# Film capacitors – AC capacitors

## EPCOS Feida Motor Run Capacitors

**Series/Type:** **CBB66 - Single Capacitor P2 Aluminum Can Oval**
**Ordering code:** **B33364**

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Version: 1

# EPCOS Feida Motor Run CapacitorsCBB66 - Single Capacitor P2 Aluminum Can Oval


## 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

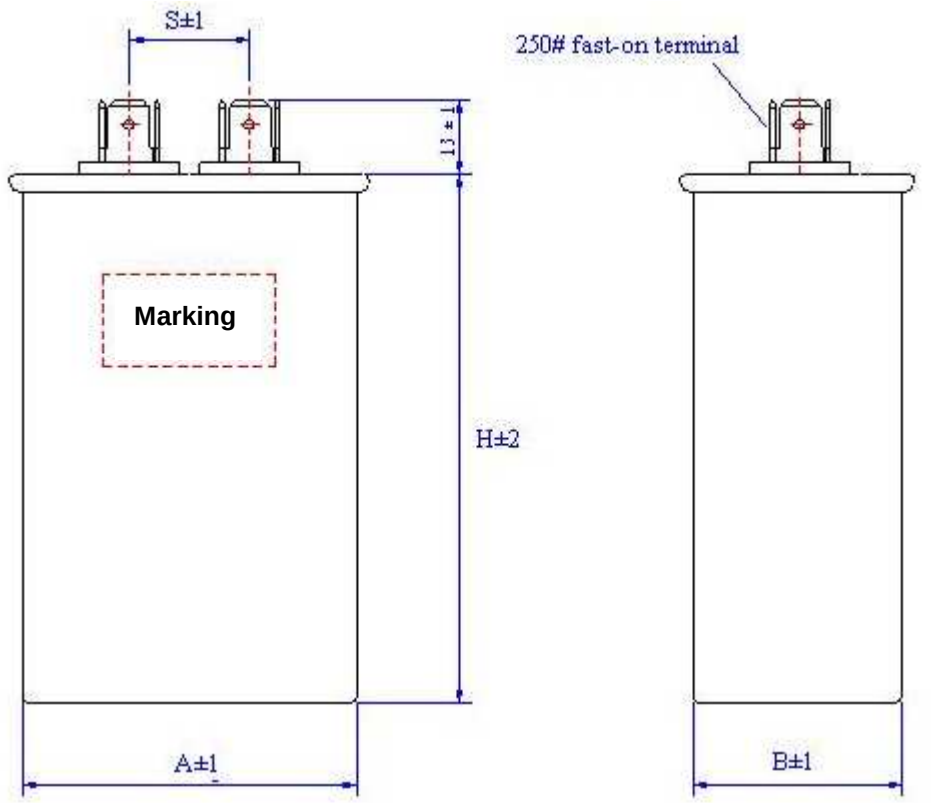
## Terminals

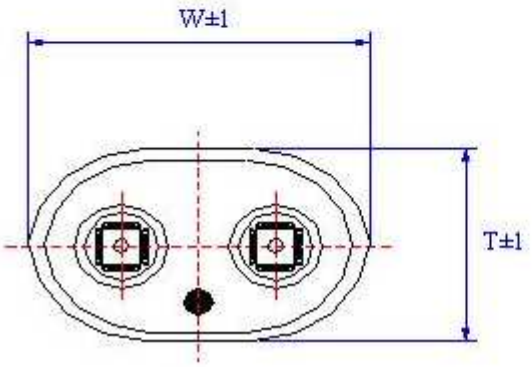
- 4+4 fast-on terminal #250 style

| **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 · $V_R$, 10 s |
| Insulation voltage terminals to case | 3000 V AC, 2 s |
| Insulation resistance $R_{ins}$ or time constant τ<br>at 20 ℃, rel. Humidity ≤ 65%<br>(minimum as-delivered values) | 10000 MΩ • μF |
| Dissipation factor tan δ at 20 ℃ | ≤ 2.0 · $10^{-3}$ (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 ℃ |
| Upper category $T_{max}$ | +70 ℃ |
| 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℃ |
| UL 94 specification | V0 compatible |
| Glow wire test to IEC60335-1 / IEC 60695-2-1/1<br>Test temperature 550 ℃ for $I_R \leqslant 0.5A$ and 750 ℃ for<br>$I_R > 0.5A$ | Self-extinguishing within 2 seconds of withdrawing glow wire |
| **Compatibility to RoHS** | |
| Compliance to directive 2002/95/EC | RoHS compatible |
| **Approvals: See table for approved ratings** | |
| **C US UL 810 files E241095**<br>**250/300/370/400450Vac** | Protected up to 5000 AFC<br>-10,000 AFC under approval |

