# Product data sheet

Specifications



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

RE17RMEMU

**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** | Power on-delay<br>Interval<br>Off-delay<br>Symmetrical flashing |
| **Time delay range** | 6...60 min<br>1...10 min<br>1...10 s<br>1...10 h<br>6...60 s<br>0.1...1 s |
| **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 |

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

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

| | |
|---|---|
| **Voltage drift** | +/- 0.2 %/V |
| **Setting accuracy of time delay** | +/- 10 % of full scale 25 °C IEC 61812-1 |
| **Time delay type** | Power on-delay - A- Power on-delay relay<br>Power on-delay - At- Power on-delay relay w/ pause/summation (Y1)<br>Interval - B- Single interval relay w/ control signal<br>Off-delay - C- Off-delay relay w/ control signal<br>Symmetrical flashing - D- Symmetrical flashing relay (starting pulse-off)<br>Symmetrical flashing - Di- Symmetrical flashing relay (starting pulse-on)<br>Interval - H- Interval relay |
| **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** | A- Power on-delay relay-1 C/O<br>At- Power on-delay relay w/ pause/summation (Y1)-1 C/O<br>B- Single interval relay w/ control signal-1 C/O<br>C- Off-delay relay w/ control signal-1 C/O<br>D- Symmetrical flashing relay (starting pulse-off)-1 C/O<br>Di- Symmetrical flashing relay (starting pulse-on)-1 C/O<br>H- Interval relay-1 C/O |
| **Product Weight** | 0.15 lb(US) (0.07 kg) |
| **Control Type** | Without test button |
| **Number of functions** | 8 |
| **Time delay type** | A, At, B, C, D, Di, H, Ht |
| **Functionality** | Multifunction |

| | |
|---|---|
| **Compatibility code** | RE17 |

## Environment

| | |
|---|---|
| **Immunity to microbreaks** | 20 ms |
| **Standards** | 2004/108/EC<br>IEC 61000-6-2<br>IEC 61000-6-3<br>IEC 61000-6-1<br>2006/95/EC<br>IEC 61812-1<br>IEC 61000-6-4 |
| **Product Certifications** | CSA<br>cULus |
| **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** | 3606480552731 |
| **Returnability** | Yes |
| **Country of origin** | ID |

## Packing Units

| | |
|---|---|
| **Unit Type of Package 1** | PCE |
| **Nbr. of units in pkg.** | 1 |
| **Package 1 Height** | 1.102 in (2.800 cm) |
| **Package 1 Width** | 3.071 in (7.800 cm) |
| **Package 1 Length** | 3.780 in (9.600 cm) |
| **Package weight(Lbs)** | 2.751 oz (78.000 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** | 8.157 lb(US) (3.700 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 | **53 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] | **51 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** |

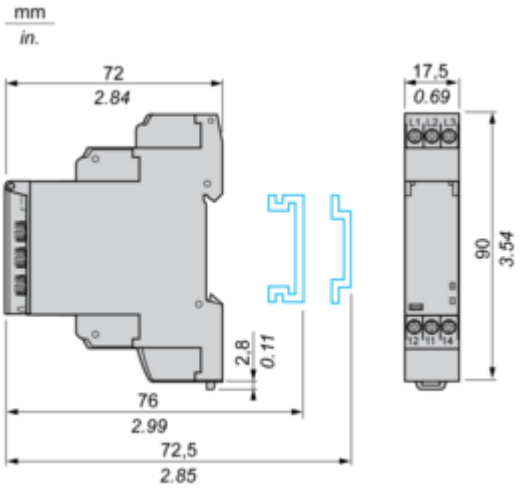
## Use Again

### Repack and remanufacture

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

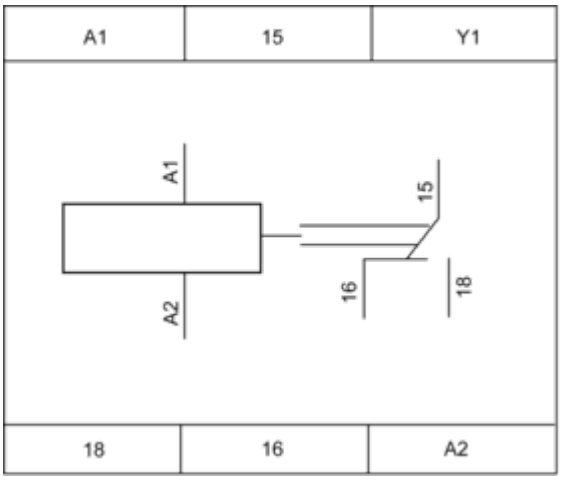
Dimensions Drawings

**Width 17.5 mm**

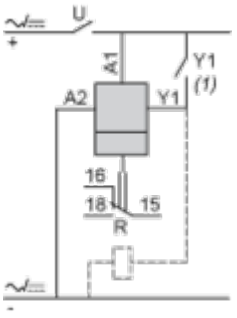


Connections and Schema

**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 A : Power on Delay Relay

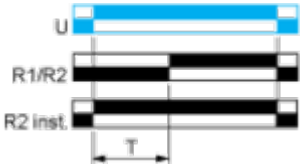
### Description

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



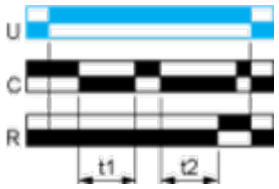

2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function 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 +...

