

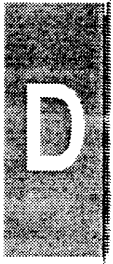
Power Capacitors

45

Contents	Type	Page
AC capacitors for power electronics (MKV)		
General-purpose applications, commutation	B 25 832	240
Damping commutation	B 25 834	242
Damping	B 25 835	245
General-purpose applications, coupling, damping	B 25 839	247
Capacitors for power factor correction and filter circuit applications (MKK)		
PhaseCap™ series	B 25 667	248
Protection cover	B 44 066	251
Terminal cap	B 44 066	251

▼ Newly included in this edition

Capacitors for power factor correction and filtering: new voltage ranges 440 and 525 Vac	B 25 667	250
Terminal cap for PhaseCaps	B 44 066	251



The minimum order quantities stated for capacitors for power electronics correspond to one delivery unit. Delivery is always in complete units.

Quantities exceeding the stated maximum quantities and non-SCS types will be supplied ex works. Inquire for prices and delivery schedules.

Further technical literature

- Data Book "Power Capacitors", B426-P2612-X-X-7600
- Short Form Catalog "Capacitors for Power Electronics and AC Power Capacitors", B426-P2613-X-X-7400
- Short Form Catalog "Capacitors for Power Factor Correction", B426-P2614-X-X-7600

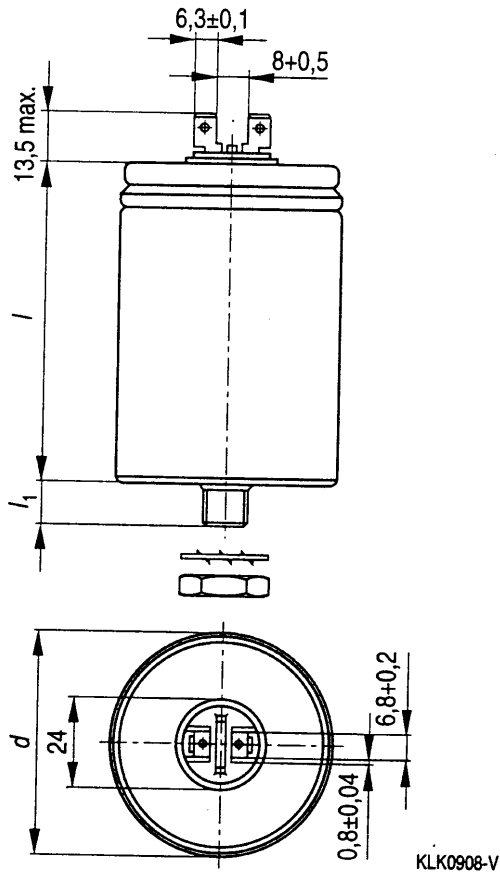
AC Capacitors for Power Electronics (MKV)

Compact model for general-purpose applications and commutation in the low-frequency range

Self-healing, with overpressure disconnector

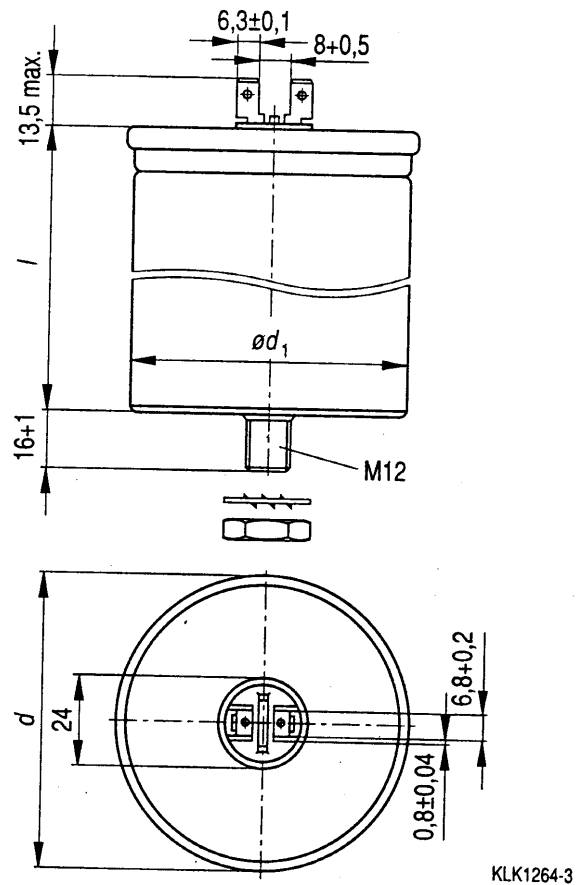
Load duration	30 000 h
Failure quota	1000 failures in 10^9 h
IEC climatic category	25/085/56
Recurrent peak voltage \hat{v}	800 ... 1200 V
Non-recurrent surge voltage v_s	1100 ... 1600 V
Dissipation factor $\tan \delta$ (50 Hz)	$\leq 3 \cdot 10^{-4}$

