

## Product data sheet

### Characteristics

# RE17LMBM

Releu de Temporizare 10 Functii, 1 S, 100 H,  
24, 240 V, Iesire Statica



### Principal

|                           |                                                                                                         |
|---------------------------|---------------------------------------------------------------------------------------------------------|
| Gama de produse           | Harmony Timer Relays                                                                                    |
| Tip produs sau componenta | Multifunction relay                                                                                     |
| Tip de iesire discreta    | Cu semiconductori                                                                                       |
| Latime                    | 17,5 mm                                                                                                 |
| Nume componenta           | RE17L                                                                                                   |
| Tip intarziere            | Power on-delay<br>On-delay and off-delay<br>Interval<br>Temporizare la revenire<br>Symmetrical flashing |
| Intervalul de intarziere  | 1...10 s<br>6...60 s<br>6...60 min<br>1...10 H<br>10...100 H<br>1...10 min<br>0.1...1 s                 |
| Curent nominal de iesire  | 0,7 A                                                                                                   |

### Suplimentar

|                                      |                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tip de control                       | Selector panou frontal                                                                                                                                                                                                                                                                                                                                                                 |
| [Us] tensiune nominala de alimentare | 24...240 V c.a. 50/60 Hz                                                                                                                                                                                                                                                                                                                                                               |
| Interval de tensiune                 | 0,85...1,1 Us                                                                                                                                                                                                                                                                                                                                                                          |
| Frecventa de alimentare              | 50...60 Hz +/- 5 %                                                                                                                                                                                                                                                                                                                                                                     |
| Release of input voltage             | 8 V                                                                                                                                                                                                                                                                                                                                                                                    |
| Control signal pulse width           | 0.05 s tipic                                                                                                                                                                                                                                                                                                                                                                           |
| Rezistenta de izolatie               | 100 MΩ la 500 V c.c. conformitate cu SR EN 60664-1                                                                                                                                                                                                                                                                                                                                     |
| [Uimp] tensiune de tinere la impuls  | 5 kV in timpul 1.2/50 μs                                                                                                                                                                                                                                                                                                                                                               |
| Power on delay                       | 100 ms                                                                                                                                                                                                                                                                                                                                                                                 |
| Conexiuni - borne                    | Borne cu surub, 2 x 0.5 - 1 x 3.3 mm <sup>2</sup> (AWG 20 - AWG 12) solid fara terminale de cablu<br>Borne cu surub, 3 x 0.5 - 2 x 2.5 mm <sup>2</sup> (AWG 20...AWG 14) solid fara terminale de cablu<br>Borne cu surub, 1 x 0.2 - 1 x 2.5 mm <sup>2</sup> (AWG 24 - AWG 14) flexibil cu pini<br>Borne cu surub, 2 x 0.2 - 2 x 1.5 mm <sup>2</sup> (AWG 24 - AWG 16) flexibil cu pini |
| Cuplu de strangere                   | 0,6...1 N.m conformitate cu IEC 60947-1                                                                                                                                                                                                                                                                                                                                                |
| Rigiditate dielectrica               | 2,5 kV 1 mA/1 minut 50 Hz conformitate cu IEC 61812-1                                                                                                                                                                                                                                                                                                                                  |
| Material carcasa                     | Autostingere                                                                                                                                                                                                                                                                                                                                                                           |
| Precizie de repetare                 | +/- 0,5 % conformitate cu IEC 61812-1                                                                                                                                                                                                                                                                                                                                                  |
| Abatere temperatura                  | +/- 0,05 %/°C                                                                                                                                                                                                                                                                                                                                                                          |
| Abatere a tensiunii                  | +/- 0,2 %/V                                                                                                                                                                                                                                                                                                                                                                            |
| Setarea preciziei temporizarii       | +/- 10 % din capatul scarii la 25 °C conformitate cu IEC 61812-1                                                                                                                                                                                                                                                                                                                       |
| Resetare timp                        | 350 ms la intreruperea alimentarii tipic                                                                                                                                                                                                                                                                                                                                               |
| Factor de sarcina                    | 100 %                                                                                                                                                                                                                                                                                                                                                                                  |
| Puterea consumata in VA              | 0...3 VA la 240 V c.a.                                                                                                                                                                                                                                                                                                                                                                 |
| Consum de putere maxim in W          | 1,5 W la 240 V c.c.                                                                                                                                                                                                                                                                                                                                                                    |

