

TIME RELAYS



- For periodical switching of electrical circuits up to 8 A according to two mutually independent set times.
- Mainly for automation purposes.
- Time range: 0.5 s ÷ 120 min.
- **Universal supply voltage:**
12 V ÷ 230 V a.c. / 12 V ÷ 220 V d.c.
- Possibility of selection of start of timing – delayed operation/impulse after switching on.
- Light indication at contact closing (red LED).
- Light indication of presence of supply voltage (green LED).

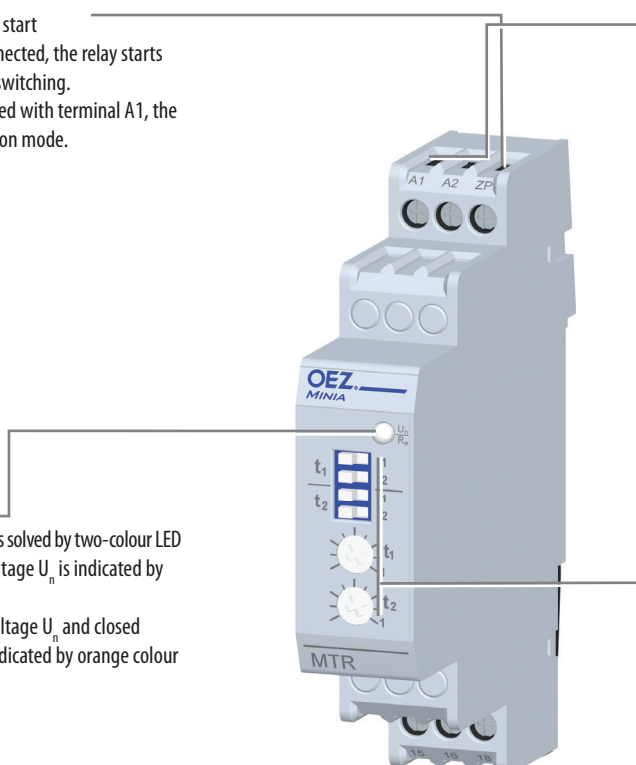
Time relays

Rated voltage U_n AC/DC [V]	Type	Product code	Number of modules	Weight [kg]	Package [pcs]
Universal ¹⁾	MTR-08-001-UNI	35570	1	0.075	1

¹⁾ Universal rated voltage = 12 ÷ 230 V a.c. / 12 ÷ 220 V d.c.

Description


- **Terminal ZP** for setting of relay start
 - If the terminal is not interconnected, the relay starts in the mode of impulse after switching.
 - If the terminal is interconnected with terminal A1, the relay starts in delayed operation mode.
- **Terminals A1-A2 for connection of supply voltage**
 - Rated voltage $U_n = 12 \div 230$ V a.c. / $12 \div 220$ V d.c.
 - Conductor L and N or (+) and (-) can be connected arbitrarily to terminals A1, A2.
- **Control knobs and change-over switches t_1, t_2** for switching time setting:
 - Minimum set time t_1 or t_2 : 0,5 s.
 - Maximum set time t_1 or t_2 : 120 min.
 - Stability of set value of t_1 and t_2 at permanent power supply - max 2% t_1 or t_2 .
 - Scale of both t_1 and t_2 is linear.
- **Indication**
 - Indication of operational states is solved by two-colour LED
 - presence of supply voltage U_n is indicated by green colour
 - presence of supply voltage U_n and closed contact 15-18 R_c is indicated by orange colour



