



Film capacitors – AC capacitors

Motor run capacitors

400 V; class B; 85 °C / 420 V; class C; 85 °C

Series/Type: **B32330/B32332 – MotorCap™**

Date: October 2007

Version: 2.0

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
- UL approval **CUL US**

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)



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	400 V: 10,000 h (class B) 420 V: 3,000 h (class C)
UL 810 file E106388	Approved component 10000 AFC protected
Rated capacitance C_R	See dimensions table
Tolerance	±5%
Rated voltage V_R	400 V, 420 V
Rated frequency f_R	50/60 Hz

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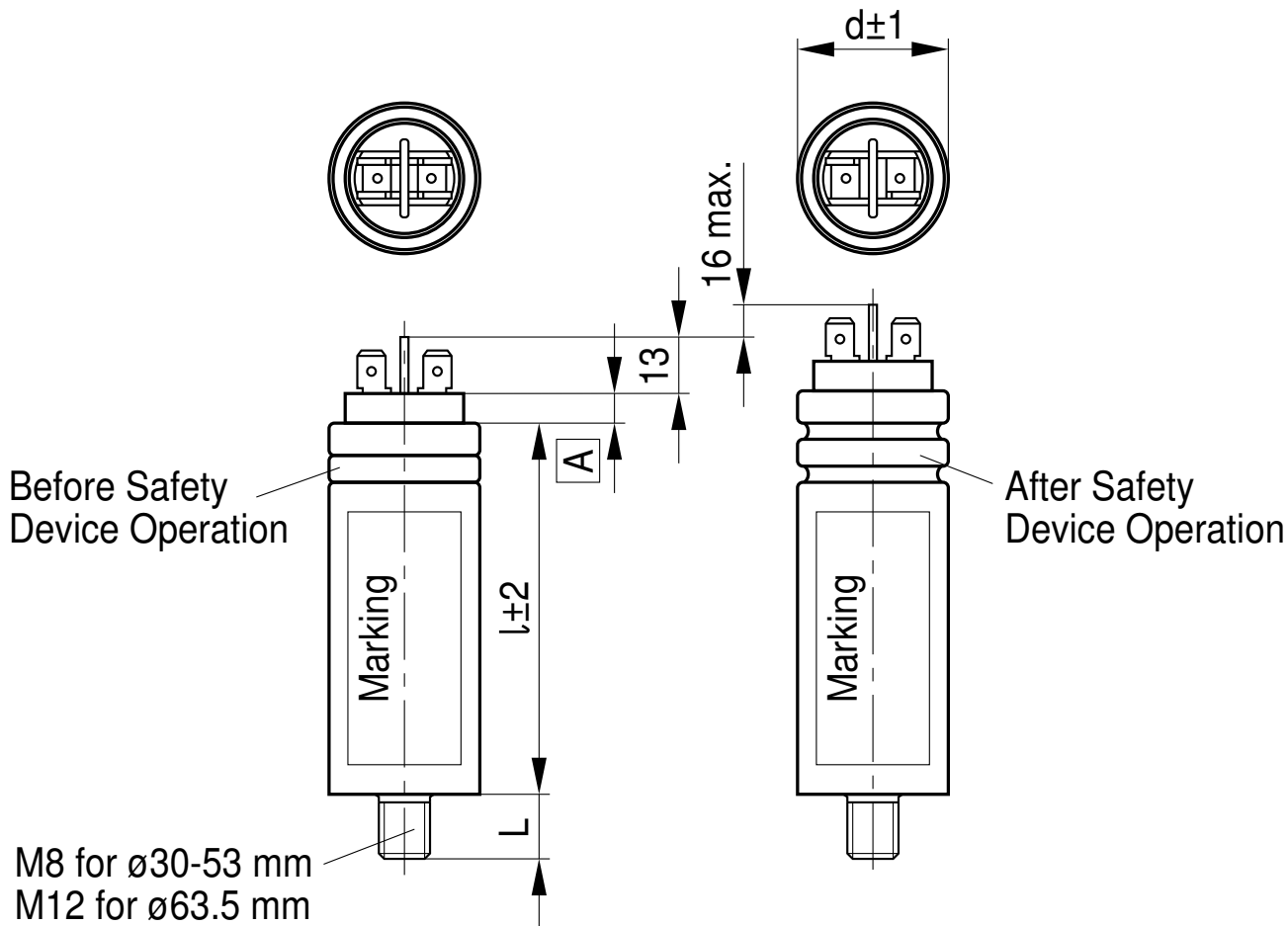
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Maximum ratings	
Maximum permissible voltage $V_{\max}$	$1.1 \cdot V_R$ (V_R = Rated voltage)
Maximum permissible current $I_{\max}$	$1.3 \cdot I_R$ (I_R = Rated current)
Test data	
AC test voltage terminal to terminal V_{TT}	$2 \cdot V_R$, 60 s (type test) $2 \cdot V_R$, 2 s (routine 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/ 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	
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C
Top disk material	
Option A:	
■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-11 Test temperature 550 °C for $I_R \leq 0.5$ A Test temperature 850 °C for $I_R > 0.5$ A	Self-extinguish within 30 seconds of withdrawing glow wire
Option B:	
■ UL 94 V2/V0 compatible ■ Glow wire test to IEC 60335-1 / IEC 60695-2-11 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