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                               |                                                              |
|-------------------------------|--------------------------------------------------------------|
| Capacitate de rupere          | 0,5 A c.a. conformitate cu UL<br>0,7 A c.a. la 20 °C         |
| Operating frequency           | 10 Hz                                                        |
| Curent maxim de iesire        | 20 A                                                         |
| Curentul minim comutat        | 10 mA                                                        |
| Curent maxim de scurgere      | 5 mA                                                         |
| Tensiunea maxima de comutatie | 250 V c.a.                                                   |
| Cadere de tensiune maxima     | <4 V 3 fire<br><8 V 2 fire                                   |
| Durabilitate electrica        | 100000000 cic                                                |
| Marcaj                        | CE                                                           |
| Distanța de conturare         | 4 kV/3 conformitate cu SR EN 60664-1                         |
| Fiabilitate securitate date   | MTTFd = 353.8 ani<br>B10d = 320000                           |
| Pozitia de montaj             | Orice poziție în raport cu planul normal vertical de montare |
| Suport de montare             | Sina DIN 35 mm conformitate cu IEC 60715                     |
| Greutate neta                 | 0,068 kg                                                     |
| Time delay type               | A, Ac, At, B, Bw, C, D, Di, H, Ht                            |
| Functionalitate               | Multifuncție                                                 |
| Number of functions           | 10                                                           |
| Cod compatibilitate           | RE17                                                         |

## Mediu

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imunitate la microîntreruperi           | 20 ms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Factor de scadere a valorii nominale    | 5 mA/°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Standarde                               | 2004/108/EC<br>IEC 61000-6-2<br>IEC 61812-1<br>IEC 61000-6-4<br>IEC 61000-6-1<br>2006/95/EC<br>IEC 61000-6-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Certificari produs                      | GL[RETURN]cULus[RETURN]CSA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Temperatura ambietala pentru depozitare | -30...60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Temperatura ambientala de functionare   | -20...60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Grad de protectie IP                    | IP20 conformitate cu SR EN 60529 (cutie de borne)<br>IP40 conformitate cu SR EN 60529 (carcasă)<br>IP50 conformitate cu SR EN 60529 (panou frontal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Rezistenta la vibratii                  | 20 m/s² (f= 10...150 Hz) conformitate cu IEC 60068-2-6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Rezistenta la socuri                    | 15 gn pentru 11 ms conformitate cu IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Umiditate relativa                      | 93 % fără condensare conformitate cu IEC 60068-2-30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Compatibilitate electromagnetica        | Test de imunitate la descarcari electrostatice nivel de test: 6 kV (în contact) nivel 3 conformitate cu IEC 61000-4-2<br>Test de imunitate la descarcari electrostatice nivel de test: 9 kV (în aer) nivel 3 conformitate cu IEC 61000-4-2<br>Sensibilitate la câmpuri electromagnetice nivel de test: 10 V/m (80 MHz la 1 GHz) nivel 3 conformitate cu IEC 61000-4-3<br>Tranzienți rapizi/test de imunitate la impulsuri de ionizare nivel de test: 1 kV (brida de conectare capacitiva) nivel 3 conformitate cu IEC 61000-4-4<br>Tranzienți rapizi/test de imunitate la impulsuri de ionizare nivel de test: 2 kV (direct) nivel 3 conformitate cu IEC 61000-4-4<br>1.2/50 μs test de imunitate la undă de șoc nivel de test: 1 kV (mod diferential) nivel 3 conformitate cu IEC 61000-4-5<br>1.2/50 μs test de imunitate la undă de șoc nivel de test: 2 kV (mod comun) nivel 3 conformitate cu IEC 61000-4-5<br>Perturbații conduse de RF nivel de test: 10 V (0.15 - 80 MHz) nivel 3 conformitate cu IEC 61000-4-6<br>Test de imunitate la căderi de tensiune și întreruperi nivel de test: 1 % (1 ciclu) conformitate cu IEC 61000-4-11<br>Test de imunitate la căderi de tensiune și întreruperi nivel de test: 71 % (25/30 cicluri) conformitate cu IEC 61000-4-11<br>Emisii conduse și radiateclasa B conformitate cu EN 55022 |

