

Mono-function and mono-time range



Delayed operation timer	Delayed release timer	Delayed operation and release timer	Fleeting on delay timer
KOP 211	KOP 212	KOP 216	KOP 221
Function diagram 			
Connection diagram <p>¹⁾ Bridge or external potentiometer 470 kΩ, min. 0.25 W (low voltage)</p>			
Function After application of the supply voltage the output relay operates with a delay t .	After closing the control contact (terminals Y1/Y2) the output relay operates and releases after the control contact opens with delay t . Note: Duration of control pulse min. 20 ms. If the control contact is closed during t , then t starts again after contact is opened.	After closing the control contact (terminals Y1/Y2) the output relay operates with delay t and releases after the opening of control contact with the same delay t . Note: Duration of control pulse $> t$. Actuation of the control contact during t cancels the initiated delay time.	After application of the supply voltage the output is in the operating state during time t .
LED status display 	- output in rest position - no timing		- output in rest position - time running

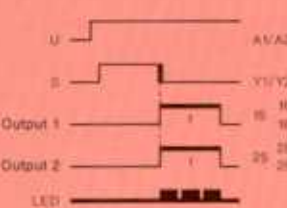
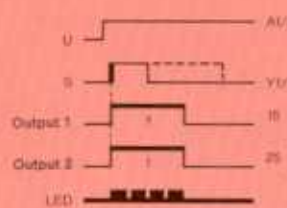
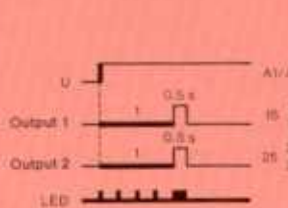
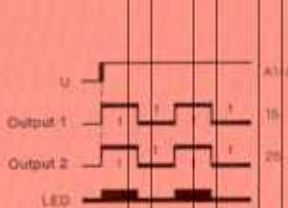
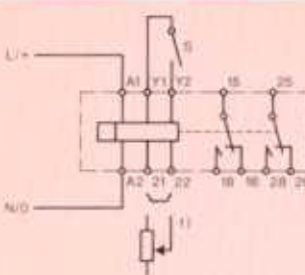
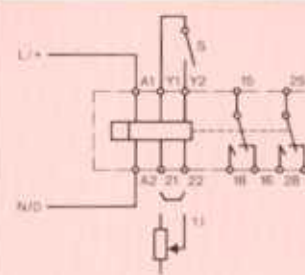
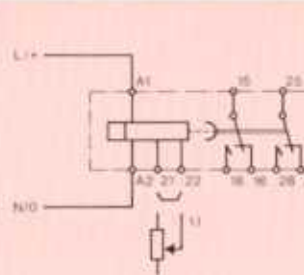
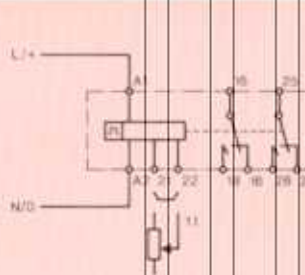
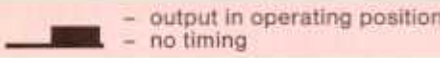
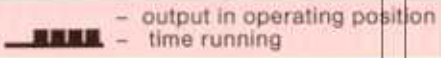
Time ranges and supply voltages: See ordering details, page 11

See pages 16/17 for further technical details

Mono-function and mono-time range

- Case width 45 mm (Automotive Standard), screw mounting or snap-on to 35 mm rail.
- Output with two electrically isolated changeover contacts.
- Time setting with setting knob or via external potentiometer.

KOPA

Fleeting off delay timer	Pulse converter	Pulse generator	Flasher relay
KOP 222	KOP 223	KOP 224	KOP 242
			
			
<p>After the opening of the control contact (terminals Y1/Y2) the output is in the operating state during the time t.</p> <p>Note: Duration of control pulse min. 20 ms. Closing the control contact during t will interrupt the timing period and the output will revert to the rest state.</p>	<p>After the closing of the control contact (terminals Y1/Y2) the output is in the operating state during the time t. The time t is independent of the length of the control pulse.</p> <p>Note: Duration of control pulse min. 20 ms. Actuations of the control contact during t are disregarded. No new cycle can be started until after the expiry of t.</p>	<p>After application of the supply voltage the output relay operates with delay t for the fixed pulse duration of 0.5 s.</p>	<p>After application of the supply voltage the output is in the operating state for the time t (starting with a pulse) and is subsequently in the rest state for the same time t. Further periods follow until the supply voltage is removed.</p>
			

