

dual function relay, Harmony Timer Relays, A, 1 CO, 0.05s…300h, power on delay, 24...240V AC DC

RE22R1AMR

# Main

Range of product	Harmony Timer Relays	
Discrete output type	Relay	
Product or component type	Modular timing 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	Power on-delay	
Time delay range	330 s	
	30300 s	
	10100 s	
	0.051 s	
	110 s	
	30300 h	
	30300 min	
	0.33 s	
	330 h	
	330 min	
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 mm <sup>2</sup> (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	
Time delay type	Power on-delay - A- Power on-delay relay	
	Power on-delay - Aw- Power on-delay relay w/ retrigger/restart	
Control signal pulse width	100 ms with load in parallel	
Control signal pulse width	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	MTTFd = 308.2 years B10d = 280000	
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	
Function available	A- Power on-delay relay-1 C/O Aw- Power on-delay relay w/ retrigger/restart-1 C/O	
Width	22.5 mm	
Product weight	0.1 kg	
Control type	With test button	
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	UL 508 IEC 61812-1	
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility	
Product certifications	CE UL GL CCC EAC RCM CSA	
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**

racking onits	
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	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	4.261 kg
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	75.0 cm
Package 3 Width	60.0 cm
Package 3 Length	80.0 cm
Package 3 Weight	76.676 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint		
Total lifecycle Carbon footprint	53	

#### **Use Better**

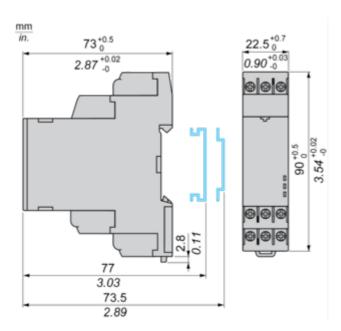
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	7bdc2711-0ad2-427c-8ece-532c5e9f09d7
REACh Regulation	REACh Declaration
California proposition 65	WARNING: This product can expose 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

## **Use Again**

○ Repack and remanufacture	
Take-back	No

# **Dimensions Drawings**

#### **Dimensions**

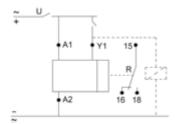


# **Product data sheet**

# RE22R1AMR

Connections and Schema

# Wiring Diagram



# RE22R1AMR

### **Technical Description**

#### **Function A: Power On-Delay**

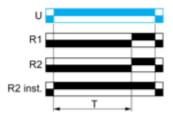
# Description

On energisation of power supply, the timing period T starts. After timing, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### **Function: 1 Output**



#### **Function: 2 Outputs**



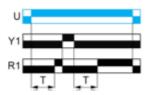
# RE22R1AMR

#### Function Aw: Power On-Delay With Retrigger / Restart Control

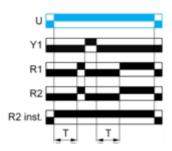
#### **Description**

On energisation of power supply, the timing period T starts.At the end of the timing period T, the output(s) R close(s). Energization of Y1 makes the output(s) R open(s). Deenergization of Y1 restarts timing period T. At the end of timing period T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST")

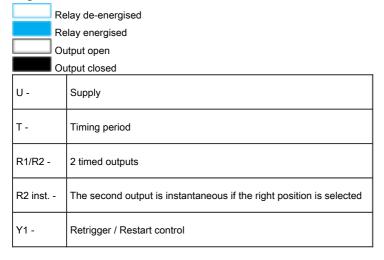
#### **Function: 1 Output**



#### **Function: 2 Outputs**

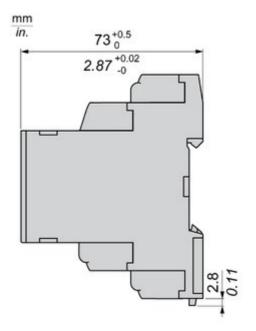


#### Legend



**Technical Illustration** 

# **Dimensions**



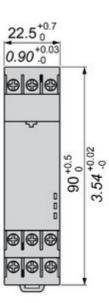


Image of product / Alternate images

# **Alternative**

