Product datasheet

Specification





multifunction relay, Harmony Timer Relays, 8A, 2CO, 0.1s...100h, bistable, 24V DC or 24...240V AC DC

RE22R2MXMU

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

| <u> </u> | |
|--------------------------------|---|
| Contacts type and composition | 1 C/O timed contact 1 C/O timed or instantaneous contact |
| time delay type | Pulse delay Safe-guard Bistable Interval |
| time delay range | 0.11 s 110 h 110 s 660 min 10100 h 660 s 110 min |
| Control type | Rotary knob front panel |
| [Us] rated supply voltage | 24240 V AC 24 V DC |
| Voltage range | 0.851.1 Us |
| Supply frequency | 5060 Hz +/- 5 % |
| Connections - terminals | Screw terminals, 2 x 1.5 mm² with cable end Screw terminals, 2 x 2.5 mm² without cable end |
| Tightening torque | 0.61 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 100 ms under load |
| 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 | 50 VA at 240 V AC |
|---------------------------------|---|
| Power consumption in W | 0.7 W at 24 V DC |
| Breaking capacity | 2000 VA |
| Minimum switching current | 10 mA at 5 V |
| Maximum switching current | 8 mA |
| Maximum switching voltage | 250 V |
| Electrical durability | 100000 cycles for resistive load, 8 A at 250 V, AC |
| Mechanical durability | 10000000 cycles |
| Rated impulse withstand voltage | 5 kV for 1.250 μs conforming to IEC 60664-1 5 kV conforming to IEC 61812-1 |
| Power on delay | 100 ms |
| Safety reliability data | B10d = 170000 MTTFd = 182.6 years |
| Mounting position | Any position in relation to normal vertical mounting plane |
| Mounting support | 35 mm DIN rail conforming to IEC 60715 |
| Status LED | LED green (flashing) for timing in progress LED green (steady) for power ON LED yellow for relay energised |
| Function available | Ad- Pulse delayed relay w/ control signal-2 C/O Ah- Pulse delayed relay (single cycle) w/ control signal-2 C/O N- Safe-guard relay-2 C/O O- Delayed Safe-guard relay-2 C/O P- Pulse delayed relay w/ fixed pulse length-2 C/O Pt- Pulse delayed relay w/ fixed pulse length and pause/summation-2 C/O Tl- Bistable relay w/ control signal on-2 C/O Tt- Retriggerable bistable relay w/ control signal on-2 C/O W- Interval relay w/ control signal off-2 C/O |
| Width | 22.5 mm |
| Net weight | 0.09 kg |
| Control type | With test button |
| Number of functions | 9 |

Environment

| Dielectric strength | 2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1 |
|---------------------------------------|---|
| Standards | IEC 61812-1 |
| | IEC 61000-6-1 |
| | IEC 61000-6-3 |
| | IEC 61000-6-4 |
| | IEC 61000-6-2 |
| Directives | 2006/95/EC - low voltage directive |
| | 2004/108/EC - electromagnetic compatibility |
| Product certifications | CSA |
| | CCC |
| | GL |
| | cULus |
| | EAC |
| | CE |
| | RCM |
| Ambient air temperature for operation | -2060 °C |
| ambient air temperature for storage | -3060 °C |
| IP degree of protection | IP40 housing: conforming to IEC 60529 |
| | IP50 front face: conforming to IEC 60529 |
| | IP20 terminal block: conforming to IEC 60529 |

| Vibration resistance | 20 m/s² (f= 10150 Hz) conforming to IEC 60068-2-6 |
|-------------------------------|---|
| Shock resistance | 15 gn for 11 ms conforming to IEC 60068-2-27 |
| Relative humidity | 93 %, without condensation conforming to IEC 60068-2-30 |
| Electromagnetic compatibility | Electrostatic discharge immunity test - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge immunity test - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Fast transients immunity test - test level: 1 kV level 3 (capacitive connecting clip) conforming to IEC 61000-4-4 Fast transients immunity test - test level: 2 kV level 3 (direct contact) 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 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V level 3 (0.1580 MHz) conforming to IEC 61000-4-6 Electromagnetic field immunity test - test level: 10 V/m level 3 (80 MHz1 GHz) conforming to IEC 61000-4-3 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 |

Packing Units

| Unit Type of Package 1 | PCE |
|------------------------------|-----------|
| Number of Units in Package 1 | 1 |
| Package 1 Height | 9.0 cm |
| Package 1 Width | 2.25 cm |
| Package 1 Length | 7.95 cm |
| Package 1 Weight | 101.42 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 40 |
| Package 2 Height | 15.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 4.622 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 640 |
| Package 3 Height | 70.0 cm |
| Package 3 Width | 60.0 cm |
| Package 3 Length | 80.0 cm |
| Package 3 Weight | 90.709 kg |

Sustainability Green Premium*

Green PremiumTM **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

Well-being performance



Mercury Free



Rohs Exemption Information

Yes

Certifications & Standards

| Reach Regulation | REACh Declaration |
|--------------------------|--|
| Eu Rohs Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| China Rohs Regulation | China RoHS declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |

