

# D6212

## SIL2 2/4-Wire Transmitter Power Supply

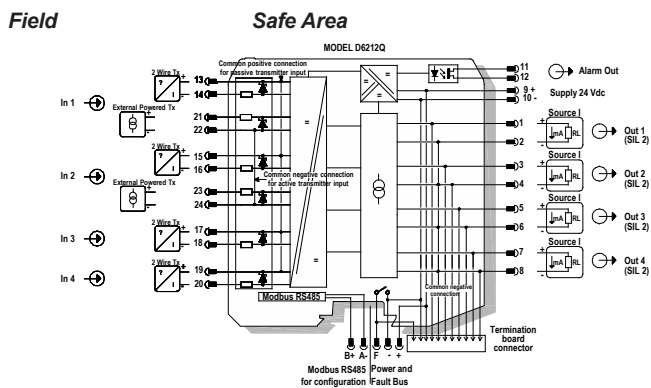
The Repeater Power Supply D6212 module is a high integrity analog input interface suitable for applications requiring SIL 2 level in safety related systems for high risk industries. It provides a fully floating dc supply for energizing conventional 2 wires 0/4-20 mA, active or passive, transmitters, and repeats the current in floating circuit. The module is fully configurable to achieve input/output multiplexing, scaling, duplication, inversion, and input elaboration (addition, subtraction, low/high selection). An additional alarm contact can be (de-) activated on programmable input trip points, including hysteresis and delays. Configuration and diagnostic parameters are programmable and can also be monitored/set through Modbus.

### FEATURES

- SIL 2 (pending)
- 0/4-20 mA Active-Passive Input, Source Output
- Duplication/inversion/scaling output
- Input operations (sum, dif, max, min) available
- Input and Output short circuit proof
- Out of range fault detection
- Alarm output with user-settable trip points
- Modbus RTU RS-485 for monitor & configuration
- Fully programmable operating parameters
- High Accuracy,  $\mu$ P controlled A/D converter
- Three port isolation, Input / Output / Supply
- High Density, four channels per unit

### FUNCTION DIAGRAM

Additional installation diagrams may be found in Instruction Manual.



### TECHNICAL DATA

#### Supply

24 Vdc nom (21.5 to 30 Vdc), reverse polarity protected.

**Current consumption:** 200 mA @ 24 Vdc with 20 mA input/output, typical.

**Power dissipation:** 2.75 W @ 24 Vdc with 20 mA input/output, typical.

#### Input

0/4 to 20 mA (2 wire Tx current limited  $\approx$  25 mA) or separately powered inputs (only for channels 1 and 2).

**Transmitter line voltage:** 14.5 V typical, 14.0 V minimum, @ 20 mA.

**Integration time:** 500 ms.

#### Output

0/4 to 20 mA, on max. 300  $\Omega$  load source mode, current limited  $\approx$  25 mA.

**Response time:** 100 ms (10 to 90 % step change).

#### Alarm

**Trip point range:** within rated limits of the input sensor.

**ON-OFF delay time:** 0 to 1000 s, 100 ms step.

**Hysteresis:** within rated limits of input sensor.

**Output:** voltage free SPST photoMOS: 100 mA, 60 Vdc ( $\leq$  1 V voltage drop).

#### Modbus interface

Modbus RTU RS-485 up to 57.6 kbps for monitor/configuration/control.

#### Performance

**Ref. Conditions:** 24 V supply, 250  $\Omega$  loads, 23  $\pm$  1  $^{\circ}$ C ambient temperature.

**Input Calibration accuracy:**  $\leq \pm 0.05$  % FSR.

**Input Linearity accuracy:**  $\leq \pm 0.05$  % FSR.

**Analog output Calibration accuracy:**  $\leq \pm 0.05$  % FSR.

**Analog output Linearity accuracy:**  $\leq \pm 0.05$  % FSR.

#### Isolation

In/Out 1.5 kV; In/Supply 1.5 kV; Out/Supply 500 V; In/Alarm 1.5 kV; Supply/Alarm 500 V; Out/Alarm 500 V.

#### Mounting

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

**Weight:** about 120 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 22.5 mm, Depth 123 mm, Height 120 mm.

### ORDERING INFORMATION

D6212Q: 4 channels

#### Accessories

Bus Connector JDFT050, Bus Mounting Kit OPT5096.

Programmable USB serial line Kit PPC5092 + SWC5090.