

# RE17RAMU

on-delay timing relay - 1 s..100 h - 24..240 V AC - 1 OC



## Main

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	A At
Time delay range	0.1...1 s 1...10 h 1...10 min 1...10 s 10...100 h 6...60 min 6...60 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	24 V DC 24...240 V AC at 50/60 Hz
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz (+/- 5 %)
Input voltage	10 V
Connections - terminals	Screw terminals, clamping capacity: 1 x 0.5...1 x 3.3 mm <sup>2</sup> AWG 20...AWG 12 (solid) without cable end Screw terminals, clamping capacity: 2 x 0.5...2 x 2.5 mm <sup>2</sup> AWG 20...AWG 14 (solid) without cable end Screw terminals, clamping capacity: 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 14 (flexible) with cable end Screw terminals, clamping capacity: 2 x 0.2...2 x 1.5 mm <sup>2</sup> 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
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	0...32 VA at 240 V AC
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

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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 $\mu$ s)
Delay response	< 100 ms
Marking	CE
Creepage distance	4 kV/3 conforming to IEC 60664-1
Safety reliability data	MTTFd = 296.8 years B10d = 270000
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) LED indicator pulsing: relay de-energised, no timing in progress (except function Di-D, Li-L) (5 % ON and 95 % OFF)
Product weight	0.07 kg

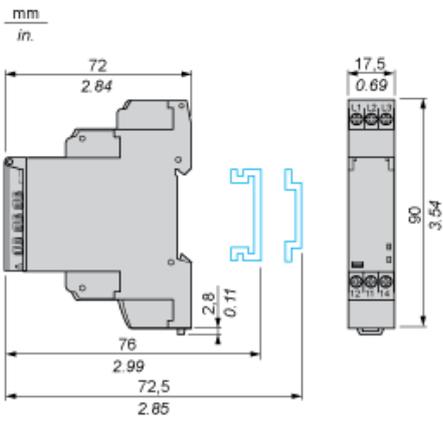
## Environment

immunity to microbreaks	<= 20 ms
standards	2004/108/EC EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4 IEC 61812-1 2006/95/EC
product certifications	CSA CULus GL
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 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529
vibration resistance	20 m/s <sup>2</sup> (f = 10...150 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 $\mu$ s shock waves immunity test, differential mode at 1 kV conforming to IEC 61000-4-5 level 3 1.2/50 $\mu$ s 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

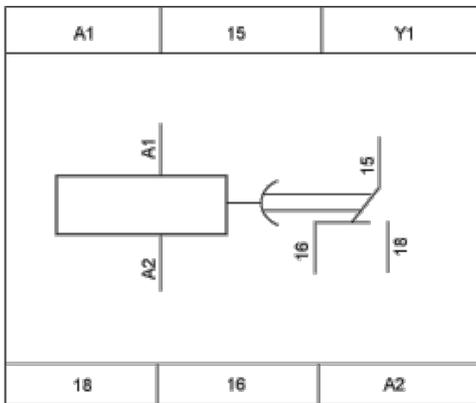
## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1650 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available

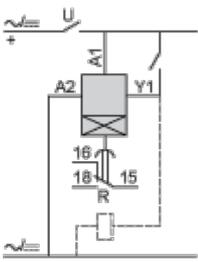
### Width 17.5 mm



### Internal Wiring Diagram



### Wiring Diagram

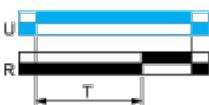


### Function A : Power on Delay Relay

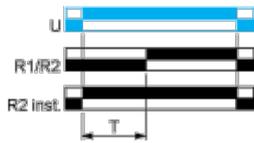
#### Description

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



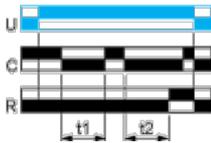
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## 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



$T = t1 + t2 + \dots$

### Legend

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

**C** Control contact

**G** Gate

**R** Relay or solid state output

**R1/R22** timed outputs

**R2** The second output is instantaneous if the right position is selected **inst.**

**T** Timing period

**Ta** - Adjustable On-delay

**Tr** - Adjustable Off-delay

**U** Supply