RS-485 bus galvanic isolator

ACSP-RSI

EN

Firmware version 1.00

acsp-rsi_en 02/23

SATEL sp. z o.o. • ul. Budowlanych 66 • 80-298 Gdańsk • POLAND
tel. +48 58 320 94 00
www.satel.pl

IMPORTANT

The device should be installed by qualified personnel.

Prior to installation, please read carefully this manual in order to avoid mistakes that can lead to malfunction or even damage to the equipment.

Disconnect power before making any electrical connections.

Changes, modifications or repairs not authorized by the manufacturer shall void your rights under the warranty.

The following symbols may be used in this manual:

- note,
- caution.

The ACSP-RSI module is used for:

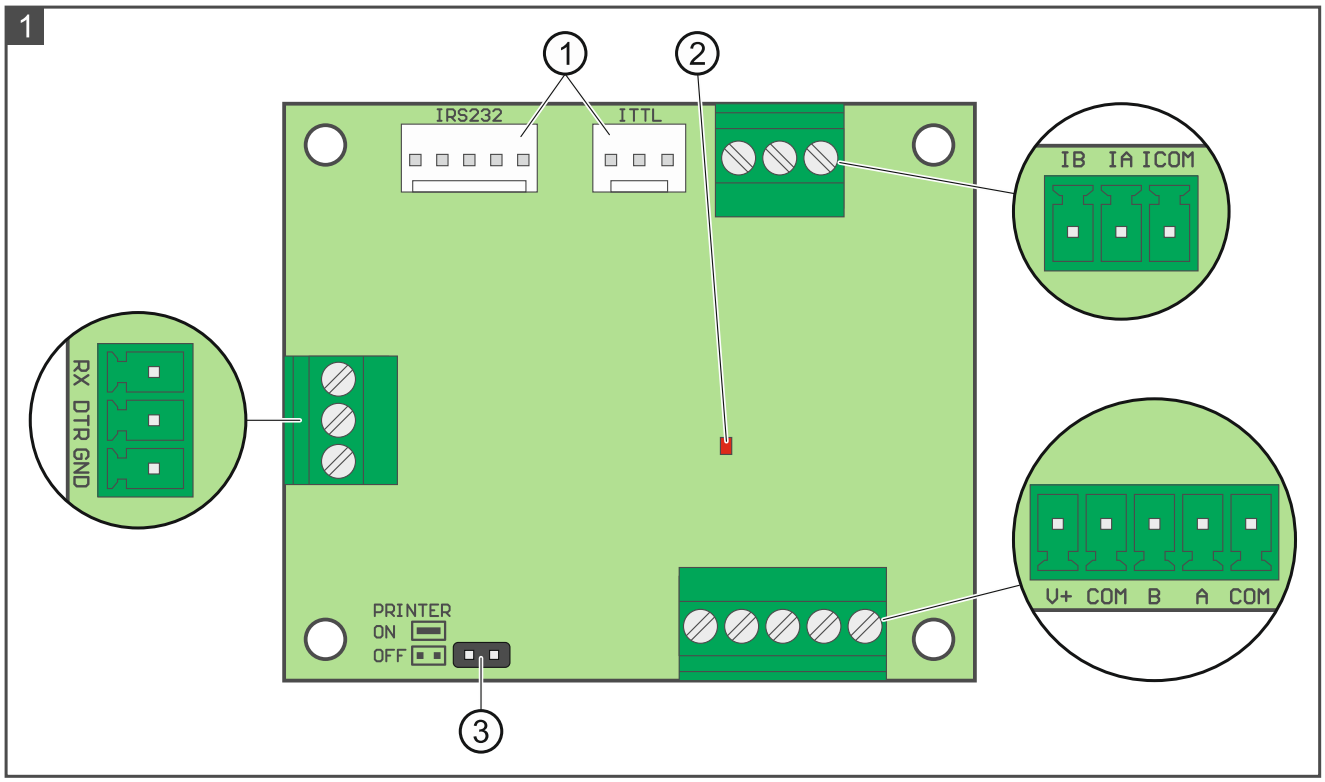
- galvanic isolation of the ACSP-402 fire alarm control panel and the APSP-402 repeater panel connected using the RS-485 bus. When isolated, the repeater panel does not have to be connected to the same protective earth circuit (PE) as the control panel.
- connecting a thermal serial printer. This enables printing of events registered by the control panel.

The module is an optional element of the ACSP-402 addressable fire alarm system.

1. Features

- Galvanic isolation of the RS-485 bus.
- RS-485 port for connecting to the ACSP-402 control panel / APSP-402 repeater panel.
- RS-485 port for connecting to a second ACSP-RSI module.
- Capability to connect a thermal serial printer.
- 12...18 VDC power from the ACSP-402 control panel / APSP-402 repeater panel.
- Removable terminal blocks.

2. Electronics board



(1) connectors not used.

(2) LED to indicate communication via the RS-485 bus (flashing during communication).

(3) PRINTER pins to enable / disable printer support:
jumper on – printer support enabled.
jumper off – printer support disabled.

