



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: Super MotorCap™, 420/450 V
Ordering code: B32330*/B32332*
Date: 2018-08-21
Version: 2

© EPCOS AG 2018. Reproduction, publication and dissemination of this publication, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited.

EPCOS AG is a TDK Group Company.

Construction

- Metallized polypropylene film
- Aluminum can with plastic top
- Soft polyurethane resin

Applications

- For general sine wave applications, mainly as motor run capacitor

Features

- Self-healing properties
- Low dissipation factor
- Safety level P2/ S2
- Overpressure disconnection device
- High insulation resistance
- EN 60335-1 compliance on request



Picture only for reference


Terminals




- B32330 – Single Fast-on: 6.3 x 0.8 mm / Single Fast-on 4.8 x 0.5 mm
- 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	IEC 60252-1 2001-02, EN 60252 2001 UL 810, IS2993 :1998
Life expectancy to IEC 60252 2001	420/450 V: 30000 h (class A) 10000 h(class B)
Safety class	S2 / P2
UL 810 file E 106388	Approved component 10000 AFC protected up to 450 V
Rated capacitance C_R	See table ordering codes, page 6
Tolerance	±5%
Permitted capacitance $\Delta C/C$	≤3%
Rated voltage V_R	420/450 V AC
Rated frequency f_R	50/60 Hz

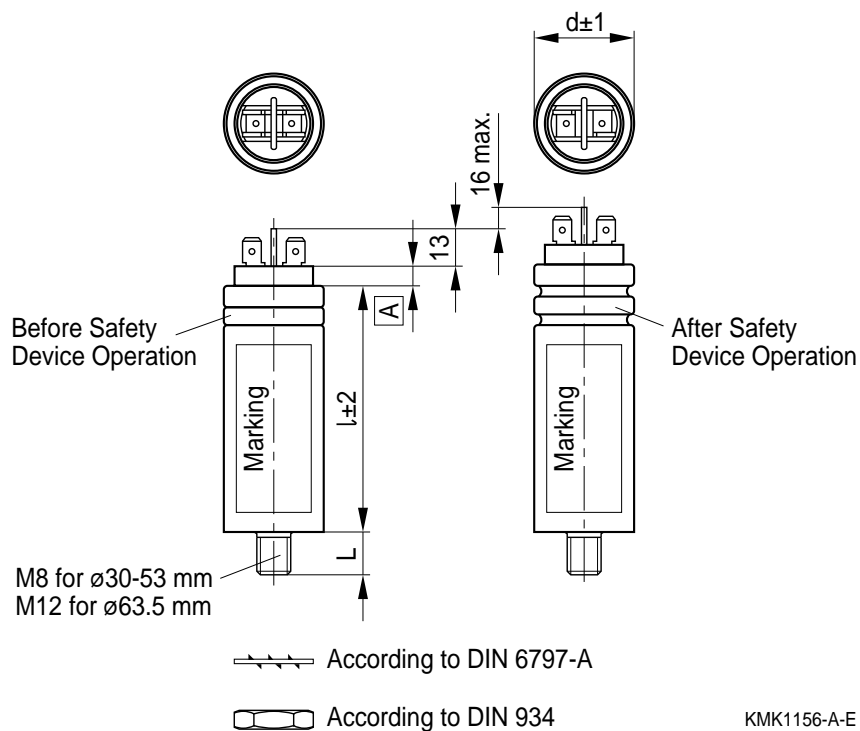
Maximum ratings	
Maximum permissible voltage V_{max}	1.1 V_R (V_R = Rated voltage)
Maximum permissible current I_{max}	1.3 I_R (I_R = Rated current)
Test data	
AC test voltage terminal to terminal V_{TT}	2 V_R , 2 s (routine test) 2 V_R , 60 s (type test)
AC test voltage terminals to can V_{TC}	2 kV AC, 2 s (routine test) 2 kV AC, 60 s (type test)
Insulation resistance R_{ins} or time constant τ at +20 °C, Rel. humidity max. value 85%, annual means \leq 65%	3000 s
Dissipation factor $\tan \delta$ at +20 °C	$\leq 1.0 \cdot 10^{-3}$ (120 Hz)
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	
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 IEC 60335-1 / IEC 60695-2-1/1 Test temperature +550 °C / +750 °C ■ Part is compatible to EN 60335-1 	Self-extinguish within 2 seconds of withdrawing glow wire
Tracking test to IEC 60112 solution A	>250 V
Compatibility to RoHS	
Compliance to directive 2011/65/EU	

Approvals		
VDE EN 60252-1 450 V / 85 °C:	30000 h (class A)	Approved up to 20 µF
TÜV EN 60252-1 450 V / 85 °C:	30000 h (class A)	Approved up to 50 µF
UL 810 E106388 		Approved component 10000 AFC, protected up to 450 V
		Approved on request
		Approved as per IS2993:2998 Upto 450V Class B
Logistics		
Delivery mode		<ul style="list-style-type: none"> ■ EU pallet as standard ■ Cardboard tape on pallet ■ Pack unit, see dimension table

Cautions and warnings

 Please read “Applications warning, installation and maintenance instructions” and the “General Safety Data Sheet for Power Capacitors” issued by ZVEI, 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. You are kindly requested to approve our product specifications or request our approval for your specification before ordering.

