

Description

The MTR10 timer relay combines a well-proven mechanical contact system with the flexibility of an electronic timing element. As a replacement of a standard automotive relay, the MTR10 adds probably missing ON or OFF delay.

The MTR10 timer relay is suitable for standard automotive relay sockets to ISO 7588 (ISO Mini).

Applications

The MTR10 timer relay is available for DC 12 V and DC 24 V applications.

Typical applications:

- Passenger cars
- Trucks
- Buses
- Construction vehicles and emergency cars

Application examples:

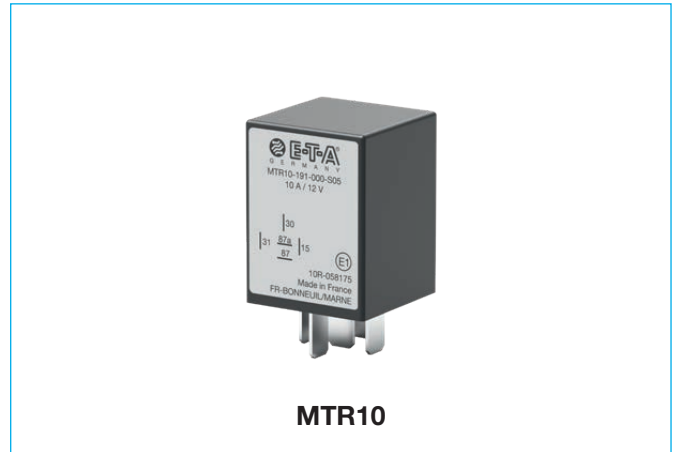
- Control of pumps, valves, lights or motors that are intended to stay open or overtravel for a certain time
- Co-ordinated, sequential switch-on of loads to avoid load peaks (e.g. with fans).

Benefits

- The MTR10 timer relay is reverse polarity protected by its design and is supplied with only roughly pre-set time settings. This saves time and avoids errors in production.
- The MTR10 provides a vehicle very simply with and ON or OFF delay without modification of the controlgear software. It is sufficient to replace a standard relay with the MTR10 in the power distribution board.

Qualifications

Degree of protection	IP50
Noise immunity	2006/28 EC DIN40839
E1 number	upon request

