



Film Capacitors – AC Capacitors

Motor run capacitors

Series/Type: MotorCap™ 250 V, UL-series
Ordering code: B32330/B32332
Date: October 2010
Version: 3.0

Construction

- Dielectric: polypropylene film
- Aluminum can
- Soft polyurethane resin

Features

- Self-healing properties
- Low dissipation factor
- Overpressure disconnection device
- Highest safety level P2 to IEC 60252-1 2001-02
- High insulation resistance
- Capacitor **C_{RU}US** UL files E106388


Typical applications

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

Terminals


- B32330 series: Single fast on 6.3 × 0.8 mm
- B32332 series: Double fast on 6.3 × 0.8 mm

Mounting parts (optional)

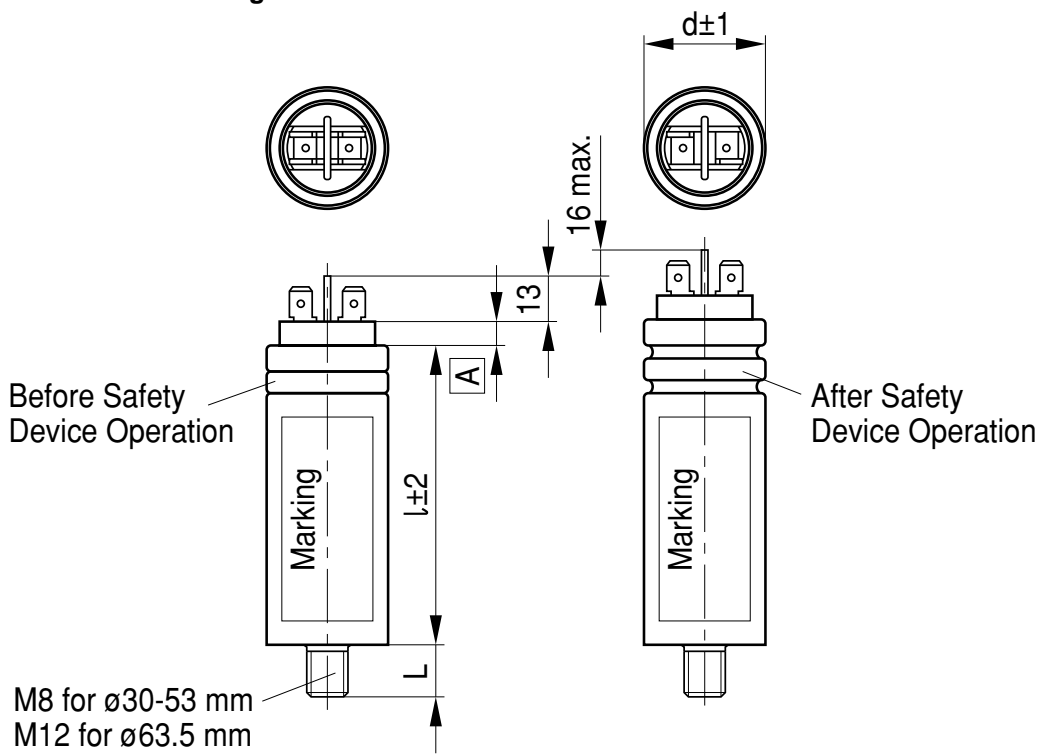
- Threaded stud at bottom of can (M8; max. torque = 5 Nm) as an option

Technical data and specifications

Reference standards	IEC 60252-1 2001-02 EN 60252 2001 UL 810
Safety class to IEC 60252-1 2001-02	P2
Life expectancy to IEC 60252 2001	250 V: 10 000 h (class B)
UL 810 file E106388	Approved component 10000 AFC
Rated capacitance C_R	See dimensions table
Tolerance	±5%
Rated voltage V_R	250 V
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)
Insulation voltage terminals to case	2 000 V AC, 60 s (type test) 2 000 V AC, 2 s (routine test)
Insulation resistance R_{ins} or time constant τ at 20 °C; rel. humidity $\leq 65\%$ (minimum as-delivered values)	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 electrical properties of terminal top disk material	
Ball pressure test to IEC 60309-1 sec. 27.3	at 125 °C
Top disk material	
Option A: <ul style="list-style-type: none"> ■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-11 Test temp 550 °C for $I_R \leq 0.5$ A Test temp 850 °C for $I_R > 0.5$ A 	Self-extinguish within 30 seconds of withdrawing glow wire
Option B: <ul style="list-style-type: none"> ■ UL 94 V2/V0 compatible ■ Glow wire test to IEC60335-1 & IEC 60695-2-11 Test temp 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 2002/95/EC	

Dimensional drawings B32330/B32332



M8 for $\varnothing 30-53$ mm
M12 for $\varnothing 63.5$ mm

 According to DIN 6797-A

 According to DIN 934

KMK1156-A-E

M 8 bolt: L = 12 mm

M 12 bolt: L = 16 mm

A = 5 mm for diameters $d = 30, 35, 40, 45$ mm

A = 0 mm for diameters $d = 50, 53, 63.5$ mm

Ordering codes and packing units

V _R	C _R	Max. dimensions d x l	Ordering code	Packing unit
V AC	μF	mm		
250	4	30 × 68	B3233*B1405J0*0	150
	5	30 × 68	B3233*B1505J0*0	150
	6	30 × 68	B3233*B1605J0*0	150
	7	30 × 68	B3233*B1705J0*0	150
	8	30 × 68	B3233*B1805J0*0	150
	10	30 × 68	B3233*B1106J0*0	150
	12	30 × 68	B3233*B1126J0*0	150
	15	35 × 68	B3233*B1156J0*0	50
	20	35 × 68	B3233*B1206J0*0	50
	25	35 × 78	B3233*B1256J0*0	50
	30	40 × 78	B3233*B1306J0*0	50
	35	40 × 78	B3233*B1356J0*0	50
	40	40 × 78	B3233*B1406J0*0	50
	45	40 × 78	B3233*B1456J0*0	50
	50	40 × 103	B3233*B1506J0*0	50
	55	40 × 103	B3233*B1556J0*0	50
60	40 × 103	B3233*B1606J0*0	50	

Composition of ordering code:

*: terminals

0 – single fast on terminals
2 – double fast on terminals

#: construction of can and plastic top

5 – aluminum can, Option A: UL 94 V2 top
6 – aluminum can, Option B: UL 94 V2/V0 top/IEC 60335-1
7 – aluminum can with M 8 bolt, Option A: UL 94 V2 top
8 – aluminum can with M 8 bolt, Option B: UL 94 V2/V0 top/IEC 60335-1

⚠ 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.

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