



- Multifunction modern timers
- 7 functions, 7 time rangers
- Universal supply of 12V AC/DC to 240V AC/DC
- Low power consumption <2.5VA or < 2W
- High energy efficiency
- Installation design DIN 35mm
- 17.5mm width
- For building and industrial applications
- In accordance with PN-EN 61812-1



1

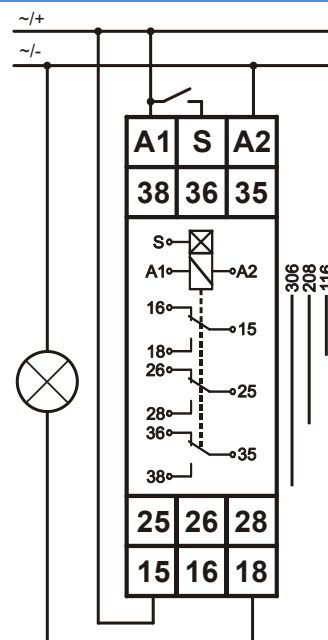
Technical data

Description

Output circuit		MTR17-...-116	MTR17-...-208	MTR17-...-306
Contact arrangement		1 form C	2 form C	3 form C
Rated voltage		V AC	250/400	
Switching current range	AC1	A/V AC	16/250	8/250
	DC1	A/V DC	16/24	8/24
Switching load range	AC1	VA	4 000	2 000
				1 500
Contact resistance		mΩ	≤ 100	
Max. rated current ②		A	12	
Input circuit				
Supply voltage U _n AC/DC (AC:50-60Hz)		V	12...240	
Tolerance			0.8...1.1U _n (9.6...264V)	
Rated consumption	AC	VA	≤ 2.5	
	DC	W	≤ 1.5	
Rated frequency		Hz	47...63	
Control input S			0.7U _n	
▪ Min. trigger level S-A2 (sensitivity) ①			AC: ≥ 90 DC: ≥ 45	
▪ Min. control pulse length		ms	yes	
▪ Loadable			yes	
Rated surge voltage		V	1 000	
Max. line length		m	10	
Insulation				
Insulation rated voltage		V AC	250	
Rated surge voltage		V	4 000 1.2/50μs	
Overvoltage category			III	
Dielectric strength			4 000	
▪ Input - output		V AC	1 000	
▪ Open contact				
General data				
Electrical life AC1 at 1000 VA resistive load	cycles		≥ 1.5 × 10 ⁵	≥ 5 × 10 ⁴
Mechanical life	cycles		≥ 3 × 10 ⁷	≥ 10 ⁷
Dimensions (L x W x H) / Weight	mm / g	90 x 17.5 x 66 / 53g	90 x 17.5 x 66 / 57g	90 x 17.5 x 66 / 70g
Ambient temperature / storage temperature	°C	-40...+55 / -20...+70		
IP rating		IP20		
Relative humidity	%	85		
Shock resistance	g	15		
Vibration resistance	mm	0,35 10...55Hz		
Time module data				
Functions		TA, TB, TC/TD, TF, TG, TI, TJ		
Time ranges		1s, 10s, 1m, 10m, 1h, 10h, 100h		
Timing adjustment		smooth 0,1...1,0 x time range		
Setting accuracy	%	5 ②		
Repeatability	%	0,5 ②		
Recovery time	ms	≤ 100		

Multifunction time relays are particularly accurate in reaching the time limit even over long periods of time. With the universal supply of 12V AC/DC to 240V AC/DC and different functions it is possible to find solutions even to the most challenging problems. The brain chip of your application-specific miniature controller is the ideal solution for realizing custom control applications within minimum space at low-cost.

Connections



Mounting

Relays are designed for direct mounting on 35mm DIN rail according to PN-EN 60715 in any operational position. Connections: max. cross section of the cables: 1x2,5 mm²/2x1,5 mm² (1x14/2x16 AWG), deinsulation length: 6,5 mm. Maximum tightening moment for the terminal: 0,6Nm.

- ① The control input S is activated by connection to A1 terminal via the external control contact S.
- ② For first range setpoint (1s) setting accuracy and repeatability are smaller than the given ones in technical parameters (significant influence of the relay operating time, processor start-time, and the moment of supply switching as referred to the AC). Calculated from the final range values, for the setting direction from minimum to maximum.
- ③ Maximum rated current together of all the relay contacts.

