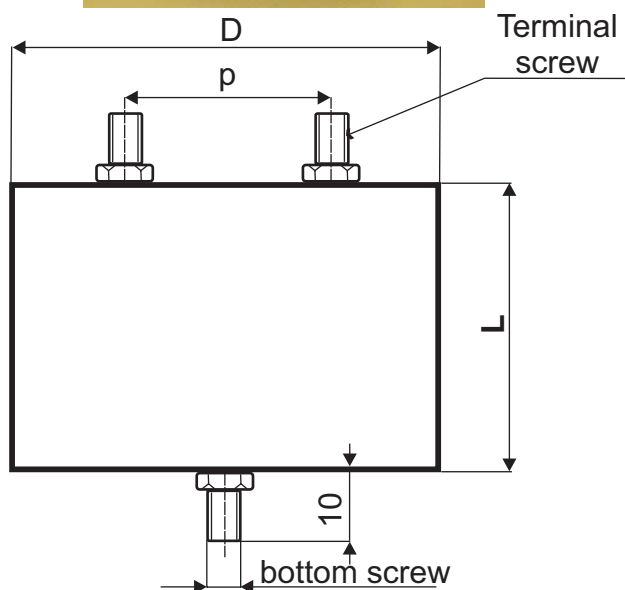


MKP DC Capacitors

MKP 300-099



| Capacit. C_R (μF) | Dimension [mm] | | | | |
|----------------------------------------|----------------|-----|----|-----------------|-----------|
| | D | L | p | Terminal screws | P_L [W] |
| 40 | 50 | 120 | 30 | M6 | 2 |
| 50 | 55 | 120 | 30 | M6 | 3 |
| 60 | 60 | 120 | 30 | M6 | 4 |
| 80 | 75 | 120 | 40 | M6 | 5 |
| 100 | 110 | 120 | 60 | M6 | 7 |
| 120 | 110 | 120 | 60 | M6 | 8 |
| 160 | 110 | 120 | 60 | M6,M8 | 8 |
| 200 | 110 | 120 | 60 | M6,M8 | 8 |
| 240 | 160 | 120 | 80 | M8 | 10 |
| 320 | 160 | 120 | 80 | M8 | 10 |
| 340 | 160 | 120 | 80 | M8 | 10 |

Construction:

Metallized polypropylene film, Non-inductive, self-healing construction. Plastic cylindrical flame retardant case, with bottom screw M8x10, or M10x12, or M12x15 available

Applications:

Filtering, smoothing, all other DC applications

Technical data

Rated voltage U_R : 1000V DC

Rated voltage is the max. DC or peak voltage, for which the capacitor is designed.

If the capacitor works with the DC and also super-imposed AC voltage U_{AC} , the sum of DC and the amplitude of AC must not exceed the U_R

Max permissible AC voltage: 400V 50/60Hz, If the working frequency is higher, the permissible AC voltage must be decreased, not to exceed the max. loss power of the capacitor.

$$\text{Max. } U_{AC(f)} = \sqrt{\frac{P_L}{2\pi f C_R \times \text{tg}\delta}}$$

Rated capacitance: 40 ÷ 300 μF

Tolerance: 10%, 5%

Dissipation factor $\text{Tg}\delta$: < 0,01 at 100Hz and +25°C

Insulation resistance $R_{i,s}$: >10 000/C [M Ω]

Operating temperature range: -40 ÷ +85°C

The highest permissible capacitor temperature at the hottest point of the case must not exceed +85°C.

Max. permitted dissipation power of the capacitor P_L : depend on the construction of the capacitor and the cooling conditions, see table.

Test voltage between terminals: 1,25 × U_R , 1min. at +25°C

All capacitors are tested by the routine test by the manufacturer

Protection against Overvoltages:

The capacitors are self-healing and regenerate themselves after occasional breakdowns. The capacitor remains fully functional after the breakdown.

Permitted Overvoltages in working conditions:

1,10 × U_R max. 30% of the service period

1,15 × U_R max. 30min./day

1,20 × U_R max. 5min./day

1,30 × U_R max. 1min./day

If the Overvoltages exceed the permissible values above, the capacitor might have been destroyed.

Test voltage between terminals and case:

3000VDC, 1min. at +25°C

Max. repetitive rate of voltage rise dU/dt :

< 10V/ μsec at U_R and +25°C

Max. peak current I_p : < $C_R \times dU/dt$

Terminals: screws M6 or M8, or tab connectors 6,3x0,8mm

Related standards: IEC 60384-1, IEC 60384-16

Marking for purchase ordering: MKP 300-099

Warning! The manufacturer is not responsible for any damages, caused by the improper installation and application. Before using the capacitor in any application, please, read carefully this technical data-sheet.