Dimensional drawing



Ordering codes

Voltage VAC	Stud	Capacitance μF	Dimensions d x l mm	Ordering code	Approvals / Life Class					Packaging unit
					VDE	TUV	UL	CQC	ISI	
420/450	Yes	2	30 x 52	B32332I5205J072	A	A	•	•	B	49
	No	2.5	30 x 52	B32332I5255J060	A	A	•	•	B	49
	No	4	30 x 52	B32332I5405J060	A	A	•	•	B	49
	No	5	30 x 52	B32332I5505J060	A	A	•	•	B	49
	No	6	30 x 52	B32332I5605J060	A	A	•	•	B	49
	No	8	30 x 68	B32332I5805J061	A	A	•	•	B	49
	No	10	30 x 68	B32332I5106J061	A	A	•	•	B	49
	No	15	30 x 78	B32332I5156J061	A	A	•	•	B	49
	No	20	35 x 78	B32332I5206J061	A	A	•	•	B	36
	No	25	40 x 78	B32332I5256J061	--	A	•	•	B	36
	No	35	40 x 103	B32332I5356J061	--	A	•	•	B	36
	No	36	40 x 103	B32332I5366J061	--	A	•	•	B	36
	No	45	40 x 103	B32332I5456J061	--	A	•	•	B	36
	No	50	45 x 103	B32332I5506J061	--	A	•	•	B	25
	No	60	45 x 103	B32332I5606J061	--	A	•	•	B	25
	Yes	4	30 x 52	B32332I5405J070	B	B	•	•	B	49
	Yes	3	30 x 52	B32332I5305J070	B	B	•	•	B	49

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

Important notes

The following applies to all products named in this publication:

1. Some parts of this publication contain **statements about the suitability of our products for certain areas of application**. These statements are based on our knowledge of typical requirements that are often placed on our products in the areas of application concerned. We nevertheless expressly point out **that such statements cannot be regarded as binding statements about the suitability of our products for a particular customer application**. As a rule, EPCOS is either unfamiliar with individual customer applications or less familiar with them than the customers themselves. For these reasons, it is always ultimately incumbent on the customer to check and decide whether an EPCOS product with the properties described in the product specification is suitable for use in a particular customer application.
2. We also point out that **in individual cases, a malfunction of electronic components or failure before the end of their usual service life cannot be completely ruled out in the current state of the art, even if they are operated as specified**. In customer applications requiring a very high level of operational safety and especially in customer applications in which the malfunction or failure of an electronic component could endanger human life or health (e.g. in accident prevention or life-saving systems), it must therefore be ensured by means of suitable design of the customer application or other action taken by the customer (e.g. installation of protective circuitry or redundancy) that no injury or damage is sustained by third parties in the event of malfunction or failure of an electronic component.
3. **The warnings, cautions and product-specific notes must be observed.**
4. In order to satisfy certain technical requirements, **some of the products described in this publication may contain substances subject to restrictions in certain jurisdictions (e.g. because they are classed as hazardous)**. Useful information on this will be found in our Material Data Sheets on the Internet (www.epcos.com/material). Should you have any more detailed questions, please contact our sales offices.
5. We constantly strive to improve our products. Consequently, **the products described in this publication may change from time to time**. The same is true of the corresponding product specifications. Please check therefore to what extent product descriptions and specifications contained in this publication are still applicable before or when you place an order. We also **reserve the right to discontinue production and delivery of products**. Consequently, we cannot guarantee that all products named in this publication will always be available. The aforementioned does not apply in the case of individual agreements deviating from the foregoing for customer-specific products.
6. Unless otherwise agreed in individual contracts, **all orders are subject to the current version of the "General Terms of Delivery for Products and Services in the Electrical Industry" published by the German Electrical and Electronics Industry Association (ZVEI)**.
7. **Our manufacturing sites serving the automotive business apply the IATF 16949 standard**. The IATF certifications confirm our compliance with requirements regarding the quality management system in the automotive industry. Referring to customer requirements and customer specific requirements ("CSR") TDK always has and will continue to have the policy of respecting individual agreements. Even if IATF 16949 may appear to support the acceptance of unilateral requirements, we hereby like to emphasize that **only requirements mutually agreed upon can and will be implemented in our Quality Management System**. For clarification purposes we like to point out that obligations from IATF 16949 shall only become legally binding if individually agreed upon.

Important notes

8. The trade names EPCOS, CeraCharge, CeraDiode, CeraLink, CeraPad, CeraPlas, CSMP, CTVS, DeltaCap, DigiSiMic, ExoCore, FilterCap, FormFit, LeaXield, MiniBlue, MiniCell, MKD, MKK, MotorCap, PCC, PhaseCap, PhaseCube, PhaseMod, PhiCap, PowerHap, PQSine, PQvar, SIFERRIT, SIFI, SIKOREL, SilverCap, SIMDAD, SiMic, SIMID, SineFormer, SIOV, ThermoFuse, WindCap are **trademarks registered or pending** in Europe and in other countries. Further information will be found on the Internet at www.epcos.com/trademarks.

Release 2018-06