

DSCP63

DC Voltage/Current Converter



Description

Each DSCP63 Voltage/Current Converter provides a single channel of voltage or current input which is converted to a voltage or current output. It is designed for industrial standard voltage or current signals. Input/output range, filter, fault indication, square root function and other functions may be configured by dip-switch. 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.

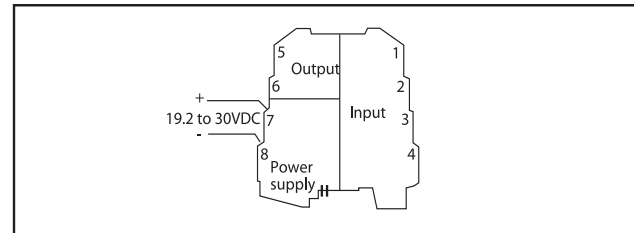


Features

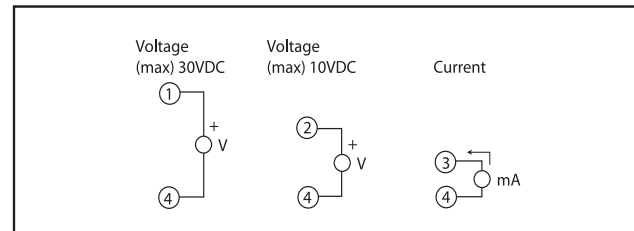
- Input Voltage: 0 to 5, 0 to 10, 0 to 15, 0 to 30, 1 to 5, 2 to 10VDC
- Input Current: 0 to 20, 4 to 20mA
- Output Voltage: 0 to 5, 0 to 10, 1 to 5, 2 to 10VDC
- Output Current: 0 to 20, 4 to 20, 20 to 0, 20 to 4mA
- 1500Vrms Galvanic Isolation, 3-Way
- 19.2 to 30VDC Power
- Spring Cage Clamp Connection
- 14-Bit Resolution
- Better than $\pm 0.1\%$ Accuracy
- Configuration by Dip-Switch
- Compact 6.2mm DIN Housing
- CE Compliant

Electrical Connections

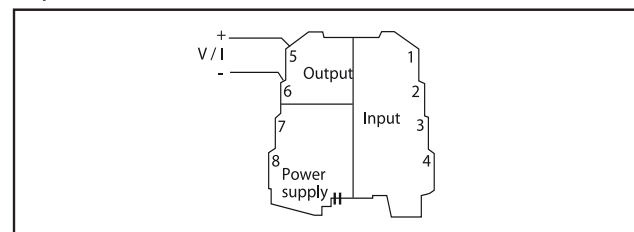
Power supply



Input



Output



Specifications Typical* at T_A = +25°C and +24VDC loop power

Module	DSCP63
Input (selectable) Voltage (maximum 50VDC) Voltage (maximum 30VDC) Current (maximum 24mA)	0 to 15, 0 to 30VDC (input R = 325kΩ) 0 to 5, 1 to 5, 0 to 10, 2 to 10VDC (input R = 110kΩ) 0 to 20, 4 to 20mA (input R = 35Ω)
Accuracy Thermal Drift A/D Conversion Processing Response Time, 90% Span, (selectable) Isolation Dip-Switch Configuration Status Indicators (LED)	±0.1% (max) <120ppm/°K 14-bit Floating point 32-bit <35ms (without filter), <74ms (with filter) 1500Vrms (1 minute), 3-Way Sets input and output ranges, filter and faults Internal fault, configuration error, connection fault
Output (selectable) Current Current Output Maximum Fault Output Voltage	0 to 20, 4 to 20, 20 to 0 or 20 to 4mA Load resistance: 500Ω (max) 25mA 102.5% or 105% of full-scale value in case of over-range 0 to 5, 1 to 5, 0 to 10 or 2 to 10VDC Load resistance: 2kΩ (min)
Power Supply Power Consumption Hot Swapping	19.2 to 30VDC ⊗ 00mW (22mA at 24VDC) Yes
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)
Environmental Operating Temp. Range Storage Temp. Range Relative Humidity IP Protection Emissions Immunity	-20°C to +65°C -40°C to +85°C 0 to 90% Noncondensing IP20 EN61000-6-4 EN61000-6-2

