



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: B32330/B32332 – Super MotorCap™, 420 V / 450 V
Ordering code: B32330/B32332
Date: March 2011
Version: 7

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
- Highest safety level P2 to IEC 60252-1 2001-02
- Overpressure disconnection device
- High insulation resistance
- EN 60335-1 compliance on request




Terminals



- B32330 – Single fast-on: 6.3 × 0.8 mm
- B32332 – Double fast-on: 6.3 × 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
Life expectancy to IEC 60252 2001	420 V: 30 000 h (class A) 450 V: 10 000 h (class B)
Safety class according to IEC 60252-1 2001-02	P2
UL 810 file E 106388	Approved component 10000 AFC protected up to 600 V
Rated capacitance C_R	See table ordering codes, page 6
Tolerance	±5%
Permitted capacitance $\Delta C/C$	≤3%
Rated voltage V_R	420 V, 450 V AC
Rated frequency f_R	50 / 60 Hz

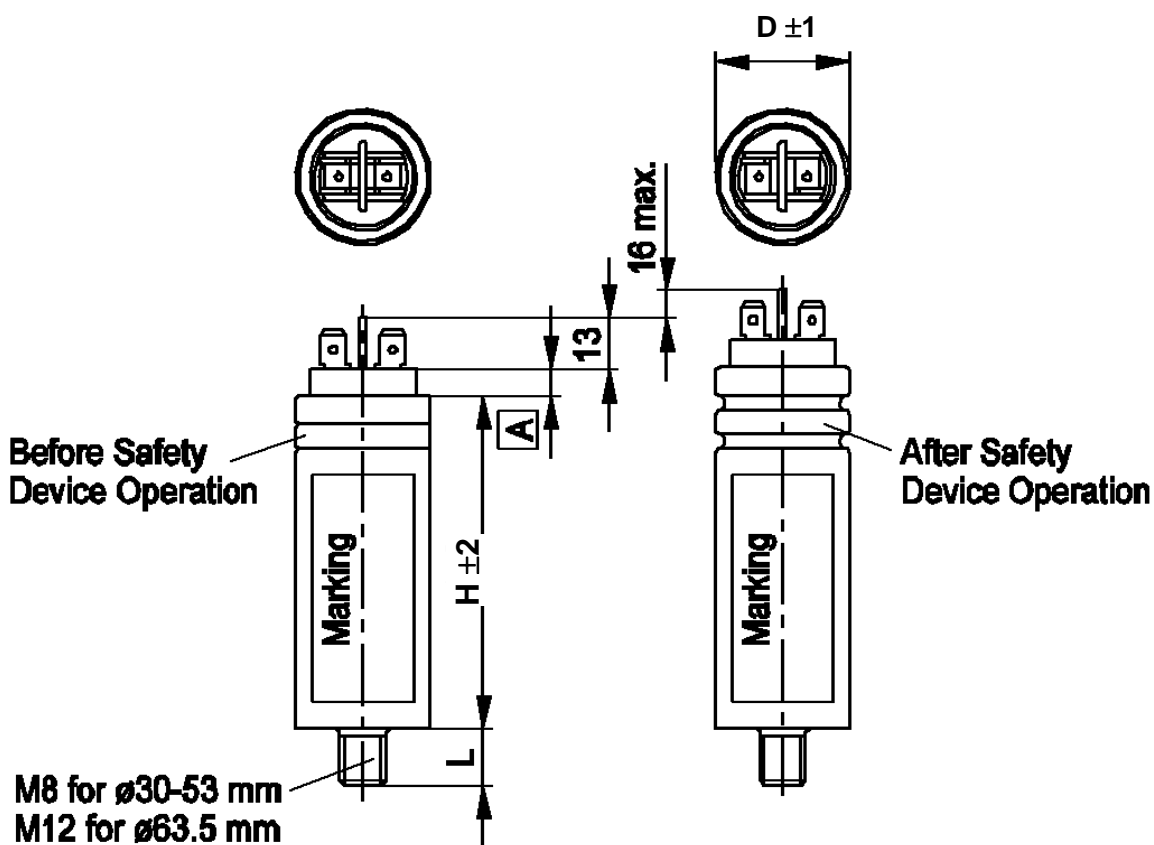
Maximum ratings	
Maximum permissible voltage V_{max}	$1.1 \cdot V_R$ (V_R = Rated voltage)
Maximum permissible current I_{max}	$1.3 \cdot I_R$ (I_R = Rated current)
Test data	
AC test voltage terminal to terminal V_{TT}	$2 \cdot V_R$, 2 s (routine test) $2 \cdot V_R$, 60 s (type test)
AC test voltage 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 $\leq 65\%$	3 000 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-extinguishing within 2 seconds of withdrawing glow wire
Tracking test to IEC 60112 solution A	>250 V
Compatibility to RoHS	
Compliance to directive 2002/95/EC	

