



## Film Capacitors – AC Capacitors

### Motor run capacitors

**Series/Type:** B32328 – MotorCap

**Ordering code:** B32328

**Date:** September 2016

**Version:** 2

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**Construction**

- Metallized polypropylene film
- Plastic can and top UL 94 V2 material minimum
- Dry type

**Features**

- Self-healing properties
- Low dissipation factor
- S0 safety class to IEC60252-1 (ed.2) am1:
- High insulation resistance
- Case IP 53 protected

**Typical applications**

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





**Terminals**

- Twin core cable, double insulated,(H05V2V2F),0.5mm<sup>2</sup> ,600V, 90°C

**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

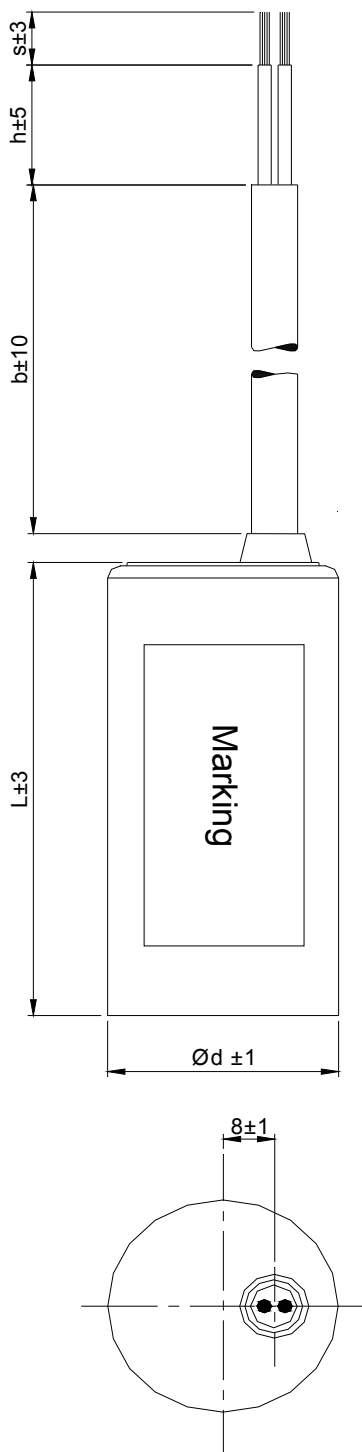
Technical data and specifications	
Reference standards	EN60252-1: 2014-07 IEC60252-1: Ed 2,2013-8,amendment 1
Safety class to IEC 60252-1/ 2013	S0
Life expectancy to IEC 60252-1 /2013	250 V/85 °C: 10000 h (class B) 400 V/85 °C: 10000 h (class B) 480 V/85 °C: 3000 h (class C)
Rated capacitance C <sub>R</sub>	See table ordering code
Tolerance Tx	±5%
Rated voltage V <sub>rms</sub>	250 V AC, 400 V AC, 480 V AC
Rated frequency f <sub>R</sub>	50/60 Hz
Maximum ratings	
Maximum permissible voltage V <sub>max</sub>	1.1 • V <sub>R</sub> (V <sub>R</sub> = Rated voltage)
Maximum permissible current I <sub>max</sub>	1.3 • I <sub>R</sub> (I <sub>R</sub> = Rated current)

<b>Test data</b>	
AC test voltage terminal to terminal $V_{TT}$	2 • $V_R$ , 2 s (routine test) 2 • $V_R$ , 60 s (type test)
Insulation resistance $R_{ins}$ or time constant $\tau$ at 20 °C, rel. humidity $\leq 65\%$ (minimum as-delivered values)	3000 s
Dissipation factor $\tan \delta$ at 20 °C	$\leq 7.0 \cdot 10^{-3}$ (1 kHz)
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 IEC 60252-1
Option A: <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 temp 550 °C for <math>I_R \leq 0.5</math> A Test temp 850 °C for <math>I_R &gt; 0.5</math> A</li> </ul>	Self-extinguishing within 30 seconds of withdrawing the glow wire and without igniting wrapping tissue.
Tracking test to IEC 60112 solution A	> 250 V
Protection class to IEC 60529 2001	IP 53
<b>Compatibility to RoHS</b>	
Compliance to directive 2002/95/EC	
<b>Approvals</b>	
<b>VDE IEC 60252-1</b> 	Approved 400 V/85 °C: 10000 h (class B) for 1.5 $\mu$ F to 50 $\mu$ F 480 V/85 °C: 3000h (class C)for 3 $\mu$ F to 35 $\mu$ F
	Compliance to LV directive 2014/35/EU

**Display of ordering codes for EPCOS products**

The ordering code for one and the same EPCOS product can be represented differently in data sheets, data books, other publications, on the EPCOS website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products.** Detailed information can be found on the Internet under [www.epcos.com/orderingcodes](http://www.epcos.com/orderingcodes)

