



Film capacitors – AC capacitors

Motor run capacitors

400 V; class A; 85 °C / 450 V; class B; 85 °C

Series/Type: B32356 – MotorCap P2 Compact

Date: June 2009

Version: 3.0

Construction

- Dielectric: polypropylene film
- Electrode: segmented metallized film
- Plastic can and top material to IEC 60335-1
- Dry type

Features

- Self-healing properties
- Low dissipation factor
- P2 safety class to IEC 60252-1 2001-02
- High insulation resistance
- Case IP 53 protected
- IEC/EN 60335 compatible

Typical applications

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

Terminals

- Twin core cable type PP 2 × 0.50 mm², 600 V, 95 °C
- Connectors on request


Mounting parts (optional)

- Threaded stud at bottom of can (M8, max. torque = 5 Nm)
- Fast fixation for mounting into a hole of Ø 8 mm


Technical data and specifications

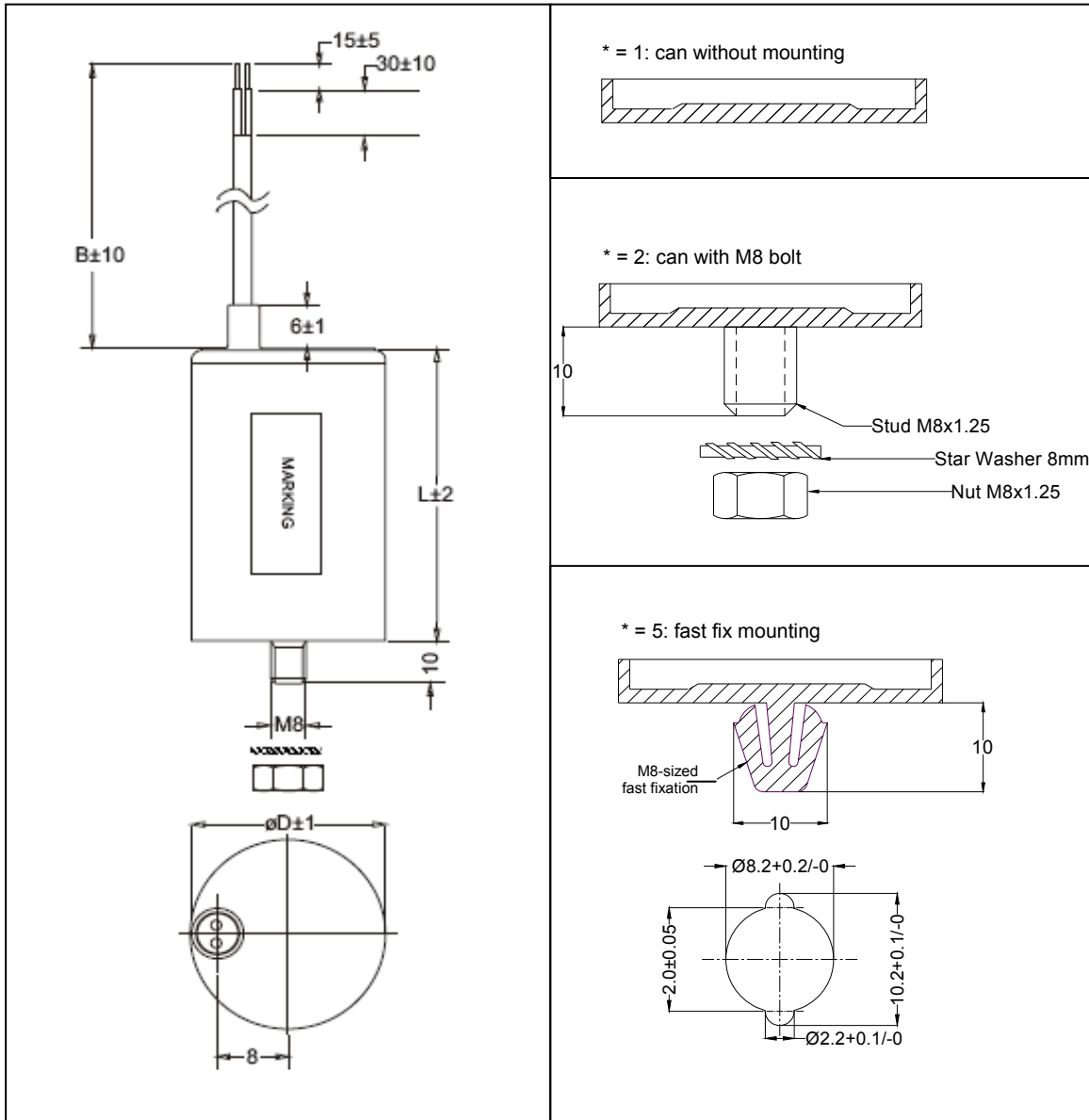
Reference standards	IEC 60252-1 2001-02 / EN 60252 2001	
Safety class to IEC 60252-1 2001-02	P0 P2	
Life expectancy to IEC 60252 2001	400 V/85 °C: 30000 h (class A) 450 V/85 °C: 10000 h (class B)	
Rated capacitance C _R	See dimensions table	
Tolerance	±5%, other tolerances upon request	
Rated voltage V _R	400, 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)

