Features

- 1-channel isolated barrier
- 24 V DC supply (bus powered)
- Current output up to 625 Ω load
- HART I/P and valve positioner
- · Low power dissipation
- Suitable for long field cables (> 1000 m)
- Up to SIL 2 acc. to IEC 61508

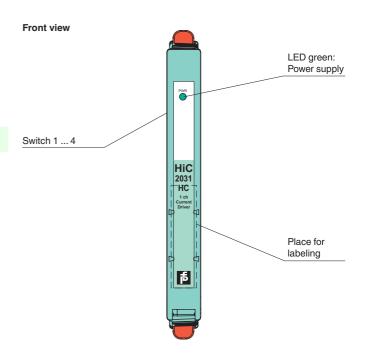
Function

This isolated barrier is used for intrinsic safety applications. It repeats the input signal from a control system to drive HART I/P converters, valve actuators, and displays located in a hazardous area.

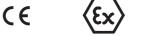
Bi-directional communication is supported for HART devices. An open field circuit presents a high impedance to the control side to allow alarm conditions to be monitored by control systems.

This device mounts on a HiC Termination Board.

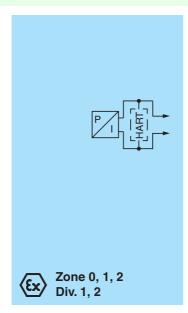
Assembly

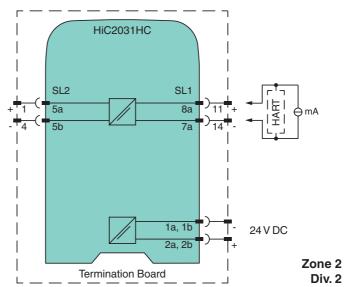


SIL 2



Connection



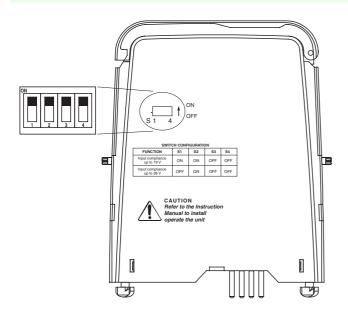


Signal type				
Functional safety related parameters Safety integrity Level (SIL.) SIL.2 Supply SL1: 1a(-), 1b(-); 2a(+), 2b(-) Rated voltage U, 1930 V DC bus powered via Termination Board Ripple ≤ 10 % Rated current V, ≤ 55 mA Power dissipation ≤ 600 mW Power consumption ≤ 700 mW Input Connection side Connection in Side Sult: 8a(+), 7a(-) Input signal 4				
Safety integrity Level (SIL) SIL 2 Supply SL1: 1a(-), 1b(-): 2a(+), 2b(+) Connection SL1: 1a(-), 1b(-): 2a(+), 2b(+) Rated voltage U _T Rappel ≤ 10 m/s Rated current U _T Power designation ≤ 25 m/s Power consumption ≤ 700 mW Input Connection Input signal 4 - 20 m/s, limited to approx. 27 mA depending on switch configuration open loop voltage of the control system < 19 V open loop voltage of the control system < 28 V				
Supply Supply Supply Substitution Substi				
Connection St.1: 1a(-), 1b(-); 2a(+), 2b(+) Riated voltage				
Rated voltage U _r 19 30 V DC bus powered via Termination Board Ripple ≤ 10 % Rated current U _r ≤ 50 mA Power dissipation ≤ 600 mW Power consumption ≤ 700 mW Input Connection side Connection Side control side Connection Side SU.1 8 a(+), 7a(-) Input signal 4 20 mA, limited to approx. 27 mA Input signal 4 20 mA, limited to approx. 27 mA Input voltage of providage of the control system × 19 V open loop voltage of the control system × 19 V open loop voltage of the control system × 26 V Voltage drop depending on switch configuration open loop voltage of the control system × 19 V approx. 5 V at 20 mA open loop voltage of the control system × 19 V approx. 5 V at 20 mA open loop voltage of the control system × 28 V approx. 12 V at 20 mA open loop voltage of the control system × 28 V approx. 12 V at 20 mA open loop voltage of the control system × 28 V approx. 12 V at 20 mA open loop voltage of the control system × 30 V approx. 12 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20 mA open loop voltage of the control system × 30 V at 20				
Ripple				
Ripple				
Rated current I₁ ≤ 35 mA Power dissipation ≤ 600 mW Power consumption ≤ 700 mW Input Connection SL1: 8a(+), 7a(-) Input signal 4 20 mA, limited to approx. 27 mA Input voltage depending on switch configuration open loop voltage of the control system = 19 V open loop voltage of the control system = 26 V Voltage drop depending on switch configuration open loop voltage of the control system = 19 V: approx. 5 V at 20 mA open loop voltage of the control system = 19 V: approx. 5 V at 20 mA open loop voltage of the control system = 19 V: approx. 5 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 19 V: approx. 5 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system = 26 V: approx. 12 V at 20 mA open loop voltage of the control system =				
Power dissipation ≤ 600 mW Power consumption ≤ 700 mW Input 2 700 mW Connection side control side Connection SL1: 8a(+), 7a(-) Input voltage depending on switch configuration open loop voltage of the control system < 26 VV				
Power consumption input ≤ 700 mW Input Connection Connection side control side Connection SL1: 8a(+), 7a(+) Input violage 4 20 mA, I limited to approx. 27 mA Input violage depending on switch configuration open loop voltage of the control system < 26 V violage of poor voltage of the control system < 26 V: approx. 5 V at 20 mA open loop voltage of the control system < 19 V: approx. 5 V at 20 mA open loop voltage of the control system < 19 V: approx. 5 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system voltage spen spen spen loop voltage of the control system voltage spen spen loop voltage of the control system voltage spen spen spen spen spen spen spen spe				
