

The Sinetamer Industrial Grade, Medium Voltage Secondary Arrester TVSS models are specifically designed for heavy duty applications including: Chemical & Pharmaceutical Plants, Waste &  $H_2O$  Treatment Facilities, Mining, Petroleum & Oil Refineries as well as other Large Scale, Automated, Heavy Commercial or Industrial Production Lines.

#### General

Protected Modes:	Directly connected*/ Bidirectional, True, ALL- Mode (Normal & Common Mode) suppression componentry
Technology:	Thermally fused, Multi-parallelized, All solid- state, Bipolar, Auto-restoring, MOV suppression arrays
Withstand:	High Energy Exposure ANSI/IEEE C62.41.1 & .2-2002 "C3" (20 kV x 10 kA) Location/Category Rating
Connection Means:	5 ft (60 in) of #6 AWG, 5 kV cable, 4 conductors: L <sub>A</sub> , L <sub>B</sub> , L <sub>C</sub> & Ground
Mechanical	2" diameter threaded Meyers hub & external
Interface:	mounting flanges
Environmental:	NEMA 12, 4, 4X, Steel & Stainless (XS) enclosures
Standard Size:	14" x 16" x 6", (L x W x H) typical
Weight:	66 lbs (typical)

#### **Design & Performance**

Peak Surge Capacity: 80 kA/Mode (L-L) & (L-G), (160 kA/ Phase PSC) 1 kV to 4.2 kV in seven model voltage ranges Protection Ranges: 47 – 420 Hz. (60 Hz. typical.) Frequency: 30 A. Ferraz A055F1D0R0-30E line fusing Interrupt Means: required; (see model Installation Instructions) **Applications:** Multiple ANSI/IEEE C62.41.2 Location (Category A, B & C) & high energy suppression uses **Thermal Integrity:** Expansion tolerant arrays Temperature Range: -40° C to +80° C; (-40° F to +176° F) % RH : 0-100% (non-condensing)

### **Quality & Safety**

Manufacturer &Product Qualifications:ISO-9001 NQA QMSCompliance:ANSI/IEEE C62.11Assurance:All models electrically<br/>factory

Life Safety:

ISO-9001 NQA QMS ANSI/IEEE C62.11 All models electrically quality checked at factory Safety Warning Labeling



# Medium Voltage ST-LSEA

# 160 kA / Phase



## **Key Features**

- Discrete *"All Mode"* Circuitry: Directly Connected Protection Elements in *"All Modes"* (6 modes for 3 phase, 4 wire Delta circuits) as recommend by IEEE Std. 1100-2005
- 5 Year Free Replacement Warranty
- Circuit Encapsulation
- < 1 Nanosecond Response Time</p>
- Multistage, Optimal Response Circuitry
- Variety of enclosure types
- Individual Thermally Fused
  Components
- ISO 9001 Manufactured Quality
- Remote LED option available
- Dry Relay Contact for Remote monitoring or connection with RTU or SCADA systems



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Model Number	Nominal Operating Voltages	Maximum Continuous Operating Voltage
ST- LSEA-MV3N1500	Up to 1,500 Vrms	1,850 Vrms
ST- LSEA-MV3N2000	Up to 2,000 Vrms	2,550 Vrms
ST- LSEA-MV3N2500	Up to 2,500 Vrms	3,000 Vrms
ST-LSEA-MV3Y2500	L-N 1500 L-L 2500	1,725 Vrms 3,000 Vrms
ST- LSEA-MV3N3000	Up to 3,000 Vrms	3,750 Vrms
ST- LSEA-MV3N3500	Up to 3,500 Vrms	4,550 Vrms
ST- LSEA-MV3N4160	Up to 4,160 Vrms	5,200 Vrms

#### **Enclosure Options** (Suffix):

М	NEMA 12 Metal

- NEMA 4 Steel
- W XS X E2 4X Stainless Steel
- NEMA 4X Composite Hub, wires outside of
- enclosure



**Mechanical and Options**