

Introduction

PFC capacitors are produced under the latest technology and conforming to international standard of EN/IEC 60831-1&2

BOPP film is dielectric material and the electrode is being prepared by very thin metallic layer in vacuum evaporation process.

Therefore, one of the important features of these capacitors is self-healing property. After self-healing, the capacitors continue working automatically.

In order to prevent the capacitor from exploding or bursting because of rising inside pressure, the safety mechanism is provided by a folded crimp and pushing the lid upwards. This safety mechanism breaks the internal connections and stops the current flow consequently.



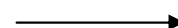
Applications

- Low Voltage distribution networks for power factor correction.
- Automatic and manual capacitor banks for centralized compensation.
- Individual power factor correction for electric motors, transformers & lighting.



Technical data and specification

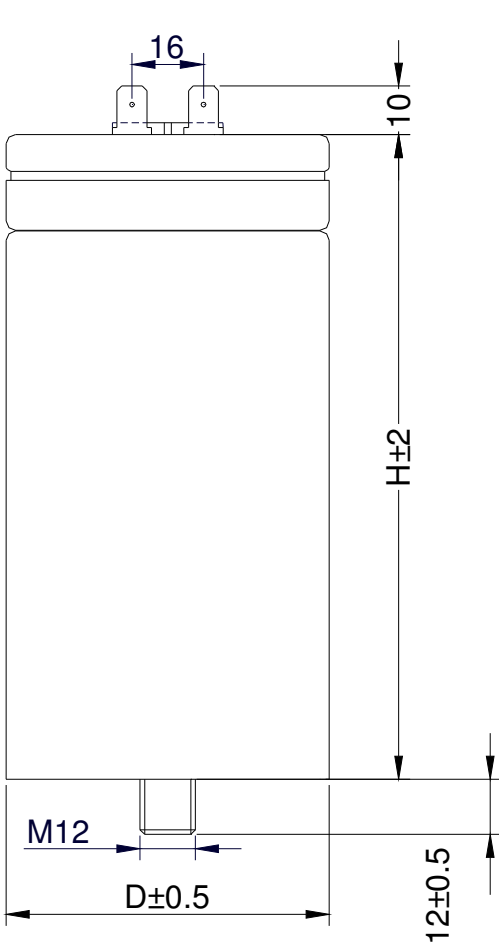
Rated Power (KVAR) Rated Voltage (V) Rated Capacitance (μ F)	According to Specification Table
Capacitance Tolerance (%)	- 5 /+10
Rated Frequency (Hz)	50 (60 Hz on request)
Mean life expectancy	Up to 100,000 operating hours
<u>Permitted Overload</u> - Max. permissible overvoltage (V_{max}) - Max. permissible overcurrent (I_{max})	Rated Voltage +10% (8 h. in every 24 h.) Rated Voltage +15% (30 min. in every 24 h.) Rated Voltage +20% (5 min.) Rated Voltage +30% (1 min.) 1.3 \times Rated current
Permitted ambient temperature	- 25 °C to 55 °C Max. temp. 55 °C Max. mean 24 h = 45 °C Max. mean 1 year = 35 °C
Number of switching operations	Max. 5000 switching per year according to EN/ IEC 60831 / 1&2
Dielectric loss Total loss	< 0.2 Watt / KVAR < 0.5 Watt / KVAR
Max. transient inrush current	100 \times Rated current
Max. discharge time	1 min. (from rated voltage to 75 V)
<u>Voltage Test</u> - Between terminals -Terminal to Can (Case)	2.15 Rated voltage, 2 Sec. 3 KV _{AC} , 10 Sec.
Insulation level	3/8 KV _{AC}



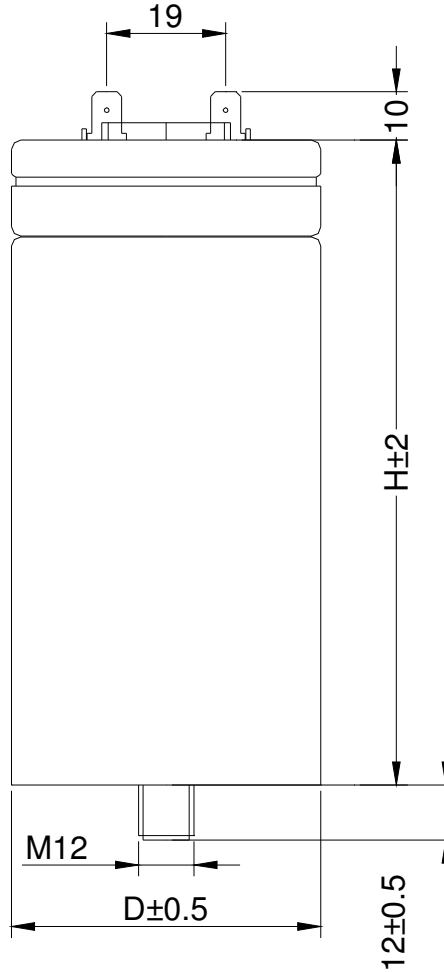
Safety Mechanism	<ul style="list-style-type: none"> - Self-healing technology - Overpressure disconnecter
Protection	IP 00 (IP 20 with protection cap)
Can / Shape	Aluminum / Cylindrical
Max. permissible humidity	95%
<u>Mounting</u> <ul style="list-style-type: none"> - Position - Installation - Expansion space 	Upright Indoor 2 cm (It is necessary to leave free space above the terminals to enable the overpressure protection device operates effectively.)
Max. permissible altitude	2000 m above sea level
Fixing / Grounding	By threaded stud M8 (for can diameter 45) / 5 Nm M12 (for can diameter 50 mm and more) / 12Nm
Fluid material	Non PCB
Terminal type	6.3 mm Single & Double Tag
Standard	EN/IEC 60831-1 & 2

PKC reserves all rights to modify any change of the specifications without prior notice.

