



Every part matters

EN

# Instruction Manual RS Pro 35 x 77mm Temperature Indicator, NTC Stock Number: 124-1075, 124-1076



Please read this document carefully before using this product. The guarantee will be invalidated if the device is damaged by not following instructions detailed in the manual. The company shall not be responsible for any damage or losses however caused, which may be experienced as a result of the installation or use of this product.

- 35x77mm
- Single NTC probe input.
- Range -60 to 150°C
- 0000 or 000.0 units display.
- Temperature units °C or °F
- Sensor input offset setting
- Alarm / Warning on display
- High and low alarm limits
- Maximum and minimum measured value stored.
- Simple operation and setup
- CE marked according to European Norms.



| Part Code | Supply Voltage | Number Outputs |
|-----------|----------------|----------------|
| 124-1075  | 230V ac        | 0              |
| 124-1076  | 24V ac/dc      | 0              |

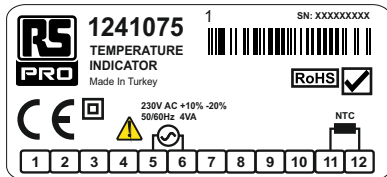


RoHS  
Compliant

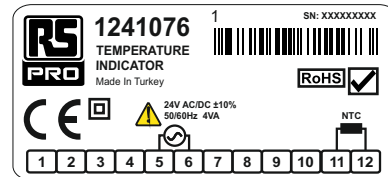
## CONNECTION DIAGRAM



1241075 & 1241076 is intended for installation within control panels. Make sure that the device is used only for intended purpose. The shielding must be grounded on the instrument side. During an installation, all of the cables that are connected to the device must be free of electrical power. The device must be protected against inadmissible humidity, vibrations, severe soiling. Make sure that the operation temperature is not exceeded. All input and output lines that are not connected to the supply network must be laid out as shielded and twisted cables. These cables should not be close to the power cables or components. The installation and electrical connections must be carried out by a qualified staff and must be according to the relevant locally applicable regulations.

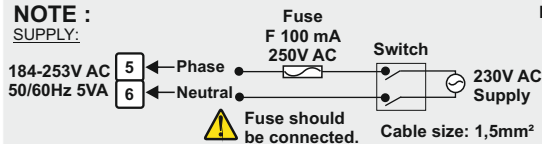


Equipment is protected throughout by DOUBLE INSULATION



Holding screw 0.4-0.5Nm.

### NOTE : SUPPLY:



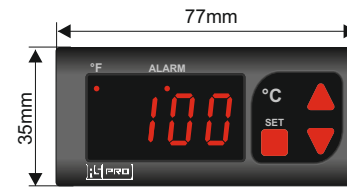
Note 1) Mains supply cords shall meet the requirements of IEC 60227 or IEC 60245.

2) In accordance with the safety regulations, the power supply switch shall bring the identification of the relevant instrument and it should be easily accessible by the operator.

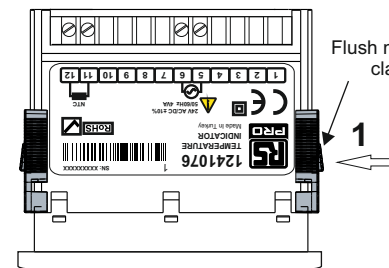
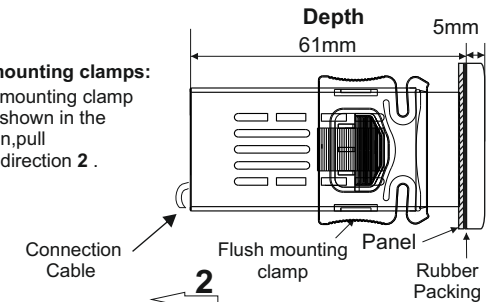
## TECHNICAL SPECIFICATIONS

