Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: **B32333 - 450V**
Ordering code: **B32333***

Date: July 2016
Version: 9

EPCOS AG is a TDK Group Company.

Construction

- Metallized polypropylene film
- Aluminum can with protective aluminum cover
- 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

- Twin core cable, double insulated, (H05V2V2F)
- Twin core cable UL style on request
- Compliance to IEC60112
- Receptacles on request

Mounting Parts (Optional)

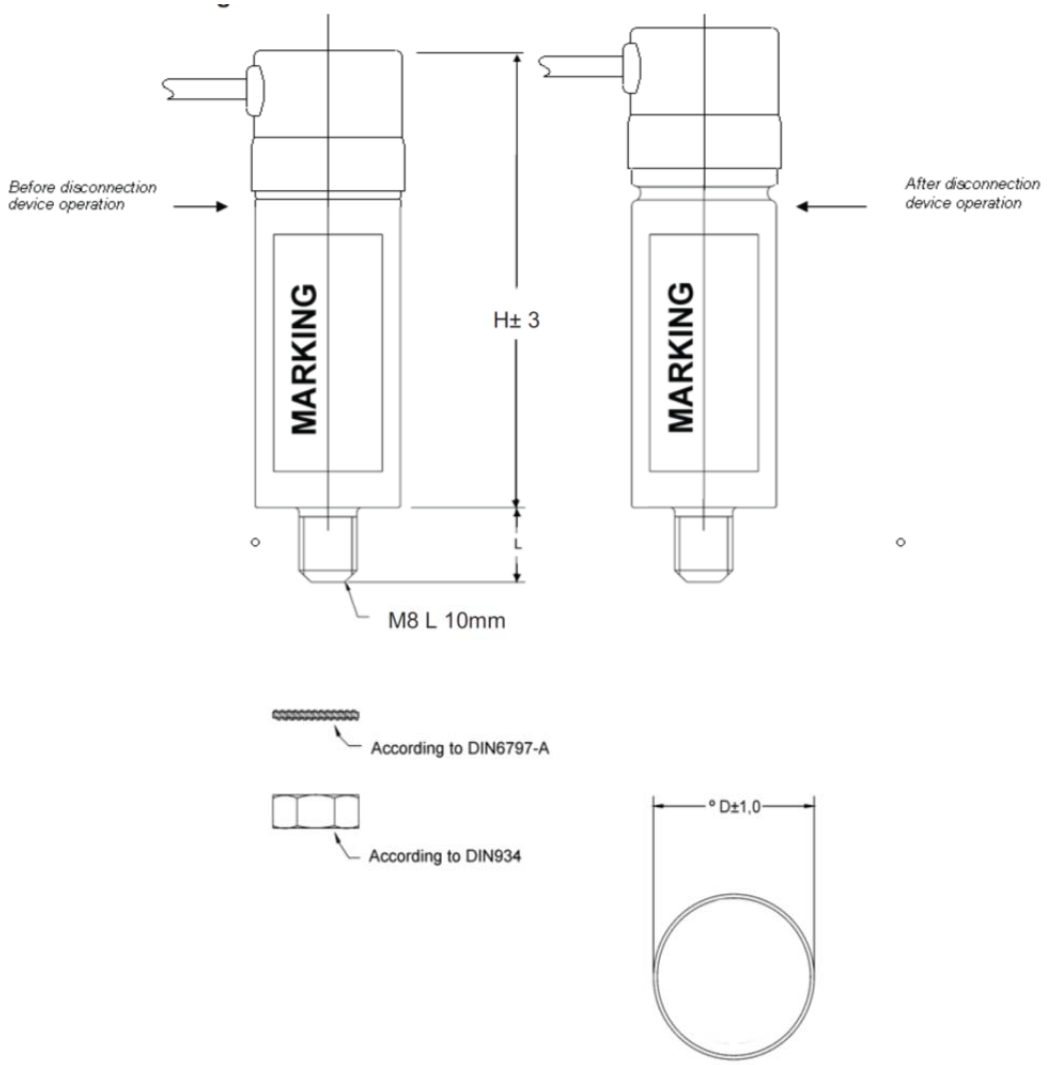
- Threaded stud at bottom of can (M8, Max torque= 5 Nm) as option

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 10000 AFC
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

Maximum ratings	
Maximum permissible voltage V_{max}	1.1 • V_R (V_R = Rated voltage)
Maximum permissible current I_{max}	1.3 • I_R (I_R = Rated current)
Test data	
AC test voltage terminal to terminal V_{TT}	2.0 • V_R, 2 s (routine test) 2.0 • 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 ℃, rel. humidity ≤65% (minimum as-delivered values)	3000 s
Dissipation factor tan δ at +20 ℃	≤ 10 • 10^{-3} (1 kHz)
Maximum rate of voltage rise dV/dt_{max}	10 V/µs
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	See option A or option B
Option A: ■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-10/11 Test temperature +550 °C for I_R ≤ 0.5 A ■ Test temperature +850 °C for I_R > 0.5 A	Self-extinguish within 30 seconds of withdrawing glow wire without igniting wrapping tissue of GWT
Option B: ■ UL 94 V2/V0 compatible ■ Glow wire test to IEC60335-1 Test temperature +750 °C ■ Part is compatible to EN 60335-1	Self-extinguishing within 2 seconds of withdrawing glow wire without igniting wrapping tissue of GWT
Tracking test to IEC 60112 solution A	> 250 V
Protection class acc. IEC 60529 2001	IP 55
Compatibility to RoHS	
Compliance to directive 2011/65/EU	RoHS compatible

