

Main

Range of product	Zelio Time
Product or component type	Modular timing relay
Discrete output type	Relay
Component name	RE11R
Time delay type	H Ht
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
[Us] rated supply voltage	24...240 V AC 50/60 Hz 24 V DC
Nominal output current	8 A

Complementary

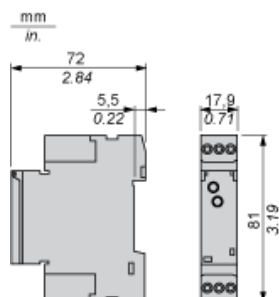
Contacts material	AgNi (cadmium free)
Width pitch dimension	17.5 mm
Control type	Selector switch on front panel
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, clamping capacity: 2 x 2.5 mm ² + 1 x 4 mm ² with cable end Screw terminals, clamping capacity: 2 x 1.5 mm ² without cable 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	30 ms 100 ms with load in parallel
Maximum reset time	100 ms on de-energisation
On-load factor	100 %
Maximum power consumption	32 VA 240 V
Maximum power consumption	1.5 W 240 V 0.6 W 24 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 8 A at 250 V resistive
Mechanical durability	5000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.2...50 µs conforming to IEC 61812-1 5 kV for 1.2...50 µs conforming to IEC 60664-1
Marking	CE
Creepage distance	4 kV/3 conforming to IEC 60664-1
Surge withstand	2 kV (common mode) conforming to IEC 61000-4-5 level 3 1 kV (differential 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 pulsing: relay energised, no timing in progress LED indicator green on steady: relay energised, no timing in progress LED indicator green flashing: timing in progress
Product weight	0.06 kg

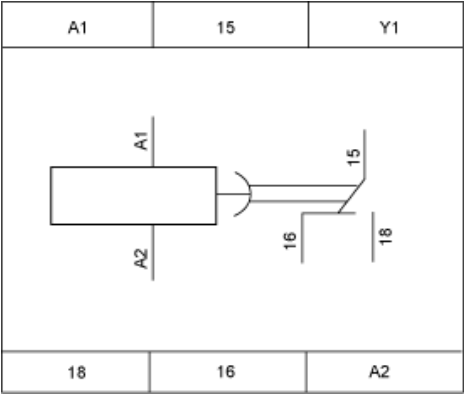
Environment

Immunity to microbreaks	> 10 ms
Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz conforming to IEC 61812-1
Standards	73/23/EEC 89/336/EEC 93/68/EEC EN 50081-1/2 EN 50082-1/2 IEC 60669-2-3 IEC 61812-1
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	IP50 (front panel) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP20 (terminal block) 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	8 kV (in air) conforming to IEC 61000-4-2 level 3 6 kV (in contact) conforming to IEC 61000-4-2 level 3
Resistance to electromagnetic fields	10 V/m, 80 MHz to 1 GHz conforming to IEC 61000-4-3 level 3 10 V/m, 80 MHz to 1 GHz conforming to ENV 50140/204 level 3
Resistance to fast transients	2 kV, direct conforming to IEC 61000-4-4 level 3 1 kV, capacitive connecting clip 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	95 % / 5 s conforming to IEC 61000-4-11 60 % / 100 ms conforming to IEC 61000-4-11 30 % / 10 ms conforming to IEC 61000-4-11
Disturbance radiated/conducted	Class B conforming to EN 55022 (EN 55011 group 1)

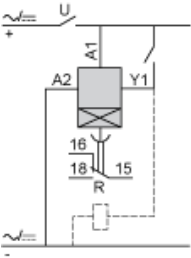
Width 17.5 mm



Internal Wiring Diagram



Wiring Diagram



Function H : Interval Relay

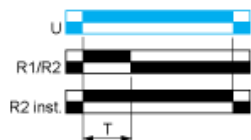
Description

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 (Summation) with Control Signal

Description

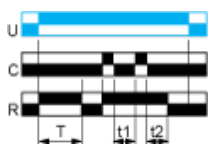
On energisation, the output R closes for the duration of a timing period T then reverts to its initial state.

Pulsing or maintaining control contact C will again close the output R.

Timing T is only active when control contact C is released and so the output R will not revert to its initial state until after a time $t_1 + t_2 + \dots$

The relay memorises the total, cumulative opening time of control contact C and, once the set time T is reached, the output R reverts to its initial state.

Function: 1 Output



$T = t_1 + t_2 + \dots$

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