

38 kV	200A Elbow Surge Arrester	375ESA
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Ratings:

For Metal Oxide Varistor (MOV) Surge Arresters	
High Current, Short Duration	All MOV Arresters withstand two discharges of 40kA crest
Low Current, Long Duration	All MOV Arresters withstand 20 surges of 75A/2000 microseconds duration
Duty Cycle Test	All MOV Arresters withstand 22 operations of 5kA crest at 8 x 20 microseconds duration while energized at rated voltage for the initial 20 operations and at maximum continuous operating voltage (MCOV) for the final two operations

Protective Characteristics							
Class	MCOV (kV RMS)	Duty Cycle Rating (kV RMS)	Maximum Discharge Voltage (kV Crest) 8 x 20 microsecond current wave				
			1.5kA	3kA	5kA	10kA	20kA
38kV	19.5	24	64.48	67.80	69.88	74.88	83.20
35kV	22.0	27	72.54	76.28	78.62	84.24	93.60
38kV	24.4	30	80.60	84.75	87.35	93.60	104.00
38kV	29.0	36	96.72	101.70	104.82	112.32	124.80
38kV	32.5	40.5	109.35	114.98	118.50	126.97	147.07

375ESA

Elbow Surge Arrester

Applications:

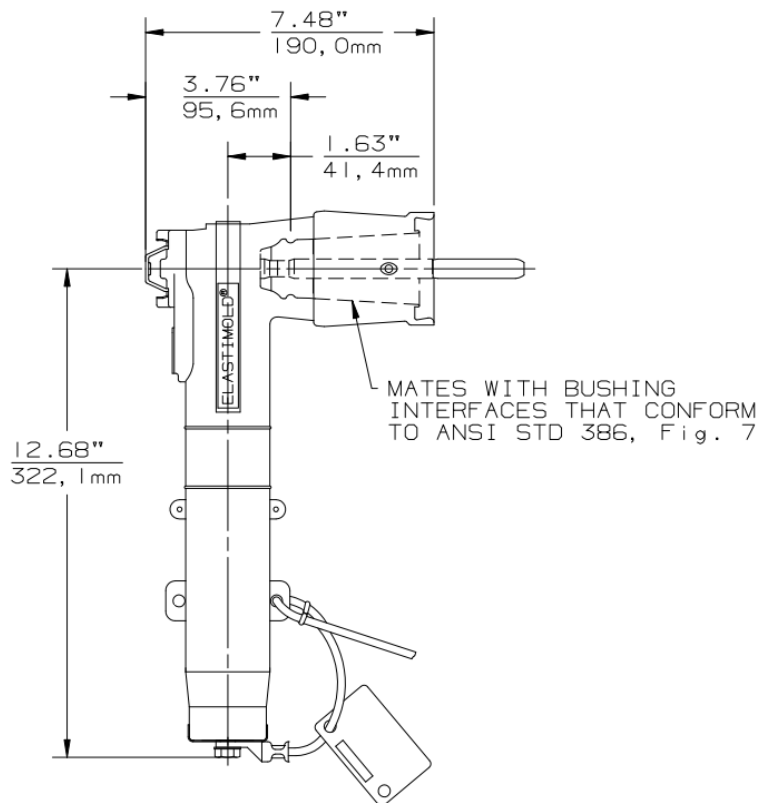
The 375ESA Elastimold® Metal Oxide Varistor (MOV) surge arrester is a fully shielded, fully submersible arrester with standard ANSI/IEEE 386 connection with other energized 200 Amp loadbreak components. The 375ESA provides high voltage lightning and switching surge protection of transformers, cable, equipment, and other components typically located on underground power distribution systems. Proper placement, voltage selection, and coordination with riser pole arresters minimize damaging surge voltages by improving protective margins. Typical applications include the following:

- Installing an arrester at the end of a radial system or at both ends of an open point on a loop system.
- Additional arresters can be added at strategic locations upstream from the end point for maximum protection.

Features:

- Provides convenient energized connection with other 200A loadbreak or deadbreak components.
- Fully shielded and fully submersible for a variety of applications.
- Enables installation in your existing cabinetry, saving you money.
- Surge arresters fit your application and are easy to install.
- Withstands 10,000 amps for 10 cycles without fusing. Controls end plug when ejected, preventing uncontrolled trajectory. Maintains the housing shield ground connection after failure.

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Arrester Application Table

38 kV Class	System Line-to-Line Voltage kVrms		MCOV kV RMS	
	Nominal	Maximum	Solidly Grounded Neutral Circuits	3-Wire Ungrounded Circuits
	23.00	24.34	-	22.00
	34.50	36.51	22.00**	-
	34.50	36.51	24.40	-

*MCOV = Maximum Continuous Operating Voltage.

**Preferred arrester MCOV for this system voltage.

Selection Chart

Description	Voltage Class	CAT. NO.	MCOV kV RMS
	38kV	375ESA-21	17.0
	38kV	375ESA-24	19.5
	38kV	375ESA-27	22
	38kV	375ESA-30	24.4
	38kV	375ESA-36	29

Example:

The ordering number for an Elbow Surge Arrester in the 38kV class with a Maximum line to line voltage of 34.50 kV and with solidly grounded neutrals is 375BSA-27.

Each kit contains the following:

1	Elbow Surge Arrester	375BSA-XX
2	Silicone Lubricant	82-08
1	Installation instruction	IS-1019

Notes:

1. Elastimold® Arresters use high-strength, silver epoxy-bonded MOV blocks and shunted spring connections for the best circuit connection.
2. A 36" 4 AWG ground lead is provided with each unit.
3. For 15kV and 28kV class deadbreak system Elbow Arresters, use catalog number 156ESA-XX with appropriate duty cycle rating.