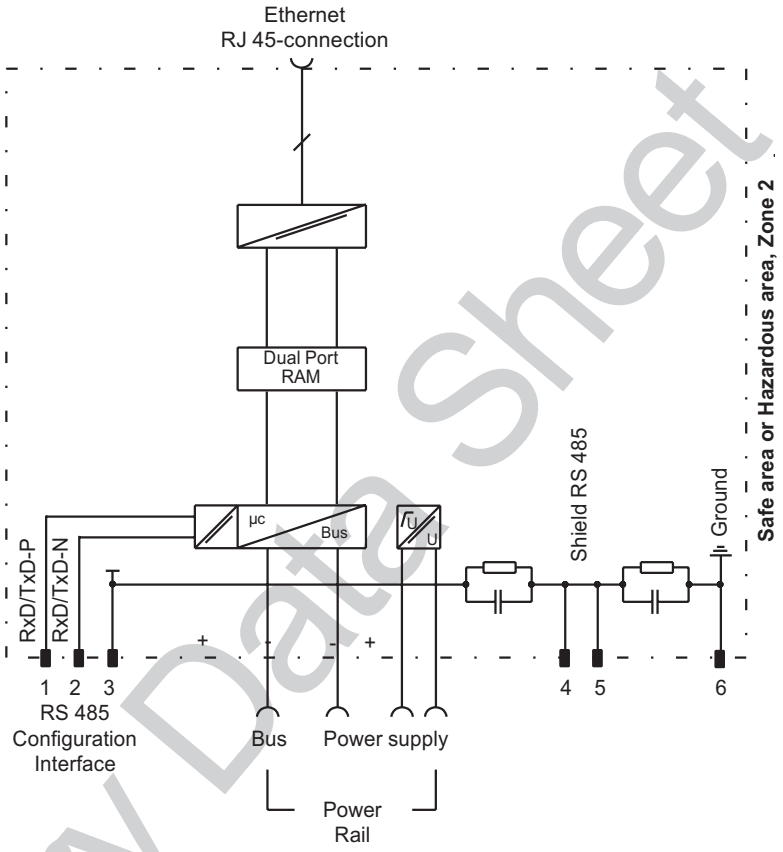
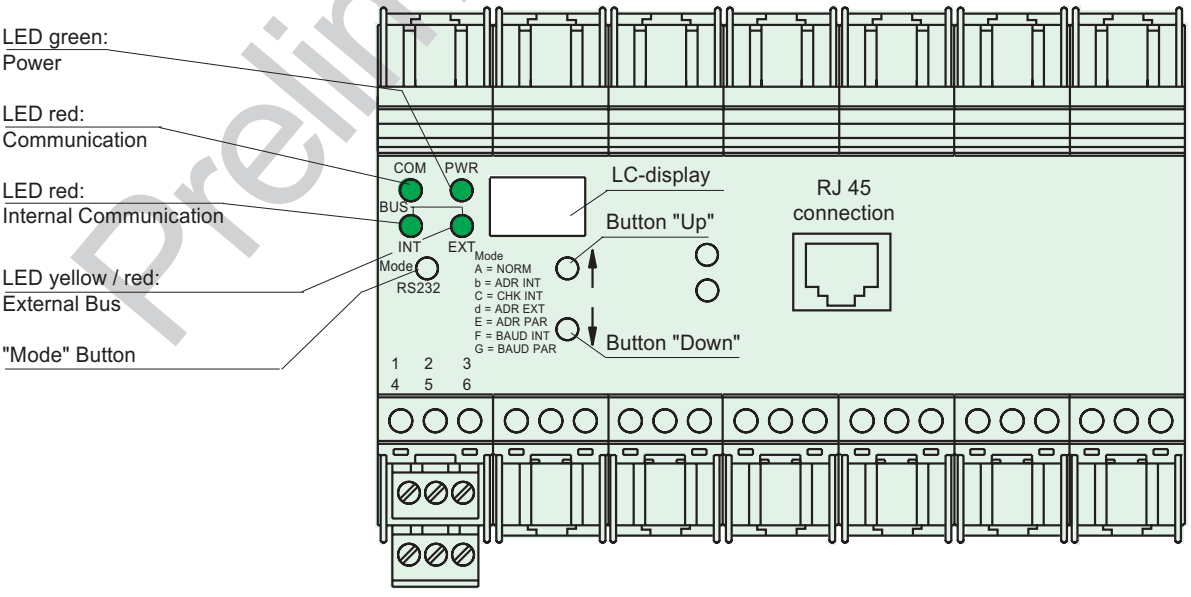
- **Connects the Remote Process Interface to the control system via Ethernet**
- **Couples the internal CAN Bus to the external Ethernet**
- **Device mounting allowable in Zone 2**
- **Connecting up to 16 RPI devices**
- **Master function for the internal CAN-Bus**
- **External Bus: Ethernet**
- **Physical layer acc. to ANSI/IEEE 802.3, ISA 8802-3**
- **RJ 45 connection**
- **Separate RS 485 interface independent of the control system in addition to the Ethernet connection. Continuous access via PC and RPI human machine interface to the configuration data and parameters of all connected gateways and RPI devices.**
- **DC 24 V supply voltage**
- **No redundancy of the gateway and the external bus possible**
- **EMC per NAMUR NE 21**