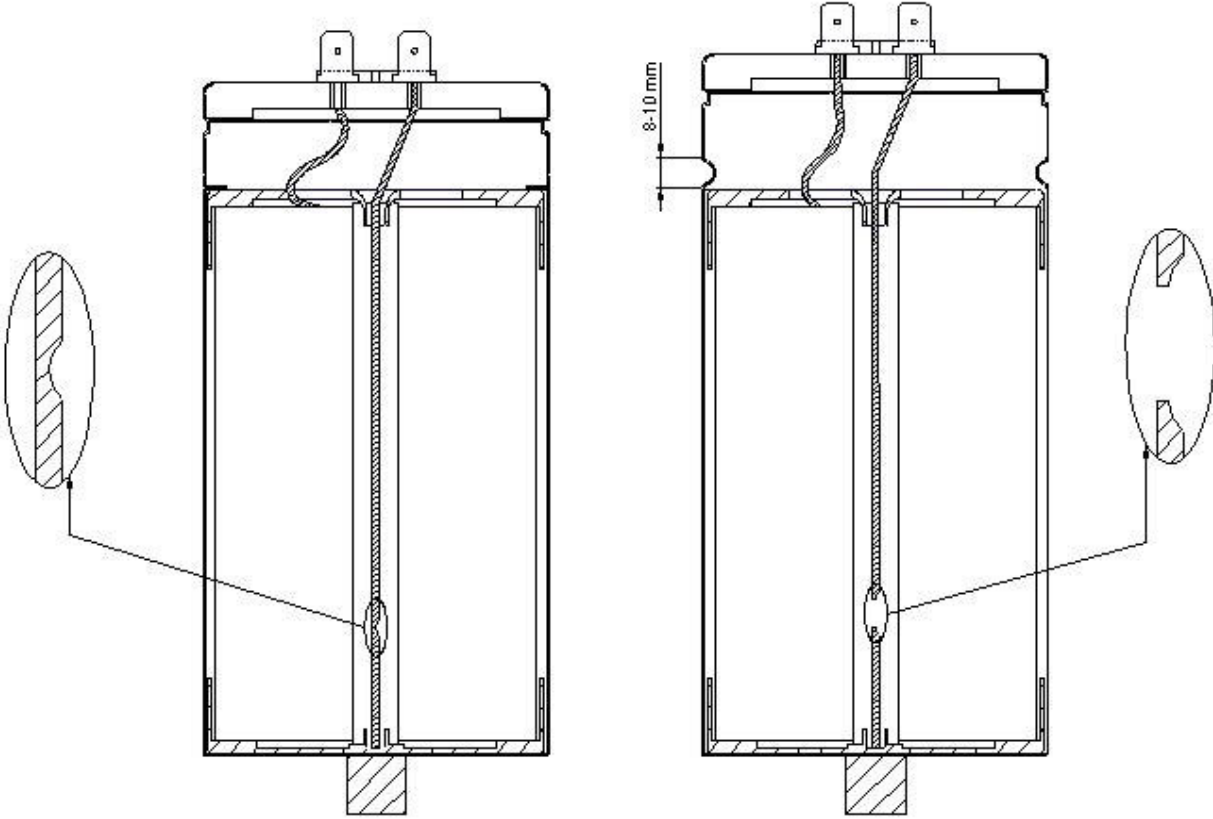
Overpressure Disconnecter Mechanism



iameter of 60 mm and above



Diameter of 45 mm upto 55 mm



Normal operation

After interruption

250V, 50 Hz

Power (Kvar)	Capacitance (μ F)	Current (A)	Type of Terminal	Dimension D x H (mm)	Net Weight (kg)	Cap. Code No.
0.5	25.5	2.0	Single Tag 6.3mm	45*85	0.210	790149
0.83	42.3	3.3	Single Tag 6.3mm	45*109	0.218	790193
1	51.0	4.0	Single Tag 6.3mm	45*129	0.225	790153
1.5	76.4	6.0	Single Tag 6.3mm	50*129	0.265	790163
1.67	85.1	6.7	Single Tag 6.3mm	55*129	0.300	790103
2.5	127.4	10.0	Double Tag 6.3mm	65*129	0.425	790219
4	203.8	16.0	Double Tag 6.3mm	70*149	0.520	790233

