

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

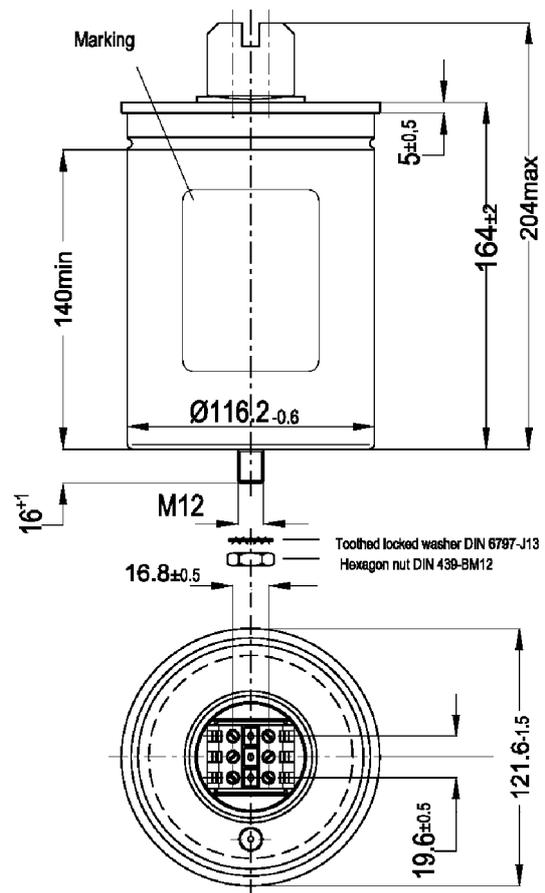
- For Power Factor Correction

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	3 x 83 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	400 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	12.5 kvar	15 kvar
Rated current I_R	18 A	22 A
$\tan\delta$ (dielectric)	0.2 W / kvar	


Power Capacitors
B25667B3247A375
Power Factor Correction
MKK400-D-12.5-01

Maximum ratings	
U_{\max} (up to 8 h daily)	440 VAC
U_{\max} (up to 1 min)	520 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	900 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (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 ($\varnothing \times l$)	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

EPCOS
 PhaseCap™
 MKK400-D-12,5-01
 B25667B3247A375
 $C_N = 3 \times 83 \mu\text{F} + 10/-5\%$ Δ SH

U_N	$Q_N / 50$ Hz	$Q_N / 60$ Hz
400 V	12,5 kvar	15,0 kvar
380 V	11,3 kvar	13,5 kvar
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 $U_i = 3/-kV$ -40/D
 Overpressure disconnecter IEC 60831(96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS

SIEMENS
 Power Quality
 4RB5 125-5 AB40
 Dry, Inert Gas
 CE

 E 10/05



Power Capacitors

B25667B3247A375

Power Factor Correction

MKK400-D-12.5-01

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 disconnecter
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

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Features

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

Typical applications

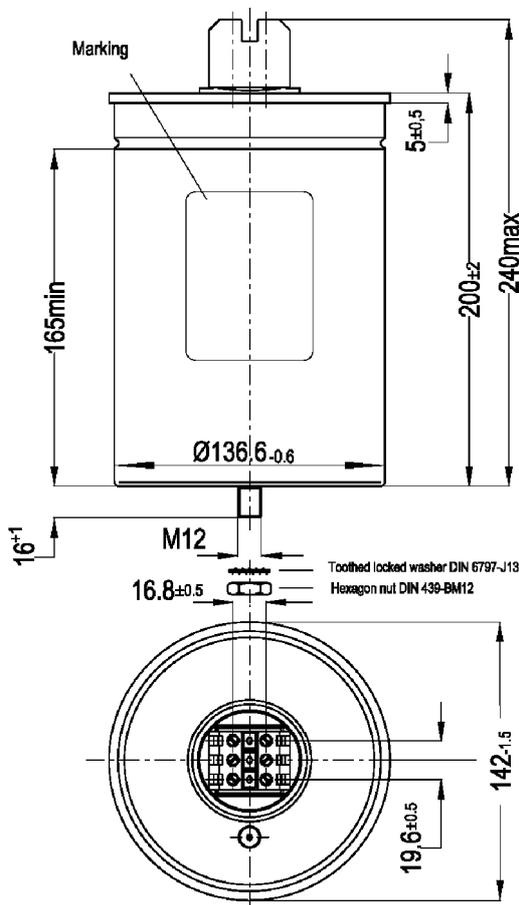
- For Power Factor Correction

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	3 x 115 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	525 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	30 kvar	--
Rated current I_R	33 A	--
$\tan\delta$ (dielectric)	0.2 W / kvar	



Power Capacitors

B25667B5347A375

Power Factor Correction

MKK525-D-30-01

Maximum ratings	
U_{max} (up to 8 h daily)	580 VAC
U_{max} (up to 1 min)	680 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,150 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (50 Hz)	≤ 0.6 W / kvar

Climatic category / -40/C	
T_{min} (-)	40 °C
T_{max} (+)	50 °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 ($\varnothing \times l$)	142 x 200 mm
Weight approx	2.4 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

EPCOS
PhaseCap™
MKK525-D-30-01

SIEMENS
Power Quality
4RB5 300-5 AB 52

B25667B5347A375
 $C_N = 3 \times 115 \mu F + 10/-5\% \Delta SH$

U_N	$Q_N / 50$ Hz	$Q_N / 60$ Hz
525 V	30,0 kvar	---
480 V	25,0 kvar	30,0 kvar
465 V	23,5 kvar	28,2 kvar

 $U_i = 3/-kV -40/C$
 Overpressure disconnecter Dry, Inert Gas
 IEC 60831(96) **CE**
 Made by EPCOS 11/05



Power Capacitors

B25667B5347A375

Power Factor Correction

MKK525-D-30-01

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 disconnecter
Max. short circuit current	(AFC: 10 kA)
Discharge resistor time	≤ 90 s (75 V)

Reference Standards

IEC 60831-1/2

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Typical applications

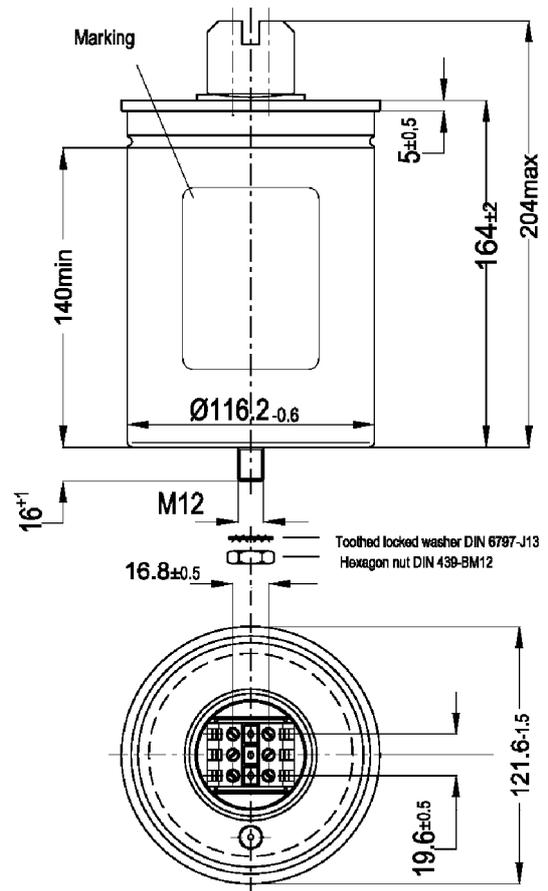
- For Power Factor Correction

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	3 x 132 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	400 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	20 kvar	24 kvar
Rated current I_R	30 A	36 A
$\tan\delta$ (dielectric)	0.2 W / kvar	



