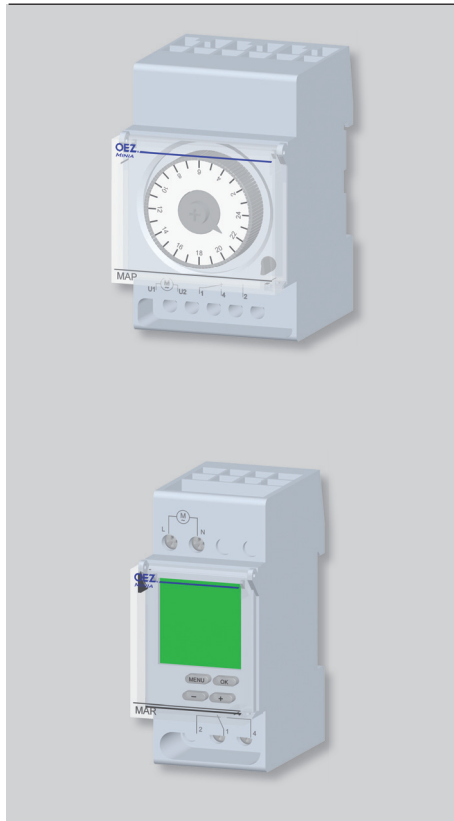


**TIMERS**



**Mechanical program timer**

- For real time load switching up to 16 A / 250 V.
- Daily program.
- Switching time setting: by plastic plates along the perimeter of the dial.
- Shortest switching interval: 30 min.
- Change-over switch automatic run / permanent operation / permanent off.
- Run reserve: 100 hours.

Design	Arrangement of contacts <sup>1)</sup>	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
standard	001	<b>MAP-16-001-A230</b>	36879	3	0.175	1
mini	100	<b>MAP-16-100-A230-MINI</b>	36880	1	0.1	1

<sup>1)</sup> Each digit indicates successively the number of make, break and break-make contacts

**Digital program timer**

- For switching of load of max. 16 A / 250 V a.c. in real time.
- Weekly and daily program.
- Switching time setting: by push-buttons on the front panel of the device.
- Shortest switching interval: 1 min.
- Change-over switch automatic run / permanent operation / permanent off.
- Run reserve: 6 years from the manufacture date.

Number of channels	Arrangement of contacts <sup>1)</sup>	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
1	001	<b>MAR-16-001-A230</b>	36881	2	0.24	1
2	002	<b>MAR-16-002-A230</b>	36882	2	0.24	1

<sup>1)</sup> Each digit indicates successively the number of make, break and break-make contacts

**Specifications**

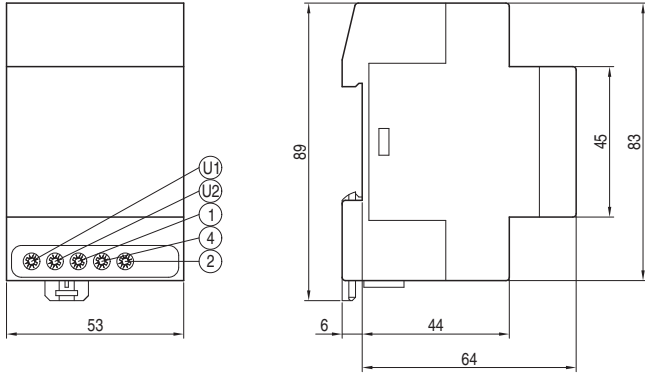
Type	MAP-16-001-A230	MAP-16-100-A230-MINI	MAR-16-001-A230	MAR-16-002-A230
Approval marks				
<b>Main circuit (contact)</b>				
Arrangement of contacts	001	100	001	002
Rated operating voltage $U_e$	250 V a.c.	250 V a.c.	250 V a.c.	250 V a.c.
Rated current $I_c$	AC-1 16 A	16 A	16 A	16 A
Switched power	AC-1	3 600 W	3 600 W	3 600 W
	AC-3	1 000 W	1 000 W	1 800 W
	AC-5a uncompensated	1 400 VA	1 400 VA	1 400 VA
	AC-5a compensated 7 $\mu$ F	58 W	58 W	60 W
	AC-5b	1 000 W	1 000 W	1 800 W
Min. switched power	4 V / 1 mA	4 V / 1 mA	12 V / 100 mA	12 V / 100 mA
Rated frequency $f_n$	50 Hz	50 Hz	50 Hz	50 Hz
Mechanical endurance	20 000 000 operating cycles	20 000 000 operating cycles	10 000 000 operating cycles	10 000 000 operating cycles
Electrical endurance	100 000 operating cycles	100 000 operating cycles	100 000 operating cycles	100 000 operating cycles
Connection	1.5 $\div$ 4 mm <sup>2</sup>	1.5 $\div$ 4 mm <sup>2</sup>	1.5 $\div$ 4 mm <sup>2</sup>	1.5 $\div$ 4 mm <sup>2</sup>
Torque	1.2 Nm	1.2 Nm	1.2 Nm	1.2 Nm
<b>Time circuit</b>				
Min. switching interval	30 min	15 min	1 min	1 min
Min. time unit	15 min	15 min	1 min	1 min
Program	daily	daily	weekly	weekly
Number of memory places	-	-	56	28 on each channel
Pre-set blocks in the week	-	-	Mo-Su, Mo-Fr, Sa-Su, individual	Mo-Su, Mo-Fr, Sa-Su, individual
Run accuracy	$\pm$ 2.5 s / day	$\pm$ 2.5 s / day	$\pm$ 0.86 s / day	$\pm$ 0.86 s / day
Switching accuracy	$\pm$ 5 min	$\pm$ 5 min	-	-
Run reserve	100 hours	100 hours	6 years	6 years
Battery type	NiMH	NiMH	Lithium	Lithium
Charging time	min 48 hours	min 48 hours	-	-
<b>Supply circuit</b>				
Rated control voltage $U_c$	230 V a.c.	230 V a.c.	230 V a.c.	230 V a.c.
Operating range	85 $\div$ 110 % $U_c$	85 $\div$ 110 % $U_c$	85 $\div$ 110 % $U_c$	85 $\div$ 110 % $U_c$
Rated frequency $f_n$	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Rated power loss $P_v$	1 VA	1 VA	2 VA	2 VA
Connection	1.5 $\div$ 4 mm <sup>2</sup>	1.5 $\div$ 4 mm <sup>2</sup>	1.5 $\div$ 4 mm <sup>2</sup>	1.5 $\div$ 4 mm <sup>2</sup>
Torque	1.2 Nm	1.2 Nm	1.2 Nm	1.2 Nm
<b>Other data</b>				
Mounting on "U" rail according to EN 60715 - type	TH 35	TH 35	TH 35	TH 35
Degree of protection	IP20	IP20	IP20	IP20
Ambient temperature	-10 $\div$ + 55 °C	-10 $\div$ + 55 °C	-10 $\div$ + 55 °C	-10 $\div$ + 55 °C
Working position	arbitrary	arbitrary	arbitrary	arbitrary