### Unitati de ambalare

|                                                      |          |
|------------------------------------------------------|----------|
| Unitate de masura pentru prima forma de impachetare  | PCE      |
| Numar unitati in prima forma de impachetare          | 1        |
| Inaltime prima forma de impachetare                  | 2,8 cm   |
| Latime prima forma de impachetare                    | 7,8 cm   |
| Lungime prima forma de impachetare                   | 9,4 cm   |
| Greutate prima forma de impachetare                  | 72,0 g   |
| Unitate de masura pentru a doua forma de impachetare | S02      |
| Numar unitati in a doua forma de impachetare         | 40       |
| Inaltime a doua forma de impachetare                 | 15,0 cm  |
| Latime a doua forma de impachetare                   | 30,0 cm  |
| Lungime a doua forma de impachetare                  | 40,0 cm  |
| Greutate a doua forma de impachetare                 | 3,222 kg |

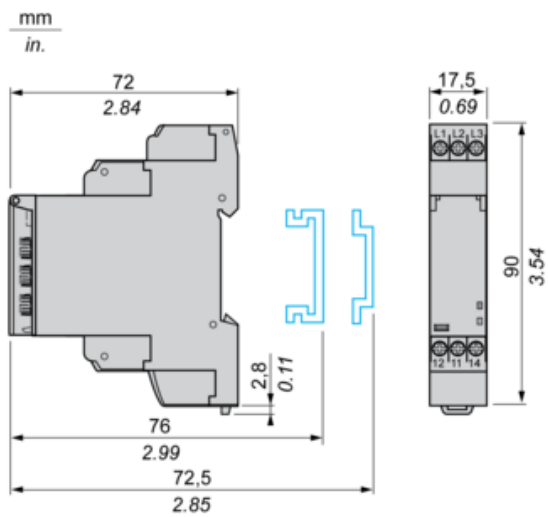
### Sustenabilitatea ofertei

|                                        |                                                                                                                                                   |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Stare ofertă sustenabilă               | Produs Green Premium                                                                                                                              |
| Regulamentul REACH                     | <a href="#"> Declaratia REACH</a>                                |
| Directiva RoHS UE                      | Conformitate proactivă (Produs în afara domeniului de aplicare a EU RoHS)                                                                         |
| Fara mercur                            | Da                                                                                                                                                |
| Regulamentul RoHS China                | <a href="#"> Declaratia RoHS China</a>                           |
| Informatii privind scutirea de la RoHS | <a href="#"> Da</a>                                              |
| Raport de mediu                        | <a href="#"> Profilul Ambiental Al Produsului</a>              |
| Profil circularitate                   | <a href="#"> Informatii Privind Sfarsitul Duratei De Viata</a> |

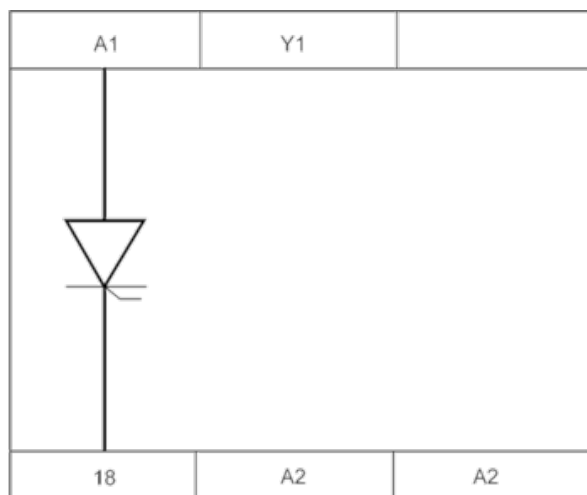
### Garanție contractuală

|          |         |
|----------|---------|
| Garantie | 18 luni |
|----------|---------|

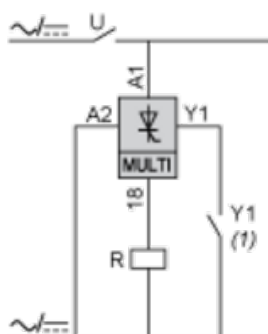
Width 17.5 mm



## Internal Wiring Diagram



## Wiring Diagram



(1) Contact Y1:

- Control for functions B, C, Ac, Bw.
- Partial stop for functions At, Ht.
- Function D if Di selected.
- Not used for functions A and H.