Power Capacitors

B25667B3397A375

Power Factor Correction

MKK400-D-20-01

Maximum ratings	
U_{max} (up to 8 h daily)	440 VAC
U_{max} (up to 1 min)	520 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	900 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (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 115,000 hours
Max. 5000 switchings per year acc. to IEC 60831	

Design data	
Dimensions ($\varnothing \times l$)	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

EPCOS
PhaseCap™
MKK400-D-20-01
B25667B3397A375

SIEMENS
Power Quality
4RB5 200-5 AB 40
4RB5 200-5 AB 40
B25667B3397A375

$C_N = 3 \times 132 \mu F + 10/-5\% \Delta SH$

U_N	$Q_N / 50$ Hz	$Q_N / 60$ Hz
400 V	20,0 kvar	24,0 kvar
380 V	18,0 kvar	21,6 kvar
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$U_i = 3/-kV -40/D$
Overpressure disconnecter Dry, Inert Gas
IEC 60831(96)
AFC 10 kA -40...+55°C
Internally protected
CSA C22.2 No.190
Made by EPCOS

CE
UL®
E 10/05



Power Capacitors

B25667B3397A375

Power Factor Correction

MKK400-D-20-01

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 disconnecter
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

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

Typical applications

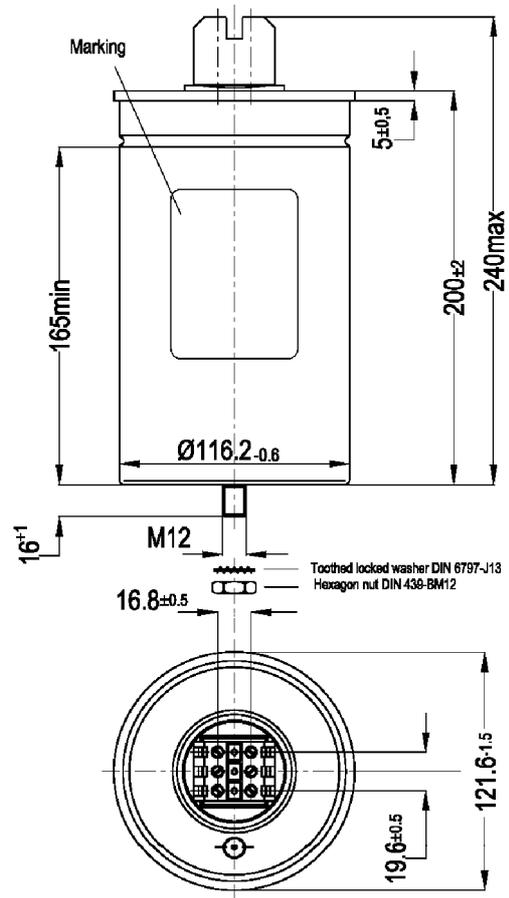
- For Power Factor Correction

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	3 x 166 μ F	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	400 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	25 kvar	--
Rated current I_R	36 A	--
$\tan\delta$ (dielectric)	0.2 W / kvar	



Power Capacitors

B25667B3497A375

Power Factor Correction

MKK400-D-25-01

Maximum ratings	
U_{max} (up to 8 h daily)	440 VAC
U_{max} (up to 1 min)	520 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	900 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (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 115,000 hours
Max. 5000 switchings per year acc. to IEC 60831	

Design data	
Dimensions ($\varnothing \times l$)	121 x 200 mm
Weight approx	1.8 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

EPCOS
 PhaseCap™
 MKK400-D-25-01
 B25667B3497A375
 $C_N = 3 \times 186 \mu F + 10/-5\% \Delta SH$

U_N	$Q_N / 50$ Hz	$Q_N / 60$ Hz
400 V	25,0 kvar	30,0 kvar
380 V	22,6 kvar	27,1 kvar
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 $U_i = 3/-kV -40/D$
 Overpressure disconnecter IEC 60831(96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS

SIEMENS
 Power Quality
 4RB5 250-5 AB 40
 Dry, Inert Gas
 CE

 E 10/05



Power Capacitors

B25667B3497A375

Power Factor Correction

MKK400-D-25-01

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 disconnecter
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

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Features

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

Typical applications

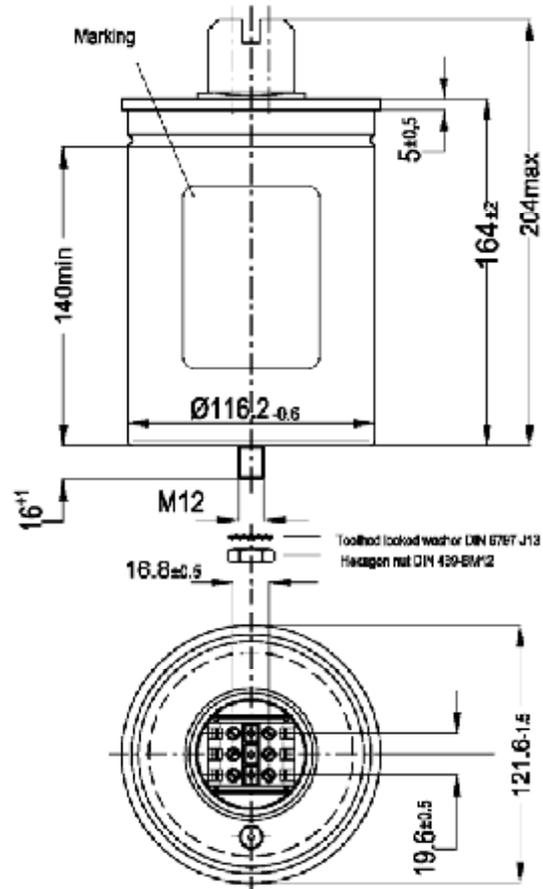
- For Power Factor Correction

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	3 x 41 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	440 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	7.5 kvar	9 kvar
Rated current I_R	10 A	12 A
$\tan\delta$ (dielectric)	0.2 W / kvar	



Power Capacitors

B25667B4127A375

Power Factor Correction

MKK440-D-7.5-01

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)	≤ 0.5 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 (∅ x l)	121.6 x 164 mm
Weight approx	1.2 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-7,5-01	4RB5 075-5 AB 45
B25667B4127A375	
C _N = 3 x 41 µF + 10/- 5% Δ SH	
U _N	Q _N /50 Hz Q _N /60 Hz
440 V	7,5 kvar 9,0 kvar
415 V	6,7 kvar 8,0 kvar
400 V	6,2 kvar 7,4 kvar
U _i = 3/- kV -40/D	
Overpressure disconnectors	Dry, Inert Gas
IEC 60831(96)	
AFC 10 kA -40...+55°C	
Internally protected	E 01/05
CSA C22.2 No.190	
Made by EPCOS	