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Compatibility to RoHS	
Compliance to directive 2002/95/EC	
Approvals	
VDE 400 V / 85 °C: 10,000 h (class B) 420 V / 85 °C: 3,000 h (class C) See table for approved ratings	Approved Approved
c  us UL 810 files E106388 See table for approved ratings	Approved Component 10000 AFC protected

Dimensional drawings B32330/B32332



 According to DIN 6797-A

 According to DIN 934

KMK1156-A-E

M8 bolt: $L = 12$ mm
M12 bolt: $L = 16$ mm

$A = 5$ mm for diameter $d = 30, 35, 40, 45$ mm
 $A = 0$ mm for diameter $d = 50, 53, 63.5$ mm

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Ordering codes and packing units

V _R V AC	C _R μF	Max. dimensions d × l mm	Ordering code	Packing units pcs.	Approvals	
					VDE	UL
400 / 420	1.0	30 × 52	B3233*B4105J0#1	on request	Yes	-
	1.5	30 × 52	B3233*B4155J0#1	on request	Yes	-
	2.0	30 × 52	B3233*B4205J0#1	on request	Yes	-
	2.5	30 × 52	B3233*B4255J0#1	on request	Yes	-
	3.0	30 × 68	B3233*B4305J0#0	on request	Yes	Yes
	3.0	30 × 52	B3233*B4305J0#1	on request	Yes	-
	3.5	30 × 68	B3233*B4355J0#0	on request	Yes	Yes
	3.5	30 × 52	B3233*B4355J0#1	on request	Yes	-
	4.0	30 × 68	B3233*B4405J0#0	on request	Yes	Yes
	4.0	30 × 52	B3233*B4405J0#1	on request	Yes	-
	5.0	30 × 68	B3233*B4505J0#0	on request	Yes	Yes
	5.0	30 × 52	B3233*B4505J0#1	on request	Yes	-
	6.0	30 × 68	B3233*B4605J0#0	on request	Yes	Yes
	7.0	30 × 78	B3233*B4705J0#0	on request	Yes	Yes
	7.5	30 × 78	B3233*B4755J0#0	on request	Yes	Yes
	8.0	30 × 78	B3233*B4805J0#0	on request	Yes	Yes
	10.0	30 × 78	B3233*B4106J0#0	on request	Yes	Yes
	12.0	40 × 78	B3233*B4126J0#0	on request	Yes	Yes
	15.0	40 × 78	B3233*B4156J0#0	on request	Yes	Yes
	20.0	40 × 78	B3233*B4206J0#0	on request	Yes	Yes
	25.0	40 × 103	B3233*B4256J0#0	on request	Yes	Yes
	30.0	40 × 103	B3233*B4306J0#0	on request	Yes	Yes
	35.0	45 × 103	B3233*B4356J0#0	on request	Yes	Yes
	40.0	45 × 103	B3233*B4406J0#1	on request	Yes	Yes
	45.0	50 × 105	B3233*B4456J0#1	on request	Yes	Yes
	50.0	50 × 107	B3233*B4506J0#2	on request	Yes	Yes
	60.0	53 × 105	B3233*B4606J0#2	on request	Yes	Yes

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

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