



- Connects the intrinsically safe ControlNet with the non-intrinsically safe ControlNet
- Fieldbus intrinsically safe EEx ib IIC
- Device installation not in hazardous areas
- ControlNet up to 5 MBit/s

**Function**

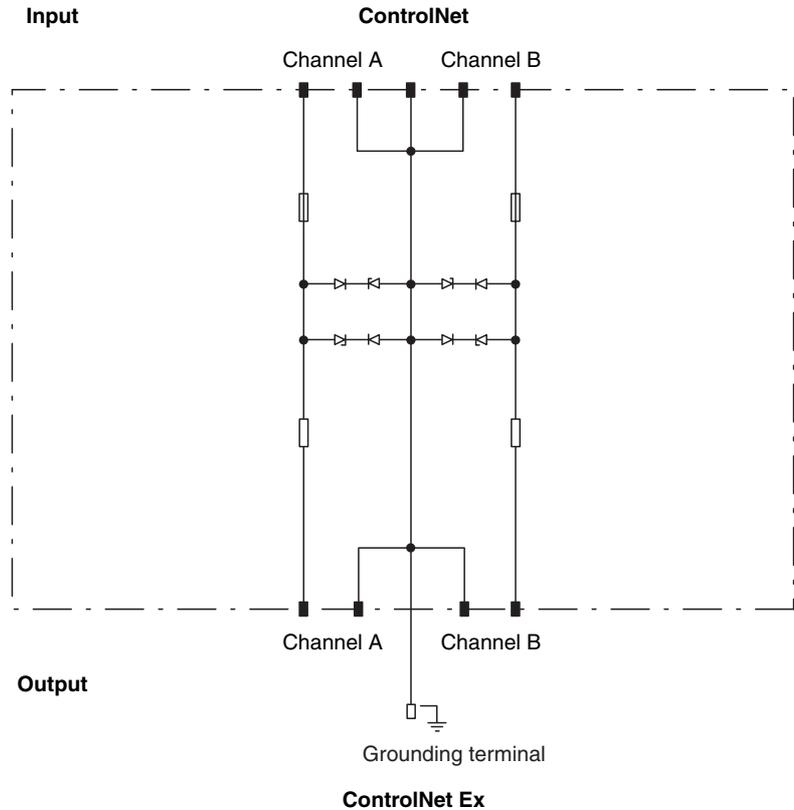
The RS-FB-Ex2.CN ControlNet barrier is a power limiter for communication signals between a ControlNet system with an intrinsically safe signal level and a ControlNet system without hazard requirements.

The ControlNet barrier includes a ground terminal for grounding of intrinsically safe signal circuits.

**Application**

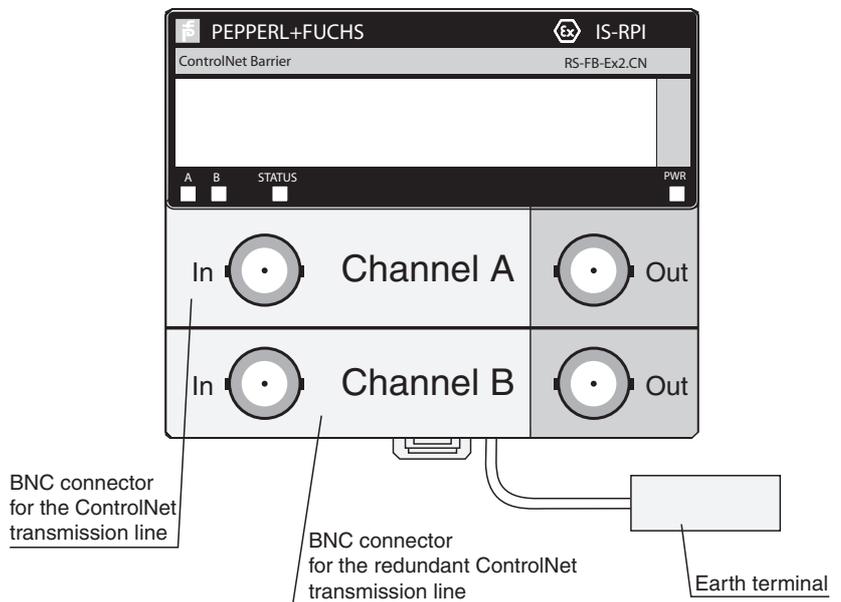
- Ex-isolation of the signal circuits from the ControlNet systems

**Connection**



**Composition**

**Front View**



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<b>Input</b>	
Connection	BNC connection
Input signal	ControlNet international version 1.5
<b>Output</b>	
Connection	BNC connection
Output signal	ControlNet international version 1.5, intrinsically safe
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Explosion protection	
Directive 94/9/EC	EN 60079-0: 2006, EN 60079-11: 2007 , EN 60079-25: 2004
<b>Standard conformity</b>	
Insulation coordination	EN 50178
Electrical isolation	EN 60079-11:2007
Electromagnetic compatibility	NE 21:2006
Protection degree	IEC 60529
Climatic conditions	IEC 60721
<b>Ambient conditions</b>	
Classification	3K3
Ambient temperature	-20 ... 70 °C (253 ... 343 K)
Storage temperature	-20 ... 100 °C (253 ... 373 K)
Relative humidity	95 % non-condensing
Shock resistance	15 g peak, 11 ms period
Vibration resistance	2 g , 10 ... 500 Hz according to IEC 60068-2-6
Damaging gas	acc. to ISA-S71.04-1985, severity level G3
<b>Mechanical specifications</b>	
Connection type	BNC connection
Protection degree	IP20
Mass	175 g
Mounting	DIN rail mounting
<b>Data for application in conjunction with hazardous areas</b>	
EC-Type Examination Certificate	DMT 99 ATEX E 058 X , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection	⊕ II (2)G [Ex ib] IIC
Supply	
Safety maximum voltage $U_m$	253 V
Output	
Voltage $U_i$	7 V
Current $I_i$	55 mA at 52 kHz
Electrical isolation	
Input/output	no electrical isolation
Output/output	no electrical isolation

**Supplementary information**

EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

**Notes**

- Maximum permissible number of partners at a cable length of 250 m:  
 Redundant mode: 10  
 Non-redundant mode: 24  
 The number of permissible intrinsically safe bus clients reduces by 3 for each permissible non-intrinsically safe bus client
- The intrinsically safe signal circuits must be grounded
- For this purpose, the ground terminal must be screwed to the DIN rail and the DIN rail must be grounded
- If the DIN rail is not grounded, the ground terminal must be connected to a copper cable for grounding. The minimum cross section of this copper cable must be 4 mm<sup>2</sup>.

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