Multi(8)function and multi(8)time range

Multi(4)function and multi(2 × 8)time range



<p>Universal timer</p>	<p>Impulser Output 1 starting with pulse Output 2 starting with pause</p>	<p>Programming relay With pulse control With mains control</p>
<p>KOP 260</p>	<p>KOP 270</p>	
<p>Function diagram The 8 functions of the KOP 211 to KOP 242 and 8 time ranges are combined in this universal timer and can be selected from the front using a screwdriver. See KOP 211 to KOP 242 diagrams, pages 8/9</p>		
<p>Connection diagram See mono-function timers KOP 211 to KOP 242, pages 8/9</p>		
<p>Function Function descriptions and notes as for the relevant mono-function timer. See KOP 211 to KOP 242, pages 8/9 LED status display See KOP 211 to KOP 242, pages 8/9</p>	<p>After application of the supply voltage, output 1 is in the operating state and output 2 in the rest state for time t1 and then switches over for the time t2. Further periods follow until the removal of the supply voltage. Note: Fit external bridge across terminals Y2 and Y3.</p>	<p>After closing the control contact (or application of the supply voltage), output 1 is in the operating state and output 2 in the rest state for the time t1. After the expiry of t1, output 1 changes to the rest state and output 2 is in the operating state for time t2. Note: Duration of the control pulse min. 20 ms. Actuations of the control contact during t1 are disregarded. Closing of the control contact during t2 will initiate the start of a new cycle. Place external bridge across terminals Y1 and Y2.</p>

See pages 16/17 for further technical data

Time ranges and supply voltages: See ordering details, page 11

KOPA

Multi-function and multi-time range

- Functions and time ranges selectable using a screwdriver.
- The outputs can be brought to the rest or operating states for commissioning by means of the function selector switch.
- Manual time setting (protruding setting knob) or using a screwdriver (recessed setting knob).

Ordering details

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
K	O	P					A					N

Function (see summary list, pages 8..9)

Time setting knob

- 0 Standard knob (protruding, manual setting)
- 7 Flat knob (recessed, setting with screwdriver)

Time range	KOP 211...242	KOP 260/270
0.05... 1 s	BA	-
0.15... 3 s	CA	MR
0.5 ...10 s	EA	MR
1.5 ...30 s	FA	-
3 ...60 s	GA	MR
0.15... 3 min	HA	MR
0.5 ...10 min	KA	MR
1.5 ...30 min	LA	-
3 ...60 min	NA	MR
0.15... 3 h	PA	MR
0.5 ...10 h	RA	MR

Supply voltage (AC: 50/60 Hz)

- BK 24 V AC/DC
- BR 36 V AC/DC
- BW 42 V AC/DC
- CA 48 V AC/DC
- CD 60 V AC/DC

- D1 100-127 VAC
- D8 150-200 VAC
- E1 208-250 VAC
- E9 346-440 VAC¹⁾

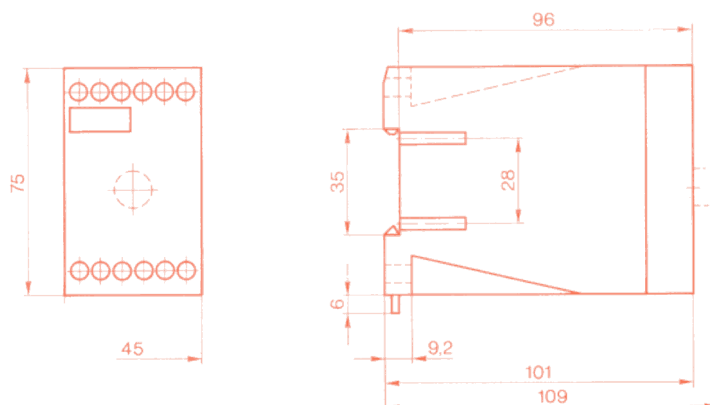
Approvals UL and CSA indicate with the order

¹⁾ Without UL and CSA approvals

Ordering can be by means of the above ASN-code or by description.

Example: Electronic timer KOP 211 A, with standard knob,
0.15...3 s, 24 VDC
or
KOP 211 A0 CA BKN

Dimensional drawings



Drill plan

