



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

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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)
- Locking clip for mounting into a hole of Ø 8 mm



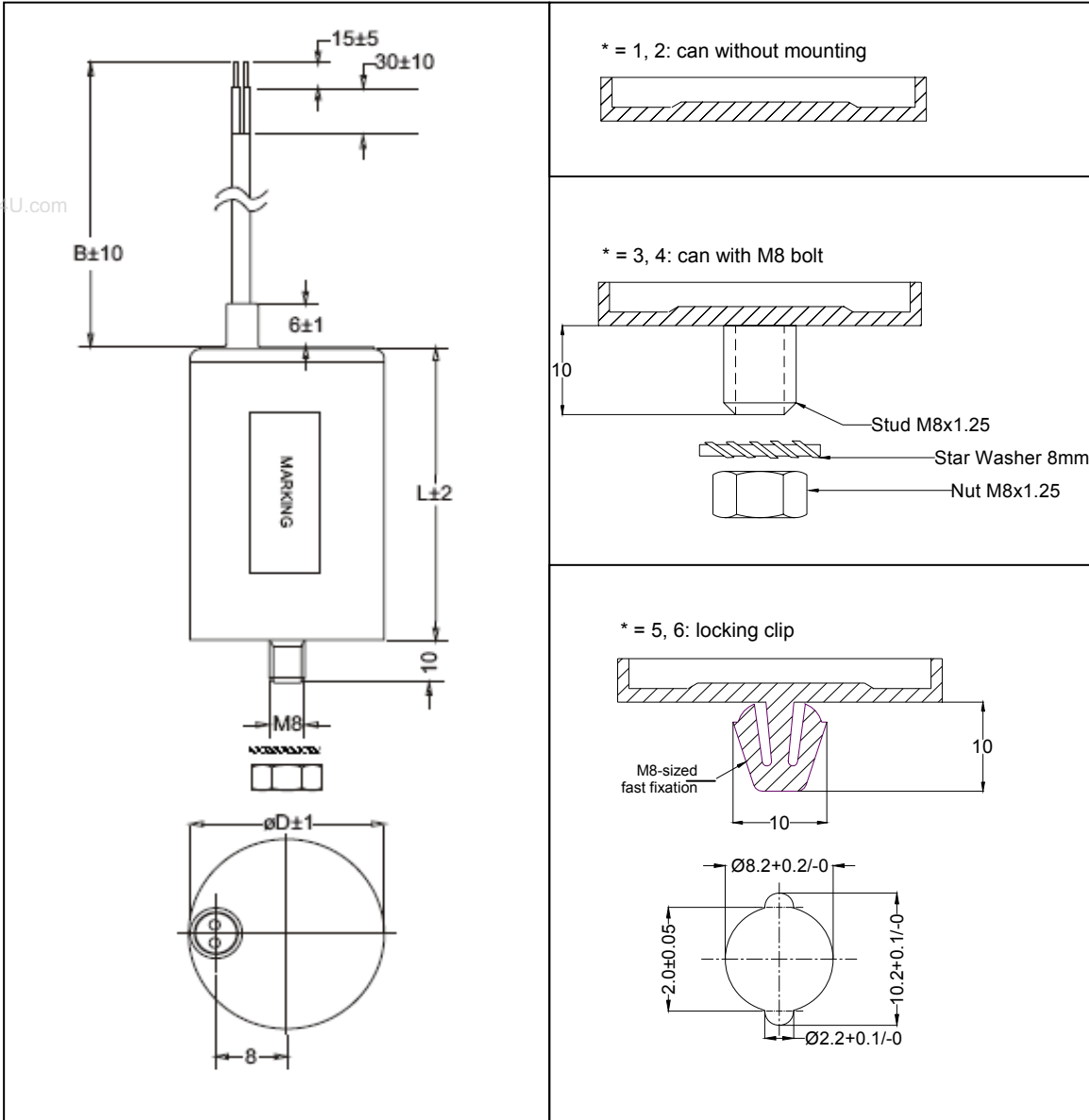
Technical data and specifications	
Reference standards	IEC 60252-1 2001-02 / EN 60252 2001
Safety class to IEC 60252-1 2001-02	P2
Life expectancy to IEC 60252 2001	400 V/85 °C: 30000 h (class A) 450 V/85 °C: 10000 h (class B)
Rated capacitance C _R	2.0 ... 20 µF
Tolerance	±5%, other tolerances upon request
Rated voltage V _R	400 V AC, 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 s
Insulation resistance R_{ins} or time constant τ at 20 °C, rel. Humidity $\leq 65\%$ (minimum as-delivered values)	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	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 $I_R \leq 0.5$ A Test temperature 750 °C for $I_R > 0.5$ A ■ Part is compatible to EN 60335-1 	Self-extinguishing 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: 30000 h (class A)	Approved
VDE – 450 V/85 °C: 10000 h (class B)	Approved
C ^{RU} US UL 810 files E106388	See table for approved ratings
Approved Component 10000 AFC up to 450 V	Protected

Dimensional drawing

Mounting options



Ordering codes and packing units

V _R V AC	C _R μF	Max. dimensions d × l mm	Ordering code	Packing units pcs.
400/450	2.0	30 × 62	B32356B4205J0*#	150
	2.5	30 × 62	B32356B4255J0*#	150
	3.0	30 × 62	B32356B4305J0*#	150
	4.0	30 × 62	B32356B4405J0*#	150
	5.0	30 × 62	B32356B4505J0*#	150
	5.0	32 × 62	B32356B4505J1*#	150
	6.0	35 × 62	B32356B4605J0*#	150
	7.0	35 × 62	B32356B4705J0*#	150
	7.5	35 × 62	B32356B4755J0*#	150
	8.0	35 × 71	B32356B4805J0*#	50
	9.0	35 × 71	B32356B4905J0*#	50
	10.0	35 × 71	B32356B4106J0*#	50
	11.0	40 × 72	B32356B4116J0*#	50
	12.0	40 × 72	B32356B4126J0*#	50
	13.0	40 × 72	B32356B4136J0*#	50
	15.0	45 × 72	B32356B4136J0*#	50
	17.5	50 × 96	B32356B4176J5*#	50
	20.0	50 × 96	B32356B4206J0*#	50

Composition of ordering code:

*: construction

- 1 plastic can
- 2 plastic can with UL approval
- 3 plastic can with M8 bolt
- 4 plastic can with M8 bolt, with UL approval
- 5 plastic can with locking clip available for diameters 30 mm, 32 mm and 35 mm, others on request
- 6 plastic can with locking clip, with UL approval, 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
- other lengths on request

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