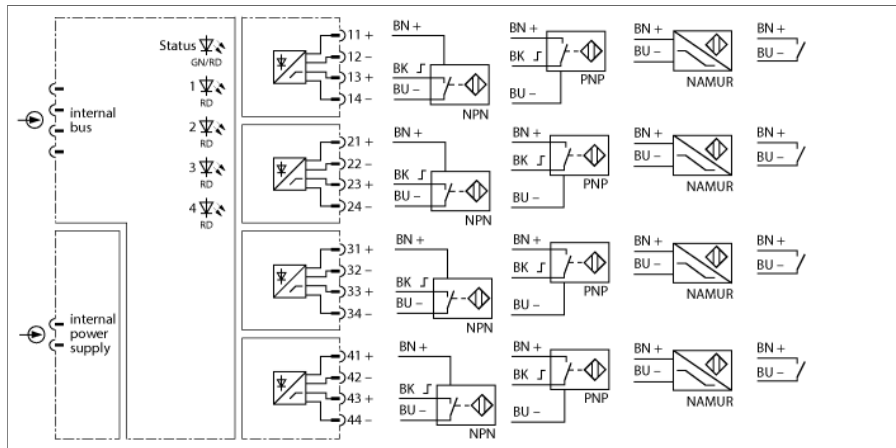


excom I/O System

Input Module, Digital, 4-channel

DI40-N



The input module DI40-N is used for the connection of NAMUR sensors (DIN EN 60947-5-6), 3-wire sensors (NPN, PNP) or mechanical contacts.

When wire-break or short-circuit monitoring are activated, mechanical contacts can only be connected with a corresponding resistor circuitry (WM1, Ident no. 0912101).

The inputs are galvanically isolated from each other.

The behavior of the inputs can be adjusted via the Fieldbus master. The following parameters can be adjusted: switching behavior, switch-on delay, default value, wire-break and short circuit monitoring.

- Input modules for NAMUR and 3-wire sensors (NPN and PNP)
- Power supply of the sensors out of the module (max. 20 mA at 12 VDC)
- Complete galvanic isolation



Dimensions

Type	DI40-N
ID	6884213
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 1.9 W
Power dissipation	≤ 1 W
Galvanic isolation	Complete galvanic isolation
Number of channels	4
Input circuits	acc. to EN 60947-5-6 (NAMUR)
No-load voltage	8.2 VDC
Short-circuit current	2.7 mA
Switching threshold on/off	type 1.8 / type 1.3 mA
Switching frequency	≤ 100 Hz
Short-circuit	< 367 Ω
Wire-break	< 0.15 mA
3-wire input	
No-load voltage	12 VDC
Current	≤ 20 mA
0-signal	≤ 4.5 V
1-signal	≥ 6.5 V
Ex approval acc. to conformity certificate	IECEX TUR 21.0012X
Ex approval acc. to conformity certificate	TÜV 21 ATEX 8643 X
Device designation	Ex II 3 G Ex ec IIC T4 Gc
Displays/Operating elements	
Operational readiness	1 × green/red
State/ Fault	4 × yellow/red
Housing material	Plastic
Connection mode	module, plugged on rack
Protection class	IP20
Ambient temperature	-40...+70 °C
Relative humidity	≤ 93 % at 40 °C acc. to IEC 60068-2-78
Vibration test	Acc. to IEC 60068-2-6
Shock test	Acc. to IEC 60068-2-27
EMC	acc. EN 61326-1 (2013) acc. to Namur NE21 (2012)
MTTF	111 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm
Comments	The power supply for 3-wire sensors is also monitored for wire breaks and short circuits
Approvals	ATEX cFMus cFM IECEX CE



Accessories

Type code	Ident-No.		Dimension drawing
excom-RMD1-BK	100020478	The resistor module prevents wire-break detection and short-circuit detection in digital input modules. For analog input modules, overflow and underflow messages are also suppressed.	