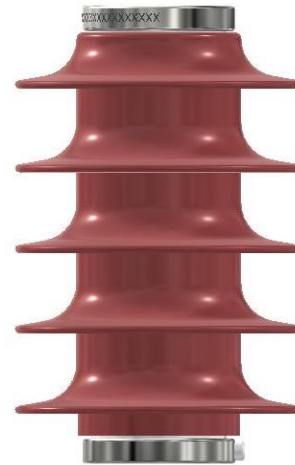


Product Data Sheet



Indoor EMProve®



Outdoor EMProve®

Description

The EMProve® is a device that will shunt to ground high current pulses caused by an E1 electromagnetic directed energy event possibly many miles away. These pulses occur so quickly they are beyond the capability of ordinary lightning surge protectors. With the addition of a suitable Faraday type enclosure, protection could even be afforded from a high altitude nuclear electromagnetic pulse (EMP).

Operation

Under normal conditions, the EMProve® acts as an open circuit drawing less than 11µA at 60 Hz.

When detecting an E1 current pulse, the EMProve® will shunt more than 97% of the current pulse to ground.

It will then return to its original high impedance state so quickly, within a fraction of a cycle, that no other circuit protection devices will trip.

Applications

- High value assets
- Long replacement lead time or obsolete components
- Processes with high consequence of loss
 - Pipeline
 - Chemical
 - Refining
 - Nuclear
 - Tunnel
 - Railroad
 - Transit
 - Offshore wind
 - Medical
 - Foundry

Dimensions

	<u>Indoor</u>	<u>Outdoor</u>
Length (in / mm)	9 / 228.9	9 / 228.9
Diameter (in / mm)	3 / 76.2	5.64 / 143.3
Weight (lb / kg)	5.5 / 2.49	6.8 / 2.86
Two NEMA mounting holes on each end:		
Spacing (in)	1-3/4"	1-3/4"
Thread size	3/8" -18	3/8" -18

Specifications

	<u>UFSA06E1-x</u>	<u>UFSA10E1-x</u>	<u>UFSA15E1-x</u>
Device Class	Intermediate	Intermediate	Intermediate
Voltage Class	6 kV	10 kV	15 kV [3]
MCOV	5.1 kV	8.4 kV	12.7 kV
Bypass Current Rating	2500 A [1]	2500 A [1]	2500 A [1]
Housing BIL Rating	110 kV [2]	110 kV [2]	110 kV [2]

[1] Tested in excess of 5000 A

[2] Tested to 130 kV

[3] 15 kV units are in stock

Installation

- Identify the asset in need of protection.
- Choose a location to mount the EMProve® within 3.28 feet (1 meter) of the asset.
- Choose the appropriate EMProve® configuration.
 - Indoor – Minimal particulates and moisture. May be located within enclosures.
 - Outdoor – Medium to heavy particulates and moisture.
- Mount the EMProve® using bolted NEMA connections to phase and neutral and ground.
- EMProve® must not be used as a structural member for any other device or equipment.

Note:

Protection of a complete facility will require a full site study to offer an approach to protect against EMP.

Ask about our OEM program

- The EMProve® may be mounted at your facility for a fractional overall cost to protect equipment such as generators, turbines, compressors, condensers, fans, switchgear and transformers.
- Contact ufsa@nwsignal.com for engineering support.

Your Favored supplier for EMProve® products



NW Signal Maintenance, LLC.
nwsignal.org
ufsa@nwsignal.org
 206-806-1043