Approvals: See table for approved ratings	
UL 810 E106388 c UL us	Approved component 10000AFC Protected up to 450V
VDE EN 60252-1 DVE	Approved up to 20 uF , 450 V / 85°C : 30000 h (Class A)
TÜV EN 60252-1 TÜV	Approved up to 50 uF , 450 V / 85°C : 30000 h (Class A)
CQC CQC	Approval on request
CE	Compliance to LV directive 2014/35/EU
Logistics	
Delivery mode	■ EU palette as standard ■ Cardboard tape on palette ■ Pack unit, see dimension table

Dimensional drawing and marking



Ordering codes and packing unit

Rated voltage V_R V AC	Rated current C_R µF	Dimension D x H mm	Ordering code	VDE	TUV	UL	CQC	Packing unit pcs
450	1	30 x 74	B32333I6105J0#X	A	A	●	●	49
	1.5	30 x 74	B32333I6155J0#X	A	A	●	●	49
	2	30 x 74	B32333I6205J0#X	A	A	●	●	49
	2.5	30 x 74	B32333I6255J0#X	A	A	●	●	49
	3	30 x 74	B32333I6305J0#X	A	A	●	●	49
	3.5	30 x 74	B32333I6355J0#X	A	A	●	●	49
	4	30 x 74	B32333I6405J0#X	A	A	●	●	49
	5	30 x 74	B32333I6505J0#X	A	A	●	●	49
	6	30 x 74	B32333I6605J0#X	A	A	●	●	49
	7	30 x 74	B32333I6705J0#X	A	A	●	●	49
	7.5	30 x 90	B32333I6755J0#X	A	A	●	●	49
	8	30 x 90	B32333I6805J0#X	A	A	●	●	49
	9	30 x 90	B32333I6905J0#X	A	A	●	●	49
	10	30 x 90	B32333I6106J0#X	A	A	●	●	49
	12	30 x 100	B32333I6126J0#X	A	A	●	●	49
	15	30 x 100	B32333I6156J0#X	A	A	●	●	49
	17	30 x 115	B32333I6176J0#X	A	A	●	●	49
	20	30 x 115	B32333I6206J0#X	A	A	●	●	49
	25	35 x 115	B32333I6256J0#X	--	A	●	●	36
	30	35 x 115	B32333I6306J0#X	--	A	●	●	36
	35	35 x 125	B32333I6356J0#X	--	A	●	●	36
	36	40 x 125	B32333I6366J0#X	--	A	●	●	36
	40	40 x 125	B32333I6406J0#X	--	A	●	●	36
	45	40 x 125	B32333I6456J0#X	--	A	●	●	36
	50	45 x 125	B32333I6506J0#X	--	A	●	●	25
	55	45 x 125	B32333I6556J0#X	--	--	●	●	25
	60	45 x 125	B32333I6606J0#X	--	--	●	●	25

Composition of ordering code

#: construction

5 Aluminum can flat type, option A: UL 94 V2 top
6 Aluminum can flat type, option B: UL 94 V2/V0 top/IEC 60335-1
7 Aluminum can with M8 bolt, option A: UL 94 V2 top
8 Aluminum can with M8 bolt, option B: UL 94 V2/V0 top/IEC 60335-1

X: 0 as per this dimension and properties
1-9 special dimension and properties

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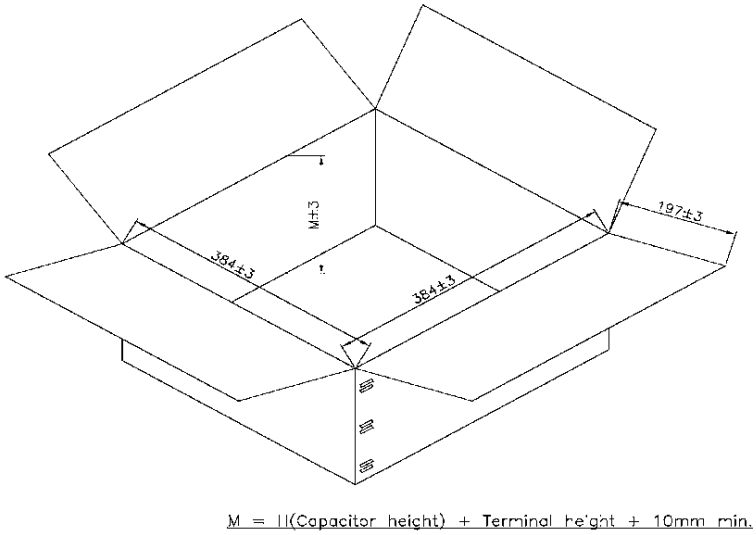
Packing box



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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