

# 15, 25, 35kV Class Shunt Capacitors



- For distribution and substation applications
- 50 through 400 kVAR standard; other sizes also available
- Conforms with IEEE-18/IEC60871-1
- Current technology design includes all polypropylene film, foil element construction, stainless steel enclosure, and non-PCB dielectric fluid
- Proven reliable performance
- High current withstand capability

**ISO 9000:2000**  
QUALITY CERTIFIED

***Maysteel***<sup>®</sup>  
Electric Power Products

## Advanced Design, Sizes To Fit Your Application

Maysteel's new family of shunt capacitors incorporate features for top performance and high field reliability – including polypropylene film and foil element construction, rugged stainless steel cases protected with multi-coat epoxy finishes, and heavy-duty terminals with bolt-down connectors.

Ideal for applications requiring power factor correction, voltage regulation and loss reduction.

**Externally fused ratings (standard):** 50 - 600 kVAR  
2.4 - 19.92 kV

**Internally fused ratings (optional):** 100 - 750 kVAR  
2.4 - 14.62 kV



### Configurations

- 1-bushing or 2-bushing
- 50, 100, 150, 200, 300, 400 kVAR standard sizes
- 500, 600 kVAR and other sizes available\*
- 95, 110 or 125kV BIL (150kV BIL upon request)

\*Note: Custom kVAR ratings for power factor correction and harmonic filter bank applications are available.

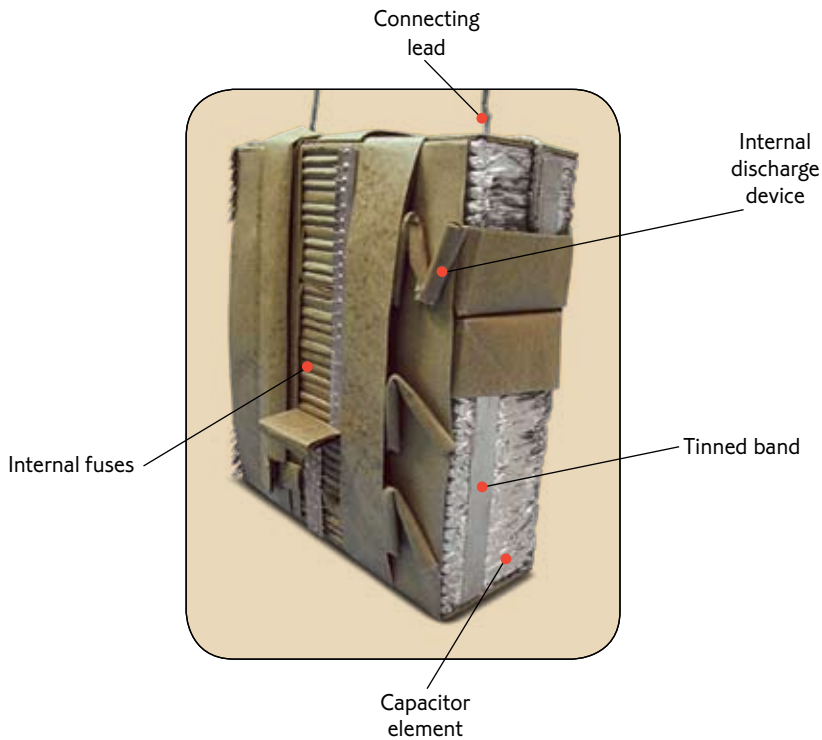
### Construction

- 409 series stainless steel case
- Finish allows superior heat dissipation and offers excellent protection against corrosion in outdoor environments
- Sand blasted prior to painting
- Epoxy primer and two coats of polyurethane top coat
- Paint thickness exceeds 85 microns
- Welded terminals are mechanically stronger and provide more consistent mounting than soldered terminals
- Heavy-duty bolted connections provide superior performance to tab-and-crimp
- Solid stud eliminates inconsistencies associated with solder-filled studs

### Applications

- Distribution and substation
- Pole or pad banks
- Power capacitor banks
- Metal enclosed banks
- Harmonic filter banks

