# Product data sheet
## Characteristics

# RE22R2MWMR
## Interval Timing Relay - 0.05s…300h - 24… 240V AC/DC - 2C/O


### 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, cadmium free<br>1 C/O timed contact, cadmium free |
| Time delay type | W<br>Wt |
| Time delay range | 0.3...3 s<br>1...10 s<br>0.05...1 s<br>3...30 s<br>10...100 s<br>30...300 s<br>3...30 min<br>30...300 min<br>3...30 h<br>30...300 h |
| Control type | External potentiometer<br>Diagnostic button<br>Rotary knob |
| [Us] rated supply voltage | 24...240 V AC/DC at 50/60 Hz |
| Release input voltage | <= 2.4 V |
| Voltage range | 0.85...1.1 Us |
| Supply frequency | 50...60 Hz (+/- 5 %) |
| Connections - terminals | Screw terminals : 2 x 0.2...2 x 1.5 mm², AWG 24...AWG 16 flexible cable with cable end<br>Screw terminals : 1 x 0.2...1 x 2.5 mm², AWG 24...AWG 14 flexible cable with cable end<br>Screw terminals : 2 x 0.5...2 x 2.5 mm², AWG 20...AWG 14 solid cable without cable end<br>Screw terminals : 1 x 0.5...1 x 3.3 mm², AWG 20...AWG 12 solid cable without 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<br>100 ms (with load in parallel) |
| Insulation resistance | 100 MOhm at 500 V DC conforming to IEC 60664-1 |
| Recovery time | 120 ms (on de-energisation) |
| Immunity to microbreaks | <= 10 ms |
| Power consumption in VA | 3 VA at 240 V AC |

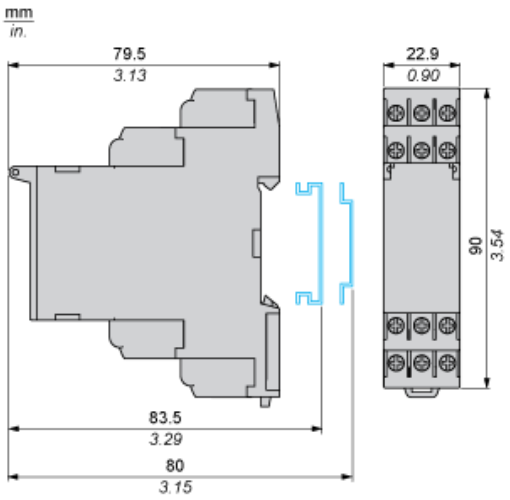
| | |
|---|---|
| Power consumption in W | 1.5 W at 240 V DC |
| Switching capacity in VA | 2000 VA |
| Minimum switching current | 10 mA 5 V DC |
| Maximum switching current | 8 A |
| Maximum switching voltage | 250 V AC |
| Electrical durability | 100000 cycles for 2 A at 24 V DC-1<br>100000 cycles for 8 A at 250 V AC-1 |
| Mechanical durability | 10000000 cycles |
| Rated impulse withstand voltage | 5 kV for 1.2...50 µs conforming to IEC 60664-1 |
| Power on delay | < 100 ms |
| Creepage distance | 4 kV/3 conforming to IEC 60664-1 |
| Overvoltage category | III conforming to IEC 60664-1 |
| Mounting position | Any position |
| Mounting support | 35 mm DIN rail conforming to EN/IEC 60715 |
| Status LED | Yellow LED (slow flashing) for timing in progress and output relay energised<br>Yellow LED (fast flashing) for timing in progress and output relay de-energised<br>Yellow LED (steady) for output relay energised<br>Green LED backlight (steady) for dial pointer indication |
| Product weight | 0.105 kg |

