**1-Channel Current Driver**

**Model Number**
KFD0-CS-Ex1.53

- 1-channel
- Loop powered
- Suitable for Division 2/Zone 2 mounting
- Accuracy 1%
- Low voltage drop
- Transmission range: 0-40 mA
- SIL 2 according to IEC 61508; SIL 3 in a redundant structure

KFD0-CS-Ex1.53 is a single channel isolator that controls I/P converters. It is ideal for applications where the control system in the safe area handles a small load. Since this isolator is loop powered, use the technical data on this page to verify that proper voltage is available to the field devices.

### Technical Data

<table>
<thead>
<tr>
<th>INPUT (not intrinsically safe)</th>
<th>Terminals 12-, 11+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage range</td>
<td>4-10 VDC</td>
</tr>
<tr>
<td>Current range</td>
<td>0-40 mA</td>
</tr>
<tr>
<td>Power loss</td>
<td>200 mW</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTPUT (intrinsically safe)</th>
<th>Terminals 1+, 2-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Load</td>
<td>$\leq 270 \Omega$ at 20 mA</td>
</tr>
<tr>
<td>Output signal</td>
<td>$V_n - (0.2 \times \text{current in mA}) - 0.6$</td>
</tr>
<tr>
<td>Transfer current</td>
<td>$\leq 40 \text{ mA}$</td>
</tr>
<tr>
<td>Short circuit current</td>
<td>$\leq 95 \text{ mA}$</td>
</tr>
</tbody>
</table>

**TRANSFER CHARACTERISTICS**

- Calibrated accuracy: $\leq 200 \mu \text{A}$
- Temperature drift per°C: $\leq 2 \mu \text{A/°C}$ (0°C to +50°C), $\leq 5 \mu \text{A/°C}$ (-20°C to +80°C)
- Rise time: $\leq 20 \text{ ms at 4-20 mA and 250 } \Omega \text{ load}$

**CERTIFICATES**

- Zone 0, 1, 2: BAS 98 ATEX 7343, EX II (1) G [EEEx ia] IIC
- Zone 2: TÜV 99 ATEX 1499X, EX II 3 G EEx nA II T4
- Exida: P+F 03/07-04 R013

**MECHANICAL**

- Housing: Type A4 (see page 454)
- Dimensions: 4.21" x 0.79" x 4.53" (107 x 20 x 115 mm)
- Weight: 3.5 oz. (~ 100 g)

**AMBIENT TEMPERATURE**

- $-4°F \text{ to } +140°F \text{ (-20°C to +60°C)}$

### Connection Diagram

**Engineer’s Guide** (page 7)  
**Accessories** (page 443)  
**Power Supplies** (page 401)  
**Surge Suppression** (page 413)  
**Lastest Info. Avail. Online**