

Features

- 1-channel isolated barrier
- 24 V DC supply (Power Rail)
- HART field device input with transmitter power supply
- Usable as signal splitter (1 input and several outputs)
- 3 analog outputs 4 mA ... 20 mA
- Sink and source mode output
- Configurable by keypad

Function

This isolated barrier is used for intrinsic safety applications. It is a HART loop converter that provides power to transmitters or can be connected to existing HART loops in parallel.

It is able to evaluate up to four HART variables (PV, SV, TV, QV). Of those four HART variables, the data contained in any three of them can be converted to three different 4 mA ... 20 mA current signals. These loop signals can be connected to display devices or analog inputs on the process control system/control system.

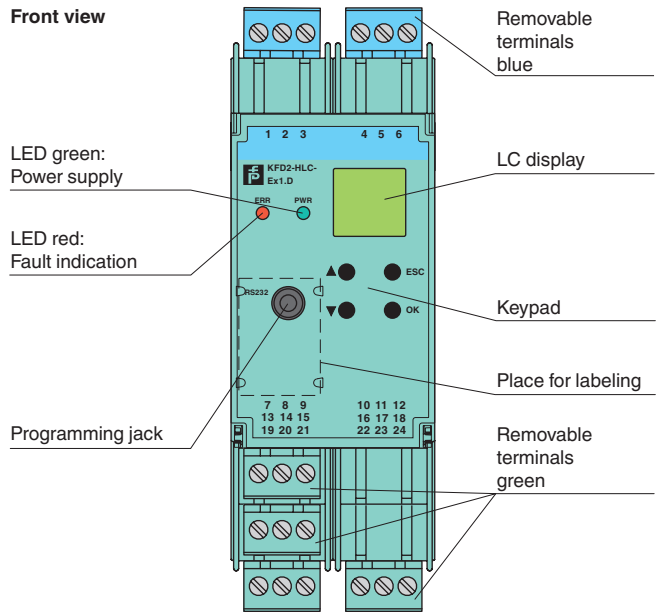
The unit is easily programmed by the use of a keypad located on the front of the unit or with the **PACTware™** configuration software.

For additional information, refer to the manual and www.pepperl-fuchs.com.

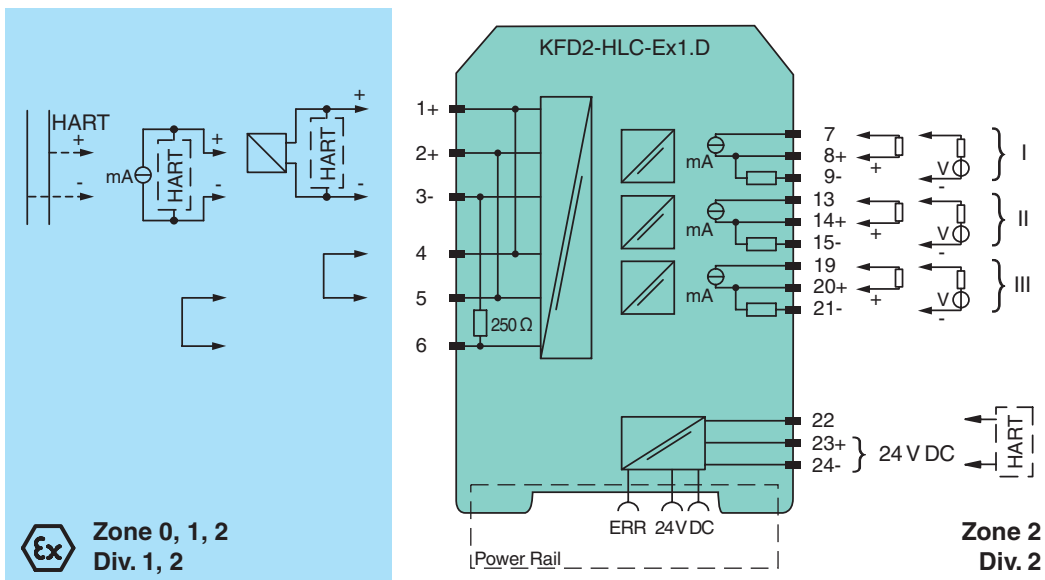
Application

- Configurable as primary or secondary master
- Automatic HART burst supported
- Support for a HART handheld device connected on safe area side
- Can be configured to assign the same input variable to multiple outputs (signal splitting)

