Повторители D6072S-087, D6072D-087, D6072S-096, D6072D-096. Технические характеристики

D6072-087

The Resistance Repeater D6072-087 accepts a resistance/RTD or transmitting potentiometer sensor and repeats the resistance with isolation, suitable for applications requiring SIL 2 level in safety related systems for high risk industries.

FEATURES

- SIL 2 / SC 3
- Installation in Zone 2 (pending)
- Installation in Div. 2
- 2/3/4wire res./RTD or potentiometer input
- Burnout Fault detection
- Fully programmable operating parameters
- High Accuracy
- Three port isolation, Input/Output/Supply
- High Density, two channels per unit

ORDERING INFORMATION

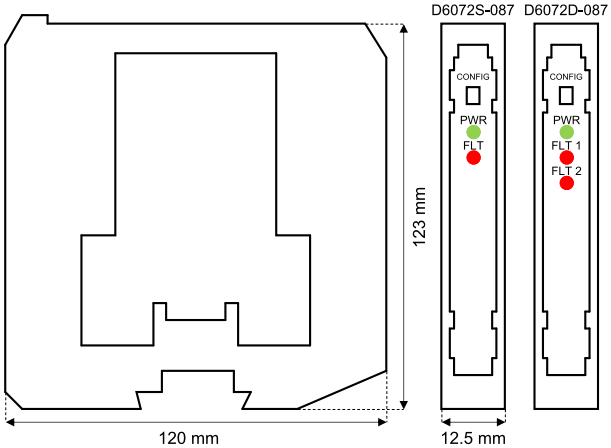
Ordering codes

D6072S-087: 1 channel
D6072D-087: 2 channels

Accessories

Bus Connector JDFT049 (mandatory for D6072D-087, optional for D6072S-087), Bus Mounting Kit OPT5096 (mandatory for D6072D-087, optional for D6072S-087).
Programmable USB serial line Kit PPC5092 + SWC5090.

OVERALL DIMENSIONS



TECHNICAL DATA

Supply

24 Vdc nom (18 to 30 Vdc), reverse polarity protected.
Current consumption: 35 mA (D6072S-087), 37 mA (D6072D-087), @ 24 Vdc with 1 mA exitation current, typical.
Power dissipation: 0.85 W (D6072S-087), 0.9 W (D6072D-087), @ 24 Vdc with 1 mA excitation current, typical.

Input

2-3-4 wire (4 wire only for D6072S-087) Resistance or 2 transmitting pot.
Integration time: from 50 ms to 500 ms.
Input range: 0 to 4 kΩ.
Measuring RTD current: ≤ 0.15 mA.

Output

2-3-4 wire (4 wire only for D6072S-087) resistance.
Transfer characteristic: linear, scaled or custom.
Response time: 10 to 90 % step: ≤ 10.0 ms (slow), ≤ 1.2 ms (fast).
Output range: 0 to 400 Ω.
Excitation current: 0.1 to 10 mA.

Fault

Burnout / Internal fault. Output reflects fault condition via highscale (450 Ω) value forcing. Fault condition is also signaled via BUS and red LED on front panel.

Performance

Ref. Conditions: 24 V supply, 23 ± 1 °C ambient temperature, slow integration mode, 4 wires (for D5072S-087) or 3 wires (for D5072D-087) configuration for RTD, input/output range 10 to 400 Ω.
Input to out:
Calibration & linearity accuracy: ≤ 200 mΩ typical (Excitation Current ≥ 1 mA); ≤ 300 mΩ typical (0.5 mA ≤ Excitation Current < 1 mA).
Temp. influence: ± 20 mΩ/°C, typical (Excitation Current ≥ 1 mA).

