

1-Channel Current/Voltage Driver

Model Number

KFD2-CD-Ex1.32.*

- 1-channel
- 24 VDC supply/Power Rail compatible
- Conversion of current/voltage or voltage/current
- Conversion ranges: 0/4-20 mA, 0/1-5 V, 0/2-10 V
- Suitable for Division 2/Zone 2 mounting
- SIL 2 according to IEC 61508; SIL 3 in a redundant structure

The KFD2-CD-Ex1.32.* series of analog current/voltage drivers drive I/P converters, electrical valves and positioners in hazardous areas. They are available in several designs.

INPUT/OUTPUT SELECTION TABLE

INPUT	OUTPUT					
	0-20mA	4-20mA	0-5V	1-5V	0-10V	2-10V
0-20mA	0	2	-	-	12	1
4-20mA	1	(0)	-	-	13	(12)
0-5V	3	5	(15)	-	-	-
1-5V	-	(3)	-	(15)	-	-
0-10V	6	8	21	-	15	-
2-10V	-	(6)	-	-	-	(15)

Match the desired inputs and outputs on this chart, then use that number when ordering. The values shown in parentheses are subsets of a larger range.

Technical Data

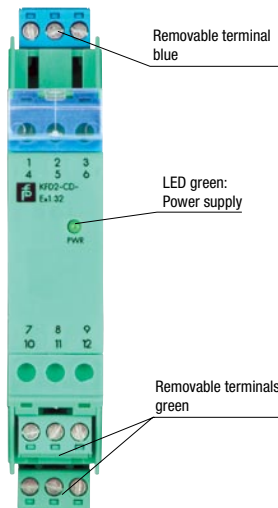
POWER SUPPLY		Power Rail or terminals 7+, 8-
Nominal voltage	20-35 VDC	
Rated current	≤ 50 mA (current output version) ≤ 20 mA (voltage output version)	
INPUT (not intrinsically safe)		Terminals 9+, 10-, 11+
Transmission range	0-20 mA (current output version) 0-10 V (voltage output version)	
Limitation, max. input	≤ 40 mA, 12 VDC	
Voltage drop (current version)	≈ 4 V at 20 mA	
Input current (voltage version)	≤ 100 µA up to 50 °C at 10 V	
OUTPUT (intrinsically safe)		Terminals 1+, 2-
Transmission range	0-20 mA (current output version) 0-10 V (voltage output version)	
Limitation, max. output	17 V at 20 mA, 10 V	
Resistance	850 Ω max. load (current output version) 3 Ω max. load (voltage output version)	
TRANSFER CHARACTERISTICS		
Calibrated accuracy	≤ 0.1 % incl. non-linearity and hysteresis at 20°C	
Temperature drift	≤ 0.01 %/°C	
Rise time	< 10 ms	
CERTIFICATES		See page 184 for entity parameters
		No. 116-0129
		No. 116-0132
		No. 116-0173
	Zone 0, 1, 2	BAS 02 ATEX 7203, II (1) G D [EEx ia] IIC
	Zone 2	TÜV 99 ATEX 1499 X, II 3 G EEx nA II T4
	Exida	P+F 03/10-12 R014
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 to +140°F (-20°C to +60°C)



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

Front View

Housing type A4
(see system description)



Connection Diagram

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

