

dual function relay, Harmony Timer Relays, 8A, 2CO, 0.05s...300h, interval relay, 24...240V AC DC

RE22R2HMR

### 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 1 C/O timed or instantaneous contact, cadmium free
Time Delay Type	Interval
Time Delay Range	110 s 330 h 10100 s 30300 s 0.051 s 330 min 0.33 s 330 s 30300 min 30300 min
Control Type	Rotary knob Diagnostic button Potentiometer external
[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 = 200000 MTTFd = 216.8 years	
Mounting Position	Any position	
Mounting Support	35 mm DIN rail conforming to 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	
Net Weight	0.105 kg	
Number Of Functions	2	

## **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	IEC 61812-1 UL 508	
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility	
Product Certifications	RCM CSA CE EAC UL CCC GL	
Ambient Air Temperature For Operation	-2060 °C	
Ambient Air Temperature For Storage	-4070 °C	
Ip Degree Of Protection	IP40 housing: conforming to IEC 60529 IP20 terminals: conforming to IEC 60529 IP50 front panel: conforming to IEC 60529	
Pollution Degree	3 conforming to IEC 60664-1	

20 m/s <sup>2</sup> (f= 10150 Hz) conforming to IEC 60068-2-6
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
95 % at 2555 °C
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**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	2.6 cm
Package 1 Width	8.2 cm
Package 1 Length	9.5 cm
Package 1 Weight	113.0 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	4.948 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	640
Package 3 Height	80.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	86.18 kg

## Sustainability

**Green Premium<sup>TM</sup> 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-CO<sub>2</sub> 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

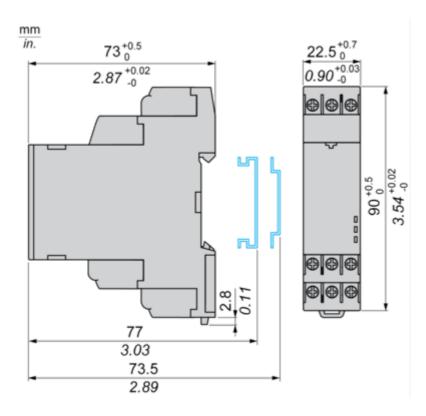
Yes

#### **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
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

#### **Dimensions Drawings**

#### **Dimensions**

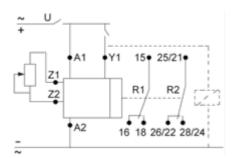


## **Product data sheet**

## RE22R2HMR

### Connections and Schema

### Wiring Diagram



### RE22R2HMR

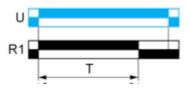
**Technical Description** 

### Function H: Interval Relay

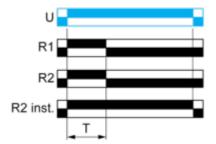
#### Description

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**

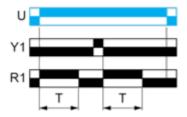


#### Function Hw: Interval Relay & with Retrigger / Restart Control

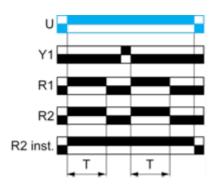
#### **Description**

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