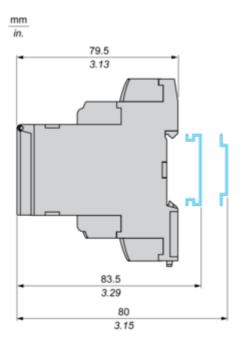
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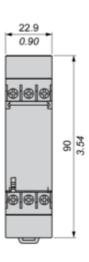
Product datasheet

RE22R2MXMU

Dimensions Drawings

Dimensions



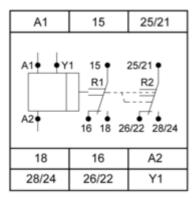


Product datasheet

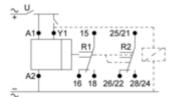
RE22R2MXMU

Connections and Schema

Internal Wiring Diagram



Wiring Diagram



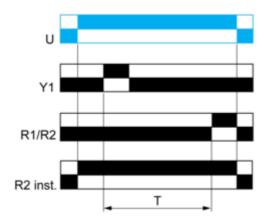
Technical Description

Function Ad: Pulse Delayed Relay with Control Signal

Description

After power-up, pulsing or maintaining of control contact Y1 starts the timing T. At the end of this timing period T, the output R closes.

The output relay will be reset the next time control contact Y1 is pulsed or maintained.



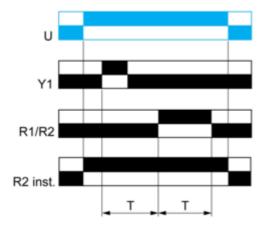
Function Ah: Pulse Delayed Relay (Single Cycle) with Control Signal

Description

After power-up, pulsing or maintaining of control contact Y1 starts the timing T. A single cycle then starts with 2 timing periods T of equal duration (start with output in rest position).

Output relay closes at the end of the first timing period T and reverts to its initial position at the end of the second timing period T.

Control contact Y1 must be reset in order to re-start the single flashing cycle.

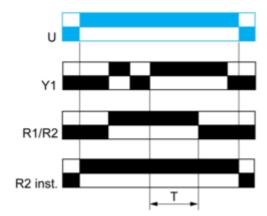


Function N : Retriggerable Interval Relay with Control Signal On

Description

After power-up and an initial control pulse C, the output relay closes.

If the interval between two control pulses C is greater than the set timing period T, timing elapses normally and the output relay closes at the end of the timing period. If the interval is not greater than the set timing period, the output relay remains closed until this condition is met.

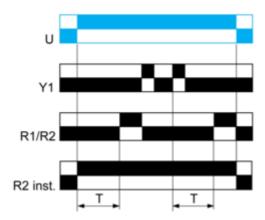


Function O: Retriggerable Interval Delayed Relay with Control Signal On

Description

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An initial timing period T begins on energization. At the end of this timing period, the output relay closes. As soon as there is a control pulse C, the output relay reverts to its initial state until the interval between two control pulses is less than the value of the set timing period T. Otherwise, the output relay closes at the end of the timing period T.



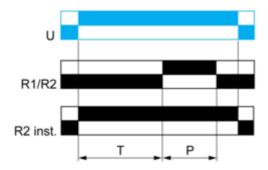
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Function P : Pulse Delayed Relay with Fixed Pulse Length

Description

The timing period T begins on energization.

At the end of this period, the output relay closes for a fixed time P.

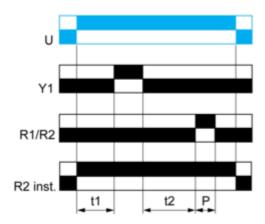


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Function Pt : Pulse Delayed Relay (Summation and Fixed Pulse Length) with Control Signal Off

Description

On energization, timing period T starts (it can be interrupted by operating the Gate control contact G). At the end of this period, the output relay closes for a fixed time P.

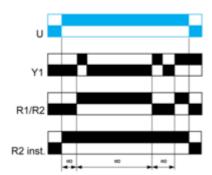


T = t1+t2 P = 500ms

Function TL : Bistable Relay with Control Signal On

Description

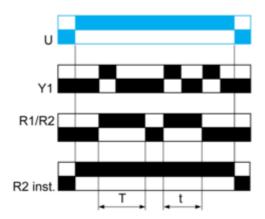
After power-up, pulsing or maintaining of control contact Y1 switches the output on. A second pulse on the control contact Y1 switches the output relay off.



Function Tt :Retriggerable Bistable Relay with Control Signal On

Description

After power-up, pulsing or maintaining of control contact Y1 switches output relay on and starts timing T. The output switches off at the end of the timing period T or following a second pulse on the control contact Y1.

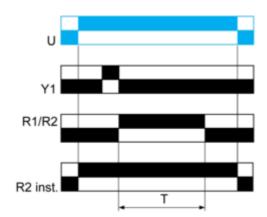


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

Function W :Interval Relay with Control Signal Off

Description

After power-up and opening of the control contact, the output(s) close(s) for a timing period T. At the end of this timing period the output(s) revert(s) to its/their initial state.



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

Relay de-energised Relay energised Output open Output closed Y1: Control contact R1/R2: 2 timed outputs R2 inst.: The second output is instantaneous if the right position is selected T: Timing period U: Supply