### **Quick Start Guide**

00825-0100-4951, Rev BE November 2024

# Rosemount<sup>™</sup> 1067

## **Temperature Sensor**





ROSEMOUNT

#### Safety messages

### A WARNING

Explosions could result in death or serious injury.

When installing this device in an explosive environment, ensure that the installation is in accordance with the appropriate local, national, and international standards, codes, and practices.

## **A** WARNING

#### Conduit/cable entries

Unless marked otherwise, the conduit/cable entries in the transmitter housing use a  $\frac{1}{2}$ -in - 14 NPT thread form. Entries marked "M20" are M20 1.5 thread form.

When installing this device in a hazardous location, only use appropriately listed or Ex certified flameproof/dust plugs, adapters, or glands in cable/conduit entries. Only use plugs, adapters, glands, or conduits with compatible thread forms when closing these entries.

### **A** WARNING

#### **Physical access**

Unauthorized personnel may potentially cause significant damage to and/or misconfiguration of end users' equipment. This could be intentional or unintentional and needs to be protected against.

Physical security is an important part of any security program and fundamental in protecting your system. Restrict physical access by unauthorized personnel to protect end users' assets. This is true for all systems used within the facility.

## NOTICE

Complications can arise when sensors and the transmitters to which they are assembled are certified as compatible, but have unique approvals. Be aware of the following situation:

- If an I.S. approved Rosemount 1067 is ordered with a housing, a transmitter enclosed in that housing may have a different I.S. approval rating. Refer to the transmitter IS certificate if applicable.
- If a sensor and transmitter have different certifications, or if either has more certifications than the other, installation must comply with the most restrictive requirements of either component. This is especially (but not exclusively) relevant when combination approvals are ordered on either the sensor or transmitter. Review certifications on both the sensor and transmitter for installation requirements and ensure installation of the sensor/transmitter assembly complies with a single certification that is shared by both of these components and that meets the requirements of the application.

## NOTICE

Refer to the Product certifications section of this Quick Start Guide.

## **A** WARNING

Refer to the *Product certifications* section of this Quick Start Guide documentation when using the RFID tag (option code Y3) for required installation conditions.

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## 1 About this guide

This guide provides basic guidelines for Rosemount 1067 Sensors. It does not provide instructions for configuration, diagnostics, maintenance, service, troubleshooting, explosion-proof, flameproof, or intrinsically safe (I.S.) installations.

If the Rosemount 1067 was ordered assembled to a temperature transmitter, see the appropriate transmitter Quick Start Guide for information on configuration and hazardous locations certifications.

#### Wiring diagrams 2

### Figure 2-1: Lead wire configuration

Flying leads termination code 0

Dual element Single element

Single element

Terminal block termination code 2

### Dual element

3 Red



### Figure 2-2: Thermocouple lead wire configuration

Flying leads termination code 0 Single element

Dual element

Terminal block termination code 2 Single element Dual element

4(+

3(-3(-)

### Table 2-1: Thermocouple wire colors

|      | IEC wire color |              | ISA wire color |              |  |
|------|----------------|--------------|----------------|--------------|--|
| Туре | Positive (+)   | Negative (-) | Positive (+)   | Negative (-) |  |
| E    | Violet         | White        | Violet         | Red          |  |
| J    | Black          | White        | White          | Red          |  |
| к    | Green          | White        | Yellow         | Red          |  |
| N    | Rose           | White        | Orange         | Red          |  |
| R    | Orange         | White        | Black          | Red          |  |
| S    | Orange         | White        | Black          | Red          |  |

### Table 2-1: Thermocouple wire colors (continued)

|   | IEC wire color |       | ISA wire color |     |  |
|---|----------------|-------|----------------|-----|--|
| т | Brown          | White | Blue           | Red |  |

### Table 2-2: Lead wire specifications

| Element                      | Sensor<br>diameter - mm | Number of<br>leads | Approximate lead wire length<br>(flying leads) |                      |
|------------------------------|-------------------------|--------------------|--|----------------------|
|                              |                         |                    | Element 1 (in<br>mm)                           | Element 2 (in<br>mm) |
| RTD single<br>element        | 3 and 6                 | 4                  | 140  | N/A                  |
| RTD dual<br>element          | 3 and 6                 | 6                  | 140  | 140                  |
| Thermocouple single element  | 3 and 6                 | 2                  | 140  | N/A                  |
| Thermocouple<br>dual element | 3 and 6                 | 4                  | 140  | 140                  |