input connection side Connection (SL1: 8a(+), 7a(-)) Input signal 4 20 mA , limited to approx. 27 mA Input voltage depending on switch configuration open loop voltage of the control system < 26 V open loop voltage of the control system < 26 V open loop voltage of the control system < 26 V: approx. 5 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA				
Connection side control side Connection SL1: 8a(+), 7a(-) Input voltage 420 mA, limited to approx. 27 mA Input voltage depending on switch configuration open loop voltage of the control system < 26 V				
Connection SL1: 8a(+), 7a(-) Input signal 4 20 mA, limited to approx. 27 mA Input voltage depending on switch configuration open loop voltage of the control system < 19 V open loop voltage of the control system < 19 V: approx. 5 V at 20 mA open loop voltage of the control system < 26 V.				
Input signal 4 20 mÅ , limited to approx. 27 mÅ Input voltage depending on switch configuration open loop voltage of the control system < 19 V open loop voltage of the control system < 26 V open loop voltage of the control system < 19 V open loop voltage of the control system < 19 V: approx. 5 V at 20 mÅ open loop voltage of the control system < 19 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 26 V: approx. 12 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system < 27 V at 20 mÅ open loop voltage of the control system open loop voltage of the control system system open loop voltage of the control syst				
Input voltage depending on switch configuration Open loop voltage of the control system < 19 V Open loop voltage of the control system < 26 V Open loop voltage of the control system < 26 V Open loop voltage of the control system < 26 V Open loop voltage of the control system < 19 V: approx. 5 V at 20 mA Open loop voltage of the control system < 19 V: approx. 12 V at 20 mA Open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control system < 20 mA Open loop voltage of the control side should hysters should be supported by a part of the system				
open loop voltage of the control system < 19 V open loop voltage of the control system < 28 V				
Voltage drop depending on switch configuration open loop voltage of the control system < 19 V: approx. 5 V at 20 mA open loop voltage of the control system < 26 V: approx. 12 V at 20 mA Input resistance > 100 kΩ, with field wiring open Output Connection side field side Connection SL2: 5a(+), 5b(-) Connection Current 4 20 mA Connection Load 0 625 Ω Connection Voltage ≥ 12.5 V at 20 mA Ripple Ripple 20 mV ms Transfer characteristics Deviation at 20 °C (68 °F), 4 20 mA Section on Fine arity and hysteresis Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (-20 0 °C (4 32 °F)) Frequency range field side into the control side: bandwidth with 0.5 Vpp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 0.5 Vpp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 0.5 Vpp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 0.5 Vpp signal 0 3 kHz (-3 dB) control side into the field side: ba	open loop voltage of the control system < 19 V			
Input resistance > 100 kΩ, with field wiring open Output > 100 kΩ, with field wiring open Connection side field side Connection SL2: Saf(+), Sb(-) Current 4 20 mA Load 0 625 Ω Voltage ≥ 12.5 V at 20 mA Ripple 2 mV rms Transfer characteristics 0 mV Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μΛ/κ (0 60 °C (32 140 °F)); < 4 μΛ/κ (-20 0 °C (4 32 °F)				
Output Field side Connection side field side Connection SL2: 5a(+), 5b(-) Current 4 20 mA Load 0 625 Ω Voltage ≥ 12.5 V at 20 mA Ripple 20 mV rms Transfer characteristics Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (-20 0 °C (4 32 °F))				
Connection SL2: 5a(+), 5b(-) Current 4 20 mA Load 0 625 Ω Voltage ≥ 12.5 V at 20 mA Ripple 20 mV rms Transfer characteristics Tensfer characteristics Deviation at 20 °C (68 °F), 4 20 mA \pm ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature $2 \mu A/K$ (0 60 °C (32 140 °F)); $4 \mu A/K$ (20 0 °C (4 32 °F) Frequency range field side into the control side: bandwidth with 0.5 Vpp signal 0 3 kHz (\cdot 3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (\cdot 3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (\cdot 3 dB) Rise time 10 90 % ≤ 100 ms Indicators/settings LED Control elements DIP-switch Configuration via DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility Pegree of protection IEC 60529 Ambient conditions IEC 60529				
Connection SL2: 5a(+), 5b(-) Current 4 20 mA Load 0 625 Ω Voltage ≥ 12.5 V at 20 mA Ripple 20 mV ms Transfer characteristics Deviation at 20 °C (68 °F), 4 20 mA $\leq \pm$ 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature $\leq \pm$ 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature $\leq \pm$ 0.1 % incl. non-linearity and hysteresis Influency range field side into the control side: bandwidth with 0.5 V _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (3 dB) control				
