

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

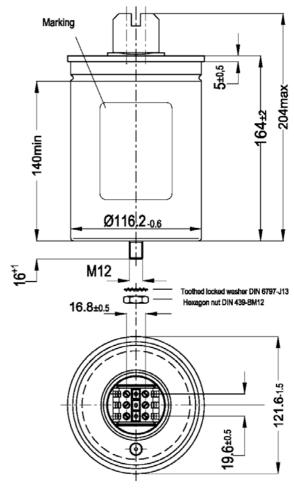
Terminals

SIGUT terminals

Mounting parts

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





All dimensions in mm

Technical data and specifications

Characteristics		
Rated capacitance C _R	3 x 57 µF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V _R	440 VAC	
Rated frequency f _R	50 Hz	60 Hz
Output	10.4 kvar	12.5 kvar
Rated current I _R	14 A	16 A
tanδ (dielectric)	0.2 W / kvar	

FK PFC RD / VA

B25667B4177A375

MKK440-D-10.4-01



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Maximum ratings	
U _{max} (up to 8 h daily)	480 VAC
U _{max} (up to 1 min)	570 VAC
I _{max}	1.3 x I _R (A)
I _S	200 x I _R (A)

Test data

UTT	950 VAC / 50 Hz during 10 s
U _{TC}	3,000 VAC / 50 Hz during 10 s
tanδ (50 Hz)	≤ 0.5 W / kvar

Climatic category / -40/D		
T _{min} (-)	40 °C	
T _{max} (+)	55 °C	
Humidity	av. rel. < 9	5%
Maximum altitu	de 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	1.3 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

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EPCOS	SI	MEN	S
PhaseCap™ MKK440-D-1	Pow 0,4-01 4RB	er Qualit 5 104-5 A	
B25667B4	177A375		
$C_{\rm N} = 3 \times 5^{\circ}$	7 μF + 10/-	5% /	∆ SH
U _N d	ସ _N /50 Hz	Q _N /60	Hz
440 V	10,4 kvar	12,5 k	var
	9,3 kvar		
400 V	8,6 kvar	10,3 k	var
$U_{i} = 3/- kV$	-40/D		
Overpressure	disconnector	Dry, In	ert Gas
IEC 60831(96	5)		CE
AFC 10 kA	_40+55°C		``
Internally prot	ected		•
CSA C22.2 N	o.190	C 71	US
Made by EPC	OS	E	01/05



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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

△ 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.

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