

Film Capacitors – AC Capacitors

Motor run capacitors

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

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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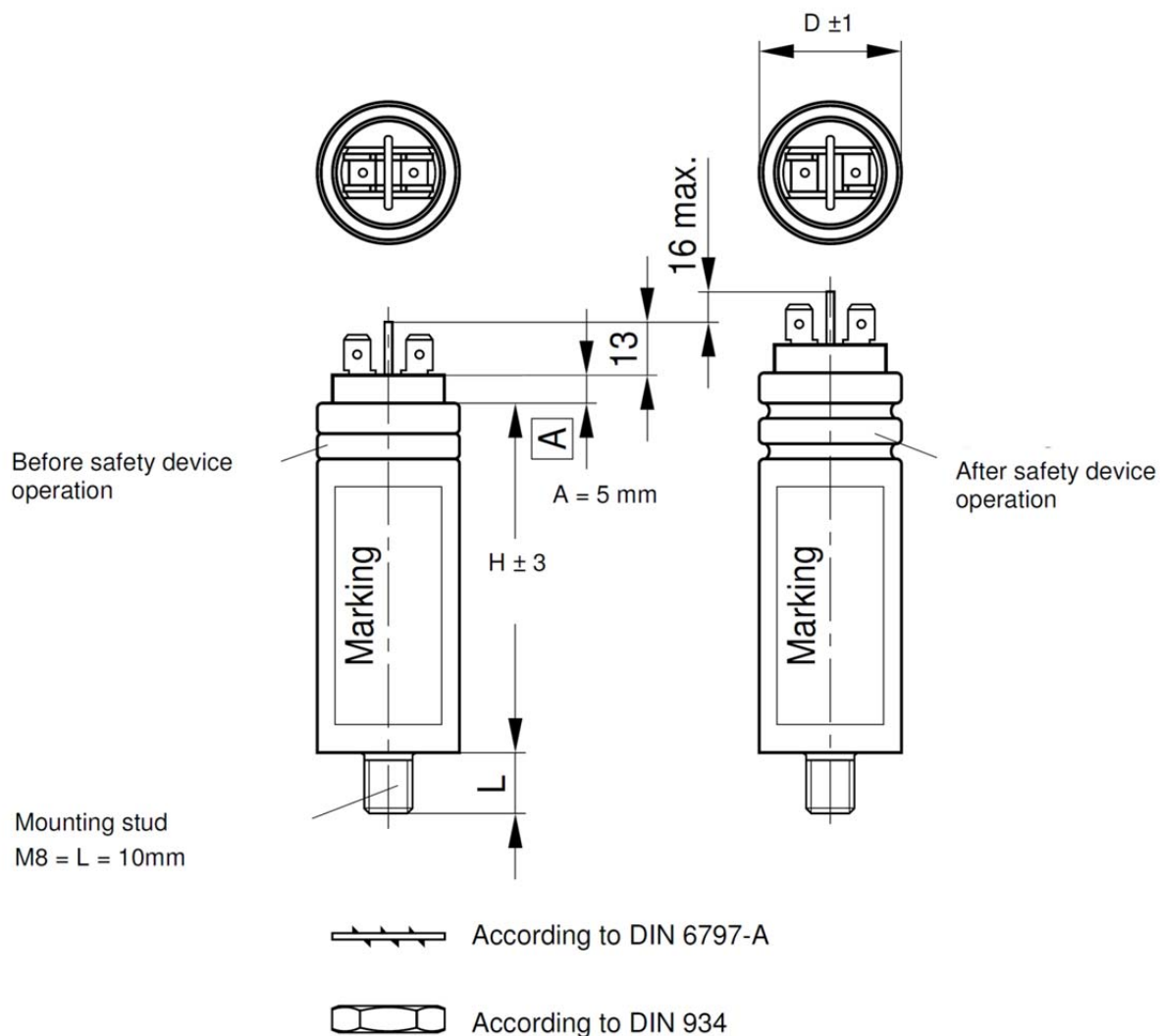
450 V

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 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
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)

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	■ EU palette as standard ■ Cardboard tape on palette ■ Pack unit, see dimension table

Display of ordering codes for EPCOS products

The ordering code for one and the same EPCOS product can be represented differently in data sheets, data books, other publications, on the EPCOS website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products.** Detailed information can be found on the Internet under www.epcos.com/orderingcodes

Dimensional drawing


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

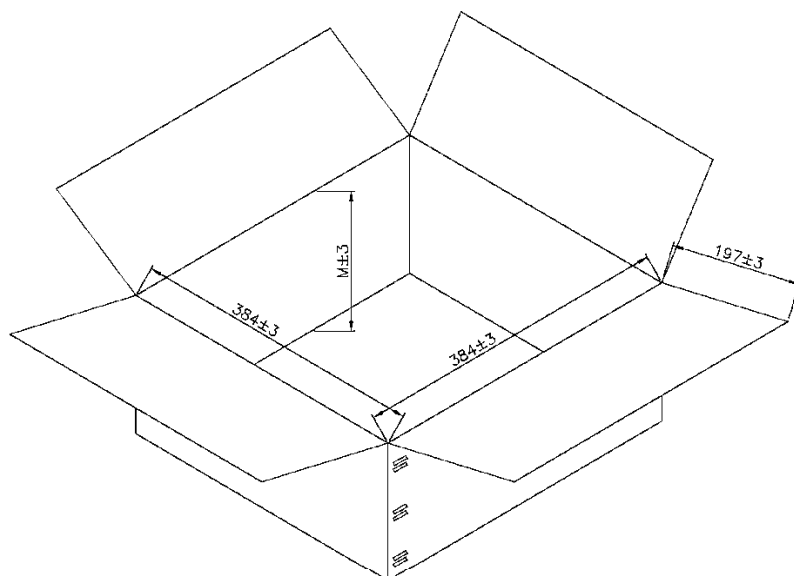
0 Single fast-on terminals

2 Double fast-on terminals

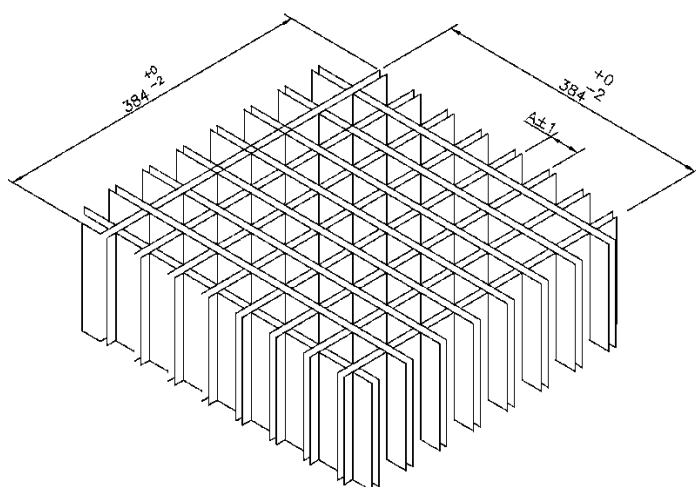
#: Construction of can and plastic top

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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