



## Film Capacitors – AC Capacitors

### Motor run capacitors

**Series/Type:** B32350/52 – MotorCap™ P2 Compact

**Ordering code:** B32350/52


**Date:** October 2010

**Version:** 5

**Construction**

- Dielectric polypropylene film
- Electrode: segmented metallized film
- Dry type

**Features**

- Self-healing properties
- Low dissipation factor
- P2 safety class to IEC 60252-1 2001-02
- High insulation resistance
-  UL file E 106388 (component approval)
- IEC/EN 60335-1 compliant


**Typical applications**

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



**Terminals**

- B32350 – single fast-on: 6.3 × 0.8 mm
- B32352 – double fast-on: 6.3 × 0.8 mm

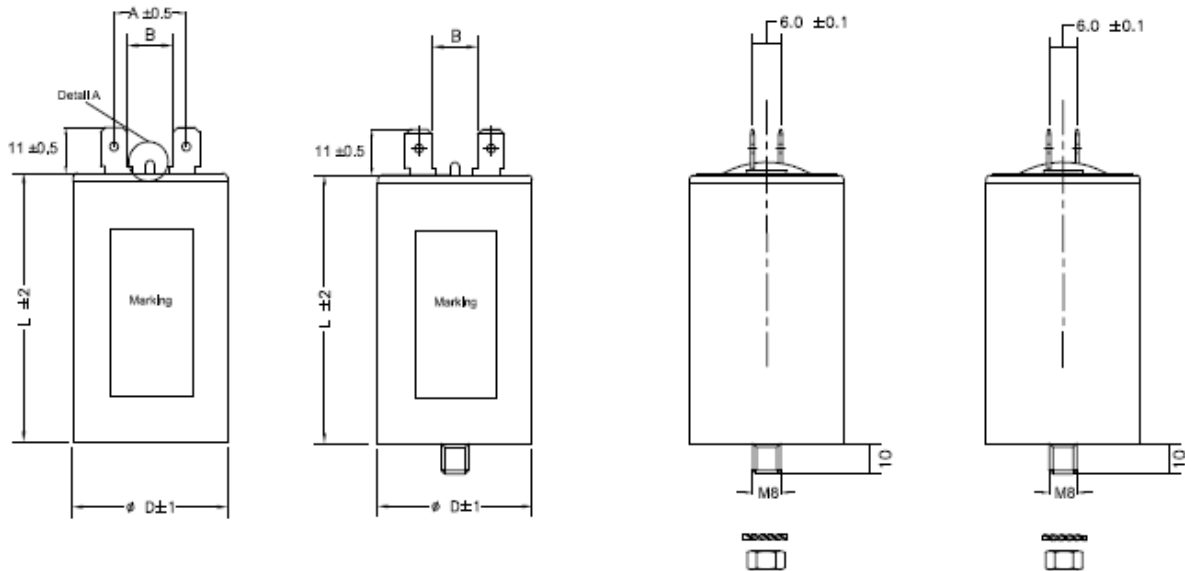
**Mounting parts (optional)**

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

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: 30 000 h (class A) 450 V/85 °C: 10 000 h (class B)	
Rated capacitance $C_R$	See dimensions table	
Tolerance	±5%	
Rated voltage $V_R$	400, 450 V AC	
Permitted capacitance $\Delta C/C$	≤ 3 %	
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)

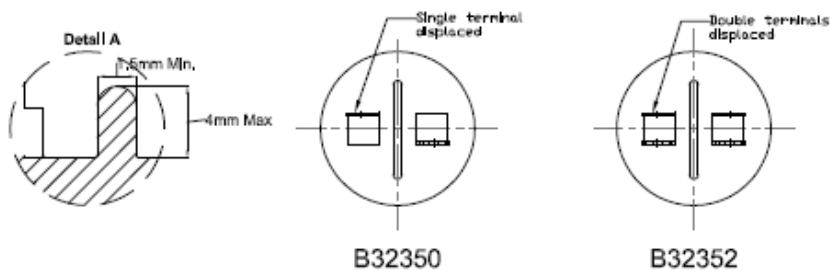
<b>Test data</b>	
AC test voltage terminal to terminal $V_{TT}$	$2 \cdot V_R$ , 2 s (routine test) $2 \cdot V_R$ , 60 s (type test)
AC test voltage terminals to can $V_{TC}$	2 kV AC, 2 s (routine test) 2 kV AC, 60 s (type test)
Insulation resistance $R_{ins}$ or time constant $\tau$ at 20 °C, rel. humidity $\leq 65\%$ (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/ $\mu$ s
<b>Climatic data</b>	
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
<b>Mechanical and thermal properties</b>	
Ball pressure test to IEC 60309-1 sec. 27.3	20 N at 125 °C
Plastic can and top disk material	Compliant to EN 60252/60335-1
<ul style="list-style-type: none"> <li>■ UL 94 V2 compatible</li> <li>■ Glow wire test to IEC 60695-2-1/0 and -2-1/1 Test temperature 550 °C for <math>I_R \leq 0.5</math> A Test temperature 750 °C for <math>I_R &gt; 0.5</math> A</li> <li>■ Part is compatible to EN 60335-1</li> </ul>	Self-extinguish within 2 seconds of withdrawing glow wire without igniting wrapping tissue to GWIT
Tracking test to IEC 60112 solution A	> 250 V
<b>Compatibility to RoHS</b>	
Compliance to directive 2002/95/EC	
<b>Approvals</b>	
VDE – 400 V/85 °C: 30 000 h (class A)	Approved
VDE – 450 V/85 °C: 10 000 h (class B)	Approved
 US UL 810 files E106388	Approved Component 10000 AFC up to 450 V

