

# 4-channel Digital Output



815-DO-04

## Solenoid driver

- ◆ output for intrinsically safe valves or alarms
- ◆ integrated driving power
- ◆ short and break detection
- ◆ isolation - output to bus and output to power
- ◆ electrical isolation channel to channel
- ◆ 4-channel, EEx ia IIC

## MODULE SPECIFICATION

See also System Specification

### OUTPUT

Supply voltage and current	21 V / 8 mA
	18 V / 20 mA
	15 V / 30 mA
	12 V / 40 mA
No-load voltage	24 V DC (16 V DC min)
Internal resistance	300 ohm
Switching frequency	< 100 Hz
Short-circuit detection	< 5 V
Line-break detection	< 1 mA



### EXPLOSION PROTECTION

Certificate number ..... PTB 01 ATEX 2136

#### Safety description (terminals 11,12,21,22,31,32,41,42)

Max. short-circuit current	$I_0 = 100 \text{ mA}$
Voltage	$U_0 = 27 \text{ V}$
Performance	$P_0 = 675 \text{ mW}$
External inductance	$L_0 = 0.99 \text{ mH}$ See Note 1
External capacitance	$C_0 = 30 \text{ nF}$ See Note 1

#### Safety description (terminals 13,14,23,24,33,34,43,44)

Max. short-circuit current	$I_0 = 100 \text{ mA}$
Voltage	$U_0 = 18.9 \text{ V}$
Performance	$P_0 = 675 \text{ mW}$
External inductance	$L_0 = 1 \text{ mH}$ See Note 1
External capacitance	$C_0 = 86 \text{ nF}$ See Note 1

**Note 1:** For a list of permissible alternatives see PTB ATEX

Certification.

### DIAGNOSTIC INFORMATION

System / Module power on ..... LED green / red

Output on ..... LED 1 to 4, yellow

Line break or short circuit ..... LED 1 to 4, red

### Via fieldbus

Break, short ..... per channel

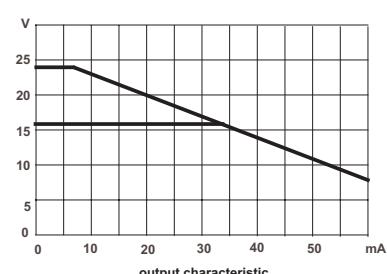
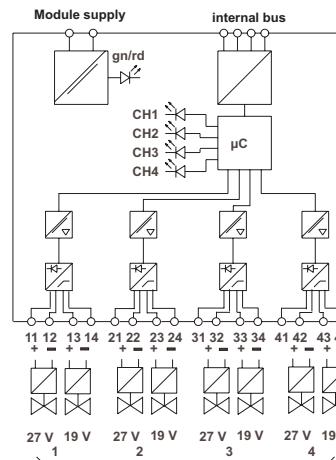
Simulation ..... per channel

Communication, hardware ..... for each I/O module

### CHARACTERISTICS AT RATED CONDITIONS

Total power consumption ..... < 2.5 W (for valves < 275 mW)

..... < 5.2 W (for valves < 500 mW)



- Output for valves from e.g.: ..... Asco-Joucomatic ..... Burkert  
..... Eugen Seitz e.g. PV12F73  
..... Norgren-Herion  
..... Parker-Lucifer  
..... Samsomatic

