# Product data sheet

Specifications

## multifunction relay, Harmony Timer Relays, 8A, 1CO, 0.1s..10h, pulse delay, 24V DC or 24...240V AC DC

RE17RMXMU

**Product availability: Stock - Normally stocked in distribution facility**

## Main

| | |
|---|---|
| **Range of Product** | Harmony Timer Relays |
| **Discrete output type** | Relay |
| **Product or Component Type** | Modular timing relay |
| **Width** | 0.7 in (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** | 3.5 in (90 mm) |
| **Depth** | 2.8 in (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** | 5.3…8.9 lbf.in (0.6…1 N.m) IEC 60947-1 |
| **Housing material** | Polycarbonate |
| **Repeat accuracy** | +/- 0.5 % IEC 61812-1 |
| **Temperature Drift** | +/- 0.05 %/°C |
| **Voltage drift** | +/- 0.2 %/V |

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|---|---|
| **Setting accuracy of time delay** | +/- 10 % of full scale 25 °C IEC 61812-1 |
| **Time delay type** | Pulse delay - Ad- Pulse delayed relay w/ control signal<br>Pulse delay - Ah- Pulse delayed relay (single cycle) w/ control signal<br>Safe-guard - N- Safe-guard relay<br>Safe-guard - O- Delayed Safe-guard relay<br>Pulse delay - P- Pulse delayed relay w/ fixed pulse length<br>Pulse delay - Pt- Pulse delayed relay w/ fixed pulse length and pause/summation<br>Bistable - TI- Bistable relay w/ control signal on<br>Bistable - Tt- Retriggerable bistable relay w/ control signal on<br>Interval - W- Interval relay w/ control signal off |
| **control signal pulse width** | 100 ms with load in parallel typical<br>30 ms typical |
| **Insulation resistance** | 100 MOhm 500 V DC IEC 60664-1 |
| **Reset time** | 120 ms on de-energisation typical |
| **On-load factor** | 100 % |
| **Power consumption in VA** | 0…32 VA 240 V AC |
| **Maximum power consumption in W** | 0.6 W 24 V DC |
| **Minimum switching current** | 10 mA 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 resistive 8 A 250 V AC |
| **Mechanical durability** | 10000000 cycles |
| **Dielectric strength** | 2.5 kV 1 mA/1 minute 50 Hz IEC 61812-1 |
| **[Uimp] rated impulse withstand voltage** | 5 kV 1.2/50 µs |
| **power on delay** | 100 ms |
| **Marking** | CE |
| **Creepage distance** | 4 kV/3 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 on steady: relay energised, no timing in progress<br>LED indicator 80 % ON and 20 % OFF flashing: timing in progress<br>LED indicator 5 % ON and 95 % OFF pulsing: relay de-energised, no timing in progress (except function Di-D, Li-L) |
| **Function available** | Ad- Pulse delayed relay w/ control signal-1 C/O<br>Ah- Pulse delayed relay (single cycle) w/ control signal-1 C/O<br>N- Safe-guard relay-1 C/O<br>O- Delayed Safe-guard relay-1 C/O<br>P- Pulse delayed relay w/ fixed pulse length-1 C/O<br>Pt- Pulse delayed relay w/ fixed pulse length and pause/summation-1 C/O<br>TI- Bistable relay w/ control signal on-1 C/O<br>Tt- Retriggerable bistable relay w/ control signal on-1 C/O<br>W- Interval relay w/ control signal off-1 C/O |
| **Net Weight** | 0.15 lb(US) (0.07 kg) |
| **Control Type** | Without test button |
| **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** | -22…140 °F (-30…60 °C) |
| **Ambient Air Temperature for Operation** | -4…140 °F (-20…60 °C) |
| **IP degree of protection** | IP20 IEC 60529 terminal block)<br>IP40 IEC 60529 housing)<br>IP50 IEC 60529 front panel) |
| **Vibration resistance** | 20 m/s² (f= 10…150 Hz) conforming to IEC 60068-2-6 |
| **Shock resistance** | 15 gn 11 ms IEC 60068-2-27 |
| **Relative Humidity** | 93 % without condensation IEC 60068-2-30 |
| **Electromagnetic compatibility** | Electrostatic discharge immunity test 6 kV in contact) level 3 IEC 61000-4-2<br>Electrostatic discharge immunity test 8 kV in air) level 3 IEC 61000-4-2<br>Susceptibility to electromagnetic fields 10 V/m 80 MHz to 1 GHz) level 3 IEC 61000-4-3<br>Electrical fast transient/burst immunity test 1 kV capacitive connecting clip) level 3 IEC 61000-4-4<br>Electrical fast transient/burst immunity test 2 kV direct) level 3 IEC 61000-4-4<br>1.2/50 µs shock waves immunity test 1 kV differential mode) level 3 IEC 61000-4-5<br>1.2/50 µs shock waves immunity test 2 kV common mode) level 3 IEC 61000-4-5<br>Conducted RF disturbances 10 V 0.15...80 MHz) level 3 IEC 61000-4-6<br>Voltage dips and interruptions immunity test 0 % 1 cycle) IEC 61000-4-11<br>Voltage dips and interruptions immunity test 70 % 25/30 cycles) IEC 61000-4-11<br>Conducted and radiated emissionsclass B EN 55022 |