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

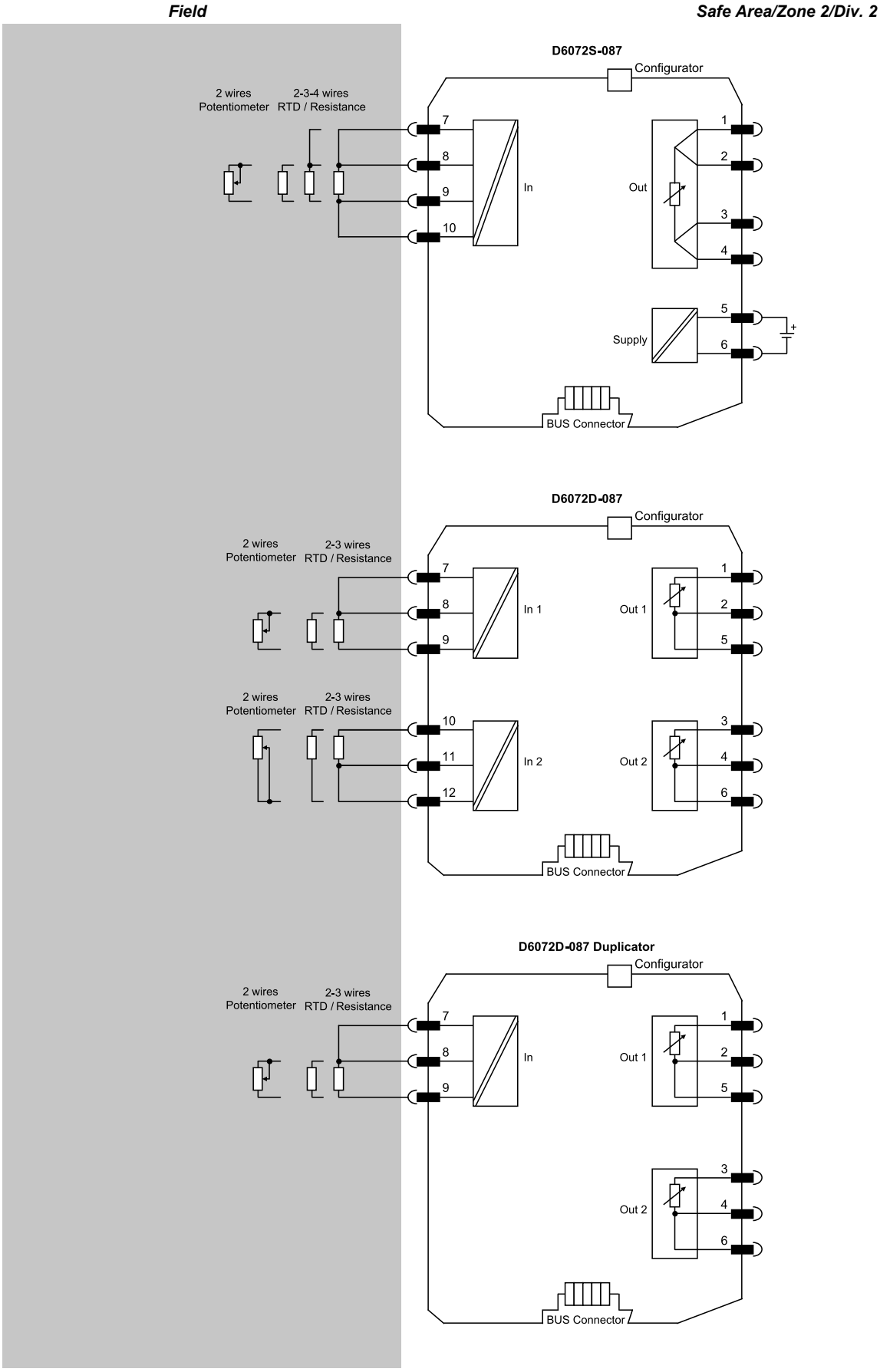
Operating temperature: temperature limits –40 to +70 °C.
Storage temperature: temperature limits –45 to +80 °C.

Mounting

DIN-Rail 35 mm, with or without Power Bus.
Weight: about 135 g (D6072D-087), 130 g (D6072S-087).
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.



D6072-096

SIL2 Thermocouple/mV Repeater

The Thermocouple/mV Repeater D6072-096 accepts a low level dc signal from millivolt or thermocouple sensor and repeats, with isolation, the signal, suitable for applications requiring SIL 2 level in safety related systems for high risk industries. For D6072D-096 module: duplicator function provides two independent outputs from one single input.

FEATURES

- SIL 2 / SC 3
- Installation in Zone 2 (pending)
- Installation in Div. 2
- mV or thermocouple input
- Output duplication
- Fully programmable operating parameters
- High Accuracy, µP controlled A/D converter
- Three port isolation, Input/Output/Supply
- High Density, two channels per unit

ORDERING INFORMATION

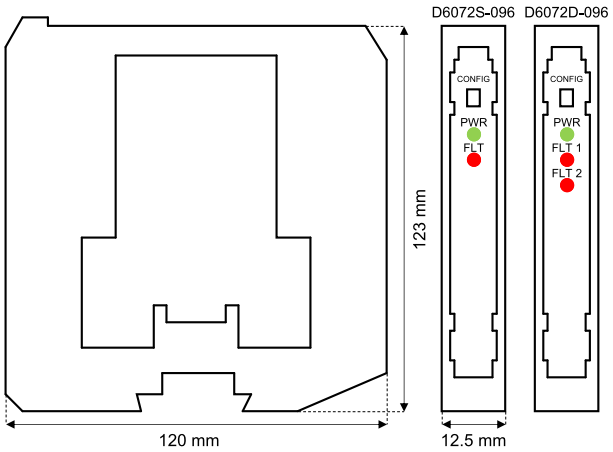
Ordering codes

D6072S-096: 1 channel
D6072D-096: 2 channels

Accessories

Bus Connector JDFT049, Bus Mounting Kit OPT5096.
Programmable USB serial line Kit PPC5092 + SWC5090.

OVERALL DIMENSIONS



TECHNICAL DATA

Supply

24 Vdc nom (18 to 30 Vdc), reverse polarity protected.
Current consumption: 35 mA (D6072D-096), 30 mA (D6072S-096), @ 24 Vdc, typical.
Power dissipation: 0.85 W (D6072D-096), 0.6 W (D6072S-096), @ 24 Vdc, typical.

Input

Millivolt or any type of thermocouple within Input Range.
Integration time: 75 ms (fast), 375 ms (slow), user selectable.
Input range: -10 to +100 mV.
Thermocouple burnout current: ≤ 50 µA.

Output

Millivolt.
Transfer characteristic: linear.
Response time: ≤ 20 ms (10 to 90 % step).
Output range: -10 to +100 mV.

Fault

Output reflects burnout/internal fault condition via highscale (+110 mV) value forcing. Fault condition is also signaled via BUS and red LED on front panel.

Performance

Ref. Conditions: 24 V supply, 23 ± 1 °C ambient temperature, slow integration mode.
Input:
Calibration & linearity accuracy: ≤ ± 10 µV.
Temp. influence: ≤ ± 3 µV/°C, typical.
Output:
Calibration & linearity accuracy: ≤ ± 10 µV.
Temp. influence: ≤ ± 3 µV/°C, typical.

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.
Weight: about 135 g (D6072D-096), 130 g (D6072S-096).
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.