

RE22R1MAMR

multifunction relay, Harmony Timer Relays, 8A,
1 CO, 0.05s-300h, on delay, 24...240V AC
DC



Main

| | |
|---------------------------|----------------------|
| Range of Product | Harmony Timer Relays |
| 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 contact, cadmium free |
| Time delay type | Power on-delay |
| Time delay range | 3...30 h 0.05...1 s 30...300 s 3...30 min 3...30 s 30...300 h 30...300 min 0.3...3 s 10...100 s 1...10 s |
| Control type | Rotary knob Diagnostic button Potentiometer external |
| [Us] rated supply voltage | 24...240 V AC/DC 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, 1 x 0.5...1 x 3.3 mm ² AWG 20...AWG 12) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) flexible with cable end |
| Tightening torque | 5.3...8.9 lbf.in (0.6...1 N.m) IEC 60947-1 |
| Housing material | Self-extinguishing |
| Repeat accuracy | +/- 0.5 % IEC 61812-1 |
| Temperature Drift | +/- 0.05 %/°C |
| Voltage drift | +/- 0.2 %/V |
| Setting accuracy of time delay | +/- 10 % of full scale 25 °C IEC 61812-1 |
| Control signal pulse width | 100 Ms with load in parallel 30 ms |
| Insulation resistance | 100 MOhm 500 V DC IEC 60664-1 |
| Recovery time | 120 ms on de-energisation |
| Immunity to microbreaks | 10 ms |
| Power consumption in VA | 3 VA 240 V AC |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

| | |
|---------------------------------|---|
| Power consumption in W | 1.5 W 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, 8 A at 250 V, AC-1 100000 cycles, 2 A at 24 V, DC-1 |
| Mechanical durability | 10000000 cycles |
| Rated impulse withstand voltage | 5 kV 1.2...50 µs IEC 60664-1 |
| Power on delay | 100 ms |
| Creepage distance | 4 kV/3 IEC 60664-1 |
| Overvoltage category | III IEC 60664-1 |
| Safety reliability data | B10d = 190000 MTTFd = 205.4 years |
| Mounting position | Any position |
| Mounting support | 35 mm DIN rail conforming to IEC 60715 |
| Status LED | Green LED backlight steady)dial pointer indication Yellow LED steady)output relay energised Yellow LED fast flashing)timing in progress and output relay de-energised Yellow LED slow flashing)timing in progress and output relay energised |
| Function available | A- Power on-delay relay-1 C/O At- Power on-delay relay w/ pause/summation (Y1)-1 C/O Aw- Power on-delay relay w/ retrigger/restart-1 C/O |
| Width | 0.9 in (22.5 mm) |
| Net Weight | 0.2 lb(US) (0.1 kg) |
| Control Type | With test button |
| Number of functions | 3 |

Environment

| | |
|---------------------------------------|--|
| Dielectric strength | 2.5 kV 1 mA/1 minute 50 Hz between relay output and power supply basic insulation IEC 61812-1 |
| Standards | UL 508 IEC 61812-1 |
| Directives | 2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility |
| Product Certifications | EAC[RETURN]CSA[RETURN]RCM[RETURN]UL[RETURN]GL[RETURN]CE[RETURN]CCC |
| Ambient Air Temperature for Operation | -4...140 °F (-20...60 °C) |
| Ambient Air Temperature for Storage | -40...158 °F (-40...70 °C) |
| IP degree of protection | IP40 housing: conforming to IEC 60529 IP50 front face: conforming to IEC 60529 IP20 terminals: conforming to IEC 60529 |
| Pollution degree | 3 IEC 60664-1 |
| Vibration resistance | 20 m/s ² 10...150 Hz)IEC 60068-2-6 |
| Shock resistance | 15 gn not operating 11 ms IEC 60068-2-27 5 gn in operation 11 ms IEC 60068-2-27 |
| Relative humidity | 95 % 77...131 °F (25...55 °C) |
| Electromagnetic compatibility | Fast transients immunity test - test level: 1 kV level 3 (capacitive connecting clip) conforming to IEC 61000-4-4 Surge immunity test - test level: 1 kV level 3 (differential mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 3 (common mode) conforming to IEC 61000-4-5 Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 (80 MHz...1 GHz) conforming to IEC 61000-4-3 Conducted RF disturbances - test level: 10 V level 3 (0.15...80 MHz) conforming to IEC 61000-4-6 Fast transient bursts - test level: 2 kV level 3 (direct contact) conforming to IEC 61000-4-4 Immunity to microbreaks and voltage drops - test level: 30 % (500 ms) conforming to IEC 61000-4-11 Immunity to microbreaks and voltage drops - test level: 100 % (20 ms) conforming to IEC 61000-4-11 |

Ordering and shipping details

| | |
|-------------------|---------------|
| Category | US10CP222376 |
| Discount Schedule | OCP2 |
| GTIN | 3606480792427 |
| Returnability | Yes |
| Country of origin | ID |