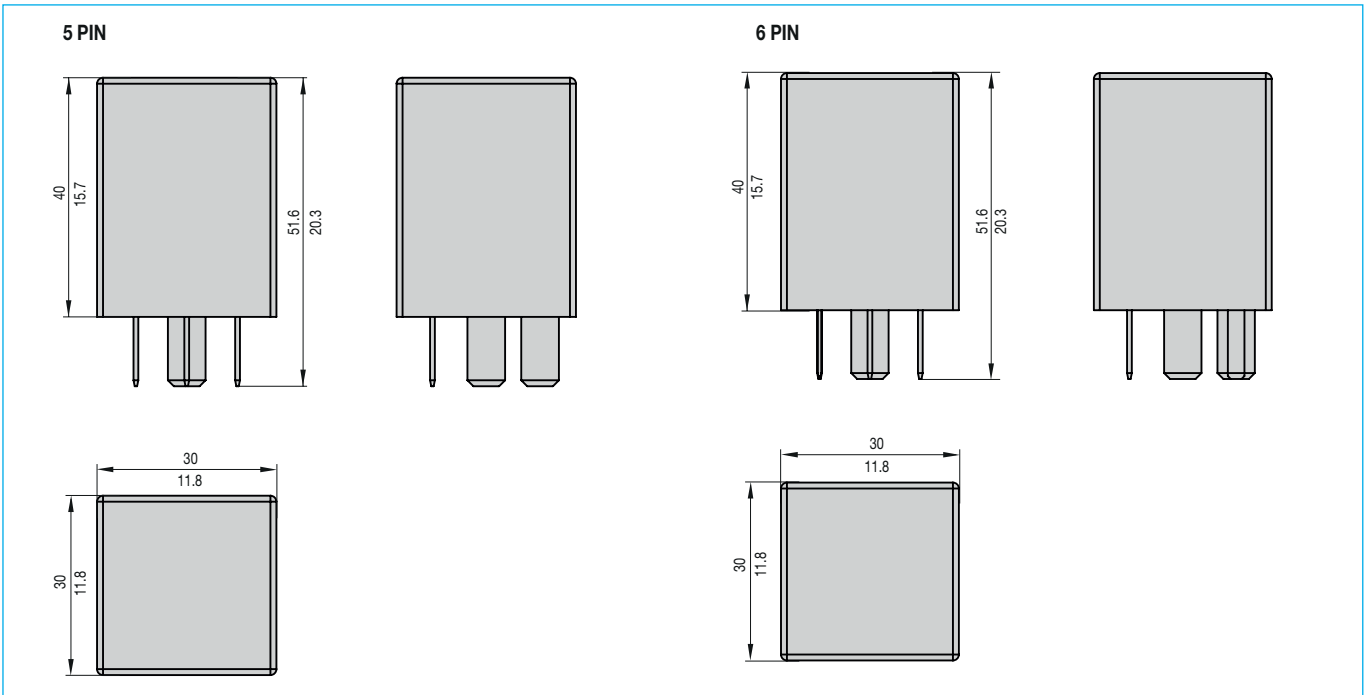


MTR10

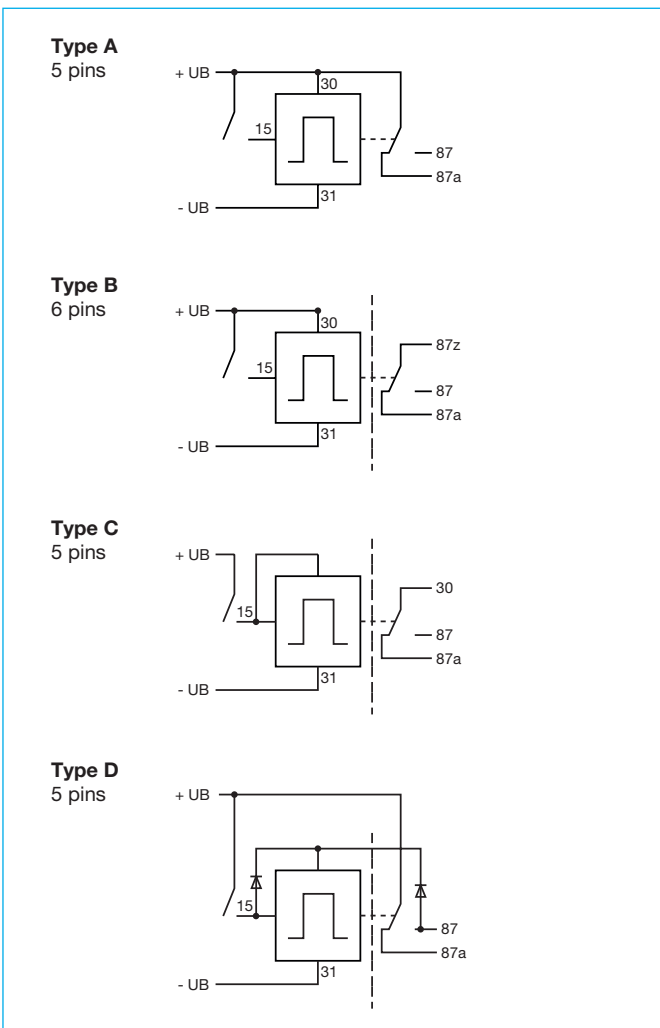
Technical data (25 °C)

Rated voltage	12 V	24 V
Operating voltage	9 V...15 V	18 V...32 V
Quiescent current	< 10 mA	
Tolerance	5 %	
Time range	Selection per ordering information	
Response time	< 100 ms	
Switching time ON	typically 10 ms	
Switching time OFF	typically 5 ms	
Operating temperature	-40 °C...-85 °C	
Typical life at rated current	10 ⁴ 5 electrically	
Mass	30 g	
Dimensions (LxWxH)	30 mm x 30mm x 40 mm	
Materials		
Blade terminals	A6.3 x 0.8 DIN 46 244 CuZn 37 F37	
Housing material	PA6GF	
Output	change-over contact	
Output power at 12 V	240 W (10 A) 720 W (30 A - upon request, not in stock)	

