



Film capacitors – AC capacitors

EPCOS Feida Motor Run Capacitors

Series/Type: CBB66 - Single Capacitor P2 Aluminum Can Oval
Ordering code: B33364
Date: March. 2010
Version: 1

Construction

- Dielectric: polypropylene film
- Electrode: Metallized film
- Aluminum can, metal top
- Filling material: Vegetable oil, PCB free
- Insulator material as per IEC 60335-1

Features

- Self-healing properties
- Low dissipation factor
- Overpressure disconnection device
- Highest safety level P2 to IEC 60252-1 2001-02
- High insulation resistance
- IEC/EN 60335 compatible





Typical applications

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

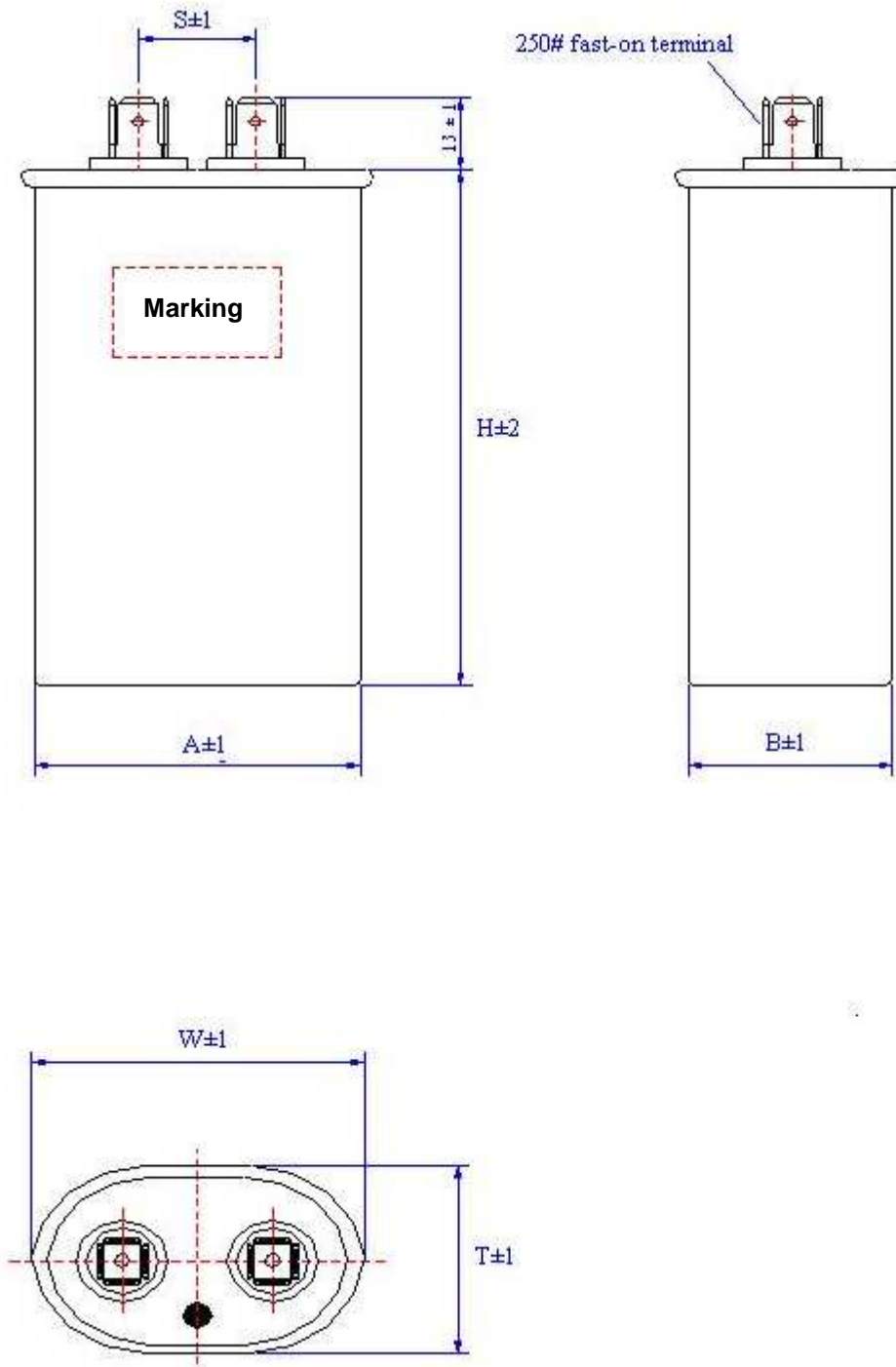
Terminals

- 4+4 fast-on terminal #250 style

| Technical data and specifications | |
|---------------------------------------|--|
| Reference standards | UL 810 / IEC 60252-1 / EIA 456 A Jan.89 |
| Safety class to IEC 60252-1 2001-02 | P2 |
| Life expectancy to IEC 60252 2001 | 370V, 440V: 10 000h (Class B) |
| Life expectancy to EIA 456 A Jan. 89 | 60 000 hours at 95% survival rate |
| Rated capacitance C_R | 3.....50µF |
| Tolerance | ±5% other tolerances on request |
| Rated voltage V_R | 370Vac, 440 Vac |
| 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) |

