

D6034

SIL3 Line-Fault Transp. Switch/Prox. Repeater

The Switch/Proximity Detector Repeater D6034 is a module suitable for applications requiring SIL 3 level in safety related systems for high risk industries. The unit can be connected to switches or proximity detectors and repeats the input current to the output. DCS/PLC Digital Input cards compatible with NAMUR devices can detect the status/fault of proximity sensors or switches equipped with end of line resistors, in transparent mode, through the module.

FEATURES

- SIL 3 / SC 3
- 2 fully independent channels
- Field fault mirroring to PLC NAMUR DI
- High Accuracy
- Three port isolation, Input/Output/Supply
- High Density, two channels per unit

ORDERING INFORMATION

Ordering codes

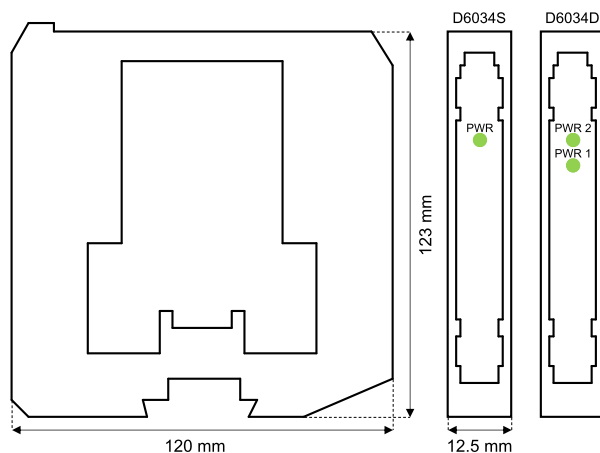
D6034S: 1 channel

D6034D: 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: 30 mA (D6034D), 15 mA (D6034S), @ 24 Vdc with short circuit input, typical.

Power dissipation: 0.72 W (D6034D), 0.36 W (D6034S), @ 24 Vdc with short circuit input, typical.

Input

Current range: ≥ 0.1 mA to ≤ 8.0 mA.

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

Output

0.1 to 8.0 mA in sink mode, V max. 30 V, current limited ≈ 8 mA, repeats input current level.

Response time: 1 ms (0 to 100 % step change).

Power dissipation: 0.4 W (D6034D), 0.2 W (D6034S), @ 24 Vdc with short circuit input, typical.

Performance

Ref. Conditions: 24 V supply, 23 ± 1 °C ambient temperature.

Calibration accuracy: $\leq \pm 0.25$ % FSR.

Linearity accuracy: $\leq \pm 0.25$ % FSR.

Temp. influence: $\leq \pm 0.03$ % FSR on zero/span for a 1 °C change.

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

DIN-Rail 35 mm, with or without Power Bus or on custom Term. Board.

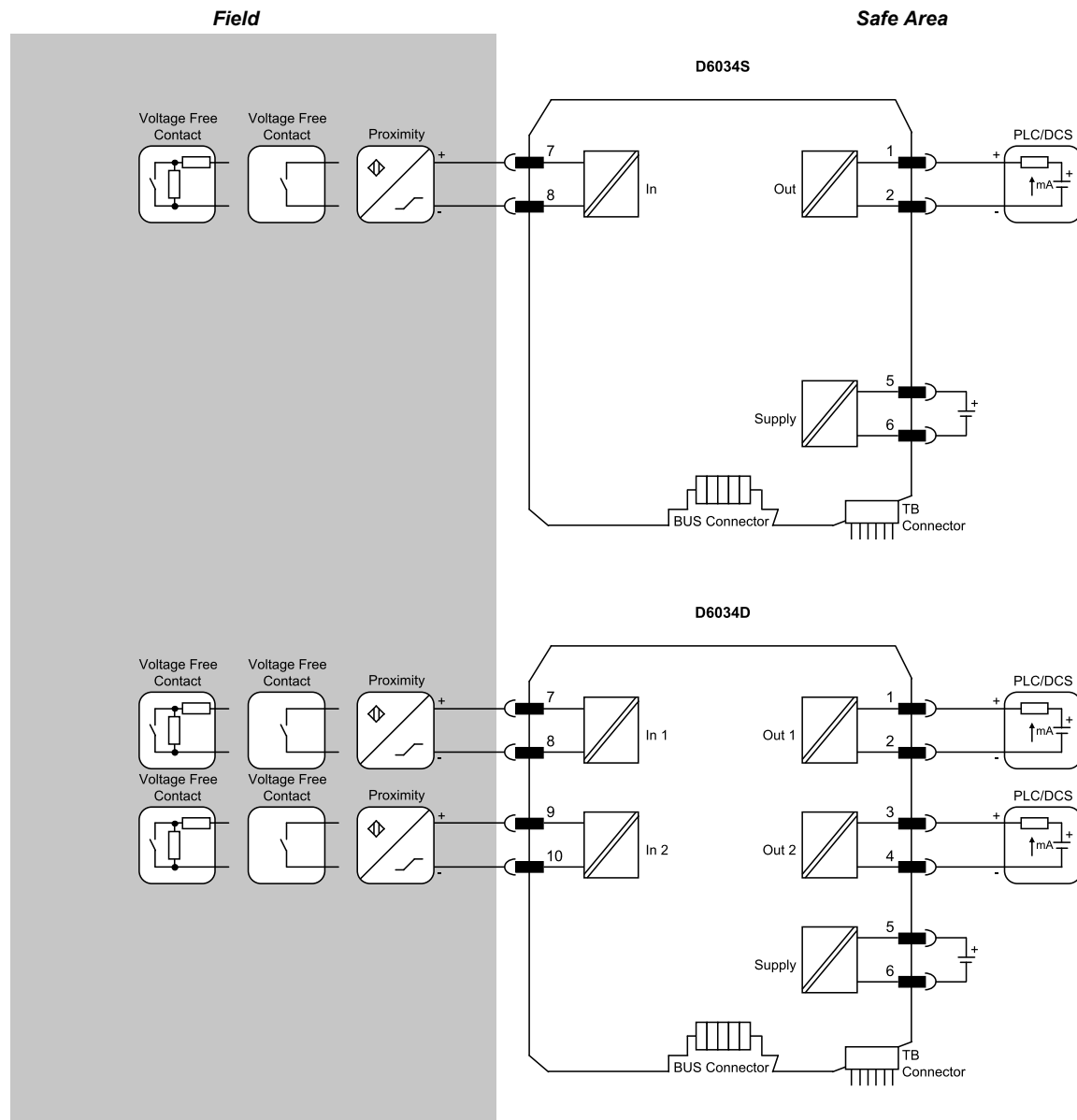
Weight: about 140 g (D6034D), 115 g (D6034S).

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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