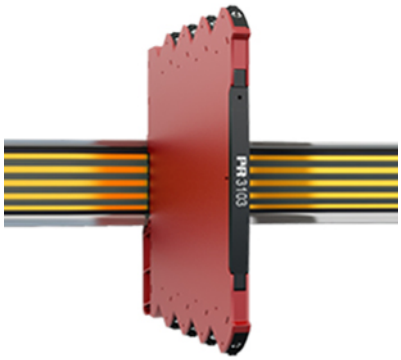
PERFORMANCE MADE SMARTER



Isolated repeater

3103

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

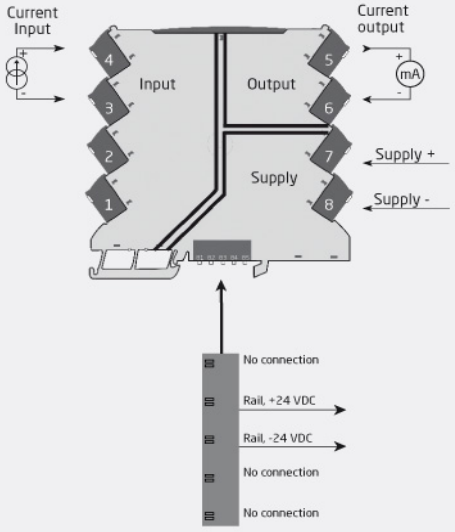
Application

- Isolation and 1:1 conversion of standard current signals.
- Galvanic separation of analog 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



Safe Area or Zone 2 & Cl. 1, Div. 2, gr. A-D

Order:

Type
3103

Environmental Conditions

Specifications range	-25°C to +70°C
Storage temperature	-40°C to +85°C
Calibration temperature	20...28°C
Relative humidity	< 95% RH (non-cond.)
Protection degree	IP20
Installation in	Pollution degree 2 & measurement / overvoltage cat. II

Mechanical specifications

Dimensions (HxWxD)	113 x 6.1 x 115 mm
Weight approx.	70 g
DIN rail type	DIN EN 60715/35 mm
Wire size	0.13 x 2.5 mm^2 / AWG 26...12 stranded wire
Screw terminal torque	0.5 Nm

Common specifications

Supply voltage	16.8...31.2 VDC
Max. power consumption	0.8 W
Internal consumption	0.4 W (typ.) / 0.65 W (max.)
Isolation voltage, test	2.5 kVAC
Isolation voltage, working	300 VAC/250 VAC
Signal / noise ratio	> 60 dB
Response time (0...90%, 100...10%)	< 7 ms
Accuracy	< ±0.05% of span
Temperature coefficient	< ±0.01% of span / °C
EMC immunity influence	< ±0.5% of span
Extended EMC immunity: NAMUR NE 21, A criterion, burst	< ±1% of span

Input specifications

Current input: Measurement range	0...20.5 mA
Functional range, current input	0...23 mA
Input voltage drop	< 1.5 VDC

Output specifications

Current output: Signal range	0...20.5 mA (span)
Load (max.)	23 mA/600 Ω
Load stability, current output	≤0.01% of span/100 Ω
Current limit	≤ 28 mA
*of span	= 0...20 mA

Approvals

EMC	EN 61326-1
LVD	EN 61010-1
ATEX	KEMA 10ATEX0147 X
IECEx	KEM 10.0068X
FM	3041043-C
DNV Marine	Stand. f. Certific. No. 2.4
GL	V1-7-2
GOST R	Yes
UL	UL 61010-1

3103-061814