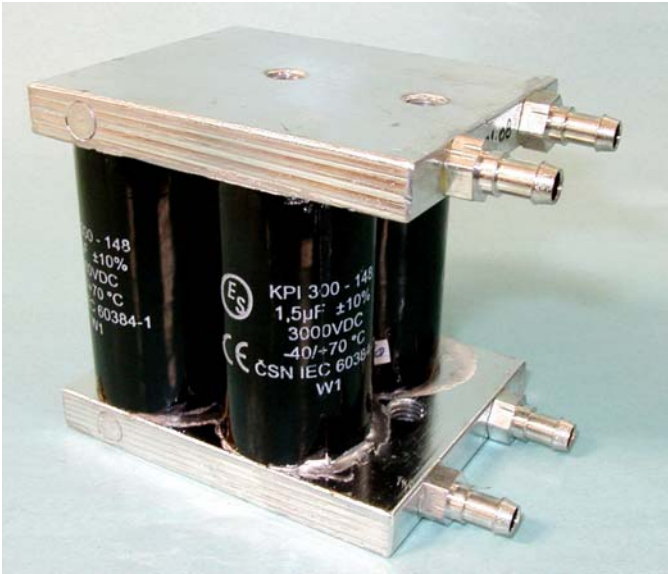
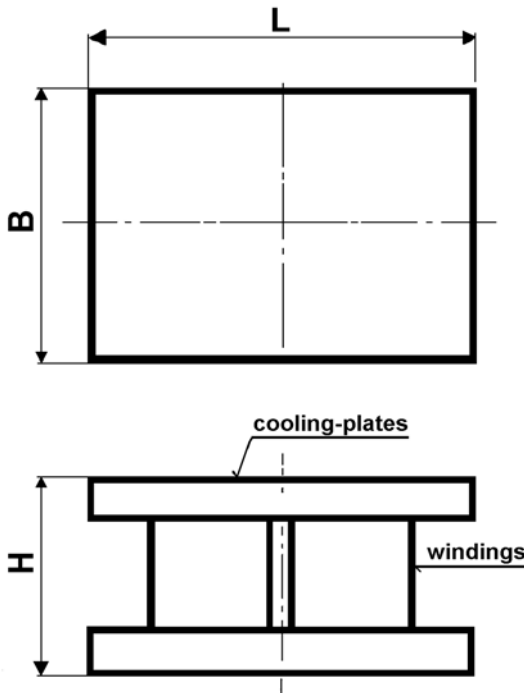


SPECIAL HIGH POWER CAPACITORS FOR HIGH FREQUENCY INDUCTION HEATING KPI300 – 148 1,5uF



Dimensions:

B=65, L=80, H=76⁺¹ mm
other dimensions on request



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 cooling of the capacitors. The winding units have non-inductive, self-healing construction,

Applications:

The capacitors are designed for use in very high power and 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: 3000VDC MAX.

recommended working voltage 2000 ÷ 2400VDC, 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: 750 V_{RMS}/50Hz, by good fluid-cooling.

If the working frequency is higher, the permissible AC voltage must be decreased, not to exceed the max. loss power of the capacitor.

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

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

Rated capacitance:

0,8 ÷ 1,5uF, 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 < 2,5mΩ, by 4w Method

Self resonant frequency of the winding unit:> 1MHz

Working frequency of the capacitors: up to 0,4MHz

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.

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

Test voltage between terminals: 3000VDC, 1min at +25°C, All capacitors are tested by the routine test by the producer

Marking for purchase ordering:

KPI300-148 1,5uF 3000VDC