# Product datasheet

Specifications

## Modular timing relay, 8 A, 1 CO, 1 s..100 h, time delay, 12...240 V AC/DC

Local distributor code:

397857445 RE17RMXMU

**EAN Code: 3606480552786**

## Main

| | |
|---|---|
| **Range Of Product** | Harmony Timer Relays |
| **Product Or Component Type** | Multifunction relay |
| **Discrete Output Type** | Relay |
| **Width** | 17.5 mm |
| **Device Short Name** | RE17R |
| **Time Delay Type** | Pulse delay<br>Safe-guard<br>Bistable<br>Interval |
| **Time Delay Range** | 6...60 s<br>1...10 min<br>0.1...1 s<br>1...10 h<br>1...10 s<br>6...60 min<br>10...100 h |
| **Nominal Output Current** | 8 A |

## Complementary

| | |
|---|---|
| **Contacts Type And Composition** | 1 C/O |
| **Contacts Material** | Cadmium free |
| **Height** | 90 mm |
| **Depth** | 72 mm |
| **Control Type** | Selector switch front panel |
| **[Us] Rated Supply Voltage** | 24...240 V AC 50/60 Hz<br>24 V DC |
| **Voltage Range** | 0.85...1.1 Us |
| **Supply Frequency** | 50...60 Hz +/- 5 % |
| **Release Of Input Voltage** | 10 V |
| **Connections - Terminals** | Screw terminals, 1 x 0.5...1 x 3.3 mm² (AWG 20...AWG 12) solid without cable end<br>Screw terminals, 2 x 0.5...2 x 2.5 mm² (AWG 20...AWG 14) solid without cable end<br>Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 24...AWG 14) flexible with cable end<br>Screw terminals, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) flexible with cable end |
| **Tightening Torque** | 0.6…1 N.m conforming to IEC 60947-1 |
| **Housing Material** | Self-extinguishing |
| **Repeat Accuracy** | +/- 0.5 % conforming to IEC 61812-1 |
| **Temperature Drift** | +/- 0.05 %/°C |
| **Voltage Drift** | +/- 0.2 %/V |

Disclaimer: 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

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|---|---|
| **Setting Accuracy Of Time Delay** | +/- 10 % of full scale at 25 °C conforming to IEC 61812-1 |
| **Control Signal Pulse Width** | 100 ms with load in parallel typical<br>30 ms typical |
| **Insulation Resistance** | 100 MOhm at 500 V DC conforming to IEC 60664-1 |
| **Reset Time** | 120 ms on de-energisation typical |
| **On-Load Factor** | 100 % |
| **Power Consumption In Va** | 0…32 VA at 240 V AC |
| **Maximum Power Consumption In W** | 0.6 W at 24 V DC |
| **Minimum Switching Current** | 10 mA at 5 V DC |
| **Maximum Switching Current** | 8 A AC/DC |
| **Maximum Switching Voltage** | 250 V AC |
| **Breaking Capacity** | 2000 VA |
| **Operating Frequency** | 10 Hz |
| **Electrical Durability** | 100000 cycles (8 A at 250 V AC maximum) for resistive load |
| **Mechanical Durability** | 10000000 cycles |
| **Dielectric Strength** | 2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1 |
| **[Uimp] Rated Impulse Withstand Voltage** | 5 kV during 1.2/50 µs |
| **Power On Delay** | 100 ms |
| **Marking** | CE |
| **Creepage Distance** | 4 kV/3 conforming to IEC 60664-1 |
| **Safety Reliability Data** | MTTFd = 296.8 years<br>B10d = 270000 |
| **Mounting Position** | Any position in relation to normal vertical mounting plane |
| **Mounting Support** | 35 mm DIN rail conforming to IEC 60715 |
| **Local Signalling** | LED indicator for on steady: relay energised, no timing in progress<br>LED indicator for flashing: timing in progress 80 % ON and 20 % OFF<br>LED indicator for pulsing: relay de-energised, no timing in progress (except function Di-D, Li-L) 5 % ON and 95 % OFF |
| **Net Weight** | 0.07 kg |
| **Number Of Functions** | 9 |
| **Time Delay Type** | Ad, Ah, N, O, P, Pt, TI, Tt, W |
| **Functionality** | Multifunction |
| **Compatibility Code** | RE17 |

