## Product datasheet Characteristics

## RE17RLMU

asymmetrical flashing relay - 1 s..100 h - 24..240 V AC - 1 OC



#### Main

| IVIAIII                   |  |
|---------------------------|--|
| Range of product          | Zelio Time                                       |
| Product or component type | Modular timing relay                             |
| Discrete output type      | Relay  |
| Width                     | 17.5 mm  |
| Device short name         | RE17R  |
| Time delay type           | Li<br>L  |
| Time delay range          | 110 h 660 min 10100 h 110 s 660 s 110 min 0.11 s |
| Nominal output current    | 8 A  |

#### Complementary

| Contacts type and composition | 1 C/O   |
|-------------------------------|---|
| Contacts material             | Cadmium free  |
| Control type                  | Selector switch on front panel  |
| [Us] rated supply voltage     | 24240 V AC at 50/60 Hz<br>24 V DC   |
| Voltage range                 | 0.851.1 Us  |
| Supply frequency              | 5060 Hz (+/- 5 %)   |
| Input voltage                 | 10 V  |
| Connections - terminals       | Screw terminals, clamping capacity: 1 x 0.51 x 3.3 mm² AWG 20AWG 12 (solid) without cable end  Screw terminals, clamping capacity: 2 x 0.52 x 2.5 mm² AWG 20AWG 14 (solid) without cable end  Screw terminals, clamping capacity: 1 x 0.21 x 2.5 mm² AWG 24AWG 14 (flexible) with cable end |
|                               | Screw terminals, clamping capacity: 2 x 0.22 x 1.5 mm² AWG 24AWG 16 (flexible) with cable end   |

