

MKV AC Capacitors Damping, Commutating

B 25 834

High dielectric strength
High peak-current capability
For damping and commutating in
the medium frequency range
Also for general AC applications

Construction

- Self-healing
- Plastic dielectric
- Oil-impregnated tubular windings (no PCB)
- Metal-sprayed end faces ensure reliable contacting
- Cylindrical aluminum case
- Plastic or ceramic lead-throughs
- Mounting bolts M8 or M12

Terminals

- Screw terminals M10
- Tab connectors 6,3 mm
- Dual tab connectors 6,3 mm and 9,5 mm

Mounting parts

- If the vibration stress is $\leq 5 g$ and the capacitors are ≤ 60 mm in diameter and ≤ 160 mm in height, the bolt is used for mounting.
- In case of a vibration stress $> 5 g$ as well as for larger-sized capacitors mounting details are given in chapter "Mounting parts".

Grounding

- Mounting bolts for grounding in accordance with VDE 0100
- Grounding identification in accordance with DIN 40 011

Overpressure disconnecter (mechanical)

When the overpressure disconnecter responds, the capacitor extends by up to 8 mm.

So leave sufficient space above the terminals when mounting the capacitor.

Individual data sheets

Individual capacitors of this series are specified in detail (incl. thermal data) [on pages 138 ... 167](#).

Upon request, these data sheets are available for each capacitor type.



B 25 834

Damping, Commutating

4,7 μF / 750 Vac

Ordering code: B25834-F5475-K001

Characteristics

C_N , tol.	4,7 $\mu\text{F} \pm 10\%$
U_N	AC 750 V
U_i	AC 670 V
I_{max}	16 A
L_{self}	90 nH
$\tan \delta_0$	$2 \cdot 10^{-4}$
R_S	13 m Ω

Maximum ratings

\hat{u}	940 V
u_s	1300 V
\hat{i}	240 A
I_s	590 A
$(du/dt)_{\text{max}}$	50 V/ μs
$(du/dt)_s$	125 V/ μs

Test data

U_{TT}	AC 930 V, 10 s
U_{TC}	AC 2400 V, 10 s
$R_{is} \cdot C$	≥ 3000 s
$\tan \delta$ (50 Hz)	$\leq 3 \cdot 10^{-4}$

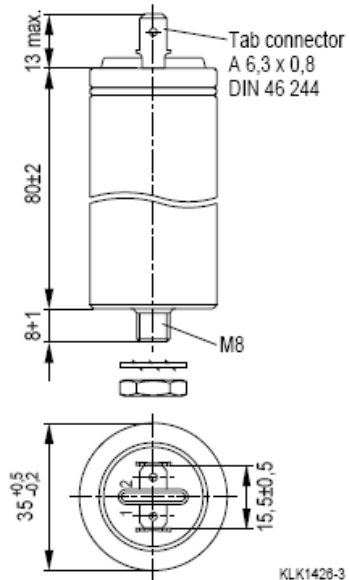
Climatic data

Θ_{min}	- 25 °C
Θ_{max}	+ 85 °C
Humidity	Average relative humidity $\leq 75\%$
$\alpha_{FQ(\text{co})}$	300/10 ⁹ h
$t_{LD(\text{co})}$	100000 h
Θ_{stg}	- 55 to + 85 °C

IEC climatic category: 25/085/56

(IEC 68-1 and 2)

Θ_{test}	+ 40 °C
Rel. humidity	93 %
t_{test}	56 days
$\Delta C/C$	$\leq 1\%$
$\Delta \tan \delta$	$\leq 3 \cdot 10^{-4}$
$R_{is} \cdot C$	≥ 1000 s



Design data

Dimensions $\varnothing \times l$	35 mm \times 80 mm
Approx. weight	100 g
Impregnation	Oil
Fixing	Threaded bolt M8
Mounting hole	9,5 mm
Max. torque	4 Nm
Terminals	Tab connector 6,3 mm
Terminal cross section	1 mm ²
Creepage distance	6 mm
Clearance	6 mm
Overpressure disconnector	

B 25 834 Damping, Commutating

10 μF / 750 Vac

Ordering code: B25834-L5106-K009

Characteristics

C_N , tol.	10 μF \pm 10 %
U_N	AC 750 V
U_i	AC 670 V
I_{max}	18 A
L_{self}	90 nH
$\tan \delta_0$	$2 \cdot 10^{-4}$
R_S	7 m Ω

Maximum ratings

\hat{u}	940 V
u_S	1300 V
\hat{i}	500 A
I_S	1250 A
$(du/dt)_{\text{max}}$	50 V/ μs
$(du/dt)_S$	125 V/ μs

Test data

U_{TT}	AC 930 V, 10 s
U_{TC}	AC 2400 V, 10 s
$R_{is} \cdot C$	≥ 3000 s
$\tan \delta$ (50 Hz)	$\leq 3 \cdot 10^{-4}$

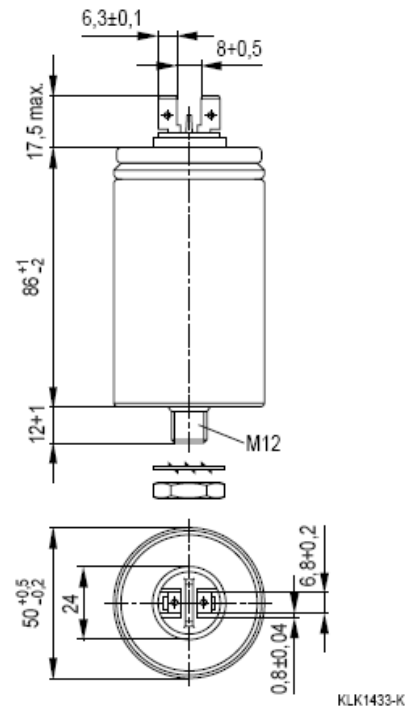
Climatic data

Θ_{min}	- 25 $^{\circ}\text{C}$
Θ_{max}	+ 85 $^{\circ}\text{C}$
Humidity	Average relative humidity ≤ 75 %
$\alpha_{\text{FQ}(co)}$	300/10 ⁹ h
$t_{\text{LD}(co)}$	100000 h
Θ_{stg}	- 55 to + 85 $^{\circ}\text{C}$

IEC climatic category: 25/085/56

(IEC 68-1 and 2)

Θ_{test}	+ 40 $^{\circ}\text{C}$
Rel. humidity	93 %
t_{test}	56 days
$\Delta C/C$	≤ 1 %
$\Delta \tan \delta$	$\leq 3 \cdot 10^{-4}$
$R_{is} \cdot C$	≥ 3000 s



Design data

Dimensions $\varnothing \times l$	50 mm \times 86 mm
Approx. weight	200 g
Impregnation	Oil
Fixing	Threaded bolt M12
Mounting hole	14 mm
Max. torque	10 Nm
Terminals	Dual tab connector 6,3 mm
Terminal cross section	1,5 mm ²
Creepage distance	10 mm
Clearance	6 mm
Overpressure disconnecter	