# Environment

| | |
|---|---|
| **Immunity To Microbreaks** | 20 ms |
| **Standards** | 2006/95/EC<br>2004/108/EC<br>IEC 61000-6-1<br>IEC 61000-6-4<br>IEC 61000-6-2<br>IEC 61000-6-3<br>IEC 61812-1 |
| **Product Certifications** | cULus<br>GL<br>CSA |
| **Ambient Air Temperature For Storage** | -30…60 °C |

| | |
|---|---|
| **Ambient Air Temperature For Operation** | -20…60 °C |
| **Ip Degree Of Protection** | IP20 (terminal block) conforming to IEC 60529<br>IP40 (housing) conforming to IEC 60529<br>IP50 (front panel) conforming to IEC 60529 |
| **Vibration Resistance** | 20 m/s² (f= 10…150 Hz) conforming to IEC 60068-2-6 |
| **Shock Resistance** | 15 gn for 11 ms conforming to IEC 60068-2-27 |
| **Relative Humidity** | 93 % without condensation conforming to IEC 60068-2-30 |
| **Electromagnetic Compatibility** | Electrostatic discharge immunity test: (in contact), level 3, 6 kV, conforming to IEC 61000-4-2<br>Electrostatic discharge immunity test: (in air), level 3, 8 kV, conforming to IEC 61000-4-2<br>Susceptibility to electromagnetic fields: (80 MHz to 1 GHz), level 3, 10 V/m, conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test: (capacitive connecting clip), level 3, 1 kV, conforming to IEC 61000-4-4<br>Electrical fast transient/burst immunity test: (direct), level 3, 2 kV, conforming to IEC 61000-4-4<br>1.2/50 µs shock waves immunity test: (differential mode), level 3, 1 kV, conforming to IEC 61000-4-5<br>1.2/50 µs shock waves immunity test: (common mode), level 3, 2 kV, conforming to IEC 61000-4-5<br>Conducted RF disturbances: (0.15...80 MHz), level 3, 10 V, conforming to IEC 61000-4-6<br>Voltage dips and interruptions immunity test: (1 cycle), 0 %, conforming to IEC 61000-4-11<br>Voltage dips and interruptions immunity test: (25/30 cycles), 70 %, conforming to IEC 61000-4-11<br>Conducted and radiated emissions: , class B, conforming to EN 55022 |

## Packing Units

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|---|---|
| **Unit Type Of Package 1** | PCE |
| **Number Of Units In Package 1** | 1 |
| **Package 1 Height** | 3.000 cm |
| **Package 1 Width** | 8.300 cm |
| **Package 1 Length** | 9.600 cm |
| **Package 1 Weight** | 80.000 g |
| **Unit Type Of Package 2** | S02 |
| **Number Of Units In Package 2** | 40 |
| **Package 2 Height** | 15.000 cm |
| **Package 2 Width** | 30.000 cm |
| **Package 2 Length** | 40.000 cm |
| **Package 2 Weight** | 3.669 kg |

## Contractual warranty

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|---|---|
| **Warranty** | 18 months |

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-$CO_2$ products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

## Well-being performance

Mercury Free

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|---|---|
| Rohs Exemption Information | Yes |

