

## Isolated DIN Rail Repeater

### DRSL-DC1



- ✓ Isolation and 1:1 Conversion of Current Signals
- ✓ 1 Current Input—1 Current Output
- ✓ Slimline Housing—Only 6 mm (0.24") Wide
- ✓ Fast Response Time <7 ms
- ✓ High Accuracy, <0.05% of Span
- ✓ Easy-to-Use—No Setup Needed

The DRSL-DC1 isolated repeater provides a competitive choice in terms of both price and technology for galvanic isolation of current signals to SCADA systems or PLC equipment. The unit provides isolation and 1:1 conversion of standard current signals.

The unit offers isolation between input, output and supply. Provides surge suppression and protects control systems from transients and noise. The DRSL-DC1 also eliminates ground loops and can be used for measuring floating signals. Low power consumption facilitates DIN rail mounting without the need for any air gap. Measurement ranges are factory calibrated. The unit operates over a wide temperature range from -25 to 70°C (-13 to 158°F).

### SPECIFICATIONS

#### CURRENT INPUT

**Measurement Range:**

0 to 20.5 mA

**Functional Range:** 0 to 23 mA

**Input Voltage Drop:** <1.5 Vdc

#### CURRENT OUTPUT

**Signal Range:** 0 to 20.5 mA (span)

**Load:** 23 mA/600 Ω max

**Load Stability:** ≤0.01 % of span/  
100 Ω (span = 0 to 20 mA)

**Current Limit:** ≤28 mA



DRSL-DC1 DIN rail signal conditioner and DRSL-PWR-RAIL power rail (sold separately), shown smaller than actual size.

#### GENERAL

**Supply Voltage (via Power Rail or Connectors):** 16.8 to 31.2 Vdc

**Power Consumption:** 0.8 W max

**Internal Consumption:** 0.4 W typical/0.65 W max

**Isolation:** Input/output/supply

**Isolation Voltage (Test):** 2.5 kVac

**Isolation Voltage (Working):** 300 Vac

**MTBF:** >284 years, according to IEC 61709 (SN29500)

**Signal/Noise Ratio:** >60 dB

**Response Time**

**(0 to 90%, 100 to 10%):** <7 ms

**Accuracy:** <±0.05 % of span

**Temperature Coefficient:** <±0.01% of span/°C

**EMC Immunity Influence:** <±0.5% of span

**Extended EMC Immunity**

**NAMUR NE 21, A Criterion, Burst:** <±1% of span

#### ENVIRONMENTAL

**Operating Temperature:**

-25 to 70°C (-13 to 158°F)

**Storage Temperature:** -40 to 85°C (-40 to 185°F)

**Calibration Temperature:** 20 to 28°C (68 to 82°F)

**Relative Humidity:** 0 to 95% RH non-condensing

**Protection Degree:** IP20

**Installation Area:** Pollution degree 2 and measurement/overvoltage category II

#### MECHANICAL

**Dimensions:** 113 H x 6.1 W x 115 mm D (4.4 x 0.24 x 4.5")

**Weight:** 70 g (0.15 lb) approx

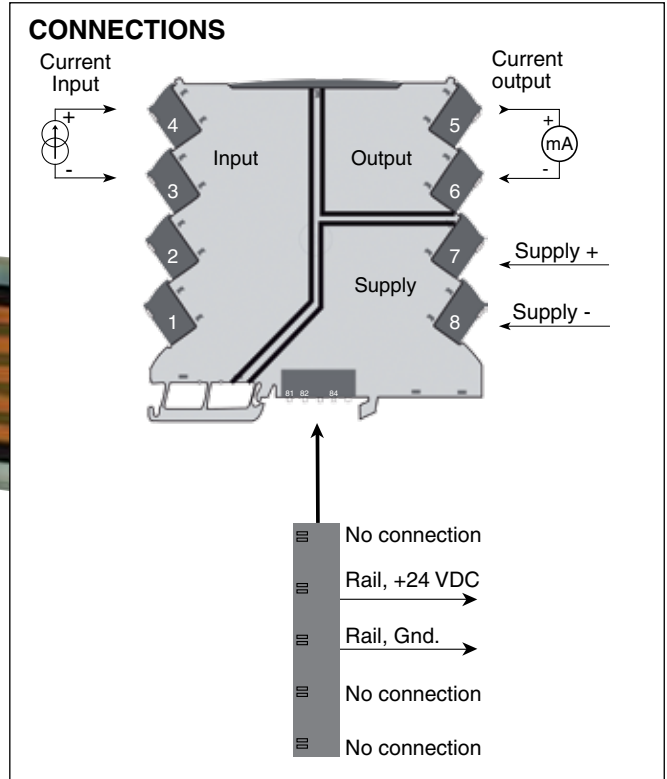
**DIN Rail Type:** DIN EN 60715 - 35 mm

**Wire Size:** 0.13 x 2.5 mm<sup>2</sup>/AWG 26 to 12 stranded wire

**Screw Terminal Torque:** 0.5 Nm



DRSL-DC1 and DRSL-PWR-RAIL shown smaller than actual size.



OMEGACARE<sup>SM</sup> extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARE<sup>SM</sup> covers parts, labor and equivalent loaners.

## To Order

Model No.	Description
DRSL-DC1	Isolated repeater for current signals

## Accessories

Model No.	Description
DRSL-PWR-RAIL	Power rail (with cover and two end covers, one right hand and one left hand), 1 m (3.3') length
DRSL-PCU	Power connector unit, 24 Vdc/2.5 A output to power rail
DRSL-MOD-STOP	Module stop (screwed onto power rail to support and hold mounted devices)

**Ordering Example:** DRSL-DC1 isolated repeater for current signals, DRSL-PWR-RAIL power rail, DRSL-PCU power connector unit, DRSL-MOD-STOP module stop and OCV-1, OMEGACARE<sup>SM</sup> extends standard 1-year warranty to a total of 2 years.