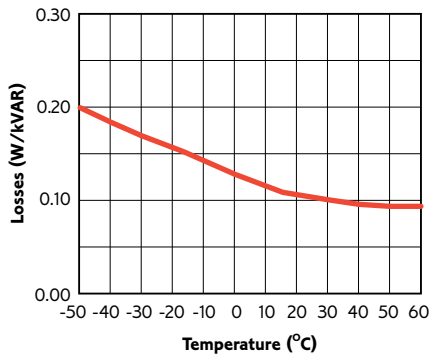
# Technical Specifications



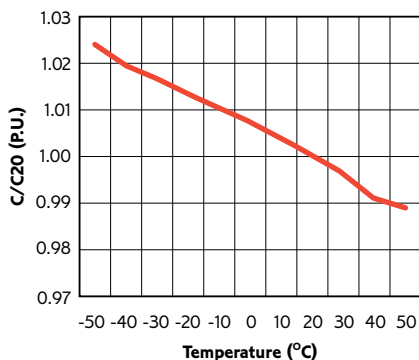
Applicable standards:	IEEE-18/IEC60871-1
Rated voltage range:	2 to 22 KV
Rated KVAR range:	50 kVAR to 750 kVAR
Phases:	1 Ph/3 Ph
Rated frequency:	60 Hz or 50 Hz
Fuse protection:	External (optional internal fuses)
Discharge device:	Internally fitted discharge resistor
Dielectric type:	All polypropylene film
Impregnating oil:	Non-PCB, non-toxic oil
Ground connection:	Unpainted area under mounting bracket
Case material:	Stainless steel 409 series/CRCA
Paint:	Gray ANSI-70 polyurethane paint suitable for outdoor application

## Performance Curves

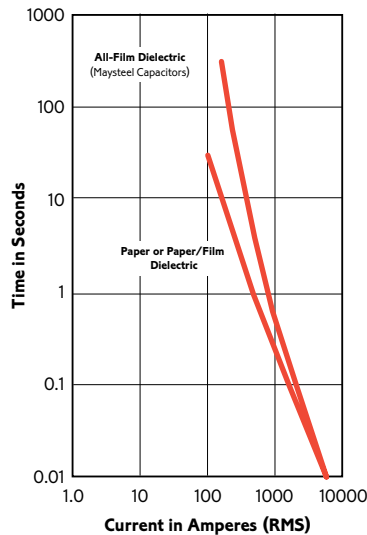
Losses vs. Temperature



Capacitance vs. Temperature



Typical Case Rupture Tolerance\*



\*1,800 cu. in. case volume

## BUSHING

Material:	Wet process porcelain
Standard creepage (min):	14.96" (380 mm) up to 15kV (95kV BIL)* 23.6" (600mm) up to 24 kV (110 or 125kV BIL) 30" (762 mm) for 150kV BIL upon request
Special creepage:	30" (762 mm) (upon request)
Insulation level:	95 kV or 110 kV up to 15 kV
(1.2 x 50 μ sec wave):	125 kV or 150 kV up to 24 kV

## PERMISSIBLE OVERLOADS

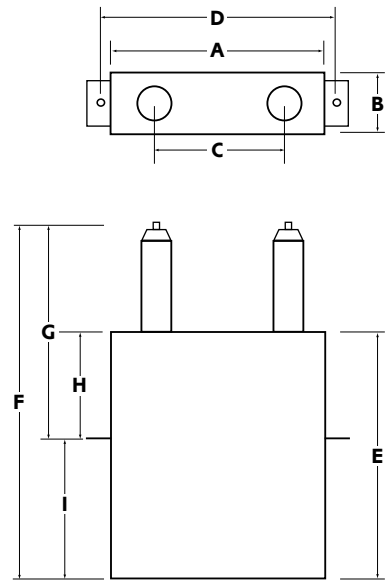
Current:	180%
Voltage:	110%
kVAR	135%
Capacitance tolerance:	Per respective standard
Weight:	Unit specific
Temperature category:	-40°C (-40°F) to +55°C (130°F)
Routine over voltage test:	4.3 times rated voltage DC

\*If using an 18kV, 450mm bushing for 95kV BIL, total height of 95kV BIL capacitors will be increased by one inch.