## Ordering and shipping details

| | |
|---|---|
| **Category** | US10CP222370 |
| **Discount Schedule** | 0CP2 |
| **GTIN** | 3606480552786 |
| **Returnability** | Yes |
| **Country of origin** | ID |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 1.181 in (3.000 cm) |
| **Package 1 Width** | 3.268 in (8.300 cm) |
| **Package 1 Length** | 3.780 in (9.600 cm) |
| **Package weight(Lbs)** | 2.822 oz (80.000 g) |
| **Unit Type of Package 2** | S02 |

| | |
|---|---|
| **Number of Units in Package 2** | 40 |
| **Package 2 Height** | 5.906 in (15.000 cm) |
| **Package 2 Width** | 11.811 in (30.000 cm) |
| **Package 2 Length** | 15.748 in (40.000 cm) |
| **Package 2 Weight** | 8.089 lb(US) (3.669 kg) |

## Contractual warranty

| | |
|---|---|
| **Warranty (in months)** | 18 |

## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

### Environmental footprint

| | |
|---|---|
| Total lifecycle Carbon footprint | **15 kg CO2 eq.** |
| Carbon footprint of the manufacturing phase [A1 to A3] | **2 kg CO2 eq.** |
| Carbon footprint of the distribution phase [A4] | **0.1 kg CO2 eq.** |
| Carbon footprint of the installation phase [A5] | **0 kg CO2 eq.** |
| Carbon footprint of the use phase [B2, B3, B4, B6] | **13 kg CO2 eq.** |
| Carbon footprint of the end-of-life phase [C1 to C4] | **0.2 kg CO2 eq.** |
| Environmental Disclosure | **Product Environmental Profile** |

## Use Better

### Materials and Substances

| | |
|---|---|
| Packaging made with recycled cardboard | **Yes** |
| Packaging without single use plastic | **Yes** |
| SCIP Number | **7bdc2711-0ad2-427c-8ece-532c5e9f09d7** |
| EU RoHS Directive | **Compliant By Exemption** |
| REACh Regulation | **Reference contains Substances of Very High Concern above the threshold** |
| California proposition 65 | **WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov** |

## Use Longer

### Lifetime extension

| | |
|---|---|
| Repair | **No** |

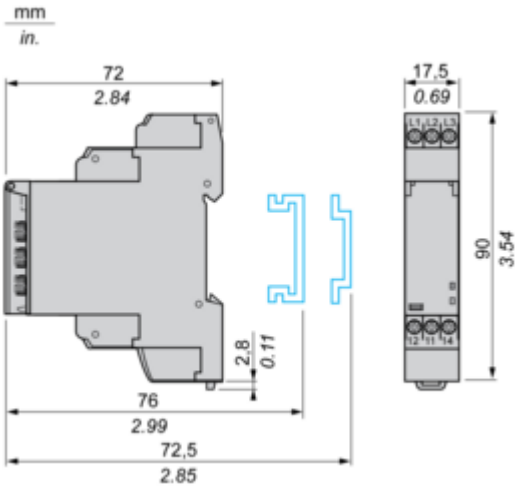
## Use Again

### Repack and remanufacture

| | |
|---|---|
| Recyclability potential, in % | **13** |
| Circularity Profile | **End of Life Information** |
| Take-back | **No** |

