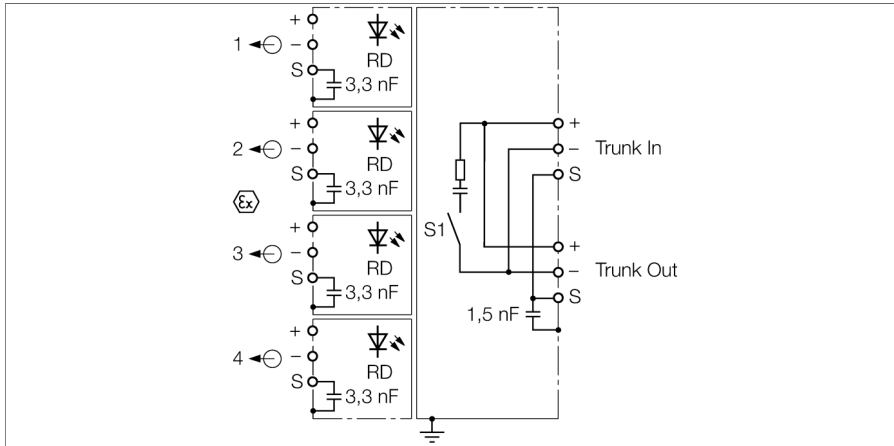


Multibarrier, 4-Channel PROFIBUS-PA MBD48-T415/EX



The 4-channel multibarrier MBD48-T415/EX enables the connection of a large number of field devices to one fieldbus in the Ex-area, according to IEC 61158-2.

Each multibarrier can take 4 Ex i field devices. Up to 12 Ex i field devices can be connected to the bus. Ex e fieldbus supply (High Power Trunk Concept) which is looped through from multibarrier to multibarrier allows to augment the number of subscribers.

Inputs and outputs of the trunk line feature enhanced safety protection (Ex e) and the outputs to the field devices are intrinsically safe (Ex i).

The multibarrier is equipped with an activatable terminating resistor for the bus. The switch is integrated in the housing on the board.

The multibarrier has four LEDs indicating short-circuit for each channel separately. They are located on the board, inside the device.

All-round galvanic isolation

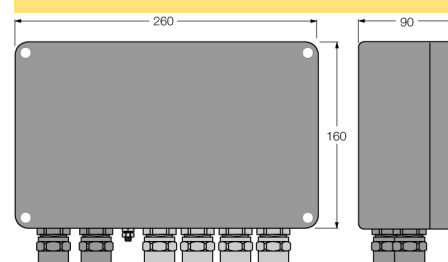
- Trunk line and Ex i outputs as well as
 - Between the Ex i outputs,
- guarantees safe operation.

- Galvanic isolation between the Ex i outputs and the Ex e bus line as well as between the Ex i outputs
- Temperature range: -20...+70 °C (-4...+158 °F)
- integrated terminating resistor (switch-in)
- cable shielding: capacitive connection to housing potential
- output data: 10V/40mA (short-circuit proof)
- powder-coated die-cast aluminium housing
- pressure compensation element for protection against condensation water
- connection of the housing potential via an M5 x 1 bolt
- Entity and FISCO compliant acc. to EN60079-11

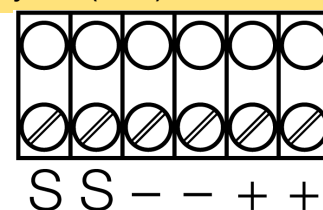


Type	MBD48-T415/EX
ID	6611270
Fieldbus standard	IEC 61158-2
Operating voltage U_o	16...32 VDC
Current self-consumption	≤ 40 mA
Galvanic isolation	Input circuit (EEx e) to output circuits (EEx i) 253 V _{eff} ; between the output circuits (Ex i) 60 V _{eff}
Output circuits	
Output current	≤ 40 mA
Output voltage	≥ 10 VDC
Short-circuit protection	≤ 45 mA
Displays/Operating elements	
Short-circuit message	4 x red
Ex approval acc. to conformity certificate	PTB 04 ATEX 2021
Device designation	Ex II 2(1 G/D)G Ex mb e [ia] IIC T4 FISCO / Entity multibarrier
Max. output voltage U_o	≤ 14.3 V
Max. output current I_o	≤ 268 mA
Max. output power P_o	≤ 958 mW
Internal resistance R_i	53.3 Ω
Characteristic	linear
Internal inductance/capacitance L/C _i	negligible
Electrical connection	Cable gland
Segment IN	1 x M20 x 1.5 (Ø 7...13 mm); plastic; black
Segment OUT	1 x M20 x 1.5 (Ø 7...13 mm); plastic; black
Spur line	4 x M20 x 1.5 (Ø 7...13 mm); plastic; blue
Terminal cross-section	2.5 mm ²
Earthing bolt	M5 x 1
Protection class	IP66
Ambient temperature	-20...+70 °C
Relative humidity	≤ 95 %, non-condensing
Housing material	Powder-coated die-cast aluminium, Black/yellow
Dimensions	260 x 160 x 90 mm
Connection mode	Wall mounting

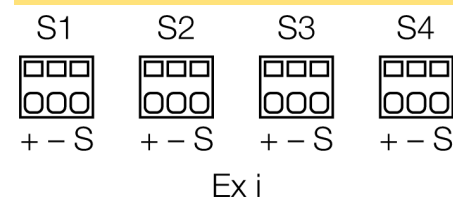
Dimensions



Supply trunk (in/out)



Outputs



Current consumption