## 3 Dimensional drawings

### Figure 3-1: Rosemount 1067 RTD and Thermocouple



### Dimensions are in millimeters.

## 3.1 Sensor assembly

### Figure 3-2: Sensor Assembly



- A. Head or field mount transmitters
- B. Connection heads
- C. Sensor with flying leads, terminal block

### Note

Sensor assemblies can be provided without an enclosure or with an enclosure such as the connection heads shown above or assembled to a Rosemount transmitter.

## 4 Specifications

## 4.1 Material selection

Emerson provides a variety of Rosemount product with various product options and configurations including materials of construction that can be expected to perform well in a wide range of applications. The Rosemount product information presented is intended as a guide for the purchaser to make an appropriate selection for the application. It is the purchaser's sole responsibility to make a careful analysis of all process parameters (such as all chemical components, temperature, pressure, flow rate, abrasives, contaminants, etc.), when specifying product, materials, options and components for the particular application. Emerson is not in a position to evaluate or guarantee the compatibility of the process fluid or other process parameters with the product, options, configuration or materials of construction selected.

## 4.2 Rosemount 1067 Platinum RTD

100  $\Omega$  RTD at 0 °C,  $\alpha$  = 0.00385  $\Omega/\Omega \times$  °C

### **Temperature range**

-196 to 300 °C (-320.8 to 572 °F)

### **Insulation resistance**

 $1,\!000~\text{M}\Omega$  minimum insulation resistance when measured at 500 Vdc and at room temperature.

### **Sheath material**

316 SST/321 SST with mineral-insulated cable construction

### Lead wire

PTFE insulated, 24 AWG, silver-plated copper wire. See <u>Figure 2-1</u> for wire configuration.

### **Ingress Protection (IP) ratings**

### Table 4-1: IP Ratings

| Option code                        | IP rating |
|------------------------------------|-----------|
| B, D, H, F, G, L, M, Q, U, V, W, Y | 66/68     |
| с                                  | 65        |

### Self heating

0.15 K/mW when measured per method defined in DIN EN 60751:1996

### Thermal response time

Thermal response times for the 1067 sensor only. Tested in accordance to IEC 751 guidelines.

### Table 4-2: Water Flowing at 0.4 m/s

| Sensor       | Pt 100     | TC grounded | TC ungrounded | Deviatio |  |
|--------------|------------|-------------|---------------|----------|--|
|              | t(0.5) [s] | t(0.5) [s]  | t(0.5) [s]    | n        |  |
| 6-mm<br>dia. | 7.7        | 1.8         | 2.8           | ± 10%    |  |
| 3-mm<br>dia. | 2.5        | 1.1         | 1.2           | ± 10%    |  |

### Table 4-3: Air Flowing at 3.0 m/s

| Sensor       | Pt 100     | TC grounded | TC ungrounded | Deviatio |
|--------------|------------|-------------|---------------|----------|
|              | t(0.5) [s] | t(0.5) [s]  | t(0.5) [s]    | n        |
| 6-mm<br>dia. | 35         | 38          | 42            | ± 10%    |
| 3-mm<br>dia. | 18         | 14          | 14            | ± 10%    |

More response time information is available online for other sensor and thermowell configurations

## 4.3 Rosemount 1067 Thermocouple

### **Temperature range**

See Table 4-4 and Table 4-5.

### **Insulation resistance**

 $1,000\ \text{M}\Omega$  minimum insulation resistance when measured at 500 Vdc and at room temperature.

### Sheath material

Rosemount thermocouples are made of a mineral insulated cable design wit h a variety of sheath materials available to suit both the temperature and the environment. For temperature up to 800 °C (1472 °F) in air, the sheath is made from 321 SST. For temperatures above 800 °C (1472 °F) in air, the sheath is made from Alloy 600.

For strongly oxidizing or reducing atmospheres, consult your local Emerson representative for information.

### **Lead wires**

Thermocouple, internal – 19 AWG solid wire (max) and 21 AWG solid wire (min.). External extension leads, Type E, J, K, N, R, S, and T. PTFE insulated. 20 AWG (max.) and 24 AWG (min.) Color coded per IEC or ISA standards. Figure 2-2 shows the wire configuration.

