



## Film AC Capacitors

### Motor Run capacitors

**Series/Type:** B32356 – MotorCap S3 Compact  
**Ordering code:** B32356  
**Date:** May 2023  
**Version:** 9

### Construction

- Metallized polypropylene film
- Plastic can with plastic top
- Dry type resin

### Features

- Self-healing properties
- Low dissipation factor
- Highest safety level S3 safety class to IEC60252-1 (ed.2) am1
- Case IP53 protected
- file E 106388, component approval mark, on request
- EN 60335-1 compatible

### Applications

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



### Terminals



- Twin core cable, double insulated, 2 x 0.5 mm<sup>2</sup> minimum, 90 °C, H05-V2-V2-F as standard.
- Twin core cable UL style on request
- Receptacles 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
- Mounting in any position possible

### Technical data and specifications

Reference standards	EN60252-1: 2014-07 IEC60252-1: Ed 2,2013-8,amendment 1
Life expectancy to IEC 60252-1 /2013	400 V: 30000 h (class A) 450 V: 10000 h (class B)
Safety class to IEC 60252-1/ 2013	S3
UL 810 file E 106388	Approved component,10000 AFC protected up to 450 V (Approval mark upon request)
Rated capacitance C <sub>R</sub>	See table ordering codes, page 5
Tolerance	±5%
Permitted capacitance ΔC/C	≤3%
Rated voltage V <sub>R</sub>	450 V AC

Rated frequency $f_R$	50/60 Hz
<b>Maximum ratings</b>	
Maximum permissible voltage $V_{max}$	$1.1 \cdot V_R$ ( $V_R$ = rated voltage)
Maximum permissible current $I_{max}$	$1.3 I_R$ ( $I_R$ = rated current)
<b>Test data</b>	
AC test voltage terminal to terminal $U_{TT}$	2 $V_R$ , 2 s (routine test) 2 $V_R$ , 60 s (type test)
AC test voltage terminals to can $U_{TC}$	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 max. value 85%, annual means $\leq 65\%$	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/ $\mu$ 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	UL 94 V2 min/ Compliant to EN60252-1/ EN60335-1
<ul style="list-style-type: none"> <li>■ Glow wire test to IEC 60695 – 2 – 1 / 1 Test temp 550 °C for <math>I_R \leq 0.5</math> A Test temp 750 °C for <math>I_R \geq 0.5</math> A</li> </ul>	Self-extinguish within 2 s of withdrawing glow wire without igniting wrapping tissue to GWIT
<ul style="list-style-type: none"> <li>■ Part compliant to EN 60335-1 Glow wire test acc. to EN60335-1:2002 +A11+A1 +A12+Corr.+A2:2006, IEC60335-1 ed 4+A1+A2</li> </ul>	Self extinguish within 2 s with GWT 750 °C and within 60 s with GWF1 850 °C of withdrawing the glow wire and without igniting the wrapping tissue
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: 30000 h (class A)	Approved
VDE – 450 V/85 °C: 10000 h (class B)	Approved
 <b>UL 810 E106388</b>	Approved component 10000 AFC, protected up to 450 V



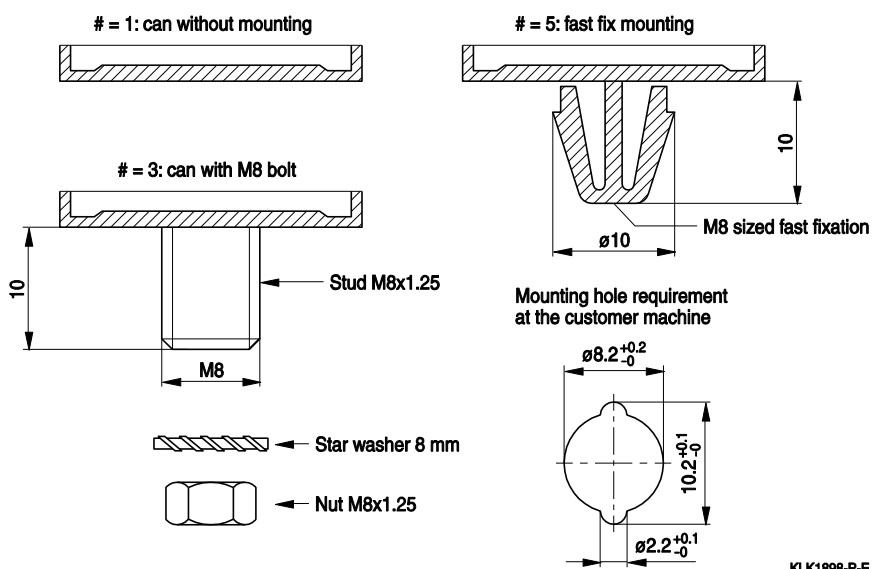
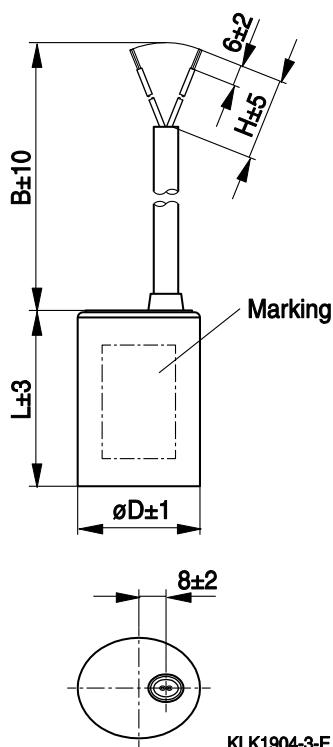
Compliance to LV directive 2014/35/EU

**Logistics**

Delivery mode

- EU pallet as standard
  - Cardboard tape on pallet
- Pack unit, see dimension table

**Dimensional drawings**



**Ordering codes & Packaging units**

V <sub>R</sub> V AC	C <sub>R</sub> μF	Dimensions D × L mm	Ordering code	Packing units pcs.
	2	25 × 65	B32356B4205J0#x	112
	2	30 × 62	B32356B4205J03x	112
	2.5	25 × 58	B32356B4255J0#x	112
	3	30 × 62	B32356B4305J0#x	112
	3.15	30 × 62	B32356B4315J5#x	112
	4	30 × 62 <sup>1</sup>	B32356B4405J0#x	112
	5	35 × 62	B32356B4505J0#x	84
	6	35 × 62	B32356B4605J0#x	84
	6.3	35 × 62	B32356B4635J0#x	84
	7	35 × 62	B32356B4705J0#x	84
	7.5	35 × 71	B32356B4755J0#x	84
	8	35 × 71	B32356B4805J0#x	84
	9	35 × 71	B32356B4905J0#x	84
	10	35 × 71	B32356B4106J0#x	84
	11	40 × 71	B32356B4116J0#x	60
	12	40 × 71	B32356B4126J0#x	60
	12.5	40 × 71	B32356B4126J5#x	60
	14	45 × 71	B32356B4146J0#x	45
	15	45 × 71	B32356B4156J0#x	45
	16	45 × 96	B32356B4166J0#x	45
	17.5	45 × 96	B32356B4176J5#x	45
	18	50 × 96	B32356B4186J0#x	32
	20	50 × 96	B32356B4206J0#x	32

<sup>1</sup> In construction type, with Fast fixation device, the dimension will change to 32 x 62. For Plain CAN construction and Plastic CAN with M8 stud construction, the dimension will remain as 35 x 62.

**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 35mm

others on request

x: cable length (dimension 'B', "H" in drawing) upon request

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## Important notes

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Release 2020-06