

Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: 450 V
Ordering code: B32330 / B32332
Date: July 2016
Version: 6

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EPCOS AG is a TDK Group Company.

Construction

- Metallized polypropylene film
- Aluminum can with plastic top
- Filling material soft polyurethane resin

Features

- Self-healing properties
- Low dissipation factor
- Overpressure disconnection safety device
- S2 safety class as per IEC-60252-1(ed-2) am1
- High insulation resistance
- EN 60335-1 compliance on request

Applications

- For general sine wave application, mainly as motor run

Terminals

- B32330 - Single fast-on 6.3 x 0.8 mm / Single fast-on 4.8 x 0.5 mm on request
- B32332 - Double fast-on 6.3 x 0.8 mm

Mounting parts (optional)

- Threaded stud at bottom of can (M8, Max torque= 5 Nm)






Technical data and specifications	
Reference standards	DIN EN 60252-1:2014-07, IEC 60252-1 (ed 2) am1 UL 810
Safety class to IEC 60252-1 2013	S2
Life expectancy to IEC 60252-1 2013	450 V : 30000 h (Class A)
UL 810 file E106388	Approved component
Rated capacitance C_R	See table ordering code, page 6
Tolerance Tx	+/- 5%
Rated voltage V_{rms}	450 V AC
Rated frequency f_R	50/60 Hz

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Maximum ratings	
Maximum permissible voltage V_{\max}	$1.1 \cdot V_R$ (V_R = Rated voltage)
Maximum permissible current I_{\max}	$1.3 \cdot I_R$ (I_R = Rated current)
Test data	
AC test voltage terminal to terminal V_{TT}	$2.0 \cdot V_R$, 2 s (routine test) $2.0 \cdot V_R$, 60 s (type test)
AC test voltage terminal to can V_{TC}	2 kVAC, 2 s (routine test) 2 kVAC, 60 s (type test)
Insulation resistance R_{ins} or time constant at +20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	3000 s
Dissipation factor $\tan \delta$ at +20 °C	$\leq 7 \cdot 10^{-3}$ (1 kHz)
Maximum rate of voltage rise dV/dt_{\max}	10 V/ μ s
Climatic data	
Climatic category	25/085/21 to IEC 60068-1
Lower category T_{\min}	-25 °C
Upper category T_{\max}	+85 °C
Damp heat test t_{test}	21 days
Mechanical and thermal properties of terminal insulator material	
Ball pressure test to IEC 60309-1 sec. 27.3	At +125 °C
Plastic can and top disk material	UL 94 V2 minimum
<ul style="list-style-type: none"> UL 94 V2/V0 compatible Glow wire test to IEC60335-1 / IEC 60695-2-1/1 Test temperature +750 °C Part is compatible to EN 60335-1 	Self-extinguish within 2 seconds of withdrawing glow wire without igniting wrapping tissue of GWT
<ul style="list-style-type: none"> Tracking test to IEC 60112 solution A 	> 250 V
Compatibility to RoHS	
Compliance to directive 2011/65/EU	
Approvals: see table for approved ratings	
UL 810 E106388 	Approved component 10000 AFC, protected up to 450 V
VDE EN 60252-1 	Approved up to 20 μ F, 450 V / +85 °C : 30000 h (Class A)