### **Ingress Protection (IP) ratings**

For information see <u>Table 4-1</u>.

## Table 4-4: Characteristics of 1067 IEC Thermocouples (IECStandards are Typically Used in European Applications)

| Туре | Wire<br>alloys                           | Sheath<br>material | Temperature<br>range               | Interchange-<br>ability error IEC<br>60584-2 <sup>(1)</sup> | Accurac<br>y |
|------|--|--------------------|------------------------------------|---|--------------|
| E    | Chromel/<br>Constanta<br>n               | 321 SST            | -40 to 800 °C<br>(-40 to 1472 °F)  | ±1.5 °C (±2.7 °F)<br>or ±0.4%                               | Class 1      |
| 1    | Iron/<br>Constanta<br>n                  | 321 SST            | -40 to 750 °C<br>(-40 to 1382 °F)  | ±1.5 °C (±2.7 °F)<br>or ±0.4%                               | Class 1      |
| к    | Chromel/<br>Alumel                       | Alloy 600          | -40 to 1000 °C<br>(-40 to 1832 °F) | ±1.5 °C (±2.7 °F)<br>or ±0.4%                               | Class 1      |
| N    | Nicrosil/<br>Nisil                       | Alloy 600          | -40 to 1000 °C<br>(-40 to 1832 °F) | ±1.5 °C (±2.7 °F)<br>or ±0.4%                               | Class 1      |
| R    | Platinum-1<br>3%<br>Rhodium/<br>Platinum | Alloy 600          | 0 to 1000 °C<br>(32 to 1832 °F)    | ±1.0 °C (±1.8 °F)<br>or ±(1+0.3% x<br>[t-1100]) °C          | Class 1      |
| S    | Platinum-1<br>0%<br>Rhodium/<br>Platinum | Alloy 600          | 0 to 1000 °C<br>(32 to 1832 °F)    | ±1.0 °C (±1.8 °F)<br>or ±(1+0.3% x<br>[t-1100]) °C          | Class 1      |
| Т    | Copper/<br>Constanta<br>n                | 321 SST            | -40 to 350 °C<br>(-40 to 662 °F)   | ±0.5 °C (±1.0 °F)<br>or ±0.4%                               | Class 1      |

(1) Whichever is greater.

## Table 4-5: Characteristics of 1067 ASTM Thermocouples (ASTM Standards are Typically Used in North American Applications)

| Туре | Wire<br>alloys                           | Sheath<br>material | Temperature<br>range (°C)       | Interchange-<br>ability error<br>ASTM E230 <sup>(1)</sup> | Accurac<br>y      |
|------|--|--------------------|---------------------------------|---|-------------------|
| E    | Chromel/<br>Constanta<br>n               | 321 SST            | 0 to 900 °C<br>(32 to 1652 °F)  | ±1.0 °C (±1.8 °F)<br>or ±0.4%                             | Special<br>limits |
| 1    | Iron/<br>Constanta<br>n                  | 321 SST            | 0 to 750 °C<br>(32 to 1382 °F)  | ±1.1 °C (±2.0 °F)<br>or ±0.4%                             | Special<br>limits |
| к    | Chromel/<br>Alumel                       | Alloy 600          | 0 to 1000 °C<br>(32 to 1832 °F) | ±1.1 °C (±2.0 °F)<br>or ±0.4%                             | Special<br>limits |
| N    | Nicrosil/<br>Nisil                       | Alloy 600          | 0 to 1000 °C<br>(32 to 1832 °F) | ±1.1 °C (±2.0 °F)<br>or ±0.4%                             | Special<br>limits |
| R    | Platinum-1<br>3%<br>Rhodium/<br>Platinum | Alloy 600          | 0 to 1000 °C<br>(32 to 1832 °F) | ±0.6 °C (±1.0 °F)<br>or ±0.1%                             | Special<br>limits |
| S    | Platinum-1<br>0%<br>Rhodium/<br>Platinum | Alloy 600          | 0 to 1000 °C<br>(32 to 1832 °F) | ±0.6 °C (±1.0 °F)<br>or ±0.1%                             | Special<br>limits |
| Т    | Copper/<br>Constanta<br>n                | 321 SST            | 0 to 350 °C<br>(32 to 662 °F)   | ±0.5 °C (±1.0 °F)<br>or ±0.4%                             | Special<br>limits |

(1) Whichever is greater.

