

Application




Internally Fused Power Capacitors are recommended for the following applications in electrical systems:

- Static compensators;
- Power factor correction / elimination of penalties;
- Series and parallel compensation of reactive power;
- Mitigation of harmonic voltage and current distortions by means of passive harmonic filters.

The fuses act on every faulty internal element until the imbalance protection of the capacitor bank shuts it down.

One of the main advantages of this technology lies in the fact that a higher reactive power builds up inside a capacitor box. This allows capacitor banks to be installed in smaller areas where the physical space is an important issue.

Fully Tested Equipment

-  Bree has its own laboratory that allows it to conduct the routine, type, and special tests set out in international standards (IEEE 18, IEC 60871, and IEC 60143).
-  Bree's own manufacturing plant has ISO 9001, ISO 14001, and ISO 45001 certification.
-  Bree is the nation's largest 100% Brazilian manufacturer of capacitors. The BR in our name stands for Brazil.

Design Features

All Bree Capacitors are manufactured as per the following technical specifications:

- "All-film" technology (dielectric with a polypropylene film) with an aluminum foil and a folded margin;
- Impregnation with WEMCOL II biodegradable oil, providing the best operation at different temperatures;
- Vitrified porcelain bushings as insulators, welded directly to the tank;
- Capacitance tolerance of -5% to 10%;
- Discharge resistor: 50V in 5 min. or 75V in 10 minutes; (call us for other values and times)
- Installation altitude: 1,000 AMS; (call us for higher altitudes)
- PCB-free equipment;
- Temperature class: -40 °C to +50 °C.



Internally Fused Power Capacitors

Specifications

All in all, four internally fused capacitor models are available:

1. Standard-Duty (SD)

Standard-Duty capacitors are developed to withstand system voltage fluctuations in industrial/commercial and transmission and distribution applications. They are designed to operate at 110% overvoltages in a contingency.

Ratings:

- 110% overvoltage in a contingency (12 every 24 hours of operation);
- Operating temperature from -40 °C to +55 °C. (call us for other temperatures)

2. Heavy-Duty (HD)

Heavy-Duty capacitors can operate at 110% overvoltages on a continuous basis.

Ratings:

- 110% overvoltage on a continuous basis;
- Operating temperature from -40 °C to +55 °C. (call us for other temperatures)

3. Extra Heavy-Duty (EHD)

Extra Heavy-Duty capacitors are designed to operate at 125% overvoltages on a continuous basis.

Ratings:

- 125% overvoltage on a continuous basis;
- Operating temperature from -40 °C to +55 °C. (call us for other temperatures)

4. Ultra Heavy-Duty (UHD)

Ultra Heavy-Duty capacitors are designed to withstand an overvoltage as high as 140% on a continuous basis. These are indicated for environments with an extreme harmonic influence.

Ratings:

- 140% overvoltage on a continuous basis;
- Operating temperature from -50 °C to +55 °C. (call us for other temperatures)

Technical Information

POWER (KVAR)	VOLTAGE (V)	DIMENSIONS (mm)				
		A	B	C	D	E
400	3810 to 7200	860	700	405	153	200
	7201 to 9960	930	700	405	153	385
500	3810 to 7200	910	750	405	182	200
	7201 to 9960	980	750	405	182	385
600	3810 to 7200	930	770	405	203	200
	7201 to 9960	1000	770	405	203	385
700	3810 to 7200	1030	870	405	203	200
	7201 to 9960	1100	870	405	203	385
800	3810 to 7200	1130	970	405	203	200
	7201 to 9960	1200	970	405	203	385

Technical Drawing

