

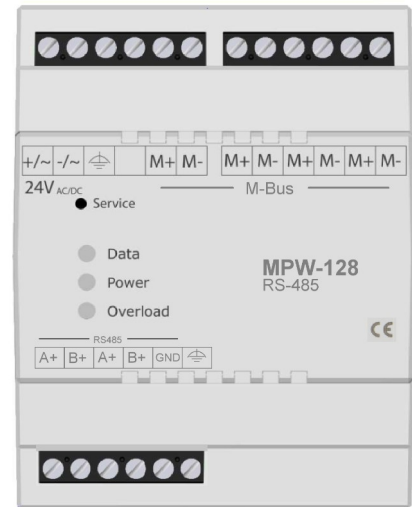
## ■ Article description

The level converter MPW128 RS-485 offers high flexibility and easy integration in one device.

The high M-Bus voltage of 38V makes it possible to operate large M-Bus networks safely.

With M-Bus transmission rates of 300 to 38400 baud, these level converters are also suitable for fast M-Bus devices.

The device can be used in applications ranging from mechanical engineering and industrial automation to home and building automation with standardised communication.



Picture similar, MPW128 RS-485

## ■ Technical Data

Rated voltage	24 V <sub>AC / DC</sub>
Supply voltage range	24 V <sub>DC</sub> ±20%, 24 V <sub>AC</sub> ±5%
Power consumption at nominal supply voltage without load currents	≈ 85 mA
Processor	Cortex M4
Button: Service	Set factory settings, press and hold for 30 s until the power LED flashes.
Displays	Data: Tx / Rx two-coloured (yellow, green) Power: supply voltage (green) Overload: M-Bus over-current (red)
M-Bus voltage	≈ 38 V
M-Bus over-current threshold	>207 mA
M-Bus load	M-Bus current 192 mA (128 standard loads @ 1,5 mA)
Interfaces	RS-485 and M-Bus
Data rate M-Bus	300 – 38400 Baud
Protection of interfaces	Galvanic isolation between supply voltage, RS-485 and M-Bus. Overvoltage protection via suppressor diodes

## ■ Terminals

Connection type	Screw terminal with tension sleeve
Solid conductor cross-section	0,2 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Stranded conductor cross-section	0,2 mm <sup>2</sup> ... 2,5 mm <sup>2</sup>
Stranded conductor cross-section with sleeve	0,25 mm <sup>2</sup> ... 2,5 mm <sup>2</sup>
Stripping length	8 mm

## ■ Environmental conditions

Ambient temperature (operational)	-10 °C to +50 °C
Relative humidity (without condensation)	90 %

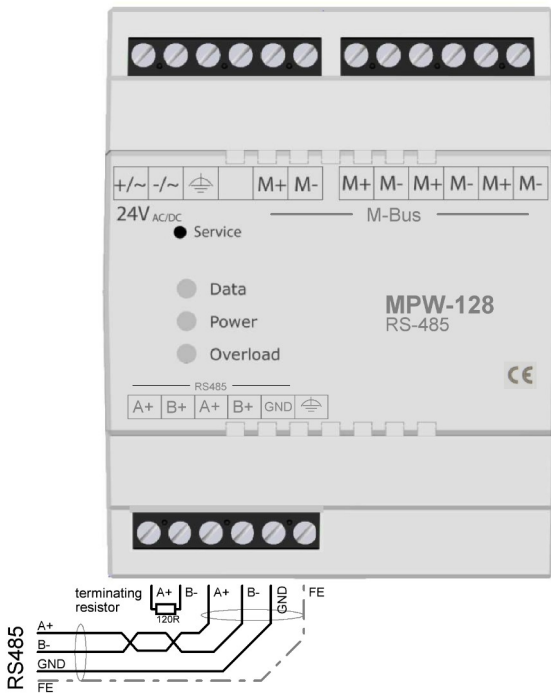
## ■ Housing data


Type of housing	Installation housing according to DIN 43880
Housing material	Plastic, polycarbonate PC V-0
Colour	Light grey (RAL 7035)
Flammability category	V0 according to UL 94
Ingress protection	IP 20
Mounting	Mounting rail TS35, (4HP) or with screw lugs according to DIN EN 50022.
Mounting position	Parallel to mounting rail



## ■ Standards and regulations

Conformity marking	<b>CE</b>
EMC noise immunity	acc. to DIN EN 55024
EMC radiated emissions	acc. to DIN EN 55032
Electromagnetic compatibility	acc. to DIN EN IEC 61000-6-2
M-Bus communication	acc. to DIN EN 13757-2

## Terminal assignment



Pin assignment	
Function	Pin
Supply voltage	24V +/-
Supply voltage	24V -/~
Functional grounding	
None	Not in use
M-Bus	M+
M-Bus	M-
M-Bus	M+
M-Bus	M-
M-Bus	M+
M-Bus	M-
M-Bus	M+
M-Bus	M-
M-Bus	M+
M-Bus	M-
RS485	A+
RS485	B-
RS485	A+
RS485	B-
RS485	GND
Functional grounding	
None	Not in use

	Power		Pin		Pin		
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## ■ Physical Data

Width	72 mm
Height	90 mm
Depth (device)	64 mm
Weight	≈ 170 g

