

Product datasheet

Specifications



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

RE11RAMU

⚠ Discontinued on: 21-Jan-2021

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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 ² without cable end Screw terminals, 2 x 2.5 mm ² + 1 x 4 mm ² 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
maximum power consumption	0.6 W at 24 V 1.5 W at 240 V

minimum switching current	10 mA
Maximum switching current	8 A
Maximum switching voltage	250 V
Breaking capacity	2000 VA
Breaking capacity	80 W
Electrical durability	100000 cycles at 8 A, 250 V for resistive load
Mechanical durability	5000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.2...50 µs conforming to IEC 60664-1 5 kV for 1.2...50 µs conforming to IEC 61812-1
Marking	CE
Creepage distance	4 kV/3 conforming to IEC 60664-1
Surge withstand	1 kV differential mode conforming to IEC 61000-4-5 level 3 2 kV common mode conforming to IEC 61000-4-5 level 3
Mounting support	35 mm symmetrical mounting rail conforming to EN 50022
Local signalling	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
Net weight	0.06 kg

Environment

Immunity to microbreaks	10 ms
Dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1
Standards	EN 50082-1/2 93/68/EEC 89/336/EEC 73/23/EEC IEC 61812-1 IEC 60669-2-3 EN 50081-1/2
Product certifications	CSA GL cULus
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	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
Relative humidity	93 % without condensation conforming to IEC 60068-2-3
Resistance to electrostatic discharge	6 kV in contact conforming to IEC 61000-4-2 level 3 8 kV in air conforming to IEC 61000-4-2 level 3
Resistance to electromagnetic fields	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
Resistance to fast transients	1 kV (capacitive connecting clip) conforming to IEC 61000-4-4 level 3 2 kV (direct) conforming to IEC 61000-4-4 level 3
Immunity to radioelectric fields	10 V (0.15...80 MHz) conforming to ENV 50141 (IEC 61000-4-6)
Immunity to voltage dips	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
Disturbance radiated/conducted	Class B conforming to EN 55022 (EN 55011 group 1)

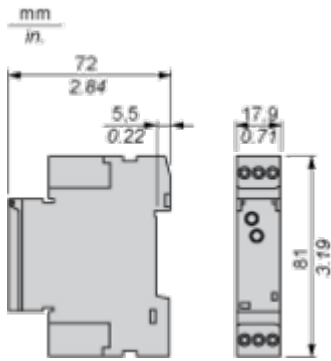
Contractual warranty

Warranty

18 months

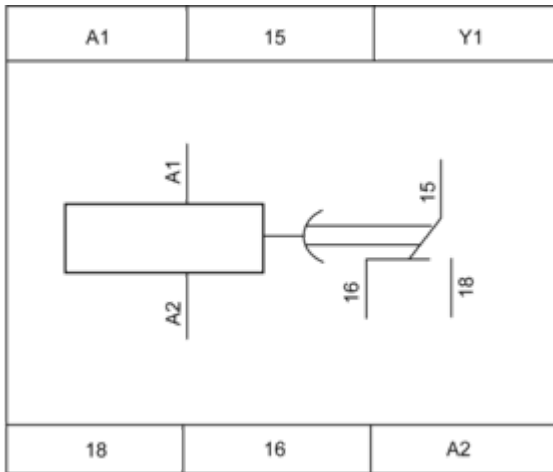
Dimensions Drawings

Width 17.5 mm

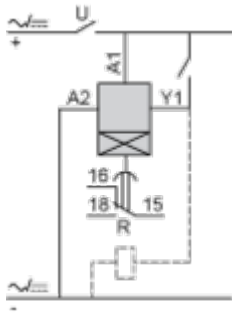


Connections and Schema

Internal Wiring Diagram



Wiring Diagram



Technical Description

Function A : Power on Delay Relay

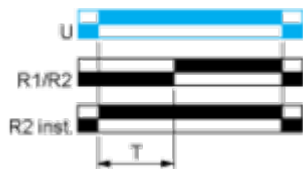
Description

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



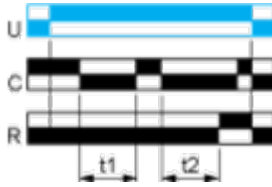
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

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



$T = t1 + t2 + \dots$

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