

## **Power Capacitors**

## Power Factor Correction PhaseCap

#### 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

- Self-healing technology
- Naturally air cooled (or forced air cooling)
- Indoor mounting

#### **Typical applications**

For Power Factor Correction

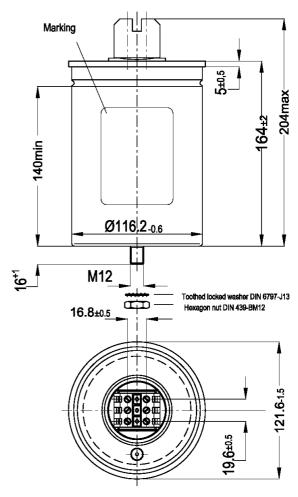
#### Terminals

SIGUT terminals

#### **Mounting parts**

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

# Dimensional drawing



## Technical data and specifications

All dimensions in mm

Characteristics	MKK440-	I-8.3-01	MKK525-	I-12.5-01	
Rated capacitance C <sub>R</sub>	1 x 144 μF		1 x 144 μF		
Tolerance	-5 / +10%		-5 / +10%		
Rated voltage V <sub>R</sub>	440 VAC		525 VAC		
Rated frequency f <sub>R</sub>	50 Hz	60 HZ	50 Hz	60 Hz	
Output	8.3 kvar	10 kvar	12.5 kvar	15 kvar	
Rated current I <sub>R</sub>	19 A	23 A	24 A	29 A	
tanδ (dielectric)	0.2 W / kva	0.2 W / kvar		0.2 W / kvar	

# B25667B5147A175

MKK440-I-8.3-01/ MKK525-I-12.5-01



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# Maximum ratings Umax (up to 8 h daily) 580 VAC Umax (up to 1 min) 680 VAC Imax 1.3 x I<sub>R</sub> (A) I<sub>S</sub> 200 x I<sub>R</sub> (A)

#### Test data

U <sub>TT</sub>	1,150 VAC / 50 Hz during 10 s
U <sub>TC</sub>	3,000VAC / 50 Hz during 10 s
tanδ (50 Hz)	≤ 0.5W / kvar

Climatic category / -40/D		
T <sub>min</sub> (-)	40 ºC	
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.

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### Label design

# EPCOS PhaseCap<sup>™</sup> MKK525-1-12.5-01 B25667B5147A175 $C_N = 1 \times 144 \ \mu\text{F} + 10/-5\%$ SH $U_N / V \quad Q_N / 50 \ \text{Hz} \quad Q_N / 60 \ \text{Hz}$ MKK525 12.5 kvar 15.0 kvar MKK440 8.3 kvar 10.0 kvar $U_i = 3/-\text{kV} \quad -40/\text{D}$

Overpressure disconnector	
IEC 60831(96)	
AFC 10 kA -40+55 °C	
Internally protected	
CSA C22.2 No.190	1
Made by EPCOS	







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# MKK440-I-8.3-01/ MKK525-I-12.5-01

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	≤ 1 min (75 V)

#### Reference Standards

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

Certification: cUL file E238746

△ 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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