

Isolated DIN Rail Repeater/Splitter for Current Signals

DRSL-SP1



- ✓ Isolation and Conversion of Current Signals
- ✓ Splitter Function: 1 Current Input—2 Current Outputs
- ✓ 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-SP1 isolated repeater/splitter provides a competitive choice in terms of both price and technology for galvanic isolation of current signals to SCADA systems or PLC equipment. Two current outputs are provided which mirror the single current input.

The DRSL-SP1 can be used for signal conversion of a standard process current signal into two individual analog signals. The unit offers 4-port isolation, provides surge suppression and protects control systems from transients and noise. The DRSL-SP1 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

Number of Outputs: 2
Signal Range: 0 to 20.5 mA (span)
Load: 23 mA/300 Ω maximum
Load Stability: ≤0.01% of span/100 Ω (span = 0 to 20 mA)
Current Limit: ≤28 mA



DRSL-SP1 and DRSL-PWR-RAIL (sold separately) shown 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 1/output 2/supply

Isolation Voltage (Test): 2.5 kVac
Isolation Voltage (Working): 300 Vac

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

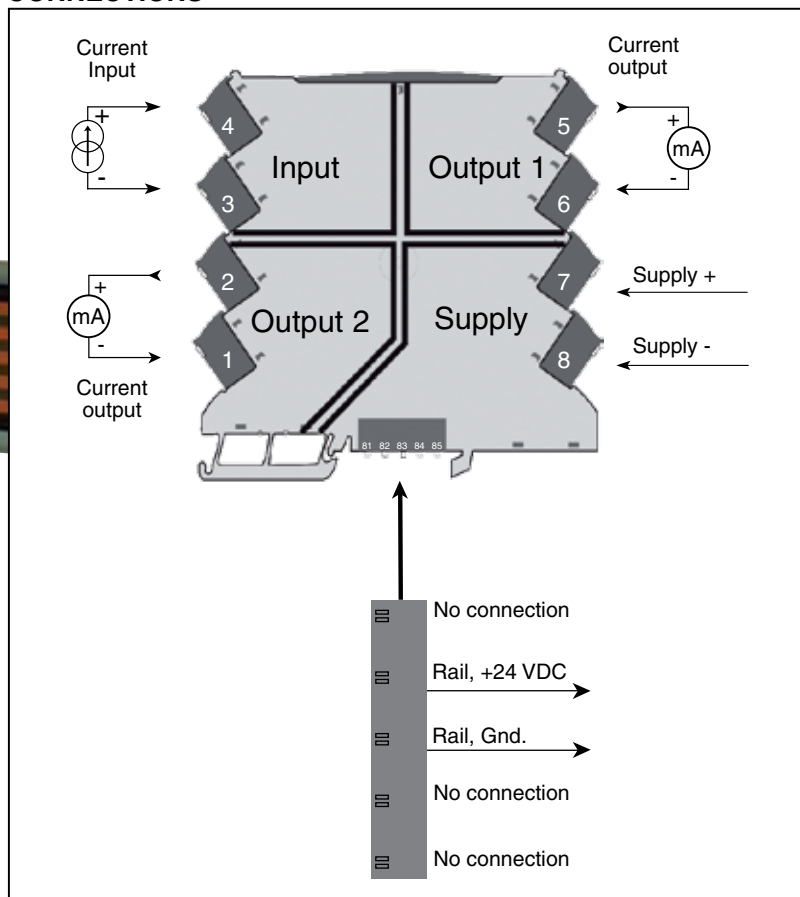
Wire Size: 0.13 x 2.5 mm²/AWG 26 to 12 stranded wire

Screw Terminal Torque: 0.5 Nm



DRSL-SP1 and DRSL-PWR-RAIL (sold separately) shown smaller than actual size.

CONNECTIONS



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

To Order

Model No.	Description
DRSL-SP1	Isolated repeater/splitter for current signals

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-SP1 isolated repeater/splitter for current signals, DRSL-PWR-RAIL power rail, DRSL-PCU power connector unit, DRSL-MOD-STOP module stop and OCW-1, OMEGACARESM extends standard 1-year warranty to a total of 2 years.