Product data sheet Characteristics

RE22R1HMR

dual function relay, Harmony Timer Relays, 8A, 1CO, 0.05s...300h, interval relay, 24...240V AC DC





Main

| Range of Product | Harmony Timer Relays |
|------------------------------|----------------------|
| Product or Component Type | Dual function 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 | Interval | |
| Time delay range | 330 s 0.33 s 30300 s 30300 h 0.051 s 110 s 330 min 30300 min 330 h 10100 s | |
| Control type | Rotary knob Diagnostic button | |
| [Us] rated supply voltage | 24240 V AC/DC 50/60 Hz | |
| Release input voltage | <= 2.4 V | |
| Voltage range | 0.851.1 Us | |
| Supply frequency | 5060 Hz +/- 5 % | |
| Connections - terminals | Screw terminals, 1 x 0.51 x 3.3 mm² AWG 20AWG 12) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm² AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm² AWG 24AWG 14) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² AWG 24AWG 16) flexible with cable end | |
| Tightening torque | 5.318.85 lbf.in (0.61 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 1.250 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 = 280000 MTTFd = 308.2 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 | |
| Width | 0.89 in (22.5 mm) | |
| Net Weight | 0.22 lb(US) (0.1 kg) | |

Environment

| 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 | CE[RETURN]EAC[RETURN]CSA[RETURN]RCM[RETURN]CCC[RETURN]GL[RETU | |
| Ambient Air Temperature for Operation | -4140 °F (-2060 °C) | |
| Ambient Air Temperature for Storage | -40158 °F (-4070 °C) | |
| IP degree of protection Housing IP40 IEC 60529 Front face IP50 IEC 60529 Terminals IP20 IEC 60529 | | |
| Pollution degree | 3 IEC 60664-1 | |
| Vibration resistance | 20 m/s² 10150 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 % 77131 °F (2555 °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 MHz1 GHz) conforming to IEC 61000-4-3 Conducted RF disturbances - test level: 10 V level 3 (0.1580 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 | 22376-RELAYS-MEASUREMENT(RM4) |
|-------------------|-------------------------------|
| Discount Schedule | CP2 |
| GTIN | 3606480792373 |
| Returnability | No |
| Country of origin | ID |

Packing Units

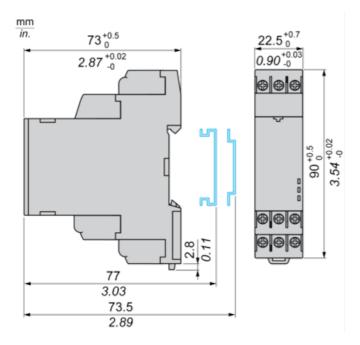
| Unit Type of Package 1 | PCE |
|------------------------------|--------------------------|
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.22 in (3.1 cm) |
| Package 1 Width | 3.50 in (8.9 cm) |
| Package 1 Length | 3.82 in (9.7 cm) |
| Package 1 Weight | 3.18 oz (90.1 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 40 |
| Package 2 Height | 5.91 in (15 cm) |
| Package 2 Width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| Package 2 Weight | 9.12 lb(US) (4.135 kg) |
| Unit Type of Package 3 | PAL |
| Number of Units in Package 3 | 640 |
| Package 3 Height | 19.69 in (50.0 cm) |
| Package 3 Width | 23.62 in (60.0 cm) |
| Package 3 Length | 31.50 in (80.0 cm) |
| Package 3 Weight | 161.78 lb(US) (73.38 kg) |

Offer Sustainability

| 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 | |
|---|--|
| EACh Declaration | |
| Pro-active compliance (Product out of EU RoHS legal scope) | |
| Yes | |
| thina RoHS Declaration | |
| es | |
| Product Environmental Profile | |
| e | |
| | |

RE22R1HMR

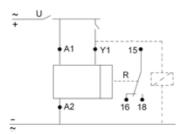
Dimensions



Product data sheet Connections and Schema

RE22R1HMR

Wiring Diagram



Product data sheet Technical Description

RE22R1HMR

Function H: Interval Relay

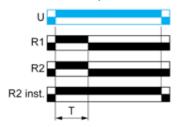
Description

On energisation of power supply, output(s) R close(s) and timing period T starts. At the end of the timing period 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



Function: 2 Outputs

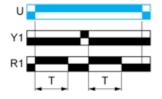


Function Hw: Interval Relay & with Retrigger / Restart Control

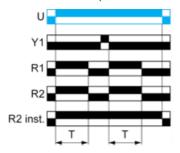
Description

On energisation of power supply, output(s) R close(s) and timing period T starts. At the end of the timing period T, the output(s) R revert(s) to its/their initial state. At any state of the output(s) R when Y1 energizes followed by deenergizes, the output(s) R close(s) then restarts the same operation as described at the beginning. 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 |
|---------|--|
| Т- | Timing period |
| R1/R2 - | 2 timed outputs |
| R2 inst | The second output is instantaneous if the right position is selected |
| Y1 - | Retrigger / Restart control |