Dimensional drawing 1
Dual tab connectors 6,3 mm



$d + 0,5/-0,2$ mm	$l + 1/-2$ mm	$l_1 + 1$ mm	Threaded bolt
40	86	8	M 8
50	86	12	M 12
50	156	12	M 12
60	86	12	M 12
60	156	12	M 12

Dimensional drawing 2
Dual tab connectors 6,3 mm



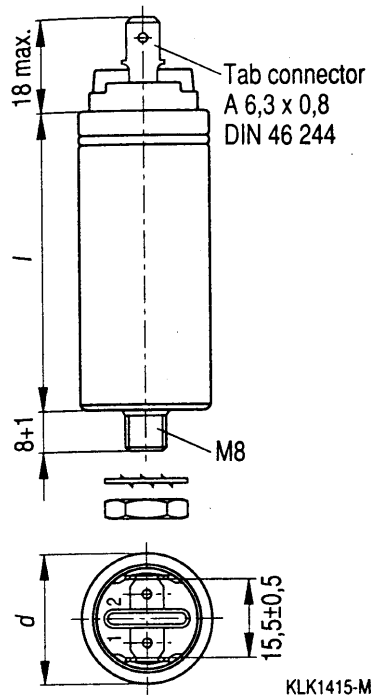
$d_{-1,2}$ mm	l_{-4} mm	$\varnothing d_1$ mm
79,2	104	75,2
89,3	104	85,2

Mounting parts (included in delivery):

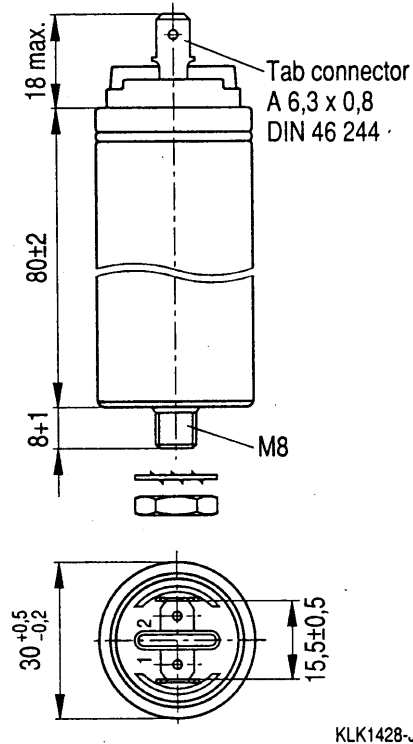
For threaded bolt M 8: toothed washer J8,2 DIN 6797, hex nut M8 ISO 4035
 For threaded bolt M12: toothed washer J12,5 DIN 6797, hex nut M12 ISO 4035

AC Capacitors for Power Electronics (MKV)

Dimensional drawing 3
Tab connectors 6,3 mm



Dimensional drawing 4
Tab connectors 6,3 mm



$d \pm 0,2$ mm	$l + 3/-1$ mm
25	48
25	80

Mounting parts (included in delivery):

Toothed washer J8,2 DIN 6797, hex nut M8 ISO 4035

C_R	Dimensions $d \times l$	Dim. drawing	Ordering code	Min. qty.	Max. qty.	Farnell order code
μF	mm					

