DSCP63

DC Voltage/Current Converter

DESCRIPTION

The 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: 0-5VDC, 0-10VDC, 0-15VDC, 0-30VDC, 1-5VDC, 2-10VDC
- Input Current: 0-20mA, 4-20mA
- Output Voltage: 0-5VDC, 0-10VDC, 1-5VDC, 2-10VDC
- Output Current: 0-20mA, 4-20mA, 20mA-0, 20-4mA
- 1500Vrms Galvanic Isolation, 3-way
- 19.2-30VDC Power
- Spring-cage Clamp Connection
- 14-bit Resolution
- Better than ±0.1% Accuracy
- Configuration by Dip-switch
- Compact 6.2mm DIN Housing
- CE Compliant

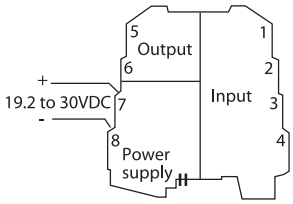
BENEFITS

- High-efficiency Energy Conversion
- Helps to Improve Device Energy Utilization

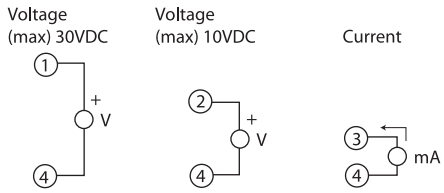
APPLICATIONS

- Data Acquisition
- Test and Measurement
- Control Systems

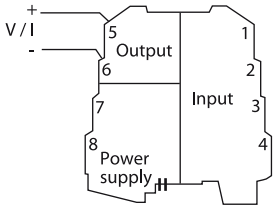
Power Supply



Input



Output



DSCP63 Electrical Connections

Specifications

Typical* at T_A = +25°C and +24VDC Loop Power

Module	DSCP63
Input (selectable) Voltage (max 50VDC) Voltage (max 30VDC) Current (max 24mA)	 0-15VDC, 0-30VDC (Input R = 325kΩ) 0-5VDC, 1-5VDC, 0-10VDC, 2-10VDC (Input R = 110kΩ) 0-20mA, 4-20mA (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	 0-20mA, 4-20mA, 20mA-0 or 20-4mA Load Resistance: 500Ω (max) 25mA 102.5% or 105% of Full-scale Value in Case of Over-range 0-5VDC, 1-5VDC, 0-10VDC or 2-10VDC Load Resistance: 2kΩ (min)
Power Supply Power Consumption Hot Swapping	19.2-30VDC <600mW (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.

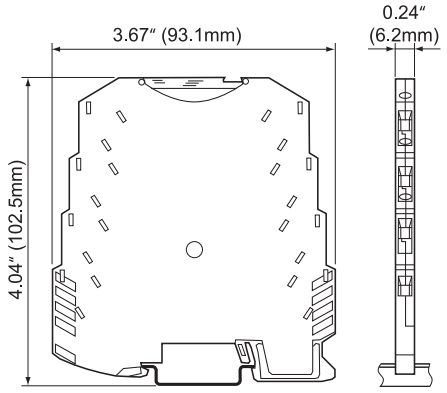
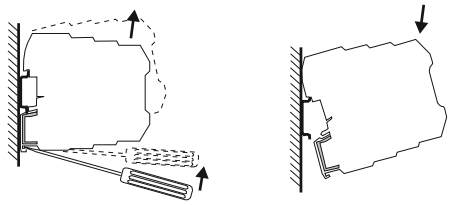
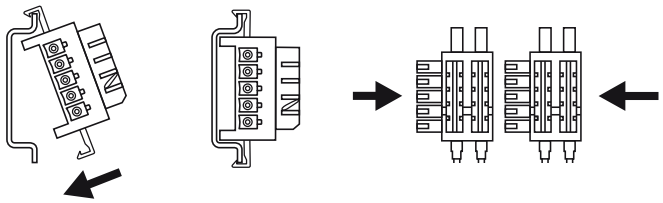


Figure 1: Dimensional Drawing

Inserting/Extracting Module on DIN Guide



Expandable Power-bus Connector



Spring-cage Clamp Connection

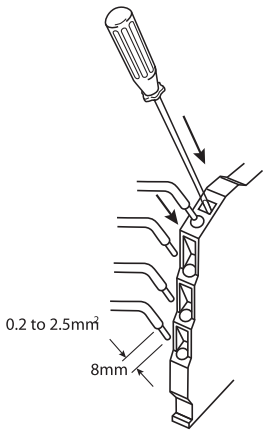


Figure 2: Module Installation