Power Capacitors

B25667B4127A375

Power Factor Correction

MKK440-D-7.5-01

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 disconnecter
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

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Typical applications

- For Power Factor Correction

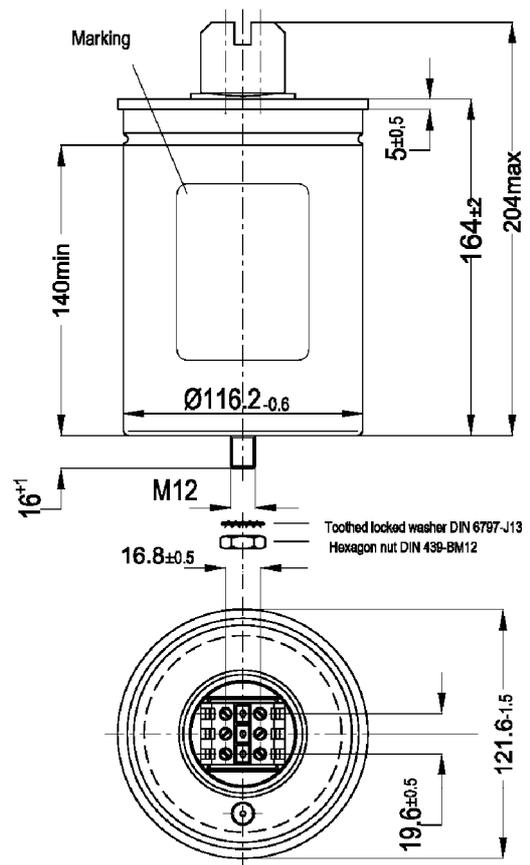
Terminals

- 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	MKK400-D-10-01	MKK415-D-10.4-01
Rated capacitance C_R	3 x 64 μ F	3 x 64 μ F
Tolerance	-5 / +10%	-5 / +10%
Connection	D (Delta)	D (Delta)
Rated voltage V_R	400 VAC	415 VAC
Rated frequency f_R	50 Hz 60 Hz	50 Hz 60 Hz
Output	10 kvar 12 kvar	10.4 kvar 12.5 kvar
Rated current I_R	14 A 17 A	15 A 17 A
$\tan\delta$ (dielectric)	0.2 W / kvar	0.2 W / kvar

**Power Capacitors****B25667B4197A375****Power Factor Correction PhaseCap****MKK400-D-10-01/MKK415-D-10.4-01**

Maximum ratings	
U_{max} (up to 8 h daily)	460 VAC
U_{max} (up to 1 min)	540 VAC
I_{max}	$1.3 \times I_R$ (A)
I_s	$200 \times I_R$ (A)

Test data	
U_{TT}	900 VAC / 50 Hz during 10 s
U_{TC}	3,000VAC / 50 Hz during 10 s
$\tan\delta$ (50 Hz)	$\leq 0.5W / \text{kvar}$

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 ($\varnothing \times l$)	121 x 164 mm
Weight approx	1.2 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

EPCOS
PhaseCap™
MKK415-D-10,4-01

SIEMENS

Power Quality
4RB5 104-5 AB 42

B25667B4197A375 $C_N = 3 \times 64 \mu F + 10/-5\% \Delta SH$ $U_N / V \quad Q_N / 50 \text{ Hz} \quad Q_N / 60 \text{ Hz}$

MKK415 10,4 kvar 12,5 kvar

MKK400 10,0 kvar 12,0 kvar

 $U_i = 3/-kV \quad -40/D$

Overpressure disconnecter

IEC 60831 (98)

AFC 10 kA -40...+55°C

Internally protected

CSA C22.2 No.190

Made by EPCOS

Dry, inert gas



E 10/05



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 disconnecter
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

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Typical applications

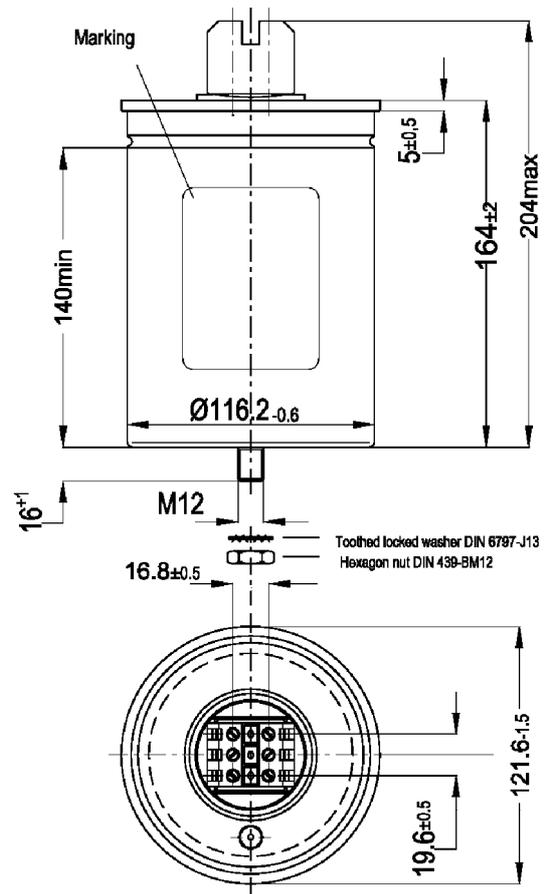
- For Power Factor Correction

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	MKK440-D-12.5-01		MKK480-D-15-01	
Rated capacitance C_R	3 x 69 μF		3 x 69 μF	
Tolerance	-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)	
Rated voltage V_R	440 VAC		480 VAC	
Rated frequency f_R	50 Hz	60 Hz	50 Hz	60 Hz
Output	12.5 kvar	15 kvar	15 kvar	18 kvar
Rated current I_R	16 A	20 A	18 A	22 A
$\tan\delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar	


Power Capacitors
B25667B4207A375
Power Factor Correction PhaseCap
MKK440-D-12.5-01/MKK480-D-15-01

Maximum ratings	
U_{\max} (up to 8 h daily)	530 VAC
U_{\max} (up to 1 min)	620 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,050 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan \delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	121 x 164 mm
Weight approx	1.4 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

EPCOS
 PhaseCap™
 MKK480-D-15-01

SIEMENS
 Power Quality
 4RB5 150-5 AB 47

B25667B4207A375
 $C_N = 3 \times 69 \mu\text{F} + 10/-5\% \Delta \text{ SH}$
 $U_N / V \quad Q_N / 50 \text{ Hz} \quad Q_N / 60 \text{ Hz}$
 MKK480 15,0 kvar 18,0 kvar
 MKK440 12,5 kvar 15,0 kvar

