

Product data sheet

Specifications



dual function relay, Harmony Timer Relays, 8A, 1C/O, 0.05sâ€¦300h, screw connectors, 24...240V AC DC

RE22R1ACMR

Product availability: Non-Stock - Not 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 | On-delay and off-delay |
| Time delay range | 3...30 min 1...10 s 30...300 s 10...100 s 3...30 s 30...300 min 30...300 h 0.3...3 s 0.05...1 s 3...30 h |
| 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 mm ² AWG 20...AWG 12) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² 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 | On-delay and off-delay - Ac- On-delay and off-delay relay w/ control signal On-delay and off-delay - Act- On-delay and off-delay relay w/ control signal and pause/summation |

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

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|--|---|
| 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 | Ac- On-delay and off-delay relay w/ control signal-1 C/O Act- On-delay and off-delay relay w/ control signal and pause/summation-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 | 2 |

Environment

| | |
|--|--|
| Dielectric strength | 2.5 kV 1 mA/1 minute 50 Hz between relay output and power supply basic insulation IEC 61812-1 |
| Standards | IEC 61812-1 UL 508 |
| Directives | 2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility |
| Product Certifications | CE CCC GL UL CSA EAC RCM |
| 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/s ² (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 | 3606480792403 |
| 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) | 3.527 oz (100.000 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 | 9.711 lb(US) (4.405 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 | 64 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] | 62 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 |
| EU RoHS Directive | Compliant By Exemption |
| REACH Regulation | Reference contains Substances of Very High Concern above the threshold |
| 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

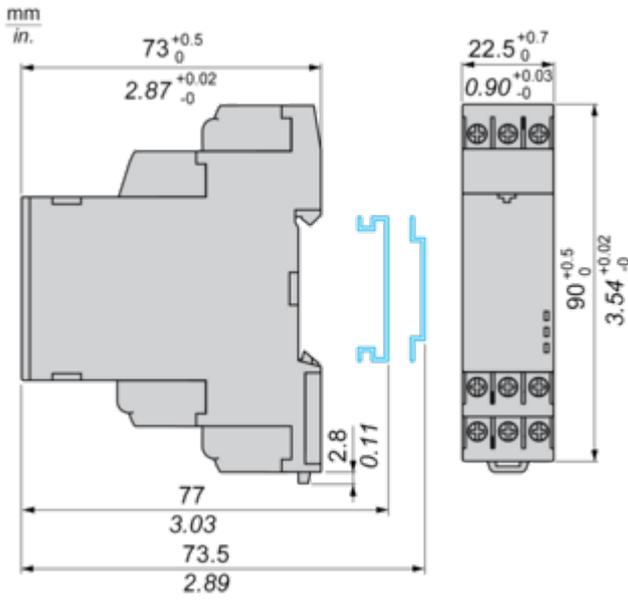


Repack and remanufacture

| | |
|---------------------|---|
| Circularity Profile | End of Life Information |
| Take-back | No |

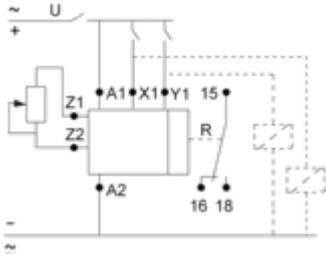
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



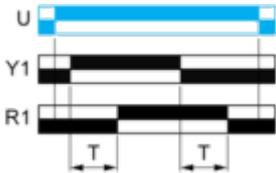
Technical Description

Function Ac: On-Delay & Off-Delay with Control Signal

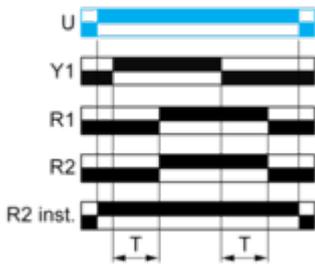
Description

After energisation of power supply and energization of Y1 causes the timing period T to start.
 At the end of this timing period, the output(s) R close(s).
 When deenergization of Y1, the timing T starts.
 At the end of this timing period T, the output(s) R revert(s) to its/their initial position.
 The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

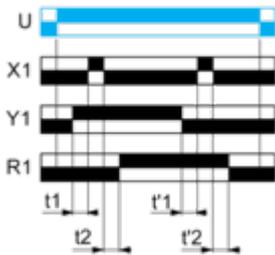


Function Act: On-Delay & Off-Delay with Control Signal & With Pause / Summation Control

Description

After energisation of power supply and energization of Y1 causes the timing period T to start and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s). When deenergization of Y1, the timing T starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial position. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

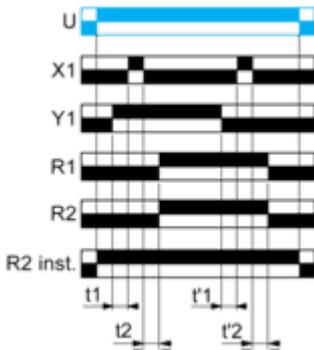
Function: 1 Output



$T = t1 + t2 + \dots$

$T = t'1 + t'2 + \dots$

Function: 2 Outputs



$T = t1 + t2 + \dots$

$T = t'1 + t'2 + \dots$

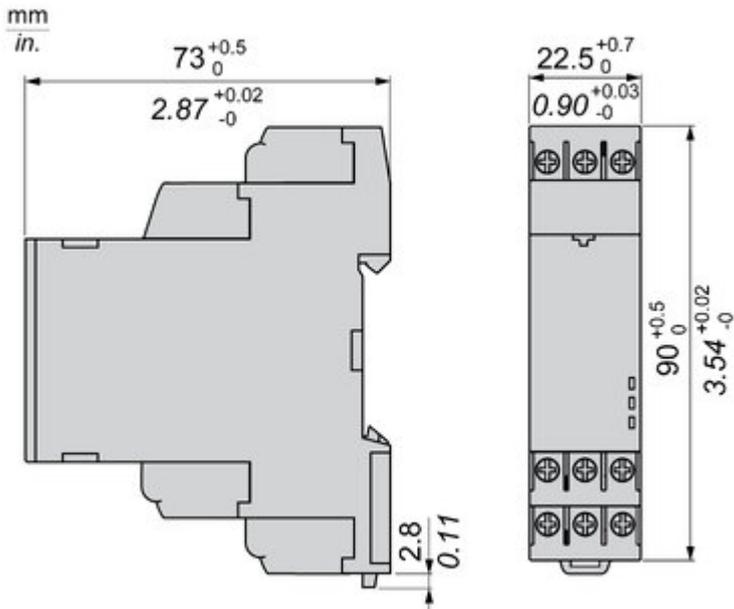
Legend

- 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 |
| X1 - | Pause / Summation control |
| 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

Offer Marketing Illustration

Product benefits / Features



Features

Harmony Timer Relay

- 

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

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

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

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

Unprecedented accuracy, predictive maintenance, and superior security.

Image of product / Alternate images

Alternative