$V_R = AC 640 V$

Capacitance tolerance $\pm 10 \%$

∇ 1,0	25 × 48	3	B25832-F4105-K1	32	128	
∇ 2,2	25 × 80	3	B25832-F4225-K1	32	128	
∇ 3,3	25 × 80	3	B25832-F4335-K1	32	128	
∇ 4,7	30 × 80	4	B25832-F4475-K1	20	80	
∇ 10	40 × 86	1	B25832-C4106-K9	12	96	
∇ 15	50 × 86	1	B25832-C4156-K9	9	72	
∇ 22	60 × 86	1	B25832-C4226-K9	12	72	
∇ 33	50 × 156	1	B25832-C4336-K9	9	72	
∇ 47	60 × 156	1	B25832-C4476-K9	6	72	

$V_R = AC 930 V$

Capacitance tolerance $\pm 10 \%$

∇ 10	60 × 86	1	B25832-C6106-K9	6	72	
∇ 15	79,2 × 104	2	B25832-C6156-K9	8	48	
∇ 22	89,3 × 104	2	B25832-C6226-K9	6	48	

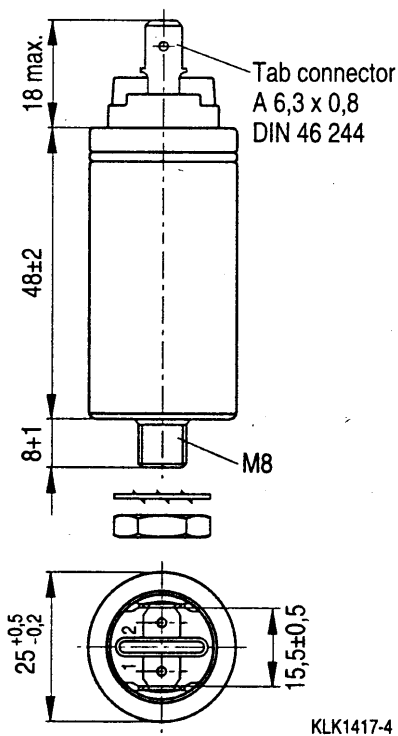
AC Capacitors for Power Electronics (MKV)

**High dielectric strength and
high peak current capability
For damping and commutation
in the medium frequency range**
Self-healing, with overpressure disconnector

Load duration	100 000 h
Failure quota	300 failures in 10 ⁹ h
IEC climatic category	25/085/56
Recurrent peak voltage \hat{v}	750 ... 1100 V
Non-recurrent surge voltage v_s	1000 ... 1500 V
Dissipation factor $\tan \delta$ (50 Hz)	$\leq 3 \cdot 10^{-4}$

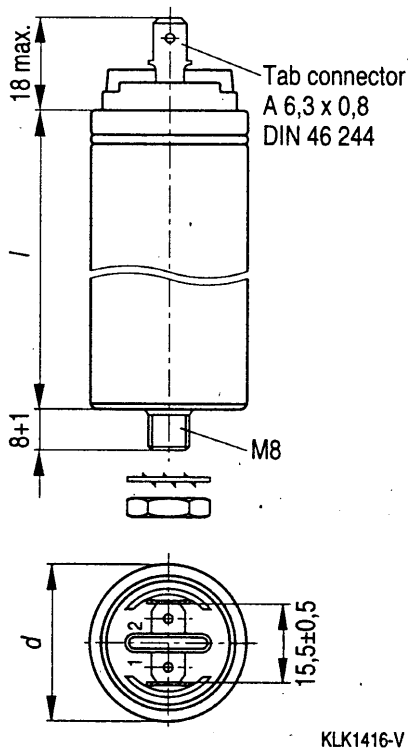
Dimensional drawing 1

Tab connectors 6,3 mm



Dimensional drawing 2

Tab connectors 6,3 mm



$d + 0,5/-0,2$ mm	$l \pm 2$ mm
30	48
30	80

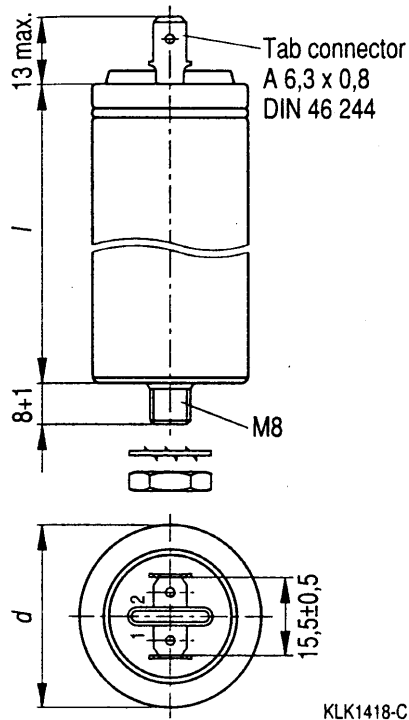
Mounting parts (included in delivery):

