



## Film Capacitors – AC Capacitors

### Motor run capacitors

**Series/Type:** B32320/B32322 – MotorCap

**Ordering code:** B32320/B32322

**Date:** September 2016

**Version:** 3

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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

**Typical applications**

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

**Terminals**




- B32320 – single fast-on: 6.3 × 0.8 mm
- B32322 – double fast-on: 6.3 × 0.8 mm

**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 $C_R$	See table ordering code
Tolerance Tx	±5%
Rated voltage $V_{rms}$	250 V AC, 400 V AC, 480 V AC
Rated frequency $f_R$	50/60 Hz
<b>Maximum ratings</b>	
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)

<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
<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
<b>Compatibility to RoHS</b>	
Compliance to directive 2002/95/EC	
<b>Approvals</b>	
<b>VDE EN 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: 3000 h (class C) for 3 $\mu$ F to 35 $\mu$ F
	Compliance to LV directive 2014/35/EU

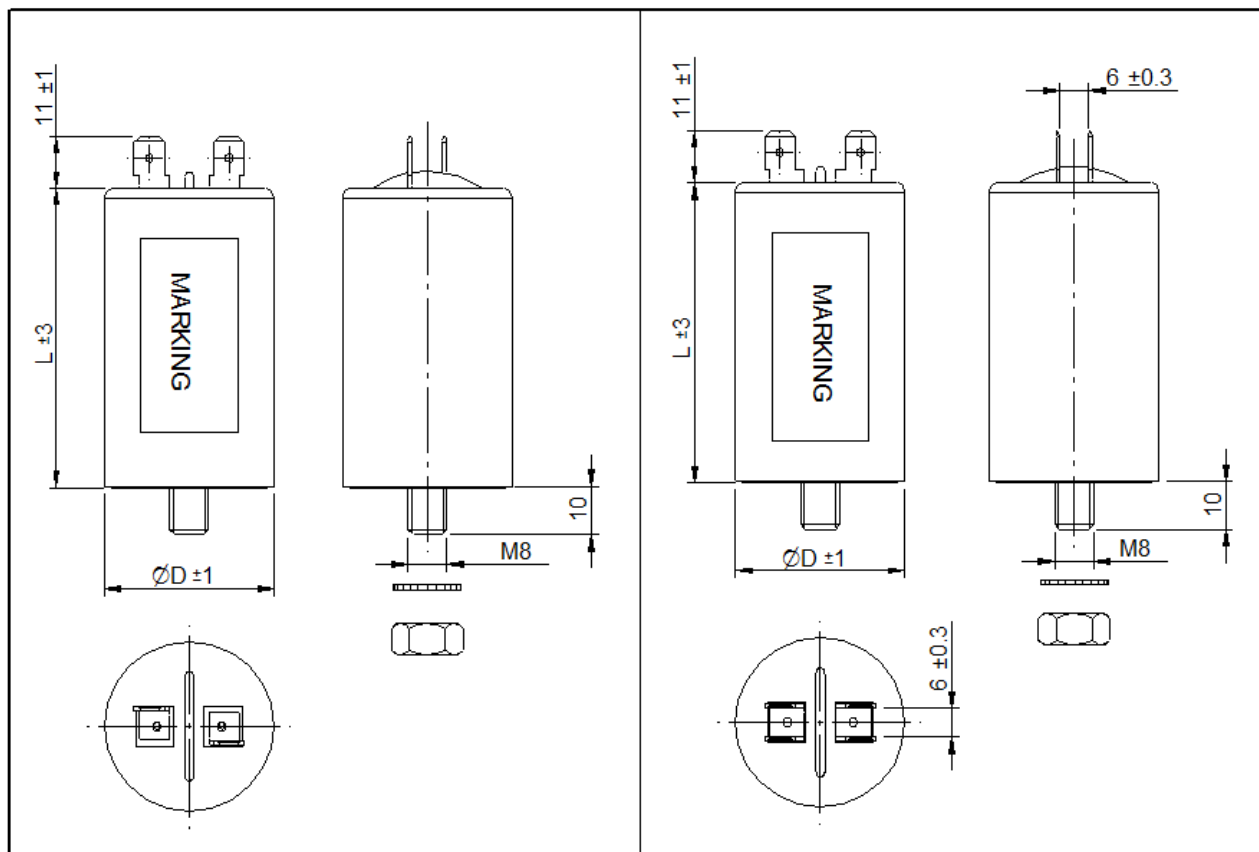
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Dimensional drawings

