

RE22R1MLMR

multifunction relay, Harmony Timer Relays, 8A,
1 CO, 0.05sâ€¦300h, asymmetrical flashing,
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 | Asymmetrical flashing |
| Time delay range | 0.05...1 s 30...300 min 30...300 h 30...300 s 3...30 h 0.3...3 s 3...30 min 3...30 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 | MTTFd = 194 years B10d = 180000 |
| 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 | L- Asymmetrical flashing relay (starting pulse-off)-1 C/O Lt- Asymmetrical flashing relay (starting pulse-off) w/ pause/summation (Y1)-1 C/O Li- Asymmetrical flashing relay (starting pulse-on)-1 C/O Lit- Asymmetrical flashing relay (starting pulse-on) w/ pause/summation (Y1)-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 | 4 |

Environment

| | |
|---------------------------------------|--|
| Dielectric strength | 2.5 kV 1 mA/1 minute 50 Hz between relay output and power supply basic insulation IEC 61812-1 |
| Standards | IEC 61812-1 UL 508 |
| Directives | 2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive |
| Product Certifications | EAC[RETURN]UL[RETURN]GL[RETURN]CSA[RETURN]RCM[RETURN]CCC[RETURN]CE |
| 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 |

| | |
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| Relative humidity | 95 % 77...131 °F (25...55 °C) |
| Electromagnetic compatibility | <p>Fast transients immunity test - test level: 1 kV level 3 (capacitive connecting clip) conforming to IEC 61000-4-4</p> <p>Surge immunity test - test level: 1 kV level 3 (differential mode) conforming to IEC 61000-4-5</p> <p>Surge immunity test - test level: 2 kV level 3 (common mode) conforming to IEC 61000-4-5</p> <p>Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2</p> <p>Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2</p> <p>Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 (80 MHz...1 GHz) conforming to IEC 61000-4-3</p> <p>Conducted RF disturbances - test level: 10 V level 3 (0.15...80 MHz) conforming to IEC 61000-4-6</p> <p>Fast transient bursts - test level: 2 kV level 3 (direct contact) conforming to IEC 61000-4-4</p> <p>Immunity to microbreaks and voltage drops - test level: 30 % (500 ms) conforming to IEC 61000-4-11</p> <p>Immunity to microbreaks and voltage drops - test level: 100 % (20 ms) conforming to IEC 61000-4-11</p> |

Ordering and shipping details

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|-------------------|---------------|
| Category | US10CP222376 |
| Discount Schedule | 0CP2 |
| GTIN | 3606480792441 |
| Returnability | Yes |
| Country of origin | IN |

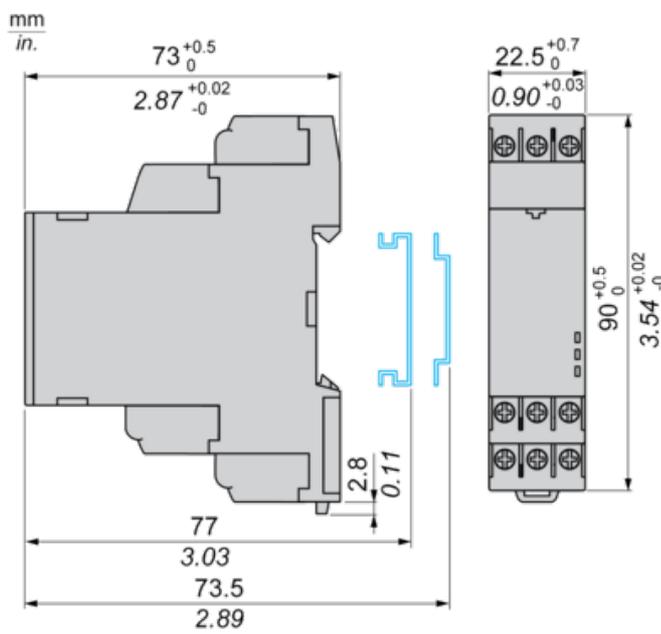
Packing Units

| | |
|------------------------------|--------------------------|
| 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 | 3.8 oz (107.0 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 | 10.439 lb(US) (4.735 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) |

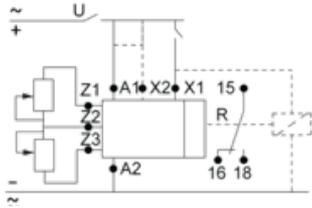
Offer Sustainability

| | |
|----------------------------|---|
| 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 |

Dimensions



Wiring Diagram

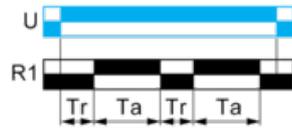


Function L: Asymmetrical Flashing Relay (Starting Pulse Off)

Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T_r then change(s) to output(s) R close(s) for the another timing duration T_a . This cycle is repeated indefinitely until power supply removal.

Function: 1 Output

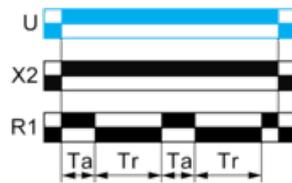


Function Li: Asymmetrical Flashing Relay (Starting Pulse On)

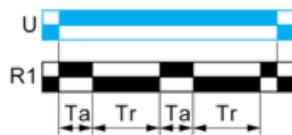
Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T_a then change(s) to its/their initial state for timing duration T_r . This cycle is repeated indefinitely until power supply removal. Specially for RE22R1MLMR, this Li function can only be initiated by energizing X2 permanently.

Function: 1 Output with Function Selection



Function: 1 Output

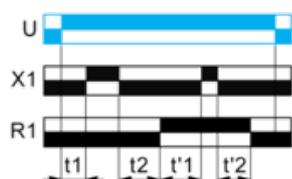


Function Lt: Asymmetrical Flashing Relay (Starting Pulse Off) & with Pause / Summation Control

Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T_r and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_r , then changes to output(s) R close(s). The output(s) R close state will remain for the same timing duration T_a and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_a , the output(s) R revert(s) to its/their initial state. This cycle is repeated indefinitely until power supply removal.

Function: 1 Output



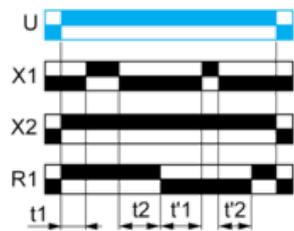
$$T = t_1 + t_2 + \dots$$

$$T = t'_1 + t'_2 + \dots$$

Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T_a and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_a , the output(s) R revert(s) to its/their initial state. The output(s) R at initial state will remain for timing duration T_r the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_r , then changes to output(s) R close(s). This cycle is repeated indefinitely until power supply removal. Specially for RE22R1MLMR, this Li function can only be initiated by energizing X2 permanently

Function: 1 Output with Function Selection



$$T = t_1 + t_2 + \dots$$

$$T = t'_1 + t'_2 + \dots$$

Legend

Relay de-energised

Relay energised

Output open

Output closed

| | |
|---------|---------------------------|
| U - | Supply |
| R1 - | Timed output |
| T_a - | Adjustable On-delay |
| T_r - | Adjustable Off-delay |
| X1 - | Pause / Summation control |
| X2 - | Function Selection |