$U_1 = 3/- \text{ kV} \quad -40/D$
 Overpressure disconnecter Dry, inert gas
 IEC 60831 (96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS E 10/05



Power Capacitors

B25667B4207A375

Power Factor Correction PhaseCap

MKK440-D-12.5-01/MKK480-D-15-01

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 disconnecter
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

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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

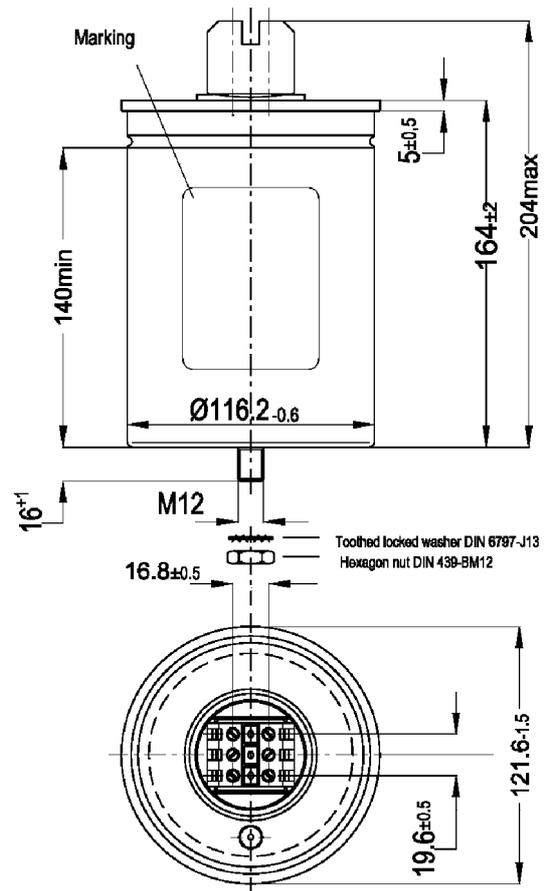
- For Power Factor Correction

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-12.5-01	MKK440-D-14.2-01
Rated capacitance C_R	3 x 77 μF	3 x 77 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	50 Hz
	60 Hz	60 Hz
Output	12.5 kvar	14.2 kvar
	15 kvar	17 kvar
Rated current I_R	17 A	19 A
	21 A	22 A
$\tan\delta$ (dielectric)	0.2 W / kvar	0.2 W / kvar


Power Capacitors
B25667B4237A375
Power Factor Correction PhaseCap
MKK415-D-12.5-01/MKK440-D-14.2-01

Maximum ratings	
U_{\max} (up to 8 h daily)	480 VAC
U_{\max} (up to 1 min)	570 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	950 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan \delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	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

EPCOS

PhaseCap™

MKK440-D-14,2-01

B25667B4237A375
 $C_N = 3 \times 77 \mu\text{F} + 10/-5\% \Delta$ SH

 U_N / V $Q_N / 50 \text{ Hz}$ $Q_N / 60 \text{ Hz}$

MKK440 14,2 kvar 17,0 kvar

MKK415 12,5 kvar 15,0 kvar

 $U_i = 3/-kV$ -40/D

Overpressure disconnecter

IEC 60831(96)

AFC 10 kA -40...+55°C

Internally protected

CSA C22.2 No.190

Made by EPCOS

SIEMENS

Power Quality

4RB5 142-5 AB 45

 Dry, inert gas

 E 10/05

**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 disconnecter
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

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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

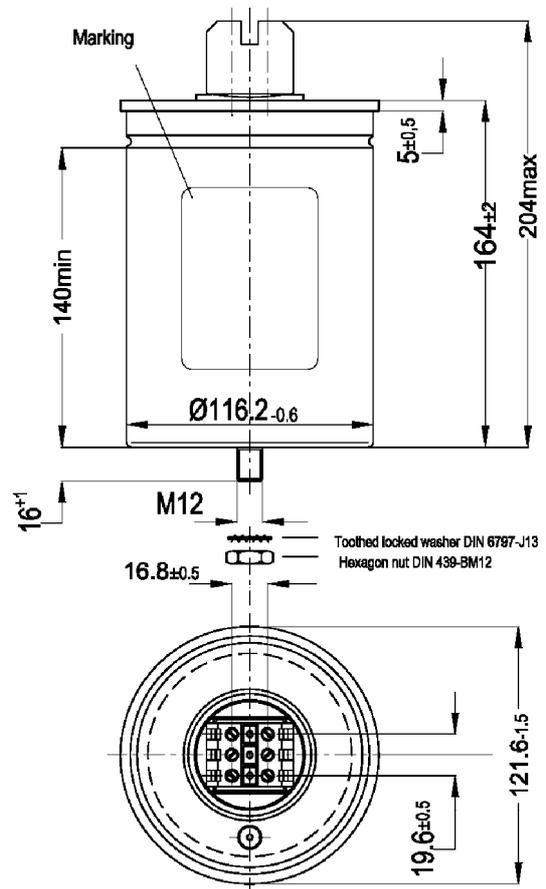
- For Power Factor Correction

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	3 x 83 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	440 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	15 kvar	18 kvar
Rated current I_R	20 A	24 A
$\tan\delta$ (dielectric)	0.2 W / kvar	



Power Capacitors

B25667B4247A375

Power Factor Correction

MKK440-D-15-01

Maximum ratings	
U_{max} (up to 8 h daily)	480 VAC
U_{max} (up to 1 min)	570 VAC
I_{max}	$1.3 \times I_R$ (A)
I_s	$200 \times I_R$ (A)

Test data	
U_{TT}	950 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	121 x 164 mm
Weight approx	1.4 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

EPCOS
 PhaseCap™
 MKK440-D-15-01
 B25667B4247A375
 $C_N = 3 \times 83 \mu F \pm 10\% -5\%$ Δ SH

U_N	$Q_N / 50$ Hz	$Q_N / 60$ Hz
440 V	15,0 kvar	18,0 kvar
415 V	13,3 kvar	16,0 kvar
400 V	12,4 kvar	14,9 kvar

 $U_i = 3\text{-kV} -40/D$
 Overpressure disconnectors Dry, Inert Gas
 IEC 60831(96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS E 10/05



Power Capacitors

B25667B4247A375

Power Factor Correction

MKK440-D-15-01

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 disconnecter
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

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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