The KSD2-GW-ETH.485B translates the protocol of the internal CAN Bus to the Modbus on Ethernet protocol of the external Bus system and vice versa. Up to 16 devices can be connected to a gateway via the Power Rail. The devices' addresses for the internal bus are in the range of 3 to 18 (including 3 and 18).
The separate RS 485 configuration interface, in addition to the Ethernet connection, can be used to link gateways of multiple RPI segments, independent to the control system or PLC.
The operator has access to an additional monitoring and configuration network to the configuration data and parameters of all connected gateways and RPI devices by means of PC and the RPI human machine interface.




**Front View**



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| | |
|---|---|
| **Technical data**<br>**Power supply**<br>Nominal voltage<br>Ripple<br>Power consumption | <br><br>DC 20 V ... 30 V<br>< 10 %<br>2.8 W |
| **Input** | CAN protocol via Power Rail Bus up to 16 devices |
| **Output** | Ethernet satisfies Modicon Open Modbus/TCP spec. draft 2 |
| **Cycle time, internal bus** | 1 Device 25 ms<br>16 Devices with digital input 29 ms<br>16 Devices with digital output 33 ms<br>16 Devices with analog input 31 ms<br>16 Devices with analog output 35 ms |
| **Galvanic isolation**<br>Internal bus / External bus<br>Internal bus / Power supply<br>External bus / Power supply<br>RS 485-interface / Internal bus<br>RS 485-interface / External bus<br>RS 485-interface / Power supply | <br>Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 $V_{eff}$<br>not present<br>Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 $V_{eff}$<br>Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 $V_{eff}$<br>Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 $V_{eff}$<br>Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 $V_{eff}$ |
| **Conformity to standard**<br>Isolation<br>Climatic conditions<br>EMC / Electromagnetic compatibility | <br>acc. to DIN EN 50 178<br>acc. to DIN IEC 721<br>acc. to DIN EN 50 081-2, DIN EN 50 082-2, NAMUR NE 21 |
| **Weight**<br>**Ambient temperature** | ≈ 500 g (≈ 17.5 oz)<br>-20 °C ... +60 °C (-4 °F ... 140 °F) |
| | **See page 12 for additional information on mechanical and electrical standards of the K-System.** |

| | |
|---|---|
| **Application** | Connection of RPI to the control system via Ethernet.<br>Configuration interface for the RPI devices. |
| **Operation** | The configuration, programming, addressing, operation and fault detection are performed by a PC and the human machine interface via an RS 485 interface (see RPI System Manual). Limited access to the configuration data is possible without the PC with the control elements of the gateway and the devices. |
| **Operation Components** | Connection of a PC for configuration and parameterization of the system to the plug in screw terminals 1, 2, 3 by means of adaptor K-ADP4. |



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