| Housing material   Self-extinguishing  | Tightening torque                      | 0.61 N.m conforming to IEC 60947-1                         |
|--|--|--|
| Temperature drift +/- 0.05 %/°C  Voltage drift +/- 0.2 %/V  Setting accuracy of time delay +/- 10 % of full scale at 25 °C conforming to IEC 61812-1  Impulse duration 100 ms with load in parallel typical 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 <= 32 VA at 240 V AC  Power consumption in W <= 0.6 W at 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 rate in Hz 10 Hz  Electrical durability 1000000 cycles for resistive load (8 A at 250 V AC maximum)  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 (1.2/50 µs)  Delay response <100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data 8 10d = 270000  MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 15 ED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | Housing material                       | Self-extinguishing   |
| Voltage drift         +/- 0.2 %/V           Setting accuracy of time delay         +/- 10 % of full scale at 25 °C conforming to IEC 61812-1           Impulse duration         100 ms with load in parallel typical           30 ms typical         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         <= 32 VA at 240 V AC   | Repeat accuracy                        | +/- 0.5 % conforming to IEC 61812-1                        |
| Setting accuracy of time delay   | Temperature drift                      | +/- 0.05 %/°C  |
| Impulse duration 30 ms typical 100 ms with load in parallel typical 30 ms typical 10 ms with load in parallel typical 30 ms typical 10 ms of the property of t | Voltage drift                          | +/- 0.2 %/V  |
| Insulation resistance   100 MOhm at 500 V DC conforming to IEC 60664-1   | Setting accuracy of time delay         | +/- 10 % of full scale at 25 °C conforming to IEC 61812-1  |
| Reset time 120 ms on de-energisation typical On-load factor 100 % Power consumption in VA <= 32 VA at 240 V AC Power consumption in W <= 0.6 W at 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 rate in Hz 10 Hz Electrical durability 1000000 cycles for resistive load (8 A at 250 V AC maximum) Mechanical durability 1000000 cycles for resistive load (8 A at 250 V AC maximum)  Minimum switching voltage 25 V AC Breaking capacity <= 2000 VA Operating rate in Hz 10 Hz Electrical durability 1000000 cycles for resistive load (8 A at 250 V AC maximum)  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 (1.2/50 µs)  Delay response <100 ms  Marking CE Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000 MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Impulse duration                       | •  |
| On-load factor 100 %  Power consumption in VA <= 32 VA at 240 V AC  Power consumption in W <= 0.6 W at 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 rate in Hz 10 Hz  Electrical durability 100000 cycles for resistive load (8 A at 250 V AC maximum)  Mechanical durability 1000000 cycles  Dielectric strength 2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1  [Uimp] rated impulse withstand voltage 5 kV (1.2/50 µs)  Delay response <100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000 MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Insulation resistance                  | 100 MOhm at 500 V DC conforming to IEC 60664-1             |
| Power consumption in VA       <= 32 VA at 240 V AC   | Reset time                             | 120 ms on de-energisation typical                          |
| Power consumption in W <= 0.6 W at 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 rate in Hz 10 Hz  Electrical durability 100000 cycles for resistive load (8 A at 250 V AC maximum)  Mechanical durability 1000000 cycles  Dielectric strength 2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1  [Uimp] rated impulse withstand voltage 5 kV (1.2/50 µs)  Delay response <100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000  MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | On-load factor                         | 100 %  |
| Minimum switching current10 mA 5 V DCMaximum switching current8 A AC/DCMaximum switching voltage250 V ACBreaking capacity<= 2000 VA  | Power consumption in VA                | <= 32 VA at 240 V AC                                       |
| Maximum switching current8 A AC/DCMaximum switching voltage250 V ACBreaking capacity<= 2000 VA   | Power consumption in W                 | <= 0.6 W at 24 V DC  |
| Maximum switching voltage 250 V AC  Breaking capacity <= 2000 VA  Operating rate in Hz 10 Hz  Electrical durability 100000 cycles for resistive load (8 A at 250 V AC maximum)  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 (1.2/50 µs)  Delay response <100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000  MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | Minimum switching current              | 10 mA 5 V DC   |
| Breaking capacity <= 2000 VA  Operating rate in Hz 10 Hz  Electrical durability 100000 cycles for resistive load (8 A at 250 V AC maximum)  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 (1.2/50 µs)  Delay response <100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000  MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | Maximum switching current              | 8 A AC/DC  |
| Operating rate in Hz       10 Hz         Electrical durability       1000000 cycles for resistive load (8 A at 250 V AC maximum)         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 (1.2/50 μs)         Delay response       < 100 ms  | Maximum switching voltage              | 250 V AC   |
| Electrical durability  100000 cycles for resistive load (8 A at 250 V AC maximum)  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 (1.2/50 μs)  Delay response  < 100 ms  Marking  CE  Creepage distance  4 kV/3 conforming to IEC 60664-1  Safety reliability data  B10d = 270000  MTTFd = 296.8 years  Mounting position  Any position in relation to normal vertical mounting plane  Mounting support  35 mm DIN rail conforming to EN/IEC 60715  Local signalling  LED indicator on steady: relay energised, no timing in progress  LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Breaking capacity                      | <= 2000 VA   |
| Mechanical durability10000000 cyclesDielectric strength2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1[Uimp] rated impulse withstand voltage5 kV (1.2/50 μs)Delay response< 100 ms  | Operating rate in Hz                   | 10 Hz  |
| Dielectric strength  2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1  [Uimp] rated impulse withstand voltage  5 kV (1.2/50 μs)  Delay response  < 100 ms  Marking  CE  Creepage distance  4 kV/3 conforming to IEC 60664-1  Safety reliability data  B10d = 270000  MTTFd = 296.8 years  Mounting position  Any position in relation to normal vertical mounting plane  Mounting support  35 mm DIN rail conforming to EN/IEC 60715  Local signalling  LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Electrical durability                  | 100000 cycles for resistive load (8 A at 250 V AC maximum) |
| [Uimp] rated impulse withstand voltage 5 kV (1.2/50 µs)  Delay response < 100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000 MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Mechanical durability                  | 10000000 cycles  |
| Delay response < 100 ms  Marking CE  Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data B10d = 270000 MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | Dielectric strength                    | 2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1       |
| Marking  CE  Creepage distance  4 kV/3 conforming to IEC 60664-1  Safety reliability data  B10d = 270000 MTTFd = 296.8 years  Mounting position  Any position in relation to normal vertical mounting plane  Mounting support  35 mm DIN rail conforming to EN/IEC 60715  Local signalling  LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | [Uimp] rated impulse withstand voltage | 5 kV (1.2/50 µs)   |
| Creepage distance 4 kV/3 conforming to IEC 60664-1  Safety reliability data  B10d = 270000 MTTFd = 296.8 years  Mounting position  Any position in relation to normal vertical mounting plane  Mounting support  35 mm DIN rail conforming to EN/IEC 60715  Local signalling  LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Delay response                         | < 100 ms   |
| Safety reliability data  B10d = 270000 MTTFd = 296.8 years  Mounting position  Any position in relation to normal vertical mounting plane  Mounting support  35 mm DIN rail conforming to EN/IEC 60715  Local signalling  LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Marking                                | CE   |
| MTTFd = 296.8 years  Mounting position Any position in relation to normal vertical mounting plane  Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Creepage distance                      | 4 kV/3 conforming to IEC 60664-1                           |
| Mounting support 35 mm DIN rail conforming to EN/IEC 60715  Local signalling LED indicator on steady: relay energised, no timing in progress LED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | Safety reliability data                |  |
| Local signalling  LED indicator on steady: relay energised, no timing in progress  LED indicator flashing: timing in progress (80 % ON and 20 % OFF)   | Mounting position                      | Any position in relation to normal vertical mounting plane |
| LED indicator flashing: timing in progress (80 % ON and 20 % OFF)  | Mounting support                       | 35 mm DIN rail conforming to EN/IEC 60715                  |
| Product weight 0.07 kg   | Local signalling                       |  |
|  | Product weight                         | 0.07 kg  |