Current 4 20 mA Load 0 625 Ω Voltage ≥ 12.5 V at 20 mA Ripple 20 mV ms Transfer characteristics at 20 °C (68 °F), 4 20 mA Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (·20 0 °C (·4 32 °F))				
Load 0 625 Ω Voltage ≥ 12.5 V at 20 mA Ripple 20 mV ms Transfer characteristics Transfer characteristics Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (20 0 °C (-4 32 °F))				
Voltage ≥ 12.5 V at 20 mA Ripple 20 mV rms Transfer characteristics at 20 °C (68 °F), 4 20 mA Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (20 0 °C (-4 32 °F))				
Ripple 20 mV rms Transfer characteristics at 20 °C (68 °F), 4 20 mA Deviation at 20 °C (68 °F), 4 20 mA ≤± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature <2 µA/K (0 60 °C (32 140 °F)); <4 µA/K (-20 0 °C (-4 32 °F))				
Ripple 20 mV rms Transfer characteristics at 20 °C (68 °F), 4 20 mA Deviation at 20 °C (68 °F), 4 20 mA ≤± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 µA/K (0 60 °C (32 140 °F)); < 4 µA/K (-20 0 °C (-4 32 °F)) Frequency range field side into the control side; bandwidth with 0.5 Vpp signal 0 3 kHz (-3 dB) control side into the field side; bandwidth with 1 mApp signal 0 3 kHz (-3 dB) control side into the field side; bandwidth with 1 mApp signal 0 3 kHz (-3 dB) Rise time 10 to 90 % ≤ 100 ms Indicators/settings LED Control elements DIP-switch Configuration DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility EN 61326-1:2013 (industrial locations) Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Paper of protection Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4				
Transfer characteristics at 20 °C (68 °F), 4 20 mA Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μ A/K (0 60 °C (32 140 °F)); < 4 μ A/K (-20 0 °C (-4 32 °F)) Frequency range field side into the control side: bandwidth with 0.5 Vpp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mApp signal 0 3 kHz (-3 dB) Rise time 10 to 90 % ≤ 100 ms Indicators/settings LED Control elements DIP-switch Configuration via DIP switches Labeling space for labeling at the front Directive conformity EN 61326-1:2013 (industrial locations) Electromagnetic compatibility NE 21:2012 Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Degree of protection IEC 60529 Ambient conditions Profurther information see system description. Mechanical specifications Profunction of Protection				
Deviation at 20 °C (68 °F), 4 20 mA ≤ ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (-20 0 °C (-4 32 °F))				
S ± 0.1 % incl. non-linearity and hysteresis Influence of ambient temperature < 2 μA/K (0 60 °C (32 140 °F)); < 4 μA/K (-20 0 °C (-4 32 °F)) Frequency range field side into the control side: bandwidth with 0.5 V _{pp} signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (-3 dB) Rise time 10 to 90 % ≤ 100 ms Indicators/settings Display elements LED Control elements DIP-switch Configuration via DIP switches Labeling Space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility Directive and the first information see system description. Degree of protection Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Frequency range field side into the control side: bandwidth with 0.5 V _{pp} signal 0 3 kHz (-3 dB) control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (-3 dB) Rise time 10 to 90 % ≤ 100 ms Indicators/settings Indicators/settings Display elements LED Control elements DIP-switch Configuration via DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions *** Ambient temperature Pedenatical specifications** Degree of protection IP20 Mechanical specifications P20 60 °C (-4 140 °F) Mechanical specifications 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Rise time 10 to 90 % ≤ 100 ms Indicators/settings Display elements LED Control elements DIP-switch Configuration via DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility Degree of protection IEC 60529 Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination see system description. Data for application in connection with hazardous areas				
Indicators/settings LED Control elements DIP-switch Configuration via DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions En 60 °C (-4 140 °F) Mechanical specifications IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas For further information see system description.	control side into the field side: bandwidth with 1 mA _{pp} signal 0 3 kHz (-3 dB)			