## 4.4 Functional specifications

Power

Overvoltage category I

Environmental

Pollution degree 4

## 5 Product certifications

Rev 2.4

## 5.1 European Directive Information

A copy of the EU Declaration of Conformity can be found at the end of the Quick Start Guide. The most recent revision of the EU Declaration of Conformity can be found at <u>Emerson.com/Rosemount</u>.

## 5.2 Ordinary Location Certification

As standard, the transmitter has been examined and tested to determine that the design meets the basic electrical, mechanical, and fire protection requirements by a nationally recognized test laboratory (NRTL) as accredited by the Federal Occupational Safety and Health Administration (OSHA).

## 5.3 North America

The US National Electrical Code<sup>®</sup> (NEC) and the Canadian Electrical Code (CEC) permit the use of Division marked equipment in Zones and Zone marked equipment in Divisions. The markings must be suitable for the area classification, gas, and temperature class. This information is clearly defined in the respective codes.

### 5.3.1 USA

### E5 US Explosion proof, Dust-Ignition proof

Certificate FM17US0170X

- Standards FM Class 3600: 2011; FM Class 3611: 2004; FM Class 3615: 2006; FM Class 3810: 2005; ANSI/NEMA<sup>®</sup> 250: 1991
- **Markings** XP CL I, Div 1, GP B, C, D; DIP CL II/III, Div 1, GP E, F, G; T5(-50 °C≤  $T_a \le 85$  °C); when installed per Rosemount drawing 00068-0013; Type 4X

### 5.3.2 Canada

### E6 Canada Explosion proof and Dust-Ignition proof

**Certificate** 70044744

Standards CAN/CSA C22.2 No. 0:2010, CAN/CSA No. 25-1966 (R2000), CAN/CSA C22.2 No. 30-M1986 (R2012), CAN/CSA C22.2 No. 94-M1991 (R2011), CAN/CSA C22.2 No. 61010-1:2012 MarkingsXP CL I, DIV 1, GP B, C, D; DIP CL II, DIV 1, GP E, F, G;<br/>CL III; T6 (-50 °C  $\leq$  T<sub>a</sub>  $\leq$  +80 °C), T5 (-50 °C  $\leq$  T<sub>a</sub>  $\leq$  +95<br/>°C); Seal not required; installed per Rosemount drawing<br/>00068-0033; Type 4X and IP 66/67; Vmax 35 VDC, 750<br/>mWmax

### 5.4 Europe

### 5.4.1 E1 ATEX Flameproof

Certificate FM12ATEX0065X

Standards EN 60079-0: 2012+A11:2013, EN 60079-1: 2014, EN 60529:1991 +A1:2000+A2:2013

Markings  $\bigotimes$  II 2 G Ex db IIC T6...T1 Gb; T6...T1: T<sub>a</sub> = -50 °C to + 40 °C; T5...T1: T<sub>a</sub> = -50 °C to +60 °C See Process temperature limits for process temperatures.

### Special Conditions for Safe Use (X):

- 1. See certificate for ambient temperature range.
- 2. The non-metallic label may store an electrostatic charge and become a source of ignition in Group III environments
- 3. Guard the LCD display cover against impact energies greater than 4 joules.
- 4. Flameproof joints are not intended for repair.
- 5. A suitable certified Ex d or Ex tb enclosure is required to be connected to temperature probes with Enclosure option "N".
- Care shall be taken by the end user to ensure that the external surface temperature on the equipment and the neck of DIN Style Sensor probe does not exceed 130 °C.
- Non-Standard Paint options may cause risk from electrostatic discharge. Avoid installations that cause electrostatic build-up on painted surfaces, and only clean the painted surfaces with a damp cloth. If paint is ordered through a special option code, contact the manufacturer for more information.

### 5.4.2 ND ATEX Dust

Certificate: FM12ATEX0065X

Standards: EN 60079-0: 2012+A11:2013, EN 60079-31:2014, EN 60529:1991 +A1:2000+A2:2013

Markings:  $\bigotimes$  II 2 D Ex tb IIIC T130 °C Db T<sub>a</sub>= -40 °C to +70 °C; IP66 See <u>Process temperature limits</u> for process temperatures.