Enable the printer support only in one ACSP-RSI module in the fire alarm system.

Terminals

V+, COM - terminals for connecting power from the ACSP-402 control panel / APSP-402 repeater panel.

B, A, COM - RS-485 port for connecting to the ACSP-402 control panel / APSP-402 repeater panel.

IB, IA, COM - RS-485 port for connecting to a second ACSP-RSI module.

RX, DTR, GND - terminals for connecting a printer.

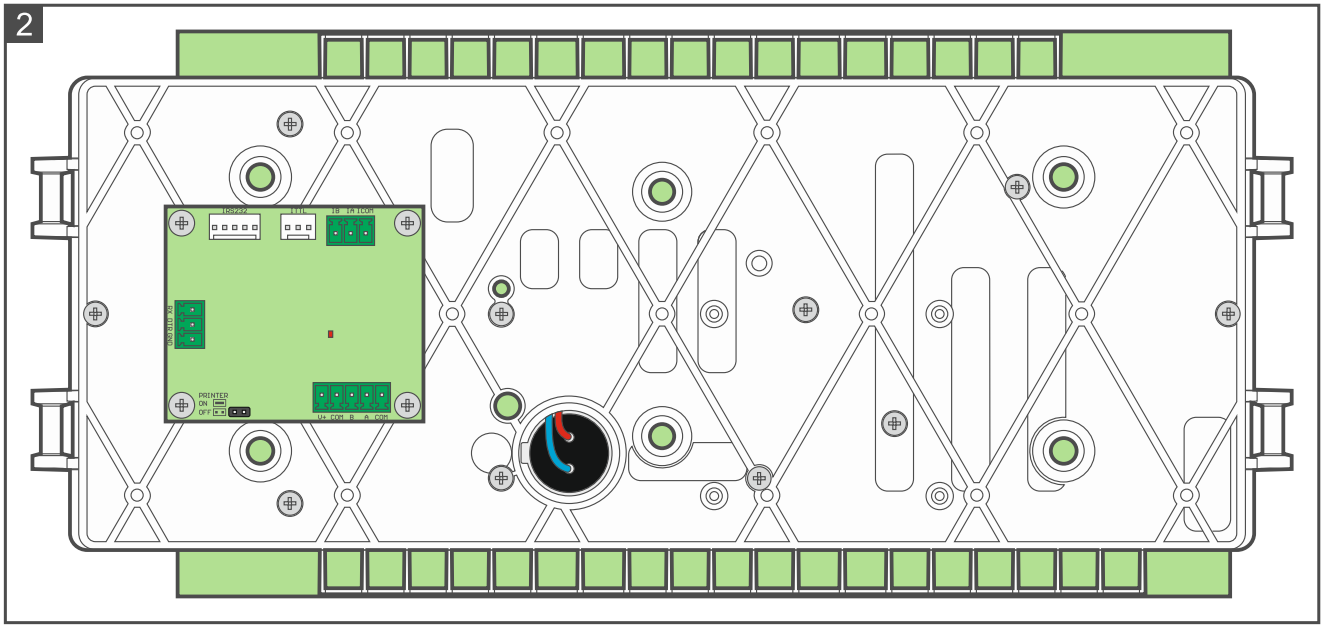
3. Installation

Disconnect power before making any electrical connections.

The module is designed for installation inside the control panel / repeater panel enclosure.

1. Remove the control panel / repeater panel mainboard module from catches.
2. Screw the ACSP-RSI module to the bottom of the control panel / repeater panel mainboard module (Fig. 2 – the control panel mainboard module is shown).