Assembly





Connection



Release date 2019-04-12 12:15 Date of issue 2019-04-12 261916_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

General specifications	
Signal type	Analog input
Supply	
Connection	Power Rail or terminals 23+, 24-
Rated voltage U_r	19 ... 30 V DC
Rated current I_r	approx. 120 mA at 24 V DC
Power dissipation	2.3 W
Power consumption	2.9 W
HART signal channels (intrinsically safe)	
Conformity	HART field device input (revision 5 to 7)
Interface	
Programming interface	programming socket
Input	
Connection side	field side
Connection	terminals 1, 2, 3, 4, 5, 6
Open circuit voltage/short-circuit current	typ. 24 V / 28 mA
Input resistance	250 Ω , 5 % (terminals 2, 3 and with jumper on 5, 6)
Available voltage	≥ 15.5 V at 20 mA, short-circuit protected
Output	
Connection side	control side
Connection	output I: terminals 7, 8, 9 , output II: terminals 13, 14, 15 , output III: terminals 19, 20, 21
Output signal	analog
Current range	4 ... 20 mA , (source or sink mode)
Load	≤ 650 Ω , source mode
Voltage range	5 ... 30 V , sink mode from external supply
Fault signal	downscale $I \leq 2$ mA, upscale $I \geq 21.5$ mA (acc. NAMUR NE43) or hold measurement value
Other outputs	HART communicator on terminals 22, 24
Collective error message	Power Rail and LED red
Transfer characteristics	
Output I, II, III	
Resolution	≤ 2 μ A
Accuracy	< 20 μ A, 10 μ A typ.
Influence of ambient temperature	$< \pm 2$ μ A/K
Duration of measurement/Response delay	HART message acquisition time plus 100 ms
Galvanic isolation	
Output I/II/III/power supply	functional insulation acc. to IEC 62103, rated insulation voltage 50 V _{eff}
Indicators/settings	
Display elements	LEDs , display
Control elements	Control panel
Configuration	via operating buttons via PACTware
Labeling	space for labeling at the front
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations)
Low voltage	
Directive 2014/35/EU	EN 61010-1:2010
Conformity	
Electromagnetic compatibility	NE 21:2006
Degree of protection	IEC 60529:2001
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Mechanical specifications	
Degree of protection	IP20
Connection	screw terminals
Mass	300 g
Dimensions	40 x 119 x 115 mm (1.6 x 4.7 x 4.5 inch) , housing type C3
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
Data for application in connection with hazardous areas	
EU-Type Examination Certificate	BASEEFA 07 ATEX 0174
Marking	 II (1)G [Ex ia Ga] IIC  II (1)D [Ex ia Da] IIC

Release date 2019-04-12 12:15 Date of issue 2019-04-12 261916_eng.xml

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group
www.pepperl-fuchs.com

USA: +1 330 486 0002
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091
pa-info@sg.pepperl-fuchs.com

Supply		
Maximum safe voltage	U_m	253 V AC (Attention! The rated voltage can be lower.)
Equipment		
Voltage	U_o	25.2 V
Current	I_o	104.9 mA
Power	P_o	0.661 W
Equipment		
terminals 2, 5/3		
Voltage	U_i	< 28 V
Power	P_i	< 1.33 W
Voltage	U_o	1.1 V
Current	I_o	11.9 mA
Power	P_o	4 mW
Output I, II, III		
terminals 7, 8, 9; 13, 14, 15; 19, 20, 21 non-intrinsically safe		
Maximum safe voltage	U_m	253 V (Attention! U_m is no rated voltage.)
Certificate		
PF 07 CERT 1142 X		
Marking		
Ⓔ II 3G Ex nA IIC T4 Gc		
Galvanic isolation		
Input/Other circuits		
safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V		
Directive conformity		
Directive 2014/34/EU		
EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-15:2010		
International approvals		
FM approval		
Control drawing		
116-0129		
IECEx approval		
IECEx certificate		
IECEx BAS 07.0047		
IECEx marking		
[Ex ia Ga] IIC , [Ex ia Da] IIIC		
General information		
Supplementary information		
Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com .		
Accessories		
Optional accessories		
- power feed module KFD2-EB2(.R4A.B)(.SP)		
- universal power rail UPR-03(-M)(-S)		
- profile rail K-DUCT-BU(-UPR-03)		



SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

www.scatts.co.uk