

# Product datasheet

Specifications



## Modular timing relay, Zelio Time, on delay 1 s..100 h, 24...240 V AC, 1 OC

RE11RAMU

! Discontinued on: 01 November 2020

! Discontinued

### Main

Range of product	Zelio Time
Product or component type	Modular timing relay
Discrete output type	Relay
Component name	RE11R
Time delay type	At A
Time delay range	10...100 h 0.1...1 s 1...10 s 6...60 min 1...10 min 6...60 s 1...10 h
[Us] rated supply voltage	24...240 V AC at 50/60 Hz 24 V DC
Nominal output current	8 A

### Complementary

Contacts material	AgNi (cadmium free)
Width pitch dimension	17.5 mm
Control type	Selector switch front panel
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, 2 x 1.5 mm <sup>2</sup> without cable end Screw terminals, 2 x 2.5 mm <sup>2</sup> + 1 x 4 mm <sup>2</sup> with cable end
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
Minimum pulse duration	100 ms with load in parallel 30 ms
Maximum reset time	100 ms on de-energisation
On-load factor	100 %
Maximum power consumption	32 VA at 240 V

	0.6 W at 24 V 1.5 W at 240 V
<b>Minimum switching current</b>	10 mA
<b>Maximum switching current</b>	8 A
<b>Maximum switching voltage</b>	250 V
<b>Breaking capacity</b>	2000 VA 80 W
<b>Electrical durability</b>	100000 cycles at 8 A, 250 V for resistive load
<b>Mechanical durability</b>	5000000 cycles
<b>[Uimp] rated impulse withstand voltage</b>	5 kV for 1.2...50 µs conforming to IEC 60664-1 5 kV for 1.2...50 µs conforming to IEC 61812-1
<b>Marking</b>	CE
<b>Creepage distance</b>	4 kV/3 conforming to IEC 60664-1
<b>Surge withstand</b>	1 kV differential mode conforming to IEC 61000-4-5 level 3 2 kV common mode conforming to IEC 61000-4-5 level 3
<b>Mounting support</b>	35 mm symmetrical mounting rail conforming to EN 50022
<b>Local signalling</b>	LED indicator (green) for flashing: timing in progress LED indicator (green) for on steady: relay energised, no timing in progress LED indicator (green) for pulsing: relay energised, no timing in progress
<b>Net weight</b>	0.06 kg

## Environment

<b>Immunity to microbreaks</b>	10 ms
<b>Dielectric strength</b>	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1
<b>Standards</b>	EN 50082-1/2 93/68/EEC 89/336/EEC 73/23/EEC IEC 61812-1 IEC 60669-2-3 EN 50081-1/2
<b>Product certifications</b>	CSA GL cULus
<b>Ambient air temperature for storage</b>	-30...60 °C
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>IP degree of protection</b>	IP20 (terminal block) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529
<b>Vibration resistance</b>	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
<b>Relative humidity</b>	93 % without condensation conforming to IEC 60068-2-3
<b>Resistance to electrostatic discharge</b>	6 kV in contact conforming to IEC 61000-4-2 level 3 8 kV in air conforming to IEC 61000-4-2 level 3
<b>Resistance to electromagnetic fields</b>	10 V/m 80 MHz to 1 GHz conforming to ENV 50140/204 level 3 10 V/m 80 MHz to 1 GHz conforming to IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	1 kV (capacitive connecting clip) conforming to IEC 61000-4-4 level 3 2 kV (direct) conforming to IEC 61000-4-4 level 3
<b>Immunity to radioelectric fields</b>	10 V (0.15...80 MHz) conforming to ENV 50141 (IEC 61000-4-6)
<b>Immunity to voltage dips</b>	30 % / 10 ms conforming to IEC 61000-4-11 60 % / 100 ms conforming to IEC 61000-4-11 95 % / 5 s conforming to IEC 61000-4-11
<b>Disturbance radiated/ conducted</b>	Class B conforming to EN 55022 (EN 55011 group 1)

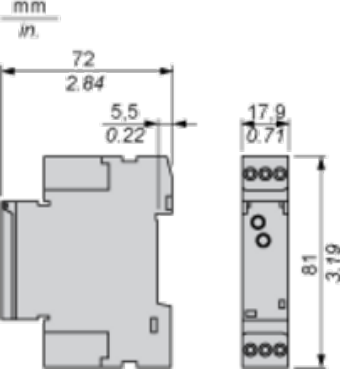
# Contractual warranty

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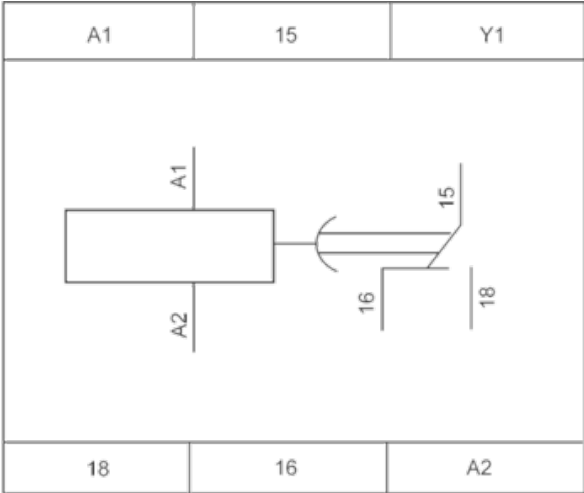
Warranty

18 months

Width 17.5 mm

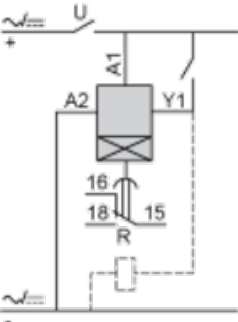


Internal Wiring Diagram



## Wiring Diagram

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**Function A : Power on Delay Relay**

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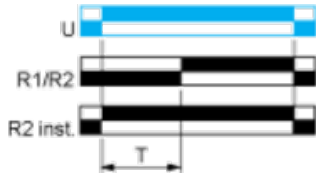
**Description**

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.)

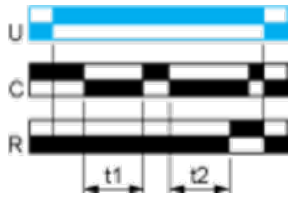
## Function At : Power on Delay Relay (Summation) with Control Signal

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### 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/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

**Recommended replacement(s)**

RE11RAMU is replaced by the following product range:



**Zelio Time**  
 Timing Relays  
 Products: 66