## Function B : Interval Relay with Control Signal

### 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

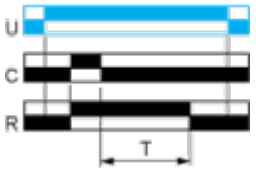


## Function C : Off-Delay Relay with Control Signal

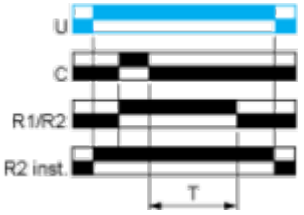
### Description

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



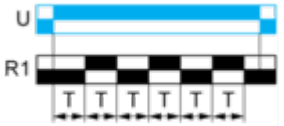

2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

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

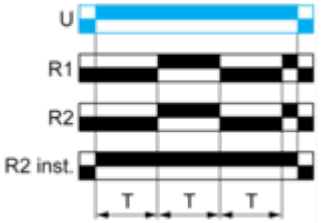
### Description

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 indefintely 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").

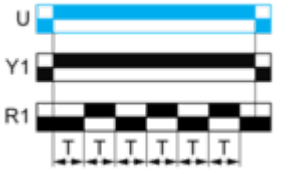
### Function: 1 Output



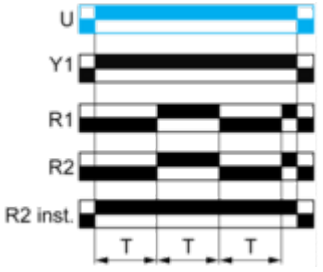

### Function: 2 Outputs




### 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

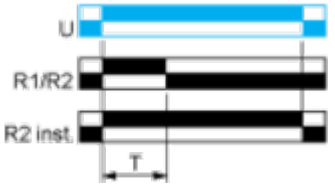
### Description

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



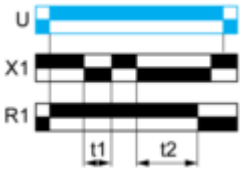

2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

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

### Description

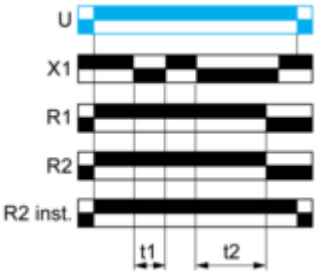
On energisation of power supply, output(s) R close(s) and timing period T starts.
The timing can be interrupted / paused each time X1 energizes.
When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state Reenergization of X1 will 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



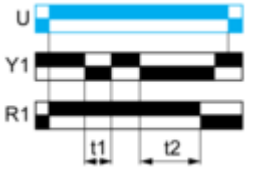

T = t1 + t2 +...

### Function: 2 Outputs



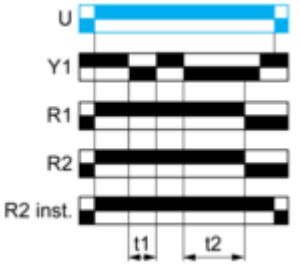

T = t1 + t2 +...

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




T = t1 + t2 +...

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




T = t1 + t2 +...

## Legend


Relay de-energised

Relay energised

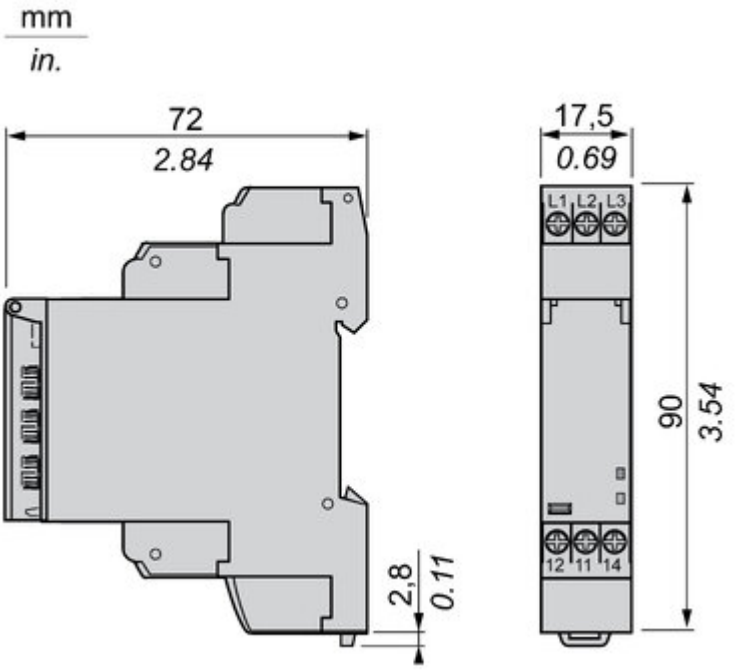
Output open

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**

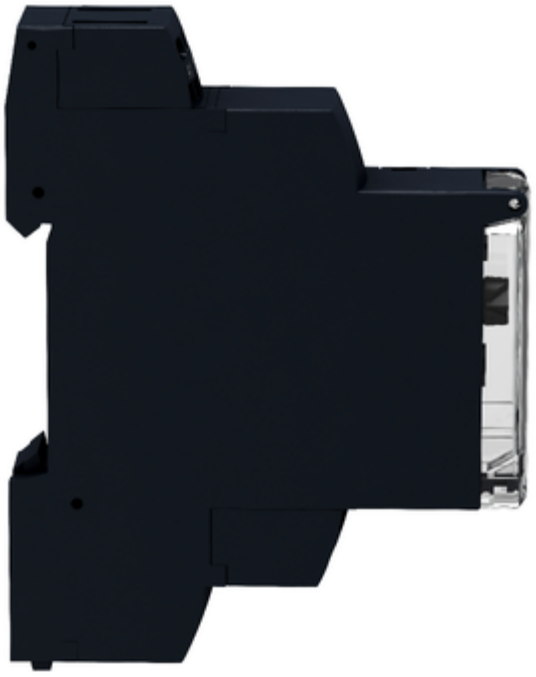


Image of product / Alternate images

**Alternative**










A1 15 Y1


18 16 A2

Image of product in real life situation