## Certifications & Standards

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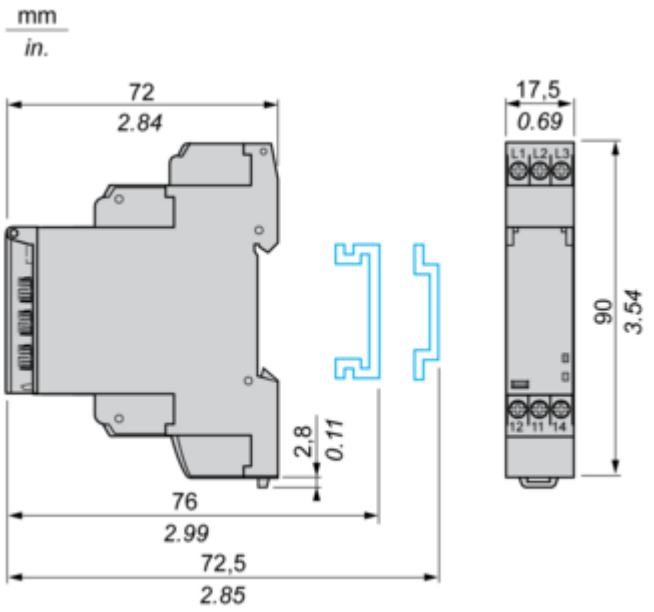
|---|---|
| **Reach Regulation** | REACh Declaration |
| **Eu Rohs Directive** | Pro-active compliance (Product out of EU RoHS legal scope) |
| **China Rohs Regulation** | China RoHS declaration |
| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |

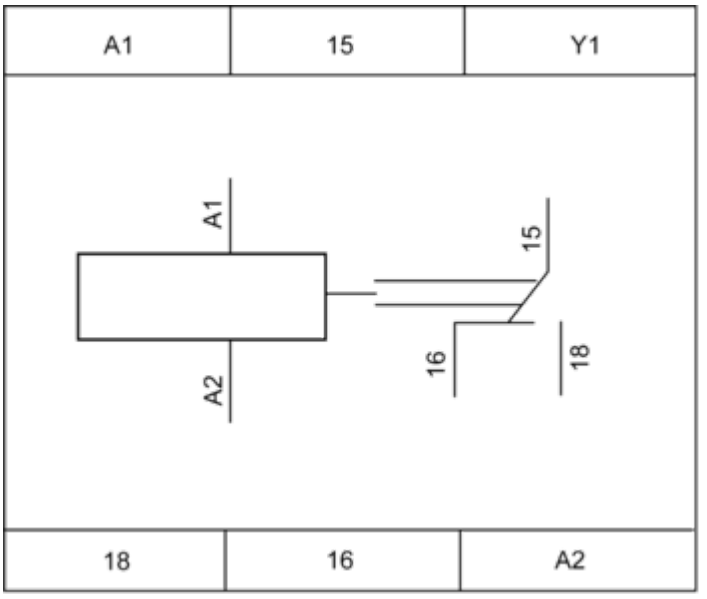
## Dimensions Drawings

### Width 17.5 mm

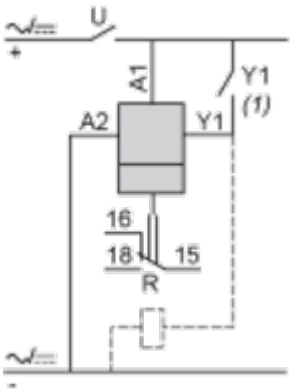


Connections and Schema

**Internal Wiring Diagram**



## Wiring Diagram




1) Contact Y1:

- Control for functions B, C, Ac, Bw, Ad, Ah, N, O, W, T, Tt.
- Partial stop for functions At, Ht and Pt.
- Function D if Di selected.
- Not used for functions A, H and P.

Technical Description

## Function Ad : Pulse Delayed Relay with Control Signal

### Description

After power-up, pulsing or maintaining of control contact C starts the timing T.
At the end of this timing period T, the output R closes.
The output R will be reset the next time control contact C is pulsed or maintained.

### Function: 1 Output

## Function Ah : Pulse Delayed Relay (Single Cycle) with Control Signal

### Description

After power-up, pulsing or maintaining of control contact C starts the timing T. A single cycle then starts with 2 timing periods T of equal duration (start with output in rest position).
Output R closes at the end of the first timing period T and reverts to its initial position at the end of the second timing period T.
Control contact C must be reset in order to re-start the single flashing cycle.

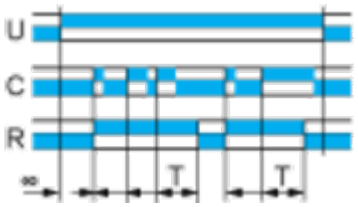
### Function: 1 Output

## Function N : Retriggerable Interval Relay with Control Signal On

### Description

After power-up and an initial control pulse C, the output R closes.
If the interval between two control pulses C is greater than the set timing period T, timing elapses normally and the output R closes at the end of the timing period. If the interval is not greater than the set timing period, the output R remains closed until this condition is met.