#### Environment

| Immunity to microbreaks               | <= 20 ms  |
|---------------------------------------|---|
|                                       | 2000/05/150   |
| Standards                             | 2006/95/EC  |
|                                       | EN 61000-6-3  |
|                                       | IEC 61812-1   |
|                                       | 2004/108/EC   |
|                                       | EN 61000-6-2  |
|                                       | EN 61000-6-1  |
|                                       | EN 61000-6-4  |
| Product certifications                | GL  |
|                                       | CSA   |
|                                       | cULus   |
| Ambient air temperature for storage   | -3060 °C  |
| Ambient air temperature for operation | -2060 °C  |
| IP degree of protection               | IP20 (terminal block) conforming to IEC 60529   |
|                                       | IP40 (housing) conforming to IEC 60529  |
|                                       | IP50 (front panel) conforming to IEC 60529  |
| Vibration resistance                  | 20 m/s² (f = 10150 Hz) conforming to IEC 60068-2-6  |
| Shock resistance                      | 15 gn (duration = 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 at 6 kV conforming to IEC 61000-4-2 level 3 Electrostatic discharge immunity test, in air at 8 kV conforming to IEC 61000-4-2 level 3 Susceptibility to electromagnetic fields, 80 MHz to 1 GHz at 10 V/m conforming to IEC 61000-4-3 level 3 |

Electrical fast transient/burst immunity test, capacitive connecting clip at 1 kV conforming to IEC 61000-4-4 level 3

Electrical fast transient/burst immunity test, direct at 2 kV conforming to IEC 61000-4-4 level 3 1.2/50 µs shock waves immunity test, differential mode at 1 kV conforming to IEC 61000-4-5 level 3 1.2/50 µs shock waves immunity test, common mode at 2 kV conforming to IEC 61000-4-5 level 3 Conducted RF disturbances, 0.15...80 MHz at 10 V conforming to IEC 61000-4-6 level 3 Voltage dips and interruptions immunity test, 1 cycle at 0 % conforming to IEC 61000-4-11 Voltage dips and interruptions immunity test, 25/30 cycles at 70 % conforming to IEC 61000-4-11 Conducted and radiated emissions conforming to EN 55022 class B

#### Offer Sustainability

| Sustainable offer status | Green Premium product   |  |
|--------------------------|---|--|
| RoHS (date code: YYWW)   | Compliant - since 1243 - Schneider Electric declaration of conformity |  |
|                          | Schneider Electric declaration of conformity                          |  |
| REACh                    | Reference not containing SVHC above the threshold                     |  |
|                          | Reference not containing SVHC above the threshold                     |  |

# Product datasheet Technical Description

## RE17RLMU

### Function L: Asymmetrical Flasher Relay (Starting Pulse Off)

#### Description

Repetitive cycle comprises of two, independently adjustable timing periods Ta and Tr. Each timing period corresponds to a different state of the output R.

Function: 1 Output

# Product datasheet Technical Description

### RE17RLMU

### Function Li: Asymmetrical Flasher Relay (Starting Pulse On)

#### Description

Repetitive cycle comprises of two, independently adjustable timing periods Ta and Tr. Each timing period corresponds to a different state of the output R.

#### Function: 1 Output



# Product datasheet Technical Description

### RE17RLMU

#### 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

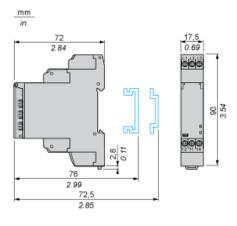
T Timing periodTa Adjustable On-delayTr Adjustable Off-delay

U Supply

# Product datasheet Dimensions Drawings

## RE17RLMU

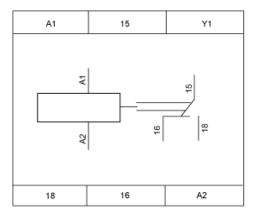
#### Width 17.5 mm



# Product datasheet Connections and Schema

## RE17RLMU

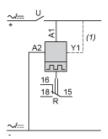
### Internal Wiring Diagram



# Product datasheet Connections and Schema

## RE17RLMU

### Wiring Diagram



1 Link A1-Y1 for function L only