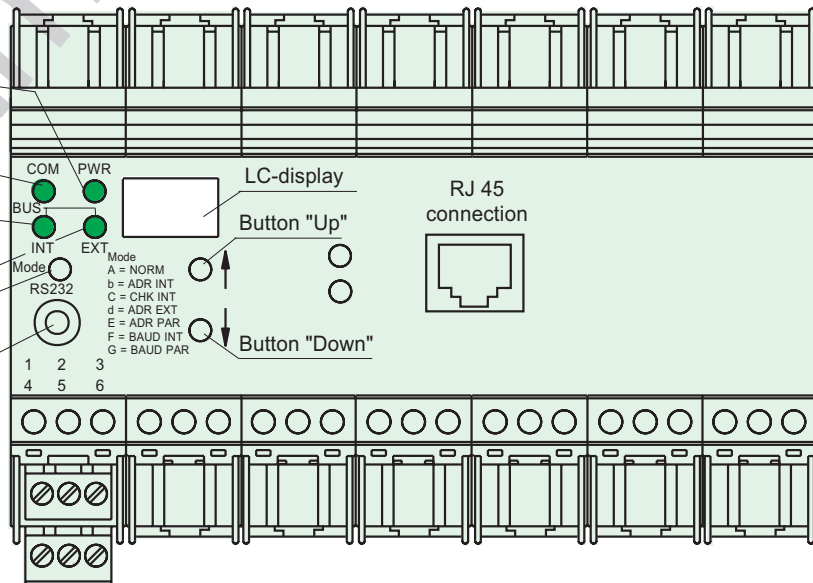- **Connects the Remote Process Interface to the control system via Ethernet.**

- **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 RS232 connection on the front panel for the configuration of the system, also fed to terminals to install an additional monitoring and configuration network.**

- **DC 24 V supply voltage**

- **No redundancy of the gateway and the external bus possible**

- **EMC per NAMUR NE 21**

The KSD2-GW-ETH.B gateway translates the protocols 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).
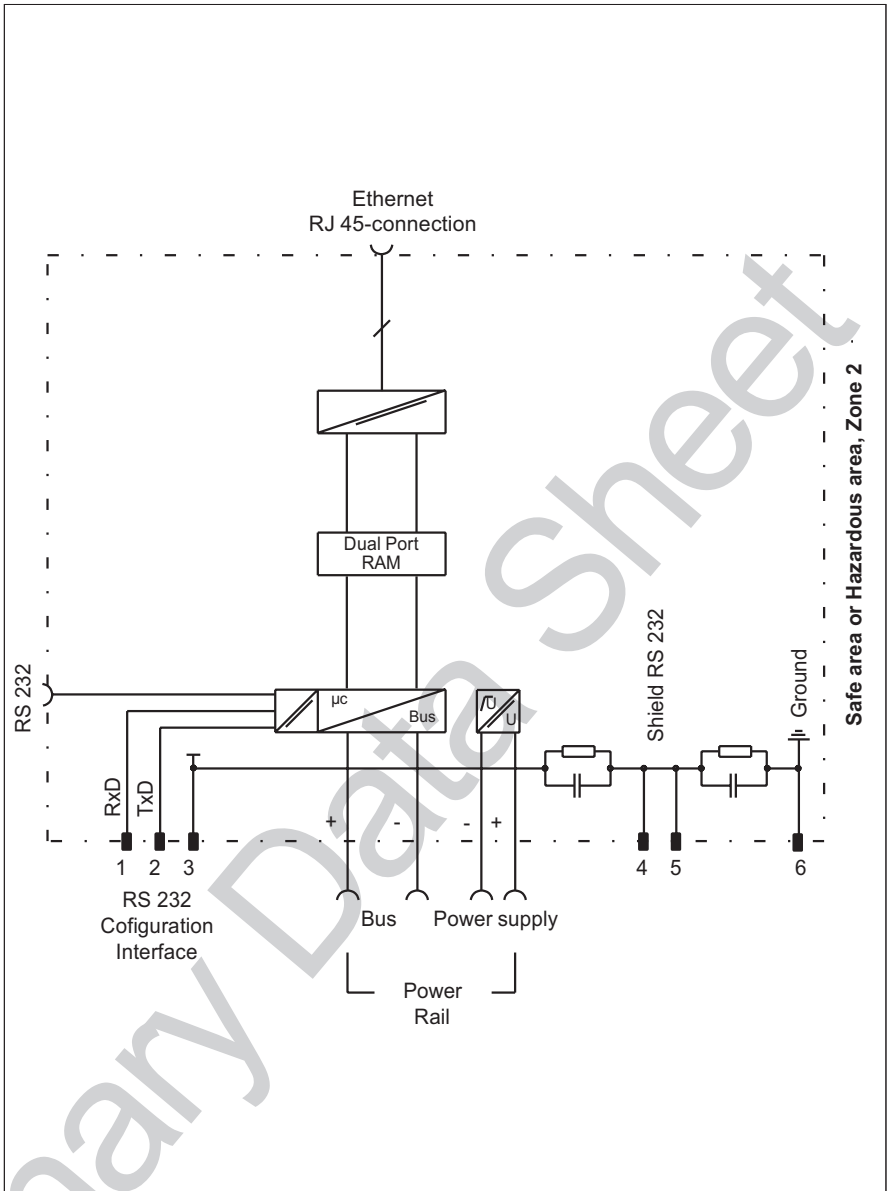
Front View

- LED green: Power
- LED red: Communication
- LED red: Internal Communication
- LED yellow / red: External Bus
- "Mode" Button
- RS 232 3.5 mm jack

COM   PWR
BUS
INT   EXT
Mode
RS232

LC-display
Button "Up"
Button "Down"
RJ 45 connection

Mode
A = NORM
b = ADR INT
C = CHK INT
d = ADR EXT
E = ADR PAR
F = BAUD INT
G = BAUD PAR

1 2 3
4 5 6

CE

Technical data **Power supply** Nominal voltage Ripple Power consumption	DC 20 V ... 30 V < 10% 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 16 Devices with digital input 29 ms 16 Devices with digital output 33 ms 16 Devices with analog input 31 ms 16 Devices with analog output 35 ms
Galvanic isolation Internal bus / External bus Internal bus / Power supply External bus / Power supply RS 232-interface / Internal bus RS 232-interface / External bus RS 232-interface / Power supply Terminals 7, 8, 9 / 3.5 mm jack bush	Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 V_{eff} not present Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 V_{eff} Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 V_{eff} Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 V_{eff} Basic isolation acc. to DIN EN 50 178, design isolation voltage AC 50 V_{eff} not present
Conformity to standard Isolation Climatic conditions EMC / Electromagnetic compatibility	acc. to DIN EN 50 178 acc. to DIN IEC 721 acc. to DIN EN 50 081-2, DIN EN 50 082-2, NAMUR NE 21
Weight **Ambient temperature**	≈ 500 g (≈ 17.5 oz) -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 the RPI to the control system via Ethernet. Configuration interface for the RPI devices.
Operation	The configuration, programming, addressing, operation and fault detection is performed by means of PC and the human machine interface via an RS232 interface (see RPI System manual). Limited operation without a PC is possible with the control elements of the gateway and the devices.
Operation Components	Jacks for the connection of a PC by means of a K-ADP2 adaptor for the configuration and programming of the system. The PC may alternatively, be connected to plug-in screw terminals 1, 2, 3, 4, 5 and 6 in case, i.e., that a separate PC based monitoring and configuration network is to be installed. The jack on the front panel and the screw terminals 1, 2 and 3 may not be used simultaneously.

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