

Features

- Converts the ControlNet coaxial signals into TTL signals for the ControlNet LWL coupler
- EEx ia IIC
- Device installation in Zone 1, Zone 2, or Zone 22
- Transfer rate 5 Mbits/s
- Connection of up to two LWL couplers, each with two bi-directional LWL transfer routes
- 1 power supply channel for 1 copper/fiber optic adapter

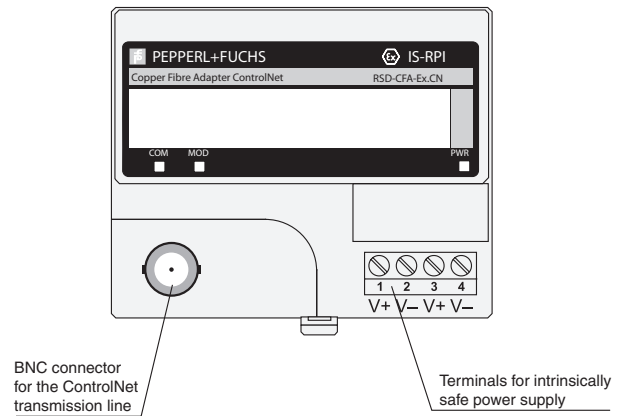
Function

This component is the actual control center of the system. On one side it has a coaxial connection for connecting to the ControlNet. On the other side it converts this bus signal into TTL signals. These signals in turn control the LWL (fiber optic cable) coupler.

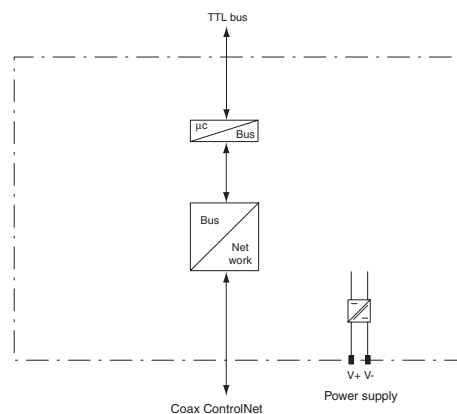
This module incorporates all the intelligence required to generate two unidirectional TTL signals from the bidirectional coaxial bus signal. Up to two LWL coupler modules can be connected to the module, each of which has two bidirectional channels.

Assembly

Front View



Connection



Supply		
Connection		terminals V+, V-
Rated voltage		8.88 ... 9.5 V
Power loss		8 W
Power consumption		8.5 W
Internal bus		
Connection		TTL bus
Interface		manufacturer specific bus
Max. number of fiber optic couplers		2
External bus		
Connection		BNC connection
Interface		ControlNet international version 1.5, intrinsically safe
Transfer rate		5 MBit/s
Directive conformity		
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 60079-26:2007
Standard conformity		
Insulation coordination		EN 50178
Electrical isolation		EN 60079-11:2007
Electromagnetic compatibility		NE 21:2006
Protection degree		IEC 60529
Climatic conditions		DIN IEC 721
Ambient conditions		
Classification		3K3
Ambient temperature		-20 ... 70 °C (-4 ... 158 °F)
Storage temperature		-20 ... 100 °C (-4 ... 212 °F)
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
Mechanical specifications		
Connection type		terminals, BNC connection
Core cross-section		≤ 2.5 mm ²
Protection degree		IP20, for on-site installation a separate housing is required with a minimum of IP54
Mass		approx. 320 g
Mounting		DIN rail mounting
Data for application in connection with Ex-areas		
EC-Type Examination Certificate		DMT 99 ATEX 010 X , for additional certificates see www.pepperl-fuchs.com
Group, category, type of protection		⊕ II (1)2G EEx ia/ib IIB/IIC
Temperature class		T4
Voltage	U _i	9.5 V
Current	I _i	1 A
Power	P _i	9.5 W
Supply		only in connection with the power units RSD2-PSD2-Ex4.34, RSA6-PSD-Ex4.34
External bus		
Voltage	U _o	5.4 V
Current	I _o	201 mA
Internal bus		customer specific
Statement of conformity		
Group, category, type of protection, temperature class		⊕ II 3D IP54 T 90°C
Electrical isolation		
Internal/external bus		no electrical isolation
Internal bus/power supply		safe electrical isolation acc. to EN 60079-11: 2007, voltage peak value 60 V
External bus/power supply		safe electrical isolation acc. to EN 60079-11: 2007, voltage peak value 60 V

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.

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Electrical connection

Terminal assignment

