

Power Capacitors

B25667B4467A375

Power Factor Correction PhaseCap

MKK415-D-25-01/MKK440-D-28.1-01

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

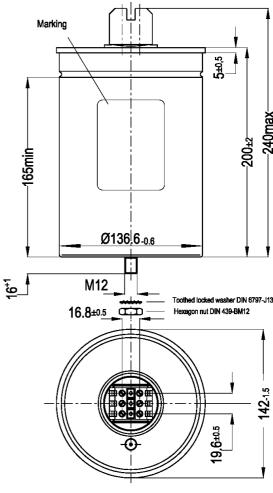
Terminals

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	MKK415-D-25-01		MKK440-D-28.1-01	
Rated capacitance C _R	3 x 154 μF		3 x 154 μF	
Tolerance	-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)	
Rated voltage V _R	415 VAC		440 VAC	
Rated frequency f _R	50 Hz	60 Hz	50 Hz	60 Hz
Output	25 kvar		28.1 kvar	
Rated current I _R	35 A		37 A	
tanδ (dielectric)	0.2 W / kvar		0.2 W / kvar	

Edition 3. 20.10.05



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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	
U _{TT}	950 VAC / 50 Hz during 10 s
U _{TC}	3,000 VAC / 50 Hz during 10 s
tanδ (50 Hz)	≤ 0.7 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 100,000 hours	
Max. 5000 switchings per year acc. to IEC 60831		

Design data	
Dimensions (∅ x I)	142 x 200 mm
Weight approx	2.1 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



SIEMENS

PhaseCap™ Power Quality MKK440-D-28,1-01 4RB5 281-5 AB 45

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 $C_{\rm N} = 3 \times 154 \ \mu \text{F} + 10/-5\% \ \Delta$ SH $U_{\rm N} / V$ $Q_{\rm N} / 50 \ \text{Hz}$ $Q_{\rm N} / 60 \ \text{Hz}$ MKK440 28,1 kvar ---MKK415 25,0 kvar 30,0 kvar *)

U₁ = 3/- kV -40/D *) valid for -40/C

Overpressure disconnector

IEC 60831 (96)

AFC 10 kA -40...+55°C

Internally protected

*) valid for -40/C

Dry, inert gas

CSA C22.2 No.190 Made by EPCOS E 10/05

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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 specifications or request our approval for your specification before ordering.

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