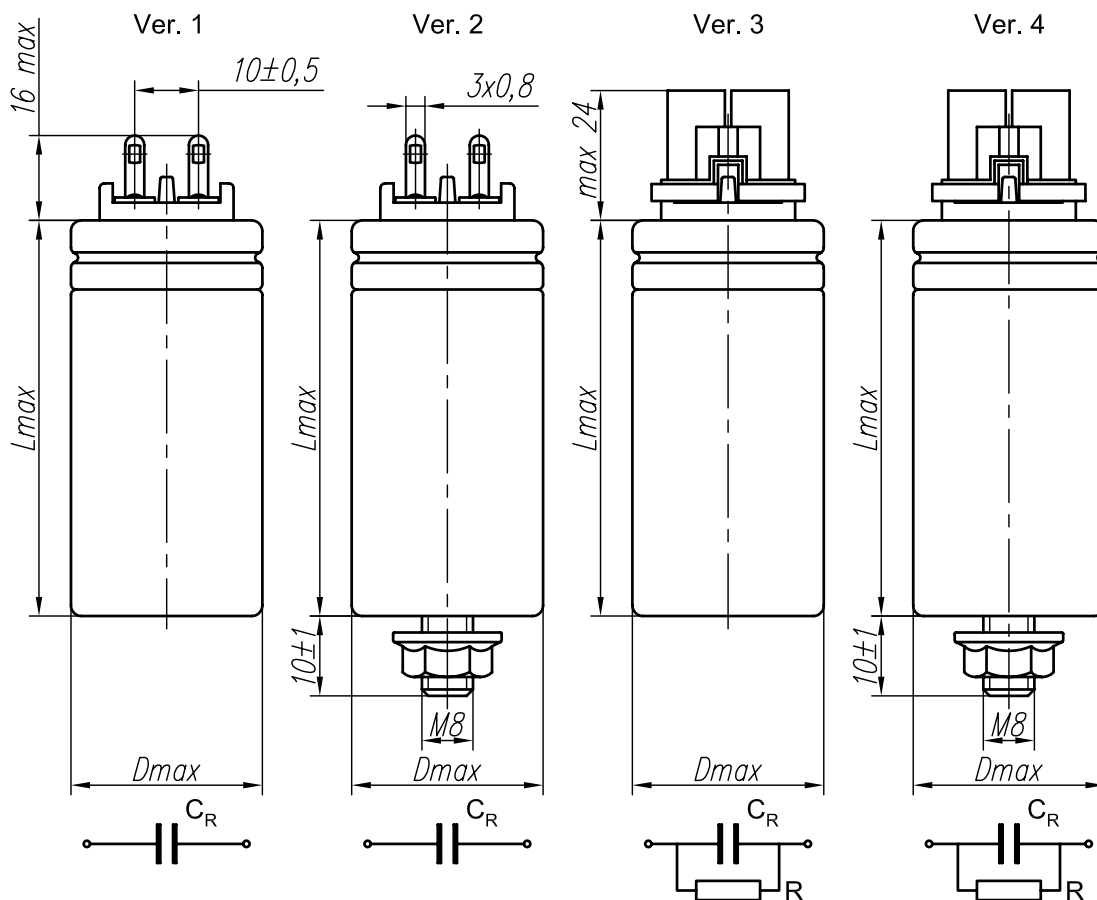


## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS



### APPLICATION

The MKSP-025 capacitors are intended for use in AC circuits for 450V~ with a frequency of 50Hz, particularly in the circuits of fluorescent discharge lamps (fluorescent and sodium-vapour lamps, etc) as series lamps. These capacitors are characterized by low inductance, reliable contact and self-healing ability. They have a pressure sensitive device that interrupts the internal connection in case of overpressure inside the capacitor caused by its failure or the end of its service life. In order to ensure proper operation of break-action mechanism, a clearance of at least 10mm must be provided above the capacitor if it has been mounted. Depending on capacitor version, the capacitor leads are designed as soldering terminals or connector with discharge resistor. The connector is designed to accept the wire leads with the cross-sectional area of  $0,5 \div 1,5 \text{ mm}^2$ . The capacitors are housed in aluminium can.

