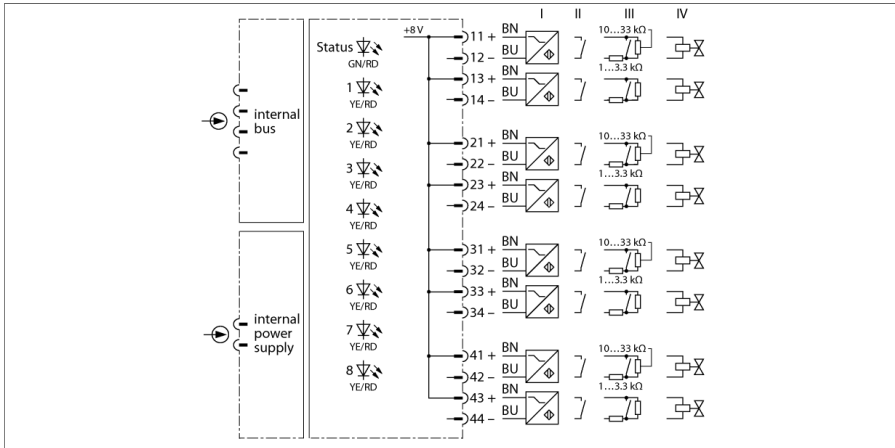


# excom I/O System

## I/O Module, Digital, 8-channel

### DM80EX



The I/O module DM80Ex is used for the connection of NAMUR sensors (DIN EN 60 60947-5-6) and actuators. 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 module features protection class Ex ib IIC and can be mounted in zone 1 in combination with *excom*®. The explosion protection category of inputs/outputs is Ex ia IIC.

When connecting the field devices, care has to be taken that all outputs are on the same potential.

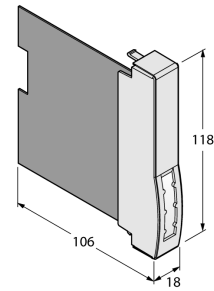
Input and output mode can be adjusted via the PROFIBUS-DP master. The following parameters can be adjusted: switching behaviour, switch-on delay, default value, wire-break and short circuit monitoring.

The user can furthermore determine whether an input or an output should be provided at the connecting point. The following configurations are possible: 8 inputs/0 outputs; 6 inputs/2 outputs up to 0 inputs/8 outputs (GSD-file, Mode 2). This way, optimal adaptation to the corresponding application environment is guaranteed.

- Input/output module for NAMUR sensors and actuators

## Dimensions

Type	DM80EX
ID	6884006
Supply voltage	Via module rack, central power supply module
Power consumption	≤ 1 W
Galvanic isolation	to int. bus and supply circuit
Number of channels	8
<b>Input circuits</b>	acc. to EN 60947-5-6 (NAMUR) Intrinsically safe acc. to EN 60079-11
No-load voltage	8 VDC
Short-circuit current	4 mA
Switching threshold on/off	type 1.8 / type 1.4 mA
Switching frequency	≤ 100 Hz
Short-circuit	< 367 Ω
Wire-break	< 0.2 mA
<b>Output circuits</b>	for intrinsically safe actuators
No-load voltage	8 VDC
Nominal current	4 mA
Internal resistance R <sub>i</sub>	320 Ω
Switching frequency	≤ 100 Hz
Short circuit	< 367 Ω
Wire break	< 0.2 mA
Ex approval acc. to conformity certificate	IECEX PTB 13.0041
Ex approval acc. to conformity certificate	PTB 00 ATEX 2178
Device designation	Ⓔ II 2 (1) G Ex ib [ia Ga] IIC T4 Gb
Device marking	Ⓔ II (1) D [Ex ia Da] IIIC
<b>Displays/Operating elements</b>	
Operational readiness	1 × green/red
State/ Fault	8 × yellow/red
<b>Housing material</b>	Plastic
Connection mode	module, plugged on rack
Protection class	IP20
Ambient temperature	-20...+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. to EN 61326-1 Acc. to Namur NE21
MTTF	141 years acc. to SN 29500 (Ed. 99) 40 °C
Dimensions	18 x 118 x 106 mm



## Approvals

ATEX  
cFMus  
cFM  
IECEX  
CCC  
INMETRO  
KOSHA  
EAC Ex  
DNV GL  
BV  
LR  
KR  
KCC  
UKCA  
CE

**Accessories**

Type code	Ident no.		Dimension drawing
excom-RMD1-BU	100020744	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.	