

SC-420TWHL

mA & VOLTAGE INPUT ISOLATING TERMINALS



The SC-420TWHL series of isolating terminal blocks can replace standard DIN-Rail terminal to provide input isolation, signal conversion and excellent RFI and noise rejection.

The units are powered from the output side, making them ideal for plc and data acquisition applications.

Inputs for the SC-420TWHL include mA or Voltage and other units are available with thermocouple, mV or RTD inputs. The standard output is 4-20mA.

The SC-420TWHL units are housed in ultra compact DIN-rail mounted enclosures just 18mm wide.

Features

- Replace Standard DIN-Rail Terminals
- RFI Protection, Input Isolation
- Voltage or Current Inputs
- Simple 2 Wire 4-20mA Output
- Loop Powered Output Gives High Noise Immunity
- Low Cost Solution

Input Options

The range of inputs for the SC-420TWHL are as follows:

Standard Ranges are 4-20mA, 0-20mA, 0-10V and 1-5V

The unit can cover the following ranges:

Input Types	Input Range MIN	Input Range MAX
DC Current	0 - 100µA	0 - 5A
DC Voltage	0 - 100mV	0 - 100V

Technical

Parameter	Min	Typ	Max	Comments
Supply Voltage	10V	24V	32V	Powered from Output Side
Input Current	0mA	0-20mA	30mA	
Full Scale Volt Drop		0.2V	0.3V	On Input Side (20mA Input)
Input Impedance (Volt In)		1M Ω		Voltage Input
Input Impedance (mA In)		10M Ω		mA Input
Output Linearity Error		$\pm 0.01\%$		
Temp Coefficient			100ppm/ $^{\circ}\text{C}$	
Load Resistance Error			$\pm 5\text{ppm}/\Omega$	$0 < R_L < 600\Omega$
Time Constant (10-90%)		30mS		300mS for Thermocouple Input
Operating Ambient	-15 $^{\circ}\text{C}$		70 $^{\circ}\text{C}$	
Relative Humidity	0%		90%	
Isolation Voltage	1kV			
Surge Voltage	2.5kV for 50 μS	Transient of 10kV/ μS		

Notes: Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Device is protected against reverse polarity connection. Accuracy figures based on 0-20mA input, 250 Ω load resistance, and an ambient temperature of 20 $^{\circ}\text{C}$.

Installation Data

Mounting	DIN Rail TS35
Orientation	Any
Connections	Screw Clamp with pressure plate
Conductor Size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 50g

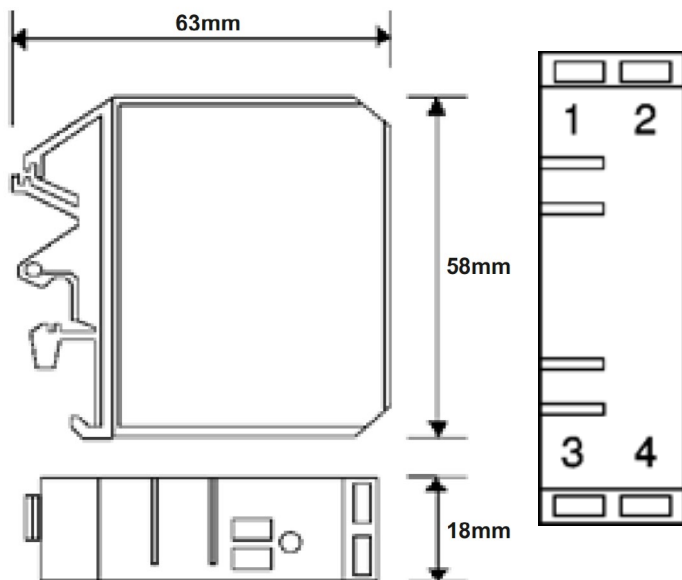
Connection Details

1. Output Channel +ve
2. Output Channel -ve
3. Input Channel +ve
4. Input Channel -ve



DIMENSIONS

All dimensions are in millimeters.





ORDERING OPTIONS

Example : SC-420TWHL

Please supply

Part Number SC-420TWHL 4-20mA In 4-20mA Out

Made in the UK

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