

Product data sheet

Specifications



multifunction relay, Harmony Timer Relays, 8A, 1 CO, 0.05sâ€³300h, on delay, 24...240V AC DC

RE22R1MAMR

Product availability: Stock - Normally stocked in distribution facility

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	3...30 h 0.05...1 s 30...300 s 3...30 min 3...30 s 30...300 h 30...300 min 0.3...3 s 10...100 s 1...10 s
Control type	Rotary knob Diagnostic button Potentiometer external
[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz
Release input voltage	<= 2.4 V
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz +/- 5 %
Connections - terminals	Screw terminals, 1 x 0.5...1 x 3.3 mm² AWG 20...AWG 12) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² AWG 24...AWG 16) flexible with cable end
Tightening torque	5.3...8.9 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Polycarbonate
Repeat accuracy	+/- 0.5 % IEC 61812-1
Temperature Drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale 25 °C IEC 61812-1
Time delay type	Power on-delay - A- Power on-delay relay Power on-delay - At- Power on-delay relay w/ pause/summation (Y1) Power on-delay - Aw- Power on-delay relay w/ retrigger/restart

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Control signal pulse width	100 ms with load in parallel 30 ms
Insulation resistance	100 MOhm 500 V DC IEC 60664-1
Recovery time	120 ms on de-energisation
Immunity to microbreaks	10 ms
Power consumption in VA	3 VA 240 V AC
Power consumption in W	1.5 W 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, 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 1.2...50 µs IEC 60664-1
Power on delay	100 ms
Creepage distance	4 kV/3 IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Safety reliability data	B10d = 190000 MTTFd = 205.4 years
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to IEC 60715
Status LED	Green LED backlight steady)dial pointer indication Yellow LED steady)output relay energised Yellow LED fast flashing)timing in progress and output relay de-energised Yellow LED slow flashing)timing in progress and output relay energised
Function available	A- Power on-delay relay-1 C/O At- Power on-delay relay w/ pause/summation (Y1)-1 C/O Aw- Power on-delay relay w/ retrigger/restart-1 C/O
Width	0.9 in (22.5 mm)
Net Weight	0.2 lb(US) (0.1 kg)
Control Type	With test button
Number of functions	3

Environment

Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz between relay output and power supply basic insulation IEC 61812-1
Standards	UL 508 IEC 61812-1
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Product Certifications	EAC CSA RCM UL GL CE CCC
Ambient Air Temperature for Operation	-4...140 °F (-20...60 °C)

Ambient Air Temperature for Storage	-40...158 °F (-40...70 °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 IEC 60664-1
Vibration resistance	20 m/s² (f= 10...150 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn not operating 11 ms IEC 60068-2-27 5 gn in operation 11 ms IEC 60068-2-27
Relative humidity	95 % 77...131 °F (25...55 °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 MHz...1 GHz) conforming to IEC 61000-4-3 Conducted RF disturbances - test level: 10 V level 3 (0.15...80 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

Ordering and shipping details

Category	US10CP222376
Discount Schedule	0CP2
GTIN	3606480792427
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.024 in (2.600 cm)
Package 1 Width	3.228 in (8.200 cm)
Package 1 Length	3.740 in (9.500 cm)
Package weight(Lbs)	3.563 oz (101.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	5.906 in (15.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	9.813 lb(US) (4.451 kg)

Contractual warranty



Environmental Data

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 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	52 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	7bdc2711-0ad2-427c-8ece-532c5e9f09d7
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 Longer



Lifetime extension

Repair	No
--------	----

Use Again

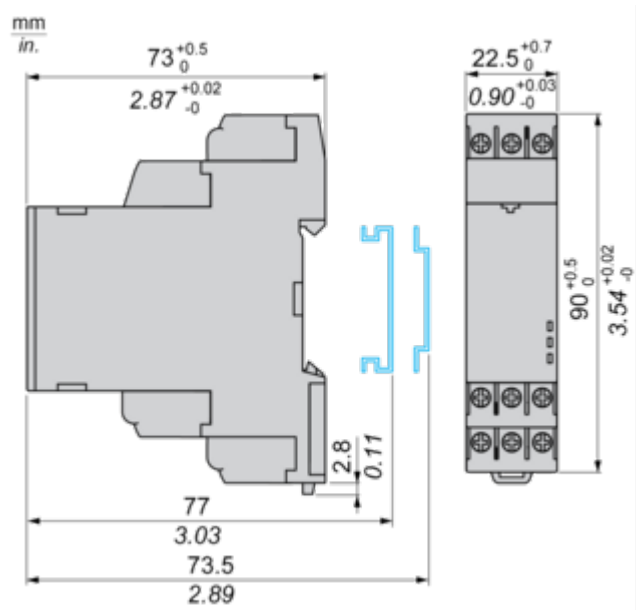


Repack and remanufacture

Circularity Profile	End of Life Information
Take-back	No

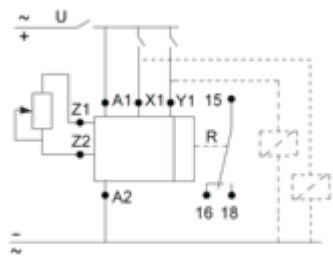
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



