

Power Capacitors

Power Factor Correction

Construction

- Dielectric: Polypropylene film
- Gas-impregnated / dry type
- Concentric winding
- Wave cut
- Extruded round aluminum can with stud
- Provided with ceramic discharge module
- Triple safety system

Features

- Three phase, delta connected
- Self-healing technology
- Naturally air cooled (or forced air cooling)
- Indoor mounting

Typical applications

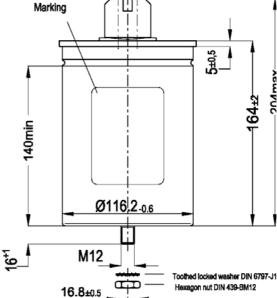
For Power Factor Correction

Terminals

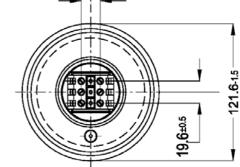
SIGUT terminals

Mounting parts

Threaded stud at bottom of can (max. torque = 10 Nm for M12)



Dimensional drawing



All dimensions in mm

Technical data and specifications

| Characteristics | | |
|----------------------------------|--------------|----------|
| Rated capacitance C _R | 1 x 313 µF | |
| Tolerance | -5 / +10% | |
| Connection | D (Delta) | |
| Rated voltage V _R | 230 VAC | |
| Rated frequency f _R | 50 Hz | 60 Hz |
| Output | 5.2 kvar | 6.2 kvar |
| Rated current I _R | 23 A | 28 A |
| tanδ (dielectric) | 0.2 W / kvar | |

FK PFC RD / VA

B25667B2317A175

MKK230-I-5.2-01



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| Maximum ratings | |
|------------------------------------|--------------------------|
| U _{max} (up to 8 h daily) | 250 VAC |
| U _{max} (up to 1 min) | 300 VAC |
| I _{max} | 1.3 x I _R (A) |
| I _S | 200 x I _R (A) |

Test data

| U _{TT} | 500 VAC / 50 Hz during 10 s |
|-----------------|-------------------------------|
| U _{TC} | 3,000 VAC / 50 Hz during 10 s |
| tanδ (50 Hz) | ≤ 0.6 W / kvar |

| Climatic category / -40/D | | |
|---------------------------|----------|----------------|
| T _{min} | (-) | 40 °C |
| T _{max} | (+) | 55 °C |
| Humidity | | av. rel. < 95% |
| Maximum | altitude | 4,000 m |

Mean life expectancy

| t _{LD} | Up to 115,000 hours |
|---|---------------------|
| Max. 5000 switchings per year acc. to IEC 60831 | |

| Design data | |
|---------------------------|--|
| Dimensions (Ø x I) | 121 x 164 mm |
| Weight approx | 1.1 kg |
| Impregnation | Dry, inert gas |
| Fixing | Threaded bolt M12 |
| Max. torque (Al can stud) | 10 Nm |
| Mounting position | Any mounting position possible. See "Maintenance and Installation Manual" for further details. |

Label design

| Â | | | _ |
|------------------------|-----------------------|--------------------|---------|
| EPCOS | SIE | EMEN | S |
| PhaseCap™ | Pow | er Qualit | y |
| MKK230-1-5 | -01 4RB | 5 0 52-5 A | A 23 |
| B25667B2 | 2317A175 | | |
| C _N = 1 x 3 | 313 µF + 10/ | - 5% | SH |
| UN | Q _N /50 Hz | Q _N /60 | Hz |
| 230 V | 5.2 kvar | 6.2 kv | /ar |
| 208 V | 4.3 kvar | 5.1 kv | /ar |
| 240 V | 5.7 kvar | 6.8 kv | /ar |
| $U_1 = 3/-kV$ | -40/D | | |
| Overpressure | e disconnector | Dry, Ine | ert Gas |
| IEC 60831(96 | 6) | | CE |
| AFC 10 kA | -40+55°C | | •• |
| Internally prot | tected | R | ° |
| CSA C22.2 N | lo.190 | C 7 | US |
| Made by EPC | COS | E | 03/05 |



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| Terminals | |
|--------------------------|----------------------------|
| Degree of protection | Isolated terminals, IP20 |
| Max. torque | 1.2 Nm |
| Terminal cross section | 16 mm ² (5 AWG) |
| Maximum terminal current | 50 A |
| Creepage distance | 12.7 mm |
| Clearance | 9.6 mm |
| | |
| Safety | |

| · · · · · · · · · · · · · · · · · · · | |
|---------------------------------------|---------------------------|
| Mechanical safety | Overpressure disconnector |
| Max. short circuit current | (AFC: 10 kA) |
| Discharge resistor time | ≤ 1 min (75 V) |
| | |

Reference standards

IEC 60831-1/2, UL 810-5th edition

Certification: cUL file E238746

A Please read information about PFC capacitors and cautions as well as installation and maintenance instructions (Power Factor Correction Product Profile, actual version, and Installation and Maintenance Instructions for PFC-capacitors, available in the Internet) to ensure optimum performance and prevent products from failing, and in worst case, bursting and fire. Information given in the PFC-product profile and values given in the data sheet reflect typical specifications. You are kindly requested to approve our product

specifications or request our approval for your specification before ordering.

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