

# D6015

## SIL2 2/4-Wire HART® Transmitter Power Supply

The Repeater Power Supply D6015 module is a high integrity analog input interface suitable for applications requiring SIL 2 level in safety related systems for high risk industries. It provides a fully floating dc supply for energizing conventional 2 wires 4-20 mA, active or passive, transmitters, and repeats the current in floating circuit to drive a load. The circuit allows bi-directional communication signals, for HART® devices.

### FEATURES

- SIL 2 / SC 3
- 4-20 mA Active-Passive Input, Source-Sink Output
- HART® compatible
- Input and Output short circuit proof
- High Accuracy
- Three port isolation, Input/Output/Supply

### ORDERING INFORMATION

#### Ordering codes

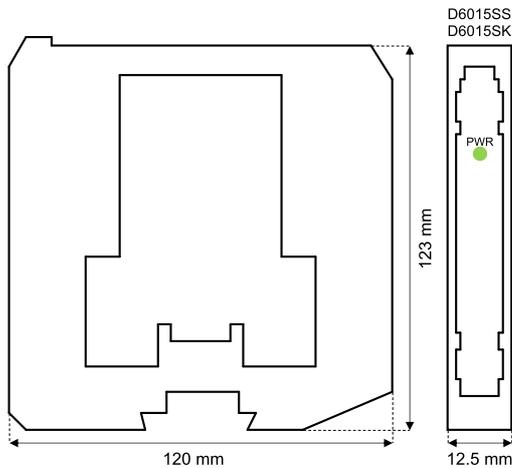
D6015SS: 1 channel source output

D6015SK: 1 channel sink output

#### 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:** 50 mA (D6015SS), 40 mA (D6015SK), @ 24 Vdc with 20 mA output, typical.

**Power dissipation:** 0.8 W (D6015SS), 1.0 W (D6015SK), @ 24 Vdc with 20 mA output, typical.

#### Input

4 to 20 mA (separately powered input, voltage drop  $\leq 0.5$  V) or 4 to 20 mA (2 wires Tx current limited  $\approx 25$  mA), reading range 0 to 24 mA.

**Transmitter line voltage:** 16.5 V minimum @ 20 mA.

#### Output

4 to 20 mA, on max. 600  $\Omega$  load in source mode; V min. 2 V @ 0  $\Omega$  load V max. 30 V in sink mode (max. load resistance 600  $\Omega$ ), current limited @  $\approx 25$  mA.

**Response time:** 5 ms.

#### Performance

**Ref. Conditions:** 24 V supply, 250  $\Omega$  load,  $23 \pm 1$  °C ambient temperature.

**Calibration accuracy:**  $\leq \pm 20$   $\mu$ A.

**Linearity accuracy:**  $\leq \pm 10$   $\mu$ A.

**Temp. influence:**  $\leq \pm 2$   $\mu$ A/°C.

#### Isolation

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

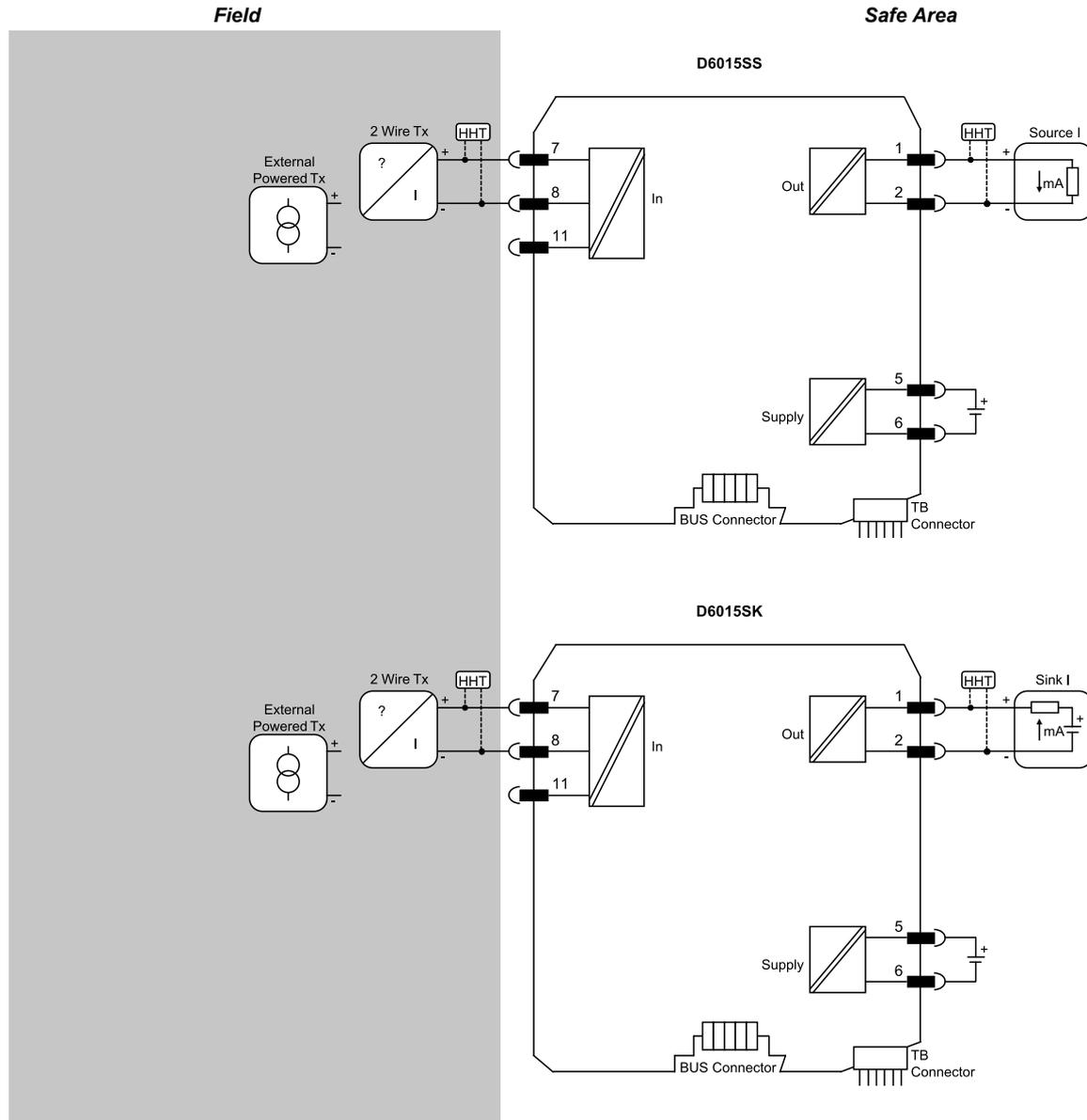
**Weight:** about 130 g.

**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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