### TECHNICAL DATA

- |  |  |
|--|--|
| - Climatic category:                   | - 40/085/21.                                     |
| - Rated voltage:                       | - 450V / 50-60Hz.                                |
| - Dissipation factor:                  | - $\leq 0.003$ at $f = 50\text{Hz}/450\text{V}~$ |
| - Dielectric strength                  |  |
| between terminals:                     | - $2U_R - 60\text{s}$ ,                          |
| between terminals and case:            | - $2,5 \text{ kV} / 50\text{Hz} - 60\text{s}$ ,  |
| - The capacitors meet requirements of: | - EN 61048 and EN 61049.                         |

### SAFETY APPROVALS

This product fulfils the requirements of the RoHS Directive (2011/65/EC).



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## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS

Rated capacitance	Version	Capacitance tolerance	Rated voltage	Dimensions	
				L <sub>max</sub>	D <sub>max</sub>
μF	-	%	VAC	mm	mm
2,7	1 ÷ 4	±4	450	64	31
2,9					
3,2					
3,4					
3,6					
3,75					
5,3				76	
5,8					



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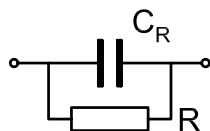
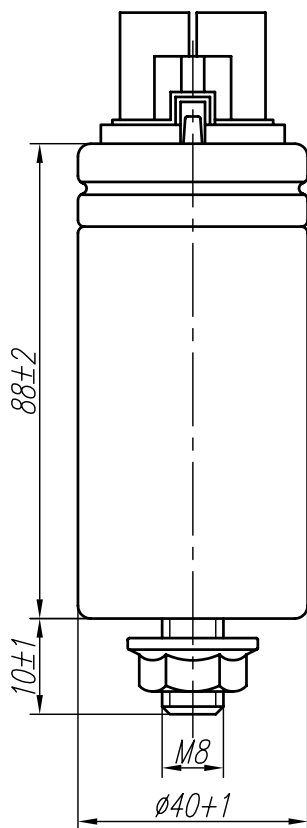
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# MKSP-025

## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)

Ver. 4  
20 $\mu$ F



### TECHNICAL DATA

- Capacitance tolerance: -  $\pm 5\%$ ,
- Rated voltage: - 450V / 50-60Hz,
- Climatic category: - 40/085/10,
- Relative humidity in capacitor environment at 20  $\pm$  25 °C: - 75% (annual average)  
- 95% (max value within 30 days)

No vapour condensation on the capacitor surface is allowed.

- Dissipation factor (tg $\delta$ ): -  $\leq 0,0015$  at f = 50Hz,
- Dielectric strength between terminals: - 2U<sub>N</sub> - 2sec.,
- Dielectric strength between terminals connected together and case: - 2,5kV / 50Hz - 2sec.,  
-  $\leq 20V/\mu$ sec.
- dV/dt: - PN-EN 61048 and PN-EN 61049.

- The capacitors meet the requirements of:

This product fulfils the requirements of RoHS (2011/65/EC).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc) . These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case. The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor. Capacitor terminal is a WAGO connector with resistor. Terminal is fitted for assembly of solid wires with the cross-section of 0.5  $\div$  1.5mm<sup>2</sup>.



