



Product Brief 2011

Power Factor Correction

MKV Series for Power Quality Solutions

Due to their rugged design, MKV capacitors are used for applications with high ambient temperatures and tough conditions. During the years, this series has experienced a great number of enhancements. With the B25836B****A305 series, a broad range of new features and parameters makes the MKV capacitors even more attractive for heavy duty applications. Especially their high temperature class and long mean life expectancy will fortify the superb reputation that MKV capacitors from EPCOS have experienced since their introduction to the market.

New features

- Inrush current withstand capability up to $500 \cdot I_R$
- Overcurrent capability up to $10 \cdot I_R$, depending on the particular capacitor type (incl. combined effects of harmonics, overvoltages and capacitance tolerance)
- Mean life expectancy up to 300 000 h at temperature class -40/D
- Number of switching operations:
 - up to 20 000 switchings per year acc. to IEC 60831-1+2
 - max. 50 000 switchings per year acc. to IEC 60831-1+2 in case standard PFC reactors are applied

PQS



MKV Capacitors

General features

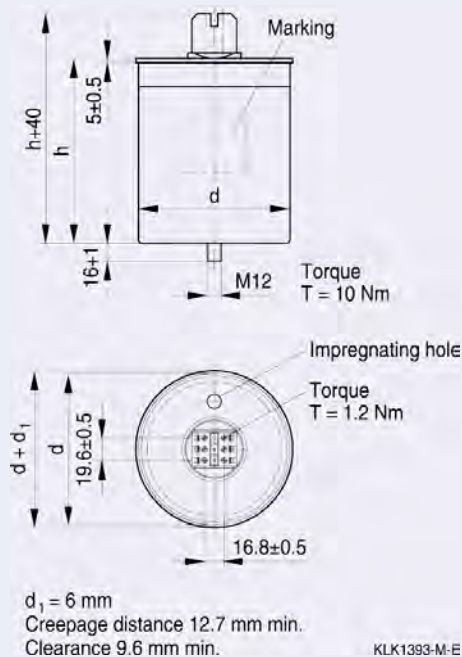
- Voltage range: 400 ... 800 V AC
- Output range: 4.2 ... 30 kvar
- Frequency: 50/60 Hz
- Ambient temperature: -40 ... +70 °C
- Safety: overpressure disconnecter, self healing
- Impregnation: oil
- Dielectric: polypropylene film with paper as electrode carrier

| Types and dimensions | | | | | | | |
|------------------------|-------------------------|-------------------------|----------------------|-------------|--------------|-----------------|-----------------|
| Type | 50 Hz Output kvar | 60 Hz Output kvar | C_R 3 • μ F | d x h mm | Weight kg | Ordering code | Packing unit |
| Rated voltage 400 V AC | | | | | | | |
| MKV400-D-5-02 | 5.0 | 6.0 | 33.2 | 95.2 x 248 | 2.3 | B25836B4996A305 | 3 |
| MKV400-D-10-02 | 10.0 | 12.0 | 66.3 | 116.2 x 248 | 3.1 | B25836B4197A305 | 2 |
| MKV400-D-12.5-02 | 12.5 | 15.0 | 82.9 | 116.2 x 248 | 3.1 | B25836B4247A305 | 2 |
| MKV400-D-15-02 | 15.0 | 18.0 | 99.5 | 116.2 x 248 | 3.1 | B25836B3297A305 | 2 |
| MKV400-D-20-02 | 20.0 | 24.0 | 133.0 | 116.2 x 325 | 4.5 | B25836B3397A305 | 2 |
| MKV400-D-25-02 | 25.0 | 30.0 | 166.0 | 116.2 x 325 | 4.5 | B25836B3497A305 | 2 |
| Rated voltage 440 V AC | | | | | | | |
| MKV440-D-6-02 | 6.1 | 7.3 | 33.2 | 95.2 x 248 | 2.3 | B25836B4996A305 | 3 |
| MKV440-D-12-02 | 12.0 | 14.4 | 66.3 | 116.2 x 248 | 3.1 | B25836B4197A305 | 2 |
| MKV440-D-15-02 | 15.0 | 18.0 | 82.9 | 116.2 x 248 | 3.1 | B25836B4247A305 | 2 |
| MKV440-D-20-02 | 20.2 | 24.2 | 110.5 | 116.2 x 325 | 4.5 | B25836B4337A305 | 2 |
| MKV440-D-25-02 | 25.0 | 30.0 | 137.0 | 116.2 x 325 | 4.5 | B25836B4417A305 | 2 |
| Rated voltage 480 V AC | | | | | | | |
| MKV480-D-4-02 | 4.2 | 5.0 | 19.3 | 95.2 x 248 | 2.3 | B25836B5576A305 | 3 |
| MKV480-D-10-02 | 10.4 | 12.5 | 48.1 | 116.2 x 248 | 3.1 | B25836B5147A305 | 2 |
| MKV480-D-12.5-02 | 12.6 | 15.1 | 58.0 | 116.2 x 248 | 3.1 | B25836B5177A305 | 2 |
| MKV480-D-15-02 | 15.0 | 18.0 | 69.0 | 116.2 x 248 | 3.1 | B25836B4207A305 | 2 |
| MKV480-D-20-02 | 20.0 | 24.0 | 92.2 | 116.2 x 325 | 4.5 | B25836B4277A305 | 2 |
| MKV480-D-25-02 | 25.0 | 30.0 | 115.0 | 116.2 x 325 | 4.5 | B25836B4347A305 | 2 |
| Rated voltage 525 V AC | | | | | | | |
| MKV525-D-5-02 | 5.0 | 6.0 | 19.3 | 95.2 x 248 | 2.3 | B25836B5576A305 | 3 |
| MKV525-D-10-02 | 10.0 | 12.0 | 38.5 | 95.2 x 248 | 2.3 | B25836B5117A305 | 3 |
| MKV525-D-12.5-02 | 12.5 | 15.0 | 48.1 | 116.2 x 248 | 3.1 | B25836B5147A305 | 2 |
| MKV525-D-15-02 | 15.0 | 18.0 | 58.0 | 116.2 x 248 | 3.1 | B25836B5177A305 | 2 |
| MKV525-D-20-02 | 20.0 | 24.0 | 77.0 | 116.2 x 325 | 4.5 | B25836B5237A305 | 2 |
| MKV525-D-25-02 | 25.0 | 30.0 | 96.2 | 116.2 x 325 | 4.5 | B25836B5287A305 | 2 |

