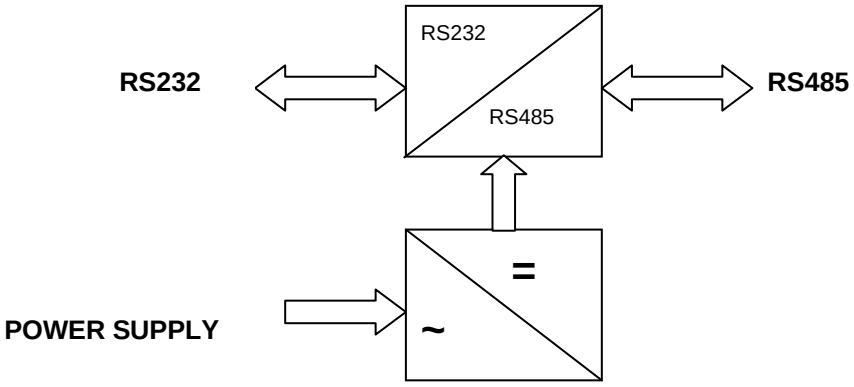
CON1H
RS232/RS485
CONVERTER

Technical Description

1. GENERAL

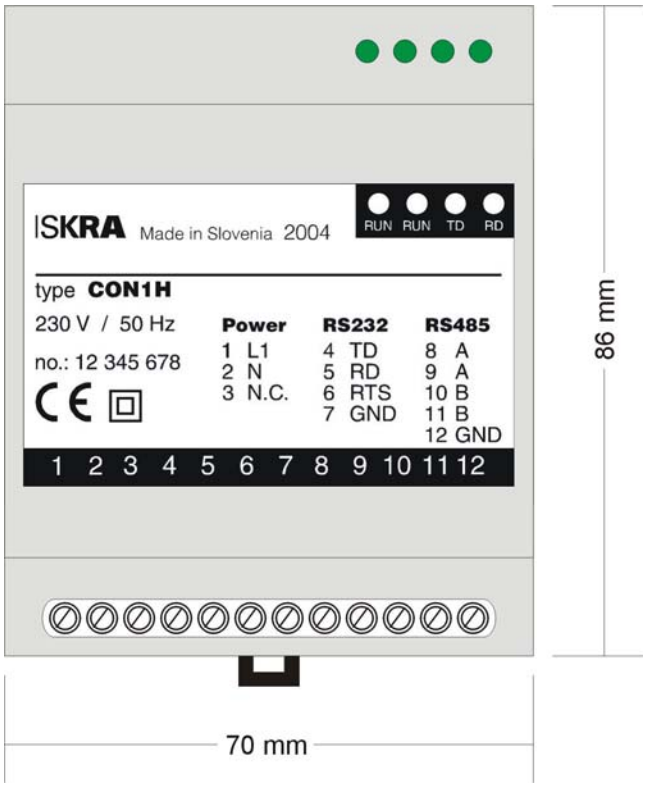
Adapter CON1H is used to convert serial signal RS232C to RS485 signal and vice versa. It is designed for using in on-line communication between communication devices (meters, data recorders, data communicators) and personal computers.



Block diagram

2. TECHNICAL DATA

Power supply :	230V~50 Hz
Transmission mode :	half duplex
Baud rate :	300 - 57600 bps; max.1200m
RS232 mode :	DCE
LED indication :	RTS, TD, RD, RUN
RS485:	max. 32 (one master, 31 slaves)
Dimension :	height 58 mm
	length 86 mm
	width 70 mm
Weight:	250g
Temperature range if operation:	-20°C to + 60°C

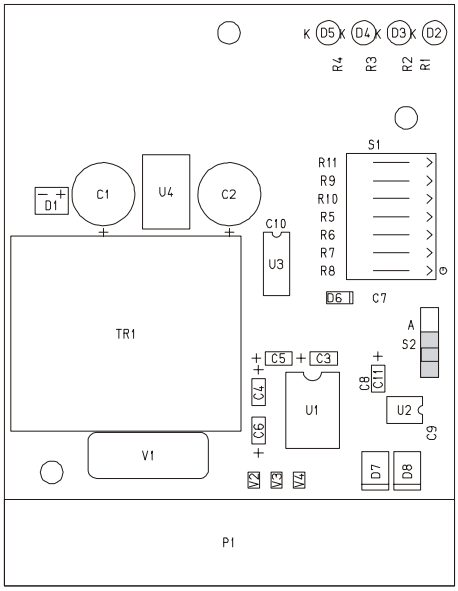


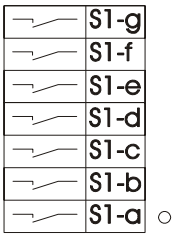
Dimension drawing

3. OPERATION DESCRIPTION

Adapter CON1H enables transformation from RS232 signals to RS485 and vice versa. It works in half–duplex mode.

