

D6036

SIL2 Switch/Proximity Relay-Out Repeater

The Switch/Proximity Detector Repeater D6036 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 a relay contact. 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 voltage/current rating relay 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

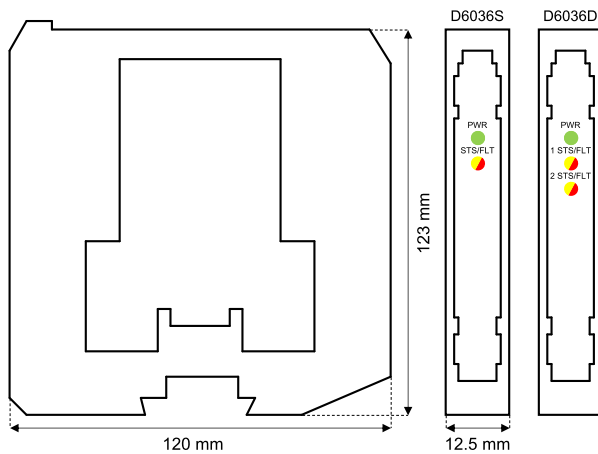
D6036S: 1 channel

D6036D: 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: 35 mA (D6036D), 18 mA (D6036S), @ 24 Vdc with short circuit input and relay energized, typical.

Power dissipation: 0.85 W (D6036D), 0.45 W (D6036S), @ 24 Vdc with short circuit input and relay energized, typical.

Input

Input switching current levels: ON \geq 2.1 mA, OFF \leq 1.2 mA.

Fault current levels: open fault \leq 0.2 mA, short fault \geq 6.8 mA.

Input equivalent source: 8 V 1 k Ω typical (8 V no load, 8 mA short).

Output

Voltage free SPST (D6036D) or SPDT (D6036S) relay contact.

Contact material: Ag Alloy (Cd free), gold plated.

Contact rating: 4 A 250 Vac 1000 VA, 4 A 250 Vdc 120 W (resistive load).

Contact min. switching current: 1 mA.

DC and AC load breaking capacity: refer to Instruction Manual.

Mechanical / electrical life: 5 * 10⁶ / 3 * 10⁴ operation, typical.

Operate / release time: 8 / 4 ms, typical.

Frequency response: 10 Hz maximum.

Isolation

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

Environmental conditions

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.

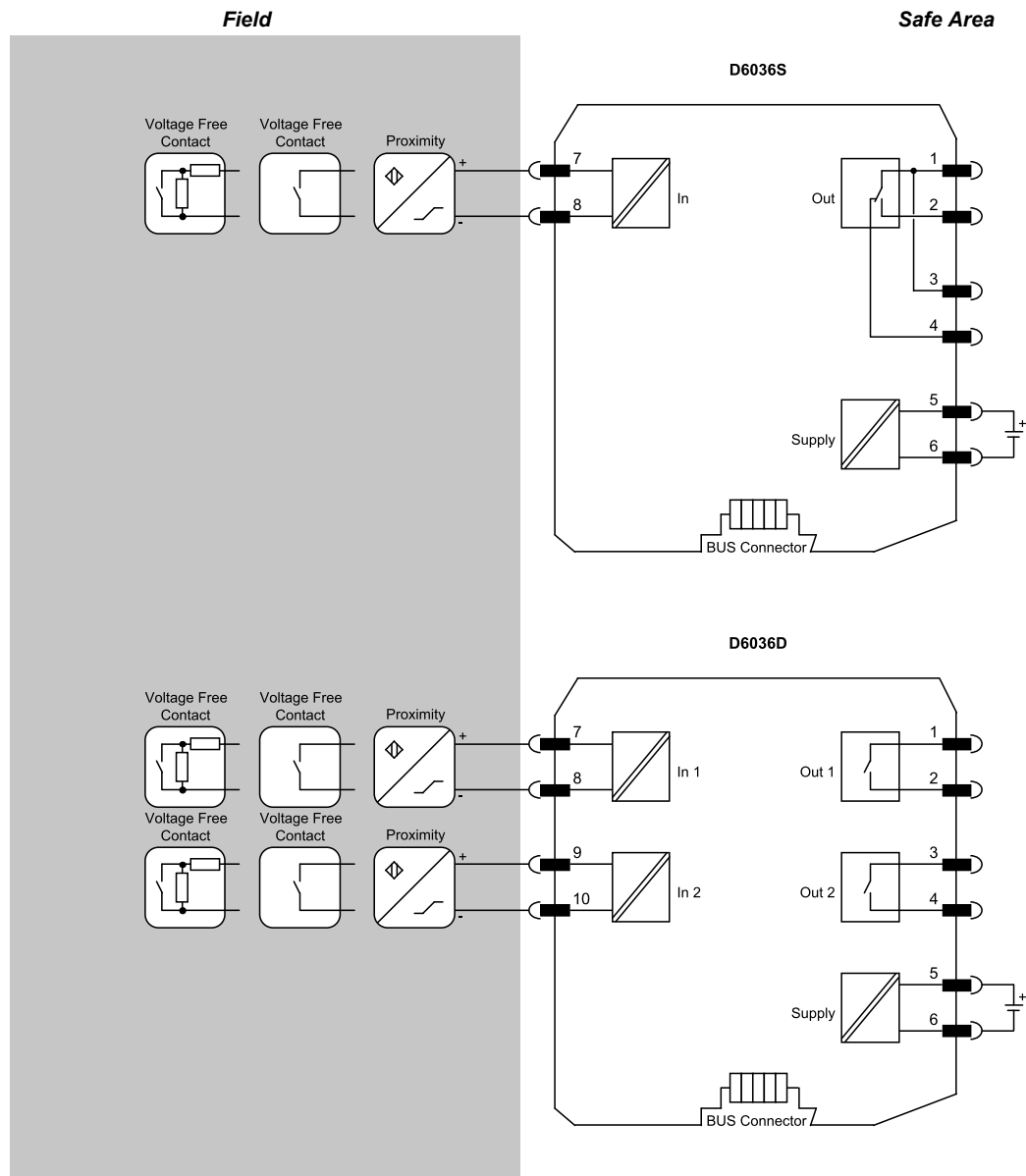
Weight: about 135 g (D6036D), 120 g (D6036S).

Connection: by polarized plug-in disconnect screw terminal blocks to accommodate terminations up to 2.5 mm² (13 AWG).

Dimensions: Width 12.5 mm, Depth 123 mm, Height 120 mm.

FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.



Functional Safety Management Certification: GM International is certified to conform to IEC61508:2010 part 1 clauses 5-6 for safety related systems up to and included SIL3. In addition, GM International products have been granted I.S. certificates from the most credited Notified Bodies in the world.

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