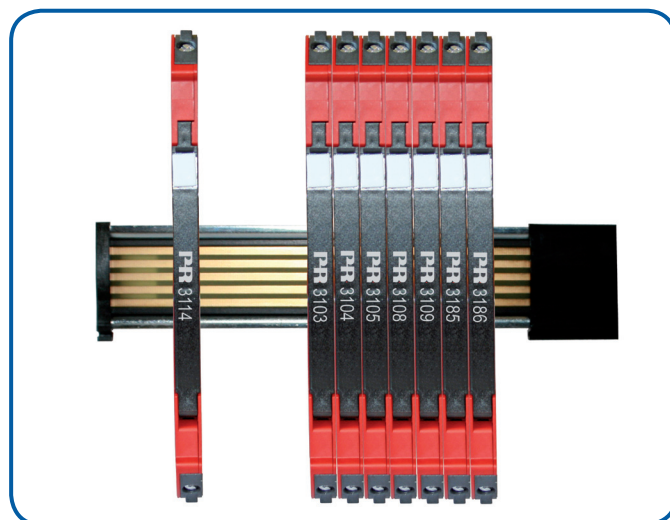


ISOLATED REPEATER / SPLITTER



- Isolation and conversion of current signals
- Slimline housing of 6 mm
- Response time <7 ms
- Splitter function: 1 in - 2 out
- Simple - no setup needed



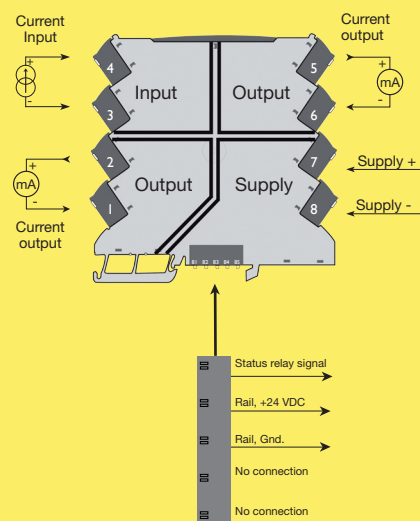
Applications

- Isolation and conversion of standard DC signals.
- Galvanic separation of analogue current signals.
- Elimination of ground loops and measurement of floating signals.
- A competitive choice in terms of both price and technology for galvanic isolation of current signals to SCADA systems or PLC equipment.
- Installation in ATEX Ex zone 2 / IECEx Zone 2 / FM division 2.
- Suitable for environments with high vibration stress, e.g. ships.

Technical characteristics

- The input is protected against overvoltage and polarity error.
- Factory-calibrated measurement ranges.
- Inputs and outputs are floating and galvanically separated.

Connections



Order codes:

3108 = Isolated Repeater / Splitter

3405 = Power Connector Unit (for power rail)

9400 = Power Rail

9404 = Module Stop

Electrical specifications:

Specifications range:

-25°C to +70°C

Common specifications:

Supply voltage, DC 16.8...31.2 VDC
 Internal consumption..... 0.4 W (typ.)
 0.65 W (max.)
 Power consumption (max.)..... 0.8 W
 Isolation voltage, test 2.5 kVAC
 Working isolation voltage 300 VAC
 Accuracy < ±0.05% of span
 Basic accuracy, mA..... < ±8 µA
 Temperature coefficient < ±0.01% of span / °C
 Signal / noise ratio..... > 60 dB (0...100 kHz)
 Response time
 (0...90%, 100...10%) < 7 ms
 Calibration temperature..... 20...28°C
 EMC immunity influence < ±1% of span
 Wire size (max.) 0.13 x 2.5 mm²
 stranded wire
 Screw terminal torque 0.5 Nm
 Relative humidity < 95% RH (non cond.)
 Dimensions (H x W x D)..... 113 x 6.1 x 115 mm
 DIN rail type..... EN 60715
 Protection degree IP20
 Weight 70 g

Current input:

Measurement range 0...20.5 mA
 Functional range..... 0...23 mA
 Input voltage drop <3 VDC

Current output:

Signal range (span)..... 0...20.5 mA
 Load (max.)..... 23 mA / 300 Ω
 Load stability ≤ 0.01% of span / 100 Ω
 Current limit ≤ 28 mA

Approvals:

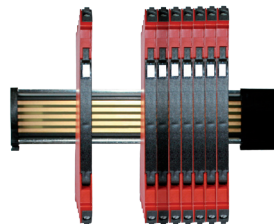
Det Norske Veritas, Ships & Offshore. Stand. f. Cert No. 2.4
 Germanischer Lloyd V1-7-2
 ATEX 94/9/EC EN 60079-0, -15
 IECEx IEC 60079-0, -15
 c FM us FM 3600, 3611, 3810
 CSA E60079-0, -15
 CSA 22.2 -213
 EMC 2004/108/EC EN 61326-1
 LVD 2006/95/EC EN 61010-1
 UL, Standard for Safety UL 61010-1
 Safe Isolation EN 61140

Installation on DIN rail



The 3100 series can be installed on a DIN rail supported, if necessary, by a module stop (PR part number 9404).

Marking



The front cover of the 3100 series has been designed with an area for affixation of a click-on marker. The area assigned to the marker measures 5 x 7.5 mm. Markers from Weidmüller's MultiCard System, type MF 5/7.5, are suitable (PR part number MF5/7.5).