

Ex-isolated driver

5105B

- 1- or 2-channel version
- 3- / 5-port 3.75 kVAC galvanic isolation
- Driver for Ex / I.S. area
- 20 programmable measurement ranges
- Universal supply by AC or DC











Application

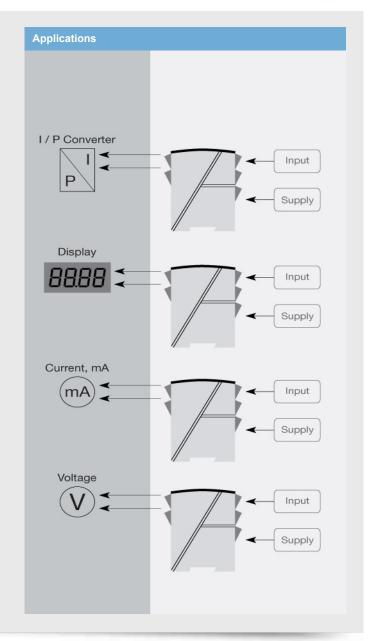
- · Safety barrier for current signals transmitted to I/P converters and displays mounted in hazardous area.
- Safety barrier for analog current / voltage signals transmitted to hazardous area.
- 1:1 or signal conversion of analog current / voltage signals.

Technical characteristics

- The 20 factory-calibrated measurement ranges in the 5105B can be selected by the internal DIP-switches without the need for a recalibration. Special measurement ranges can be
- PR5105B is based on microprocessor technology for gain and offset. The analog signal is transmitted at a response time of less than 25 ms.
- · Inputs, outputs, and supply are floating and galvanically separated.

Mounting / installation

· Mounted vertically or horizontally on a DIN rail. By way of the 2-channel version up to 84 channels per meter can be mounted.



Order:

Туре	Input		Output		Chann	els
5105B	020 mA	: A	Special	: 0	Single	: A
	420 mA	: B	020 mA	: 1	Double	: B
	010 V	: E	420 mA	: 2		
	210 V	: F	01 V	: 4		
	Special	: X	0.21 V	: 5		
			010 V	: 6		
			210 V	: 7		

Environmental Conditions

Operating temperature	-20°C to +60°C
Calibration temperature	2028°C
Relative humidity	< 95% RH (non-cond.)
Protection degree	IP20

Mechanical specifications

Dimensions (HxWxD)	109 x 23.5 x 130 mm
Weight approx	225 q
DIN rail type	1 x 2.5 mm ² stranded wire
Screw terminal torque	
Vibration	IEC 60068-2-6
213.2 Hz	±1 mm
13.2100 Hz	±0.7 a

Common specifications

solation voltage	
nternal power dissipation	≤ 2 W (2 channels)
Max. required power	
use	400 mA SB / 250 VAC
rappi) reliage, amrereamment	19.2300 VDC
Supply voltage, universal	21.6253 VAC. 5060 Hz o
Supply	

Isolation voltage Isolation voltage, test / working PELV/SELV.		250 VAC
FELV/SELV	. 100 01140	

Response time Response time (090%, 10010%)	PELV/SELV	
Accuracy Better than 0.1% of sel. ran- EMC immunity influence < ±0.5% of span		< 25 ms
NE21. A criterion, burst < ±1% of span	Accuracy EMC immunity influence	Better than 0.1% of sel. range < ±0.5% of span
, ,	NE21, A criterion, burst	< ±1% of span

Input specifications

Common input specifications		
May offeet	20% of may	value

Current input

Measurement range	020 mA
Min. measurement range (span)	16 mA
Input resistance	Nom 10 O + PTC 10 O

Voltage input

r ortugeput	
Measurement range	010 VDC
Min. measurement range (span)	8 VDC
Input resistance	> 2 MΩ

Output specifications

Current output	
Signal range	020 mA
Min. signal range	16 mA
Load (@ current output)	≤ 770 Ω
Load stability	≤ 0.01% of span / 100 Ω
Current limit	≤ 28 mA
Voltage output	
Signal range	0 1 VDC / 0 10 VDC
Min. signal range	
	0.8 VDC / 8 VDC

Observed authority requirements

EMC	2014/30/EU
LVD	2014/35/EU
EAC	TR-CU 020/2011

Approvals

ATEX 2014/34/EU	DEMIKO 99ATEX126014, II (1)
	GD [EEx ia] IIC
UL	UL 913, UL 508
EAC Ex TR-CU 012/2011	RU C-DK.GB08.V.00410
DNV-GL Marine	Stand. f. Certific. No. 2.4