

## Technical data sheet

Interface Technology · LCIS analogue/analogue converter

---

**Input: 0–10 V / 0–20 mA / 4–20 mA**

**Output: 0–10 V / 0–20 mA / 4–20 mA**

**Insulation: 2.5 kV, 3-way isolation**



---

### Identification

Type LCIS-WAA-1539-62-PI  
Part No. [751539.0000](#)

---

### Product version

Hardware revision 1.0  
Software version 1.1  
Datasheet version 01

---

### Input

Input signal 0–10 V, 0–20 mA, 4–20 mA, adjustable via DIP switch S1  
Galvanic isolation I/O 3-way isolation  
Zero /Span Production comparison  
Input resistance >330 k $\Omega$  @ 0–10 V, <100  $\Omega$  @ 0–20 mA, 4–20 mA

---

### Output

Output signal 0–10 V, 0–20 mA, 4–20 mA adjustable via switch  
Output voltage limit min 0 V  
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  
min. 3.6 mA or all output ranges 4 – 20 mA  
max. 21.6 mA for all output ranges with nominal upper limit 20 mA  
Max. load impedance at I-output 500  $\Omega$  @ 0–20 mA, 4–20 mA  
Min. load impedance at U-output 2 k $\Omega$  @ 0–10 V  
Load deviation at U-output max. 5 mV @ 2 k $\Omega$   
Output voltage <16 V @ 0–20 mA, 4–20 mA

---

#### United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park  
Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU  
Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2  
[www.lutze.com](http://www.lutze.com) • [sales.gb@lutze.co.uk](mailto:sales.gb@lutze.co.uk)

#### Germany: Friedrich Lütze GmbH

Postfach 12 24 (PLZ 71366) • Bruckwiesenstraße 17-19 • D-71384 Weinstadt  
Tel. +49 (0)7151 6053-0 • Fax +49 (0)7151 6053-277(-288)  
[www.luetze.de](http://www.luetze.de) • [info@luetze.de](mailto:info@luetze.de)

12.12.2023 • Subject to technical modification  
Part No. [751539.0000](#) • Datasheet version: 01

## Technical data sheet

### Interface Technology · LCIS analogue/analogue converter

---

Output current	max. 5 mA @ 0–10 V
Residual ripple	<20 mV <sub>eff</sub>

---

#### Operating data

---

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

---

#### General

---

Rated voltage U <sub>N</sub>	AC/DC 24 V
Current Consumption	22 mA
Status indication	LED green
Input/output protection	Overvoltage, current input with PTC fuse, short circuit-proof output
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)
Degree of protection	IP20
Installation position	Any
Connection type	Push-In single wire 0.25 mm <sup>2</sup> – 2.5 mm <sup>2</sup> / AWG 24–14 fine stranded wire with ferrule 0.25 mm <sup>2</sup> – 1.5 mm <sup>2</sup> / AWG 24–16
Strip length	8 mm
Dimensions (w × h × d)	6.2 mm × 93.0 mm × 73.0 mm
Weight/unit	0.03 kg
PU (units)	1

---

#### General ambient conditions

---

Operation temperature range	-25 °C ... +60 °C
Storage temperature range	-40 °C ... +80 °C
Relative air humidity	20 – 90 % RH, not condensing
Vibration resistance	0.7 g acc. to EN 60068-2-6

---

#### Failure Rate Prediction (MTBF)

---

Standards	Electronic components – Reliability – Reference conditions for failure rates and stress models for conversion: EN/IEC 61709 Failure Rates of Components – Expected values: SN 29500
Failure rate at +45 °C	531 fit
Failure rate at +45 °C	1881921 h

---

## Technical data sheet

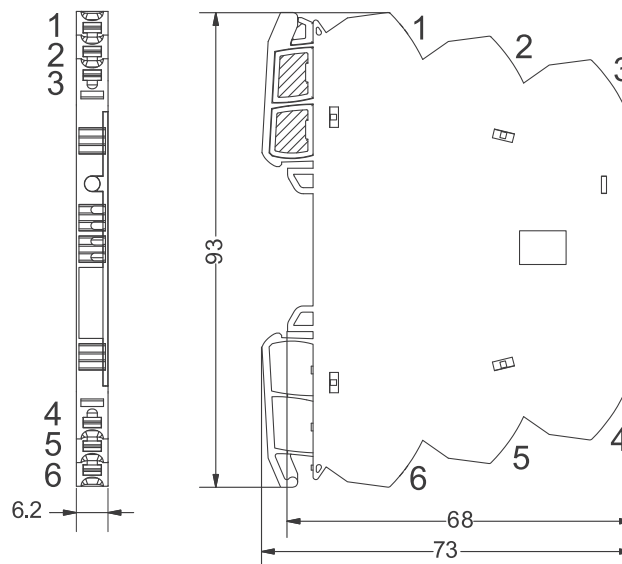
### Interface Technology · LCIS analogue/analogue converter

