

Product data sheet

Characteristics

RE22R1MLMR

Harmony, Modular timing relay, 8 A, 1 CO, 0.05 s...300 h, asymmetrical flashing, 24...240 V AC/DC

Product availability : Stock - Normally stocked in distribution facility



Price* : 88.90 USD



Main

| | |
|---------------------------|----------------------|
| Range of product | Harmony Timer Relays |
| Product or component type | Multifunction 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 |

* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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|---------------------------------|---|
| | 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 | 5.31...8.85 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 |
| 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 EN/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 |
| Width | 0.89 in (22.5 mm) |
| Net Weight | 0.22 lb(US) (0.1 kg) |

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 UL GL CSA RCM CCC 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 | Housing IP40 IEC 60529 Front face IP50 IEC 60529 Terminals IP20 IEC 60529 |
| Pollution degree | 3 conforming to 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 1 kV capacitive connecting clip)level 3 IEC 61000-4-4 Surge immunity test 1 kV differential mode)level 3 IEC 61000-4-5 Surge immunity test 2 kV common mode)level 3 IEC 61000-4-5 Electrostatic discharge 6 kV contact discharge)level 3 IEC 61000-4-2 Electrostatic discharge 8 kV air discharge)level 3 IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test 10 V/m 80 MHz...1 GHz)level 3 IEC 61000-4-3 Conducted RF disturbances 10 V 0.15...80 MHz)level 3 IEC 61000-4-6 Fast transient bursts 2 kV direct contact)level 3 IEC 61000-4-4 Immunity to microbreaks and voltage drops 30 % 500 ms) IEC 61000-4-11 Immunity to microbreaks and voltage drops 100 % 20 ms) IEC 61000-4-11 |

Ordering and shipping details

| | |
|-----------------------|---------------------------------|
| Category | 22376 - RELAYS-MEASUREMENT(RM4) |
| Discount Schedule | CP2 |
| GTIN | 03606480792441 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 3.77 oz (107 g) |
| Returnability | Yes |
| Country of origin | ID |

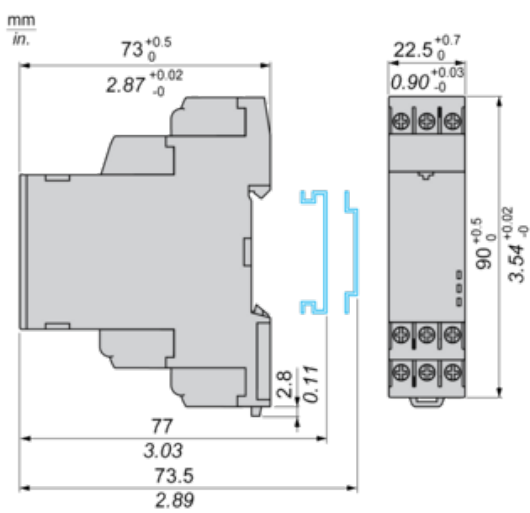
Packing Units

| | |
|------------------------|------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 3.23 in (8.2 cm) |
| Package 1 width | 3.74 in (9.5 cm) |
| Package 1 Length | 1.02 in (2.6 cm) |

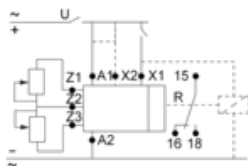
Offer Sustainability

| | |
|----------------------------|---|
| 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) EU RoHS Declaration |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |

Dimensions



Wiring Diagram

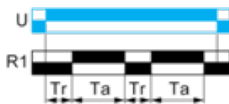


Function L: Asymmetrical Flashing Relay (Starting Pulse Off)

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

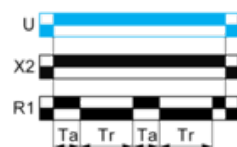


Function Li: Asymmetrical Flashing Relay (Starting Pulse On)

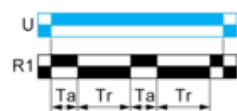
Description

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

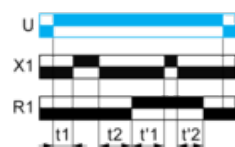


Function Lt: Asymmetrical Flashing Relay (Starting Pulse Off) & with Pause / Summation Control

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



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

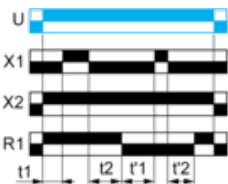
$$T = t'1 + t'2 + \dots$$

Function Lit: Asymmetrical Flashing Relay (Starting Pulse On) & Pause / Summation Control

Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration Ta and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value Ta, the output(s) R revert(s) to its/their initial state. The output(s) R at initial state will remain for timing duration Tr the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value Tr, 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 |
| Ta - | Adjustable On-delay |
| Tr - | Adjustable Off-delay |
| X1 - | Pause / Summation control |
| X2 - | Function Selection |