Toothed washer J8,2 DIN 6797
Hex nut M8 ISO 4035

AC Capacitors for Power Electronics (MKV)

Dimensional drawing 3

Tab connectors 6,3 mm

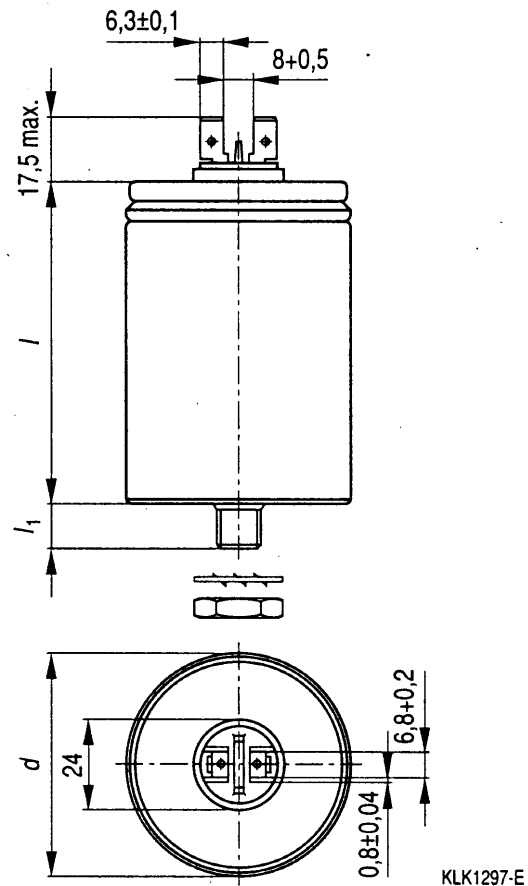


KLK1418-C

$d + 0,5/-0,2$ mm	$l \pm 2$ mm
35	48
35	80

Dimensional drawing 4

Dual tab connectors 6,3 mm



KLK1297-E

$d + 0,5/-0,2$ mm	$l + 1/-2$ mm	$l_1 + 1^*)$ mm
40	86	8
50	86	12
60	86	12

*) 8 mm = threaded bolt M8
12 mm = threaded bolt M12

Mounting parts (included in delivery):

For threaded bolt M 8: toothed washer J 8,2 DIN 6797, hex nut M8 ISO 4035
For threaded bolt M12: toothed washer J 12,5 DIN 6797, hex nut M12 ISO 4035

AC Capacitors for Power Electronics (MKV)

