

# 8-channel Digital Input/Output



818-DX-08

- ◆ configurable as a mixture of inputs and outputs
- ◆ inputs - dry contacts/proximity switches (NAMUR)
- ◆ outputs - low power intrinsically safe valves
- ◆ short and break detection
- ◆ isolation - input to bus, input to power
- ◆ common return for all inputs/outputs
- ◆ 8 I/O channel, EEx ia IIC

## MODULE SPECIFICATION

See also System Specification

### INPUT

No-load voltage .....	8 V DC
Short-circuit current .....	3 mA to 4 mA
Switching point in range .....	1.4 mA to 1.8 mA
Switching hysteresis .....	0.2 mA
Switching frequency .....	< 100 Hz
Short-circuit detection .....	< 367 ohm
Line-break detection .....	< 0.2 mA
Explosion protection .....	PTB 01 ATEX 2139

### INPUT OR OUTPUT

Max. short-circuit current .....	$I_0 = 44 \text{ mA}$
Voltage .....	$U_0 = 9.6 \text{ V}$
Performance .....	$P_0 = 106 \text{ mW}$
External inductance .....	$L_0 = 2 \text{ mH}$
External capacitance .....	$C_0 = 900 \text{ nF}$

### OUTPUT

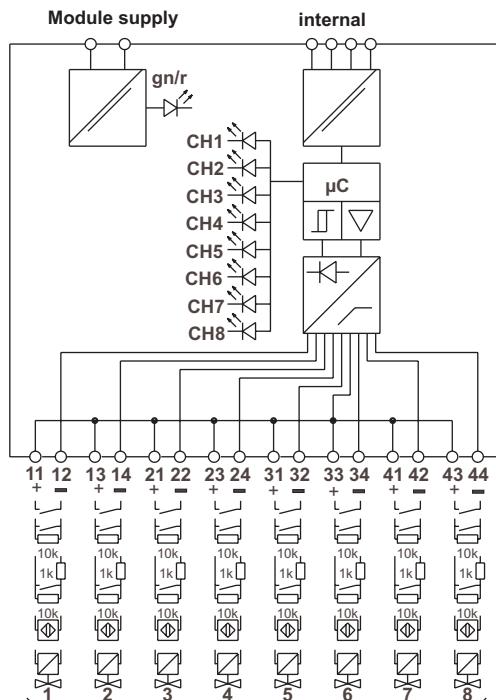
No-load voltage .....	< 8 V DC
Effective current .....	< 4 mA
Internal resistance .....	320 ohm
Switching frequency .....	< 100 Hz
Short-circuit detection .....	< 1 kOhm
Line-break detection .....	< 0.2 mA

### DIAGNOSTIC INFORMATION

System / Module power on .....	LED green / red
Open (off)/ closed (on) .....	LED 1 to 8, off / yellow
Line break or short circuit .....	LED 1 to 8, red
Via fieldbus	
Break, short .....	per channel
Simulation .....	per channel
Via fieldbus .....	for each I/O module

### CHARACTERISTICS AT RATED CONDITIONS

De-bounce filter .....	2 to 100 ms
Total power consumption .....	< 1.1 W



#### Inputs for :

Dry contacts, NAMUR proximity switches

#### Output for valves from eg.:

Samson (all standard valves with 6 V coil)

Hoerbiger (only Piezo valve)

Asco-Joucomatic (only Piezo valve)



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