### Function: 1 Output

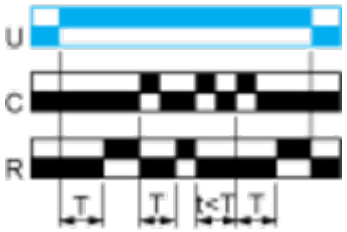


## Function O : Retriggerable Interval Delayed Relay with Control Signal On

### Description

An initial timing period T begins on energisation. At the end of this timing period, the output R closes.
As soon as there is a control pulse C, the output R reverts to its initial state until the interval between two control pulses is less than the value of the set timing period T. Otherwise, the output R closes at the end of the timing period T.

### Function: 1 Output

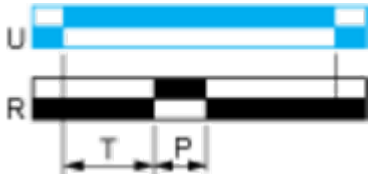


## Function P : Pulse Delayed Relay with Fixed Pulse Length

### Description

The timing period T begins on energisation.
At the end of this period, the output R closes for a fixed time P.

### Function: 1 Output



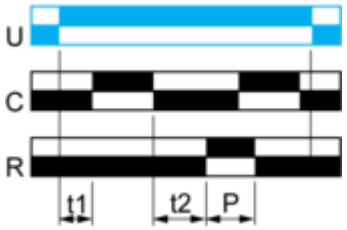

P = 500 ms

## Function Pt : Pulse Delayed Relay (Summation and Fixed Pulse Length) with Control Signal Off

### Description

On energisation, timing period T starts (it can be interrupted by operating the Gate control contact G).
At the end of this period, the output R closes for a fixed time P.

### Function: 1 Output

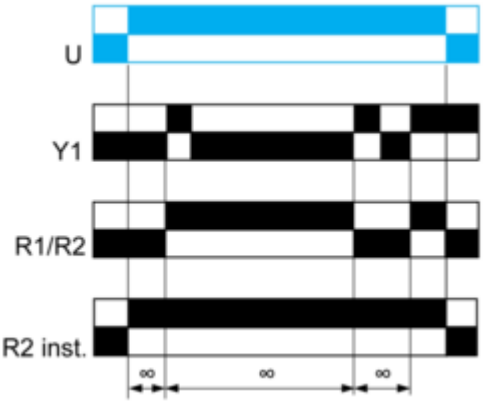



T = t1 + t2 + ...
P = 500 ms

## Function TL : Bistable Relay with Control Signal On

### Description

After power-up, pulsing or maintaining of control contact Y1 switches the output on.
A second pulse on the control contact Y1 switches the output relay off.



## Function Tt : Retriggerable Bistable Relay with Control Signal On

### Description

After power-up, pulsing or maintaining of control contact C switches output R on and starts timing T.
The output switches off at the end of the timing period T or following a second pulse on the control contact C.

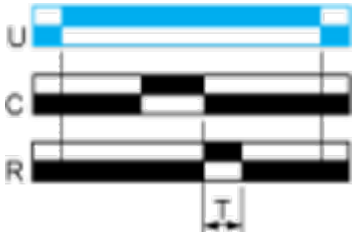
### Function: 1 Output

## Function W : Interval Relay with Control Signal Off

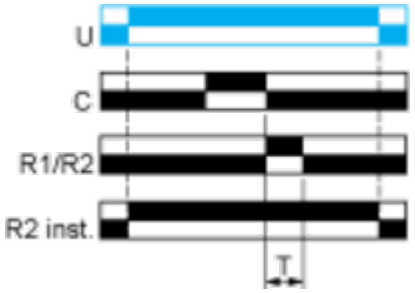
### Description

After power-up and opening of the control contact, the output(s) close(s) for a timing period T.
At the end of this timing period the output(s) 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.).

## 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 |