

D6036

SIL2 Switch/Proximity Relay-Out Repeater

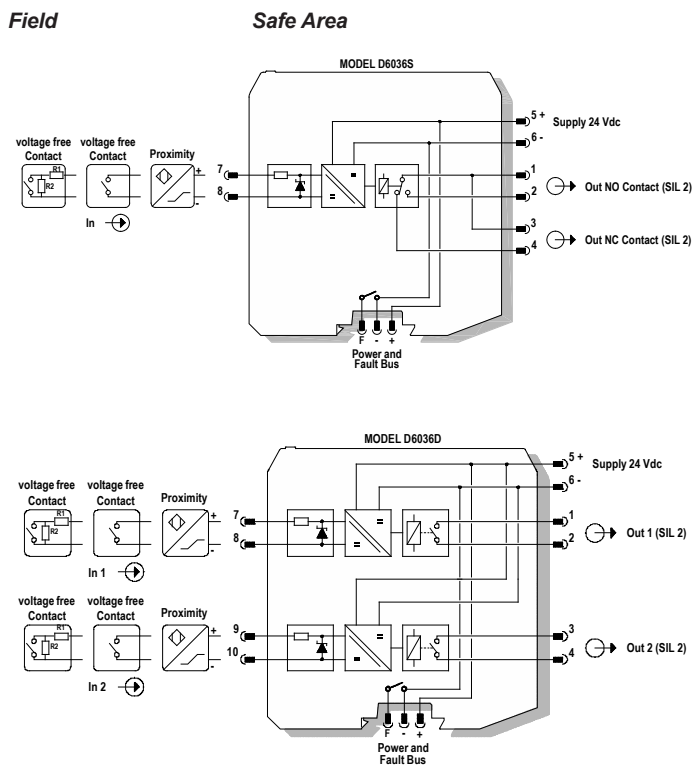
The Switch/Proximity Detector Repeater D6036 is a module suitable for applications requiring SIL 2 level in safety related systems for high risk industries. The unit can be configured for switches or proximity detectors and repeats the input state to a relay contact. The selectable fault detection circuit 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

FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.



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 ≥ 2.1 mA, OFF ≤ 1.2 mA.

Fault current levels: open fault ≤ 0.2 mA, short fault ≥ 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.

ORDERING INFORMATION

D6036S: 1 channel

D6036D: 2 channels

Accessories

Bus Connector JDFT049, Bus Mounting Kit OPT5096.