531 Series

Temperature Display for Pt100 and Ni100 RTD's

Features

- Compact and Low-Cost Temperature Display
- Temperature Display in °C or °F
- MIN/MAX Value Retention
- EEPROM Data Backup on Power Failure
- Galvanic Isolation with Reverse Polarity Protection
- Screw Terminal Connectors: pitch 5 mm
- Display Hold Input
- Easy Programming and Operation
- 5 Measurements/second

Specifications:

Supply voltage:	10-30 V DC, galvanically isolated with reverse polarity protection
Current draw:	max. 40 mA
Display:	5-digit display, red LED's; height 8 mm
Measuring rate:	5 measurements/second
Display refresh:	1-2 times per second
Data backup:	EEPROM
Housing:	housing for control panel 48 x 24 mm acc. to DIN 43 700; RAL 7021, dark grey
Ambient temp.:	–20 to +65 °C
EMC:	according to EC EMC directive 89/36/EEC
Interference emissions:	EN 50081-2/EN 55 011 Class B
Interference resistance:	EN 6100-6-2
Protection:	NEMA4 / IP65 (front)
Weight:	app. 50 g
Circuit type:	2-wire, 3-wire and 4-wire connection technique, programmable
Input:	Pt100 or Ni100 RTD with sensor breakage monitoring
Control inputs:	High: 4-30 V DC, Low: 0-2 V DC
Supply current:	1 mA
Supply line:	2-wire: max 20 Ω, programmable 3-wire, 4-wire: max 20 Ω, no balancing required
Temp. ranges:	Pt100 acc. to DIN IEC 751: –199.9 °C to +850.0 °C –327.8 °F to +1562.0 °F Ni100 acc. to DIN 43760: –60.0 °C to +250.0 °C –76.0 °F ... +482.0 °F
Resolution:	0.1°C (0.1°F) or 1°C (1°F)
Linearity error:	Pt100 < 0.1 % for entire measuring range at an ambient temperature of 20 °C Ni100 < 0.2 % for entire measuring range at an ambient temperature of 20 °C
Temp. drift:	0.1 K/KAmbient

Order #:

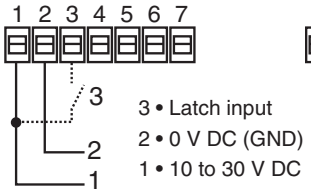
531 = Temperature Display with RTD Input

Accessories

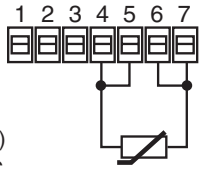
N7 - Explosion proof housing (see accessories section)
E200 - Outdoor Enclosure (see accessories section)

Wiring:

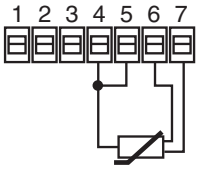
Power Supply



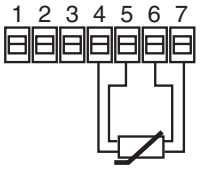
2-Wire RTD



3-Wire RTD



4-Wire RTD



Panel Cutout: 0.876" x 1.78" (22.3 x 45.2mm)
or 0.99" x 1.97" (25 x 50mm) with adaptor provided