CE

- 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 RS 232 connection on front side for system configuration, also directed to terminals for creating a subordinate monitoring system
- 24 V DC nominal supply voltage
- Redundancy of the gateways and external buses not possible
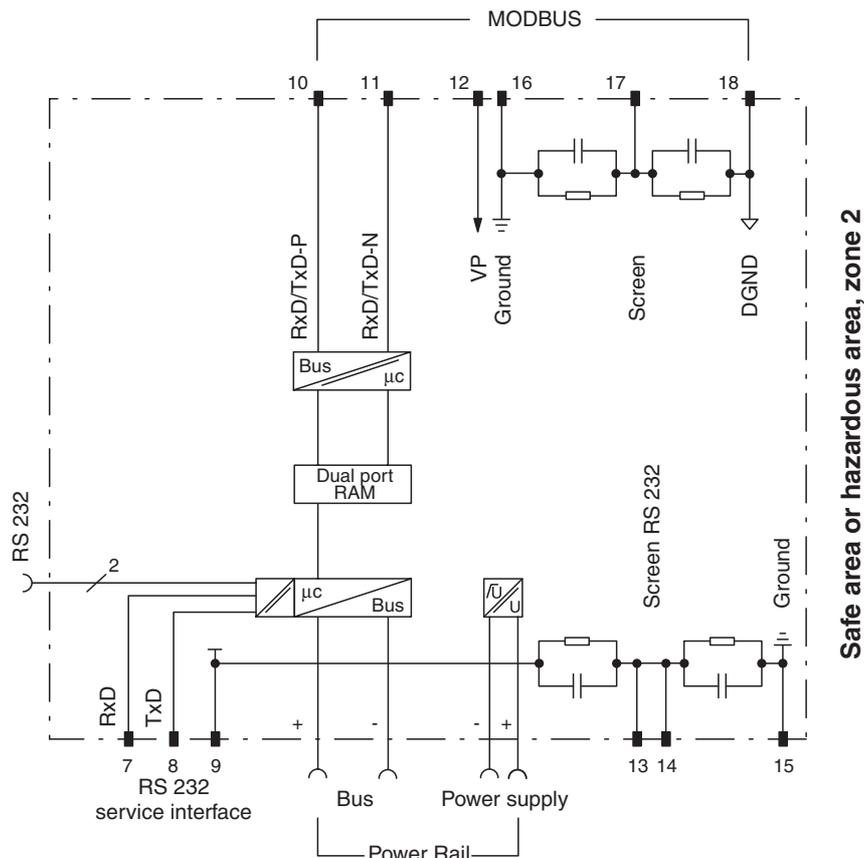- EMC acc. to NAMUR NE 21

Function

The KSD2-GW-MOD.B translates the protocols of the internal CAN Bus into the Modbus RTU protocols of the external Bus system and vice versa. 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).

Application

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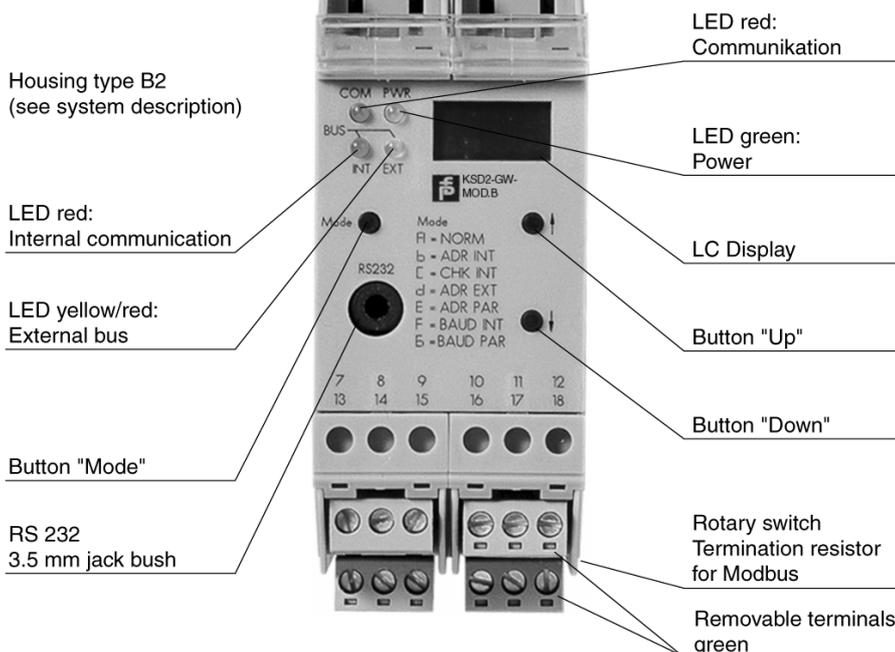- Configuration interface for the RPI devices.

Connection

Composition

Front View

Housing type B2 (see system description)

LED red: Internal communication

LED yellow/red: External bus

Button "Mode"

RS 232 3.5 mm jack bush

LED red: Communikation

LED green: Power

LC Display

Button "Up"

Button "Down"

Rotary switch Termination resistor for Modbus

Removable terminals green

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 and jack bush
Interface	RS 232
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	⟨Ex⟩ 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 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 parameterization of the system. The PC may alternatively be connected to the plug-in screw terminals 7, 8, 9, 13, 14, 15 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.