

Technical Data		
POWER SUPPLY		Power Rail or terminals 14+, 15-
Nominal voltage		20-35 VDC
Power consumption		1.9 W
INPUT (intrinsically safe)		Terminals 1+, 2-, 3 or 5-, 6+
Input signal		0/4-20 mA
Available voltage		≥16 V at 20 mA terminals 1+, 3
OUTPUT (not intrinsically safe)		Terminals 7-, 8+, 9
Output signal		0/4-20 mA; load 0-800 Ω
Ripple		≤ 50 μA _{rms}
TRANSFER CHARACTERISTICS		
Calibrated accuracy		\leq 10 μ A incl. calibration, linearity, hysteresis, loads and fluctuations of supply voltage
Temperature drift		≤ 0.4 μA/°C
Frequency range Band width at 0.5 V _{pp} Signal		Hazardous area into the safe area: 0-7.5 kHz (-3 dB)
Frequency range Band width at 0.5 V _{pp} Signal		Safe area into the hazardous area: 0.3-7.5 kHz (-3 dB)
Rise time		20 μs
CERTIFICATES		See page 157 for entity parameters
	c UL us	No. 116-0173
CE	(Ex) Zone 0, 1, 2	BAS 99 ATEX 7060, 🐼 II (1) G D [EEx ia] IIC
	(€x) Zone 2	TÜV 99 ATEX 1499 X, 🐼 II 3 G EEx nA II T4
	Exida	P+F 01/04-03D R001
MECHANICAL		
Housing		Type C see page 454
Dimensions		4.65" x 0.79" x 4.53" (118 x 20 x 115 mm)
Weight		7.1 oz. (≈ 200 g)
AMBIENT TEMPERATURE		-4°F to +140°F (-20°C to +60°C)

1-Channel SMART **Transmitter Power** Supply

Model Number KFD2-STC4-Ex1

- 1-channel
- 24 VDC supply/Power Rail compatible
- SMART-compatible up to 7.5 kHz (-3 dB)
- Suitable for Division 2/Zone 2 mounting
- · Galvanically isolated output
- Current source output 0/4-20mA
- SIL 2 according to IEC 61508; SIL 3 in a redundant structure

This SMART transmitter power supply provides 2- or 3-wire SMART transmitters with power in hazardous areas and transfers the analog values from the hazardous area to the

Digital signals may be superimposed on the analog values in the hazardous or safe area, which are transferred bidirectionally.

If the loop resistance is too low, an internal resistor of \approx 274 Ω between terminals 8 and 9 is available, which may be used as the HART resistor. SMART transmitter power supplies are delivered standard with terminals KF-STP-BU and KF-STP-GN. Jacks are integrated in these terminals for the connection of the handheld units.

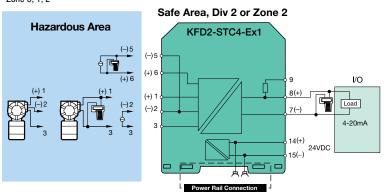
Voltage output versions are available upon request:

Model number	Output
KFD2-STV4-Ex1-1	0/1-5 V
KFD2-STV4-Ex1-2	0/2-10 V

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

Connection Diagram

Class I; Div 1, 2 Zone 0, 1, 2



Front View

Housing type C (see system description)



