

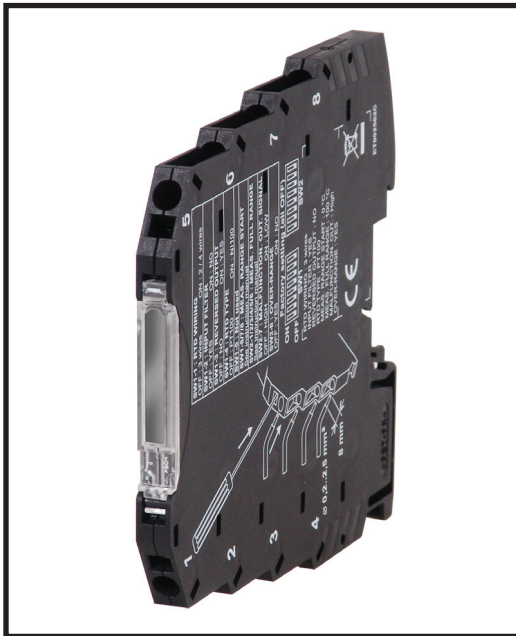
DSCP61

Pt100-to-DC Current/Voltage Converter



Description

Each DSCP61 RTD Pt100 Converter provides a single channel of RTD input which is amplified, linearized and converted to a high-level current or voltage output. Inputs may be connected by 2, 3, or 4 wires and measurement range may be configured by dip-switch to cover a range of -150°C to $+650^{\circ}\text{C}$. Power can be applied directly to the converter's terminals or through a DIN rail mounted bus connector accessory, eliminating the need to wire power to each individual converter.

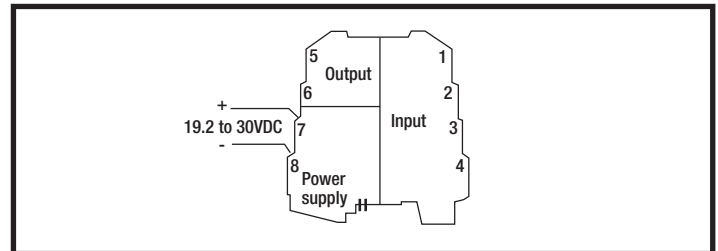


► Features

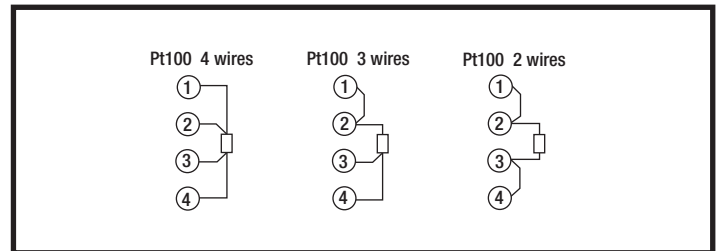
- Input: Pt100 (2, 3, 4 wires, -150°C to $+650^{\circ}\text{C}$)
- Output Current: 0 to 20, 4 to 20, 20 to 0, 20 to 4mA
- Output Voltage: 0 to 5, 1 to 5, 0 to 10, 10 to 0VDC
- 1500Vrms Galvanic Isolation, 3-Way
- 19.2 to 30VDC Power
- Spring Cage Clamp Connection
- 14-Bit Resolution
- Better than $\pm 0.1\%$ Accuracy
- Configuration by Dip-Switch
- Compact 6.2mm DIN Housing
- CE Compliant

