IsoVerter®II
Models SC4130, SCL4130, SC4151 & SCL4151
INSTALLATION INSTRUCTIONS

Getting Started
1.) Using a small screwdriver, ball point pen, etc. set the Output Switch (SW-1) on the side of the unit (see Output Programming on page 2).
2.) Mount unit into panel. (see Mounting on page 2).
3.) Connect unit to input signal, output signal, and power wiring (see Wiring on page 3).
4.) Check calibration (See Calibration on page 3).

Specifications are on page 4.

Dimensions

Dimensions in millimeters (inches)
Output Programming

MODE SELECTION SWITCH BANK (SW-1)

1. For VOLTAGE OUTPUT (0 to 10 VDC) turn switches one, two, and three ON and switches four, five, and six OFF.
2. For CURRENT OUTPUT (4 to 20 mA) turn switches one, two, and three OFF and switches four, five, and six ON

WARNING: Do not attempt to operate this device with the cover removed. Potentially lethal voltage is present on some of the internal components. Do not open the unit. There are no internal adjustments or user serviceable parts in the unit.

Mounting

Mount the unit in a panel that will not be subject to excessive temperature, shock, or vibration. All models are designed for mounting on an industry standard 35 mm DIN rail. An optional surface mounting kit is available from the factory (P/N 35DINADPTR).

To install hold the SC4130 / SCL4130 / SC4151 / SCL4151 so that is the front is higher than the rear. Place the upper slot on the rear of the SC4130 / SCL4130 / SC4151 / SCL4151 on the top edge of the DIN rail. Slowly rotate the front down until the bottom spring clip snaps over the bottom edge of the DIN rail.

To remove from the DIN rail, place a small slotted screwdriver in the slot in the spring clip under the housing. Pry the slot downward to release the SC4130 / SCL4130 / SC4151 / SCL4151 from the bottom of the rail.
Wiring
The wiring terminals for the SC4130 /SCL4130/ SC4151/SCL4151 are compression type. To open the wiring terminal, turn the screw for that terminal counterclockwise. Slide the wire into the terminal space. While holding the wire in place, turn the screw clockwise to tighten. Do not overtighten. The wire should be held snugly in place.

For the SC4130/SCL4130 wire the thermocouple to terminals 1 (negative / red wire) and 2 (positive).

For the SC4151/SCL4151 wire the RTD to terminals 1 and 2. Three wire RTDs should have the two common wires connected to terminals 2 and 3. Two wire RTDs need a jumper wire placed between terminals 2 and 3.

Power for SC4130/SC4151 is 85 to 265 Vdc/Vac 50 to 400 Hz. Power for SCL4130/SCL4151 is 12 to 24 Vdc/Vac 50 to 400 Hz.

Wire the input, output, and power as shown on the wiring label. Do not run Class 2 signal wires adjacent to or in the same conduit as power wires.

Calibration
The SC4130, SCL4130, SC4151, and SCL4151 are calibrated at the factory for correct output for the range selected. For field calibration follow the following procedure.

1. Apply the appropriate input (millivolts for the SC4130/SCL4130, ohms for the SC4151/SCL4151) for the low end of the scale.
2. Adjust the ZERO screw for the appropriate low end output.
3. Apply the appropriate input for the high end of the scale.
4. Adjust the SPAN screw for the appropriate high end output.
5. Repeat as necessary.
Specifications

Power Supply:
  SC4130/SC4151: 85 to 265 VDC / VAC 50 to 400 Hz.
  SCL4130/SCL4151: 12 to 24 Vdc/Vac 50 to 400 Hz. ±20%

Isolation: 1500 VAC

Ambient Temperature Range:
  Operating: 0° to 50° C (32° to 131° F)
  Storage: -40° to +80° C (-40° to +176° F)

Humidity Conditions: 0 to 90% rh up to 40°C non-condensing, 10 to 50% rh at 55°C non-condensing.

Linearity: 0.25%

Drift: ±0.02% per °C typical, ±0.05% maximum.

Maximum current output load: 600 ohms.

Maximum voltage output load: 20mA (500 ohms).

Input impedance - SC4130/SCL4130 - thermocouple: 1 Megohm.

RTD Search Current - SC4151/SCL4151 - RTD: 500µA maximum.