| INPUT   |   |          |
|---|---|----------|
| Input Type  | NTC Resistance Sensor   | EN 60751 |
| Scale Range   | -60.0...150.0 °C -76.0...302.0°F  |          |
| Accuracy  | ± 1% (for full scale) ± 1 Digit   |          |
| ENVIRONMENTAL CONDITIONS  |   |          |
| Ambient/Storage temperature   | 0 ... +50 / °C -25... +70°C (with no icing)   |          |
| Relative Humidity   | Max. humidity 80% for temperatures up to 31°C (88°F) decreasing linearly to 50% relative humidity at 40°C (104°F).    |          |
| Protection Class  | According to EN60529; Front panel: IP62 Rear panel : IP20   |          |
| Height  | Max. 2000m  |          |
| ⚠ Do not use the device in locations subject to corrosive and flammable gasses.                               |   |          |
| ELECTRICAL CHARACTERISTICS  |   |          |
| Supply  | 230V AC +%10 -%20, 50/60Hz or 24V AC/DC ±%10 50/60Hz  |          |
| Power Consumption   | Max. 4VA  |          |
| Wiring  | Power connector : 2.5mm <sup>2</sup> screw-terminal, Signal connector : 1,5mm <sup>2</sup> screw-terminal conenction. |          |
| Sensor input  | 10K @ 25°C NTC, Beta Value 3435K 25/85 °C. (Used with RS NTC sensors).  |          |
| Data Retention  | EEPROM (Min. 10 years)  |          |
| Accuracy  | 0.1 °C  |          |
| EMC   | EN 61326-1: 2013 (Performance criterion B is satisfied for EN 61000-4-3)  |          |
| A/D Converter   | 12 bit resolution, 100ms sampling time.   |          |
| Indicator   | 4 digits, 12.5mm, 7 segment red LED   |          |
| Hysteresis  | Adjustable between 0.1 and 15 °C / °F.  |          |
| Safety Requirements   | EN 61010-1: 2010 (Pollution degree 2, overvoltage category II)  |          |
| HOUSING   |   |          |
| Housing Type  | Suitable for flush-panel mounting according to DIN 43 700.  |          |
| Dimensions  | H35xW77xD61mm   |          |
| Weight  | Approx. 215g (After packing)  |          |
| Enclosure Materials   | Self extinguishing plastics   |          |
| ⚠ While cleaning the device, solvents (thinner, gasoline, acid etc.) or corrosive materials must not be used. |   |          |

## Dimensions



For removing mounting clamps:  
- Push the flush-mounting clamp in direction 1 as shown in the figure below. Then, pull out the clamp in direction 2.



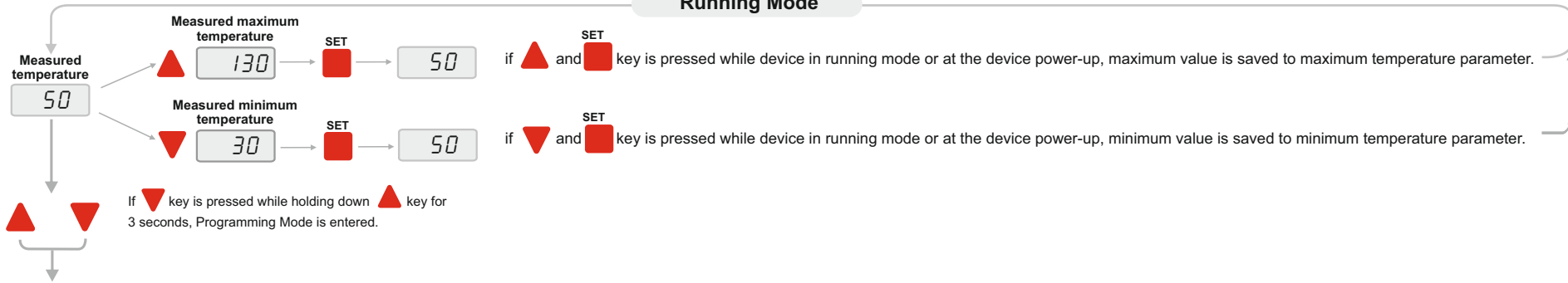
Note:  
1) Panel thickness should be maximum 7mm.  
2) If there is not 60mm free space at the back side of the device, it would be difficult to remove it from the panel.

