

## **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**

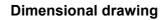
For Power Factor Correction

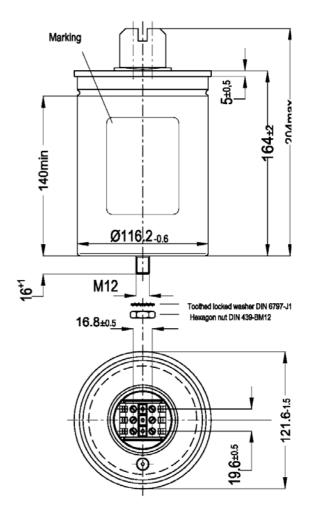
### Terminals

SIGUT terminals

#### Mounting parts

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





### Technical data and specifications

Characteristics		
Rated capacitance C <sub>R</sub>	1 x 200 µF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V <sub>R</sub>	480 VAC	
Rated frequency f <sub>R</sub>	50 Hz	60 Hz
Output	14.5 kvar	
Rated current I <sub>R</sub>	30 A	
tanδ (dielectric)	0.2 W / kvar	

B25667B4207A175

MKK480-I-14.1-01



# Power Capacitors

## **Power Factor Correction**

# B25667B4207A175 MKK480-I-14.1-01

Maximum ratings	
U <sub>max</sub> (up to 8 h daily)	530 VAC
U <sub>max</sub> (up to 1 min)	620 VAC
I <sub>max</sub>	1.3 x I <sub>R</sub> (A)
l <sub>S</sub>	200 x I <sub>R</sub> (A)

## Test data

UTT	1,050 VAC / 50 Hz during 10 s
U <sub>TC</sub>	3,000 VAC / 50 Hz during 10 s
tanδ (50 Hz)	≤ 0.5 W / kvar

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

# Mean life expectancy

t <sub>LD</sub>	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	1.5 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	SI	EMENS
PhaseCap <sup>⊤</sup> MKK480-I-1		ver Quality 35 145-5 AA 48
B25667B	4207A175	
$C_{\rm N} = 1 \text{ x2}$	00 μF + 10/	-5% SH
UN	<i>Q</i> <sub>N</sub> /50 Hz	Q <sub>N</sub> ∕60 Hz
480 V	14,5 kvar	
494 V	15,3 kvar	
$U_{\rm i} = 3/- \rm kV$	-40/D	
Overpressur	e disconnector	r Dry, Inert Gas
IEC 60831 (9	6)	CE
Made by EP	COS	04/05



## **Power Capacitors**

### **Power Factor Correction**

## B25667B4207A175 MKK480-I-14.1-01

Terminals		
Degree of protection	Isolated terminals, IP20	
Max. torque	1.2 Nm	
Terminal cross section	16 mm <sup>2</sup> (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	≤ 90 s (75 V)

#### **Reference standards**

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

△ 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

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.

© EPCOS AG 2005. All Rights reserved. Reproduction, publication and dissemination of this data sheet, enclosures hereto and the information contained therein without EPCOS' prior express consent is prohibited. The information contained in this data sheet describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.