Dimensional drawings

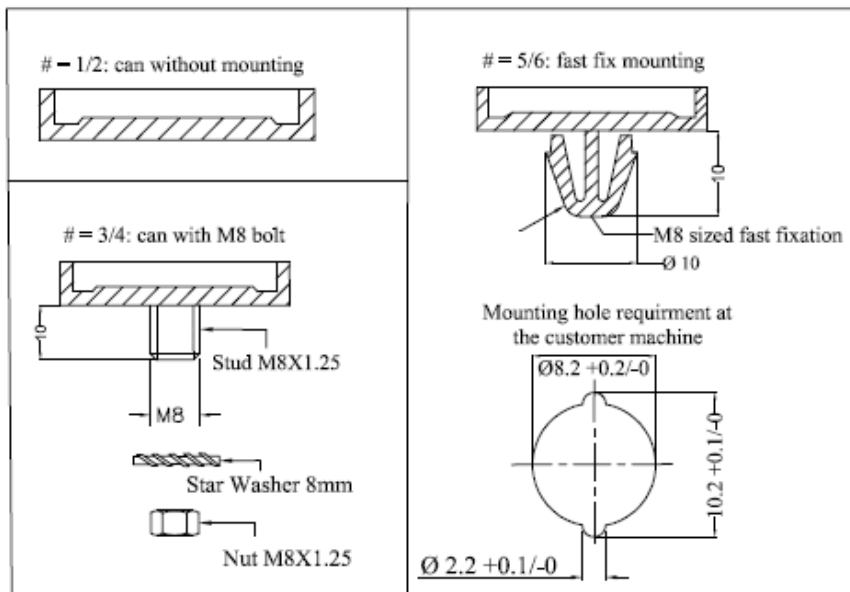


Dimension table

Dia. ØD (mm)	A (mm)	Min. B (mm)
25	12.65	6
30	16.5	9,5
35-50	16.5	9,5



Mounting options:



**Ordering codes and packing units for B32350-Series (single fast-on connector)**

V <sub>R</sub> V AC	C <sub>R</sub> μF	Dimensions d × h mm	Ordering code	Packing units
400 / 450	2	25 × 58	B32350A4205J0#0	112
	2.5	25 × 58	B32350A4255J0#0	112
	3	30 × 56*	B32350A4305J0#0	112
	3.15	30 × 56*	B32350A4315J5#0	112
	4	30 × 56*	B32350A4405J0#0	112
	5	30 × 56*	B32350A4505J0#0	112
	6	35 × 56*	B32350A4605J0#0	84
	6.3	35 × 56*	B32350A4635J0#0	84
	7	35 × 56*	B32350A4705J0#0	84
	7.5	35 × 56*	B32350A4755J0#0	84
	8	35 × 71	B32350A4805J0#0	84
	9	35 × 71	B32350A4905J0#0	84
	10	35 × 71	B32350A4106J0#0	84
	11	40 × 72	B32350A4116J0#0	60
	12	40 × 72	B32350A4126J0#0	60
	12.5	40 × 72	B32350A4126J5#0	60
	14	45 × 72	B32350A4146J0#0	45
	15	45 × 72	B32350A4156J0#0	45
	16	45 × 96	B32350A4166J0#0	45
	17.5	45 × 96	B32350A4176J5#0	45
18	50 × 96	B32350A4186J0#0	32	
20	50 × 96	B32350A4206J0#0	32	

\* In case of construction with M8, bolt and locking clip height (dimension L) will be increased by 6 mm

**Composition of ordering code**

#: construction

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

**Ordering codes and packing units for B32352-Series (double fast-on connector)**

V <sub>R</sub>	C <sub>R</sub>	Dimensions d × h	Ordering code	Packing units
V AC	μF	mm		
400 / 450	2	30 × 56*	B32352A4205J0#0	112
	2.5	30 × 56*	B32352A4255J0#0	112
	3	30 × 56*	B32352A4305J0#0	112
	3.15	30 × 56*	B32352A4315J5#0	112
	4	30 × 56*	B32352A4405J0#0	112
	5	30 × 56*	B32352A4505J0#0	112
	6	35 × 56*	B32352A4605J0#0	84
	6.3	35 × 56*	B32352A4635J0#0	84
	7	35 × 56*	B32352A4705J0#0	84
	7.5	35 × 56*	B32352A4755J0#0	84
	8	35 × 71	B32352A4805J0#0	84
	9	35 × 71	B32352A4905J0#0	84
	10	35 × 71	B32352A4106J0#0	84
	11	40 × 72	B32352A4116J0#0	60
	12	40 × 72	B32352A4126J0#0	60
	12.5	40 × 72	B32352A4126J5#0	60
	14	45 × 72	B32352A4146J0#0	45
	15	45 × 72	B32352A4156J0#0	45
	16	45 × 96	B32352A4166J0#0	45
	17.5	45 × 96	B32352A4176J5#0	45
18	50 × 96	B32352A4186J0#0	32	
20	50 × 96	B32352A4206J0#0	32	

\* In case of construction with M8 bolt height (dimension L) will be increased by 6 mm

**Composition of ordering code**

#: construction

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

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