<sup>1)</sup> Each digit indicates successively the number of make, break and break-make contacts

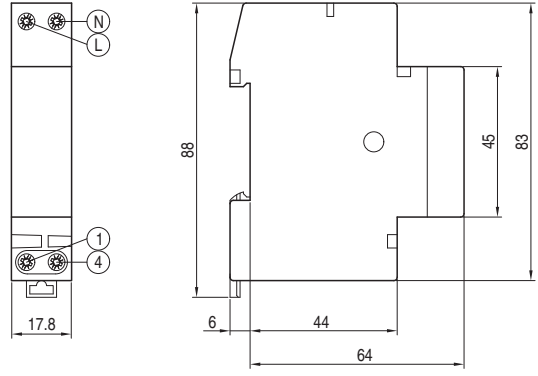
TIMERS

Dimensions

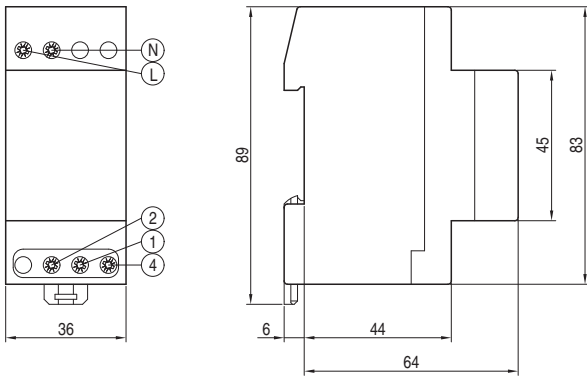
MAP-16-001-A230



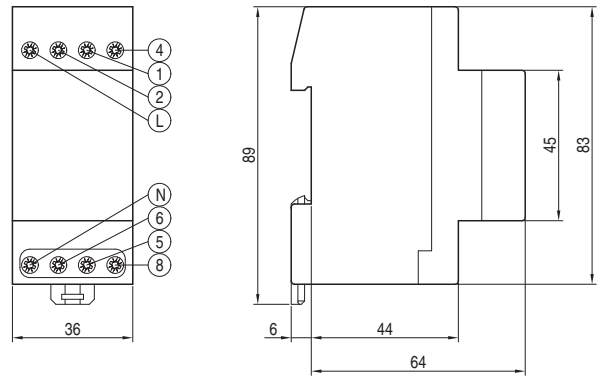
MAP-16-100-A230-MINI



MAR-16-001-A230

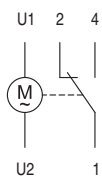


MAR-16-002-A230

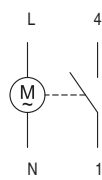


Diagram

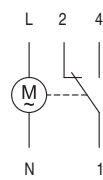
MAP-16-001-A230



MAP-16-100-A230-MINI



MAR-16-001-A230



MAR-16-002-A230

