

Motor capacitors

MKP 351, MKP 353

Construction:

The motor run capacitors are made of metallized polypropylene film in plastic prismatic case sealed with epoxy resin.

The case and resin are self - extinguishing.

The basic construction of capacitors is construction A.

On request the capacitors are made:

- with mounting clamp - construction B,
- with metallic mounting clamps - construction C
- with two metallic clamps - construction D
- with metallic clamp - construction E.

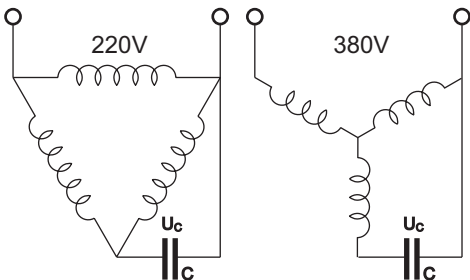
The capacitors with short tinned cooper wire - construction A are to be applied in printed circuits.

The other construction of capacitors is to be mounted in electronic devices or direct in to the terminal box of motors.

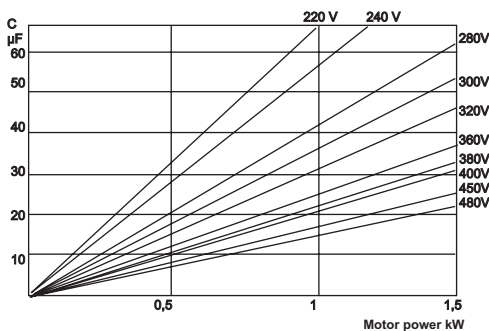
Application:

Motor capacitors are designed for the operation of induction motors on single phase mains supplies and also for the operation of three phase asynchronous Motors on single phase AC mains supplies. Motor capacitors can also be used in any AC application provided the specified operating conditions and permissible loads are not exceeded.

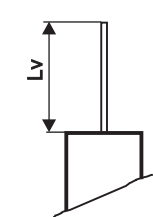
The operation of low-power motors can be enabled using a capacitors connected as shown below.



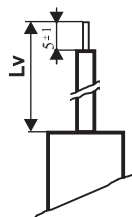
The capacitance for the motor power and working voltage can be provided by the graph.



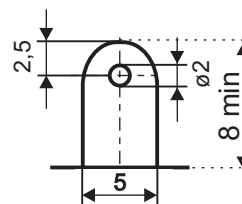
The construction of leads is shown on pictures below:



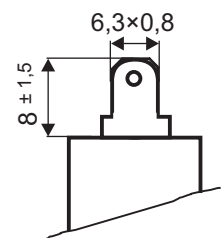
tinned cooper wire



stranded wire $s=0,5\text{mm}^2$ or insulated wire $\varnothing 0,8$
 length of leads: $L_V = 40^{+5}$, other length of leads on request



solder tags



fastons or dual fastons

Rated capacitance C_R - see table

Other values on request.

Tolerance of capacitance: $\pm 20\%(M), \pm 10\%(K), \pm 5\%(J)$

Reference standards: EN 60252, IEC 60252/93

Approvals: IECEE- CB - certificate CZ - 926(1.000906-00/1,2)

THE ESČ MARK - a symbol of the product safety and reliability

Climatic category: 40/085/21 (IEC 600 68-1)



Temperature range: $-40^\circ\text{C} + +85^\circ\text{C}$

Dissipation factor: $(+25^\circ\text{C}; 1\text{kHz}) \text{tg}\delta \leq 0,001$

Rated voltage U_R 50/60 Hz

Test voltage:

- between terminals: $2 \times U_R, 50/60 \text{ Hz}$ (2 sec, $+25^\circ\text{C}$)

- between terminals and case: $2 \times U_R + 1000\text{V}$ 50/60 Hz (1min),
 min. 2000V 50/60 Hz (1min)

Insulation resistance between terminals:

$(+25^\circ\text{C}, 100 \text{ VDC}/1\text{min}) R_{is} \geq 10 \text{ GOhm}/ \text{C}[\mu\text{F}]$

Max. pulse rise time: $dU_R/dt \leq 20\text{V}/\mu\text{sec}$

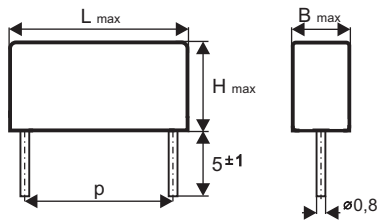
Construction A:

Type	MKP 351		MKP 353	
	250 AC/450 DC		400/450 AC/1000 DC	
	Rozměry [mm]		Dimensions [mm]	
Rated cap. C_R [μF]	B x H x L	p	B x H x L	p
0.22	6 x 15 x 26.5	22.5	7.0 x 16.5 x 26.5	22.5
0.33	7 x 16.5 x 26.5	22.5	9 x 17 x 31.5	27.5
0.47	9.0 x 18.5 x 26.5	22.5	10 x 20 x 32	27.5
0.68	10 x 20 x 32	27.5	13 x 22 x 32	27.5
1.00	13 x 22 x 32	27.5	11 x 22 x 42	37.5
1.50	15 x 24.5 x 32	27.5	14 x 25 x 42	37.5
2.00	14 x 25 x 42	37.5	16.5 x 27.5 x 42	37.5
2.50	14 x 25 x 42	37.5	16.5 x 27.5 x 42	37.5
3.00	16.5 x 27.5 x 42	37.5	22 x 37 x 32	27.5
3.50	16.5 x 27.5 x 42	37.5	22 x 37 x 32	27.5
4.00	16.5 x 27.5 x 42	37.5	22 x 37 x 32	27.5
5.00	22 x 37 x 32	27.5	27 x 37 x 42.5	37.5
6.00	22 x 37 x 32	27.5	27 x 39 x 58.5	52.5
7.00	22 x 37 x 32	27.5	27 x 39 x 58.5	52.5
8.00	27 x 37 x 42.5	37.5		
9.00	27 x 37 x 42.5	37.5		
10.00	27 x 39 x 58.5	52.5		

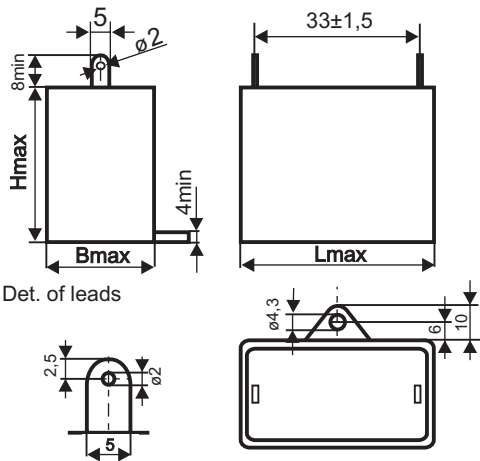
other dimensions of boxes on request

Motor capacitors

Construction A:



Construction B:

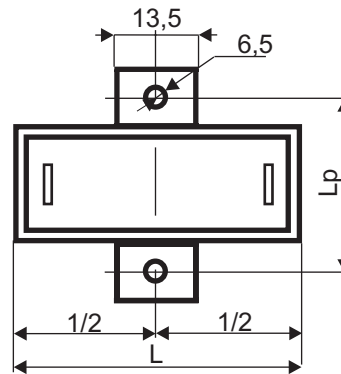


Construction C:

Construction with metallic clamp at the base

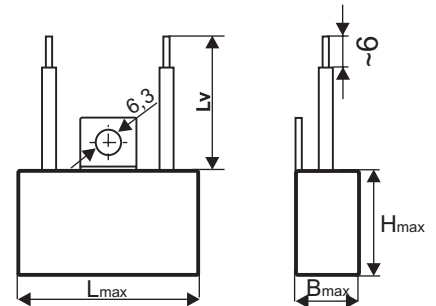


Construction D:



Construction E:

Construction with metallic clamp on the side of leads



Construction B:

Type	MKP 351	MKP 353
	250 AC/450 DC	400/450 AC/1000 DC
Rated cap. C_r [µF]	Dimensions [mm]	
	B x H x L	
1.00		19 x 32 x 38
1.50		19 x 32 x 38
2.00		19 x 32 x 38
3.00	19 x 32 x 39	23 x 36 x 38
3.30	19 x 32 x 39	23 x 36 x 38
3.50	19 x 32 x 39	23 x 36 x 38
4.00	19 x 32 x 39	23 x 36 x 38
4.50	19 x 32 x 39	26,5 x 39,5 x 38
5.00	23 x 35 x 39	26,5 x 39,5 x 38
6.00	23 x 36 x 38	
7.00	23 x 36 x 38	
8.00	26,5 x 39,5 x 38	
9.00	26,5 x 39,5 x 38	

Standardly we supply the capacitors with construction A for PCB.

On request we also supply:

- construction B - leads: solder tags or fastons or stranded wire
- construction C - with metallic clamp at the base, leads on request
- construction D - two metallic clamps at the base, leads on request
- construction E - metallic clamp on the side of leads, leads on request

If the customer do nto specify the construction, the manufacturer supply the capacitors with construction A for PCB.