

LCIS temperature/analog converter

KOS 819



Identification	Type Code	LCIS-WPT3LA-1819-62-PI KOS 819
Description	Input: PT100, 2-wire/3-wire Output: 0–10 V / 0–20 mA / 4–20 mA Insulation: 2.5 kV, 2-way isolation	
Input	Input variable Temperature sensor PT100 Galvanic isolation I/O 2-way isolation Measuring procedure 2-wire of 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 Overvoltage protection	
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	



Technical data sheet • Interface Technology

Load deviation	at U-output max. 5 mV @ 2 k Ω
Output voltage	< 16 V @ 0–20 mA, 4–20 mA
Output current	max. 5 mA @ 10 V
Residual ripple	<20 mV _{eff}
Parameterisation	DIP switch S1
Protection device	short circuit protection

Operating data

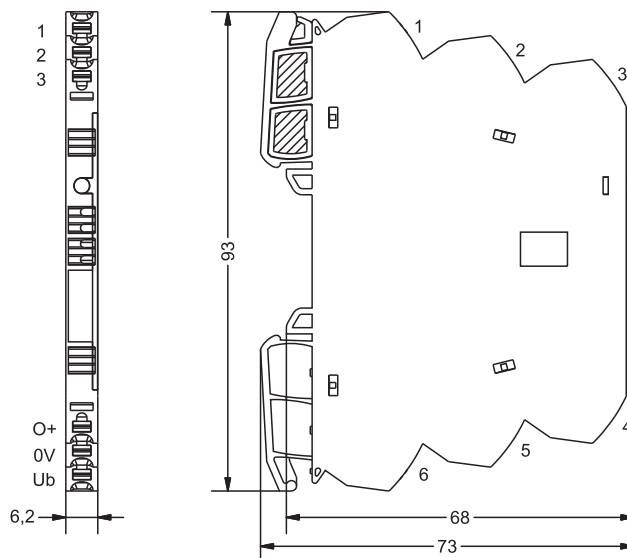
Accuracy	0.3 % FSR @ 23 °C
Linearity error	0.1 % FSR
Rise time (10 - 90%)	approx. 30 ms @ 23 °C
Build-up time (Accuracy 1%)	approx. 60 ms @ 23 °C
Temperature coefficient	150 ppm / K FSR
Critical frequency	10 Hz @ 3 dB / 23 °C
Error coefficient of measuring line	2-conductor: 2.7 K/ Ω , 3-conductor: 0.1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

General

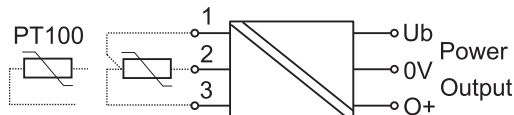
Rated voltage	AC/DC 24 V
Operation voltage range	AC 19.2–26.4 V / DC 18.0–31.2 V
Rated current	approx. 22 mA @ AC 24 V / approx. 13 mA @ DC 24 V
Status indication	LED green
Rise time (10 - 90%)	approx. 30 ms @ 23 °C
Insulation voltage input / output	2.5 kV _{eff}
Housing material	PA 6.6 (UL 94 V-0, NFF I2, F2)
Color of the housing	RAL 7012 basalt grey
Mounting	DIN rail mountable TS35 (EN 60715)
Protection class	IP20
Installation position	any
Connection device	Push-In single wire 0.25 mm ² –2.5 mm ² / AWG 20–14 fine stranded wire with ferrule 0.25 mm ² –1.5 mm ² / AWG 20–16
Operation temperature range	-25 °C ... +60 °C
Storage temperature range	-40 °C ... +85 °C
Dimensions (w × h × d)	6.2 × 93.0 × 73.0 mm
Weight	0.030 kg/piece
PU	1 piece
Approvals	cULus in preparation DNV GL in preparation
Standards	EN 60947-5-1



Dimensions



PIN assignment



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	● ● ●

