

MKP Low voltage power capacitors

The application of low voltage power capacitors is for the purpose of improving Power Factor in low voltage power networks. Cos Phi capacitors use MKP technology which consists of metallized PP film with an extremely low loss factor. The dielectric system is self-healing and has no liquid impregnate.

Capacitor elements are enclosed in cylindrical aluminum cases and are filled with inert N₂ gas, which is non-toxic and environmentally friendly.

The capacitors have overpressure protection to disconnect it from the supply in the event of internal failure and at the end of its operational life. Capacitors can be installed in any position. Mounting is by M12 stud on the bottom and this can also be used for the earth connection - max tightening torque 5 Nm. Connection in terminal is done by M5 screws - max torque 2 Nm. Connecting cables must permit the capacitor top to rise by 20 mm to ensure correct operation of the overpressure disconnect. Expansion upper part of the capacitor must be free without any fixing clamp. If necessary, fixing clamps can be mounted on the lower capacitor part below the groove only.

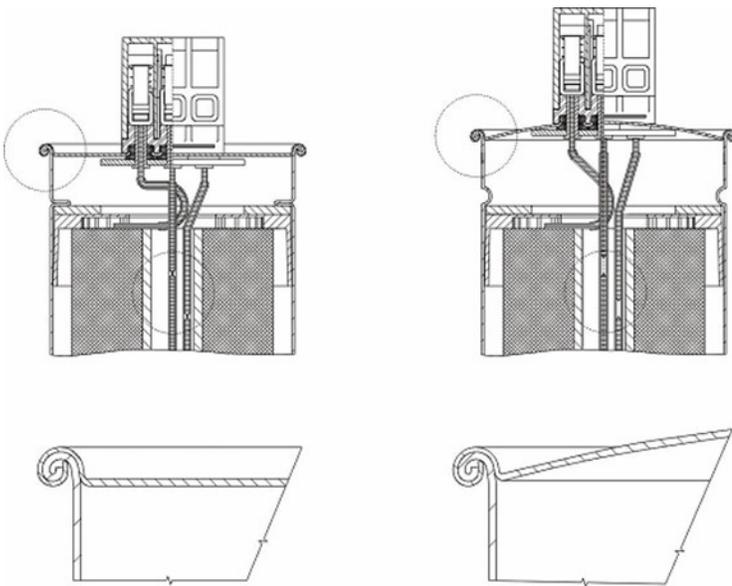


Figure 1 Overpressure disconnect protection

Back up fuses should have A4J characteristics and they should be rated at twice the nominal current of the capacitors).



Rated Voltage: 230, 480, 600, 690

Frequency: 50 / 60 Hz

Max Over Voltage:

- U_N + 10% (up to 8 hrs dailiing)
- U_N + 15% (up to 30 minutes daily)
- U_N + 20% (up to 5 minutes)
- U_N + 30% (up to 1 minute)

Overcurrent: 1.5 –2.0 * I_N

Capacitance tolerance: -5 / +10%

Test Voltage, terminal/terminal:
2.15 * U_N, AC, 2 x

Test Voltage, terminal/case:
U_N < 500V: 3000V AC, 10s
U_N > 500V: 2 x U_N + 2000V AC, 10s

Inrush current: Max 400 x I_N

Life: 150,000-200,000 (depending on voltage & temperature)

Mounting: M12 Stud on bottom, Any position

Case: Aluminum

Dielectric: MKP—metallized PP fim

Impregnant: inert gas N₂

Discharge Resistors: Included - 50V, 1minute or 75V, 3 minutes.