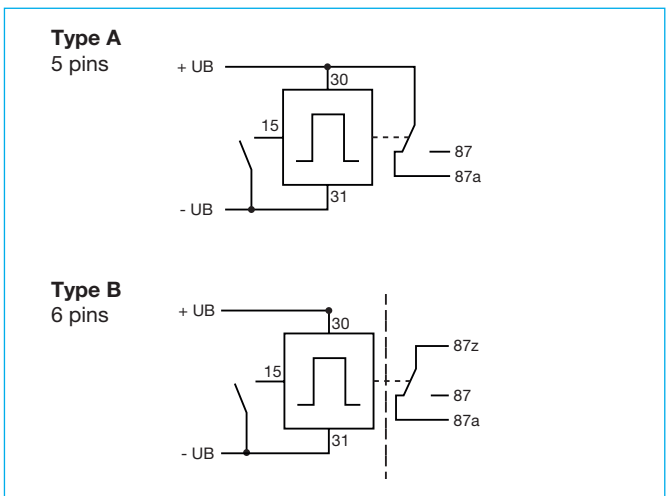
Dimensions



Schematic diagram / pin assignment / positive control input

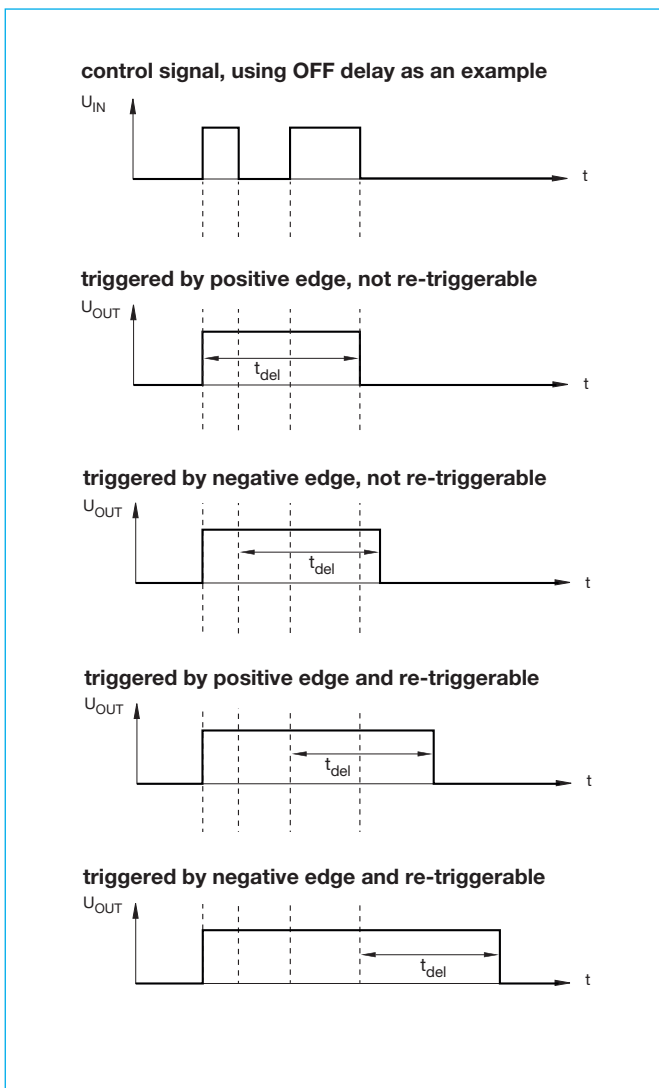


Schematic diagram / pin assignment / negative control input



5

Functional diagram



Ordering information

Type number	
MTR10	Mechanical timer relay
Operating voltage	
1	12 V
2	24 V
Function / control input	
1	ON delay / type A
2	ON delay / type B
3	ON delay / type C
4	ON delay / type D
6	OFF delay / type A
7	OFF delay / type B
8	OFF delay / type C
9	OFF delay / type D
Control level	
0	positive
1	negative
Edge direction	
0	positive edge
1	negative edge
Retriggerable	
0	no
1	yes
Option 4	
0	none
Time unit	
S	seconds
M	minutes
H	hours (max. 12)
Time value	
01	1
02	2
03	3
04	4
05	5
06	6
07	7
08	8
09	9
10	10
11	11
...	to
59	59
Current ratings	
	10 A
	30 A (upon request, not in stock)
MTR10 - 1 0 0 0 - 0 0 0 - M 14 - 10 A ordering example	

All information and data given on our products are accurate and reliable to the best of our knowledge, but E-T-A does not accept any responsibility for the use in applications which are not in accordance with the present specification. E-T-A reserves the right to change specifications at any time in the interest of improved design, performance and cost effectiveness. Dimensions are subject to change without notice. Please enquire for the latest dimensional drawing with tolerances if required. All dimensions, data, pictures and descriptions are for information only and are not binding. Amendments, errors and omissions excepted. Ordering codes of the products may differ from their marking