Approvals		
VDE EN 60252		
420 V / +85 °C:	30 000 h (class A)	Approved (1 ... 20 µF)
450 V / +85 °C:	10 000 h (class B)	Approved (1 ... 30 µF)
TÜV EN 60252		
450 V / +85 °C:	30 000 h (class A)	Approved (1 ... 50 µF)
UL 810 E106388		Approved component 10000 AFC, protected up to 600 V
		
		Approved on request
Logistics		
Delivery mode		<ul style="list-style-type: none"> ■ EU palette as standard ■ Cardboard tape on palette ■ Packing 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 drawings



 According to DIN 6797-A

 According to DIN 934

For M 8 – L = 12 mm
For M 12 – L = 16 mm

A = 5 mm for dia. 25, 30, 35, 40 & 45
A = 0 mm for dia. 50, 53 & 63.5



Ordering codes

V _R V AC	C _R μF	Dimensions d x h mm	Ordering code	Approvals / Life Class					Packing units
				VDE 420 V	VDE 450 V	TÜV 450 V	UL	CQC	
420 / 450	1	25 x 50	B3233+ I6105J0*0	A	B	A	●	●	64
	1.5	25 x 50	B3233+ I6155J0*0	A	B	A	●	●	64
	2	25 x 50	B3233+ I6205J0*0	A	B	A	●	●	64
	2.5	25 x 50	B3233+ I6255J0*0	A	B	A	●	●	64
	3	25 x 50	B3233+ I6305J0*0	A	B	A	●	●	64
	3.5	25 x 50	B3233+ I6355J0*0	A	B	A	●	●	64
	4	25 x 50	B3233+ I6405J0*0	A	B	A	●	●	64
	5	30 x 52	B3233+ I6505J0*0	A	B	A	●	●	64
	6	30 x 52	B3233+ I6605J0*0	A	B	A	●	●	49
	7	30 x 52	B3233+ I6705J0*0	A	B	A	●	●	49
	7.5	30 x 68	B3233+ I6755J0*0	A	B	A	●	●	49
	8	30 x 68	B3233+ I6805J0*0	A	B	A	●	●	49
	9	30 x 68	B3233+ I6905J0*0	A	B	A	●	●	49
	10	30 x 68	B3233+ I6106J0*0	A	B	A	●	●	49
	12	30 x 78	B3233+ I6126J0*0	A	B	A	●	●	49
	15	30 x 78	B3233+ I6156J0*0	A	B	A	●	●	49
	16	30 x 78	B3233+ I6166J0*0	A	B	A	●	●	49
	18	30 x 93	B3233+ I6186J0*0	A	B	A	●	●	49
	20	30 x 93	B3233+ I6206J0*1	A	B	A	●	●	49
	22	30 x 93	B3233+ I6226J0*2		B	A	●	●	49
	25	35 x 93	B3233+ I6256J0*0		B	A	●	●	36
	30	35 x 78	B3233+ I6306J0*0		B	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	●	●	36
	55	53 x 105	B3233+ I6556J0*2				●	●	25
60	53 x 105	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

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The following applies to all products named in this publication:

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