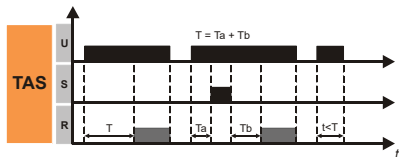


Attention

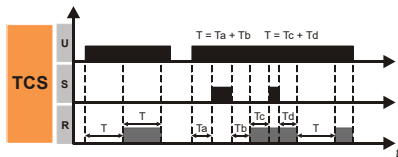


Read and understand these instructions before installing, operating or maintaining the equipment. Never carry out work on live parts! Danger of fatal injury! The product must not be used in case of obvious damage. To be installed by an authorized person.

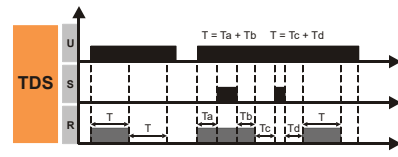
Time functions



ON delay with STOP (TAS) - on applying the supply voltage U the R relay is in OFF position and the set interval T begins. After the interval T has lapsed, the output relay R switches ON and remains ON until supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is suspended until the contact is open again.

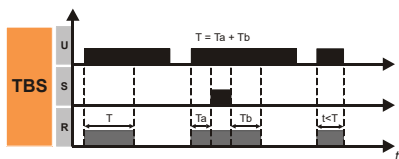


Symmetrical cyclical operation pause first with STOP (TCS) - applying the supply voltage U starts the cyclical operation - switching the output relay R OFF followed by switching ON for the interval T. The cyclical operation lasts until the supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is suspended until the contact is open again.

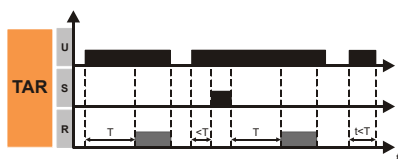


Symmetrical cyclical operation pulse first with STOP (TDS) - applying the supply voltage U starts the cyclical operation - switching the output relay R ON followed by switching OFF for the interval T. The cyclical operation lasts until the supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is suspended until the contact is open again.

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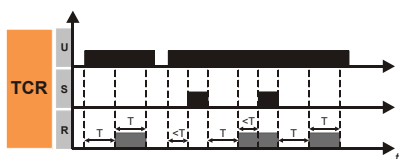
ON for the set interval with STOP (TBS) - on applying the supply voltage U the R relay is in ON position and the set interval T begins. After the interval T has lapsed, the output relay R switches OFF and remains OFF until supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is suspended until the contact is open again.



ON delay with RESET (TAR) - on applying the supply voltage U the R relay is in OFF position and the set interval T begins. After the interval T has lapsed, the output relay R switches ON and remains ON until supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is stopped without the relay state change. Once the S contact is opened again the relay restarts.

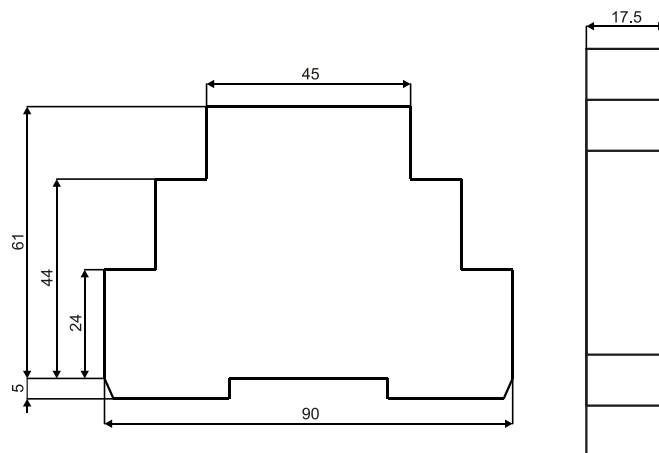


ON for the set interval with RESET (TBR) - on applying the supply voltage U the R relay is in ON position and the set interval T begins. After the interval T has lapsed, the output relay R switches OFF and remains OFF until supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is stopped without the relay state change. Once the S contact is opened again the relay restarts.



Symmetrical cyclical operation pause first with RESET (TCR) - applying the supply voltage U starts the cyclical operation - switching the output relay R OFF followed by switching ON for the interval T. The cyclical operation lasts until the supply voltage U is interrupted. If the S contact is closed during the interval T, the timer is stopped without the relay state change. Once the S contact is opened again the relay restarts.

Dimensions



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