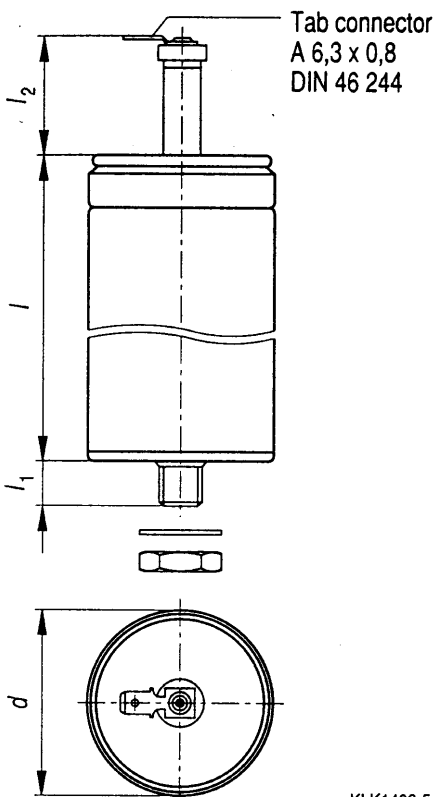
C_R	Dimensions $d \times l$	Dim. draw- ing	Ordering code	Min. qty.	Max. qty.	Farnell order code
μF	mm					
$V_R = \text{AC } 600 \text{ V}$						Capacitance tolerance $\pm 10 \%$
▽ 1,0	25 × 48	1	B25834-F4105-K1	32	128	
▽ 1,5	30 × 48	2	B25834-F4155-K1	20	80	
▽ 2,2	30 × 48	2	B25834-F4225-K1	20	80	
▽ 3,3	35 × 48	3	B25834-F4335-K1	18	72	
▽ 4,7	30 × 80	2	B25834-F4475-K1	20	80	
▽ 6,8	35 × 80	3	B25834-F4685-K1	18	72	
▽ 10	40 × 86	4	B25834-L4106-K9	12	48	
$V_R = \text{AC } 750 \text{ V}$						Capacitance tolerance $\pm 10 \%$
▽ 4,7	35 × 80	3	B25834-F5475-K1	18	72	
▽ 6,8	40 × 86	4	B25834-L5685-K9	12	48	
▽ 10	50 × 86	4	B25834-L5106-K9	9	36	
$V_R = \text{AC } 900 \text{ V}$						Capacitance tolerance $\pm 20 \%$
▽ 0,1	25 × 48	1	B25834-F6104-M1	32	128	
▽ 0,22	25 × 48	1	B25834-F6224-M1	32	128	
▽ 0,33	25 × 48	1	B25834-F6334-M1	32	128	
▽ 0,47	25 × 48	1	B25834-F6474-M1	32	128	
▽ 0,68	25 × 48	1	B25834-F6684-M1	32	128	
$V_R = \text{AC } 900 \text{ V}$						Capacitance tolerance $\pm 10 \%$
▽ 1,0	30 × 48	2	B25834-F6105-K1	20	80	
▽ 1,5	35 × 48	3	B25834-F6155-K1	32	128	
▽ 2,2	30 × 80	2	B25834-F6225-K1	32	128	
▽ 3,3	35 × 80	3	B25834-F6335-K1	32	128	
▽ 4,7	40 × 86	4	B25834-L6475-K9	12	48	
▽ 6,8	50 × 86	4	B25834-L6685-K9	9	36	
▽ 10	60 × 86	4	B25834-L6106-K9	12	48	

AC Capacitors for Power Electronics (MKV)

Damping capacitor with high dielectric strength and high peak current capability; especially for snubber circuits

Single-pole, self-healing, with overpressure disconnecter

Load duration	100 000 h
Failure quota	300 failures in 10 ⁹ h
IEC climatic category	25/085/56
Recurrent peak voltage \hat{v}	1100 ... 4300 V
Non-recurrent surge voltage v_s	1500 ... 5800 V
Dissipation factor $\tan \delta$ (50 Hz)	$\leq 3 \cdot 10^{-4}$



$d + 0,5/-0,2$ mm	$l + 1/-2$ mm	$l_1 + 1^*)$ mm	l_2 max. mm
25	57	8	15
25	57	8	23
25	70	8	23
25	95	8	23
30	57	8	15
30	95	8	23
35	95	8	26
35	95	8	32
35	131	8	32
40	95	8	32
45	57	8	22
45	95	8	32
50	95	12	26
50	131	12	32
60	131	12	32

*) 8 mm = threaded bolt M8
12 mm = threaded bolt M12

Mounting parts (included in delivery):

For threaded bolt M 8: washer A8,4 DIN 125-Ms, hex nut M8 ISO 4035
For threaded bolt M12: washer A13 DIN 125-Ms, hex nut M12 ISO 4035

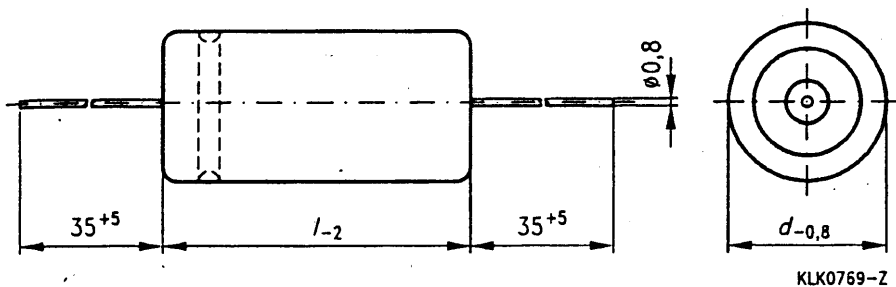
AC Capacitors for Power Electronics (MKV)