FOR MORE INFORMATION VISIT THIS SITE  
<http://www.rs-components.com/index.html>

1241075/76-E-01-161006

## Programming Diagram

### Running Mode



### PROGRAMMING MODE

Default Value

- 150 **RuPL** *RuPL* = Alarm output upper value limit. Adjustable between *RLoL* parameter and 150°C. If measured temperature is above this value, the indicator value warns by flash.
- 60 **RLoL** *RLoL* = Alarm output lower value limit. Adjustable between -60°C and *RuPL*. If measured temperature is below this value, the indicator value warns by flash.
- 2 **RHYs** *RHYs* = Alarm hysteresis value. Adjustable between 0.1 and 20.0°C. (This parameter can not be higher than  $(RuPL - RLoL) / 2$  value)
- 0 **oFFs** *oFFs* = Zero point input shift. (Offset value) Zero point shift value is added to the measured value. This feature is used for eliminating the measuring probe distance errors. It can be adjusted between -20.0 and 20.0°C. Normal value is 0.0
- no **d.P.** *d.P.* = Decimal point selection. *d.P.* = no Decimal point not displayed. *d.P.* = *YES* Decimal point displayed.
- °C **Un it.** *Un it.* = Temperature unit selection. *Un it.* = Can be selected as °C or °F.

#### Modification Of Parameter Diagram



While holding down SET key, parameter value blinks and by ▼ ▲ using keys, the requested value can be adjusted.

If ▲ key is pressed and held 0.6 seconds, the value of the selected parameter increases rapidly. If waited enough, the value increases a hundred at each step. After 1 second, following the release of the key, initial increasing condition is returned. The same procedure is valid for the decrementing.

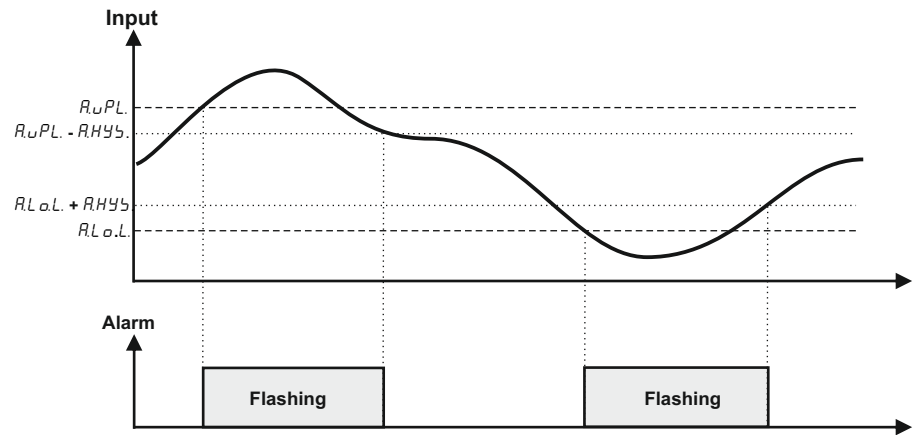
### Entering Running Mode in Programming Mode :

If no key is pressed within 20 seconds in Programming Mode, data is stored automatically and the Running Mode is entered. Alternatively, first held down ▲ key and held down ▼ keys by pressed together for 3 seconds, data is stored and Running Mode is entered.

#### ERROR MESSAGES

- PFA Sensor is broken
- Temperature value is higher than the scale
- Temperature value is lower than the scale
- P5C Sensor short circuit

### Alarm Diagram



When an alarm occurs, measured temperature value flashes on display.