

## **Product Datasheet - Technical Specifications**



More information in our Web-Shop at **www.meilhaus.com** and in our download section.

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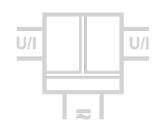
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# Customer-Specific Isolation Amplifier DK 8000

Isolation and Conversion of Industrial Signals in Special Applications



The Isolation Amplifier DK 8000 is used for isolation and conversion of customer-specific industrial signals.

When it comes to individualized solutions, the know-how advantage of our development team stands ready to serve. This allows us to offer customer-specific solutions with the proverbial DRAGO quality in the shortest possible time; solutions which, as a result of individualized consultation, optimally meet all customer needs, including their economic ones.

The slim housing with 12.5 mm width saves space in the switch cabinet and facilitates by the practical plug-in screw terminal blocks the assembly.

The new universal power pack for 20 ... 253 V AC/DC means the DK 8000 can be used anywhere in the world, with all mains power supplies. The unit's high efficiency contributes significantly to reducing the unit's own heat generation. This is reflected in extremely high reliability and long-term stability.

## Customer-Specific Solutions Special Input and output range on request

Universal Power Supply for 20 ... 253 V AC/DC
 Applicable world-wide for all common supply voltages

#### • 3-Port Isolation

Protection against erroneous measurements due to parasitic voltages or ground loops

#### Ultra-small-sized housing

12.5 mm housing with plug-in screw terminal blocks

#### • High accuracy

No falsification of measured signal

#### • Protective Separation

Protects service personnel and downstream devices against impermissibly high voltage

#### Maximum reliability

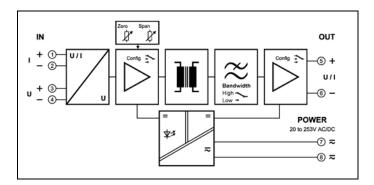
No maintenance costs

#### • 5 Years Warranty

Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)



#### **Block diagram**

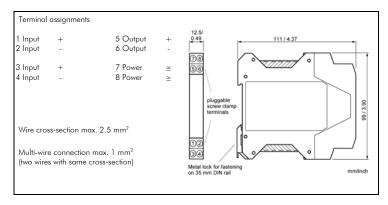




### **Technical Data**

Input	
Input signal	Customer-specific
	technical data as orders (see label)
Input resistance	Current input approx. 25 $\Omega$ (depends on measuring range)
	Voltage input approx. 1 M $\Omega$ (depends on measuring range)
Overload	Max. 120 % of final value
Output	
Output signal	Customer-specific
	technical data as orders (see label)
Load	Current output $\leq 12 \text{ V}$ (600 $\Omega$ at 20 mA)
	Voltage output $\leq$ 20 mA (500 $\Omega$ at 10 V)
Transmission range	unipolar: - 2 + 110 % bipolar: - 110 + 110 %
Residual ripple	< 10 mV <sub>rms</sub>
General Data	
Transmission error	Typical 0.1 % full scale (max. 0.3 %, depends on measuring range)
Temperature coefficient <sup>1)</sup>	< 100 ppm/K
Zero/Span Adjustment	Optional
Cut-off frequency (-3 dB)	Max. 10 kHz
Test voltage	4 kV AC, 50 Hz, 1 min. input against output against power supply
Working voltage <sup>2)</sup> (Basic Insulation)	1000 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1
Ambient temperature	Operation $-20 \text{ to } +70 ^{\circ}\text{C}$ $(-4 \text{ to } +158 ^{\circ}\text{F})$
	Transport and storage $-35 \text{ to} + 85 ^{\circ}\text{C}$ (-31 to $+185 ^{\circ}\text{F}$ )
Power supply	20 253 V AC/DC AC 48 62 Hz, approx. 2 VA
	DC approx. 1.0 W
EMC <sup>3)</sup>	EN61326 -1
Construction	12.5 mm (0.49") housing, protection class IP 20, mounting on 35 mm DIN rail acc. to EN 60715
Weight	Approx. 100 g

#### **Dimensions**



Subject to change!

#### **Product line**

Device	Order No.
Customer-Specific Isolation Amplifier	DK 8000 - XXX

The index number -XXX describes the signal combination and will be announced by order.

<sup>1)</sup> Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C
2) For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.
3) Minor deviations possible during interference