### Special Conditions for Safe Use (X):

- 1. See certificate for ambient temperature range.
- 2. The non-metallic label may store an electrostatic charge and become a source of ignition in Group III environments.
- 3. Guard the LCD display cover against impact energies greater than 4 joules.
- 4. Flameproof joints are not intended for repair.
- 5. A suitable certified Ex db or Ex tb enclosure is required to be connected to temperature probes with Enclosure option "N".
- Care shall be taken by the end user to ensure that the external surface temperature on the equipment and the neck of DIN Style Sensor probe does not exceed 130 °C.
- 7. Non-Standard Paint options may cause risk from electrostatic discharge. Avoid installations that cause electrostatic build-up on painted surfaces, and only clean the painted surfaces with a damp cloth. If paint is ordered through a special option code, contact the manufacturer for more information.

### 5.4.3 I1 ATEX Intrinsic Safety

Certificate: Baseefa16ATEX0101X

Standards: EN 60079-0:2012+A11:2013, EN 60079-11:2012

Markings: II 1 G Ex ia IIC T5/T6 Ga (SEE CERTIFICATE FOR SCHEDULE)

| Thermocouples; P <sub>i</sub> = 500 mW | T6 –60 °C ≤ T <sub>a</sub> ≤ +70 °C |
|--|-------------------------------------|
| RTDs; P <sub>i</sub> = 192 mW          | T6 –60 °C ≤ T <sub>a</sub> ≤ +70 °C |
| RTDs; P <sub>i</sub> = 290 mW          | T6 –60 °C ≤ T <sub>a</sub> ≤ +60 °C |
|  | T5 –60 °C ≤ T <sub>a</sub> ≤ +70 °C |

### Special Conditions for Safe Use (X):

The equipment must be installed in an enclosure which affords it a degree of ingress protection of at least IP20.

### 5.5 International

5.5.1 E7 IECEx Flameproof

Certificate: IECEx FMG 12.0022X

Standards: IEC 60079-0:2011, IEC 60079-1:2014

Markings:Ex db IIC T6...T1 Gb; T6...T1:  $T_a$ = -50 °C to +40 °C; T5...T1:<br/> $T_a$ = -50 °C to +60 °CSee <a href="Process temperature limits">Process temperature limits</a> for process

temperatures.

### Special Conditions for Safe Use (X):

- 1. See certificate for ambient temperature range.
- 2. The non-metallic label may store an electrostatic charge and become a source of ignition in Group III environments.
- 3. Guard the LCD display cover against impact energies greater than 4 joules.
- 4. Flameproof joints are not intended for repair.
- 5. A suitable certified Ex d or Ex tb enclosure is required to be connected to temperature probes with Enclosure option "N".
- Care shall be taken by the end user to ensure that the external surface temperature on the equipment and the neck of DIN Style Sensor probe does not exceed 130 °C.
- 7. Non-Standard Paint options may cause risk from electrostatic discharge. Avoid installations that cause electrostatic build-up on painted surfaces, and only clean the painted surfaces with a damp cloth. If paint is ordered through a special option code, contact the manufacturer for more information.

### 5.5.2 NK IECEx Dust-Ignitionproof

Certificate: IECEx FMG 12.0022X

Standards: IEC 60079-0:2011, IEC 60079-1:2013

**Markings:** Ex tb IIIC T130 °C Db  $T_a$ = -40 °C to +70 °C; IP66 See <u>Process temperature limits</u> for process temperatures.

### Special Conditions for Safe Use (X):

1. See certificate for ambient temperature range.

- 2. The non-metallic label may store an electrostatic charge and become a source of ignition in Group III environments
- 3. Guard the LCD display cover against impact energies greater than 4 joules.
- 4. Flameproof joints are not intended for repair.
- 5. A suitable certified Ex db or Ex tb enclosure is required to be connected to temperature probes with Enclosure option "N".
- Care shall be taken by the end user to ensure that the external surface temperature on the equipment and the neck of DIN Style Sensor probe does not exceed 130 °C.
- 7. Non-Standard Paint options may cause risk from electrostatic discharge. Avoid installations that cause electrostatic build-up on painted surfaces, and only clean the painted surfaces with a damp cloth. If paint is ordered through a special option code, contact the manufacturer for more information.