C_R μF	Dimensions		Ordering code	Min. qty.	Max. qty.	Farnell order code
	$d \times l$ mm	l_2 mm				
$V_R = \text{AC } 900 \text{ V}$ Capacitance tolerance $\pm 10\%$						
▽ 0,22	25 × 57	15	B25835-M6224-K7	16	128	
▽ 0,33	25 × 57	15	B25835-M6334-K7	16	128	
▽ 0,47	25 × 57	15	B25835-M6474-K7	16	128	
▽ 0,68	30 × 57	15	B25835-M6684-K7	20	80	
▽ 1,0	30 × 57	15	B25835-M6105-K7	20	80	
▽ 2,2	45 × 57	22	B25835-M6225-K7	10	80	
$V_R = \text{AC } 1400 \text{ V}$ Capacitance tolerance $\pm 10\%$						
▼ 0,10	25 × 57	23	B25835-M104-K7	16	128	
▽ 0,22	25 × 70	23	B25835-M224-K7	16	128	
▽ 0,33	25 × 95	23	B25835-M334-K7	16	128	
▽ 0,47	30 × 95	23	B25835-M474-K7	10	80	
▽ 0,68	30 × 95	23	B25835-M684-K7	10	80	
▽ 1,0	35 × 95	26	B25835-M105-K7	9	72	
▽ 2,2	50 × 95	26	B25835-M225-K7	6	72	
$V_R = \text{AC } 1700 \text{ V}$ Capacitance tolerance $\pm 10\%$						
▼ 0,10	25 × 57	23	B25835-M7104-K7	16	128	
▽ 0,22	25 × 70	23	B25835-M7224-K7	16	128	
$V_R = \text{AC } 2100 \text{ V}$ Capacitance tolerance $\pm 10\%$						
▼ 0,47	35 × 95	32	B25835-M1474-K7	9	72	
▼ 0,68	40 × 95	32	B25835-M1684-K7	9	72	
▼ 1,0	45 × 95	32	B25835-M1105-K7	8	80	
▽ 2,2	60 × 131	32	B25835-M1225-K7	6	72	
$V_R = \text{AC } 3400 \text{ V}$ Capacitance tolerance $\pm 10\%$						
▽ 0,10	35 × 131	32	B25835-M2104-K7	9	72	
▽ 0,22	35 × 131	32	B25835-M2224-K7	9	72	
▽ 0,33	50 × 131	32	B25835-M2334-K7	9	72	
▽ 0,47	50 × 131	32	B25835-M2474-K7	6	72	

AC Capacitors for Power Electronics (MKV)

**Capacitor for coupling and damping,
also suitable for general-purpose applications**
Self-healing, surge-proof

Load duration	100 000 h
Failure quota	1000 failures in 10^9 h
IEC climatic category	25/085/56
Recurrent peak voltage \hat{v}	880 V
Non-recurrent surge voltage v_s	1200 V
Dissipation factor $\tan \delta$ (50 Hz)	$\leq 3 \cdot 10^{-4}$



C_R	Dimensions $d \times l$	Ordering code	Min. qty.	Max. qty.	Farnell order code
μF	mm				
$V_R = AC 700 V$ Capacitance tolerance $\pm 20 \%$					
$\nabla 0,10$	$16,8 \times 32$	B25839-C6104-M	50	400	
$\nabla 0,22$	$16,8 \times 44$	B25839-C6224-M	50	400	
$\nabla 0,33$	$20,8 \times 44$	B25839-C6334-M	50	400	
$\nabla 0,47$	$20,8 \times 44$	B25839-C6474-M	50	400	
$V_R = AC 700 V$ Capacitance tolerance $\pm 10 \%$					
$\nabla 1,0$	$20,8 \times 75$	B25839-C6105-K	45	360	

