

Technical data sheet

Interface Technology · Microcompact analog/analog converter

Input: ± 30 V, ± 50 mA, $\pm$ DC 5 A adjustable

Output: 0–20 mA / 4–20 mA / 0–10 V / -10–10 V / 2–10 V / 0–5 V / 1–5 V

Insulation: 2.5 kV, 3-way isolation



Identification

Type LCON AA DFDT 806211
Part No. [751320](#)

Product version

Hardware revision 1.3
Software version 1.9
Datasheet version 03

Input

Input variable Analogue signals
Measurement input +30/-30 V, +50/-50 mA, DC +5 A/-5 A
adjustable via switch and software FDT/DTM, connection via micro USB
Galvanic isolation I/O 3-way isolation
Step response (10–90%) 1 ms–500 ms (adjustable by means of filter stage 1–5, default: filter stage 4 = 80 ms)
Parameterisation Software FDT/DTM
DIP switch
Zero /Span Freely adjustable
Input resistance >800 k Ω @ +30/-30 V, <30 Ω @ +50/-50 mA, 10 m Ω @ DC +5 A/-5 A

Output

Output signal 0–10 V, -10–10 V, 0–20 mA, 4–20 mA adjustable via switch and software
FDT/DTM, connection via USB service cable
Max. load impedance at I-output 700 Ω @ 0–20 mA, 4–20 mA
Min. load impedance at U-output 2 k Ω @ 0–10 V, -10–+10 V

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Technical data sheet

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Limitation for exceeding measurement range	10.25 V @ 0–10 V, -10–10 V 20.5 mA @ 0–20 mA, 4–20 mA
Max. modulation range/output signal/output current	10.5 V @ 0–10 V, -10–10 V 21 mA @ 0–20 mA, 4–20 mA
Parameterisation	Software FDT/DTM DIP switch

Operating data

Accuracy	0.1 % FSR @ +30/-30 V, +50/-50 mA 0.5 % FSR @ +5 A/-5 A
Linearity error	±0.05 % FSR @ +30/-30 V, +50/-50 mA ±0,1 % FSR @ +5 A/-5 A

General

Rated voltage U_N	DC 24 V
Rated current	Approx. 18 mA
Status indication	LED green, red (error)
Input/output protection	Overvoltage DC 30 V, short circuit-proof output
Temperature error	<100 ppm/K FSR
Data storage	Flash
Insulation voltage input / output	2.5 kV _{eff}
Resolution	16-bit
Configuration	Switch and software: FDT / DTM
Housing material	PA 6.6 (UL 94 V-0)
Color of the housing	Light grey
Mounting	DIN rail mountable TS35 (EN 60715)
Degree of protection	IP20
Installation position	Any
Connection type	Spring terminal 0.14 mm ² – 1.5 mm ²
Dimensions (w × h × d)	6.2 mm × 90.0 mm × 115.5 mm
Weight/unit	0.05 kg
PU (units)	1

General ambient conditions

Operation temperature range	-40 °C ... +70 °C
Storage temperature range	-40 °C ... +85 °C
Relative air humidity	10 % – 95 %, without condensation
Vibration resistance	4 g acc. to EN 60068-2-6
Shock resistance	15 g acc. EN 60068-2-27

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
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Technical data sheet

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Failure rate at +45 °C	607 fit
Failure rate at +45 °C	1647753 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) cULus (E319134) use in Class I, Div. 2, Hazardous Locations
Standards	EN 60947-1 EN 60947-5-1 UL 508 UL 121201 DNVGL-CG-0339 Temperature Class D – not certified Humidity Class B – not certified Vibration Class B – not certified EMC Class A – not certified Enclosure Class A – not certified