## Environment

| | |
|---|---|
| Dielectric strength | 2.5 kV for 1 mA/1 minute at 50 Hz between relay output and power supply with basic insulation conforming to IEC 61812-1 |
| Standards | IEC 61812-1<br>UL 508 |
| Directives | 2004/108/EC - electromagnetic compatibility<br>2006/95/EC - low voltage directive |
| Product certifications | CCC<br>CE<br>CSA<br>GL<br>UL<br>RCM<br>EAC<br>China RoHS |
| Ambient air temperature for operation | -20...60 °C |
| Ambient air temperature for storage | -40...70 °C |
| IP degree of protection | IP50 (front panel) conforming to IEC 60529<br>IP20 (terminals) conforming to IEC 60529<br>IP40 (housing) conforming to IEC 60529 |
| Pollution degree | 3 conforming to IEC 60664-1 |
| Vibration resistance | 20 m/s² (f = 10...150 Hz) conforming to IEC 60068-2-6 |
| Shock resistance | 5 gn (in operation) (duration = 11 ms) conforming to IEC 60068-2-27<br>15 gn (not operating) (duration = 11 ms) conforming to IEC 60068-2-27 |
| Relative humidity | 95 % at 25...55 °C |
| Electromagnetic compatibility | Immunity to microbreaks and voltage drops (test level: 100 % - 20 ms) conforming to IEC 61000-4-11<br>Immunity to microbreaks and voltage drops (test level: 30 % - 500 ms) conforming to IEC 61000-4-11<br>Fast transient bursts (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4<br>Conducted RF disturbances (test level: 10 V, level 3 - 0.15...80 MHz) conforming to IEC 61000-4-6<br>Radiated radio-frequency electromagnetic field immunity test (test level: 10 V/m, level 3 - 80 MHz...1 GHz) conforming to IEC 61000-4-3<br>Electrostatic discharge (test level: 8 kV, level 3 - air discharge) conforming to IEC 61000-4-2<br>Electrostatic discharge (test level: 6 kV, level 3 - contact discharge) conforming to IEC 61000-4-2<br>Surge immunity test (test level: 2 kV, level 3 - common mode) conforming to IEC 61000-4-5<br>Surge immunity test (test level: 1 kV, level 3 - differential mode) conforming to IEC 61000-4-5<br>Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) conforming to IEC 61000-4-4 |

RE22R2MWMR

## Dimensions



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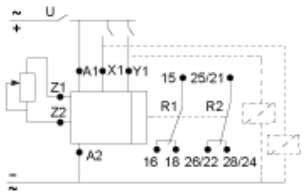
## Wiring Diagram

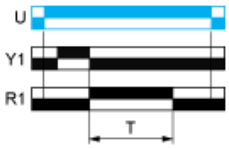


## Function W: Interval Relay with Control Signal Off

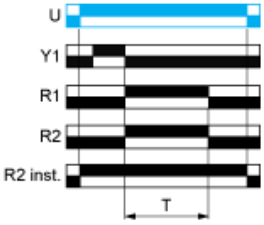
### Description

After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.At the end of the timing period, the output(s) R revert(s) to its/their initial state.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

### Function: 1 Output




### Function: 2 Outputs

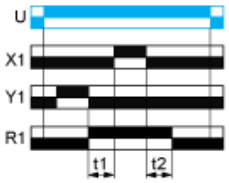



## Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

### Description

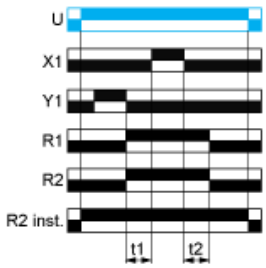
After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.Timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

### Function: 1 Output




T = t1 + t2 +…

### Function: 2 Outputs




T = t1 + t2 +…

### Legend

Relay de-energised

Relay energised

Output open

Output closed

U Supply
-
T Timing period
-
R1/ 2 timed outputs
R2
-
R2 The second output is instantaneous if the right position is selected
inst.
-
X1 Pause / Summation control
-
Y1 Retrigger / Restart control
-