Electrical Connections

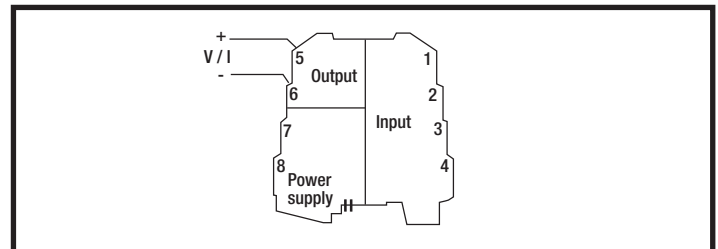
Power supply



Input



Output



For information call 800-444-7644

Specifications Typical at $T_A=+25^{\circ}\text{C}$ and +24VDC power

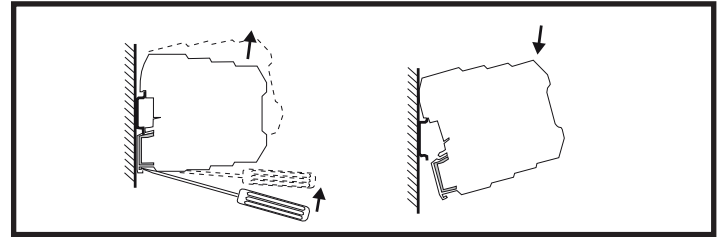
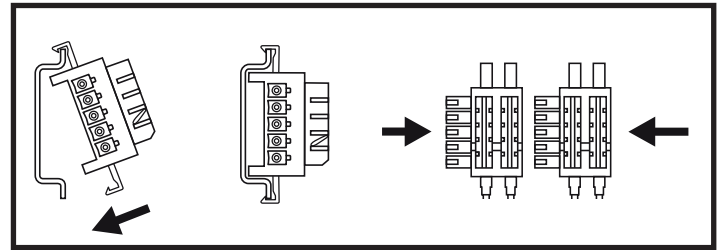
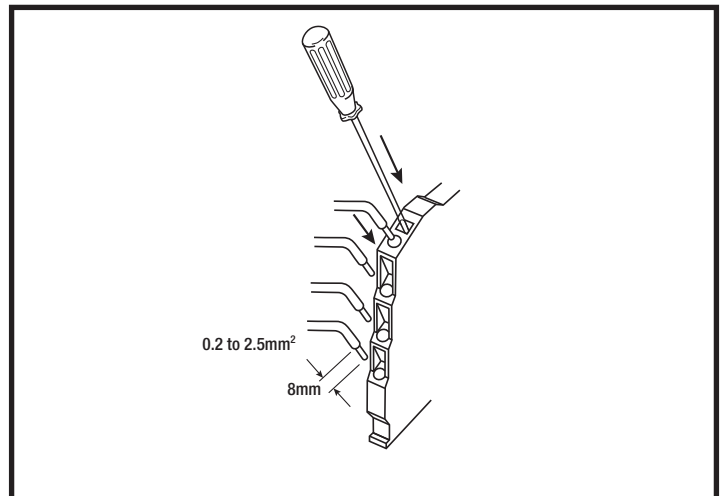
Module	DSCP61
Input (selectable) Pt100 Probe EN 60751	Accepts 2-, 3-, or 4-wire RTDs Sensor current: <math><900\mu\text{A}</math> Cable resistance: 20 Ω per wire (max) Measurement range: -150°C to $+650^{\circ}\text{C}$ (settable) Span: 50 $^{\circ}\text{C}$ (min) Input voltage: 32VDC (max)
Accuracy	$\pm 0.1\%$ (max)
Thermal Drift	<math><100\text{ppm}/^{\circ}\text{K}</math>
A/D Conversion	14-bit
Processing	Floating point 32-bit
Response Time, 90% Span (selectable)	<math><50\text{ms}</math> (without filter), <math><200\text{ms}</math> (with filter)
Isolation	1500Vrms (1 minute), 3-Way
Dip-Switch Configuration	Sets input and output ranges, sensor type, filter and faults
Status Indicators (LED)	Internal fault, configuration error, connection fault
Output (selectable)	
Current	0 to 20, 4 to 20, 20 to 0 or 20 to 4mA Load resistance: 500 Ω (max)
Current Output Maximum	25mA
Fault Output	102.5% or 105% of full-scale value in case of over-range
Voltage	0 to 5, 1 to 5, 0 to 10 or 10 to 0VDC Load resistance: 2k Ω (min)
Power Supply	19.2 to 30VDC
Power Consumption	500mW (21mA at 24VDC)
Hot Swapping	Yes
Environmental	
Operating Temp. Range	-20°C to $+65^{\circ}\text{C}$
Storage Temp. Range	-40°C to $+85^{\circ}\text{C}$
Relative Humidity	0 to 90%, Noncondensing
IP Protection	IP20
Emissions	EN61000-6-4
Immunity	EN61000-6-2
Mechanical Dimensions (w x h x d)	0.24" x 3.67" x 4.04" (6.2mm x 93.1mm x 102.5mm)
Housing	Terminal housing for mounting on 35mm DIN 46277
Connections	Spring cage clamp
Weight	1.8 ounces (50g)

Ordering Information

Model	Description
DSCP61	Pt100-to-DC Current/Voltage Converter

Accessories

Model	Description
DSCX-02	DIN Rail Expandable Power-Bus Connector
DSCP70	Power Supply Connection Module

Installation
Inserting/extracting module on DIN guide

Expandable power-bus connector

Spring cage clamp connection

Dimensional Drawing
