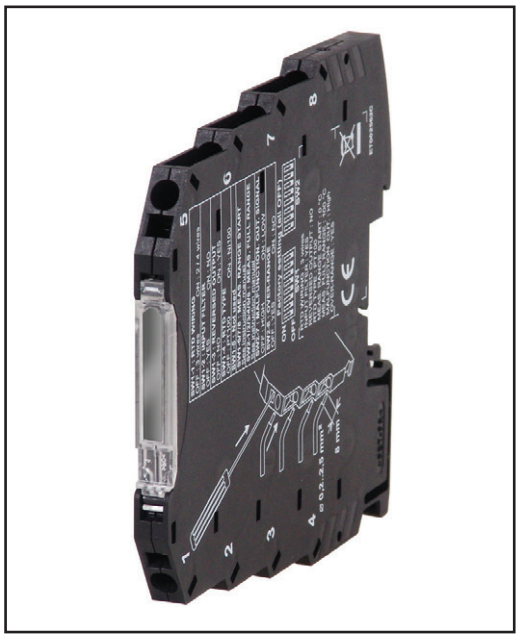
DSCP64

DC Voltage/Current Converter with Transducer Power Supply

Description

Each DSCP64 Voltage/Current Converter provides a single channel of voltage or current input which is converted to a current or voltage output. An auxiliary power supply is provided for powering the input transducer/sensor. 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.

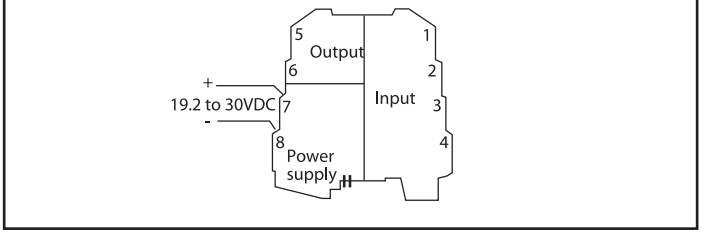


Features

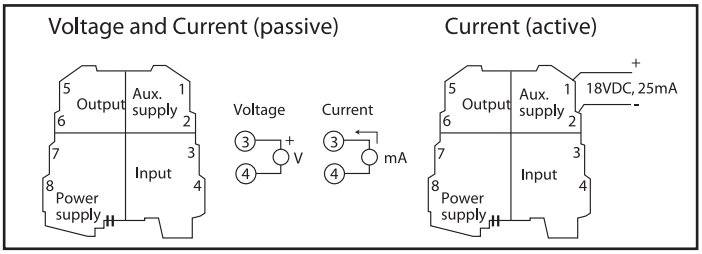
- Input Voltage: 0 to 5, 0 to 10, 1 to 5, 2 to 10VDC
- Input Current: 0 to 20, 4 to 20mA
- Output Voltage: 0 to 5, 0 to 10, 1 to 5, 2 to 10VDC
- Output Current: 0 to 20, 4 to 20, 20 to 0, 20 to 4mA
- 1500Vrms Galvanic Isolation, 4-Way
- 19.2 to 30VDC Power
- Spring Cage Clamp Connection
- 14-Bit Resolution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

Electrical Connections

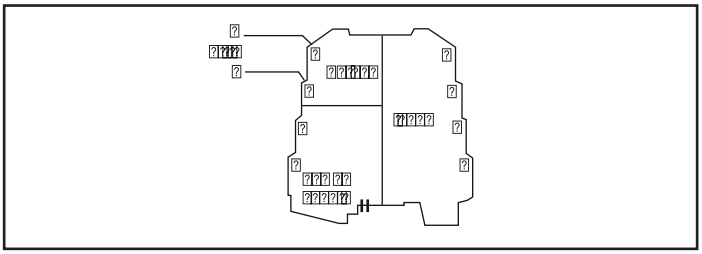
Power supply



Input



Output



Specifications

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

Module	DSCP64
Input (selectable) Voltage Current	 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 Auxiliary Power Supply	 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) 17 to 21VDC, 0 to 25mA
Power Supply Power Consumption Hot Swapping	19.2 to 30VDC 23mA (max) at 24VDC with output at 20mA and auxiliary supply not used 45mA (max) at 24VDC with output at 21mA and auxilliary supply at 21mA 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	1.6 ounces (46g)
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
DSCP64	DC Voltage/Current Converter

