### Timer, electronic

- **Multi function or mono function**
- **To 10 time ranges**
- **22.5 mm width for DIN rail**
- **24...48 VDC and 24...240 VAC, 50/60 Hz**
- **24...240 VAC/DC**
- **1 or 2 changeover contacts, instantaneous and/or timed contacts**

From left to right: KOP219K, KOP511K, KOP560K

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| Time ranges                                    |               |
| 0.05 s...60 h                                  |               |
| 0.15 s...10 min                                |               |

| Operating voltage                             |               |
| 24...48 VDC and 24...240 VAC                  |               |
| 24...240 VDC/AC                               |               |

| Number of contact                             |               |
| 1 changeover contact                          |               |
| 2 changeover contacts                         |               |
| 2 changeover contacts, instantaneous and/or timed contacts |               |

| Order no.                                      |               |
| KOP119K7MWVAN00                                |               |
| KOP219K7MWVAN00                                |               |
| KOP511K7MWVPN00                                |               |
| KOP512K7MWVPN00                                |               |
| KOP560K7MWVAN00                                |               |
| KOP560K7MWVPN00                                |               |

### Settings

**Rough time setting**
- e.g., 1 m = 1 minute

**Fine setting time**
- Divides the value set in the rough setting by a factor of 10
- Example:
  - rough setting 1 m = 1 minute
  - 1 unit = 6 s.
  - If 24 s are necessary, factor 4 must be set here

**Function settings (KOP560 only)**
- Here you can set the relay, e.g.: 11 - delayed operation

**Output 2 as instantaneous contact programmable by sliding switch on the front (KOP5 only)**
Technical data

Multi time ranges

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<td>0.15...2.5 s, 1...10 s</td>
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<tr>
<td>0.05...1 h, 0.15...3 h, 0.5...10 h, 3...60 h</td>
<td>24...240 VAC/DC, 50/60 Hz (VP)</td>
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Time range can be easily selected on the front of the relay, using a screwdriver

Setting accuracy

± 5% of the time range final value (t_{max})

Repeat accuracy

± 0.2% of the set value

Reset time

50 ms

Operating voltage

24...48 VDC and 24...240 VAC, 50/60 Hz (VP)
24...240 VAC/DC, 50/60 Hz (VA)

Power consumption

VP version: 1 W (DC) or 5.0 VA (AC)
VA version: 3 VA (AC) 3 W (DC)

Setting accuracy

± 5% of the time range final value (t_{max})

Repeat accuracy

± 0.2% of the set value

Reset time

50 ms

Operating voltage

24...48 VDC and 24...240 VAC, 50/60 Hz (VP)
24...240 VAC/DC, 50/60 Hz (VA)

Power consumption

VP version: 1 W (DC) or 5.0 VA (AC)
VA version: 3 VA (AC) 3 W (DC)

Duty cycle

100%

Pulse control

Operating voltage range, current 1 mA, duration of the control pulse >30 ms (DC), >50 ms (AC);

Outputs

KOP219 and KOP 5
2 changeover contacts, status display by LED
KOP 119
1 changeover contact

Setting accuracy

± 5% of the time range final value (t_{max})

Repeat accuracy

± 0.2% of the set value

Reset time

50 ms

Operating voltage

24...48 VDC and 24...240 VAC, 50/60 Hz (VP)
24...240 VAC/DC, 50/60 Hz (VA)

Power consumption

VP version: 1 W (DC) or 5.0 VA (AC)
VA version: 3 VA (AC) 3 W (DC)

Duty cycle

100%

Pulse control

Operating voltage range, current 1 mA, duration of the control pulse >30 ms (DC), >50 ms (AC);

Outputs

KOP219 and KOP 5
2 changeover contacts, status display by LED
KOP 119
1 changeover contact

Switching capacity

KOP 5
U = 440 VAC, I_{th} = 8 A, P = 2000 VA
3 A/250 VAC (AC15), 3 A/440 VAC (AC14) or 1 A/24 VDC (DC13) in accordance with IEC60947-5-1

KOP119/219
U = 440 VAC, I_{th} = 5 A, P = 1200 VA
1.5 A/250 VAC (AC15) or 1 A/25 VDC (DC13) in accordance with IEC60947-5-1

Insulation characteristics

6 kV 1.2/50 μs surge voltage in accordance with IEC60947-5-1 between all inputs and outputs

EMC/immunity to interference

Surge capacity in accordance with IEC61000-4-5, 4 kV
Burst in accordance with IEC61000-4-4, 6 kV
ESD in accordance with IEC61000-4-2, with contact 8 kV, in air 8 kV

Secure disconnection

In accordance with VDE0106, part 101

Protection class

Housing IP40, terminals IP20

Approvals

UL, C-UL

Ambient temperature

Open –20 °C to +60 °C, encapsulated –20 °C to +45 °C

Connections

Screw terminals for 1 × 0.5 mm² or 2 × 2.5 mm² (solid wire) or 2 × 1.5 mm² (multistrand with end sleeve), AWG 14…20, with two-chamber system, M3.5 screws for Pozidrive no. 2 (Phillips) and slotted head no. 2, suitable for drill/driver (max. 1.2 Nm). Finger protection in accordance with VDE0106

Mounting

Snap-on mounting on 35 mm rail according to EN60715TH35 or screw mounting by adapter (accessories) and 2 M4 screws. Any mounting position

Dimension diagrams
1) For pulse control, a different voltage than the supply voltage can be optionally used. For example A1-A2=230 V AC and B1-A2=24 V DC.
2) Output 2 as instantaneous contact programmable by sliding switch on the front (output switches with the supply voltage U or with the control pulses S).
3) Bridge or potentiometer 10 kΩ at least 0.25 W (low voltage) for external time setting.