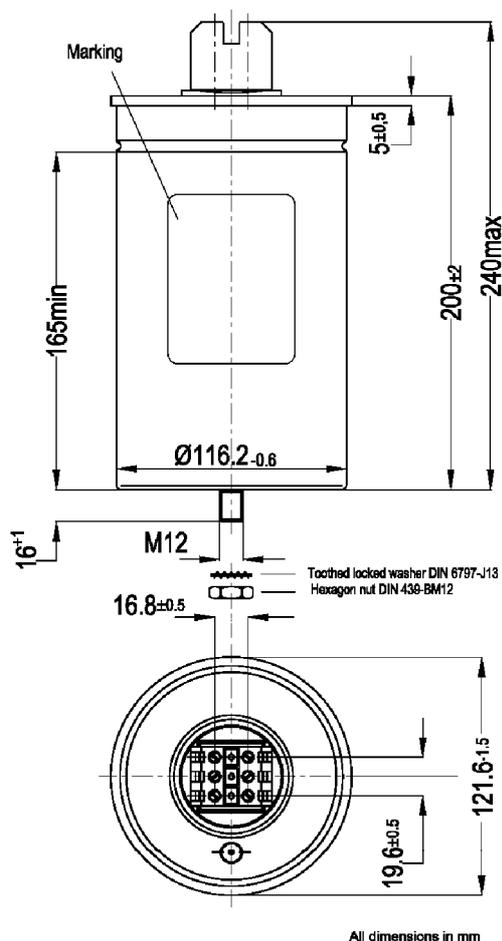
- For Power Factor Correction

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	MKK440-D-16.7-01		MKK480-D-20-01	
Rated capacitance C_R	3 x 92 μF		3 x 92 μF	
Tolerance	-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)	
Rated voltage V_R	440 VAC		480 VAC	
Rated frequency f_R	50 Hz	60 Hz	50 Hz	60 Hz
Output	16.7 kvar	20 kvar	20 kvar	24 kvar
Rated current I_R	22 A	26 A	24 A	29 A
$\tan\delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar	

**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 disconnecter
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

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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

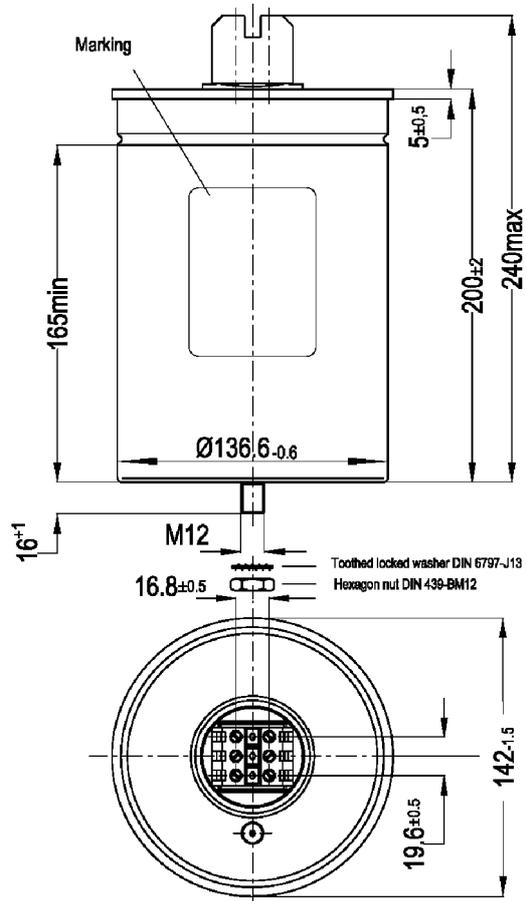
- For Power Factor Correction

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	3 x 115 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	440 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	25 kvar	30kvar*)
Rated current I_R	30 A	36A
$\tan\delta$ (dielectric)	0.2 W / kvar	

*) valid for -40/B


Power Capacitors
B25667B4347A375
Power Factor Correction
MKK480-D-25-01

Maximum ratings	
U_{max} (up to 8 h daily)	530 VAC
U_{max} (up to 1 min)	620 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,050 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (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 ($\varnothing \times l$)	142 x 200 mm
Weight approx	2.2 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

PhaseCap™
 MKK480-D-25-01

SIEMENS
Power Quality
 4RB5 250-5 AB 47

B25667B4347A375
 $C_N = 3 \times 115 \mu F + 10/-5\% \Delta SH$

U_N	$Q_N / 50$ Hz	$Q_N / 60$ Hz
480 V	25,0 kvar	30,0 kvar *)
465 V	23,5 kvar	28,2 kvar *)
440 V	21,0 kvar	25,2 kvar

 $U_i = 3/-kV -40/D$ *) valid for -40/B

Overpressure disconnect Dry, Inert Gas

IEC 60831(96)

AFC 10 kA -40...+55°C

Internally protected

CSA C22.2 No.190

Made by EPCOS



E 11/05



Power Capacitors

B25667B4347A375

Power Factor Correction

MKK480-D-25-01

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 disconnecter
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

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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

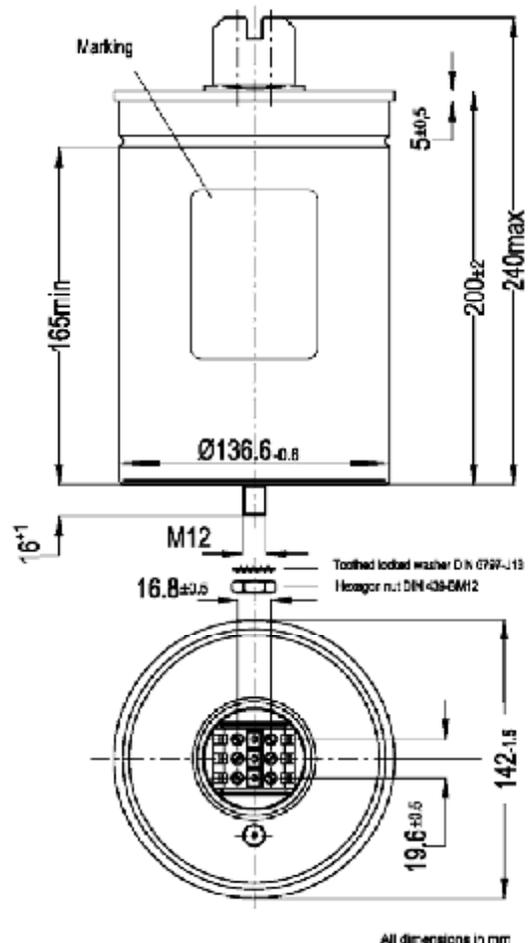
- For Power Factor Correction

Terminals

- SIGUT terminals

Mounting parts

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

Dimensional drawing

Technical data and specifications

Characteristics		
Rated capacitance C_R	3 x 138 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	440 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	30 kvar	--
Rated current I_R	36 A	--
$\tan\delta$ (dielectric)	0.2 W / kvar	



Power Capacitors

B25667B4417A365

Power Factor Correction

MKK480-D-30-01

Maximum ratings	
U_{max} (up to 8 h daily)	530 VAC
U_{max} (up to 1 min)	620 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,050 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (50 Hz)	≤ 0.6 W / kvar

Climatic category / -40/C	
T_{min} (-)	40 °C
T_{max} (+)	50 °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 l)	142 x 200 mm
Weight approx	2.4 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

PhaseCap™	Power Quality
MKK480-D-30-01	4RB5 300-5 AB 47
B25667B4417A365	
$C_N = 3 \times 138 \mu F + 10/-5\% \Delta SH$	
U_N	$Q_N / 50$ Hz
480 V	30.0 kvar
465 V	28.2 kvar
440 V	25.2 kvar
$U_i = 3/-kV -40/C$	
Overpressure disconnecter	Dry, Inert Gas
IEC 60831(96)	
Made by EPCOS	02/05



