

# RE22R2AMU

Harmony, Modular timing relay, 8 A, 2 CO, 0.1 s...100 h, power on delay , 24 V DC / 24...240 V 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  | 2 C/O timed contact   |
| Time delay type                | Power on-delay  |
| Time delay range               | 1...10 min<br>10...100 h<br>1...10 s<br>0.1...1 s<br>6...60 s<br>6...60 min<br>1...10 h                               |
| Control type                   | Rotary knob front panel   |
| [Us] rated supply voltage      | 24...240 V AC<br>24 V DC  |
| Voltage range                  | 0.85...1.1 Us   |
| Supply frequency               | 50...60 Hz +/- 5 %  |
| Connections - terminals        | Screw terminals, 2 x 1.5 mm <sup>2</sup> with cable end<br>Screw terminals, 2 x 2.5 mm <sup>2</sup> without cable end |
| Tightening torque              | 5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1  |
| Housing material               | Self-extinguishing  |
| 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  |
| Control signal pulse width     | 30 Ms<br>100 ms under load  |
| 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        | 50 VA 240 V AC  |
| Power consumption in W         | 0.7 W 24 V DC   |
| Breaking capacity              | 2000 VA   |
| Minimum switching current      | 10 mA 5 V   |
| Maximum switching current      | 8 mA  |
| Maximum switching voltage      | 250 V   |
| Electrical durability          | 100000 cycles for resistive load, 8 A at 250 V, AC  |
| Mechanical durability          | 10000000 cycles   |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                                 |   |
|---------------------------------|---|
| Rated impulse withstand voltage | 5 kV 1.2...50 µs IEC 60664-1<br>5 kV IEC 61812-1  |
| Power on delay                  | 100 ms  |
| Safety reliability data         | MTTFd = 182.6 years<br>B10d = 170000  |
| Mounting position               | Any position in relation to normal vertical mounting plane                                      |
| Mounting support                | 35 mm DIN rail conforming to EN/IEC 60715   |
| Status LED                      | Green LED flashing)timing in progress<br>Green LED steady)power ON<br>Yellow LEDrelay energised |
| Width                           | 0.89 in (22.5 mm)   |
| Net Weight                      | 0.20 lb(US) (0.09 kg)   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Dielectric strength                   | 2.5 kV 1 mA/1 minute 50 Hz IEC 61812-1   |
| Standards                             | EN 61000-6-3<br>EN 61000-6-4<br>EN 61000-6-2<br>IEC 61812-1<br>EN 61000-6-1  |
| Directives                            | 2004/108/EC - electromagnetic compatibility<br>2006/95/EC - low voltage directive  |
| Product Certifications                | CULus<br>CE<br>EAC<br>CSA<br>RCM<br>CCC<br>GL  |
| Ambient Air Temperature for Operation | -4...140 °F (-20...60 °C)  |
| Ambient Air Temperature for Storage   | -22...140 °F (-30...60 °C)   |
| IP degree of protection               | Housing IP40 IEC 60529<br>Terminal block IP20 IEC 60529<br>Front face IP40 IEC 60529   |
| Vibration resistance                  | 20 m/s <sup>2</sup> 10...150 Hz)IEC 60068-2-6  |
| Shock resistance                      | 15 gn 11 ms IEC 60068-2-27   |
| Relative humidity                     | 93 %, without condensation IEC 60068-2-30  |
| Electromagnetic compatibility         | Electrostatic discharge immunity test 6 kV contact discharge)level 3 EN/IEC 61000-4-2<br>Electrostatic discharge immunity test 8 kV air discharge)level 3 EN/IEC 61000-4-2<br>Fast transients immunity test 1 kV capacitive connecting clip)level 3 IEC 61000-4-4<br>Fast transients immunity test 2 kV direct contact)level 3 IEC 61000-4-4<br>Surge immunity test 1 kV differential mode)level 3 IEC 61000-4-5<br>Surge immunity test 2 kV common mode)level 3 IEC 61000-4-5<br>Radiated radio-frequency electromagnetic field immunity test 10 V 0.15...80 MHz)level 3 IEC 61000-4-6<br>Electromagnetic field immunity test 10 V/m 80 MHz...1 GHz)level 3 IEC 61000-4-3<br>Immunity to microbreaks and voltage drops 30 % 500 ms) IEC 61000-4-11<br>Immunity to microbreaks and voltage drops 100 % 20 ms) IEC 61000-4-11<br>Conducted and radiated emissionsclass B EN 55022 |

