

## Technical data sheet

Interface Technology · LCIS analogue/analogue converter

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**Input: 0–10 V / 0–20 mA / 4–20 mA**

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

**Insulation: 4 kV, 3-way isolation, Wide range input**



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### Identification

Type LCIS-WP-WAA-1510-175-PI  
Part No. [751510.0000](#)

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### Product version

Hardware revision 1.0  
Software version 1.1  
Datasheet version 01

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### 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

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### 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 <18 V @ 0–20 mA, 4–20 mA

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Part No. [751510.0000](#) • Datasheet version: 01

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

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#### Operating data

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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

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#### General

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Rated voltage U <sub>N</sub>	AC/DC 24–240 V
Current Consumption	19 mA
Status indication	LED green
Input/output protection	Overvoltage, current input with PTC fuse, short circuit-proof output
Insulation voltage input / output	4.0 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)	17.5 mm × 93.0 mm × 73.0 mm
Weight/unit	0.059 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 ... +80 °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
Failure rate at +45 °C	667 fit
Failure rate at +45 °C	1498305 h

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### 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

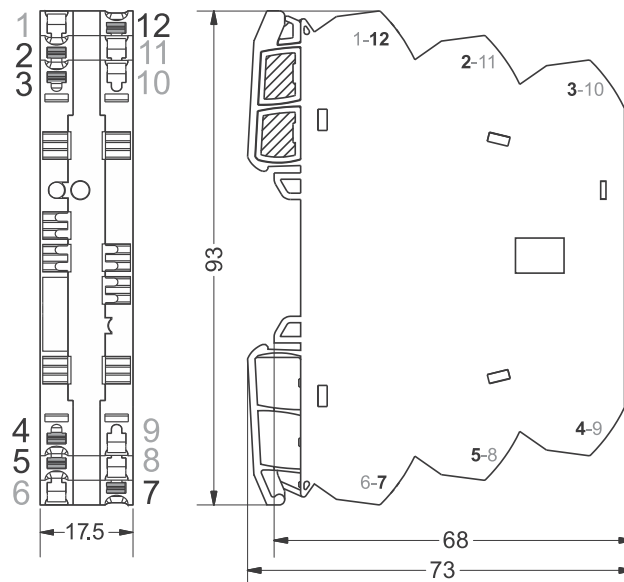
#### Certifications

cULus (E135145)  
DNV (TAA000024Y)

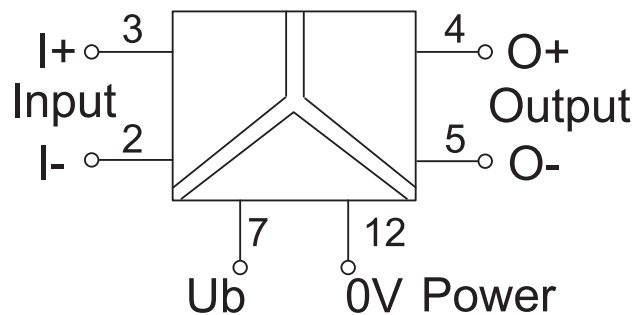
#### Standards

EN 60947-1  
EN 60947-5-1  
EN 61000-6-2  
EN 61000-6-4  
UL 508  
DNV-CG-0339

### Dimensions



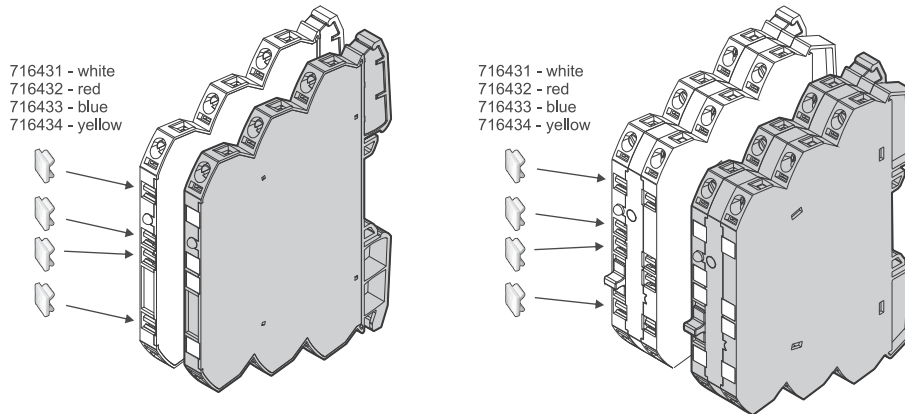
### PIN assignment



# Technical data sheet

## Interface Technology · LCIS analogue/analogue converter

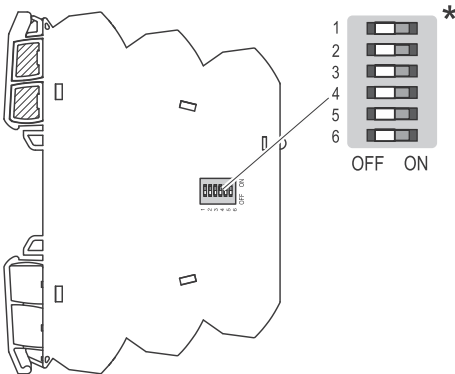
### Use



### Use

#### DE DIP-Schalterstellungen EN DIP switch positions FR Positions des interrupteurs DIP

**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.  
**Je nach Art des Wandlers ist dann bereits ein bestimmter Bereich voreingestellt.**

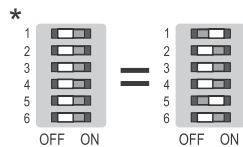
\* EN: Delivery state (factory setting): 0 setting/ all switches are set to OFF.  
**Depending on the type of transducer, a certain range is then already preset.**

\* FR: État à la livraison (réglage d'usine) : réglage 0/ tous les interrupteurs sont sur OFF.  
**Selon le type de transducteur, une certaine plage est alors déjà prédéfinie.**

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 751510.0000  
 751518.0000  
 751519.0000  
 750518.0000  
 750519.0000

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

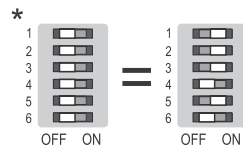
S1	Output	5	6
●→ Switch On			
0- 10V*		●	
0-20mA		●	
4-20mA		●	●



750516.0000  
 750517.0000  
 751516.0000  
 751517.0000

S1	Input	1	2	3	4
●→ Switch On					
0- 60 mV		●			
0- 100 mV		●			
0- 300 mV		●			
0- 500 mV		●	●		
0- 1 V		●	●		
0- 2 V		●	●		
0- 5 V		●	●	●	
0- 10 V*		●	●	●	
2- 10 V		●	●	●	●
0- 20 V		●	●	●	●
0- 5 mA		●	●	●	●
0- 10 mA		●	●	●	●
± 5 mA		●	●	●	●
± 20 mA		●	●	●	●
0- 20 mA		●	●	●	●
4- 20 mA		●	●	●	●

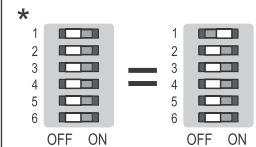
S1	Output	5	6
●→ Switch On			
0- 10 V*		●	
0- 20 mA		●	
4- 20 mA		●	●



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 751512.0000

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

S1	Output	5	6
●→ Switch On			
0- 50 Hz*		●	
0- 100 Hz		●	
0- 1000 Hz		●	●
0- 10000 Hz		●	●



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### 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	●  ●

