

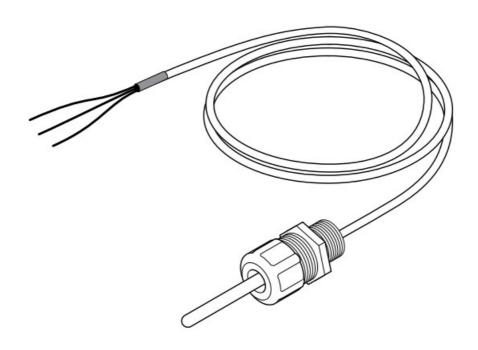
nVent RTD-200 Temperature Sensor for Ambient Sensing Owner's Manual

Home » nVent » nVent RTD-200 Temperature Sensor for Ambient Sensing Owner's Manual





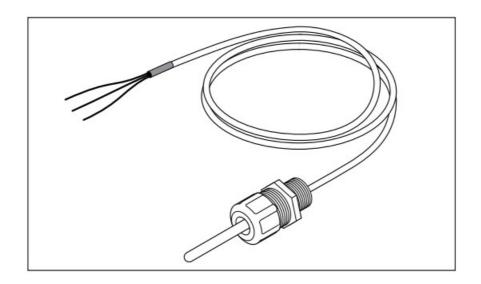
RTD Temperature Sensor for Ambient Sensing **Installation Instructions**



Contents

- 1 RTD-200 Temperature Sensor for Ambient
- **Sensing**
- 2 APPROVALS
- **3 DESCRIPTION**
- **4 KIT CONTENTS**
- **5 SPECIFICATIONS**
- **6 INSTALLATION**
- 7 RTD-200 WIRING
- 8 Documents / Resources
 - 8.1 References

RTD-200 Temperature Sensor for Ambient Sensing



APPROVALS

Approvals associated with control device, however not to be used in Div. 1 areas.

DESCRIPTION

The nVent RAYCHEM RTD-200 is a three-wire platinum RTD (resistance-temperature-detector) typically used with electronic control systems that require accurate ambient temperature sensing. The RTD-200 comes with a 1/2" NPT fitting that installs to the appropriate conduit box. This allows mounting of the RTD in a typical ambient location. This also allows for splicing of RTD extension wire back to the controller.

Tools required

None

Additional materials required

None

KIT CONTENTS

Item	Qty	Description
Α	1	RTD temperature sensor with 1/2-in NPT fitting

SPECIFICATIONS

Sensor		
Housing	316 stainless steel	
Dimensions	3 in (7.6 mm) length 1/4 in (6 mm) diameter	
Accuracy	±0.3°F (0.2°C)	
Range	-100°F to 300°F (-73°C to 149°C)	
Resistance	100 ohms +/25 ohm at 0°C X=0.00385 ohms/ohm/°C	
Extension Wires		
Wire size (each of 3)	22 AWG Note: The length of RTD extension wires is determined by the wire gauge used. To reduce the likelihood that electrical noise will affect temperature measurement, keep R TD extension wires as short as possible. Use shielded instrument cable such as nVent RA YCHEM MONI-RTD-WIRE (22 AWG, PVC insulation, -30°F to 140°F, -20°C to 60°C) or Belden 83553 (22 AWG, FEP insulation, -95°F to 395°F, -70°C to 200°C).	
Wire dielectric stren gth	600 volts	
Length	6 ft (1.8 m)	
Outer jacket	Fluoropolymer	
Maximum exposure temperature	300°F (149°C)	
Sensor fitting	1/2-in NPT with sealing washer and nut	

WARNING:

This component is an electrical device. It must be installed correctly to ensure proper operation and to prevent shock or fire. Read these important warnings and carefully follow all the installation instructions. Component approvals and performance are based on the use of specified parts only. Do not use substitute parts or vinyl electrical tape to make connections.

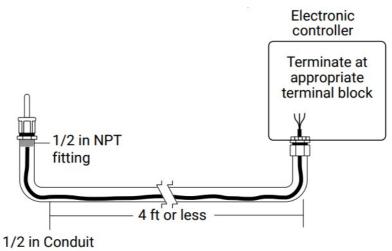
INSTALLATION

The RTD-200 can be terminated directly at the controller using the supplied 1/2 in NPT fitting. In this configuration, no additional extension wire is required.

RTD wired directly to controller

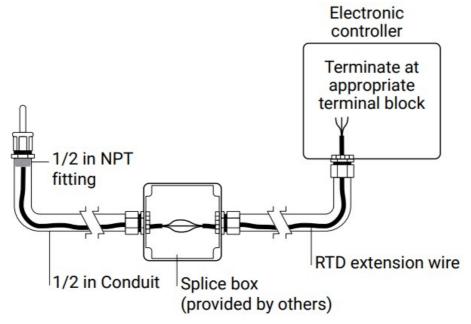
(Distance from sensor bulb to controller must be less than 4 ft)

Note: RTD should be placed in a typical ambient location.



RTD wired with splice box

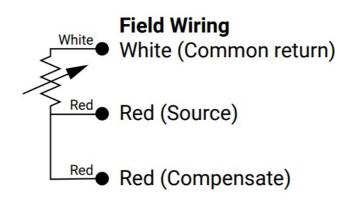
Note: RTD should be placed in a typical ambient location.



RTD-200 WIRING

Electrical Schematic of RTD

Connect the wires as shown.



North America

Tel +1.800.545.6258 Fax +1.800.527.5703 thermal.info@nVent.com

Europe, Middle East, Africa

Tel +32.16.213.511 Fax +32.16.213.604 thermal.info@nVent.com

Asia Pacific

Tel +86.21.2412.1688 Fax +86.21.5426.3167 cn.thermal.info@nVent.com

Latin America

Tel +1.713.868.4 Fax +1.713.868 thermal.info@r ©2024 nVent. All nVent marks and logos are owned or licensed by nVent Services GmbH or its affiliates. All other trademarks are the property of their respective owners.

nVent reserves the right to change specifications without notice.

RAYCHEM-IM-H56998-RTD200-EN-2401



Documents / Resources



nVent RTD-200 Temperature Sensor for Ambient Sensing [pdf] Owner's Manual RTD-200 Temperature Sensor for Ambient Sensing, RTD-200, Temperature Sensor for Ambient Sensing, Sensor for Ambient Sensing, Ambient Sensing, Sensing

References

- <u>** Electrical Heat Tracing | Heat Tracing | nVent RAYCHEM</u>
- User Manual

Manuals+, Privacy Policy

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