



# Three Phase Surge Arrester

**TES 277SE**  
Commercial/Industrial



## DESCRIPTION

Introducing the TES 277SE Surge Arrester, installed at wattmeter, service entry or weatherhead locations for commercial and industrial applications. The TES 277SE Surge Arrester is specifically designed for long lifetimes even with strong lightning activity and temporary line overvoltage conditions. A tough Surge Arrester for tough line conditions.

## FEATURES

- 40,000 Amp peak capability, each phase
- Temporary overvoltage clamping capability
- Lowest, reliable voltage clamping level
- Safety fusing, all phases, patented
- LED "unit good" indicators, all phases
- Fire proof and explosion proof polycarbonate glass-fiber reinforced enclosure with matching mounting connector
- Sealed unit except for mounting connector wiring opening
- For less inductance, #10 AWG tinned copper wire
- MCOV 320

## APPLICATIONS

Three Phase 277 VAC Surge Arrester for commercial and industrial usage. Installed at wattmeter, service entry, or weatherhead, safely clamps and dissipates AC line high voltage current impulses going to a residence, apartment or light industrial building.

## ELECTRICAL-ENVIRONMENTAL SPECIFICATIONS

### Maximum Peak Surge Current

(All phases) 40 KA

### Maximum Clamping Voltage Level

@40 KA (All Phases) 1900 VDC

### Start Clamping Voltage Level

@1 ma (All Phases) 510 VDC

### Accelerated Life Test

13 KV, 1.2/50  $\mu$ sec. open circuit, 5.5 KA, 8/20  $\mu$ sec. short circuit, 100 surge cycles, 6 secs. apart. No failure or arcing allowed. Surge Arresters still in excellent condition at end of tests. No arcing.

### Temporary Overvoltage

Continuous, 5 minutes, maximum line voltage without thermal runaway. 440 VAC

### End of Life Failure Mode

While in overvoltage induced thermal runaway, apply 7 KA at operating voltage. Surge arrester must fail safe without faulting the AC line. No arcing allowed.

Surge arrester fails safe—surge element punctures, safety fuse opens, LED turns off, no fire, slight puff of smoke out connector wiring opening. AC line not faulted. No arcing.

### Enclosure Flammability

(550° C or greater) 960° C, UL 94 V1

### Ultra-Violet Resistance

Good UV stability in tropical conditions

### Thermal Withstand

(80° C)

### Salt-Fog Corrosion Resistance

Chemical resistance

### Enclosure Dimensions

12"X10"X4"

### Recommended "Hole Size" for Mounting Connector

1.12"