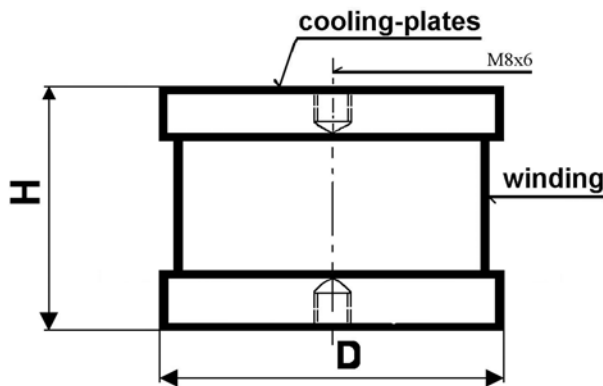


MKP 300-207 SPECIAL POWER CAPACITORS FOR HIGH PULSE LOADING AND HIGH FREQUENCY INDUCTION HEATING



Capacitor 5uF/1500VDC

Dimensions:



C [µF]*	Dimensions [mm]	
	D	H
2,0	50	56 ⁺¹
3,0	60	56 ⁺¹
5,0	70	56 ⁺¹
10,0	100	56 ⁺¹
12,0	110	56 ⁺¹

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.

Construction:

Special winding units soldered on metal plates, which ensure good cooling of the capacitors. The winding unit have non-inductive, self-healing construction,

Applications:

The capacitors are designed for use in high power and high pulse loading and in high frequency resonant circuits of induction heating devices.

The construction of contact-plates are adaptable in accordance to customer requirements.

Technical data:

Rated voltage U_R: 1500DC up to +70°C
recommended working voltage 1200 ÷ 1500VDC, depend on the cooling-condition and working frequency. 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: 700 V_{RMS}/50Hz by good cooling. If the working frequency is higher, the permissible AC voltage must be decreased, not to exceed the max. loss power of the capacitor.

$$P_L = U_{ef}^2 \times 2\pi f \times C_R \times \text{tg}\delta$$

The max. loss power must to be lower than max. power dissipated by the capacitor under the cooling-condition. The power, which the capacitor can radiate

$$P_R = S \times \Delta T \times K$$

S: surface of the case [cm²]
Δ T: temperature rise max. 10°C
K: coefficient [mW/°C x cm²], depend on the cooling-condition

Max. permitted dissipation power of the capacitor: depend on the cooling conditions of the capacitors

Rated capacitance:

2,0 ÷ 12 uF other capacitance on request

Tolerance: ±10%, other tolerance on request

Dissipation factor Tgδ: < 0,0006 at 1kHz and +25°C

ESR: at 100kHz and +25°C < 5mΩ

Self resonant frequency of the winding unit:

> 0,5MHz

Working frequency of the capacitors: up to 200kHz

Insulation resistance R_{IS}: 30 000/C [MΩ]

Operating temperature range: -40 ÷ +70°C

The highest permissible capacitor temperature at the hottest point of the case must not exceed +70°C.

Test voltage between terminals: 1 800VDC, 10sec at +25°C,

All capacitors are tested by the routine test by the producer

Marking for purchase ordering:

MKP300-207 5uF±10% 1500VDC