MKV Capacitors

| Type | 50 Hz Output kvar | 60 Hz Output kvar | C_R $3 \cdot \mu\text{F}$ | d x h mm | Weight kg | Ordering code | Packing unit |
|------------------------|-------------------------|-------------------------|--------------------------------|-------------|--------------|-----------------|-----------------|
| Rated voltage 600 V AC | | | | | | | |
| MKV600-D-10.4-02 | 10.4 | 12.5 | 30.7 | 116.2 x 248 | 3.1 | B25836B6926A305 | 2 |
| Rated voltage 690 V AC | | | | | | | |
| MKV690-D-5-02 | 5.0 | 6.0 | 11.2 | 95.2 x 248 | 2.3 | B25836B6336A305 | 3 |
| MKV690-D-10-02 | 10.1 | 12.1 | 22.5 | 95.2 x 248 | 2.3 | B25836B6666A305 | 2 |
| MKV690-D-12.5-02 | 12.5 | 15.0 | 27.9 | 116.2 x 248 | 3.1 | B25836B6836A305 | 2 |
| MKV690-D-15-02 | 15.0 | 18.0 | 33.5 | 116.2 x 248 | 3.1 | B25836B6107A305 | 2 |
| MKV690-D-20-02 | 20.0 | 24.0 | 44.5 | 116.2 x 325 | 4.5 | B25836B6137A305 | 2 |
| MKV690-D-25-02 | 25.0 | 30.0 | 55.8 | 116.2 x 325 | 4.5 | B25836B6167A305 | 2 |
| Rated voltage 800 V AC | | | | | | | |
| MKV800-D-5-02 | 5.0 | 6.0 | 8.3 | 95.2 x 248 | 2.3 | B25836B8246A305 | 3 |
| MKV800-D-10-02 | 10.0 | 12.0 | 16.6 | 116.2 x 248 | 3.1 | B25836B8496A305 | 2 |
| MKV800-D-12.5-02 | 12.7 | 15.2 | 21.0 | 116.2 x 248 | 3.1 | B25836B8636A305 | 2 |
| MKV800-D-15-02 | 15.0 | 18.0 | 24.8 | 116.2 x 248 | 3.1 | B25836B8746A305 | 2 |
| MKV800-D-17-02 | 16.9 | 20.3 | 28.0 | 116.2 x 325 | 4.5 | B25836B8846A305 | 2 |
| MKV800-D-20-02 | 20.0 | 24.0 | 33.2 | 116.2 x 325 | 4.5 | B25836B8996A305 | 2 |

Dimensional drawing



Important information: Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products. We expressly point out that these statements cannot be regarded as binding statements about the suitability of our products for a particular customer application. It is incumbent on the customer to check and decide whether a product is suitable for use in a particular application. This publication is only a brief product survey which may be changed from time to time. Our products are described in detail in our data sheets. The Important notes (www.epcos.com/ImportantNotes) and the product-specific Cautions and warnings must be observed. All relevant information is available through our sales offices.