

# TMR 48 analogue timers

## → TMR 48

- Multi-function or mono-function
- Multi-range from 0.02 s to 300 h
- Multi-voltage 12 to 240 VDC / 24 to 240 V AC
- Time setting displayed on dial
- 2 changeover relays 5 A / 250 VAC
- Display of power and output states by 2 LEDs
- Housing 48 x 48 mm



### Specifications

Type	Functions	Relay outputs	Max. breaking current	Supply voltage	Connection	Code
TMR 48 U	A, B, C, W, G, Ac, Bw	2 timed changeover	5 A / 250 VAC	12 → 240 VDC 24 → 240 VAC	Plug-in 11 way	88 886 016
TMR 48 A	A	2 timed changeover	5 A / 250 VAC	12 → 240 VDC 24 → 240 VAC	Plug-in 8 way	88 886 106
TMR 48 X	A1, A2, H1, H2, Q1, Q2, D-Di	2 changeover or 1 timed and 1 instantaneous	5 A / 250 VAC	12 → 240 VDC 24 → 240 VAC	Plug-in 8 way	88 886 116
TMR 48 L	L, Li, G, Gi	2 timed changeover	5 A / 250 VAC	12 → 240 VDC 24 → 240 VAC	Plug-in 11 way	88 886 516

### Accessories

Accessories	Code
11-pin connector base	25 622 080
8-pin connector base	25 622 130
Spring clips (packet of 2)	79 237 740

### General characteristics

Supply voltage Un	12 → 240 VDC 24 → 240 V AC
Operating range	± 10 % DC supply - 15 % / + 10 % AC supply
Frequency	50 / 60 Hz
Power consumption	4.8 VA / 230 VAC 2.5 VA / 110 VAC 1.1 VA / 24 VAC 0.5 W / 24 VDC 0.8 W / 12 VDC
Timing ranges (14 available options)	0,02 → 1,2 s    0,2 → 12 min.    0,2 → 12 h 0,05 → 3 s    0,5 → 30 min.    0,5 → 30 h 0,2 → 12 s    2 → 120 min.    2 → 120 h 0,5 → 30 s    5 → 300 min.    5 → 300 h 2 → 120 s 5 → 300 s
Repetition accuracy	± 0.5 % of full scale at 25°C (typical with constant parameters)
Temperature drift according to CEI/EN 61812	± 0.05 % of full scale
Display accuracy	± 5 % of full scale at 25°C
Minimum pulse duration START	25 ms
Minimum pulse duration GATE	60 ms
Minimum pulse duration RESET	60 ms
	50 ms

### Output specification

Nominal rating	2 x 5 A
Nominal insulation voltage	250 VAC
Rated power (resistive load)	2000 VA
Minimum current	10 mA
Electrical life at I max. 250 V AC resistive (number of operations)	10 <sup>5</sup>
Mechanical life (operations)	30 x 10 <sup>6</sup>

### Function and use

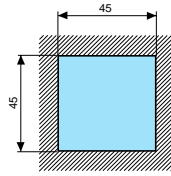
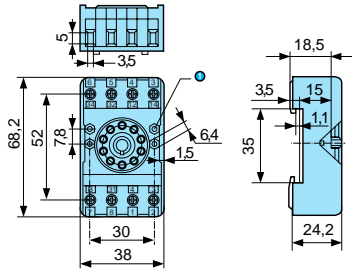
Display of output state by 2 LEDs	Green : power ON, flashing during timing Yellow : ON output ON, OFF output OFF
Operating temperature range (°C)	-20 → +55
Storage temperature range (°C)	-40 → +70
Breakdown voltage	2 KV
Protection class (IEC 60529) - Panel-mounted	IP 50
Protection class (IEC 60529) - Casing	IP 40
Material housing	self-extinguishing
Weight (g)	140

