

D6034

SIL3 Line-Fault Transp. Switch/Prox. Repeater

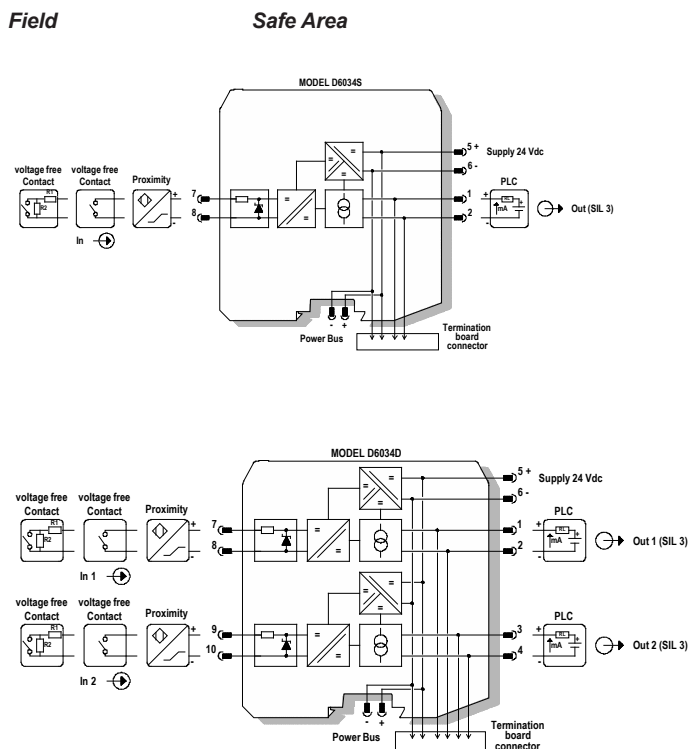
The Switch/Proximity Detector Repeater D6034 is a module suitable for applications requiring SIL 3 level in safety related systems for high risk industries. The unit can be connected to switches or proximity detectors and repeats the input current to the output. DCS/PLC Digital Input cards compatible 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

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: 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 \pm 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.

ORDERING INFORMATION

D6034S: 1 channel

D6034D: 2 channels

Accessories

Bus Connector JDFT049, Bus Mounting Kit OPT5096.