

# Product datasheet

Specifications



## temperature control relay RTC - 48x48 mm - 24V AC/DC - 1 relay, alarm

RTC48PUN1RNLU

⚠ Discontinued on: Jan 27, 2022 AD

⚠ Discontinued

### Main

|                              |                                                                |
|------------------------------|----------------------------------------------------------------|
| Range of product             | Zelio Control                                                  |
| Product or component type    | Modular measurement and control relays                         |
| Relay type                   | Temperature control relays                                     |
| Product specific application | Heating or cooling<br>Industrial machines<br>HVAC<br>Packaging |
| Relay name                   | RTC                                                            |

### Complementary

|                           |                                                                                                                                                                                                                                                                    |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outer dimension           | 48 x 48 mm<br>1/16 DIN                                                                                                                                                                                                                                             |
| Analogue input type       | Thermocouple (thermocouple J, K, R, B, S, T, E, N, PLII, C(W/Re5-26))<br>Temperature probe (temperature probe: Pt 100, JPt 100)<br>Voltage 0...1 V DC<br>Voltage 0...5 V DC<br>Voltage 1...5 V DC<br>Voltage 0...10 V DC<br>Current 0...20 mA<br>Current 4...20 mA |
| [Us] rated supply voltage | 24 V AC/DC                                                                                                                                                                                                                                                         |
| [Us] rated supply voltage | 24 V AC/DC                                                                                                                                                                                                                                                         |
| Supply voltage limits     | 20...28 V                                                                                                                                                                                                                                                          |
| Measurement accuracy      | 0.2 % full scale                                                                                                                                                                                                                                                   |
| Sampling duration         | 250 ms                                                                                                                                                                                                                                                             |
| Number of outputs         | 1 relay output with NO contact for output 1                                                                                                                                                                                                                        |
| Output type               | Relay output at 250 V AC / 3 A on resistive load<br>Relay output at 250 V AC / 1 A on inductive load                                                                                                                                                               |
| Alarm output              | 1 C/O                                                                                                                                                                                                                                                              |
| Power consumption in VA   | 8 VA at 250 V AC                                                                                                                                                                                                                                                   |
| Function available        | PID<br>Auto tuning                                                                                                                                                                                                                                                 |
| Marking                   | CE                                                                                                                                                                                                                                                                 |
| Operating position        | Any position                                                                                                                                                                                                                                                       |
| Display type              | 11 segments LCD                                                                                                                                                                                                                                                    |
| Display digits            | 5                                                                                                                                                                                                                                                                  |

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

|                     |                                                                                                                                                                                      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signalling function | Process value green, orange and red<br>Output status (OUT1, OUT2) orange<br>Alarm status (EV1, EV2) orange<br>Transmission/reception activity (TX/TR) orange<br>Setpoint value green |
| Mounting support    | Panel                                                                                                                                                                                |
| Product weight      | 120 g                                                                                                                                                                                |

## Environment

|                                       |                                                          |
|---------------------------------------|----------------------------------------------------------|
| Standards                             | EN 61010-1<br>CSA C22.2 No 24-93<br>EN 61326-1           |
| Product certifications                | cURus (873)                                              |
| Ambient air temperature for storage   | -25...80 °C                                              |
| Ambient air temperature for operation | 0...50 °C                                                |
| Relative humidity                     | 35...85 % without condensation                           |
| Vibration resistance                  | 1 gn (f= 10...55 Hz) conforming to IEC 60068-2-6         |
| Shock resistance                      | 10 gn conforming to IEC 60068-2-27                       |
| IP degree of protection               | IP66 (front face) conforming to IEC 60529<br>IP20 (rear) |
| NEMA degree of protection             | NEMA 4X front face                                       |

## Packing Units

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Height             | 6.1 cm |
| Package 1 Width              | 6.4 cm |
| Package 1 Length             | 8.7 cm |
| Package 1 Weight             | 135 g  |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## 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 >](#)

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |

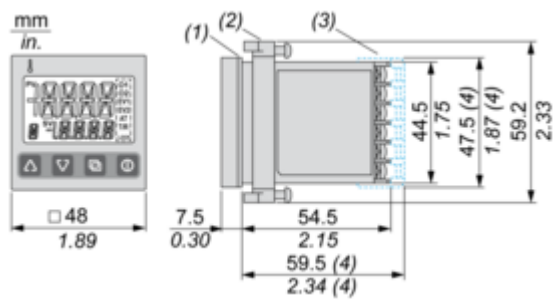
### Use Again

| Repack and remanufacture |                                                                                                                                                                                                               |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WEEE Label               |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

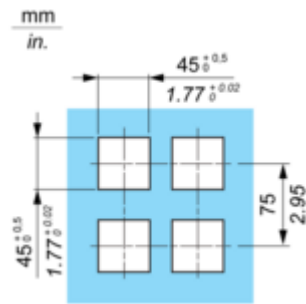
Dimensions Drawings

48 x 48 Size – 1/16 DIN Standard

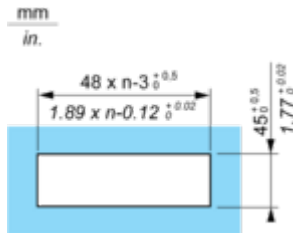
Panel Mounting : Mounting Frame Supplied



- (1) Gasket
  - (2) Mounting frame
  - (3) Terminal cover, to be ordered separately.
  - (4) When Terminal cover (sold separately) is used
- Panel cut-out

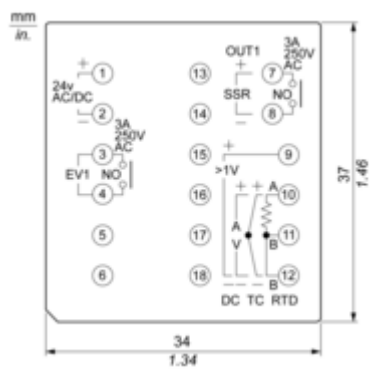


Side stick mounting: n units (water-proof property lost in this case)



Connections and Schema

Wiring Diagram



- EV : Alarm output
- OUT : Control output
- DC : DC current or DC voltage input
- TC : Thermocouple input
- RTD : Resistance temperature detector input
- SSR : Solid State relay