- Connects the Remote Process Interface to the control system/PLC/PC via PROFIBUS
- Couples the internal CAN bus to the external PROFIBUS
- Device installation in Zone 2
- Master function for the internal CAN bus
- External bus: PROFIBUS DP
- External baud rate up to 1.5 MBd
- Separate RS 232 connection on front side for system configuration, also directed to terminals for creating a subordinate monitoring system
- 24 V DC supply voltage
- Redundant gateway possible
- EMC acc. to NAMUR NE 21

Function

The KSD2-GW-PRO translates the protocol of the internal CAN bus into the PROFIBUS DP protocol of the external bus system and vice versa.

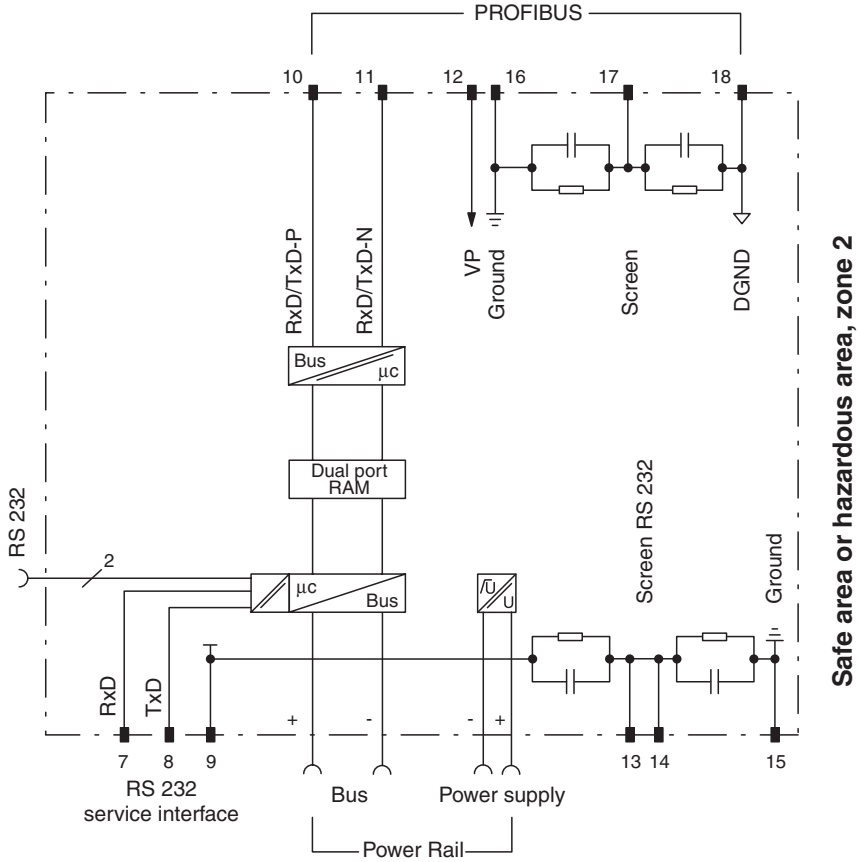
Up to 125 devices can be connected to a gateway via the Power Rail.

The operator has access independent of the control system, to the configuration data and parameters of all connected gateways and RPI devices by means of a PC and the **PACT***ware*™ control display.