Ordering Information

Model	Description
DSCP63	DC Voltage/Current Converter

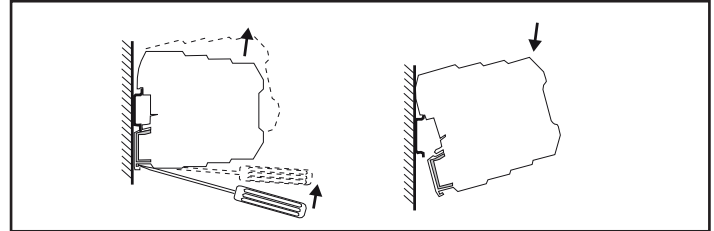
Accessories

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

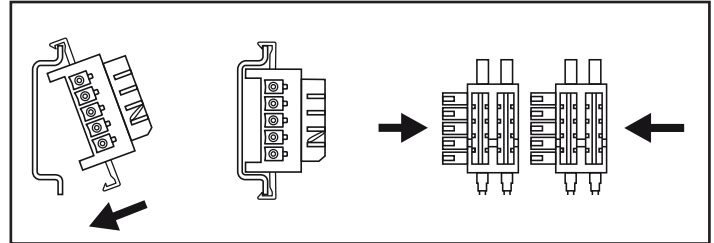
NOTES:
*Contact factory or your local Dataforth sales office for maximum values.

Installation

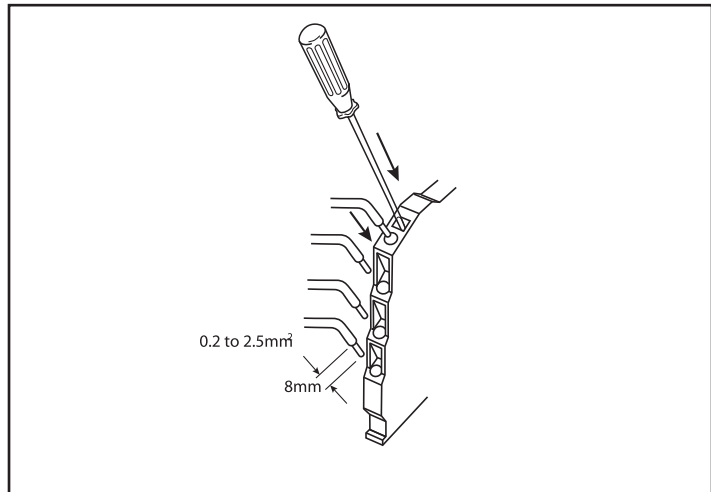
Inserting/extracting module on DIN guide



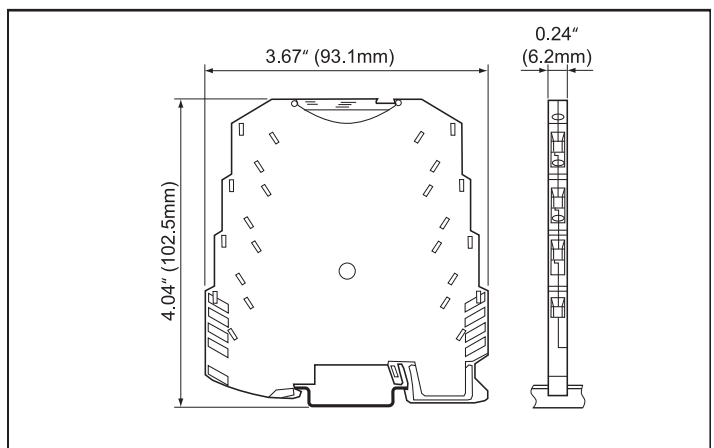
Expandable power-bus connector



Spring cage clamp connection



Dimensional Drawing



DSCP