Power Capacitors

B25667B4417A365

Power Factor Correction

MKK480-D-30-01

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 disconnecter
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

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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

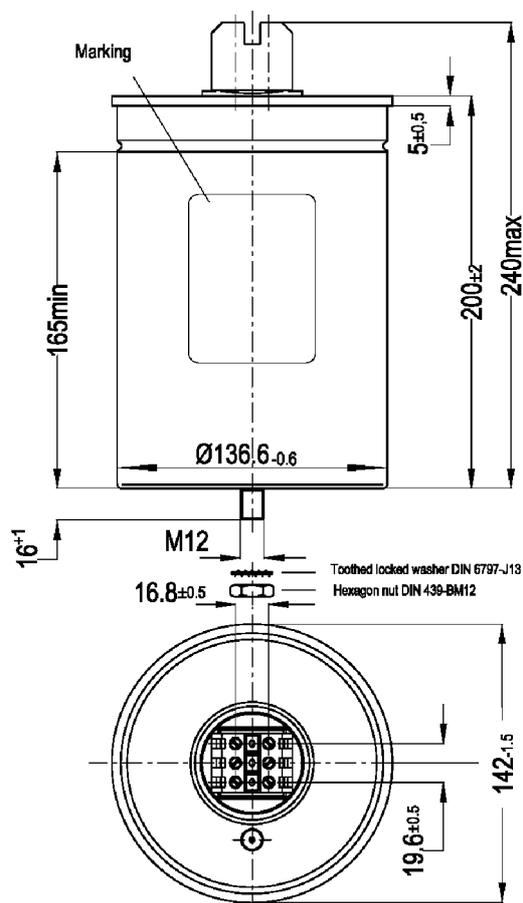
- For Power Factor Correction

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	3 x 137 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	440 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	25 kvar	30 kvar
Rated current I_R	33 A	39 A
$\tan\delta$ (dielectric)	0.2 W / kvar	


Power Capacitors
B25667B4417A375
Power Factor Correction
MKK440-D-25-01

Maximum ratings	
U_{\max} (up to 8 h daily)	480 VAC
U_{\max} (up to 1 min)	570 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	950 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (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 ($\varnothing \times l$)	142 x 200 mm
Weight approx	2.0 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

EPCOS PhaseCap™
SIEMENS Power Quality
 MKK440-D-25-01 4RB5 250-5 AB 45
 B25667B4417A375
 $C_N = 3 \times 137 \mu\text{F} + 10/-5\% \Delta \text{SH}$

U_N	$Q_N / 50 \text{ Hz}$	$Q_N / 60 \text{ Hz}$
440 V	25,0 kvar	30,0 kvar
415 V	22,2 kvar	26,6 kvar
400 V	20,7 kvar	24,8 kvar

 $U_I = 3/-kV -40/D$
 Overpressure disconnectors Dry, Inert Gas
 IEC 60831(96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS

CE
 UL®
 E 10/05



Power Capacitors

B25667B4417A375

Power Factor Correction

MKK440-D-25-01

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 disconnecter
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

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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

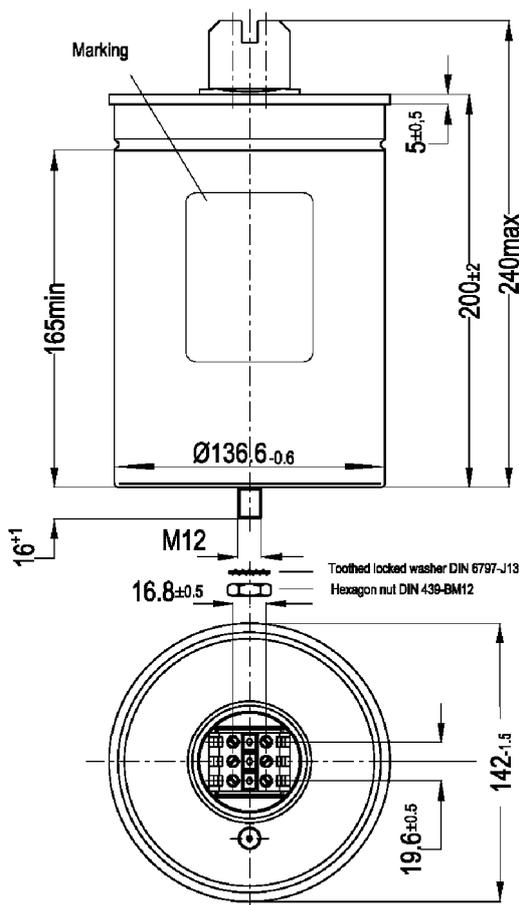
- For Power Factor Correction

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	--
$\tan\delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar	


Power Capacitors
B25667B4467A375
Power Factor Correction PhaseCap
MKK415-D-25-01/MKK440-D-28.1-01

Maximum ratings	
U_{max} (up to 8 h daily)	480 VAC
U_{max} (up to 1 min)	570 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	950 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (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 ($\varnothing \times l$)	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

EPCOS
 PhaseCap™
 MKK440-D-28,1-01

SIEMENS
 Power Quality
 4RB5 281-5 AB 45
B25667B4467A375
 $C_N = 3 \times 154 \mu F + 10/-5\% \Delta SH$
 U_N / V $Q_N / 50 \text{ Hz}$ $Q_N / 60 \text{ Hz}$
 MKK440 28,1 kvar ---
 MKK415 25,0 kvar 30,0 kvar *)

$U_1 = 3/-$ kV -40/D *) valid for -40/C
 Overpressure disconnectors Dry, inert gas
 IEC 60831(96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS E 10/05



Power Capacitors

B25667B4467A375

Power Factor Correction PhaseCap

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

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 disconnecter
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

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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

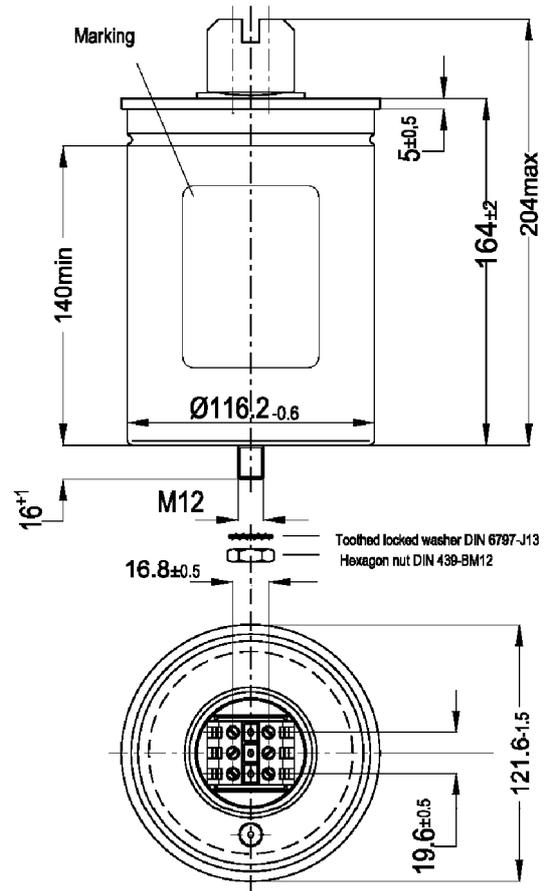
- For Power Factor Correction

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-6.2-01		MKK480-D-8.3-01		MKK525-D-10-01	
Rated capacitance C_R	3 x 39 μ F		3 x 39 μ F		3 x 39 μ F	
Tolerance	-5 / +10%		-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)		D (Delta)	
Rated voltage V_R	415 VAC		480 VAC		525 VAC	
Rated frequency f_R	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Output	6.2 kvar	7.5 kvar	8.3 kvar	10 kvar	10 kvar	12 kvar
Rated current I_R	8 A	10 A	10 A	12 A	11 A	13 A
$\tan \delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar		0.2 W / kvar	