To order, see page 6

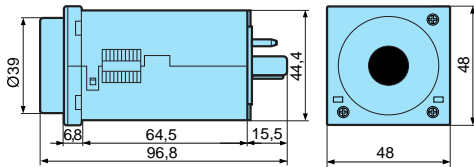
## Dimensions

35 mm DIN rail base with clips 79 237 739

Panel cut-out

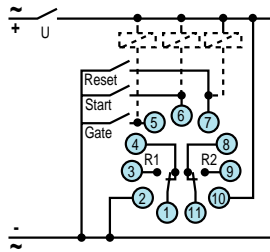


TMR 48 U / A / X / L

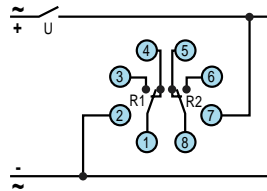


## Connections

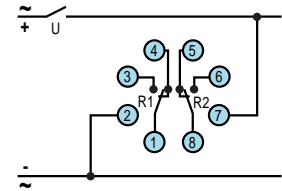
TMR 48 U



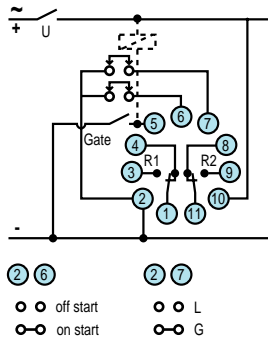
TMR 48 A



TMR 48 X

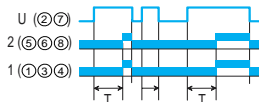


TMR 48 L

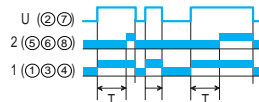


## Curves

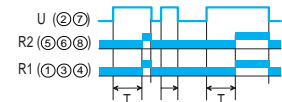
Function A (TMR 48 A)  
Delay on energisation



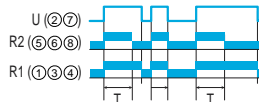
Function A1  
Delay on energisation



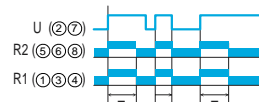
Function A2  
Delay on energisation



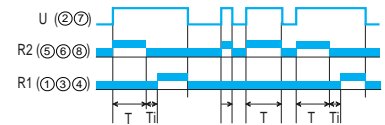
Function H1  
Timing on energisation



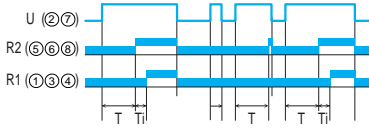
Function H2  
Timing on energisation



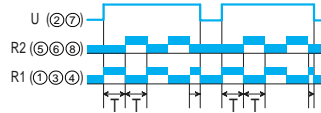
Function Q1  
Star-delta



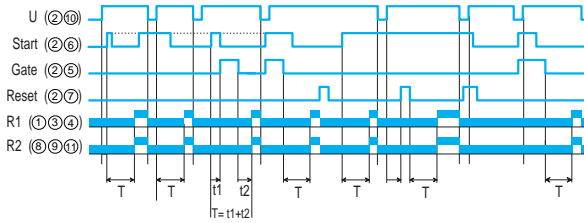
**Function Q2**  
**Star-delta 2**



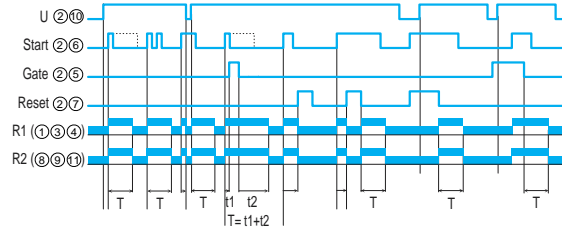
**Function D-Di**  
**Cyclic timing : symetric recycler**