When transmission is active, reception in the device is disabled. This can be made “automatically” or with “RTS” signal. Mode can be set by internal switch S2. Factory default setting is “automatically mode“ - switch position down.



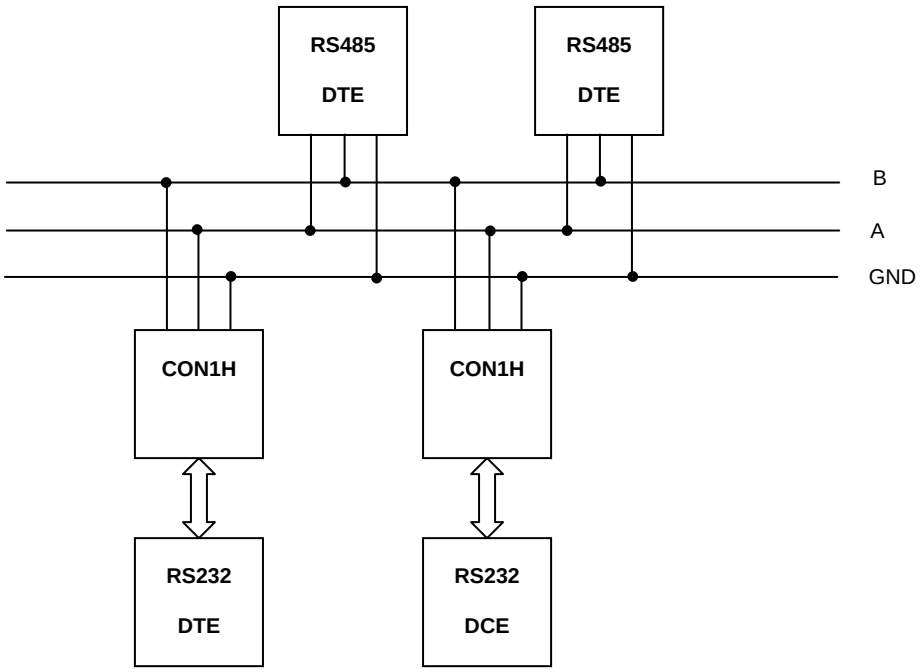


After deactivating of TxD signal RS485 channel stays in active position for transmission for a periode of time which is defined by the position of the switchs S1-a, S1-b, S1-c or S1-d.

Switch ON	Time delay (msec)
S1-a	0,31
S1-b	0,6
S1-c	1,2
S1-d	2,2

With the rest of switches is possible to activate termination load 100R (S1-g), pull up resistor (S1-e) and pull down resistor (S1-f).

Point-to-point or multidrop connections can be realized to max. distance up to 1200 m. In one loop maximum 32 adapters can be connected.



4. CONNECTION

RS232C:	pin 4	TD
	pin 5	RD
	pin 6	RTS
	pin 7	GND
RS485:	pin 8 and 9	A
	pin 10 and 11	B
	pin 12	GND
Power supply:	pin 1	L1
	pin 2	N

On RS232 side we can connect both DTE as well as DCE devices.

DTE connection:

DTE (PC)		DCE (adapterCON1H)
TD	⇨	TD
RD	⇦	TD
RTS	⇨	RTS
GND	⇔	GND

DCE connection:

DCE (modem)		DCE (adapter CON1)
RD	⇨	TD
TD	⇦	RD
RTS	⇨	RTS
GND	⇔	GND

In case that modem works in full duplex mode of transmission it is necessary to set jumper to "automatically" in CON1H.

Converter CON1H is electrically isolated from main power supply by using transformer.

Owing to periodical improvements of our products the supplied products can differ in some details from data stated in the Technical Description.

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