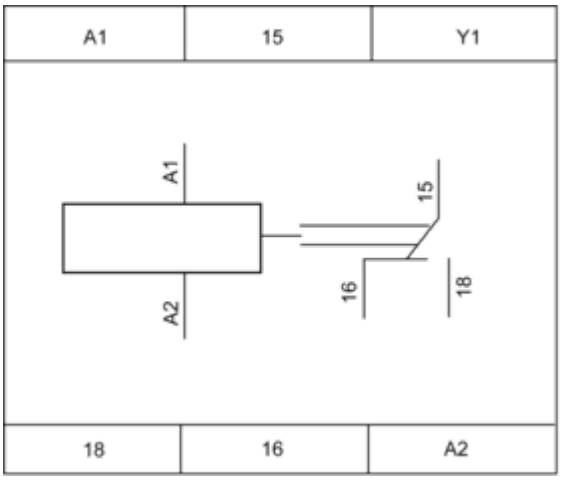
Dimensions Drawings

**Width 17.5 mm**

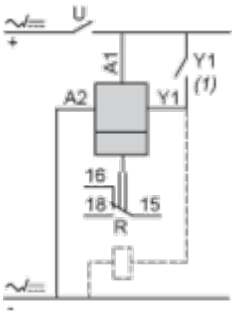


Connections and Schema

**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.

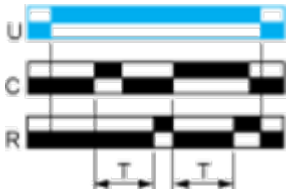
Technical Description

## 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.

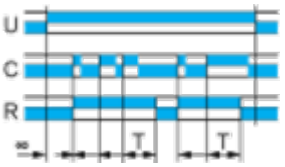
### Function: 1 Output

## 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

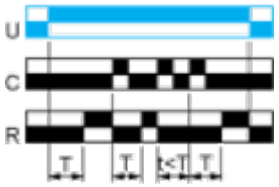


## Function O : Retriggerable Interval Delayed Relay with Control Signal On

### 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

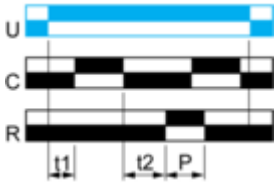

P = 500 ms

## 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

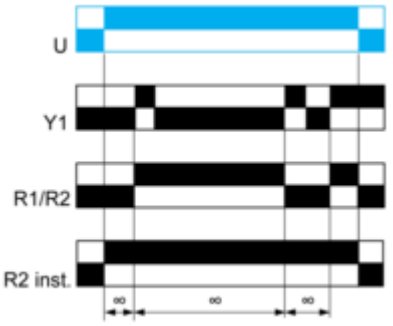



T = t1 + t2 + ...
P = 500 ms

## 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.

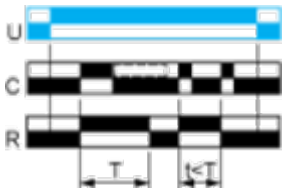


## Function Tt : Retriggerable Bistable Relay with Control Signal On

### 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

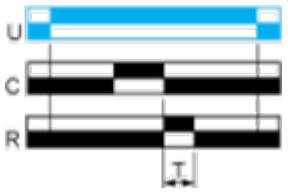


## Function W : Interval Relay with Control Signal Off

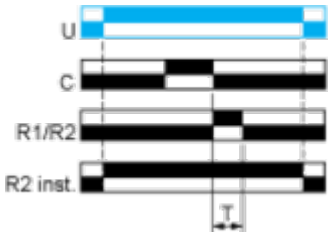
### Description

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.).

