- Connects the Remote Process Interface to the control system/PLC/PC via MODBUS Plus
- Couples the internal CAN bus to the external MODBUS Plus
- Device installation permissible in zone 2
- For the connection of max. 16 RPI devices
- Master function for the internal CAN bus
- · External bus: MODBUS Plus
- · External baud rate 1 MBd
- Standard interface RS 485
- Separate service connection independent from the DCS or PLC through RS 485 interface in addition to MODBUS Plus connection
- 24 V DC nominal supply voltage
- Redundancy of the gateways and external buses not possible
- EMC acc. to NAMUR NE 21

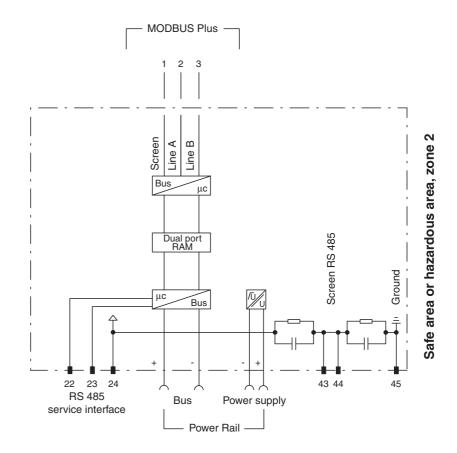
Function

The KSD2-GW-MPL.485B translates the protocols of the internal CAN Bus into the Modbus-plus-protocols of the external Bus system and vice versa. Up to 16 devices can be connected to a Gateway via the Power Rail. Addresses 3 ... 18 for the internal bus. 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-plus 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

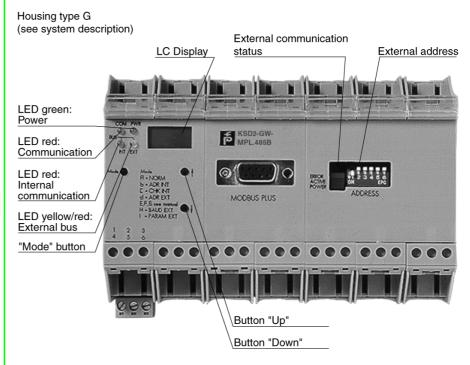
- Connection of the RPI with control system/PLC/PC via MODBUS Plus.
- Configuration interface for the RPI devices.

Connection



Composition

Front View



| Supply | |
|---|--|
| Connection | Power Rail |
| Rated voltage | 20 30 V DC |
| Ripple | <10 % |
| Power consumption | 4.8 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 | Sub-D socket, 9-pin |
| Interface | MODBUS Plus, RS 485 interface |
| Service interface | |
| Connection | terminals 22, 23, 24 |
| 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 $V_{\rm eff}$ 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. 505 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 | €x 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 is performed by means of PC and the Human Machine Interface via the RS 485 interface. Limited operation without a PC is possible with the control elements of the gateway and the devices.

Operating components

Anschluss eines PCs zur Konfigurierung und Parametrierung des Systems über Adapter K-ADP4 an die steckbaren Schraubklemmen 22, 23, 24 (43, 44, 45).