

**Datasheet**

# RS PRO Signal Converter

Stock No: 192-3395

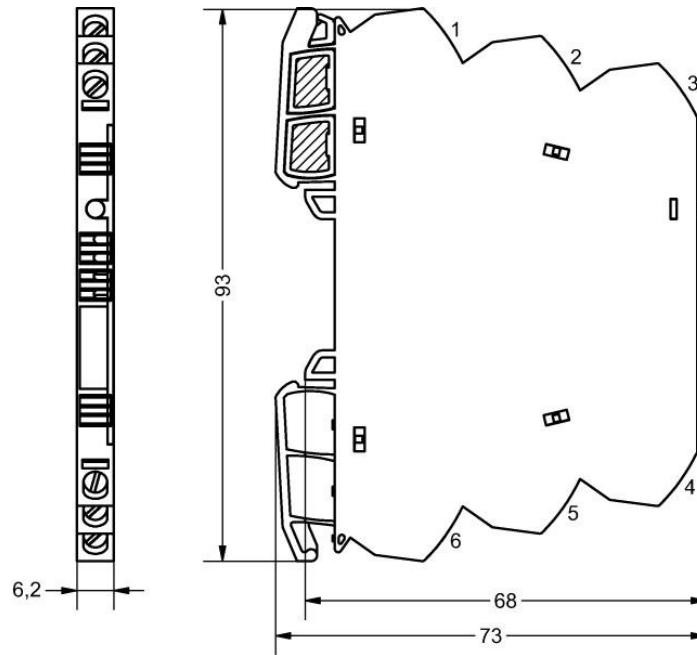
## LCIS analogue/ analogue converter



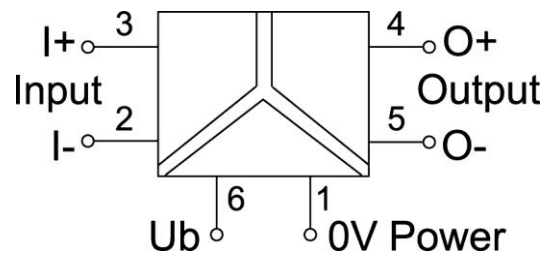
### Specifications

| Type             | LCIS-WAA-0538-62-S                 |
|------------------|------------------------------------|
| Input            | 4–20 mA                            |
| Output           | 4–20 mA                            |
| Insulation       | 2.5 kV, 3-way isolation            |
| Mounting Type    | DIN rail mountable TS35 (EN 60715) |
| Connection type  | Screwed terminal                   |
| IP Rating        | IP20                               |
| Housing Material | PA 6.6 (UL 94 V-0, NFF I2, F2)     |

## Dimensions



## PIN assignment



## Technical Data

| Input                  |                       |
|------------------------|-----------------------|
| Input signal           | 4–20 mA               |
| Galvanic isolation I/O | 3-way isolation       |
| Step response (10–90%) | 6 ms                  |
| Zero /Span             | Production comparison |
| Input resistance       | 100 $\Omega$          |

| <b>Output</b>                   |  |
|---------------------------------|--|
| Output signal                   | 4 – 20 mA  |
| Output voltage limit            | min 0 V<br>max 10.8 V for all output ranges with nominal upper limit 10 V  |
| Output current limit            | min. 0 mA for all output ranges with nominal lower limit 0 mA<br>min. 3.6 mA or all output ranges 4 – 20 mA<br>max. 21.6 mA for all output ranges with nominal upper limit 20 mA |
| Max. load impedance at I-output | 500 $\Omega$   |
| Load deviation                  | at U-output max. 5 mV @ 2 k $\Omega$   |
| Residual ripple                 | <20 mV <sub>eff</sub>  |

| <b>Operating data</b>       |                   |
|-----------------------------|-------------------|
| Accuracy                    | 0.1 % FSR @ 23 °C |
| Linearity error             | 0.05 % FSR        |
| Rise time (10 - 90%)        | 6 ms              |
| Build-up time (Accuracy 1%) | 17 ms             |
| Critical frequency          | 30 Hz @ 3 dB      |
| Temperature coefficient     | <150 ppm / K FSR  |

| General                           |  |
|-----------------------------------|--|
| Rated voltage U <sub>N</sub>      | AC/DC 24 V   |
| Operation voltage range           | AC 19.2–26.4 V / DC 18.0–31.2 V  |
| Status indication                 | LED green  |
| Input/output protection           | Overvoltage, current input with PTC fuse, short circuit-proof output   |
| Rise time (10 - 90%)              | 6 ms   |
| Insulation voltage input / output | 2.5 kV <sub>eff</sub>  |
| Housing material                  | PA 6.6 (UL 94 V-0, NFF I2, F2)   |
| Color of the housing              | RAL 7012 basalt grey   |
| Mounting                          | DIN rail mountable TS35 (EN 60715)   |
| Protection class                  | IP20   |
| Installation position             | any  |
| Connection type                   | Screwed terminal<br>single wire<br>0.25 mm <sup>2</sup> –2.5 mm <sup>2</sup> / AWG 20–14<br>fine stranded wire with ferrule<br>0.25 mm <sup>2</sup> –1.5 mm <sup>2</sup> / AWG 20–16 |
| Operation temperature range       | -25 °C ... +60 °C  |
| Storage temperature range         | -40 °C ... +80 °C  |
| Dimensions (w × h × d)            | 6,2×93×73 mm   |
| Weight                            | 0.029 kg/piece   |
| PU                                | 1 piece  |
| Approvals                         | cULus (E135145)<br>DNV GL  |
| Standards                         | EN 60947-5-1   |

| Failure Rate Prediction (MTBF) |  |
|--------------------------------|--|
| Standards                      | Electronic components – Reliability – Reference conditions for failure rates and stress models for conversion: EN/IEC 61709<br>Failure Rates of Components – Expected values: SN 29500     |
| Failure rate at +45 °C         | 504 fit  |
| Failure rate at +45 °C         | 1983891 h  |
|                                | 1 fit equals one failure per 10 <sup>9</sup> component hours<br>The indicated temperature is the mean component ambient temperature.   |
| Comments                       | The results are valid under following conditions:<br>Automotive environment or industrial areas without extreme dust levels and harmful substances<br>Continuous operation 8760 h per year |