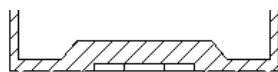
B32320

B32322

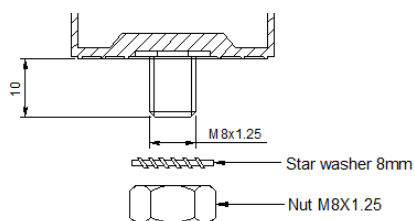


Mounting options

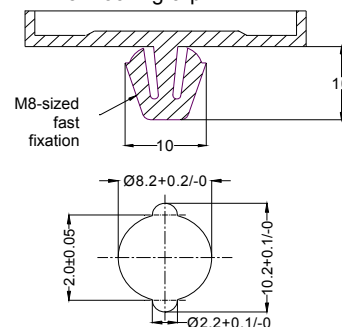
# = 1: Can without mounting



# = 3: Can with M8 bolt



# = 5: Locking clip



**Ordering codes and packing units**

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D × L B32320 mm	Dimensions D × L B32322 mm	Ordering code	Approvals	Packing unit  pcs.
250	1.5	25 × 58	30 × 62	B3232*C1155J0#0	---	112
	2	25 × 58	30 × 62	B3232*C1205J0#0	---	112
	3	25 × 58	30 × 62	B3232*C1305J0#0	---	112
	4	25 × 58	30 × 62	B3232*C1405J0#0	---	112
	5	25 × 58	30 × 62	B3232*C1505J0#0	---	112
	6	25 × 58	30 × 62	B3232*C1605J0#0	---	112
	7	25 × 58	30 × 62	B3232*C1705J0#0	---	112
	7.5	25 × 58	30 × 62	B3232*C1755J0#0	---	112
	8	25 × 58	30 × 62	B3232*C1805J0#0	---	112
	9	30 × 62	30 × 62	B3232*C1905J0#0	---	112
	10	30 × 62	30 × 62	B3232*C1106J0#0	---	112
	12	30 × 62	30 × 62	B3232*C1126J0#0	---	112
	14	30 × 62	30 × 62	B3232*C1146J0#0	---	112
	15	30 × 62	30 × 62	B3232*C1156J0#0	---	112
	16	35 × 62	35 × 62	B3232*C1166J0#0	---	84
	18	35 × 62	35 × 62	B3232*C1186J0#0	---	84
	20	35 × 62	35 × 62	B3232*C1206J0#0	---	84
	22	35 × 62	35 × 62	B3232*C1226J0#0	---	84
	25	35 × 71	35 × 71	B3232*C1256J0#0	---	84
	30	35 × 71	35 × 71	B3232*C1306J0#0	---	84
	35	40 × 71	40 × 71	B3232*C1356J0#0	---	60
40	40 × 71	40 × 71	B3232*C1406J0#0	---	60	
45	40 × 71	40 × 71	B3232*C1456J0#0	---	60	
50	40 × 96	40 × 96	B3232*C1506J0#0	---	60	
55	40 × 96	40 × 96	B3232*C1556J0#0	---	60	
60	40 × 96	40 × 96	B3232*C1606J0#0	---	60	

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D x L <b>B32320</b> mm	Dimensions D x L <b>B32322</b> mm	Ordering code	Approvals	Packing unit  pcs.
400	1.5	25 x 58	30 x 62	B3232*B4155J0#0	VDE	112
	2	25 x 58	30 x 62	B3232*B4205J0#0	VDE	112
	3	25 x 58	30 x 62	B3232*B4305J0#0	VDE	112
	4	25 x 58	30 x 62	B3232*B4405J0#0	VDE	112
	5	30 x 62	30 x 62	B3232*B4505J0#0	VDE	112
	6	30 x 62	30 x 62	B3232*B4605J0#0	VDE	112
	7	35 x 62	35 x 62	B3232*B4705J0#0	VDE	84
	8	35 x 62	35 x 62	B3232*B4805J0#0	VDE	84
	9	35 x 62	35 x 62	B3232*B4905J0#0	VDE	84
	10	35 x 62	35 x 62	B3232*B4106J0#0	VDE	84
	12	35 x 71	35 x 71	B3232*B4126J0#0	VDE	84
	14	35 x 71	35 x 71	B3232*B4146J0#0	VDE	84
	15	40 x 71	40 x 71	B3232*B4156J0#0	VDE	60
	16	40 x 71	40 x 71	B3232*B4166J0#0	VDE	60
	18	40 x 71	40 x 71	B3232*B4186J0#0	VDE	60
	20	40 x 71	40 x 71	B3232*B4206J0#0	VDE	60
	22	40 x 96	40 x 96	B3232*B4226J0#0	VDE	60
	25	40 x 96	40 x 96	B3232*B4256J0#0	VDE	60
	30	40 x 96	40 x 96	B3232*B4306J0#0	VDE	60
	35	45 x 96	45 x 96	B3232*B4356J0#0	VDE	45
40	45 x 96	45 x 96	B3232*B4406J0#0	VDE	45	
45	50 x 96	50 x 96	B3232*B4456J0#0	VDE	32	
50	50 x 96	50 x 96	B3232*B4506J0#0	VDE	32	
55	50 x 96	50 x 96	B3232*B4556J0#0	---	32	
60	50 x 96	50 x 96	B3232*B4606J0#0	—	32	

Rated voltage $V_R$ V AC	Rated capacitance $C_R$ $\mu\text{F}$	Dimensions D x L <b>B32320</b> mm	Dimensions D x L <b>B32322</b> mm	Ordering code	Approvals	Packing unit  pcs.
480	3	30 x 62	30 x 62	B3232*B7305J0#0	VDE	112
	4	30 x 62	30 x 62	B3232*B7405J0#0	VDE	112
	5	30 x 62	30 x 62	B3232*B7505J0#0	VDE	112
	6	35 x 62	35 x 62	B3232*B7605J0#0	VDE	84
	7.5	35 x 71	35 x 71	B3232*B7755J0#0	VDE	84
	8	35 x 71	35 x 71	B3232*B7805J0#0	VDE	84
	10	40 x 71	40 x 71	B3232*B7106J0#0	VDE	60
	12	40 x 71	40 x 71	B3232*B7126J0#0	VDE	60
	15	45 x 71	45 x 71	B3232*B7156J0#0	VDE	45
	16	45 x 71	45 x 71	B3232*B7166J0#0	VDE	45
	20	45 x 71	45 x 71	B3232*B7206J0#0	VDE	45
	22	45 x 71	45 x 71	B3232*B7226J0#0	VDE	45
	25	45 x 96	45 x 96	B3232*B7256J0#0	VDE	45
	30	45 x 96	45 x 96	B3232*B7306J0#0	VDE	45
35	50 x 96	50 x 96	B3232*B7356J0#0	VDE	32	

**Composition of ordering code:**

\*: Terminals

- 0 single fast-on terminals
- 2 double fast-on terminals

#: 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



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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