



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),0.5mm² ,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

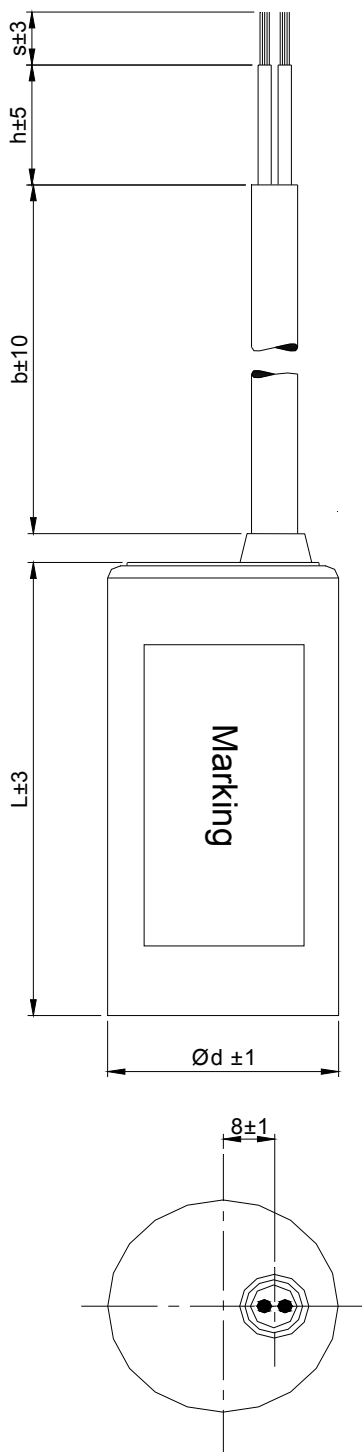
| Technical data and specifications | |
|--|---|
| Reference standards | EN60252-1: 2014-07 IEC60252-1: Ed 2,2013-8,amendment 1 |
| Safety class to IEC 60252-1/ 2013 | S0 |
| Life expectancy to IEC 60252-1 /2013 | 250 V/85 °C: 10000 h (class B) 400 V/85 °C: 10000 h (class B) 480 V/85 °C: 3000 h (class C) |
| Rated capacitance C _R | See table ordering code |
| Tolerance T _x | ±5% |
| Rated voltage V _{rms} | 250 V AC, 400 V AC, 480 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) |

| Test data | |
|--|---|
| 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 τ 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/ 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 IEC 60252-1 |
| Option A: <ul style="list-style-type: none"> ■ UL 94 V2 compatible ■ Glow wire test to IEC 60695-2-1/0 and -2-1/1 Test temp 550 °C for $I_R \leq 0.5$ A Test temp 850 °C for $I_R > 0.5$ A | 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 |
| Compatibility to RoHS | |
| Compliance to directive 2002/95/EC |  |
| Approvals | |
| VDE IEC 60252-1  | Approved 400 V/85 °C: 10000 h (class B) for 1.5 μ F to 50 μ F 480 V/85 °C: 3000h (class C)for 3 μ F to 35 μ F |
|  | Compliance to LV directive 2014/35/EU |

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Dimensional drawings

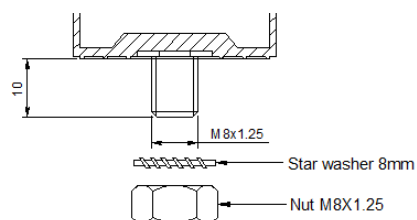


Mounting options

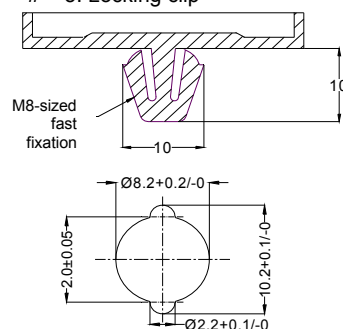
= 1: Can without mounting



= 3: Can with M8 bolt



= 5: Locking clip



Ordering codes and packing units

| Rated voltage V_R V AC | Rated capacitance C_R μF | 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 μF | 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 μF | 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, 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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