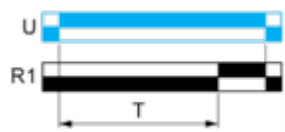
Technical Description

Function A: Power On-Delay

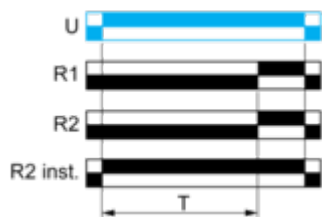
Description

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

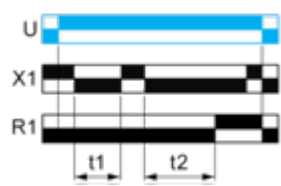


Function At: Power On-Delay with Pause / Summation Control

Description

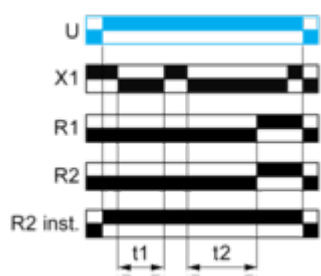
On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value 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 with Pause / Summation Control



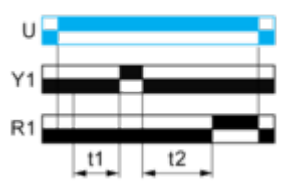
$T = t1 + t2 + \dots$

Function: 2 Outputs with Pause / Summation Control



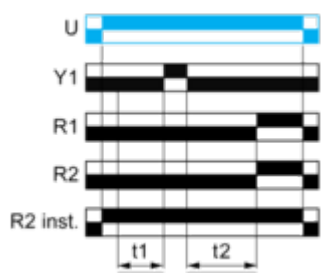
$T = t1 + t2 + \dots$

Function: 1 Output with Retrigger / Restart Control



$T = t1 + t2 + \dots$

Function: 2 Outputs with Retrigger / Restart Control



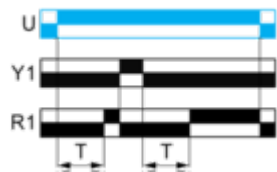
$T = t1 + t2 + \dots$

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

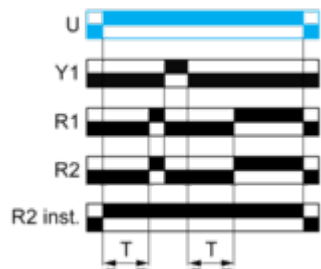
Description

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



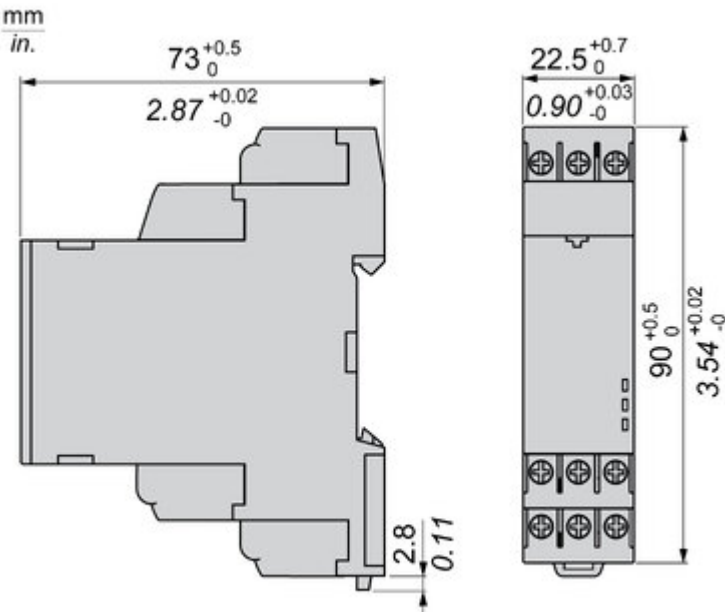
Legend

- Relay de-energised
- Relay energised
- Output open
- Output closed

U -	Supply
T -	Timing period
R1/R2 -	2 timed outputs
R2 inst. -	The second output is instantaneous if the right position is selected
Y1 -	Retrigger / Restart control

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Timer Relay

Flexible choice of screw or spring connection terminals for wiring.

One product reference covering 28 timing functions, 2 outputs, and a wide range of supply voltage 24...240 V AC/DC.

Dust and unintended human intervention avoided thanks to the IP50 lead-sealable settings protection cover.

A Dial-Pointer LED indicator that enhances ease of operation in difficult environments such as dusty or low-light conditions

Different mounting style to meet your preference:
DIN rail mount with product width:
17.5 mm/0.69 in.
22.5 mm/0.88 in.
Plug in mounting with socket



The image displays two models of the Harmony Timer Relay. The relay on the left is a DIN rail mount version, featuring a black plastic housing with a circular dial and a pointer. It has screw terminals at the top and bottom. The relay on the right is a plug-in mounting version, also with a black plastic housing and a similar dial, but with a different terminal configuration at the bottom. Green arrows point from the descriptive text blocks to specific features on the relays.

Offer Marketing Illustration

Product benefits / Features

Features

Harmony Timer Relay



"Diagnostic button" to check downstream circuit immediately, shorten the commission and troubleshooting time



Wide range of time delay for adjustment: from 0.01 s to 999 hrs.



Unprecedented accuracy, predictive maintenance, and superior security.



Compatible with a wide range of applications including machines, buildings, water segments, and HVAC.



Compliant with IEC 60255-1 standard, and a wide array of product certifications such as UL, CE, CSA, EAC.



Image of product / Alternate images

Alternative