t_1, t_2	t_1, t_2				
<table border="1"> <tr><td>■</td><td>1</td></tr> <tr><td>■</td><td>2</td></tr> </table>	■	1	■	2	 0,5 s 12 s
■	1				
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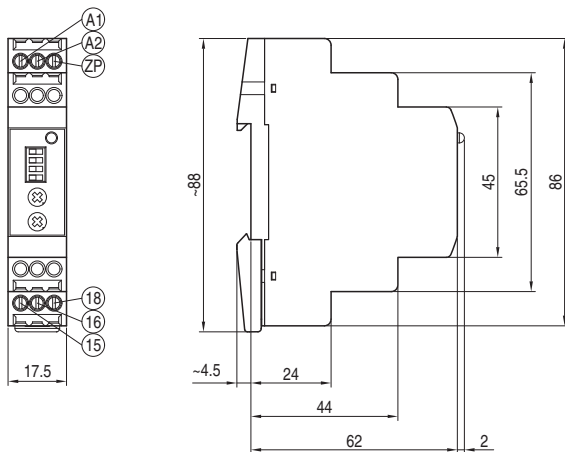
Specifications

Type	MTR-08-001-UNI	
Standards	EN 61812-1	
Approval marks		
Main circuit (contact)		
Arrangement of contacts ¹⁾		001
Rated operating voltage	U_e	250 V a.c. / 24 V d.c.
Rated current	I_n	8 A
Max. switched power		2000 VA / 192 W
Max. switched voltage		380 V a.c., 150 V d.c.
Min. voltage/current		5 V d.c. / 10 mA
Endurance - electrical/mechanical		100 000 operating cycles/5 000 000 operating cycles
Connection		0.2 ÷ 2.5 mm ²
Torque		0.5 Nm
Control circuit (coil)		
Rated control voltage	U_n	12 ÷ 230 V a.c. / 12 ÷ 220 V d.c.
Dwell between applied U_e		3 s
Consumption at U_e	12/230 V a.c.	0.7 VA / 2.1 VA
	12/220 V d.c.	0.9 W / 1.2 W
Rated frequency		50 ÷ 60 Hz
Connection		0.2 ÷ 2.5 mm ²
Torque		0.5 Nm
Time circuit		
Range		0.5 s ÷ 120 min
T setting method t_1, t_2		control knobs and switches on the front panel
Stability of set value at permanent power supply		max. 2 % t_1, t_2
Other data		
Mounting on "U" rail according to EN 60715 - type		TH 35
Degree of protection		IP20
Ambient temperature		-20 ÷ 55 °C
Working position		Arbitrary

¹⁾ Each digit indicates successively the number of make, break and break-make contacts

Dimensions

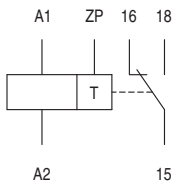
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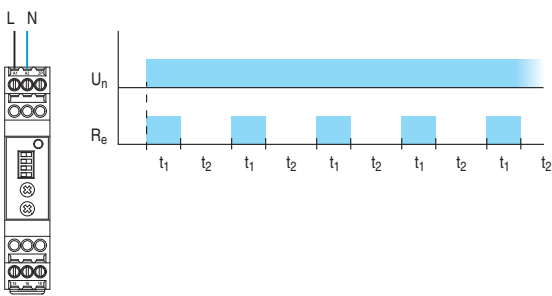
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Diagram

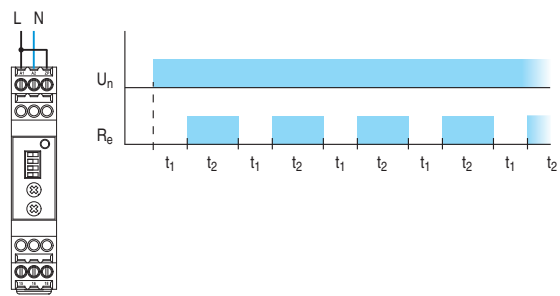
MTR-08-001-UNI



Graph



U_n – rated voltage
 R_e – contact closing 15-18
 t_1 – set time on the switch t_1 and on the knob t_1
 t_2 – set time on the switch t_2 and on the knob t_2



U_n – rated voltage
 R_e – contact closing 15-18
 t_1 – set time on the switch t_1 and on the knob t_1
 t_2 – set time on the switch t_2 and on the knob t_2