## Function A : Power on Delay Relay

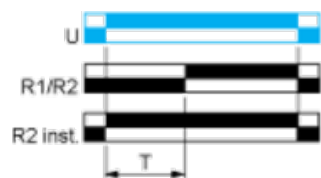
### Description

The timing period T begins on energisation. After timing, the output(s) R close(s). The second output can be either timed or instantaneous.

#### Function: 1 Output



#### Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function Ac: On-Delay & Off-Delay with Control Signal

### Description

After energisation of power supply and energization of Y1 causes the timing period T to start.

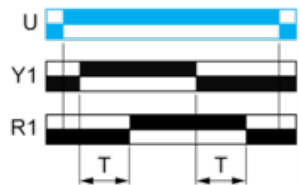
At the end of this timing period, the output(s) R close(s).

When deenergization of Y1, the timing T starts.

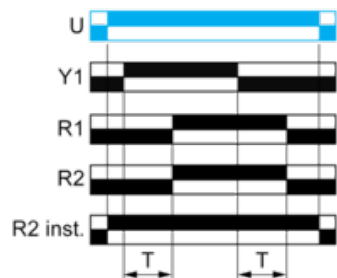
At the end of this timing period T, the output(s) R revert(s) to its/their initial position.

The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



#### Function: 2 Outputs

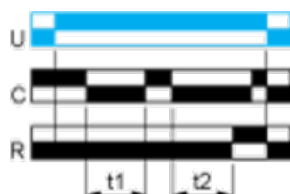


## Function At : Power on Delay Relay (Summation) with Control Signal

## Description

After power-up, the first opening of control contact C starts the timing. Timing can be interrupted each time control contact closes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output relay closes.

## Function: 1 Output



$$T = t1 + t2 + \dots$$

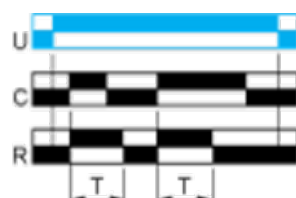
## Function B : Interval Relay with Control Signal

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### Description

After power-up, pulsing or maintaining control contact C starts the timing T. The output R closes for the duration of the timing period T then reverts to its initial state.

## Function: 1 Output



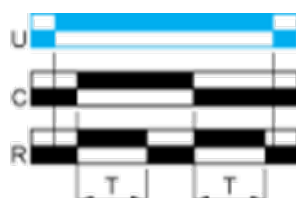
## Function Bw : Double Interval Relay with Control Signal

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### Description

On closing and opening of control contact C, the output R closes for the duration of the timing period T.

## Function: 1 Output



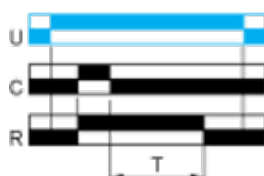
## Function C : Off-Delay Relay with Control Signal

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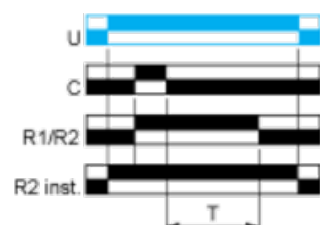
### Description

After power-up and closing of the control contact C, the output R closes. When control contact C re-opens, timing T starts. At the end of the timing period, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

## Function: 1 Output



### Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

### Function D: Symmetrical Flashing Relay (Starting Pulse Off)

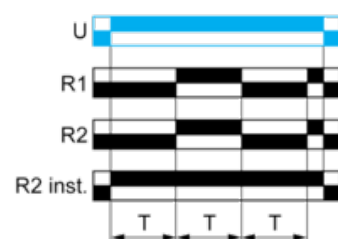
#### Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T then change(s) to output(s) R close(s) for the same timing duration T. This cycle is repeated indefinitely until power supply removal. Specially for RE17\*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, this D function can only be initiated by energizing Y1 permanently. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