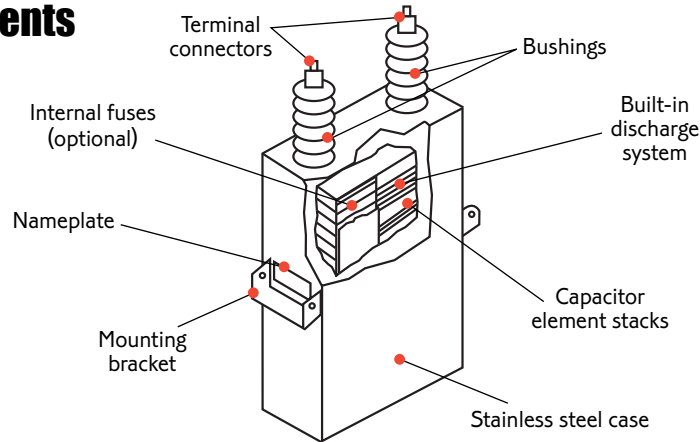
# Capacitor Dimensions

Class	15kV		15kV		25kV		35kV	
kV BIL	95		110		125		150	
kV	7.62		7.62		14.4		19.92	
kVAR	200	400	200	400	200	400	200	400
A	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7
B	5.83	6.69	5.83	6.69	5.83	5.83	5.83	5.83
C	9.06	9.06	9.06	9.06	9.06	9.06	9.06	9.06
D	15.63	15.63	15.63	15.63	15.63	15.63	15.63	15.63
E	14.37	22.13	14.37	22.13	14.96	26.38	15.35	27.56
F	23.81	31.57	25	32.76	26.38	37.8	26.77	38.98
G	16.69	22.82	17.88	22.82	18.5	22.82	18.5	22.82
H	7.24	13.39	7.24	12.21	7.09	11.42	7.09	11.42
I	7.12	8.74	7.12	9.92	7.87	14.96	8.27	16.14

NOTE: Dimensions are approximate and subject to change without notice.

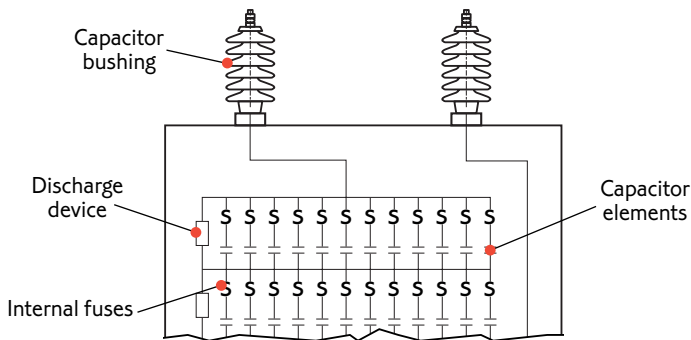


## Capacitor Components

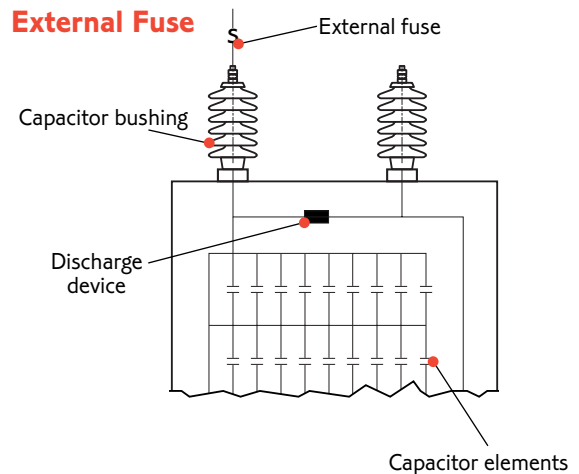


## Fusing Options

### Internal Fuse



### External Fuse



[www.maysteel.com](http://www.maysteel.com)

**MAYSTEEL Electric Power Products** W142 N9041 Fountain Blvd., Menomonee Falls, WI 53051  
PO Box 1240, Menomonee Falls, WI 53052-1240 • Phone 877/219-9728 • Fax 262/251-0069