

Line termination device with terminating resistor for the active bus termination of RS485 networks

S+S REGELTECHNIK

LA-Modbus

Line termination device **MODKON® LA-Modbus T3** with terminating resistor, in an impact-resistant plastic housing with quick-locking screws.

The line termination serves as an active bus termination for RS485 networks (ANSI TIA/EIA-485), such as Modbus RTU. It contains a terminating resistor with a biasing network, which pre-defines the bus signals to a safe value (fail-safe biasing) during bus idle time.

The bus termination can be fully switched on or off via DIP switches. This allows various operating scenarios to be tested in a simple manner whenever servicing is needed.

For very long network cables, both end points can also be provided with an active bus termination to improve interference immunity under harsh environmental conditions.



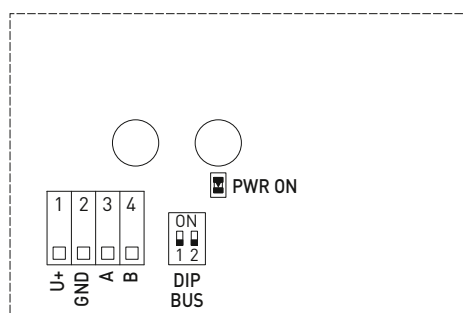
TECHNICAL DATA

Power supply:	24 V AC ($\pm 20\%$) and 15...36 V DC
Power consumption:	< 0.5 W / 24 V DC; < 0.5 VA / 24 V AC
Housing:	Plastic, UV-resistant, polyamide material, 30 % glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016)
Housing dimensions:	108 x 78.5 x 43.3 mm (Tyr 3 without display)
Cable connection:	Cable gland, plastic (2x M20 x 1.5; with strain relief, exchangeable, inner diameter 8 - 13 mm)
Electrical connection:	0.2 - 1.5 mm ² , using push-in terminals
Ambient temperature:	-30...+70 °C
Permitted humidity:	< 95 % r. H., non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529)
Operation display:	Status LED PWR ON (supply voltage)
Standards:	CE conformity, electromagnetic compatibility according to EN 61326, according to EMC Directive 2014 / 30 / EU

DIP 1	DIP 2	Resistance (type adjustable)	Bus termination (explanation)
ON	ON	R_{AB} active and R_{BIAS} active	Line termination and BIAS active
ON	OFF	R_{AB} active	Line termination active
OFF	OFF	Deactivated	Bus termination switched off

Connecting diagram

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Push-in terminal

- +UB** Terminal 1: +UB 24V
- GND** Terminal 2: -UB GND
- A/B** Terminal 3/4: RS485 Modbus

Status LED

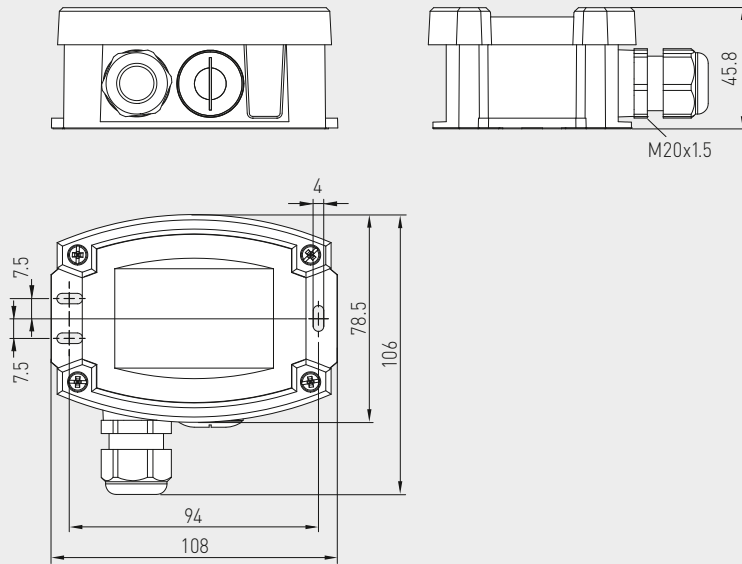
- PWR ON** Supply voltage

DIP switch

- DIP BUS** Activation or deactivation
of the bus termination

Dimensional drawing

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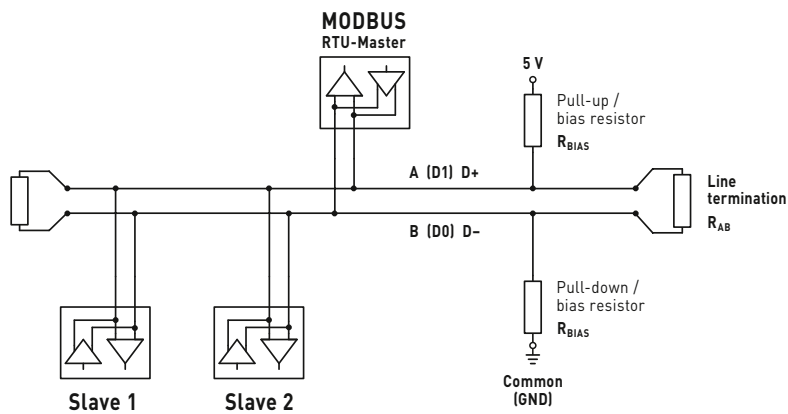


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Bus topology with terminating
and bias resistors

LA-Modbus



MODKON® LA-Modbus Line termination device with terminating resistor

Type / WG01	Bus termination (adjustable)	Item No.
LA-Modbus		
LA-Modbus	1. Line termination and BIAS active 2. Line termination active 3. Bus termination deactivated	1906-1300-0000-100

Note: The bus termination can be fully switched on or off (via DIP switches).