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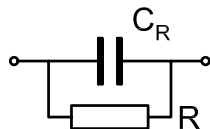
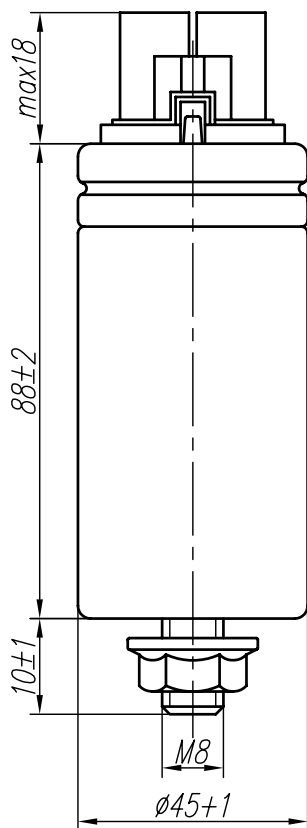
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## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)

Ver. 4  
22 $\mu$ F



### TECHNICAL DATA

- Capacitance tolerance: -  $\pm 5\%$ ,
  - Rated voltage: - 450V / 50-60Hz,
  - Climatic category: - 40/085/10,
  - Relative humidity in capacitor environment at  $20 \pm 25^\circ\text{C}$ :
    - 75% (annual average)
    - 95% (max value within 30 days)
  - No vapour condensation on the capacitor surface is allowed.
  - Dissipation factor ( $\text{tg}\delta$ ): -  $\leq 0,0015$  at  $f = 50\text{Hz}$ ,
  - Dielectric strength
    - between terminals: -  $2U_N - 2\text{sec.}$ ,
    - between terminals connected together and case: - 2,5 kV / 50Hz - 2sec.,
  - $-dV/dt$ : -  $\leq 20\text{V}/\mu\text{sec.}$
  - The capacitors meet the requirements of: - PN-EN 61048 and PN-EN 61049.
- This product fulfils the requirements of RoHS (2011/65/EC).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc). These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case.

The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor.

Capacitor terminal is a WAGO connector with resistor. Terminal is fitted for assembly of solid wires with the cross-section of  $0,5 \pm 1,5\text{mm}^2$ .



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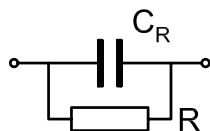
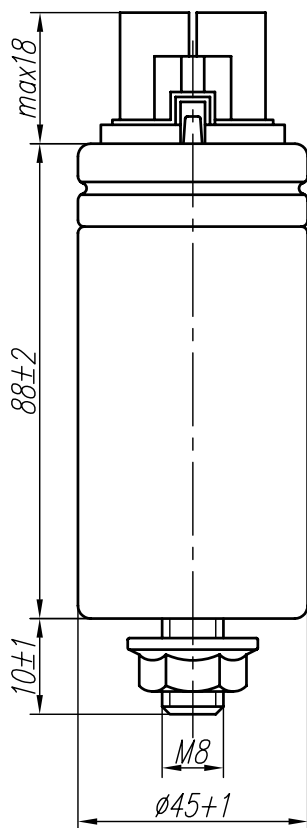
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# MKSP-025

## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)

Ver. 4  
25 $\mu$ F



### TECHNICAL DATA

- Capacitance tolerance:  $\pm 5\%$ ,
- Rated voltage: 450V / 50-60Hz,
- Climatic category: 40/085/10,
- Relative humidity in capacitor environment at  $20 \pm 25^\circ\text{C}$ :
  - 75% (annual average)
  - 95% (max value within 30 days)
- No vapour condensation on the capacitor surface is allowed.
- Dissipation factor ( $\text{tg}\delta$ ):  $\leq 0,0015$  at  $f = 50\text{Hz}$ ,
- Dielectric strength
  - between terminals:  $2U_N - 2\text{sec.}$ ,
  - between terminals connected together and case:  $2,5\text{ kV} / 50\text{Hz} - 2\text{sec.}$ ,
- $-dV/dt$ :  $\leq 20\text{V}/\mu\text{sec.}$
- The capacitors meet the requirements of: PN-EN 61048 and PN-EN 61049.

This product fulfils the requirements of RoHS (2011/65/WE).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc) . These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case. The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor. Capacitor terminal is a WAGO connector with resistor. Terminal is fitted for assembly of solid wires with the cross-section of  $0,5 \div 1,5\text{mm}^2$ .