### 5.5.3 I7 IECEx Intrinsic Safety

Certificate: IECEx BAS 16.0077X

Standards: IEC 60079-0: 2011, IEC 60079-11:2011

Markings: Ex ia IIC T5/T6 Ga (SEE CERTIFICATE FOR SCHEDULE)

| Thermocouples; P <sub>i</sub> = 500 mW | T6 –60 °C ≤ T <sub>a</sub> ≤ +70 °C |
|--|-------------------------------------|
| RTDs; P <sub>i</sub> = 192 mW          | T6 –60 °C ≤ T <sub>a</sub> ≤ +70 °C |
| RTDs; P <sub>i</sub> = 290 mW          | T6 –60 °C ≤ T <sub>a</sub> ≤ +60 °C |
|  | T5 –60 °C ≤ T <sub>a</sub> ≤ +70 °C |

### Special Conditions for Safe Use (X):

The equipment must be installed in an enclosure which affords it a degree of ingress protection of at least IP20

### 5.5.4 E2 Brazil Flameproof and Dust-Ignitionproof

Certificate: UL-BR 13.0535X

Standards: ABNT NBR IEC 60079-0:2013, ABNT NBR IEC 60079-1:2016, ABNT NBR IEC 60079-31:2014

Markings: Ex db IIC T6...T1 Gb; T6...T1:  $T_a$ = -50 °C to +40 °C; T5...T1:  $T_a$ = -50 °C to +60 °C; Ex tb IIIC T130 °C Db IP66; (-40 °C  $\leq T_a \leq$  +70 °C)

### Special Conditions for Safe Use (X):

- 1. See product description for ambient temperature limits and process temperature limits.
- 2. The non-metallic label may store an electrostatic charge and become a source of ignition in Group III environments.
- 3. Guard the LCD display cover against impact energies greater than 4 joules.
- 4. Consult the manufacturer if dimensional information on the flameproof joints is necessary.
- 5. A suitable certified Ex "d" or Ex "tb" enclosure is required to be connected to temperature sensors with Enclosure option "N".
- Care shall be taken by the end user to ensure that the external surface temperature on the equipment and the neck of DIN Style Sensor probe does not exceed 130 °C.
- 7. For all equipment, non-standard paint options may cause risk from electrostatic discharge. Avoid installations that cause electrostatic build-up on painted surfaces, and only clean the painted surfaces with a damp cloth. If paint is ordered through a special option code, contact the manufacturer for more information.

## 5.6 Process temperature limits

### Table 5-1: Sensor Only (No Transmitter Installed)

|                         | Process temperature (°C) |     |     |     |     |     |         |
|-------------------------|--------------------------|-----|-----|-----|-----|-----|---------|
|                         |                          | Gas |     |     |     |     |         |
|                         | Т6                       | T5  | T4  | Т3  | T2  | T1  | T130 °C |
| Any extension<br>length | 85                       | 100 | 135 | 200 | 300 | 450 | 130     |

### Table 5-2: Transmitter

|                 | Process temperature (°C) |     |     |     |     |     |         |
|-----------------|--------------------------|-----|-----|-----|-----|-----|---------|
|                 |                          | Gas |     |     |     |     | Dust    |
|                 | Т6                       | T5  | T4  | Т3  | T2  | T1  | T130 °C |
| No extension    | 55                       | 70  | 100 | 170 | 280 | 440 | 100     |
| 3-in. extension | 55                       | 70  | 110 | 190 | 300 | 450 | 110     |
| 6-in. extension | 60                       | 70  | 120 | 200 | 300 | 450 | 110     |

### Table 5-2: Transmitter *(continued)*

| 9-in. extension | 65 | 75 | 130 | 200 | 300 | 450 | 120 |
|-----------------|----|----|-----|-----|-----|-----|-----|
|-----------------|----|----|-----|-----|-----|-----|-----|

Adhering to the process temperature limitations of <u>Table 5-3</u> will ensure that the service temperature limitations of the LCD display cover are not exceeded. Process temperatures may exceed the limits defined in <u>Table 5-3</u> if the temperature of the LCD display cover is verified to not exceed the service temperatures in <u>Table 5-4</u> and the process temperatures do not exceed the values specified in <u>Table 5-2</u>.

