



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: Super MotorCap™, 420/450 V
Ordering code: B32330*/B32332*
Date: 2023-02-06
Version: 3

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)

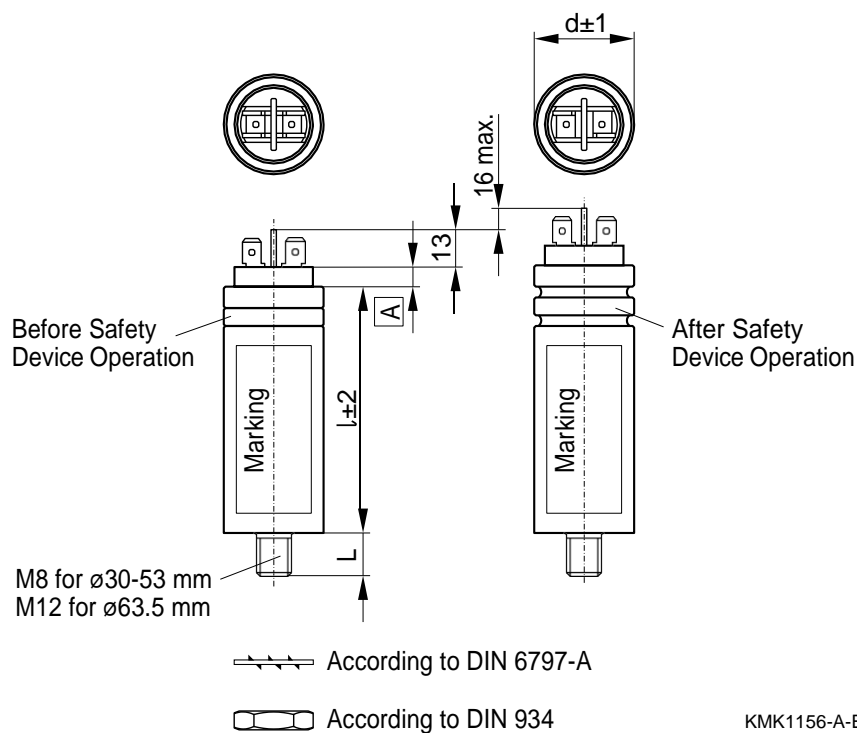
- Threaded stud at bottom of can (M8, max. torque = 5 Nm)

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 C US		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

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

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.tdk-electronics.tdk.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 our specification before ordering.

Product for sales in India only

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