400V, 50 Hz

Power (Kvar)	Capacitance (μ F)	Current (A)	Type of Terminal	Dimension D x H (mm)	Net Weight (kg)	Cap. Code No.
0.83	16.5	2.1	Single Tag 6.3mm	45*85	0.200	791191
1.67	33.2	4.2	Single Tag 6.3mm	45*129	0.225	791101
2.5	50	6.3	Single Tag 6.3mm	50*129	0.265	791111
3.33	66.3	8.3	Single Tag 6.3mm	55*129	0.300	791121
4.17	83	10.4	Double Tag 6.3mm	60*129	0.380	791231
5	100	12.5	Double Tag 6.3mm	65*129	0.425	791241

440V, 50 Hz

Power (Kvar)	Capacitance (μ F)	Current (A)	Type of Terminal	Dimension D x H (mm)	Net Weight (kg)	Cap. Code No.
0.83	13.7	1.9	Single Tag 6.3mm	45*85	0.200	790190
1.67	27.5	3.8	Single Tag 6.3mm	45*129	0.225	790100
2.5	41.1	5.7	Single Tag 6.3mm	50*129	0.265	790110
3.33	54.8	7.6	Single Tag 6.3mm	55*129	0.300	790120
4.17	68.6	9.5	Double Tag 6.3mm	65*129	0.425	790230
5	82.2	11.4	Double Tag 6.3mm	70*129	0.515	790240

460V, 50 Hz

Power (Kvar)	Capacitance (μ F)	Current (A)	Type of Terminal	Dimension D x H (mm)	Net Weight (kg)	Cap. Code No.
0.83	12.5	1.8	Single Tag 6.3mm	45*85	0.200	790191
1.67	25.1	3.6	Single Tag 6.3mm	45*129	0.225	790101
2.5	37.6	5.4	Single Tag 6.3mm	50*129	0.265	790111
3.33	50.1	7.2	Single Tag 6.3mm	55*129	0.300	790121
4.17	62.8	9.1	Double Tag 6.3mm	60*129	0.380	790231
5	75.3	10.9	Double Tag 6.3mm	65*129	0.425	790241

480V, 50 Hz

Power (Kvar)	Capacitance (μ F)	Current (A)	Type of Terminal	Dimension D x H (mm)	Net Weight (kg)	Cap. Code No.
0.83	11.5	1.7	Single Tag 6.3mm	45*85	0.200	790194
1.67	23.1	3.5	Single Tag 6.3mm	45*129	0.225	790104
2.5	34.6	5.2	Single Tag 6.3mm	50*129	0.265	790114
3.33	46.0	6.9	Single Tag 6.3mm	55*129	0.300	790124
4.17	57.6	8.7	Double Tag 6.3mm	60*129	0.380	790234
5	69.1	10.4	Double Tag 6.3mm	65*129	0.425	790244

525V, 50 Hz

Power (Kvar)	Capacitance (μ F)	Current (A)	Type of Terminal	Dimension D x H (mm)	Net Weight (kg)	Cap. Code No.
0.83	9.6	1.6	Single Tag 6.3mm	45*85	0.200	790195
1.67	19.3	3.2	Single Tag 6.3mm	45*129	0.225	790105
2.5	28.9	4.8	Single Tag 6.3mm	55*129	0.300	790115
3.33	38.5	6.3	Double Tag 6.3mm	60*129	0.380	790125
4.17	48.2	7.9	Double Tag 6.3mm	65*129	0.425	790235
5	57.8	9.5	Double Tag 6.3mm	70*129	0.515	790245

660V , 50 Hz

Power (Kvar)	Capacitance (µF)	Current (A)	Type of Terminal	Dimension D × H (mm)	Net Weight (kg)	Cap. Code No.
0.83	6.1	1.3	Single Tag 6.3mm	45*85	0.200	790196
1.67	12.2	2.5	Single Tag 6.3mm	45*129	0.225	790106
2.5	18.3	3.8	Single Tag 6.3mm	50*129	0.265	790116
3.33	24.3	5.0	Single Tag 6.3mm	55*129	0.300	790126
4.17	30.5	6.3	Double Tag 6.3mm	65*129	0.425	790236
5	36.6	7.6	Double Tag 6.3mm	70*129	0.515	790246

690V, 50 Hz

Power (Kvar)	Capacitance (µF)	Current (A)	Type of Terminal	Dimension D × H (mm)	Net Weight (kg)	Cap. Code No.
0.83	5.6	1.2	Single Tag 6.3mm	45*85	0.200	790197
1.67	11.2	2.4	Single Tag 6.3mm	45*129	0.225	790107
2.5	16.7	3.6	Single Tag 6.3mm	50*129	0.265	790117
3.33	22.3	4.8	Single Tag 6.3mm	55*129	0.300	790127
4.17	27.9	6.0	Double Tag 6.3mm	60*129	0.380	790237
5	33.4	7.2	Double Tag 6.3mm	65*129	0.425	790247

Note :

- 1) Capacitors of 45mm, 55mm and 60mm can be supplied with IP20 Top Cover.
- 2) The Net Weights are given approximately.
- 3) For diameters of 45mm, M8 Stud will be used and for bigger diameters than 45mm, M12 stud will be applied.