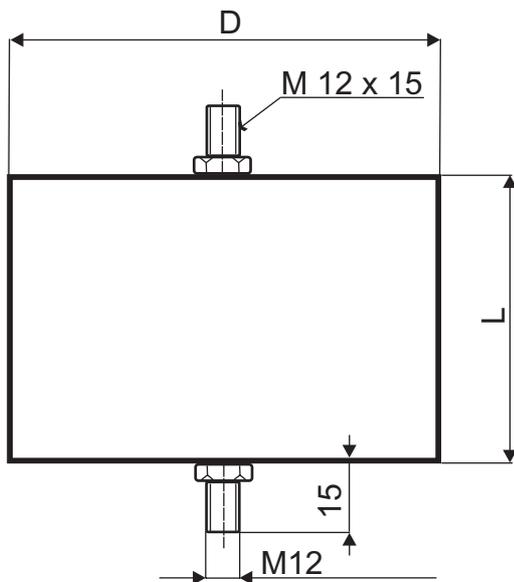


# MKPI 300-125



Capacit. C <sub>R</sub> [µF]	Dimension [mm]		
	D	L	Terminal screw
20	110	75	M 12

## Construction:

Metallized polypropylene film, Non-inductive, self-healing construction. Plastic cylindrical flame retardant case, with bottom screw M 12 x 15.

## Applications:

Filtering, smoothing, all other AC and DC applications with  $dU/dt < 500 \text{ V}/\mu\text{sec}$

## Technical data

### Rated voltage U<sub>R</sub>: 600 VDC

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<sub>AC</sub>, the sum of DC and the amplitude of AC must not exceed the U<sub>R</sub>

### Max permissible AC voltage:

see table  
 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: 20µF

Tolerance: 10%, 5%

Dissipation factor  $\text{Tg}\delta$ :  $< 0,01$  at 1kHz and  $+25^\circ\text{C}$

Insulation resistance R<sub>i,s</sub>:  $> 10 \text{ } 000/\text{C}$  [MΩ]

Operating temperature range:  $-55 \div +85^\circ\text{C}$

The highest permissible capacitor temperature at the hottest point of the case must not exceed  $+85^\circ\text{C}$ .

### Max. permitted dissipation power of the capacitor P<sub>L</sub>:

depend on the construction of the capacitor and the cooling conditions, see table.

Test voltage between terminals:  $1,25 \times U_R$ , 1min. at  $+25^\circ\text{C}$

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:

$1,10 \times U_R$  max. 30% of the service period

$1,15 \times U_R$  max. 30min./day

$1,20 \times U_R$  max. 5min./day

$1,30 \times U_R$  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  $+25^\circ\text{C}$

### Max. repetitive rate of voltage rise dU/dt:

$< 500 \text{ V}/\mu\text{sec}$  at U<sub>R</sub> and  $+25^\circ\text{C}$

Max. peak current I<sub>p</sub>:  $< C_R \times dU/dt$

Terminals: M 12 x 15

Related standards: IEC 60384-1, IEC 60384-17

Marking for purchase ordering: MKPI 300-125

**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.