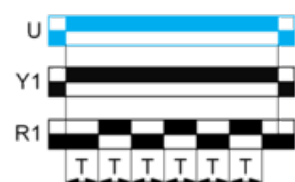
#### Function: 1 Output



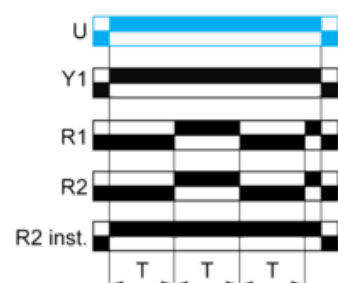
#### Function: 2 Outputs



#### Function: 1 Output with Retrigger / Restart Control



#### Function: 2 Output with Retrigger / Restart Control



### Function Di : Symmetrical Flasher Relay (Starting Pulse On)

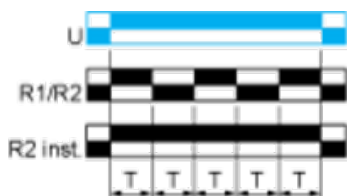
#### Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T. The second output can be either timed or instantaneous.

### Function: 1 Output



### Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function H : Interval Relay

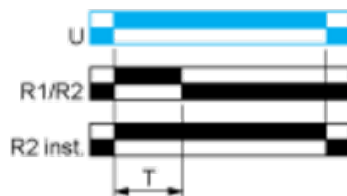
### Description

On energisation of the relay, timing period T starts and the output(s) R close(s). At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

### Function: 1 Output



### Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function Ht: Interval Relay & With Pause / Summation Control

### Description

On energisation of power supply, output(s) R close(s) and timing period T starts.

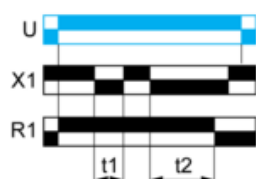
The timing can be interrupted / paused each time X1 energizes.

When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. Reenergization of X1 will also cause output(s) R close(s) if the time has elapsed and restart the same operation as described at the beginning.

Except for RE17\*, RE22R2MMW, RENF22R2MMW, RE22R2MMU and RE22R2MJU, timing can be interrupted / paused each time Y1 energizes.

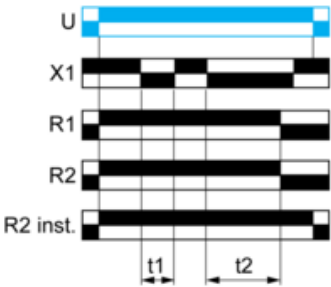
The second output (R2) can be either timed (when set to "TIMED" or instantaneous (when set to "INST").

### Function: 1 Output



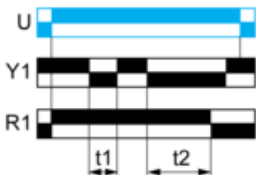
$T = t1 + t2 + \dots$

Function: 2 Outputs



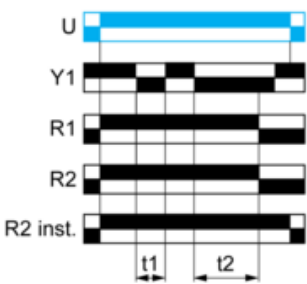
$T = t1 + t2 + \dots$

Function: 1 Output with Retrigger / Restart Control



$T = t1 + t2 + \dots$

Function: 2 Outputs with Retrigger / Restart Control



$T = t1 + t2 + \dots$

Legend

- Relay de-energised
- Relay energised
- Output open
- Output closed

|          |                                                                      |
|----------|----------------------------------------------------------------------|
| C        | Control contact                                                      |
| G        | Gate                                                                 |
| R        | Relay or solid state output                                          |
| R1/R2    | 2 timed outputs                                                      |
| R2 inst. | The second output is instantaneous if the right position is selected |
| T        | Timing period                                                        |
| Ta -     | Adjustable On-delay                                                  |
| Tr -     | Adjustable Off-delay                                                 |
| U        | Supply                                                               |