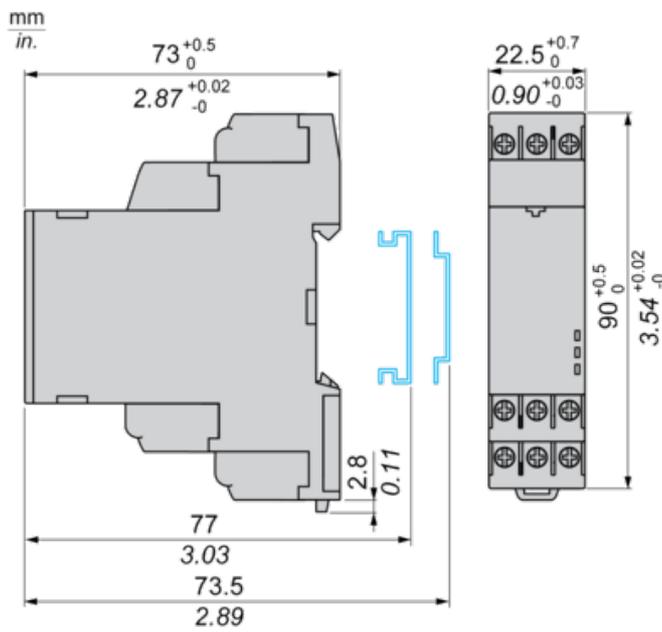
Packing Units

| | |
|------------------------------|--------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 3.2 in (8.2 cm) |
| Package 1 Width | 3.7 in (9.5 cm) |
| Package 1 Length | 1.02 in (2.6 cm) |
| Package 1 Weight | 3.5 oz (99.0 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 40 |
| Package 2 Height | 5.9 in (15.0 cm) |
| Package 2 Width | 11.8 in (30.0 cm) |
| Package 2 Length | 15.7 in (40.0 cm) |
| Package 2 Weight | 9.733 lb(US) (4.415 kg) |
| Unit Type of Package 3 | PAL |
| Number of Units in Package 3 | 640 |
| Package 3 Height | 19.7 in (50.0 cm) |
| Package 3 Width | 23.6 in (60.0 cm) |
| Package 3 Length | 31.5 in (80.0 cm) |
| Package 3 Weight | 189.99 lb(US) (86.18 kg) |

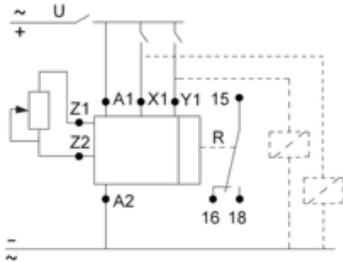
Offer Sustainability

| | |
|----------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Dimensions



Wiring Diagram



Function A: Power On-Delay

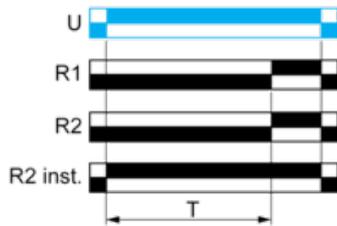
Description

On energisation of power supply, the timing period T starts. After timing, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

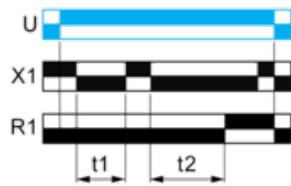


Function At: Power On-Delay with Pause / Summation Control

Description

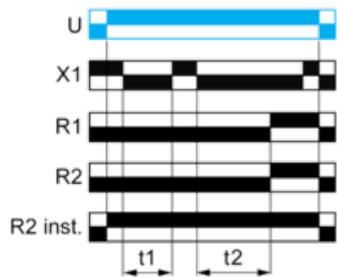
On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output with Pause / Summation Control



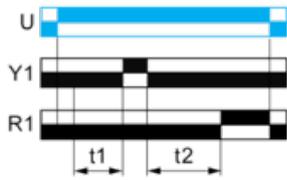
$$T = t1 + t2 + \dots$$

Function: 2 Outputs with Pause / Summation Control



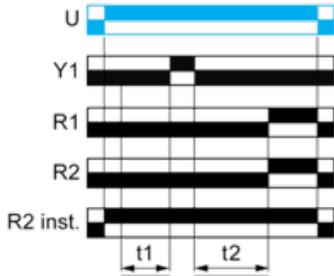
$$T = t1 + t2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



$$T = t1 + t2 + \dots$$

Function: 2 Outputs with Retrigger / Restart Control



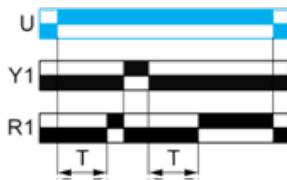
$$T = t1 + t2 + \dots$$

Function Aw : Power On-Delay With Retrigger / Restart Control

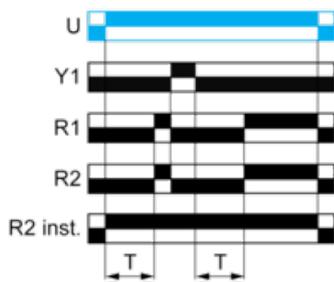
Description

On energisation of power supply, the timing period T starts. At the end of the timing period T, the output(s) R close(s). Energization of Y1 makes the output(s) R open(s). Deenergization of Y1 restarts timing period T. At the end of timing period T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST")

Function: 1 Output



Function: 2 Outputs



Legend

Relay de-energised

Relay energised

Output open

Output closed

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