Power Capacitors
B25667B5127A375
Power Factor Correction PhaseCap
**MKK415-D-6.2-01/MKK480-D-8.3-01/
MKK525-D-10-01**

Maximum ratings	
U_{max} (up to 8 h daily)	580 VAC
U_{max} (up to 1 min)	680 VAC
I_{max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,150 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	121 x 164 mm
Weight approx	1.2 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

EPCOS
 PhaseCap™
 MKK525-D-10-01

SIEMENS
 Power Quality
 4RB5 100-5 AB 52

B25667B5127A375
 $C_N = 3 \times 39 \mu F + 10/-5\% \quad \Delta \quad SH$
 $U_N \quad Q_N / 50 \text{ Hz} \quad Q_N / 60 \text{ Hz}$

MKK525 10,0 kvar 12,0 kvar

MKK480 8,3 kvar 10,0 kvar

MKK415 6,2 kvar 7,5 kvar

 $U_i = 3\text{-kV} \quad -40/D$

Overpressure disconnecter Dry, Inert Gas

IEC 60831(96)

AFC 10 kA -40...+55°C

Internally protected

CSA C22.2 No.190

Made by EPCOS



E 10/05

**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 disconnecter
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

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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

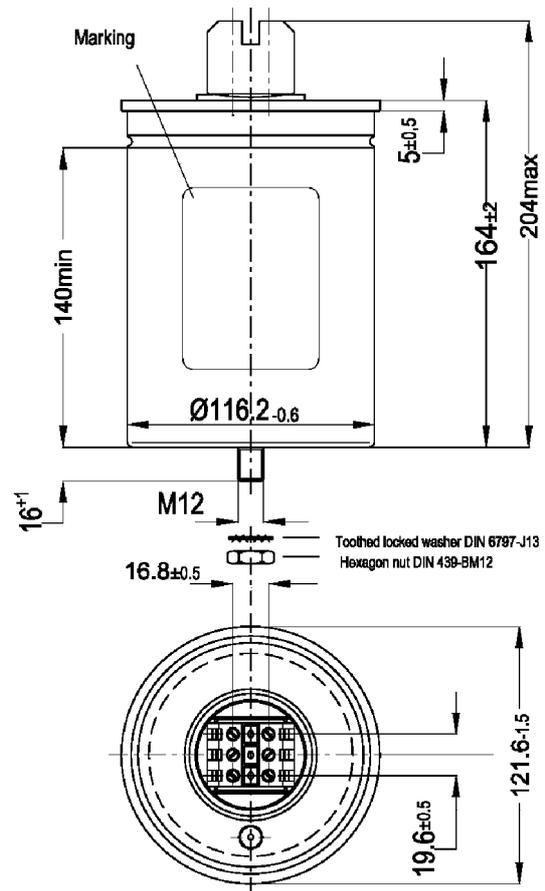
- For Power Factor Correction

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	MKK480-D-12.5-01		MKK525-D-15-01	
Rated capacitance C_R	3 x 58 μF		3 x 58 μF	
Tolerance	-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)	
Rated voltage V_R	480 VAC		525 VAC	
Rated frequency f_R	50 Hz	60 Hz	50 Hz	60 Hz
Output	12.5 kvar	15 kvar	15 kvar	18 kvar
Rated current I_R	15 A	18 A	17 A	20 A
$\tan\delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar	


Power Capacitors
B25667B5177A375
Power Factor Correction PhaseCap
MKK480-D-12.5-01/MKK525-D-15-01

Maximum ratings	
U_{\max} (up to 8 h daily)	580 VAC
U_{\max} (up to 1 min)	680 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,150 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan \delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	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

EPCOS

PhaseCap™

MKK525-D-15-01

B25667B5177A375

 $C_N = 3 \times 58 \mu F + 10/-5\% \Delta SH$
 $U_N / V \quad Q_N / 50 \text{ Hz} \quad Q_N / 60 \text{ Hz}$

MKK525 15,0 kvar 18,0 kvar

MKK480 12,5 kvar 15,0 kvar

 $U_i = 3/-kV \quad -40/D$

Overpressure disconnecter

IEC 60831 (96)

AFC 10 kA -40...+55°C

Internally protected

CSA C22.2 No.190

Made by EPCOS

SIEMENS

Power Quality

4RB5 150-5 AB 52

Dry, inert gas



E 10/05

**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 disconnecter
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

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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

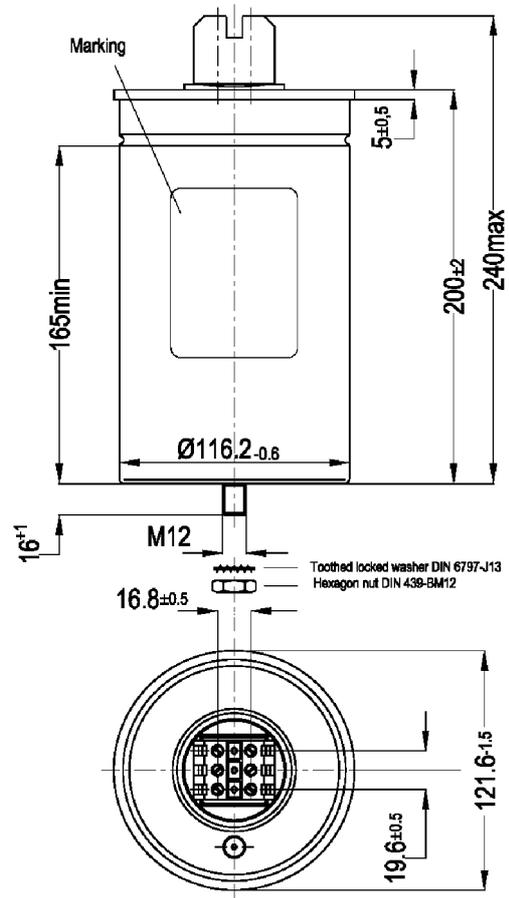
- For Power Factor Correction

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	MKK480-D-16.7-01		MKK525-D-20-01	
Rated capacitance C_R	3 x 77 μF		3 x 77 μF	
Tolerance	-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)	
Rated voltage V_R	480 VAC		525 VAC	
Rated frequency f_R	50 Hz	60 Hz	50 Hz	60 Hz
Output	16.7 kvar	20 kvar	20 kvar	24 kvar
Rated current I_R	20 A	24 A	22 A	26 A
$\tan\delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar	