**Dimensional drawings CBB 66 (B33364) series**



**Ordering codes and packing units**

| $V_R$ V AC | $C_R$ µF | W mm | T mm | S mm | Dimensions B×A×H mm | Ordering code | Packing units pcs | UL |
|---|---|---|---|---|---|---|---|---|
| 370 | 3 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3305-J050 | 120 | |
| | 4 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3405-J050 | 120 | |
| | 5 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3505-J050 | 120 | |
| | 6 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3605-J050 | 120 | |
| | 7 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3705-J050 | 120 | |
| | 7.5 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3755-J050 | 120 | |
| | 8 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A3805-J050 | 120 | |
| | 10 | 54.5 | 34.5 | 20 | 31.5×51.5×65 | B33364-A3106-J050 | 120 | |
| | 12 | 54.5 | 34.5 | 20 | 31.5×51.5×65 | B33364-A3126-J050 | 120 | |
| | 12.5 | 54.5 | 34.5 | 20 | 31.5×51.5×75 | B33364-A3126-J550 | 120 | |
| | 15 | 54.5 | 34.5 | 20 | 31.5×51.5×75 | B33364-A3156-J050 | 120 | |
| | 20 | 73 | 48 | 20 | 45×70×65 | B33364-A3206-J050 | 60 | |
| | 25 | 73 | 48 | 20 | 45×70×65 | B33364-A3256-J050 | 60 | |
| | 30 | 73 | 48 | 20 | 45×70×75 | B33364-A3306-J050 | 60 | |
| | 35 | 73 | 48 | 20 | 45×70×75 | B33364-A3356-J050 | 60 | |
| | 40 | 73 | 48 | 20 | 45×70×85 | B33364-A3406-J050 | 60 | |
| | 45 | 73 | 48 | 20 | 45×70×100 | B33364-A3456-J050 | 60 | |
| | 50 | 73 | 48 | 20 | 45×70×100 | B33364-A3506-J050 | 60 | |
| 440 | 3 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A5305-J050 | 120 | |
| | 4 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A5405-J050 | 120 | |
| | 5 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A5505-J050 | 120 | |
| | 6 | 54.5 | 34.5 | 20 | 31.5×51.5×55 | B33364-A5605-J050 | 120 | |
| | 7 | 54.5 | 34.5 | 20 | 31.5×51.5×65 | B33364-A5705-J050 | 120 | |
| | 7.5 | 54.5 | 34.5 | 20 | 31.5×51.5×65 | B33364-A5755-J050 | 120 | |
| | 8 | 54.5 | 34.5 | 20 | 31.5×51.5×65 | B33364-A5805-J050 | 120 | |
| | 10 | 54.5 | 34.5 | 20 | 31.5×51.5×75 | B33364-A5106-J050 | 120 | |
| | 12 | 54.5 | 34.5 | 20 | 31.5×51.5×75 | B33364-A5126-J050 | 120 | |
| | 12.5 | 54.5 | 34.5 | 20 | 31.5×51.5×75 | B33364-A5126-J550 | 120 | |
| | 15 | 73 | 48 | 20 | 45×70×65 | B33364-A5156-J050 | 60 | |
| | 20 | 73 | 48 | 20 | 45×70×65 | B33364-A5206-J050 | 60 | |
| | 25 | 73 | 48 | 20 | 45×70×75 | B33364-A5256-J050 | 60 | |
| | 30 | 73 | 48 | 20 | 45×70×85 | B33364-A5306-J050 | 60 | |
| | 35 | 73 | 48 | 20 | 45×70×100 | B33364-A5356-J050 | 60 | |
| | 40 | 73 | 48 | 20 | 45×70×100 | B33364-A5406-J050 | 60 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 45 | 93 | 51 | 20 | 48×90×75 | B33364-A5456-J050 | 45 | |
| | 50 | 93 | 51 | 20 | 48×90×85 | 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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