Display elements Control elements DIP-switch via DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting Coding pin 2 and 4 trimmed For further information see system description.				
Control elements Configuration via DIP switches space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Configuration via DIP switches Labeling space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions -20 60 °C (-4 140 °F) Mechanical specifications IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Labeling space for labeling at the front Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Directive conformity Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Feetbromagnetic compatibility Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions Ambient temperature Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas For further information see system description.	via DIP switches			
Electromagnetic compatibility Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Directive 2014/30/EU EN 61326-1:2013 (industrial locations) Conformity Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
ConformityNE 21:2012 For further information see system description.Degree of protectionIEC 60529Ambient conditions-20 60 °C (-4 140 °F)Mechanical specificationsPegree of protectionDegree of protectionIP20Massapprox. 100 gDimensions12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch)Mountingon Termination BoardCodingpin 2 and 4 trimmed For further information see system description.Data for application in connection with hazardous areasTender of the protection of the prot				
ConformityNE 21:2012 For further information see system description.Degree of protectionIEC 60529Ambient conditions-20 60 °C (-4 140 °F)Mechanical specificationsP20Degree of protectionIP20Massapprox. 100 gDimensions12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch)Mountingon Termination BoardCodingpin 2 and 4 trimmed For further information see system description.Data for application in connection with hazardous areasTender of the protection of the pro				
Electromagnetic compatibility NE 21:2012 For further information see system description. Degree of protection IEC 60529 Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Ambient conditions Ambient temperature -20 60 °C (-4 140 °F) Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Ambient temperature Mechanical specifications Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Mechanical specifications IP20 Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas For further information see system description.				
Degree of protection IP20 Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Mass approx. 100 g Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Dimensions 12.5 x 128 x 106 mm (0.5 x 5.1 x 4.2 inch) Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Mounting on Termination Board Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
Coding pin 2 and 4 trimmed For further information see system description. Data for application in connection with hazardous areas				
For further information see system description. Data for application in connection with hazardous areas				
with hazardous areas				
ELI Typo Evamination Cartificate CESI 11 ATEV 010				
EU-Type Examination Certificate CESI 11 ATEX 012				
Marking (☑) II (1)GD [Ex ia] IIC, [Ex iaD] [circuit(s) in zone 0/1/2/20/21/22] (☑) I (M1) [Ex ia] I	I			
Output Ex ia IIC, Ex iaD				
Supply				
Maximum safe voltage U _m 253 V AC (Attention! U _m is no rated voltage.)				
Equipment SL2: 5a(+), 5b(-)				
Voltage U _o 20 V				



Current	I _o	100 mA
Power	P_{o}	500 mW
Output		
Maximum safe voltage	U_{m}	253 V AC (Attention! The rated voltage can be lower.)
Certificate		PF 11 CERT 1845 X
Marking		⟨ II 3G Ex nA IIC T4 Gc
Galvanic isolation		
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Input/power supply		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		
UL approval		
Control drawing		116-0393 (cULus)
IECEx approval		IECEx CES 11.0010
General information		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.

Configuration



Switch position

Function	S1	S2	S3	S4
Open loop voltage of the control system < 19 V	ON	ON	OFF	OFF
Open loop voltage of the control system < 26 V	OFF	ON	OFF	OFF

Factory settings: open loop voltage of the control system < 19 V

Configure the device in the following way:

- Push the red Quick Lok Bars on each side of the device in the upper position.
- Remove the device from Termination Board.
- Set the DIP switches according to the figure.



The pins for this device are trimmed to polarize it according to its safety parameter. Do not change! For further information see system description.