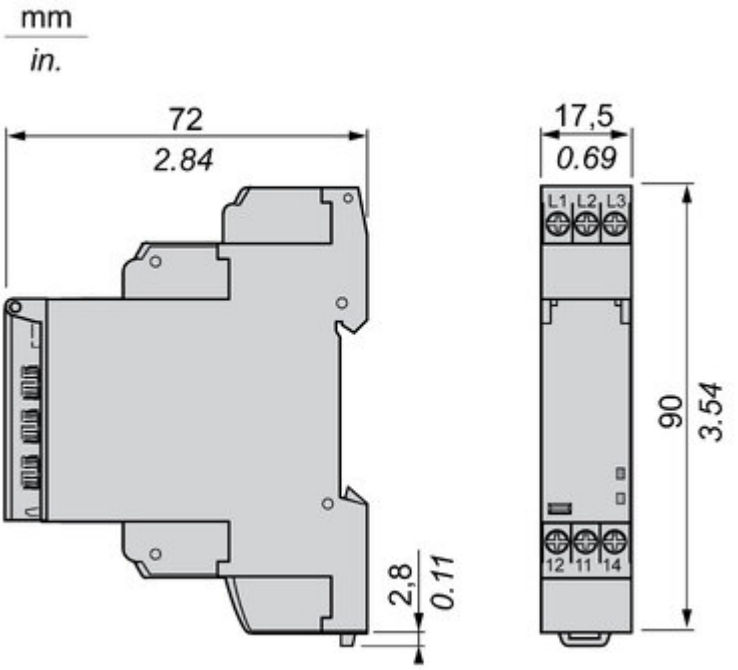
## Legend

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 |

Technical Illustration

**Dimensions**



Offer Marketing Illustration

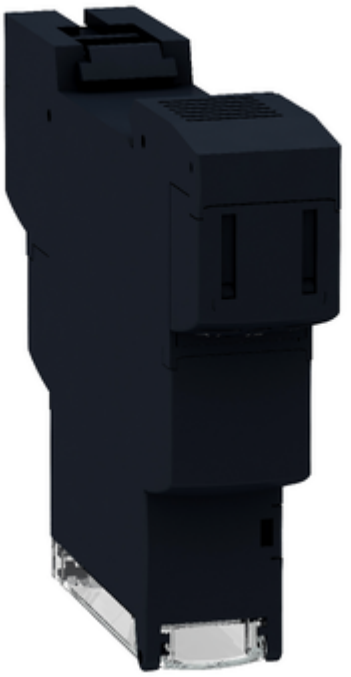
**Product benefits / Features**

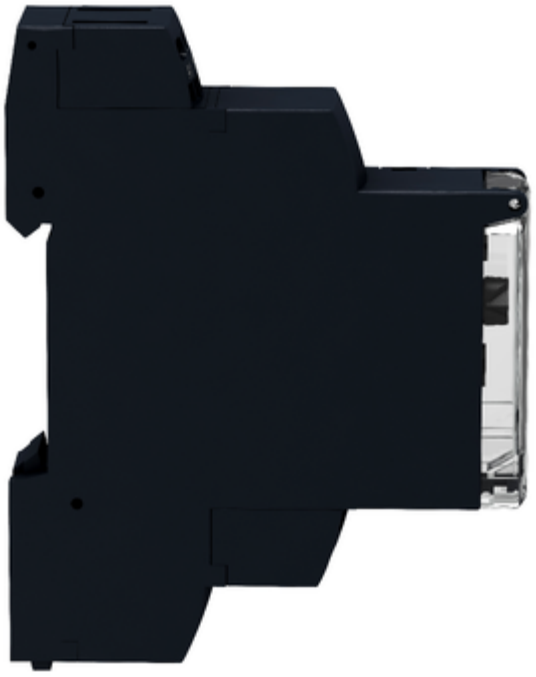
Offer Marketing Illustration

**Product benefits / Features**

Image of product / Alternate images

**Alternative**






18
16
A2


A1
15
Y1

Image of product in real life situation