Dimensional drawings

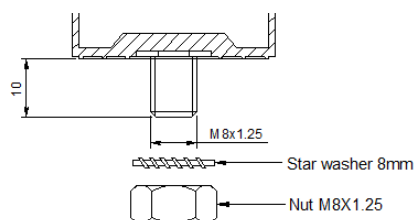


Mounting options

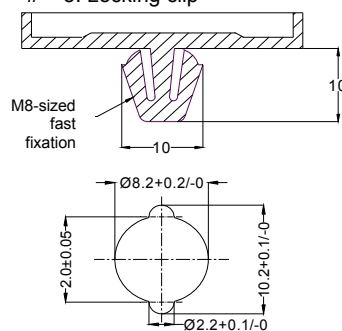
# = 1: Can without mounting



# = 3: Can with M8 bolt



# = 5: Locking clip



**Ordering codes and packing units**

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu F$	Dimensions D x L mm	Ordering code	Approvals	Packing unit pcs.
250	1.5	25 x 58	B32328A1155J0#*	---	112
	2	25 x 58	B32328A1205J0#*	---	112
	3	25 x 58	B32328A1305J0#*	---	112
	4	25 x 58	B32328A1405J0#*	---	112
	5	25 x 58	B32328A1505J0#*	---	112
	6	25 x 58	B32328A1605J0#*	---	112
	7	25 x 58	B32328A1705J0#*	---	112
	7.5	25 x 58	B32328A1755J0#*	---	112
	8	25 x 58	B32328A1805J0#*	---	112
	9	30 x 62	B32328A1905J0#*	---	112
	10	30 x 62	B32328A1106J0#*	---	112
	12	30 x 62	B32328A1126J0#*	---	112
	14	30 x 62	B32328A1146J0#*	---	112
	15	30 x 62	B32328A1156J0#*	---	112
	16	35 x 62	B32328A1166J0#*	---	84
	18	35 x 62	B32328A1186J0#*	---	84
	20	35 x 62	B32328A1206J0#*	---	84
	22	35 x 62	B32328A1226J0#*	---	84
	25	35 x 71	B32328A1256J0#*	---	84
	30	35 x 71	B32328A1306J0#*	---	84
	35	40 x 71	B32328A1356J0#*	---	60
	40	40 x 71	B32328A1406J0#*	---	60
45	40 x 71	B32328A1456J0#*	---	60	
50	40 x 96	B32328A1506J0#*	---	60	
55	40 x 96	B32328A1556J0#*	---	60	
60	40 x 96	B32328A1606J0#*	---	60	

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D × L mm	Ordering code	Approvals	Packing unit pcs.
400	1.5	25 × 58	B32328A4155J0#*	VDE	112
	2	25 × 58	B32328A4205J0#*	VDE	112
	3	25 × 58	B32328A4305J0#*	VDE	112
	4	25 × 58	B32328A4405J0#*	VDE	112
	5	30 × 62	B32328A4505J0#*	VDE	112
	6	30 × 62	B32328A4605J0#*	VDE	112
	7	35 × 62	B32328A4705J0#*	VDE	84
	8	35 × 62	B32328A4805J0#*	VDE	84
	9	35 × 62	B32328A4905J0#*	VDE	84
	10	35 × 62	B32328A4106J0#*	VDE	84
	12	35 × 71	B32328A4126J0#*	VDE	84
	14	35 × 71	B32328A4146J0#*	VDE	84
	15	40 × 71	B32328A4156J0#*	VDE	60
	16	40 × 71	B32328A4166J0#*	VDE	60
	18	40 × 71	B32328A4186J0#*	VDE	60
	20	40 × 71	B32328A4206J0#*	VDE	60
	22	40 × 96	B32328A4226J0#*	VDE	60
	25	40 × 96	B32328A4256J0#*	VDE	60
	30	40 × 96	B32328A4306J0#*	VDE	60
	35	45 × 96	B32328A4356J0#*	VDE	45
40	45 × 96	B32328A4406J0#*	VDE	45	
45	50 × 96	B32328A4456J0#*	VDE	32	
50	50 × 96	B32328A4506J0#*	VDE	32	
55	50 × 96	B32328A4556J0#*	---	32	
60	50 × 96	B32328A4606J0#*	—	32	

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D × L mm	Ordering code	Approvals	Packing unit pcs.
480	3	30 × 62	B32328A7305J0#*	VDE	112
	4	30 × 62	B32328A7405J0#*	VDE	112
	5	30 × 62	B32328A7505J0#*	VDE	112
	6	35 × 62	B32328A7605J0#*	VDE	84
	7.5	35 × 71	B32328A7755J0#*	VDE	84
	8	35 × 71	B32328A7805J0#*	VDE	84
	10	40 × 71	B32328A7106J0#*	VDE	60
	12	40 × 71	B32328A7126J0#*	VDE	60
	15	45 × 71	B32328A7156J0#*	VDE	45
	16	45 × 71	B32328A7166J0#*	VDE	45
	20	45 × 71	B32328A7206J0#*	VDE	45
	22	45 × 71	B32328A7226J0#*	VDE	45
	25	45 × 96	B32328A7256J0#*	VDE	45
	30	45 × 96	B32328A7306J0#*	VDE	45
35	50 × 96	B32328A7356J0#*	VDE	32	

**Composition of ordering code:**

# : construction

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

\*: Wire length (dimension 'b', h, s in drawing)

Note: Dimension "b" "h" and "s" will vary as per requirement.

**Cautions and warnings**


Please read "Applications warning, installation and maintenance instructions" and the "ZVEI - General safety recommendations for power capacitors", which are available on the Internet at [www.epcos.com/ac\\_capacitors](http://www.epcos.com/ac_capacitors), to ensure optimum performance and to prevent products from failing, and in worst case, bursting and fire. Information given in the data sheet reflects typical specifications.

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