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Test data	
AC test voltage terminal to terminal V_{TT}	$2 \cdot V_R, 2 \text{ s}$
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 thermal properties	
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C
Plastic can and top disk material	Compliant to EN 60252
<ul style="list-style-type: none"> ■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-1/0 and -2-1/1 Test temperature 550 °C for $I_R \leq 0.5 \text{ A}$ Test temperature 750 °C for $I_R > 0.5 \text{ A}$ ■ Part is compatible to EN 60335-1 	Self-extinguish within 2 seconds of withdrawing glow wire without igniting wrapping tissue to GWIT
Tracking Test to IEC 60112 solution A	> 250 V
Protection class to IEC 60529 2001	IP 53
Compatibility to RoHS	
Compliance to directive 2002/95/EC	
Approvals	
VDE – 400 V/85 °C: 30,000 h (class A)	Approved
VDE – 450 V/85 °C: 10,000 h (class B)	Approved

Dimensional drawing

Mounting options



Ordering codes and packing units

V_R	C_R	Max. dimensions d × l	Ordering code (composition see below)	Packing units
V AC	μF	mm		pcs.
400 / 450	2.0	25 × 50	B32356B4205J0*#	112
	2.5	25 × 50	B32356B4255J0*#	112
	3.0	25 × 50	B32356B4305J0*#	112
	3.5	30 × 56	B32356B4355J0*#	112
	4.0	30 × 56	B32356B4405J0*#	112
	5.0	30 × 56	B32356B4505J0*#	112
	6.0	30 × 62	B32356B4605J0*#	84
	7.0	35 × 56	B32356B4705J0*#	84
	7.5	35 × 62	B32356B4755J0*#	84
	8.0	35 × 62	B32356B4805J0*#	84
	9.0	35 × 71	B32356B4905J0*#	84
	10	35 × 71	B32356B4106J0*#	84
	11	40 × 72	B32356B4116J0*#	60
	12	35 × 96	B32356B4126J1*#	84
	12	40 × 72	B32356B4126J0*#	60
	13	40 × 72	B32356B4136J0*#	60
	15	45 × 72	B32356B4156J0*#	60
	18	50 × 96	B32356B4186J0*#	32
20	50 × 96	B32356B4206J0*#	32	

Composition of ordering code:

*: construction

- 1 plastic can
- 3 plastic can with M8 bolt
- 5 plastic can with fast fixation device available for diameters 30 mm, 32 mm and 35 mm, others on request

#: cable length (dimension 'B' in drawing)

- 2 200 mm
- 3 300 mm

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