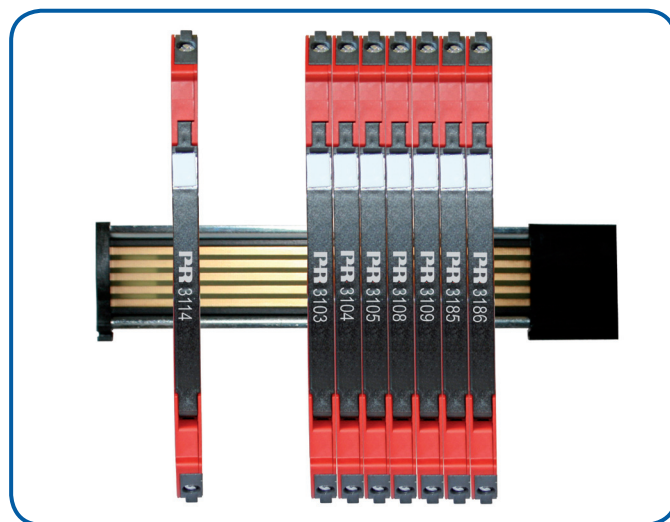


ISOLATED REPEATER



- Isolation and 1:1 conversion of standard current signals
- Slimline housing of 6 mm
- Response time <7 ms
- Low cost
- Simple - no setup needed



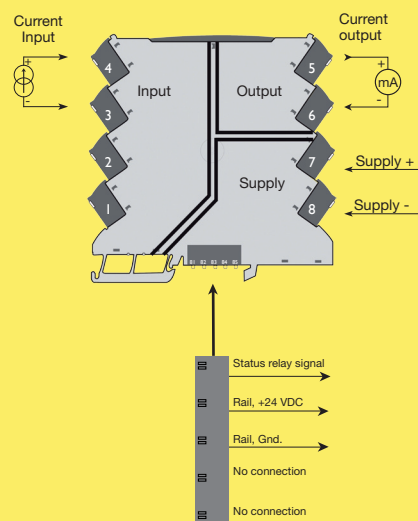
Applications

- Isolation and 1:1 conversion of standard current 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



QUALITY SYSTEM AND ENVIRONMENTAL MANAGEMENT SYSTEM
DS/EN ISO 9001
DS/EN ISO 14001

PR electronics A/S
Lerbakken 10 . DK-8410 Rønde
Tlf. 8637 2677 . Fax. 8637 3085
www.prelectronics.dk . sales@prelectronics.dk

Order codes:

3103 = Isolated Repeater

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 mm ²
	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 / 600 Ω
Load stability	≤ 0.01% of span / 100 Ω
Current limit	≤ 28 mA

Approvals:

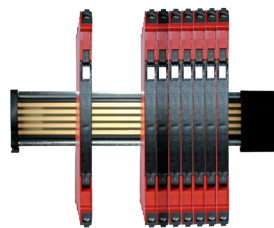
Det Norske Veritas, Ships & Offshore	Stand. f. Cert No. 2.4
Germanischer Lloyd	V1-7-2
ATEX 94/9/EC	EN 60079-0, -15
IECEx	IEC 60079-0, -15
c FM us.....	FM 3600, 3611, 3810
	CSA E60079-0, -15
	CSA 22.2 -213
EMC 2004/108/EC	EN 61326-1
LVD 2006/95/EC	EN 61010-1
UL, Standard for Safety.....	UL 61010-1
Safe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