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 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

<table>
<thead>
<tr>
<th>Input signal</th>
<th>Customer-specific technical data as orders (see label)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input resistance</td>
<td>Current input approx. 25 Ω (depends on measuring range)</td>
</tr>
<tr>
<td></td>
<td>Voltage input approx. 1 MΩ (depends on measuring range)</td>
</tr>
<tr>
<td>Overload</td>
<td>Max. 120 % of final value</td>
</tr>
</tbody>
</table>

Output

<table>
<thead>
<tr>
<th>Output signal</th>
<th>Customer-specific technical data as orders (see label)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load</td>
<td>Current output ≤ 12 V (600 Ω at 20 mA)</td>
</tr>
<tr>
<td></td>
<td>Voltage output ≤ 20 mA (500 Ω at 10 V)</td>
</tr>
<tr>
<td>Transmission range</td>
<td>unipolar: -2 ... + 110 %</td>
</tr>
<tr>
<td></td>
<td>bipolar: -110 ... + 110 %</td>
</tr>
<tr>
<td>Residual ripple</td>
<td>&lt; 10 mV_{rms}</td>
</tr>
</tbody>
</table>

General Data

Transmission error

Typical 0.1 % full scale (max. 0.3 %, depends on measuring range)

Temperature coefficient

< 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^{2) (Basic Insulation)}

1000 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1

Ambient temperature

Operation: -20 to + 70 °C (-4 to + 185 °F)

Transport and storage: -35 to + 85 °C (-31 to + 185 °F)

Power supply

20 ... 253 V AC/DC

AC 48 ... 62 Hz, approx. 2 VA

DC approx. 1.0 W

EMC^{3)}

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

1) 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

Dimensions

Wire cross-section max. 2.5 mm²

Multi-wire connection max. 1 mm² (two wires with same cross-section)

Product line

Device

Customer-Specific Isolation Amplifier

Order No.

DK 8000 - XXX

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