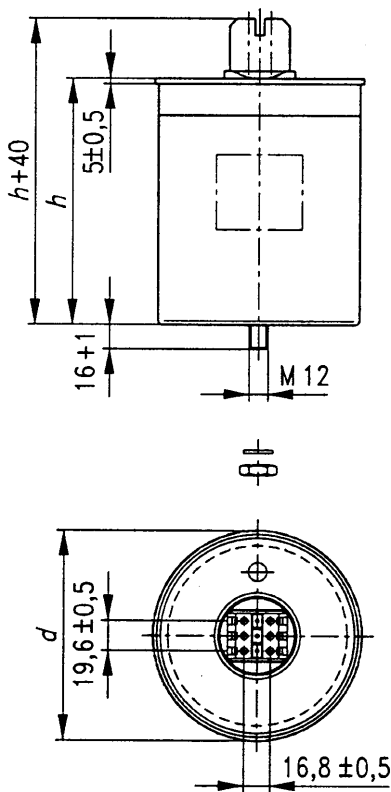
Capacitors for Power Factor Correction (MKK)

PhaseCap™ capacitors for power factor correction and filter circuit applications

Self-healing, dry, with overpressure disconnecter

Standards: IEC 831-1/2, EN 60831-1/2, VDE 560-46/47

Load duration	100 000 h
Temperature range	-25/D (max. 55 °C)
Peak voltage	$V_R + 10\%$ (up to 8 hours daily)
Dielectric losses	$< 0,25 \text{ W/kvar}$
Inrush current	$> 300 \cdot I_R$



SBS0948-8

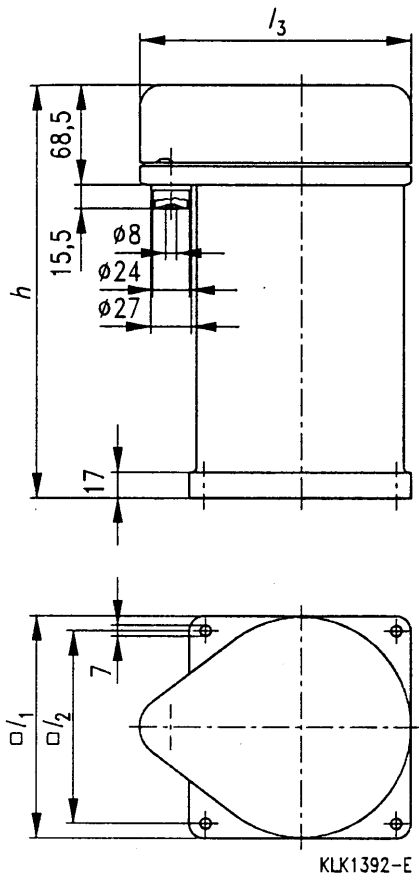
Creepage distance 12,7 mm min.
Clearance 9,6 mm min.

Mounting parts: toothed washer J12,5 DIN 6797, hex nut M12 ISO 4035

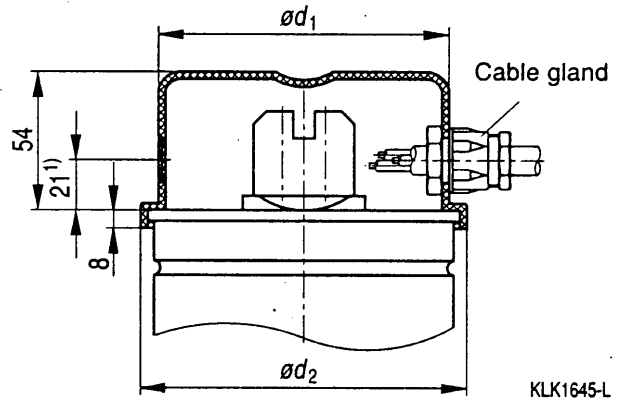
Mounting parts and discharge resistors are included in delivery.