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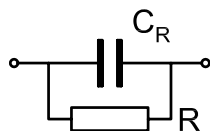
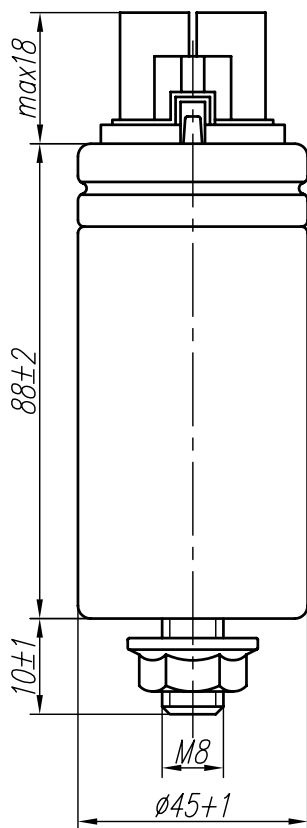
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# MKSP-025

## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)

Ver. 4  
28 $\mu$ F



### TECHNICAL DATA

- Capacitance tolerance:  $\pm 5\%$ ,
- Rated voltage: 450V / 50-60Hz,
- Climatic category: 40/085/10,
- Relative humidity in capacitor environment at  $20 \pm 25^\circ\text{C}$ :
  - 75% (annual average)
  - 95% (max value within 30 days)
- No vapour condensation on the capacitor surface is allowed.
- Dissipation factor ( $\text{tg}\delta$ ):  $\leq 0,0015$  at  $f = 50\text{Hz}$ ,
- Dielectric strength
  - between terminals:  $2U_N - 2\text{sec.}$ ,
  - between terminals connected together and case:  $2,5\text{ kV} / 50\text{Hz} - 2\text{sec.}$ ,
- $-dV/dt$ :  $\leq 20\text{V}/\mu\text{sec.}$
- The capacitors meet the requirements of: PN-EN 61048 and PN-EN 61049.

This product fulfils the requirements of RoHS (2011/65/WE).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc) . These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case. The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor. Depending on capacitor version, the terminals are either soldering terminals or a connector with discharging resistor; the connector is suitable for assembling of 4 wire with a cross section of  $0.5 \pm 1.5\text{mm}^2$ .