Application

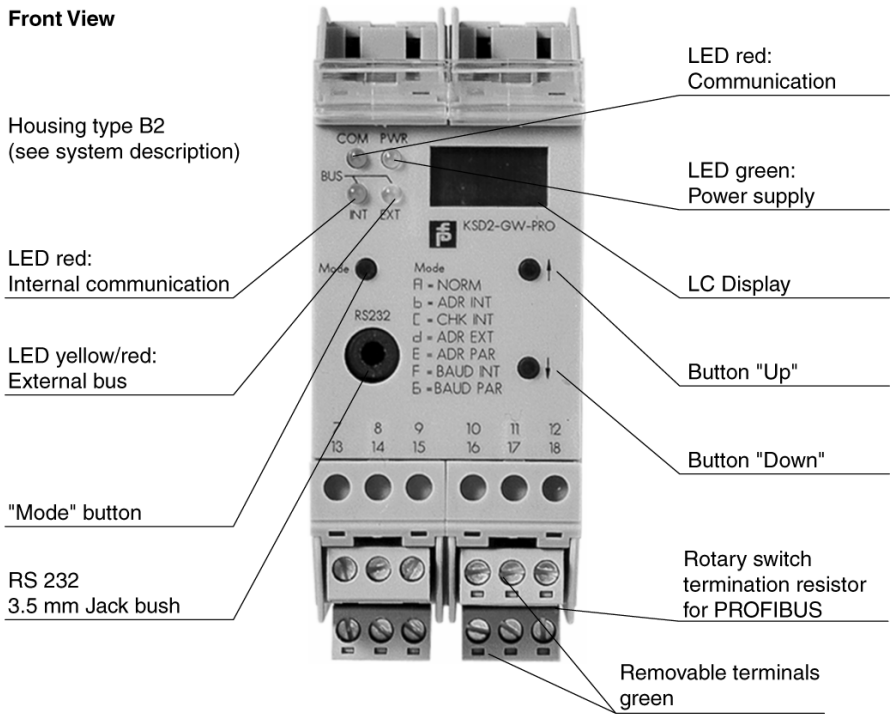
- Connection of the RPI with the control system/PLC/PC via PROFIBUS.
- Configuration interface for the RPI devices.

Connection



Composition

Front View



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Supply	
Connection	Power Rail
Rated voltage	20 ... 30 V DC
Ripple	< 10 %
Power consumption	2.8 W
Internal bus	
Connection	Power Rail
Interface	CAN protocol via Power Rail bus with up to 125 units
Cycle time	1 device 25 ms 125 devices with discrete input 60 ms 125 devices with discrete output 90 ms 125 devices with analog input 75 ms 125 devices with analog output 110 ms
External bus	
Connection	terminals 10, 11, 12; 16, 17, 18
Interface	PROFIBUS acc. to EN 50170/2
Service interface	
Connection	terminals 7, 8, 9 and jack bush
Interface	RS 232
Redundancy	
Option	through the use of a second gateway
Electrical isolation	
Internal/external bus	basic insulation acc. to EN 50178:1997, rated insulation voltage 50 V_{eff} AC
Internal bus/power supply	not available
External bus/power supply	basic insulation acc. to EN 50178:1997, rated insulation voltage 50 V_{eff} AC
Service interface/internal bus	basic insulation acc. to EN 50178:1997, rated insulation voltage 50 V_{eff} AC
Service interface/external bus	basic insulation acc. to EN 50178:1997, rated insulation voltage 50 V_{eff} AC
Service interface/supply	basic insulation acc. to EN 50178:1997, rated insulation voltage 50 V_{eff} AC
Directive conformity	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
Explosion protection	
Directive 94/9/EC	EN 60079-15:2005
Standard conformity	
Electrical isolation	EN 50178:1997
Electromagnetic compatibility	NE 21:2006
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (-4 ... 140 °F)
Damaging gas	acc. to ISA-S71.04-1985, severity level G3
Mechanical specifications	
Protection degree	IP20
Connection	terminal connection ≤ 2.5 mm^2
Mass	approx. 300 g
Dimensions	40 x 100 x 115 mm (1.6 x 3.9 x 4.5 in)
Mounting	DIN rail mounting
Data for application in connection with Ex-areas	
Statement of conformity	TÜV 00 ATEX 1617 X , observe statement of conformity
Group, category, type of protection, temperature classification	⟨Ex⟩ II 3G Ex nA IIC T4

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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Notes

Operation

The configuration, parameterisation, addressing, operation and fault detection are performed by PC and FDT comform **PACT***ware***™** human machine interface via RS 232 interface (see RPI system manual). Limited operation without a PC is possible with the control elements of the gateway and the devices.

Operating components

Jacks for the connection of a PC across K-ADP2 adapter for the configuration and parameterisation of the system. The PC may alternatively be connected to the plug-in screw terminals 7, 8, 9 in case, e. g. that a PC-based separate monitor level is to be installed. The jack on the front panel and the screw terminals 7, 8, 9 may not be used simultaneously.

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