



# 4-channel Analog Output

## 4-20 mA, isolated

804-AO-04

- ◆ output signal 0/4 –20 mA for actuators
- ◆ short and break detection
- ◆ isolation, output to bus and output to power
- ◆ isolation channel to channel
- ◆ 4-channel, EEx ia IIC

### MODULE SPECIFICATION

See also System Specification

#### OUTPUT

Output current .....0/4 to 20 mA  
 Range .....0 to 24 mA  
 Load .....700 ohm (20 mA)  
 Short-circuit detection .....< 100 ohm  
 Line-break detection .....< 2 mA

#### EXPLOSION PROTECTION

Certificate number .....PTB 01 ATEX 2142  
 Max. short-circuit current ..... $I_0 = 80$  mA  
 Voltage ..... $U_0 = 18.9$  V  
 Performance ..... $P_0 = 510$  mW  
 External inductance ..... $L_0 = 2$  mH  
 External capacitance ..... $C_0 = 100$  nF

#### DIAGNOSTIC INFORMATION

System/Module power on .....LED green / red  
 Line break or short circuit .....LED 1 to 4, red

#### Via fieldbus

Break, short .....per channel  
 Over/under-range .....per channel  
 Simulation .....per channel  
 Communication, hardware .....for each I/O module

#### CHARACTERISTICS AT RATED CONDITIONS

Accuracy incl. nonlinearity .....< 0.1 %  
 Digital Accuracy .....13 bit  
 Linearity .....< 0.05 %  
 Temperature effect .....< 0.05 % / 10 K  
 Response time .....50 ms (10% -> 90%)  
 Total power consumption .....< 3.1 W

