Product data sheet Characteristics

RE22R1HMR

Interval Timing Relay - 0.05s...300h - 24... 240V AC/DC - 1C/O



Main

Range of product	Zelio Time
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	H Hw
Time delay range	0.33 s 110 s 0.051 s 330 s 10100 s 30300 s 330 min 30300 min 330 h 30300 h
Control type	Diagnostic button Rotary knob
[Us] rated supply voltage	24240 V AC/DC at 50/60 Hz
Release input voltage	<= 2.4 V
Voltage range	0.851.1 Us
Supply frequency	5060 Hz (+/- 5 %)
Connections - terminals	Screw terminals: 2 x 0.22 x 1.5 mm², AWG 24AWG 16 flexible cable with cable end Screw terminals: 1 x 0.21 x 2.5 mm², AWG 24AWG 14 flexible cable with cable end Screw terminals: 2 x 0.52 x 2.5 mm², AWG 20AWG 14 solid cable without cable end Screw terminals: 1 x 0.51 x 3.3 mm², AWG 20AWG 12 solid cable 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 (with load in parallel)
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	3 VA at 240 V AC
Power consumption in W	1.5 W at 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 for 2 A at 24 V DC-1 100000 cycles for 8 A at 250 V AC-1
Mechanical durability	10000000 cycles
Rated impulse withstand voltage	5 kV for 1.250 µs conforming to IEC 60664-1
Power on delay	< 100 ms
Creepage distance	4 kV/3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Yellow LED (slow flashing) for timing in progress and output relay energised Yellow LED (fast flashing) for timing in progress and output relay de-energised Yellow LED (steady) for output relay energised Green LED backlight (steady) for dial pointer indication
Product weight	0.1 kg
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Environment Dielectric strength	2.5 bV for 4 mA/4 minute at 50 Hz between relativistic and a source of the
<u> </u>	2.5 kV for 1 mA/1 minute at 50 Hz between relay output and power supply with basic insulation conforming to IEC 61812-1
Standards	IEC 61812-1 UL 508
Directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive
	CE CSA GL UL RCM EAC China RoHS
Ambient air temperature for operation	-2060 °C
Ambient air temperature for storage	-4070 °C
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Vibration resistance	20 m/s² (f = 10150 Hz) conforming to IEC 60068-2-6
Shock resistance	5 gn (in operation) (duration = 11 ms) conforming to IEC 60068-2-27 15 gn (not operating) (duration = 11 ms) conforming to IEC 60068-2-27
Relative humidity	95 % at 2555 °C
Electromagnetic compatibility	Immunity to microbreaks and voltage drops (test level: 100 % - 20 ms) conforming to IEC 61000-4-11 Immunity to microbreaks and voltage drops (test level: 30 % - 500 ms) conforming to IEC 61000-4-11 Fast transient bursts (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4 Conducted RF disturbances (test level: 10 V, level 3 - 0.1580 MHz) conforming to IEC 61000-4-6 Radiated radio-frequency electromagnetic field immunity test (test level: 10 V/m, level 3 - 80 MHz1 GHz) conforming to IEC 61000-4-3 Electrostatic discharge (test level: 8 kV, level 3 - air discharge) conforming to IEC 61000-4-2 Electrostatic discharge (test level: 6 kV, level 3 - contact discharge) conforming to IEC 61000-4-2 Surge immunity test (test level: 2 kV, level 3 - common mode) conforming to IEC 61000-4-5 Surge immunity test (test level: 1 kV, level 3 - differential mode) conforming to
	IEC 61000-4-5 Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip

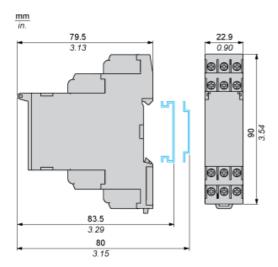


Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) conforming to IEC 61000-4-4

Product data sheet Dimensions Drawings

RE22R1HMR

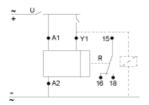
Dimensions



Product data sheet Connections and Schema

RE22R1HMR

Wiring Diagram



Product data sheet Technical Description

RE22R1HMR

Function H: Interval Relay

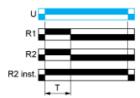
Description

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

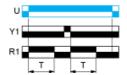


Function Hw: Interval Relay & with Retrigger / Restart Control

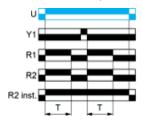
Description

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

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T Timing period

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R1/ 2 timed outputs

R2

 $\ensuremath{\mathsf{R2}}$ The second output is instantaneous if the right position is selected inst.

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Y1 Retrigger / Restart control

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