RE22R1HMR

Modular timing relay, Harmony, 8A, 1 CO, 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	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	100 Ms with load in parallel 30 ms
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 at 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 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	
Safety reliability data	B10d = 280000 MTTFd = 308.2 years	
Mounting position	Any position	
Mounting support	35 mm DIN rail conforming to EN/IEC 60715	
Status LED	LED backlight green (steady) for dial pointer indication LED yellow (steady) for output relay energised LED yellow (fast flashing) for timing in progress and output relay de-energised LED yellow (slow flashing) for timing in progress and output relay energised	
Width	22.5 mm	
Product weight	0.1 kg	
Environment Dielectric strength	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	UL 508 IEC 61812-1	
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility CE	
	EAC CSA RCM CCC GL UL	
Ambient air temperature for operation	-2060 °C	
Ambient air temperature for storage	-4070 °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 conforming to IEC 60664-1	
Vibration resistance	20 m/s² (f= 10150 Hz) conforming to IEC 60068-2-6	
Shock resistance	15 gn not operating for 11 ms conforming to IEC 60068-2-27 5 gn in operation for 11 ms conforming to IEC 60068-2-27	
Relative humidity	95 % at 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	

Packing Units

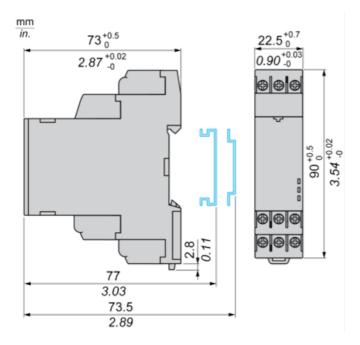
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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.2 cm
Package 1 Width	9.5 cm
Package 1 Length	2.6 cm
Package 1 Weight	92.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	4.135 kg
Unit Type of Package 3	PAL
Number of Units in Package 3	640
Package 3 Height	50.0 cm
Package 3 Width	60.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	73.38 kg

Offer Sustainability

Green Premium product	
☑REACh Declaration	
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Yes	
China RoHS Declaration	
₽¥Yes	
Product Environmental Profile	
☑ End Of Life Information	
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	

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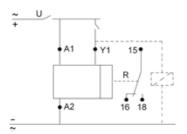
Dimensions



Product data sheet Connections and Schema

RE22R1HMR

Wiring Diagram



Product data sheet Technical Description

RE22R1HMR

Function H: Interval Relay

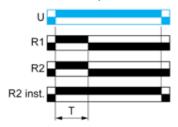
Description

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

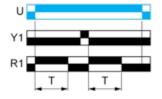


Function Hw: Interval Relay & with Retrigger / Restart Control

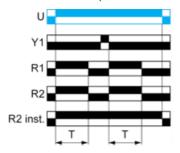
Description

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