Equipment/Spare parts

Accessories	Jumper comb 6 A (VE 10) 2-pin: 762802 (red), 762803 (white), 762804 (blue) 3-pin: 762805 (red), 762806 (white), 762807 (blue) 4-pin: 762812 (red), 762813 (white), 762814 (blue) 8-pin: 762822 (red), 762823 (white), 762824 (blue) 16-pin: 762832 (red), 762833 (white), 762834 (blue) Marker holder 4×11 mm white, Part-No. 681313, PU: 100 units Laser label 4.23×11 mm (sheet with 1056 labels), Part-No. 681034, PU: 1 unit
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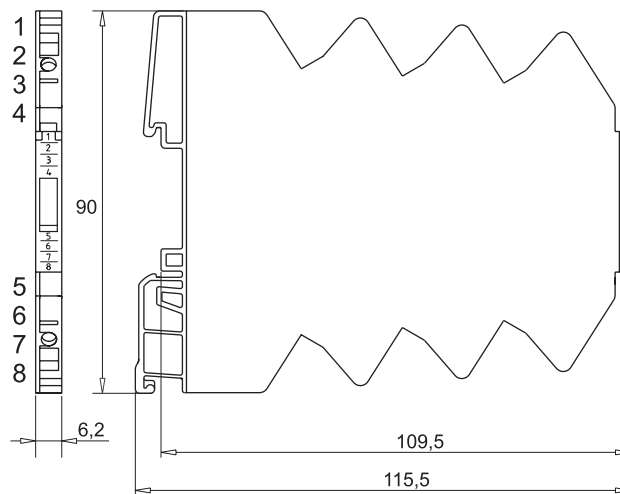
Notes and Comments

Note	For the parameterization you need the USB service cable, LCON ZB USB, part number 750894 and the software Lütze HART-DTM and PACTware. The current versions can be found in the download area of the respective product page on the LÜTZE website.
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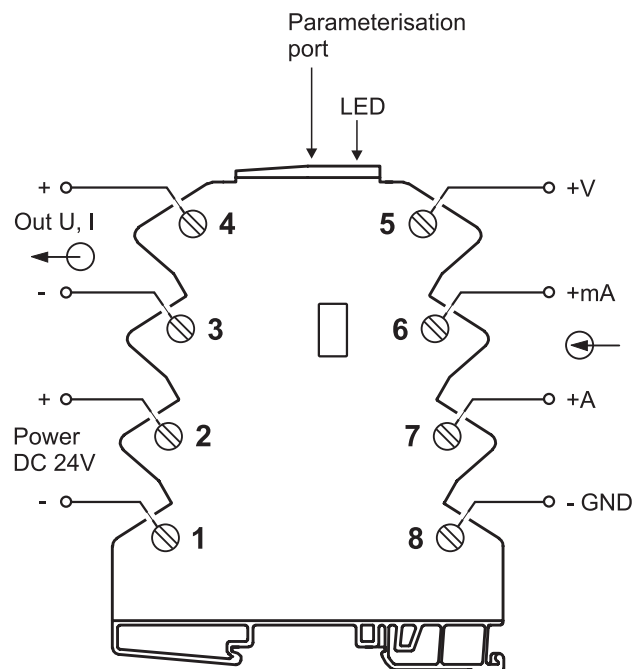
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Interface Technology · Microcompact analog/analog converter

Dimensions



PIN assignment



PIN assignment



Range adjustment

S1 ● → Switch On											
Range*	1	2	3	4	5	Range*	1	2	3	4	5
0 – 50mV	●					0 – 10mA					●
0 – 100mV		●				0 – 20mA	●				●
0 – 200mV	●	●				0 – 50mA		●			●
0 – 500mV			●			4 – 20mA	●	●			●
0 – 1V	●		●			0 – 0.5A			●		●
0 – 2V		●	●			0 – 1A	●		●		●
0 – 5V	●	●	●			0 – 2A		●	●		●
0 – 10V				●		0 – 5A	●	●	●		●
0 – 20V	●			●		±1V				●	●
0 – 30V		●		●		±5V	●			●	●
1 – 5V	●	●		●		±10V		●		●	●
2 – 10V			●	●		±5mA	●	●		●	●
0 – 1mA	●		●	●		±20mA			●	●	●
0 – 2mA		●	●	●		±2A	●		●	●	●
0 – 5mA	●	●	●	●		±5A		●	●	●	●

S1 1-8 off: FDT/DTM

*See instruction leaflet

Output	6	7	8
0 – 20mA	●		
4 – 20mA		●	
0 – 10V	●	●	
±10V			●
2 – 10V	●		●
0 – 5V		●	●
1 – 5V	●	●	●