



- Connects the Remote Process Interface to the control system/PLC/PC via MODBUS
- Couples the internal CAN bus to the external MODBUS
- Device installation permissible in zone 2
- For the connection of max. 16 RPI devices
- 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 nominal supply voltage
- Redundancy of the gateways and external buses not possible
- EMC acc. to NAMUR NE 21

Function

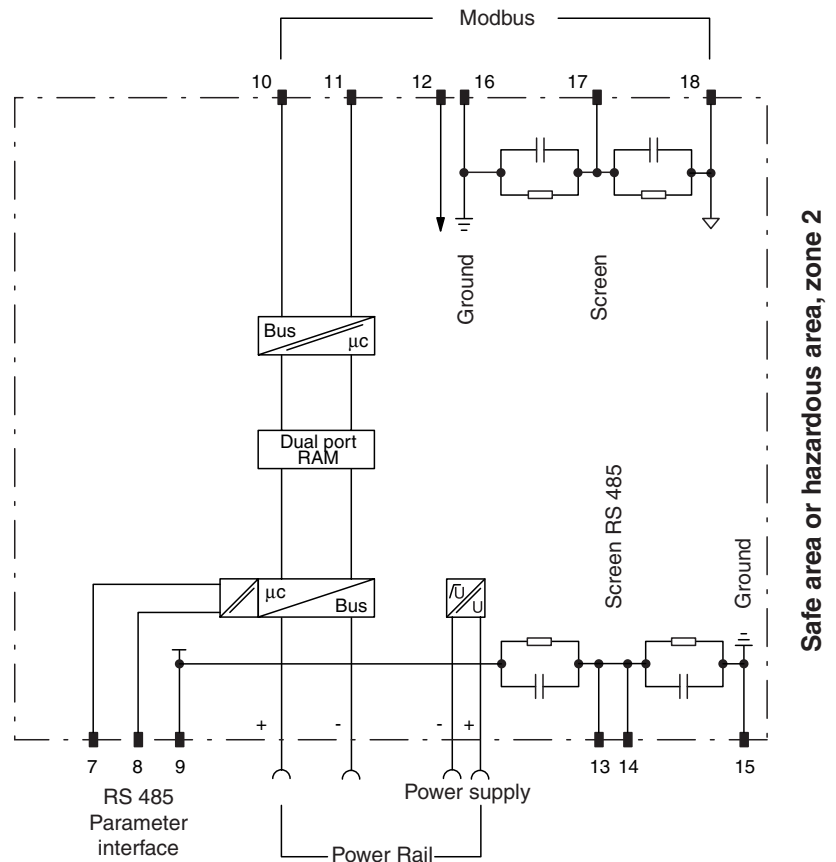
Der KSD2-GW-MOD.485B übersetzt die Protokolle des internen CAN-Busses in die Modbus-RTU-Protokolle des externen Bus-Systems und umgekehrt. Up to 16 devices can be connected to a Gateway via the Power Rail. The device addresses for the internal bus are between 3 and 18 (inclusive).

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 RS485 program 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.

Application

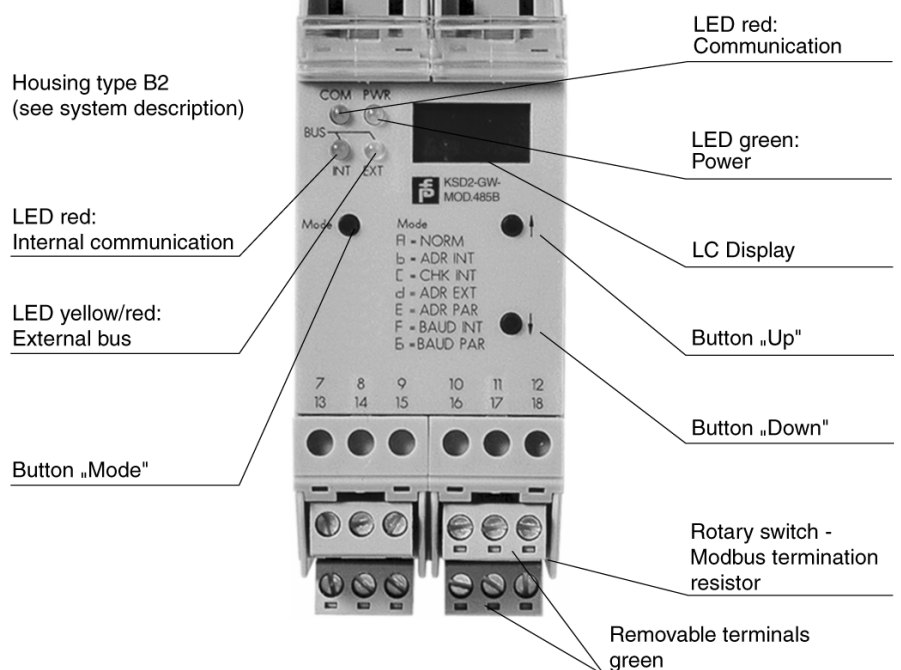
- Connection of the RPI with the control system/PLC/PC via MODBUS.
- Configuration interface for the RPI devices.

Connection



Composition

Front View



Release date 2006-12-04 14:41 Date of issue 2006-12-04 05:3785_ENG.xml

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 16 units
Cycle time	1 device 25 ms 16 devices with discrete input 29 ms 16 devices with discrete output 33 ms 16 devices with analogue input 31 ms 16 devices with analogue output 35 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
Electrical isolation	
Internal/external bus	basic insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff} AC
Internal bus/power supply	not available
External bus/power supply	basic insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff} AC
Service interface/internal bus	basic insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff} AC
Service interface/external bus	basic insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff} AC
Service interface/supply	basic insulation acc. to DIN EN 50178, rated insulation voltage 50 V _{eff} AC
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EC	EN 61326
Standard conformity	
Electrical isolation	EN 50178
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Mechanical specifications	
Protection degree	IP20
Mass	approx. 100 g
Data for application in conjunction with hazardous areas	
Statement of conformity	TÜV 00 ATEX 1617 X (observe statement of conformity)
Group, category, type of protection, temperature classification	⊕ II 3G EEx nA II 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.

Notes

Operation

The configuration, parameterization, addressing, operation and fault detection are performed by PC and Human Machine Interface 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 parameterization of the system via K-ADP4 adapter to the plug-in screw terminals 7, 8, 9.

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