|                    | Process temperature (°C) |      |      |         |  |
|--------------------|--------------------------|------|------|---------|--|
|                    |                          | Dust |      |         |  |
|                    | Т6                       | T5   | T4T1 | T130 °C |  |
| No extension       | 55                       | 70   | 95   | 95      |  |
| 3-in.<br>extension | 55                       | 70   | 100  | 100     |  |
| 6-in.<br>extension | 60                       | 70   | 100  | 100     |  |
| 9-in.<br>extension | 65                       | 75   | 110  | 110     |  |

### Table 5-3: Transmitter with LCD Display Cover

### Table 5-4: Transmitter with LCD Display Cover

| Service temperature (°C) |      |      |         |  |
|--------------------------|------|------|---------|--|
|                          | Dust |      |         |  |
| T6                       | T5   | T4T1 | T130 °C |  |
| 65                       | 75   | 95   | 95      |  |

## 5.7 Y3 ATEX/IECEx RFID tag approvals

| Certificate | IECEx EPS 15.0042X, EPS 15 ATEX 1 1011 X                  |
|-------------|---|
| Markings    | II 2G Ex ia IIC T6/T4 Gb, II 2D Ex ia IIC T80/T130C<br>Db |

### **Conditions of certification**

Maximum operating temperature: -58 °F (-50 °C) to +158 °F (+70 °C)

The RFID tags shall never be exposed to high electromagnetic field strengths according to IEC 60079-14.

Electrostatic charges shall be avoided. The tags shall never be used next to strong charge generating processes.

### **A** WARNING

### **Additional warnings**

The plastic enclosure may present a potential electrostatic ignition hazard.

RFID tag has limitations in ambient temperature and zone installation areas (Zones 1 & 21) as compared to the gauge.

## 6 Declaration of Conformity

**EU Declaration of Conformity** EMERSON No: RMD 1059 Rev. Q We, Rosemount, Inc. **6021 Innovation Boulevard** Shakopee, MN 55379-4676 USA declare under our sole responsibility that the product, Rosemount<sup>™</sup> Model 1067 Temperature Sensor manufactured by, Rosemount, Inc. **6021** Innovation Boulevard Shakopee, MN 55379-4676 USA to which this declaration relates, is in conformity with the provisions of the European Union Directives, including the latest amendments, as shown in the attached schedule. Assumption of conformity is based on the application of the harmonized standards and, when applicable or required, a European Union notified body certification, as shown in the attached schedule. Vice President of Global Quality (signature) (function) December 21, 2021 Mark Lee (date of issue) (name) Page 1 of 2



## 7 China RoHS

罗斯蒙特产品型号 1067 2/9/2021

#### 含有China RoHS 管控物质超过最大浓度限值的部件型号列表 1067 Temperature Sensor List of 1067 Temperature Sensor Parts with China RoHS Concentration above MCVs 有害物质 / Hazardous Substances 多溴联苯醚 Polybrominated diphenyl ethers (PBDE) 多溴联苯 Polybrominated biphenyls 部件名称 Part Name 六价格 Hexavalent 铅 Lead 汞 Mercury 福 Cadmium Chromium (Pb) (Hg) (Cd) (Cr +6) (PBB) 壳体组件 Housing 0 0 0 0 0 0 Assembly 传感器组件 Sensor 0 0 0 0 0 0 Assembly

本表格系依据SJ/T11364的规定而制作

This table is proposed in accordance with the provision of SJ/T11364.

O: 営力该部件的所有均质材料中该有害物质的含量均低于GB/T 26572所规定的模量要求. C: Indicate that said hazardous substance in all of the homogeneous materials for this part is below the limit requirement of GB/T 26572.

X: 営力在该部件所使用的所有均质材料里,至少有一类均质材料中该有害物质的含量高于GB/T 26572所规定的限量要求. X: Indicate that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB/T 26572.

| 部件名称                        | 组装备件说明                                  |
|-----------------------------|---|
| Part Name                   | Spare Parts Descriptions for Assemblies |
| 壳体组件<br>Housing<br>Assembly | 电子外壳 Electrical Housing                 |

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Quick Start Guide 00825-0100-4951, Rev. BE November 2024

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