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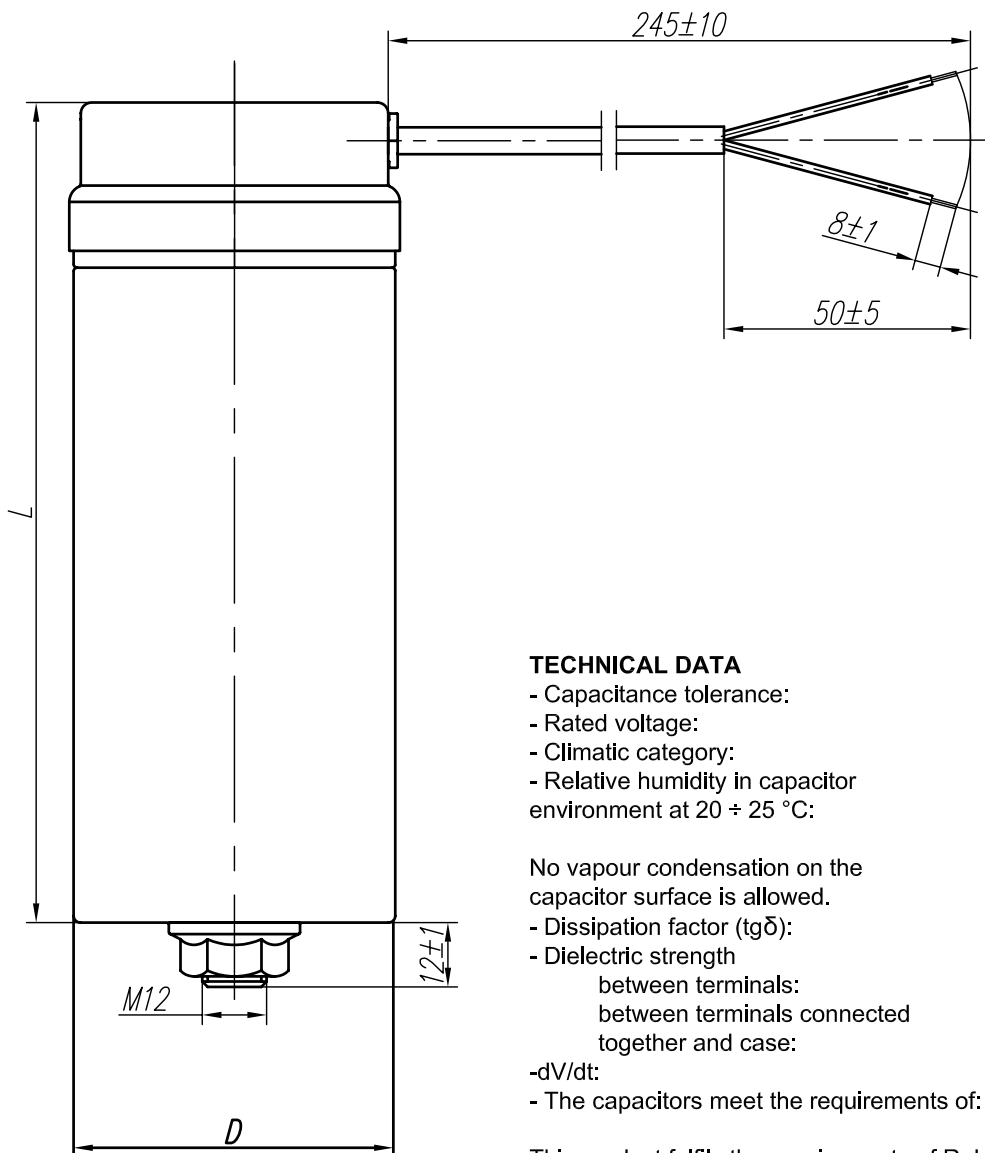
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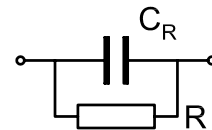
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# MKSP-025

## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)



40 i 60  $\mu$ F



Capacitor dimensions

Capacitance	Capacitor dimensions	
	D $\pm$ 1	L $\pm$ 3
$\mu$ F	mm	mm
40	60	90
60		140

### TECHNICAL DATA

- Capacitance tolerance:
- Rated voltage:
- Climatic category:
- Relative humidity in capacitor environment at  $20 \div 25$  °C:

- $\pm 5\%$ ,
- 450V / 50-60Hz,
- 40/85/10,
- 75% (annual average)
- 95% (max value within 30 days)

No vapour condensation on the capacitor surface is allowed.

- Dissipation factor ( $\tan \delta$ ):
- Dielectric strength
- between terminals:
- between terminals connected together and case:

- $\leq 0,0015$  at  $f = 50$ Hz,
- $2U_N / 50$ Hz - 2sec.,
- 2,5 kV / 50Hz - 2sec,

-dV/dt:

- $\leq 20$ V/ $\mu$ s,

- The capacitors meet the requirements of:

- PN-EN 61048 and PN-EN 61049.

This product fulfils the requirements of RoHS (2011/65/EC).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc) . These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case. The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor. The capacitor terminal is a 0,75mm<sup>2</sup> coated copper pair wire.