Power Capacitors
B25667B5237A375
Power Factor Correction
MKK480-D-16.7-01 / MKK525-D-20-01

Maximum ratings	
U_{\max} (up to 8 h daily)	580 VAC
U_{\max} (up to 1 min)	680 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,150 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan \delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	121 x 200 mm
Weight approx	1.8 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

EPCOS
 PhaseCap™
 MKK525-D-20-01
B25667B5237A375
 $C_N = 3 \times 77 \mu\text{F} + 10/-5\%$ Δ SH
 U_N / V $Q_N / 50 \text{ Hz}$ $Q_N / 60 \text{ Hz}$
 MKK525 20,0 kvar 24,0 kvar
 MKK480 16,7 kvar 20,0 kvar
 $U_1 = 3/-$ kV -40/D
 Overpressure disconnecter Dry, inert gas
 IEC 60831 (96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS
 E 10/05

**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 disconnecter
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

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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

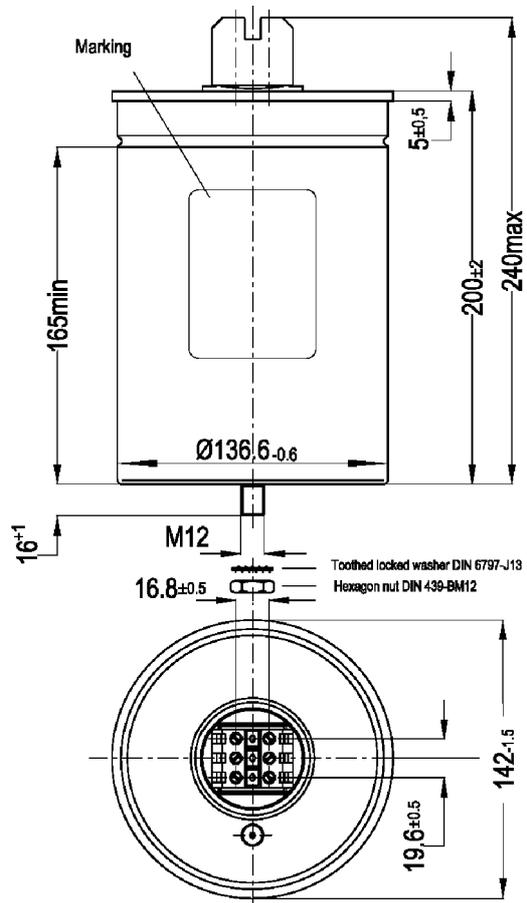
- For Power Factor Correction

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	3 x 96 μF	
Tolerance	-5 / +10%	
Connection	D (Delta)	
Rated voltage V_R	525 VAC	
Rated frequency f_R	50 Hz	60 Hz
Output	25 kvar	--
Rated current I_R	28 A	--
$\tan\delta$ (dielectric)	0.2 W / kvar	


Power Capacitors
B25667B5287A375
Power Factor Correction
MKK525-D-25-01

Maximum ratings	
U_{\max} (up to 8 h daily)	580 VAC
U_{\max} (up to 1 min)	680 VAC
I_{\max}	$1.3 \times I_R$ (A)
I_S	$200 \times I_R$ (A)

Test data	
U_{TT}	1,150 VAC / 50 Hz during 10 s
U_{TC}	3,000 VAC / 50 Hz during 10 s
$\tan\delta$ (50 Hz)	≤ 0.5 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 ($\varnothing \times l$)	142 x 200 mm
Weight approx	2.3 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

EPCOS
 PhaseCap™
 MKK525-D-25-01
 B25667B5287A375
 $C_N = 3 \times 96 \mu\text{F} + 10/-5\%$ Δ SH

U_N	$Q_N / 50 \text{ Hz}$	$Q_N / 60 \text{ Hz}$
525 V	25,0 kvar	---
480 V	20,9 kvar	25,0 kvar
465 V	19,6 kvar	23,5 kvar

 $U_i = 3/-kV$ -40/D
 Overpressure disconnectors Dry, Inert Gas
 IEC 60831(96)
 AFC 10 kA -40...+55°C
 Internally protected
 CSA C22.2 No.190
 Made by EPCOS

CE
 UL US
 E 10/05



Power Capacitors

B25667B5287A375

Power Factor Correction

MKK525-D-25-01

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 disconnecter
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

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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

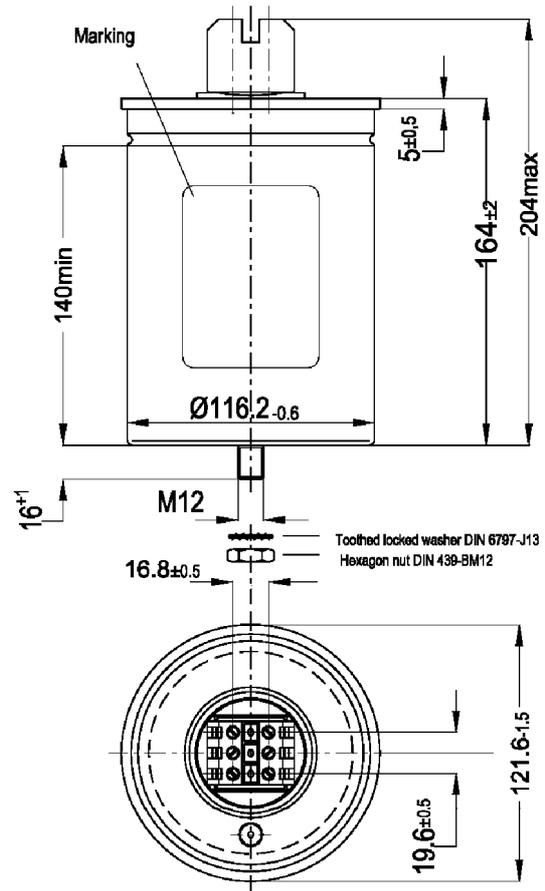
- For Power Factor Correction

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	MKK400-D-5-01		MKK415-D-5-01		MKK525-D-8.3-01	
Rated capacitance C_R	3 x 32 μF		3 x 32 μF		3 x 32 μF	
Tolerance	-5 / +10%		-5 / +10%		-5 / +10%	
Connection	D (Delta)		D (Delta)		D (Delta)	
Rated voltage V_R	400 VAC		415 VAC		525 VAC	
Rated frequency f_R	50 Hz	60 Hz	50 Hz	60 Hz	50 Hz	60 Hz
Output	5 kvar	6 kvar	5 kvar	6 kvar	8.3 kvar	10 kvar
Rated current I_R	7 A	9 A	7 A	8 A	9 A	11 A
$\tan\delta$ (dielectric)	0.2 W / kvar		0.2 W / kvar		0.2 W / kvar	



Power Capacitors

B25667B5966A375

Power Factor Correction PhaseCap

MKK400-D-5-01/MKK415-D-5-01/
MKK525-D-8.3-01

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 disconnecter
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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