Comments	1 fit equals one failure per $10^9$ component hours
	The indicated temperature is the mean component ambient temperature.
	The results are valid under following conditions: Automotive environment or industrial areas without extreme dust levels and harmful substances
	Continuous operation 8760 h per year

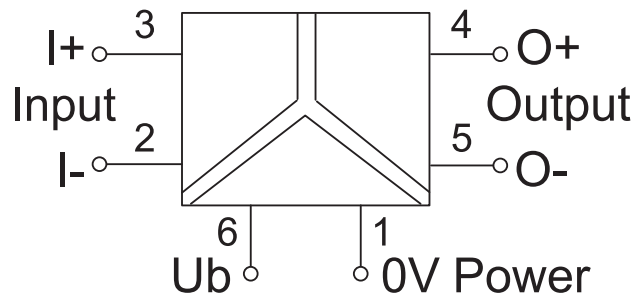
### Certifications/Standards

Conformity	CE UKCA
Certifications	cULus (E135145) DNV (TAA000024Y)
Standards	EN 60947-1 EN 60947-5-1 EN 61000-6-2 EN 61000-6-4 UL 508 DNV-CG-0339

### Dimensions



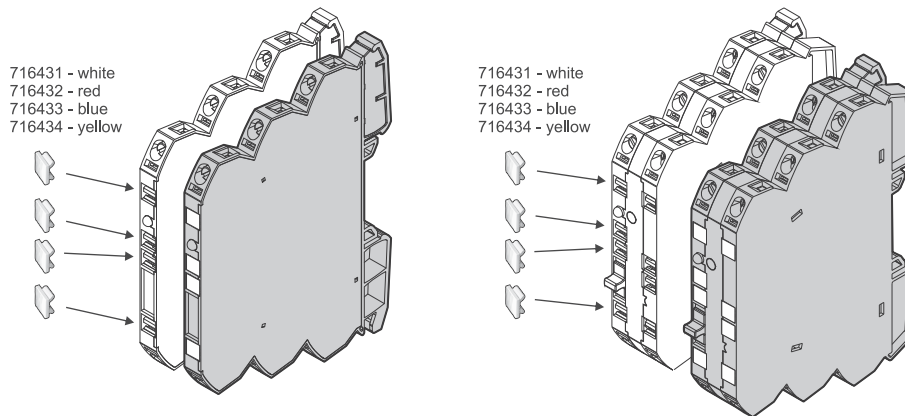
### PIN assignment



# Technical data sheet

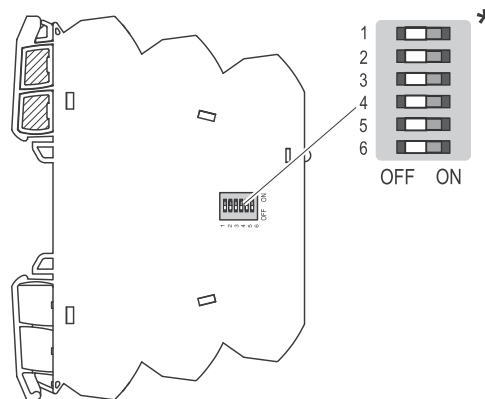
## Interface Technology · LCIS analogue/analogue converter

### Use



### Use

**DE HINWEIS:** Die Schalter dürfen während des Betriebs nicht umgeschaltet werden. Der Wandler benötigt einen Neustart.  
**EN NOTICE:** The switches must not be switched during operation. The converter requires a restart.  
**FR AVIS:** Les interrupteurs ne doivent pas être actionnés pendant le fonctionnement. Le convertisseur nécessite un redémarrage.



\* **DE:** Auslieferungszustand (Werkseinstellung): 0-Einstellung/ alle Schalter sind auf OFF gestellt.  
 \* **EN:** Delivery state (factory setting): 0 setting/ all switches are set to OFF.  
 \* **FR:** État à la livraison (réglage d'usine) : réglage 0/ tous les interrupteurs sont sur OFF.

### Range adjustment

S1	Input
● → Switch On	1 2 3 4
0–10V*	● ●
0–20mA	● ●
4–20mA	● ●

S1	Output
● → Switch On	5 6
0–10V*	● ●
0–20mA	● ●
4–20mA	● ●

