



- Connects the Remote Process Interface to the control system/PLC/PC via MODBUS
- Couples the internal CAN bus to the external MODBUS
- Device installation in Zone 2
- Master function for the internal CAN bus
- External bus: MODBUS profile RTU (Remote Terminal Unit)
- External baud rate up to 57.6 KBd
- Standard interface RS 485
- Separate service connection independent from the DCS or PLC through RS 485 interface in addition to MODBUS connection
- 24 V DC supply voltage
- Redundant gateway possible
- EMC acc. to NAMUR NE 21

Function

The KSD2-GW-MOD.485 translates the protocol of the internal CAN bus into the MODBUS RTU protocol of the external bus systems and vice versa.

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

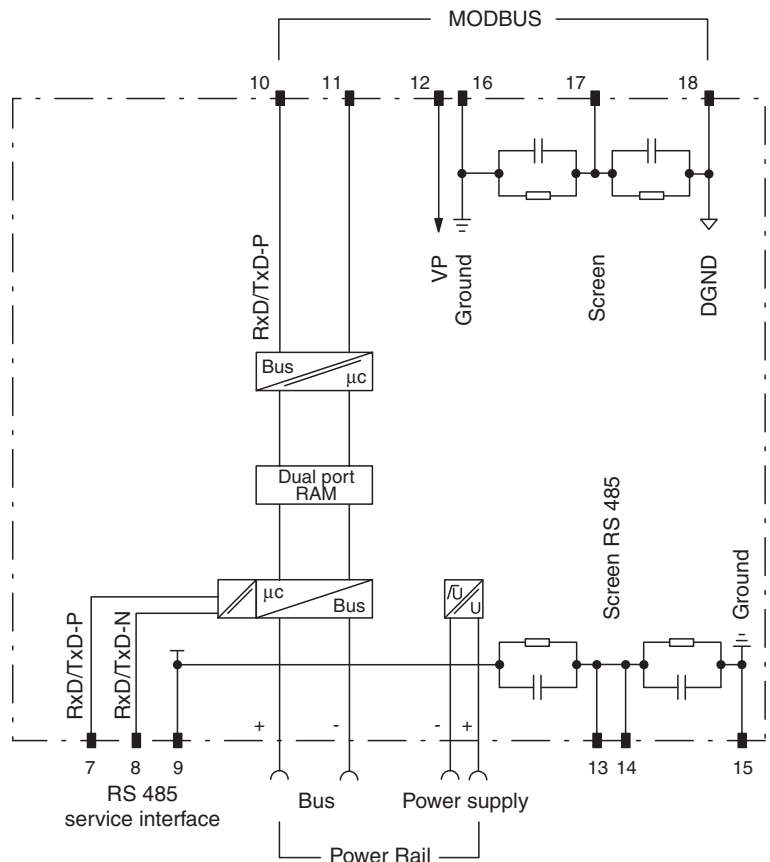
The gateways of multiple RPI segments can be continuously networked with one of the control system's or PLC's independent service levels over the RS 485 service interface in addition to the MODBUS connection.

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 RPI human machine interface **PACTware™**.

Application

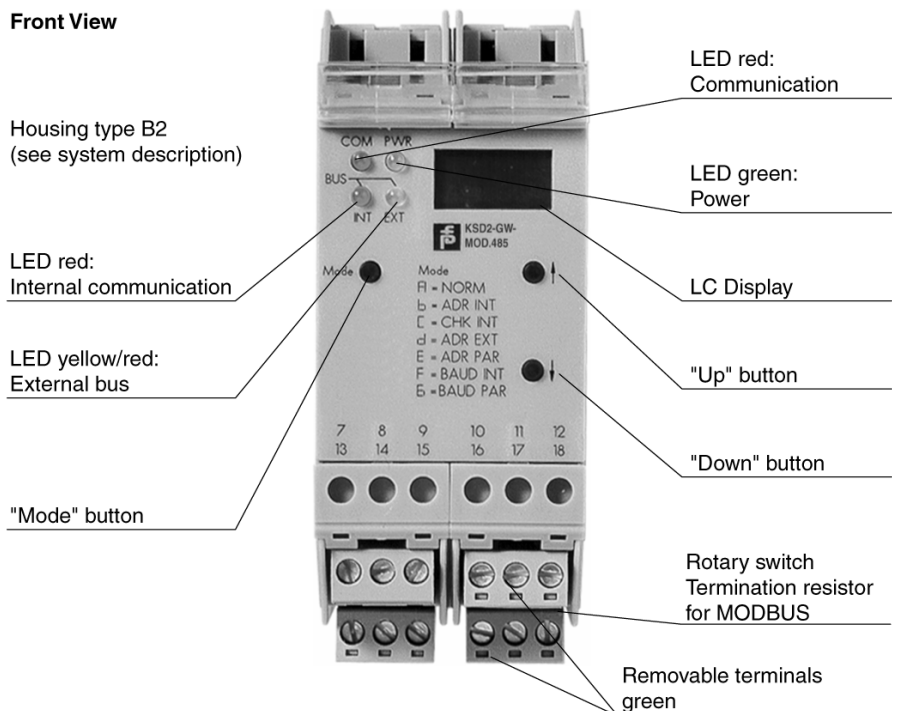
- Connection of the RPI with the control system/PLC/PC via MODBUS.
- Configuration interface for the RPI devices.

Connection



Composition

Front View



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Supply	
Connection	Power Rail
Rated voltage	20 ... 30 V DC
Ripple	< 10 %
Power consumption	2.4 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	MODBUS profile RTU, RS 485 interface
Service interface	
Connection	terminals 7, 8, 9
Interface	RS 485
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
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	⊕ II 3G Ex nA IIC T4
Directive conformity	
Directive 94/9/EC	EN 60079-15:2005
General information	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity, Attestation of Conformity and instructions have to be observed where applicable. 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 compliant human machine interface **PACTware™** via RS 485 interface (see RPI system manual). Limited operation without a PC is possible with the control elements of the gateway and the devices.

Operating components

Connection of a PC for the configuration and parameterisation of the system via K-ADP4 adapter to the plug-in screw terminals 7, 8, 9.