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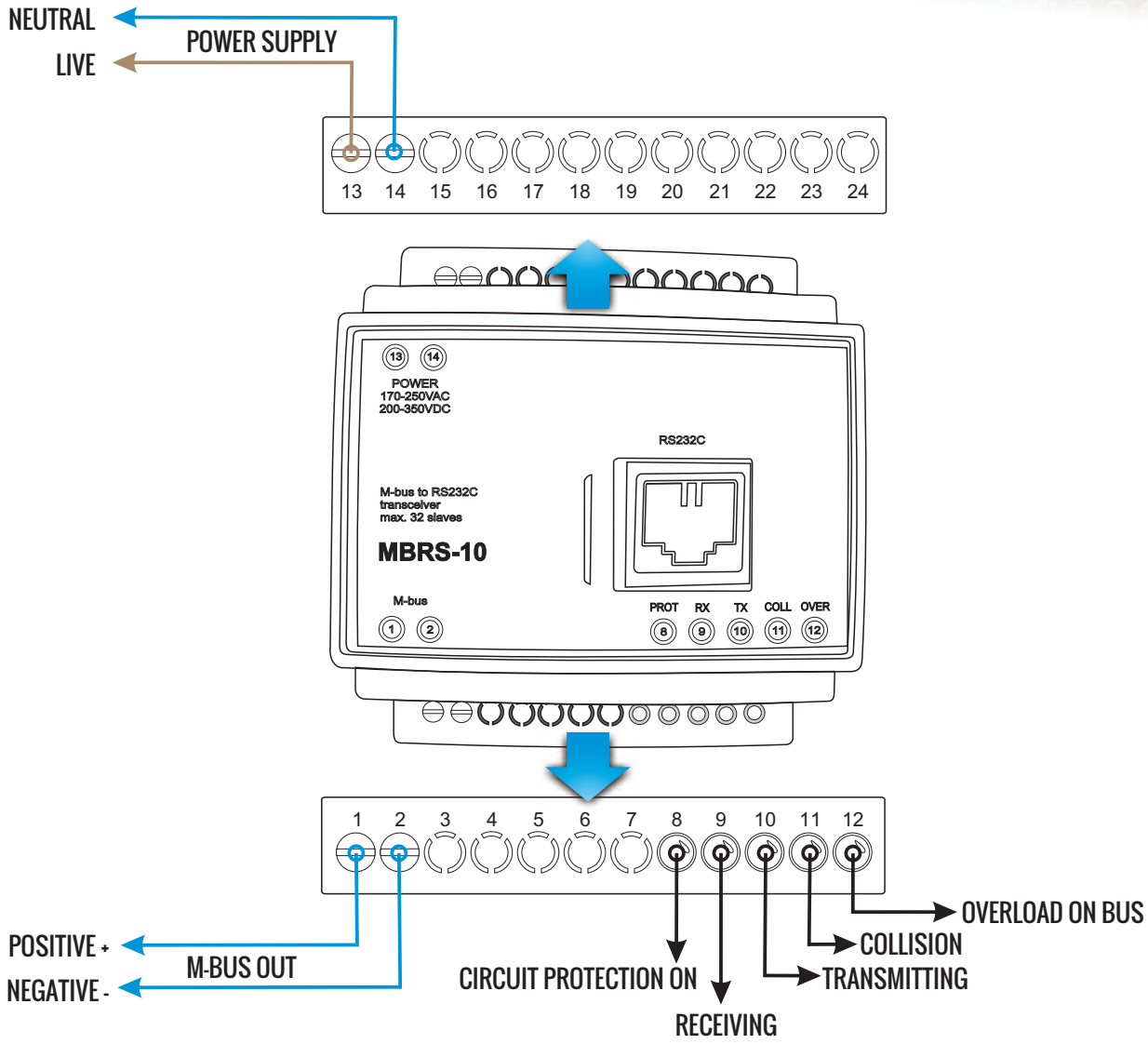
M-BUS Master 10 PORT

DESCRIPTION

MBRS-10 is a microprocessor two-way full-duplex M-Bus to RS-232C converter, capable of feeding up to 10 standard m-bus slave devices. It is intended for use in buildings and industrial installations and mainly for remote reading of the readings of tariff instruments or different sensors.

It is protected by a short circuit in the output. The installation is carried out on a standard M36 DIN rail.

All connections should be made with insulated multi wire cable with cross section 0.5mm / 2.5mm low resistance speaker cable or CAT 5 cable is ideal.



FEATURES

Maximum number of M-Bus Slave Devices	10
Maximum Output Current	35 mAmp
Output Protection Level	45 mAmp
Nominal Output Voltage	36 VDC
Zero Output Voltage 'O' (space)	22-25 VDC
Power Supply Voltage	150-250 VAC (200-350 VDC)
Max Power Consumption	3w with 10 bus slaves connected
IP Protection Class	IP30
Dimensions H*W*D	75 * 45 * 105mm
Weight	200g
Maximum Transmissible Signal Baud Rate	4800bps
Maximum Distance between master and slave in the network	1200m
Display	5 LED's

OPERATIONAL DATA

The MBRS-10 starts operating immediately after powering up. Sequence as follows:

Primary Initialization Mode (0.2-0.3 s)

For about 0.2-0.3 s, the device initializes. During this time, the output is disabled and has a voltage of 0 V.
No LED is turned on

The device is enabled when the output is turned on and the network current is measured.

Normal operation mode

The consumption of the connected slave devices is continuously measured, and if the value of 35 mA is exceeded, the 'alarm' LED will flash. If the value of 45 mA is exceeded, the output is forbidden. When connecting the device to a computer (or other data capture device) via the RS-232C interface the external device can transmit data to each of the slave devices on the network, as MBRS-10 acts as a bridge to connect between the computer and the network. Data is transmitted directly without delay. When transmitting information from a slave, it is decoded and sent to the serial port without delay. Concurrent bidirectional data transmission is possible.

If collision occurs (simultaneous data transmission from more than one slave), a coll (LED) light flashes and the data is still sent to the RS-232 interface.

MBRS-10 is mounted on a standard M36 DIN rail. All external connections are made with insulated conductors with a cross section of 0.25mm² ÷ 2.5mm².

The links are shown in the following table:-

C1 "Power" - a non-removable two-pole terminal

3 & 4	input power supply - L, N

C2 "M-Bus" - a non-dismountable two-pole terminal

1 M-Bus output, +
2 M-Bus output, -

C3 'RS-232C' - detachable terminal type RJ-45

1,4,6,7,8	do not bind
2	RxD (Receive)
3	TxD (Transmit)
5	GND