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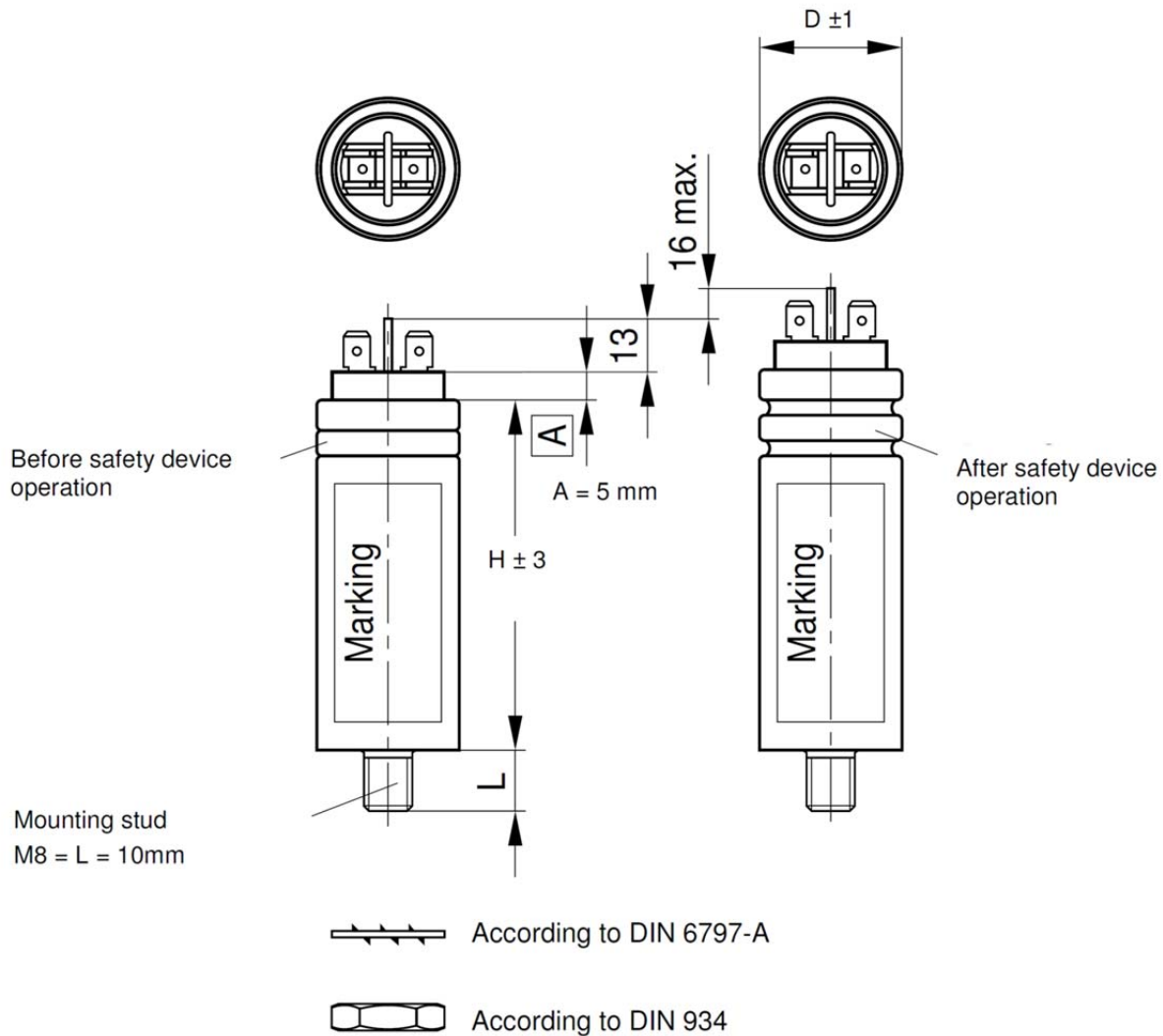
450 V

TÜV EN 60252-1 	Approved up to 50 uF, 450 V / +85 °C : 30000 h (Class A)
CQC 	Approval on request
	Compliance to LV directive 2014/35/EU
Logistics	
Delivery mode	<ul style="list-style-type: none"> ■ EU palette as standard ■ Cardboard tape on palette ■ Pack unit, see dimension table

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Dimensional drawing



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Ordering codes

Rated voltage V_R V AC	Rated capacitance C_R μF	Dimensions D x H mm	Ordering code	Approvals / Life class				Packing unit pcs
				VDE	TÜV	UL	CQC	
450	1	30 x 52	B3233*I6105J0#0	A	A	●	●	49
	1.5	30 x 52	B3233*I6155J0#0	A	A	●	●	49
	2	30 x 52	B3233*I6205J0#0	A	A	●	●	49
	2.5	30 x 52	B3233*I6255J0#1	A	A	●	●	49
	3	30 x 52	B3233*I6305J0#0	A	A	●	●	49
	3.5	30 x 52	B3233*I6355J0#0	A	A	●	●	49
	4	30 x 52	B3233*I6405J0#0	A	A	●	●	49
	5	30 x 52	B3233*I6505J0#1	A	A	●	●	49
	6	30 x 52	B3233*I6605J0#0	A	A	●	●	49
	7	30 x 52	B3233*I6705J0#0	A	A	●	●	49
	7.5	30 x 68	B3233*I6755J0#0	A	A	●	●	49
	8	30 x 68	B3233*I6805J0#0	A	A	●	●	49
	9	30 x 68	B3233*I6905J0#0	A	A	●	●	49
	10	30 x 68	B3233*I6106J0#0	A	A	●	●	49
	11	30 x 78	B3233*I6116J0#0	A	A	●	●	49
	12	30 x 78	B3233*I6126J0#0	A	A	●	●	49
	15	30 x 78	B3233*I6156J0#0	A	A	●	●	49
	17	30 x 93	B3233*I6176J0#0	A	A	●	●	49
	18	30 x 93	B3233*I6186J0#0	A	A	●	●	49
	20	30 x 93	B3233*I6206J0#1	A	A	●	●	49
	22	35 x 93	B3233*I6226J0#2	--	A	●	●	36
	25	35 x 93	B3233*I6256J0#0	--	A	●	●	36
	30	35 x 93	B3233*I6306J0#0	--	A	●	●	36
	35	35 x 103	B3233*I6356J0#1	--	A	●	●	36
	36	40 x 103	B3233*I6366J0#1	--	A	●	●	36
	40	40 x 103	B3233*I6406J0#1	--	A	●	●	36
	45	40 x 103	B3233*I6456J0#1	--	A	●	●	36
	50	45 x 103	B3233*I6506J0#1	--	A	●	●	25
	55	45 x 103	B3233*I6556J0#2	--	--	●	●	25
	60	45 x 103	B3233*I6606J0#2	--	--	●	●	25