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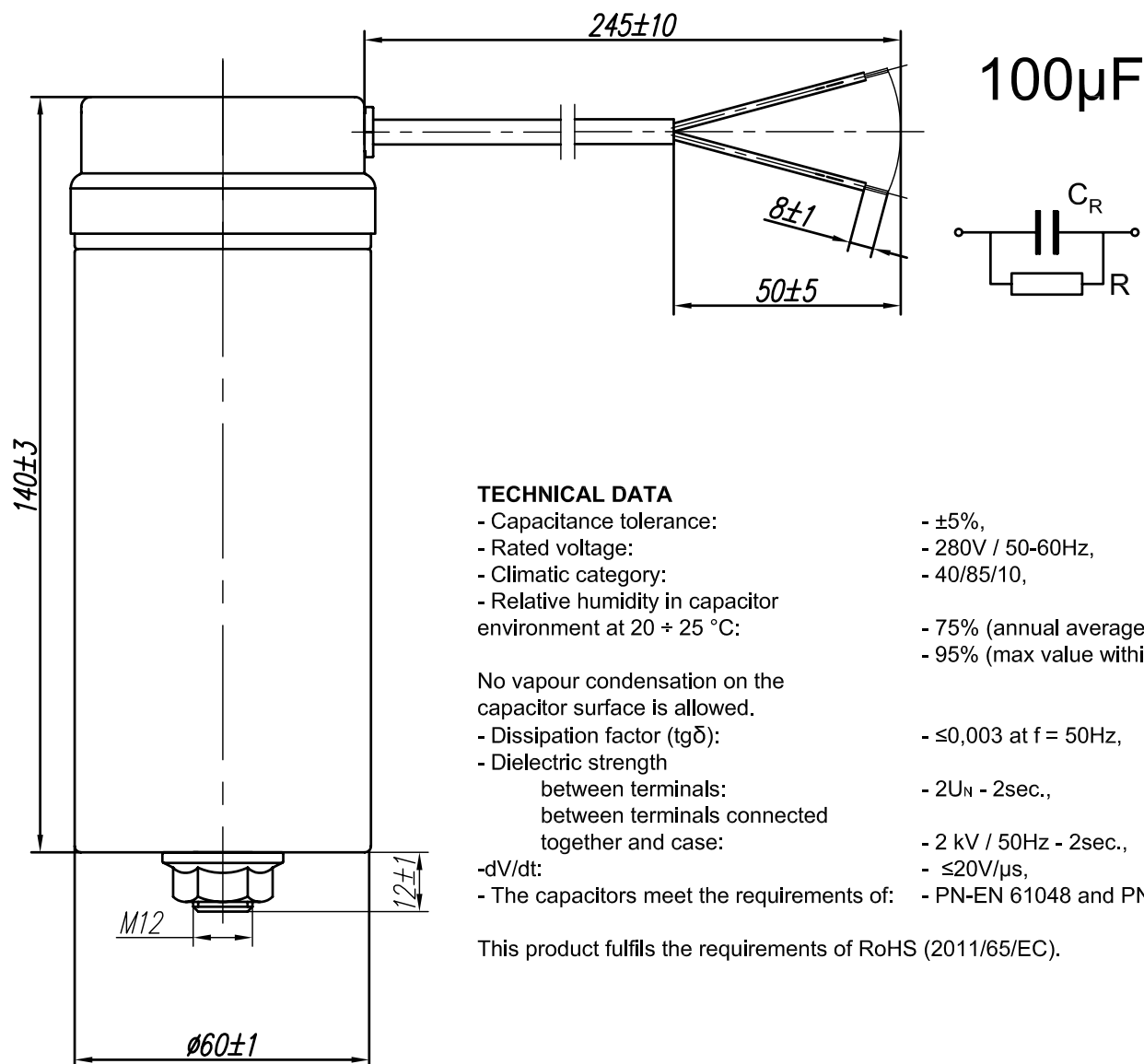
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10.07.2020

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# MKSP-025

## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)



