



### Main

Range of product	Zelio Time
Product or component type	Modular timing relay
Discrete output type	Relay
Device short name	RE22
Nominal output current	8 A

### Complementary

Contacts type and composition	1 C/O timed or instantaneous contact 1 C/O timed contact
Width	22.5 mm
Width pitch dimension	22.5 mm
Time delay type	A Ac At B Bw C D Di 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
Control type	Rotary knob on front panel
[Us] rated supply voltage	12 V AC/DC
Voltage range	0.9...1.2 Us
Supply frequency	50...60 Hz (+/- 5 %)
Connections - terminals	Screw terminals : 2 x 2.5 mm <sup>2</sup> without cable end Screw terminals : 2 x 1.5 mm <sup>2</sup> 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
Control signal pulse width	30 ms 100 ms (under load)
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Reset time	120 ms (on de-energisation)
Immunity to microbreaks	> 10 ms
Power consumption in VA	1.2 VA at 12 V AC

Power consumption in W	0.5 W at 12 V DC
Breaking capacity	2000 VA
Minimum switching current	10 mA 5 V
Maximum switching current	8 mA
Maximum switching voltage	250 V
Electrical durability	100000 cycles for 8 A at 250 V AC for resistive load
Mechanical durability	10000000 cycles
[Uimp] rated impulse withstand voltage	5 kV conforming to IEC 61812-1 5 kV for 1.2...50 µs conforming to IEC 60664-1
Power on delay	< 100 ms
Mounting position	Any position in relation to normal vertical mounting plane
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Local signalling	Yellow LED for relay energised Green LED (steady) for power ON Green LED (flashing) for timing in progress
Product weight	90.55 kg

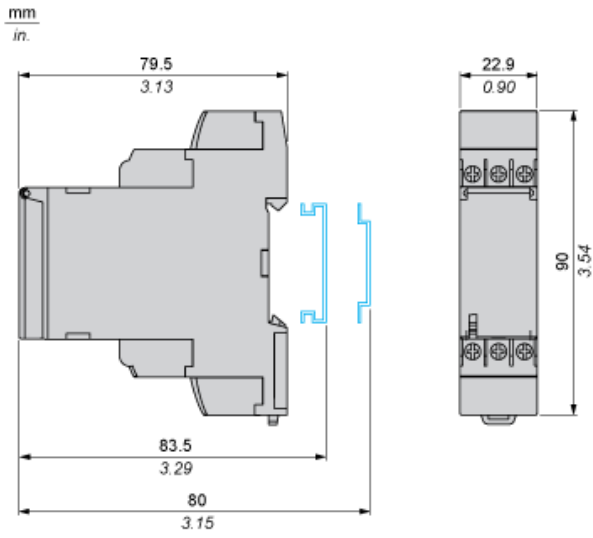
## Environment

Dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1
Standards	EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4 IEC 61812-1
Directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive
Product certifications	CCC CE CSA CULus GL RCM EAC China ROHS
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-30...60 °C
IP degree of protection	IP50 (front face) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP20 (terminal block) 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	Radiated radio-frequency electromagnetic field immunity test (test level: 10 V, level 3 - 0.15...80 MHz) conforming to IEC 61000-4-6 Surge immunity test (test level: 2 kV, level 3 - common mode) conforming to IEC 61000-4-5 Surge immunity test (test level: 1 kV, level 3 - differential mode) conforming to IEC 61000-4-5 Fast transients immunity test (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4 Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) conforming to IEC 61000-4-4 Electromagnetic field immunity test (test level: 10 V/m, level 3 - 80 MHz to 1 GHz) conforming to IEC 61000-4-3 Electrostatic discharge immunity test (test level: 8 kV, level 3 - air discharge) conforming to EN/IEC 61000-4-2 Electrostatic discharge immunity test (test level: 6 kV, level 3 - contact discharge) conforming to EN/IEC 61000-4-2
Immunity to voltage dips	100 % / 20 ms conforming to IEC 61000-4-11 30 % / 500 ms conforming to IEC 61000-4-11
Disturbance radiated/conducted	Class B conforming to EN 55022

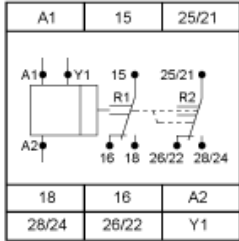
## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1416 - <a href="#">Schneider Electric declaration of conformity</a>
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available <a href="#">Download Product Environmental</a>
Product end of life instructions	Available <a href="#">Download End Of Life Manual</a>

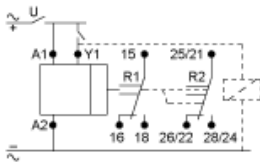
Dimensions



Internal Wiring Diagram



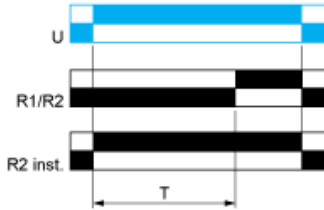
Wiring Diagram



Function A : Power on Delay Relay

Description

The timing period T begins on energization. After timing, the output(s) relay close(s).