Capacitors for Power Factor Correction (MKK)

Protection cover



Terminal cap



1) Embossment for second cable gland

Capacitor diameter	l_1 mm	l_2 mm	l_3 mm	h mm
121,6 mm	134	110	177	243
142,0 mm	154,5	130,5	186	280

Capacitor diameter	Cable gland	Cable diameter	Dim. (mm)	
			ϕd_1	ϕd_2
121,6 mm	PG 13,5	9...13 mm	116	125
121,6 mm	PG 16	10...14 mm	116	125
142,0 mm	PG 21	14...18 mm	137	145



Capacitors for Power Factor Correction (MKK)

Out-put kVar	I_R A	C_R 3X μF	Dim. $d \times h$ mm	Ordering code	Min. qty.	Max. qty.	Farnell order code
$V_R = 400$ Vac, 50 Hz							
				3-phase	Capacitance tolerance – 5/+ 10 %		
5,0	7,2	33	121 × 164	B25667-A3996-A375	6	24	
6,3	9,0	42	121 × 164	B25667-A3127-A375	6	24	
7,5	10,8	50	121 × 164	B25667-A3147-A375	6	24	
8,3	12,0	55	121 × 164	B25667-A3167-A375	6	24	
10,4	15,0	69	121 × 164	B25667-A3207-A375	6	24	
12,5	18,0	83	121 × 164	B25667-A3247-A375	6	24	
15,0	21,7	100	121 × 164	B25667-A3297-A375	6	24	
16,7	24,0	111	121 × 200	B25667-A3337-A375	6	24	
20,8	30,0	138	142 × 200	B25667-A3417-A375	4	12	
25,0	36,0	166	142 × 200	B25667-A3497-A375	4	12	
$V_R = 440$ Vac, 50 Hz							
				3-phase	Capacitance tolerance – 5/+ 10 %		
▼ 10,4	13,7	57	121 × 164	B25667-A4177-A375	6	24	
▼ 15,0	19,7	82	121 × 164	B25667-A4247-A375	6	24	
▼ 20,8	27,3	114	121 × 200	B25667-A4347-A375	4	12	
▼ 25,0	32,8	137	121 × 200	B25667-A4417-A375	4	12	
$V_R = 525$ Vac, 50 Hz							
				3-phase	Capacitance tolerance – 5/+ 10 %		
▼ 12,5	13,8	48	121 × 164	B25667-A5147-A375	6	24	
▼ 16,7	18,4	64	121 × 200	B25667-A5197-A375	6	24	
▼ 25,0	27,5	96	142 × 200	B25667-A5287-A375	4	12	
Out-put kVar	I_R A	C_R 1X μF	Dim. $d \times h$ mm	Ordering code			
$V_R = 400$ Vac, 50 Hz							
				1-phase	Capacitance tolerance – 5/+ 10 %		
5,0	12,5	100	121 × 164	B25667-A3107-A175	6	24	
6,3	15,6	124	121 × 164	B25667-A3127-A175	6	24	
7,5	18,8	149	121 × 164	B25667-A3147-A175	6	24	
8,3	20,8	166	121 × 164	B25667-A3167-A175	6	24	
10,4	26,0	207	121 × 164	B25667-A3207-A175	6	24	
12,5	31,2	249	121 × 164	B25667-A3247-A175	6	24	
$V_R = 525$ Vac, 50 Hz							
				1-phase	Capacitance tolerance – 5/+ 10 %		
6,5	12,4	75	121 × 164	B25667-A5756-A175	6	24	
8,3	15,9	96	121 × 164	B25667-A5966-A175	6	24	
10,0	19,0	116	121 × 164	B25667-A5117-A175	6	24	
12,5	23,8	144	121 × 164	B25667-A5147-A175	6	24	
15,0	28,6	173	121 × 200	B25667-A5177-A175	6	24	

Capacitors for Power Factor Correction (MKK)

Protection cover for B 25 667

For capacitor diameter	Protection class	Ordering code	Min. qty.	Max. qty.	Farnell order code
121 mm	IP 55	B44066-X9122	1	24	
142 mm	IP 55	B44066-X9142	1	12	

Terminal cap for B 25 667

For capacitor diameter	Cable gland	Ordering code	Min. qty.	Max. qty.	Farnell order code
▼ 121 mm	PG 13,5	B44066-K1211	1	24	
▼ 121 mm	PG 16	B44066-K1212	1	24	
▼ 142 mm	PG 21	B44066-K1421	1	12	