### TECHNICAL DATA

- Capacitance tolerance:  $\pm 5\%$ ,
- Rated voltage: 280V / 50-60Hz,
- Climatic category: 40/85/10,
- Relative humidity in capacitor environment at  $20 \pm 25$  °C:
  - 75% (annual average)
  - 95% (max value within 30 days)
- No vapour condensation on the capacitor surface is allowed.
- Dissipation factor ( $\tan \delta$ ):  $\leq 0,003$  at  $f = 50$ Hz,
- Dielectric strength
  - between terminals:  $2U_N - 2\text{sec.}$ ,
  - between terminals connected together and case:  $2 \text{ kV} / 50\text{Hz} - 2\text{sec.}$ ,
- $dV/dt$ :  $\leq 20\text{V}/\mu\text{s}$ ,
- The capacitors meet the requirements of: PN-EN 61048 and PN-EN 61049.

This product fulfils the requirements of RoHS (2011/65/EC).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc) . These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case. The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor. The capacitor terminal is a  $0,75\text{mm}^2$  coated copper pair wire.



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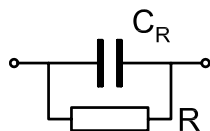
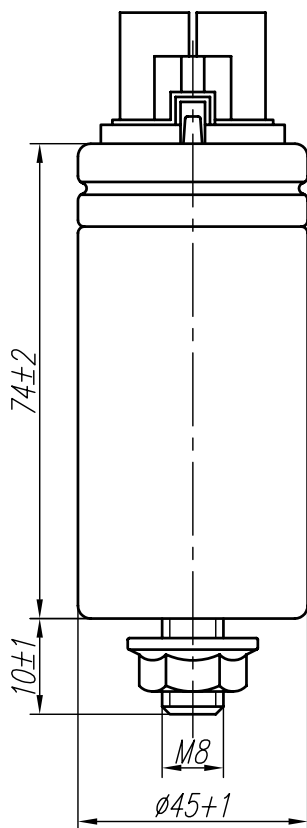
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# MKSP-025

## AC METALLIZED POLYPROPYLENE FILM CAPACITORS FOR USE IN DISCHARGE LAMP CIRCUITS (TYPE B)

Ver. 4  
15 i 16 $\mu$ F



### TECHNICAL DATA

- Capacitance tolerance:  $\pm 5\%$ ,
  - Rated voltage: 480V / 50-60Hz,
  - Climatic category: 40/085/10,
  - Relative humidity in capacitor environment at 20 ÷ 25 °C: 75% (annual average)  
95% (max value within 30 days)
  - No vapour condensation on the capacitor surface is allowed.
  - Dissipation factor (tg $\delta$ ):  $\leq 0,0015$  at f = 50Hz,
  - Dielectric strength between terminals: 2U<sub>N</sub> / 50Hz-2sec.,  
between terminals connected together and case: 2,5kV / 50Hz - 2sec.,  
 $\leq 20V/\mu$ sec.
  - dV/dt:  $\leq 20V/\mu$ sec.
  - The capacitors meet the requirements of: PN-EN 61048 and PN-EN 61049.
- This product fulfils the requirements of RoHS (2011/65/EC).

### APPLICATION

The MKSP-025 capacitors (type B) are intended to use in a.c. circuits with a frequency of 50-60Hz, particularly in the circuits of discharge lamps (eg. fluorescent lamps, sodium-vapour lamps, etc) . These capacitors are characterized by low inductance, reliable contact, and self-healing ability. The winding element is placed into aluminium case. The MKSP-025 capacitors (type B) have overpressure safety break-action mechanism, which to ensure a proper operation requires a free distance of at least 10mm above the terminals. In case of failure or end of the capacitor's useful service life, the pressure may rise inside the capacitor. With the rising pressure, the case begins to expand by opening the fold crimp. As a result, the connecting wires inside the capacitor are separated and the current path is interrupted irreversibly. This way, the capacitor is disconnected from the mains, and no conducting or burning parts can escape from inside the capacitor. Capacitor terminal is a WAGO connector with resistor. Terminal is fitted for assembly of solid wires with the cross-section of 0.5 ÷ 1.5mm<sup>2</sup>.



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