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

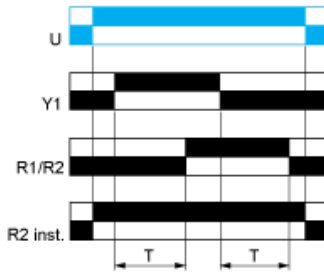
Function Ac : On- and Off-Delay Relay with Control Signal

Description

After power-up, closing of the control contact Y1 causes the timing period T to start (timing can be interrupted by operating the Gate control contact G). At the end of this timing period, the relay closes.

When control contact Y1 re-opens, the timing T starts. At the end of this timing period T

At the end of this timing period T, the output reverts to its initial position (timing can be interrupted by operating the Gate control contact G).

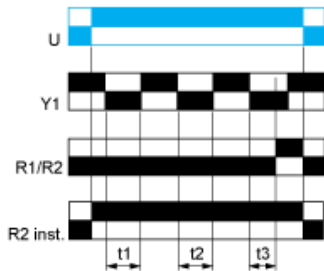


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

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

Description

After power-up, the first opening of control contact Y1 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.

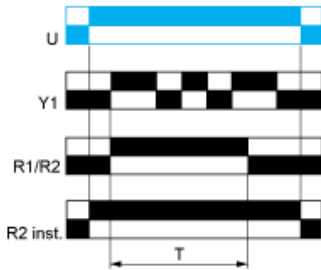


$T = t_1 + t_2 + t_3$

Function B : Interval Relay with Control Signal

Description

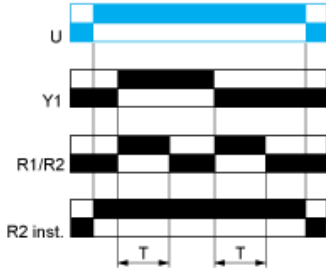
After power-up, pulsing or maintaining control contact Y1 starts the timing T. The output relay closes for the duration of the timing period T then reverts to its initial state.



### Function Bw : Double Interval Relay with Control Signal

#### Description

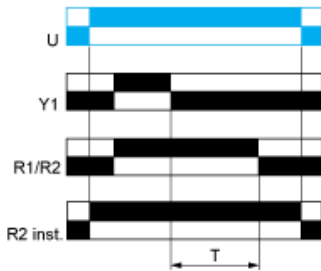
On closing and opening of control contact Y1, the output relay closes for the duration of the timing period T.



### Function C : Off-Delay Relay with Control Signal

#### Description

After power-up and closing of the control contact Y1, the output relay closes. When control contact Y1 re-opens, timing T starts. At the end of the timing period, the output(s) relay revert(s) to its/their initial state.

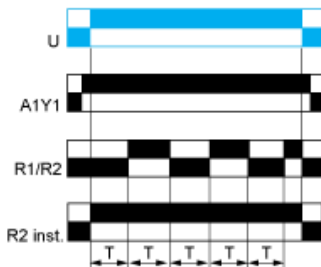


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

### Function D : Symmetrical Flasher Relay (Starting Pulse Off)

#### Description

Repetitive cycle with two timing periods T of equal duration, with output(s) relay changing state at the end of each timing period T.



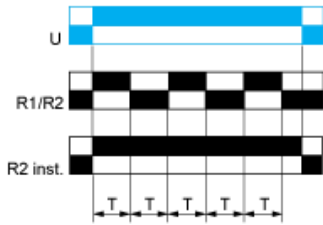
Before power-up Y1 should be permanently connected to A1.

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

### Function D : Symmetrical Flasher Relay (Starting Pulse On)

#### Description

Repetitive cycle with two timing periods T of equal duration, with output(s) relay changing state at the end of each timing period T.

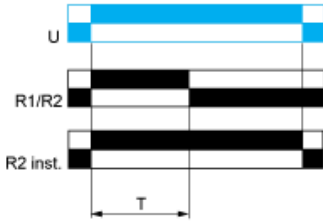


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

## Function H : Interval Relay

### Description

On energization of the relay, timing period T starts and the output(s) relay close(s). At the end of the timing period T, the output(s) relay revert(s) to its/their initial state



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

### Legend

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

Y1 : Control contact

R1/ 2 timed outputs

R2 :

R2 The second output is instantaneous if the right position is selected

inst. :

T : Timing period

U : Supply

## Function Ht : Interval Relay (Summation) with Control Signal

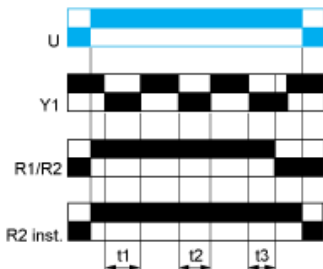
### Description

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

Pulsing or maintaining control contact Y1 will again close the output relay.

Timing T is only active when control contact Y1 is released and so the output relay will not revert to its initial state until after a time  $t_1 + t_2 + t_3$

The relay memories the total, cumulative opening time of control contact Y1 and, once the set time T is reached, the output relay reverts to its initial state.



$T = t_1 + t_2 + t_3$

### Legend

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

Y1 : Control contact

R1/ 2 timed outputs

R2 :

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

T : Timing period

U : Supply