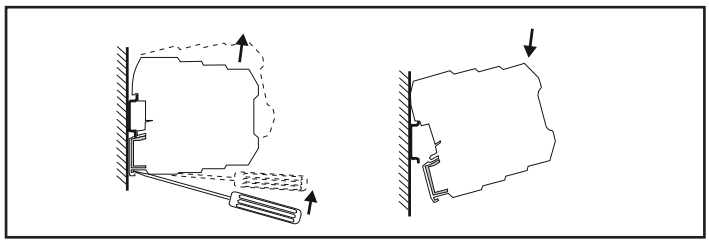
Accessories

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

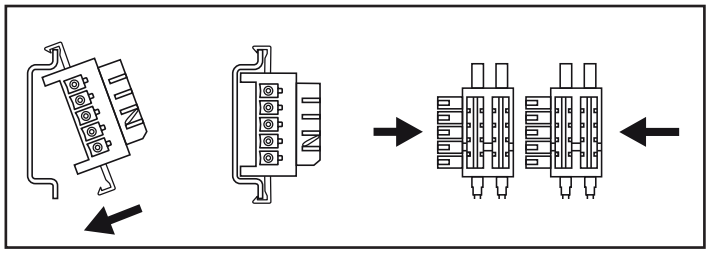
NOTES:
*Contact factory or your local Dataforth sales office for maximum values.

Installation

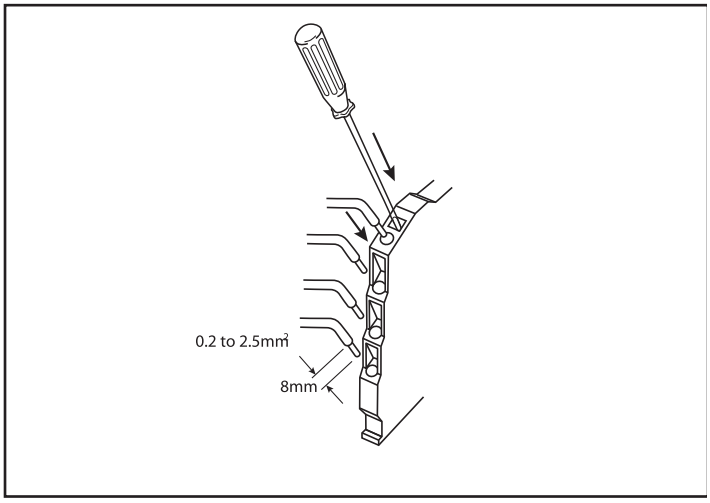
Inserting/extracting module on DIN guide



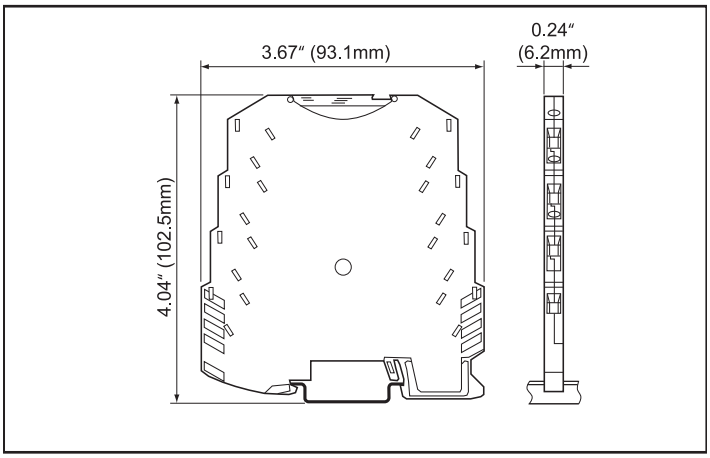
Expandable power-bus connector



Spring cage clamp connection



Dimensional Drawing



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