

# D6032

## SIL3 Switch/Proximity Relay-Out Repeater

The Switch/Proximity Detector Repeater D6032 is a module suitable for applications requiring SIL 3 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. In the double-channel model, the second output can be configured to repeat the second input, to duplicate the first input or to report the first input fault. If needed, the output can also be inverted.

### FEATURES

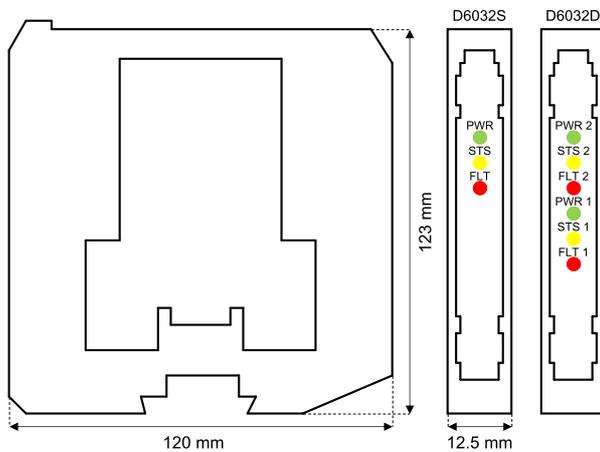
- SIL 3 / SC 3
- 2 fully independent channels
- Field open and short circuit detection
- In-field programmability by DIP Switch
- Three port isolation, Input/Output/Supply
- High Density, two channels per unit

### ORDERING INFORMATION

#### Ordering codes

D6032S: 1 channel  
D6032D: 2 channels

### OVERALL DIMENSIONS



### TECHNICAL DATA

#### Supply

24 Vdc nom (18 to 30 Vdc), reverse polarity protected.

**Current consumption:** 35 mA (D6032D), 18 mA (D6032S), @ 24 Vdc with short circuit input and relay energized, typical.

**Power dissipation:** 0.85 W (D6032D), 0.45 W (D6032S), @ 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 $\Omega$  typical (8 V no load, 8 mA short).

#### Output

Voltage free SPST relay contact.

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

**Contact rating:** 100 mA 50 Vac 5 VA, 100 mA 50 Vdc 5 W (resistive load).

**Contact min. switching current:** 1 mA.

**Mechanical / electrical life:** 5 \* 10<sup>6</sup> / 1 \* 10<sup>6</sup> operation, typical.

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

**Frequency response:** 10 Hz maximum.

#### Isolation

In/Out 2.5 kV; In/Supply 2.5 kV; In/In 500 V; Out/Supply 500 V; Out/Out 500 V.

#### Environmental conditions

**Operating temperature:** temperature limits  $-40$  to  $+70$  °C.

**Storage temperature:** temperature limits  $-45$  to  $+80$  °C.

#### Mounting

On custom Term. Board.

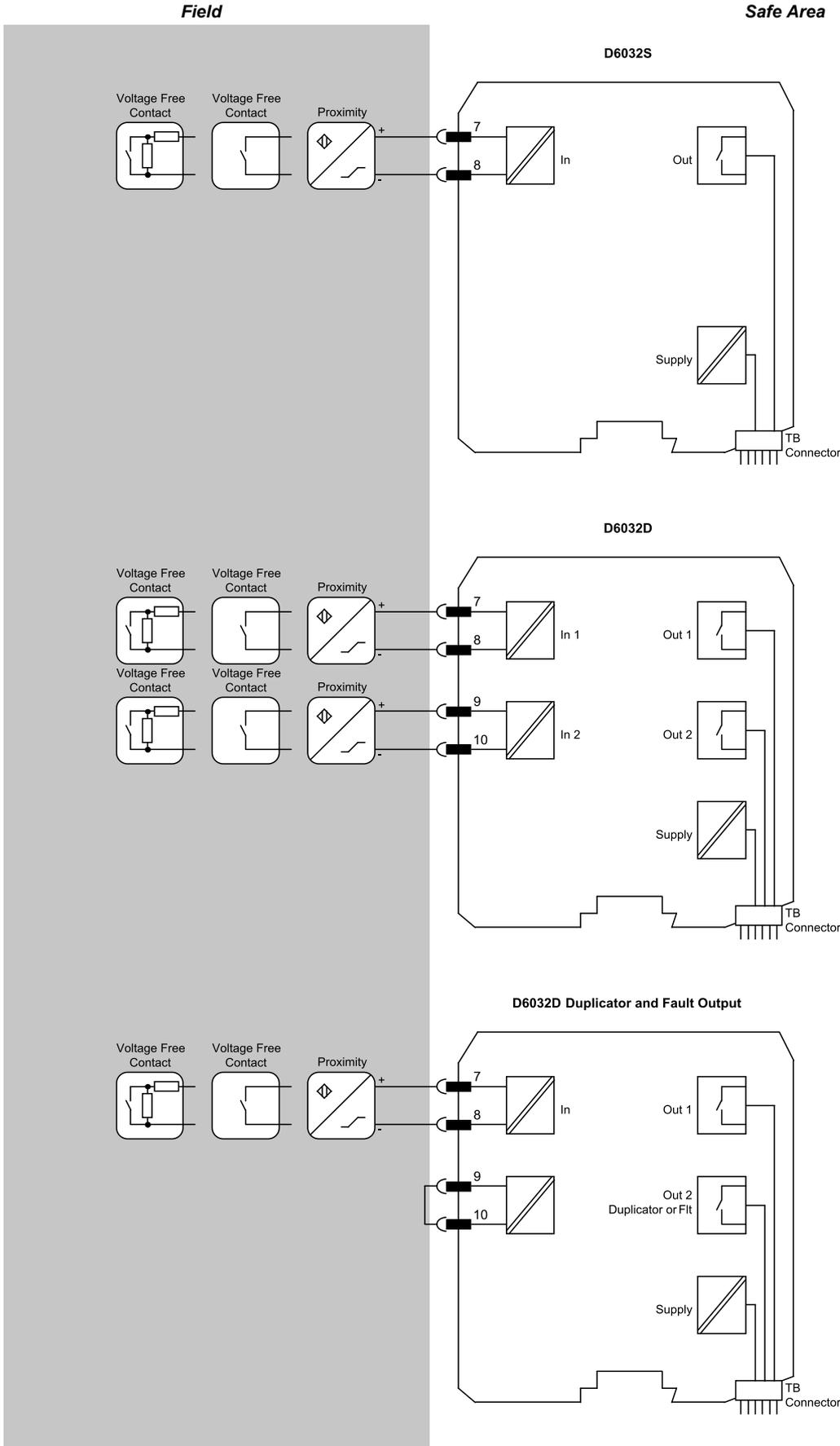
**Weight:** about 125 g (D6032D), 115 g (D6032S).

**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.

# 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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