

## 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  $\leq 60$  mm in diameter and  $\leq 160$  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  $\mu\text{F}$  / 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
$I_{\text{max}}$	16 A
$L_{\text{self}}$	90 nH
$\tan \delta_0$	$2 \cdot 10^{-4}$
$R_S$	13 m $\Omega$

#### Maximum ratings

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

#### Test data

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

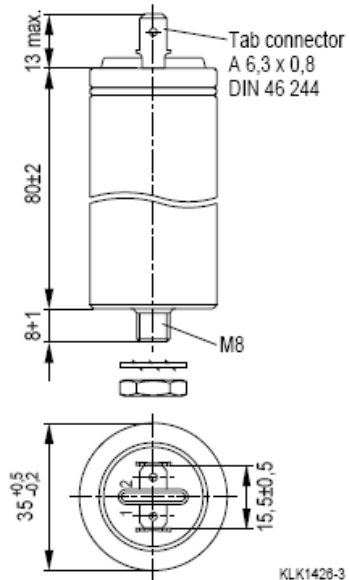
#### Climatic data

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

#### IEC climatic category: 25/085/56

(IEC 68-1 and 2)

$\Theta_{\text{test}}$	+ 40 °C
Rel. humidity	93 %
$t_{\text{test}}$	56 days
$\Delta C/C$	$\leq 1\%$
$\Delta \tan \delta$	$\leq 3 \cdot 10^{-4}$
$R_{is} \cdot C$	$\geq 1000$ 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 <sup>2</sup>
Creepage distance	6 mm
Clearance	6 mm
Overpressure disconnector	

## B 25 834 Damping, Commutating

10  $\mu\text{F}$  / 750 Vac

Ordering code: B25834-L5106-K009

### Characteristics

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

### Maximum ratings

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

### Test data

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

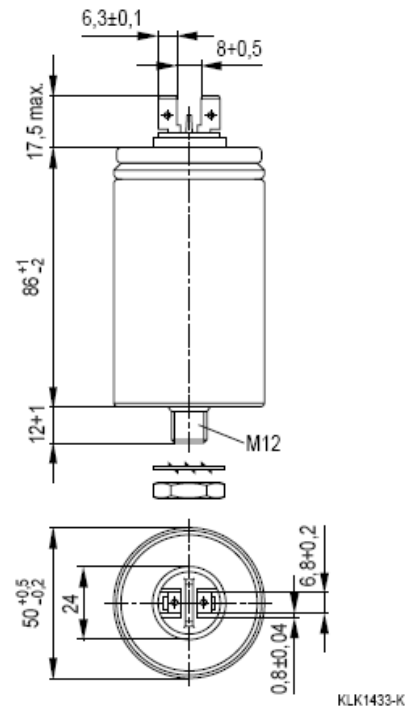
### Climatic data

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

### IEC climatic category: 25/085/56

(IEC 68-1 and 2)

$\Theta_{\text{test}}$	+ 40 $^{\circ}\text{C}$
Rel. humidity	93 %
$t_{\text{test}}$	56 days
$\Delta C/C$	$\leq 1$ %
$\Delta \tan \delta$	$\leq 3 \cdot 10^{-4}$
$R_{is} \cdot C$	$\geq 3000$ 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 <sup>2</sup>
Creepage distance	10 mm
Clearance	6 mm
Overpressure disconnecter	