Composition of ordering code

*: Terminals

0 Single fast-on terminals

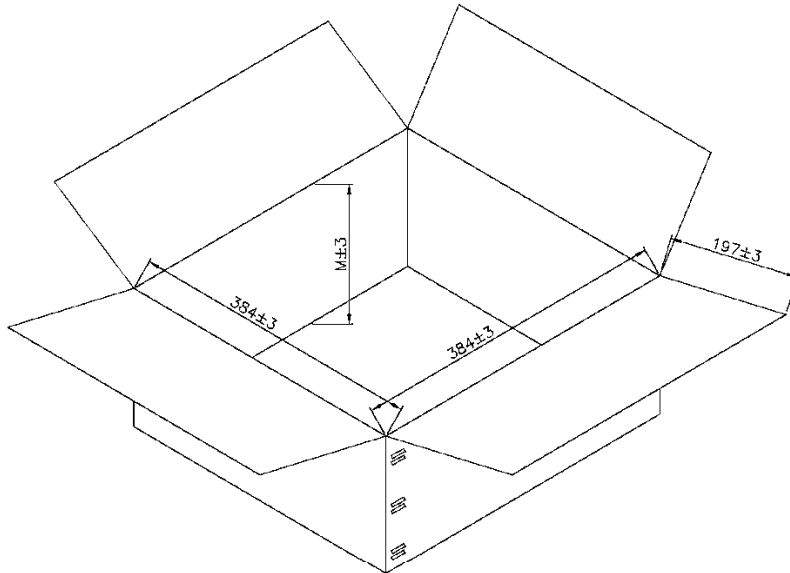
2 Double fast-on terminals

#: Construction of can and plastic top

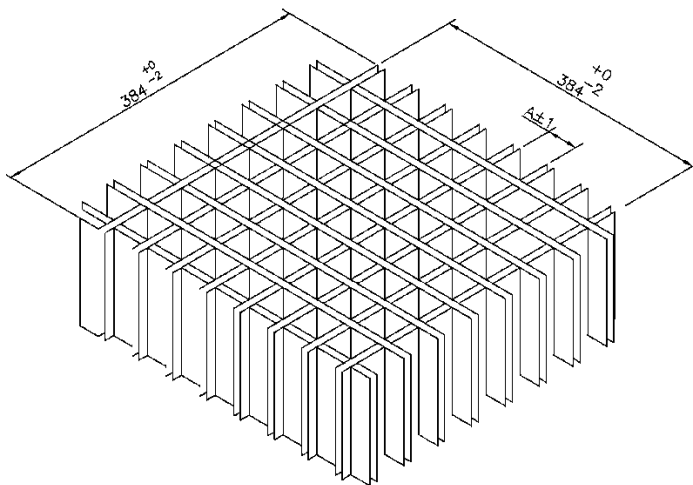
6 Aluminum can: UL 94 V2/V0 top/IEC 60335- 1

8 Aluminum can with M 8 bolt: UL 94 V2/V0 top/IEC 60335-1

Packing box



$M = H(\text{Capacitor height}) - \text{Terminal height} + 10\text{mm min.}$



Please read “Applications warning, installation and maintenance instructions” and the “ZVEI - General safety recommendations for power capacitors”, which are available on the Internet at **www.epcos.com/ac_capacitors**, to ensure optimum performance and to prevent products from failing, and in worst case, bursting and fire. Information given in the data sheet reflects typical specifications.

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