| Test data | |
|---|--|
| AC test voltage terminal to terminal V_{TT} | $2.0 \cdot V_R, 10 \text{ s}$ |
| Insulation voltage terminals to case | 3000 V AC, 2 s |
| Insulation resistance R_{ins} or time constant τ at 20 °C, rel. Humidity $\leq 65\%$ (minimum as-delivered values) | 10000 M $\Omega \cdot \mu F$ |
| Dissipation factor $\tan \delta$ at 20 °C | $\leq 2.0 \cdot 10^{-3}$ (100 Hz) |
| Maximum rate of voltage rise dV/dt_{max} | 10 V/ μs |
| Climatic data | |
| Climatic category | 40/070/21 |
| Lower category T_{min} | -40 °C |
| Upper category T_{max} | +70 °C |
| Damp heat test t_{test} | 21 days |
| Mechanical and thermal properties of insulation terminal material | |
| Ball pressure test to IEC 60309-1 sec. 27.3 | 20 N at 125°C |
| UL 94 specification | V0 compatible |
| Glow wire test to IEC60335-1 / IEC 60695-2-1/1 Test temperature 550 °C for $I_R \leq 0.5A$ and 750 °C for $I_R > 0.5A$ | Self-extinguishing within 2 seconds of withdrawing glow wire |
| Compatibility to RoHS | |
| Compliance to directive 2002/95/EC |  |
| Approvals: See table for approved ratings | |
| C  US UL 810 files E241095 250/300/370/400450Vac | Protected up to 5000 AFC -10,000 AFC under approval |

Dimensional drawings CBB 66 (B33364) series





Ordering codes and packing units

| VR V AC | CR μF | W mm | T mm | S mm | Dimensions B×A×H mm | Ordering code | Pack- ing units pcs | UL |
|------------|----------|---------|---------|-----------|---------------------------|-------------------|------------------------------|----|
| 370 | 3 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3305-J050 | 120 | |
| | 4 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3405-J050 | 120 | |
| | 5 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3505-J050 | 120 | |
| | 6 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3605-J050 | 120 | |
| | 7 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3705-J050 | 120 | |
| | 7.5 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3755-J050 | 120 | |
| | 8 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A3805-J050 | 120 | |
| | 10 | 54.5 | 34.5 | 20 | 31.5x51.5x65 | B33364-A3106-J050 | 120 | |
| | 12 | 54.5 | 34.5 | 20 | 31.5x51.5x65 | B33364-A3126-J050 | 120 | |
| | 12.5 | 54.5 | 34.5 | 20 | 31.5x51.5x75 | B33364-A3126-J550 | 120 | |
| | 15 | 54.5 | 34.5 | 20 | 31.5x51.5x75 | B33364-A3156-J050 | 120 | |
| | 20 | 73 | 48 | 20 | 45x70x65 | B33364-A3206-J050 | 60 | |
| | 25 | 73 | 48 | 20 | 45x70x65 | B33364-A3256-J050 | 60 | |
| | 30 | 73 | 48 | 20 | 45x70x75 | B33364-A3306-J050 | 60 | |
| | 35 | 73 | 48 | 20 | 45x70x75 | B33364-A3356-J050 | 60 | |
| | 40 | 73 | 48 | 20 | 45x70x85 | B33364-A3406-J050 | 60 | |
| | 45 | 73 | 48 | 20 | 45x70x100 | B33364-A3456-J050 | 60 | |
| 50 | 73 | 48 | 20 | 45x70x100 | B33364-A3506-J050 | 60 | | |
| 440 | 3 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A5305-J050 | 120 | |
| | 4 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A5405-J050 | 120 | |
| | 5 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A5505-J050 | 120 | |
| | 6 | 54.5 | 34.5 | 20 | 31.5x51.5x55 | B33364-A5605-J050 | 120 | |
| | 7 | 54.5 | 34.5 | 20 | 31.5x51.5x65 | B33364-A5705-J050 | 120 | |
| | 7.5 | 54.5 | 34.5 | 20 | 31.5x51.5x65 | B33364-A5755-J050 | 120 | |
| | 8 | 54.5 | 34.5 | 20 | 31.5x51.5x65 | B33364-A5805-J050 | 120 | |
| | 10 | 54.5 | 34.5 | 20 | 31.5x51.5x75 | B33364-A5106-J050 | 120 | |
| | 12 | 54.5 | 34.5 | 20 | 31.5x51.5x75 | B33364-A5126-J050 | 120 | |
| | 12.5 | 54.5 | 34.5 | 20 | 31.5x51.5x75 | B33364-A5126-J550 | 120 | |
| | 15 | 73 | 48 | 20 | 45x70x65 | B33364-A5156-J050 | 60 | |
| | 20 | 73 | 48 | 20 | 45x70x65 | B33364-A5206-J050 | 60 | |
| | 25 | 73 | 48 | 20 | 45x70x75 | B33364-A5256-J050 | 60 | |
| | 30 | 73 | 48 | 20 | 45x70x85 | B33364-A5306-J050 | 60 | |
| | 35 | 73 | 48 | 20 | 45x70x100 | B33364-A5356-J050 | 60 | |
| 40 | 73 | 48 | 20 | 45x70x100 | B33364-A5406-J050 | 60 | | |



| | | | | | | | | |
|--|----|----|----|----|----------|-------------------|----|--|
| | 45 | 93 | 51 | 20 | 48x90x75 | B33364-A5456-J050 | 45 | |
| | 50 | 93 | 51 | 20 | 48x90x85 | B33364-A5506-J050 | 45 | |

U 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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