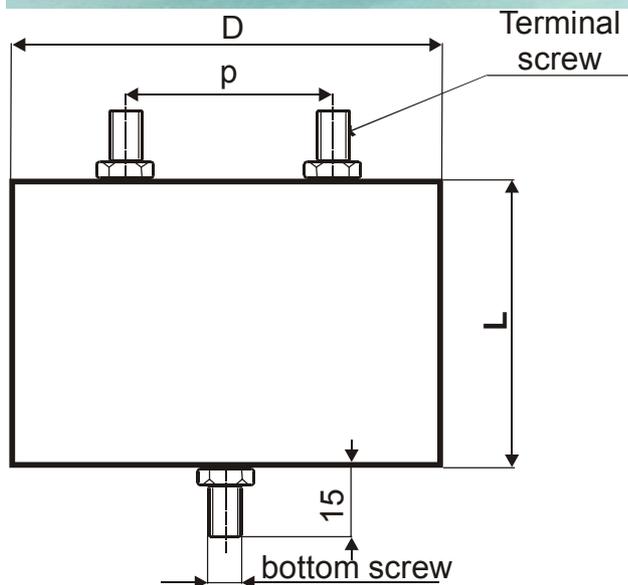




KPI 300-171 CAPACITORS FOR AC HIGH PULSE LOADING



Capacit. C_R [μ F]	Dimensions [mm]				
	D	L	p	Terminal screw	P_L [W]
30	160	90	100	M10	25

Other Capacitance on request

Construction:

Metal electrodes, polypropylene film dielectricum, Non-inductive, self-healing construction, Plastic cylindrical flame retardant case, with bottom screw M12x15 available

Applications:

High pulse loading, high current and other AC 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: 600V 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: up to 30 μ F

Tolerance: $\pm 10\%$, $\pm 5\%$,

Dissipation factor $\text{Tg} \delta$: $< 0,001$ at 1kHz and $+25^\circ\text{C}$

Insulation resistance R_{IS} : > 1000 [$M\Omega$]

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_L : 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 producer

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:

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

$< 1000\text{V}/\mu\text{sec}$ at U_R and $+25^\circ\text{C}$

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

Terminals: screws M10

Related standards: IEC 60384-1

Marking for purchase ordering:

KPI300-171 30 μ F $\pm 10\%$ 1000VDC/600V 50Hz

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.