The SFI is a single channel, auxiliary powered, isolator for current/voltage signals. The DFI combines two isolators, which can be used separately or as a signal splitter.

- Single and dual channel versions
- Power for active input devices
- Highly accurate (±0.1% of span)
- LED status indication
- Bipolar inputs
- Switch selectable input format
- Front panel zero and span adjustment
- Complete Isolation
- AC or DC powered
- Removable, screw-type, terminal blocks
- Compact metal housing
Auxiliary Powered, Signal Isolators

General Information
The standard package has a single 24Vdc output to drive a loop powered transmitter as input. The second power supply output (on DFI channel two) is standard. Input channel one, Input channel two, Output channel one, Output channel two and the power supply are all fully isolated from one another.

Technical Specifications

Inputs
Type
Switch selectable current/voltage format
Ranges
4-20mA, 0-20mA, 0-10V, -10 to +10V
Other ranges on request
22Ω (current inputs) or 1MΩ (voltage inputs)
Power supply (out)
One 24Vdc (to 25mA) per channel

Outputs
Type
Current/voltage format (as ordered)
Ranges
4-20mA or 0-20mA (into 0–1kΩ load)
0-10V (minimum load 430kΩ)
1-5V (minimum load 215kΩ)
Other ranges on request

Power Supply
Type
AC or DC powered
AC Voltage
110V/240V, Frequency 50Hz/60Hz
12-50Vdc
DC 4.6VA @ 240Vac/110Vac
DC 4.5W @ 24Vdc

Adjustments
Type
20-turn potentiometers
Span
±25% of span
Zero
±25% of span

Environmental Conditions
Operating temperature
0 to 60 °C
-25 to +70 °C
2
10–90% (non-condensing)

Insulation Co-ordination
Ports
Input Channel One / Output Channel One
Input Channel Two / Output Channel Two / Case
Rated Insulation Voltage
300Veff
III
-6kV (1.2 / 50)
2 kV (between ports)

Performance
Linearity
Better than ±0.1%
<0.005% span per °C
0.1% per 10,000 hours
280mS

Housing
Type
Dual DIN-rail mount
Dimensions
See diagram
Weight
0.35kg
Connection type
Plug in terminal blocks with screw connections
Wiring
Use 12-28AWG Cu Wire rated >60°C

Approvals
Mark
SRI and DFI - DC Powered versions only
E256486
SRI and DFI
UL61010-1: 2004
EN50178:1998
BS EN 61326:1998 + A2

Connections
Terminal | Signal | Input channel one
--- | --- | ---
1 | 24Vdc (out) | 
2 | Current + | 
3 | Common – | 
4 | Voltage + | 
5 | 24Vdc (out) | 
6 | Current + | 
7 | Common – | 
8 | Voltage + | 
9 | Neutral (–) | 
10 | Live (+) | 
11 | Not used | 
12 | Output + | 
13 | Output – | 
14 | Not used | 
15 | Output + | 
16 | Output – | 

Case Earthing is via a stud on lower side of case

Dimension drawing

Effective depth:
97 mm
120mm (Top Hat 35mm +/- 0.3, DIN 46277-3, EN 50022)
125mm (G - Rail 32mm +/- 0.3, DIN 46277-1, EN 50035)

To surface (including rail/ mounting plate)

Ordering Information

Type (Model Input/Output/Supply) | Cat. no.
--- | ---
SFI 0-10V/4-20mA/12-50Vdc | 7940016083
SFI 4-20mA/4-20mA/12-50Vdc | 7940010212
DFI 0-10V/4-20mA/12-50Vdc | 7940012275
DFI 4-20mA/4-20mA/12-50Vdc | 7940010167

Note: For other ranges please specify Model 1/2/3 where:
1 = Input, 2 = Output, 3 = Supply