## Ordering and shipping details

|                       |                               |
|-----------------------|-------------------------------|
| Category              | 22376-RELAYS-MEASUREMENT(RM4) |
| Discount Schedule     | CP2                           |
| GTIN                  | 3606480676567                 |
| Nbr. of units in pkg. | 1                             |
| Package weight(Lbs)   | 3.63 oz (103.0 g)             |
| Returnability         | No                            |
| Country of origin     | ID                            |

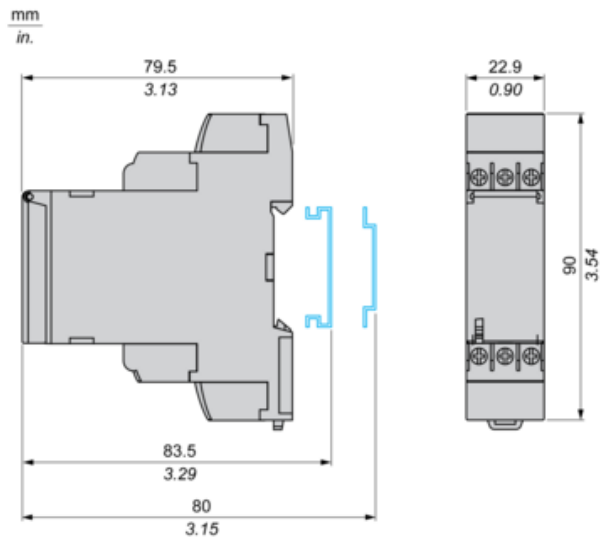
## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Package 1 Height             | 1.02 in (2.6 cm)       |
| Package 1 width              | 3.23 in (8.2 cm)       |
| Package 1 Length             | 3.74 in (9.5 cm)       |
| Unit Type of Package 2       | S02                    |
| Number of Units in Package 2 | 40                     |
| Package 2 Weight             | 10.03 lb(US) (4.55 kg) |
| Package 2 Height             | 5.91 in (15 cm)        |
| Package 2 width              | 11.81 in (30 cm)       |
| Package 2 Length             | 15.75 in (40 cm)       |

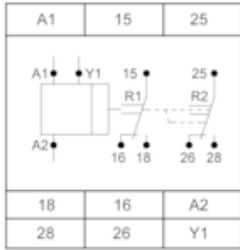
## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>  |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |

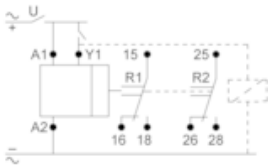
Dimensions



## Internal Wiring Diagram



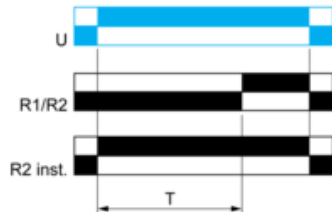
## Wiring Diagram



Function A : Power on Delay Relay

Description

The timing period T begins on energization. After timing, the output(s) relay close(s).

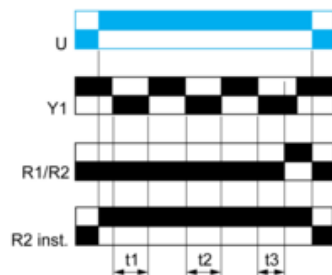


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function At : Power on Delay Relay (Summation) with Control Signal

Description

After power-up, the first opening of control contact Y1 starts the timing. Timing can be interrupted each time control contact closes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output relay closes.



$$T = t_1 + t_2 + t_3$$

Legend

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

|            |  |
|------------|--|
| Y1 :       | Control contact  |
| R1/R2 :    | 2 timed outputs  |
| R2 inst. : | The second output is instantaneous if the right position is selected |
| T :        | Timing period  |
| U :        | Supply   |