

## Technical data sheet

Interface Technology · LCIS temperature/analog converter

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Input: PT100, 2-wire/3-wire

Output: 0–10 V / 0–20 mA / 4–20 mA

Insulation: 2.5 kV, 2-way isolation



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### Identification

Type LCIS-WPT3LA-1819-62-PI  
Part No. [751819.0000](#)

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### Product version

Hardware revision 1.0  
Software version 1.0  
Datasheet version 01

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### Input

Input variable Temperature sensor PT100  
Galvanic isolation I/O 2-way isolation  
Measuring procedure 2-wire or 3-wire, constant current  
Temperature range -50 °C–50 °C / -50 °C–100 °C / -50 °C–150 °C / 0 °C–100 °C / 0 °C–150 °C / 0 °C–200 °C / 0 °C–300 °C / 0 °C–400 °C  
Parameterisation DIP switch S1  
Zero /Span Production comparison  
Input resistance >1 MΩ @ 2-wire, >500 kΩ @ 3-wire  
Sensor current 0.5 mA  
Protection device Input Overvoltage protection

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### Output

Output signal 0–10 V, 0–20 mA, 4–20 mA  
Max. load impedance at I-output 500 Ω  
Min. load impedance at U-output 2 kΩ  
Load deviation at U-output max. 5 mV @ 2 kΩ

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12.12.2023 • Subject to technical modification  
Part No. [751819.0000](#) • Datasheet version: 01

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Output voltage	<16 V @ 0–20 mA, 4–20 mA
Output current	max. 5 mA @ 10 V
Residual ripple	<20 mV <sub>eff</sub>
Parameterisation	DIP switch S1
Protection device	short circuit protection

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#### Operating data

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Accuracy	0.3 % FSR @ 23 °C
Linearity error	0.1 % FSR
Rise time (10-90%)	approx. 30 ms @ 23 °C
Build-up time (Accuracy 1%)	approx. 60 ms @ 23 °C
Temperature coefficient	150 ppm / K FSR
Critical frequency	10 Hz @ 3 dB / 23 °C
Error coefficient of measuring line	2-conductor: 2.7 K/Ω, 3-conductor: 0.1 K + 0.1 %/Ω

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#### General

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Rated voltage U <sub>N</sub>	AC/DC 24 V
Rated current	approx. 22 mA @ AC 24 V / approx. 13 mA @ DC 24 V
Status indication	LED green
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
Dimensions (w × h × d)	6.2 mm × 93.0 mm × 73.0 mm
Weight/unit	0.03 kg
PU (units)	1

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#### General ambient conditions

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Operation temperature range	-25 °C ... +60 °C
Storage temperature range	-40 °C ... +85 °C
Relative air humidity	20 – 90 % RH, not condensing
Vibration resistance	0.7 g acc. to EN 60068-2-6

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#### Failure Rate Prediction (MTBF)

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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
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## Technical data sheet

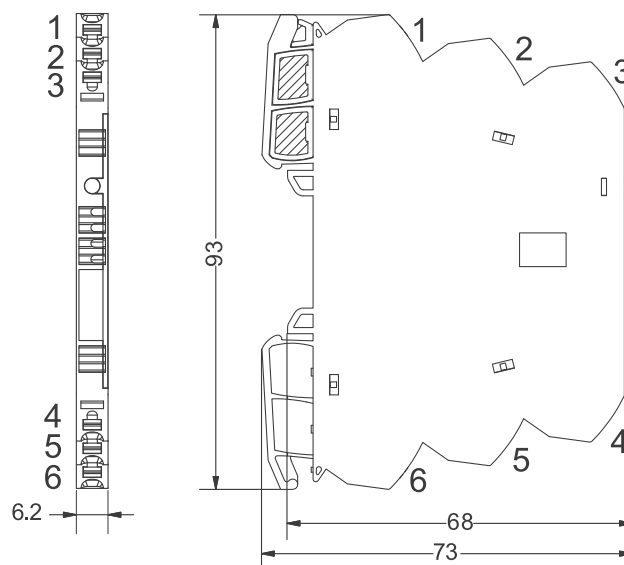
### Interface Technology · LCIS temperature/analog converter

Failure rate at +45 °C	578 fit
Failure rate at +45 °C	1729323 h
	1 fit equals one failure per $10^9$ component hours
	The indicated temperature is the mean component ambient temperature.
Comments	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

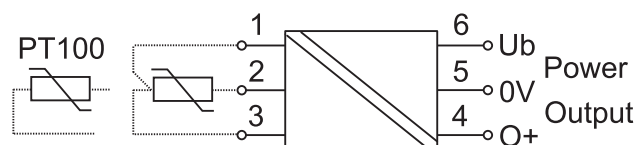
### Certifications/Standards

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

### Dimensions



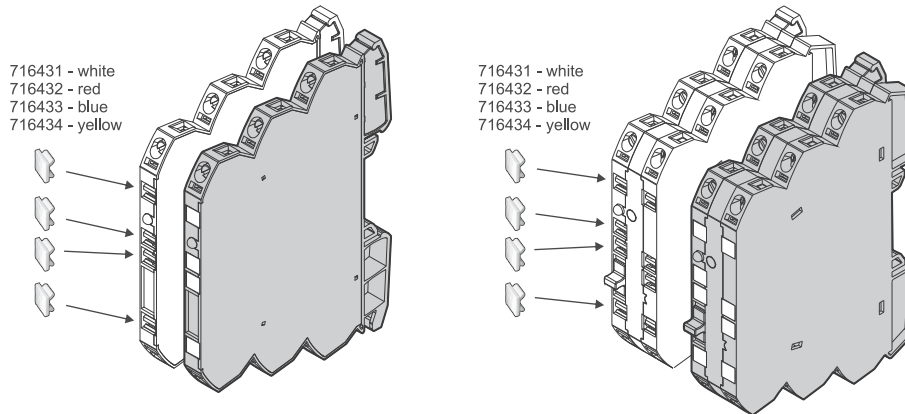
### PIN assignment



## Technical data sheet

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#### Use

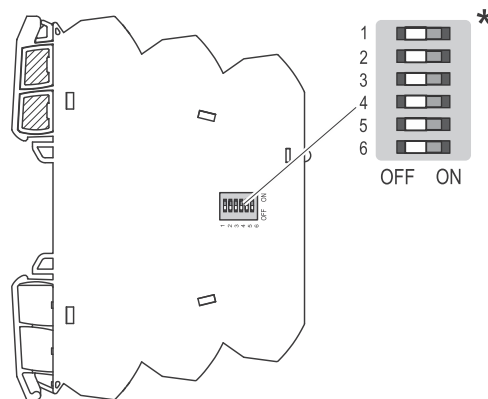


#### Use

**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.

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### Range adjustment

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

S1	Input
• → Switch On	1 2 3 4
PT100, 3-wire	
PT100, 2-wire	●
-50 – 50°C	
-50 – 100°C	●
-50 – 150°C	●
0 – 100°C	●●
0 – 150°C	●●
0 – 200°C	●●
0 – 300°C	●●
0 – 400°C	●●●