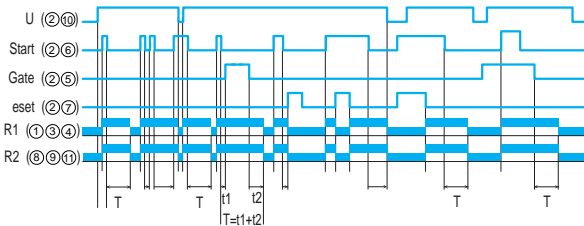
**Function A (TMR 48 U)**  
**Delay on energisation**



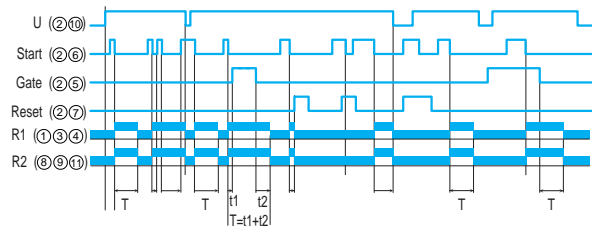
**Function B**  
**Timing on impulse**



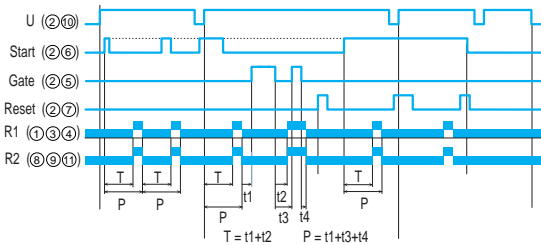
**Function C**  
**Timing after impulse- Delay off with constant supply**



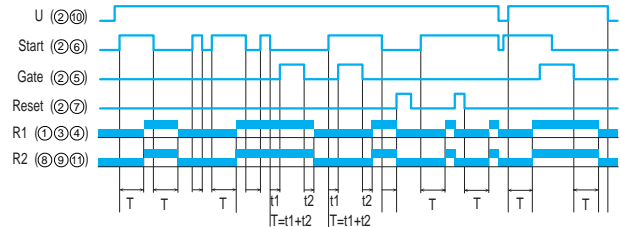
**Function W**  
**Timing after impulse on control contact**



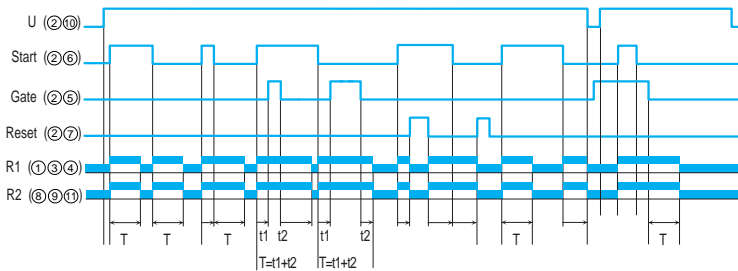
**Function G**  
**Cyclic function**



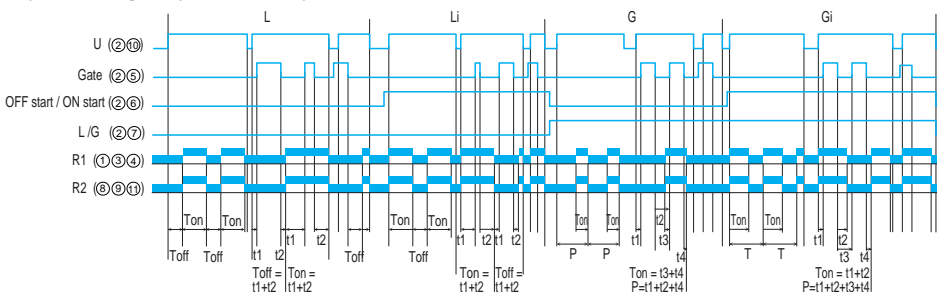
**Function Ac**  
**Timing after closing and opening of control contact**



**Function Bw**  
**Pulse output (adjustable)**



**Function L/Li - G/Gi**  
**Cyclic timing : asymetrical recycler**



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