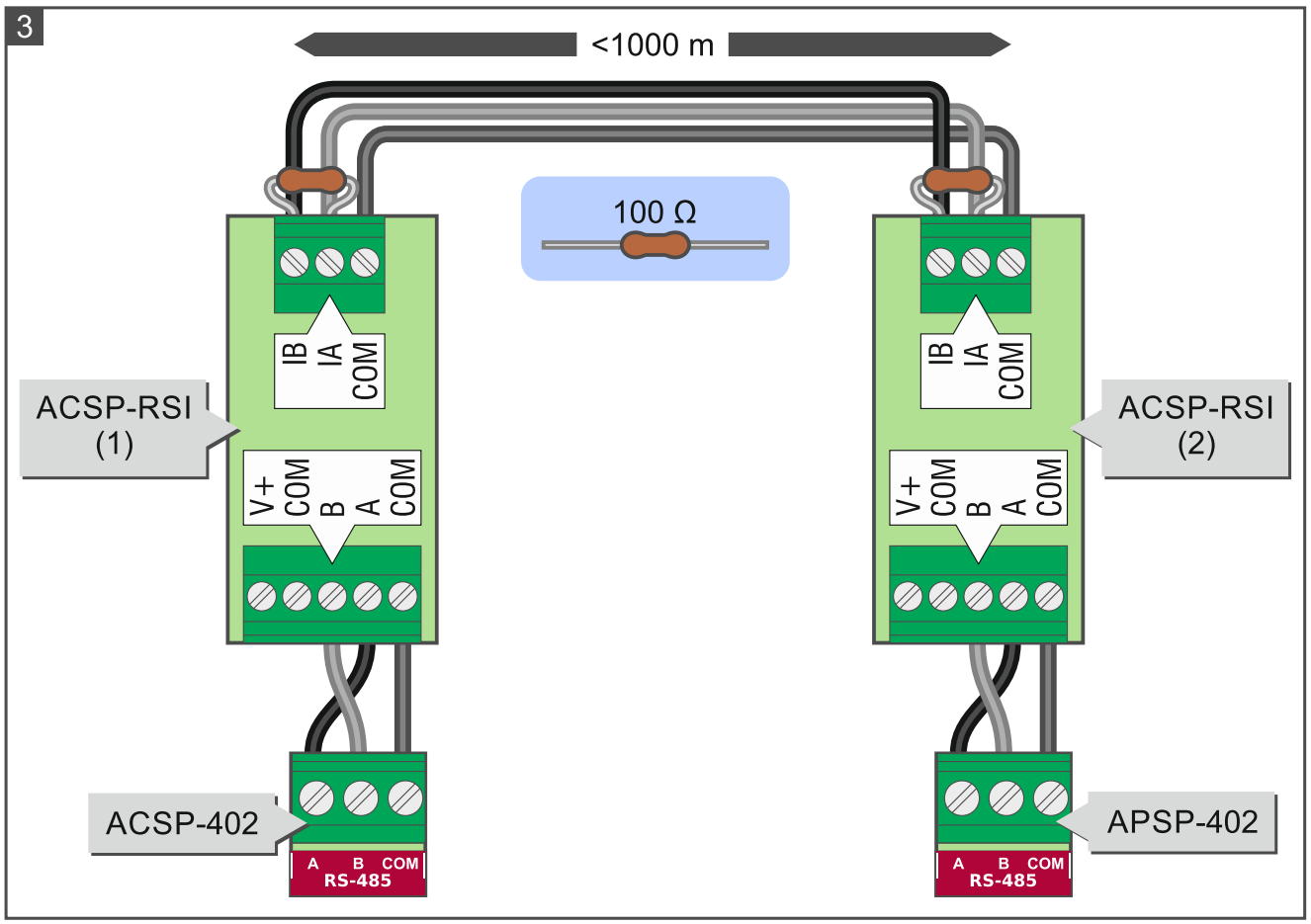
2

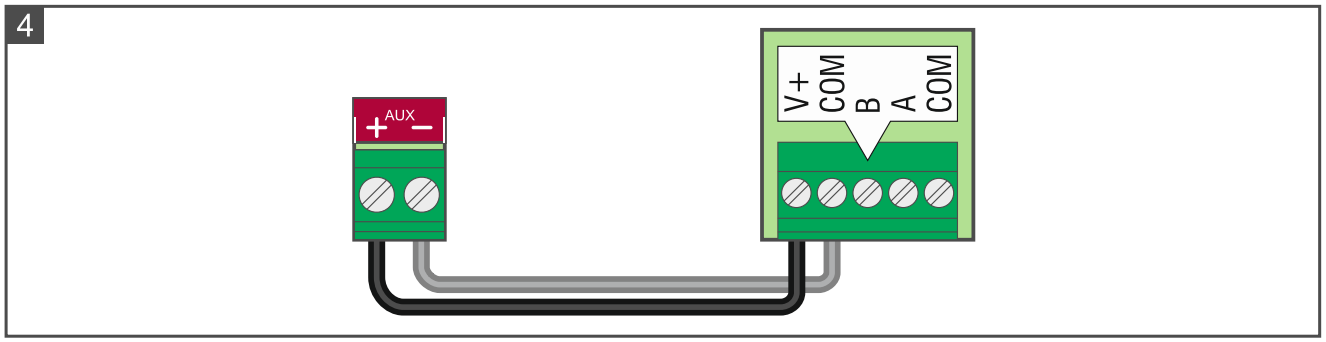


3. Connect the module to the control panel / repeater panel using the RS-485 bus (Fig. 3). Use a fire-rated cable.
4. If the ACSP-RSI modules are to be used for communication between the control panel and the repeater panel, connect the modules to each other using the RS-485 bus (Fig. 3). The bus may be up to 1000 m long. Use a fire-rated twisted-pair cable. Screw 100 Ω resistors to the **IA** and **IB** terminals.
5. If the module is to support a serial printer, place a jumper across the PRINTER pins and connect the printer to the module.

Only one ACSP-RSI module in the fire alarm system can support a printer.

6. Connect power to the module (Fig. 4).
7. Mount the control panel / repeater panel mainboard module on catches.





4. Specifications

Supply voltage ..... 12...18 VDC
Current consumption ..... 45 mA
Operating temperature range ..... -10°C...+55°C
Maximum humidity ..... 93±3%
Dimensions ..... 61 x 51 mm
Weight ..... 28 g