

# **D6037** SIL2 Switch/Proximity Transistor-Out Repeater

The Switch/Proximity Detector Repeater D6037 is a module suitable for applications requiring SIL 2 level in safety related systems for high risk industries. The unit can be configured for switches or proximity detectors and repeats the input state to an open-collector transistor. The selectable fault detection circuit is available for proximity sensors or switches equipped with end of line resistors. If needed, the output can also be inverted.

# **FEATURES**

- SIL 2 / SC 3
- · High frequency transistor output
- Field open and short circuit detection
- In-field programmability by DIP Switch
- Three port isolation, Input/Output/Supply
- High Density, two channels per unit

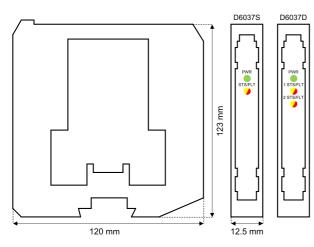
# **ORDERING INFORMATION**

Ordering codes D6037S: 1 channel D6037D: 2 channels

Accessories

Bus Connector JDFT049, Bus Mounting Kit OPT5096.

# **OVERALL DIMENSIONS**



# **TECHNICAL DATA**

Supply

24 Vdc nom (18 to 30 Vdc), reverse polarity protected. **Current consumption:** 22 mA (D6037D), 12 mA (D6037S), @ 24 Vdc with short circuit input and transistor closed, typical. **Power dissipation:** 0.53 W (D6037D), 0.30 W (D6037S), @ 24 Vdc with short circuit input and transistor closed, typical.

## Inpu

Input switching current levels: ON  $\ge 2.1$  mA, OFF  $\le 1.2$  mA. Fault current levels: open fault  $\le 0.2$  mA, short fault  $\ge 6.8$  mA. Input equivalent source: 8 V 1 k $\Omega$  typical (8 V no load, 8 mA short).

## Output

Voltage free SPST optocoupled open-collector transistor. **Open-collector/drain rating:** 100 mA @ 35 Vdc ( $\leq$  1.5 V voltage drop). **Leakage current:**  $\leq$  50 µA @ 35 Vdc. **Response time:**  $\leq$  100 µs. **Frequency response:** 5 kHz maximum.

## Isolation

ln/Out 1.5 kV; ln/Supply 1.5 kV; ln/ln 500 V; Out/Supply 500 V; Out/Out 500 V.

#### Environmental conditions Operating temperature: ten

**Operating temperature:** temperature limits -40 to +70 °C. **Storage temperature:** temperature limits -45 to +80 °C.

## Mounting

DIN-Rail 35 mm, with or without Power Bus or on custom Term. Board. Weight: about 125 g (D6037D), 110 g (D6037S). Connection: by polarized plug-in disconnect screw terminal blocks to accommodate terminations up to 2.5 mm<sup>2</sup> (13 AWG). Dimensions: Width 12.5 mm, Depth 123 mm, Height 120 mm.



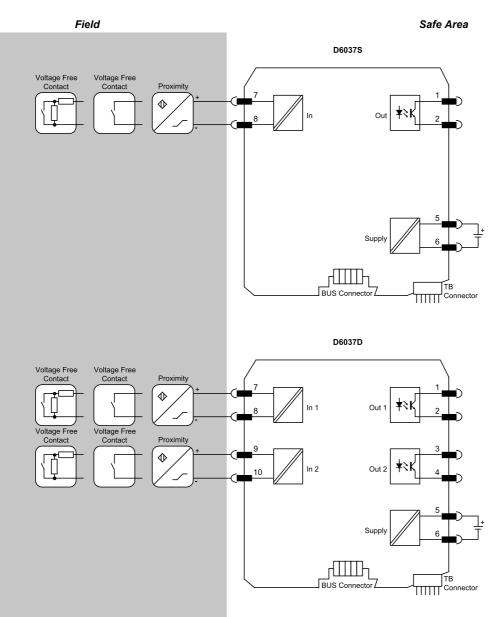
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# **FUNCTION DIAGRAM**

Additional installation diagrams may be found in Instruction Manual.



Functional Safety Management Certification: FSM

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