



- 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
- 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 supply voltage
- Redundant gateway possible

Function

The KSD2-GW-MPL.485 translates the protocol of the internal CAN bus into the MODBUS Plus protocol of the external bus system and vice versa.

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

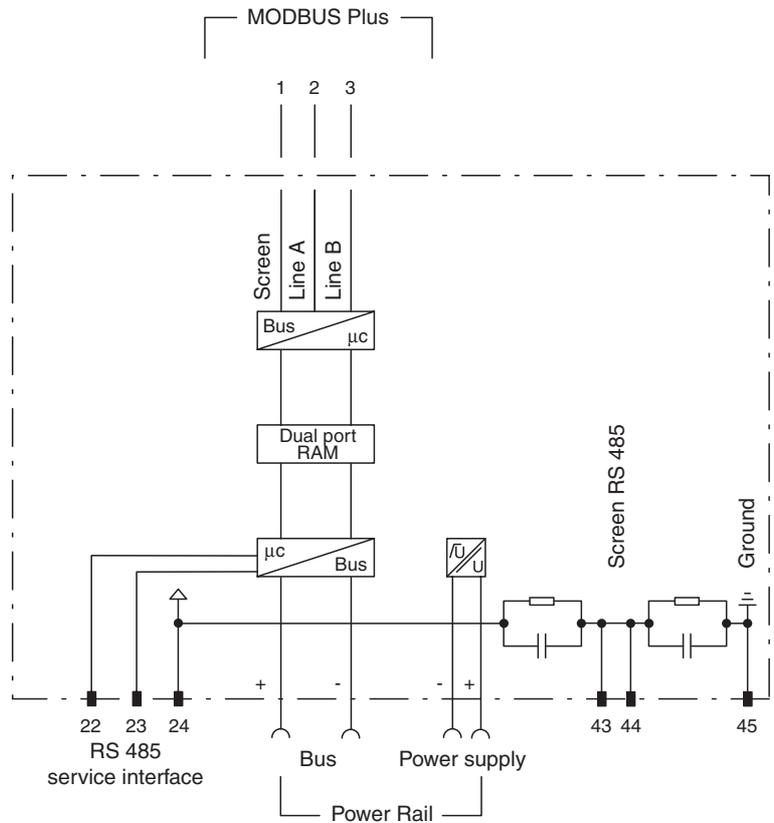
The gateways of multiple RPI segments can be continuously networked with one of the control systems's or PLC's independent service levels using the RS 485 parameter interface in addition to the MODBUS Plus connection.

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 **PACTware™**.

Application

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

Connection

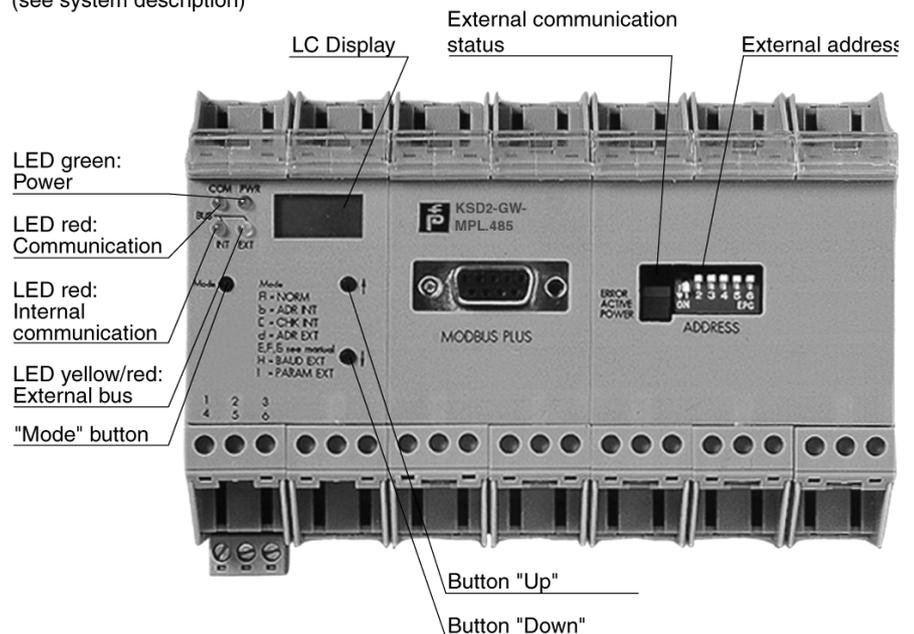


Safe area or hazardous area, zone 2

Composition

Front View

Housing type G (see system description)



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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 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 analogue input 75 ms 125 devices with analogue output 110 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
Redundancy	
Option	through the use of a second gateway
Electrical isolation	
Internal/external bus	basic insulation acc. to EN 50178, rated insulation voltage 50 V _{eff} AC
Internal bus/power supply	not available
External bus/power supply	basic insulation acc. to EN 50178, rated insulation voltage 50 V _{eff} AC
Service interface/internal bus	basic insulation acc. to EN 50178, rated insulation voltage 50 V _{eff} AC
Service interface/external bus	basic insulation acc. to EN 50178, rated insulation voltage 50 V _{eff} AC
Service interface/supply	basic insulation acc. to EN 50178, rated insulation voltage 50 V _{eff} AC
Directive conformity	
Electromagnetic compatibility	
Directive 89/336/EC	EN 61326
Explosion protection	
Directive 94/9 EC	EN 50021
Standard conformity	
Electrical isolation	EN 50178
Protection degree	IEC 60529
Ambient conditions	
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
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. 505 g
Dimensions	140 x 100 x 115 mm (5.5 x 3.9 x 4.5 in)
Mounting	DIN rail mounting
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
Entity parameter	
Certification number	3000845
FM control drawing	No. 116-0150
Suitable for installation in division 2	yes

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, parameterisation, addressing, operation and fault detection is performed by means of PC and FDT compliant human machine interface **PACTware™** via the RS 485 interface. 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 22, 23, 24.