

RS485 HUBs


H01 - H03 RS485 HUBs documentation

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Data Sheet

RS485 HUBs (H01 - H03)

H01 H02 H03



Features

- Isolated RS485 1:3 HUB
- ESD protection for the RS485 data line
- Power supply: +12 to +30 VDC or 24 VAC
- 3000 VDC isolation protection
- Transmission speed up to 115200 bps
- Tx, Rx and power LED indicators
- RS485 embedded termination 120 ohm
- Operating temperatures: -40°C to +75°C
- DIN-rail mounting
- Compact size - single module format (1M)
- Dimensions: 90x56.4x17.5 mm
- 3 years warranty
- Customization of OEM is welcomed

Introduction

The products from the H01-H03 family are reliable RS485 signal hubs made to work with variable transmission speeds. They allow flexible branching of the 1:3 interface while simultaneously protecting the attached devices thanks to internal 3 kV/DC galvanic isolation. Additionally, dedicated EMC protections will improve transmission quality and limit the impact of interference typical for an industrial environment.

Specifications

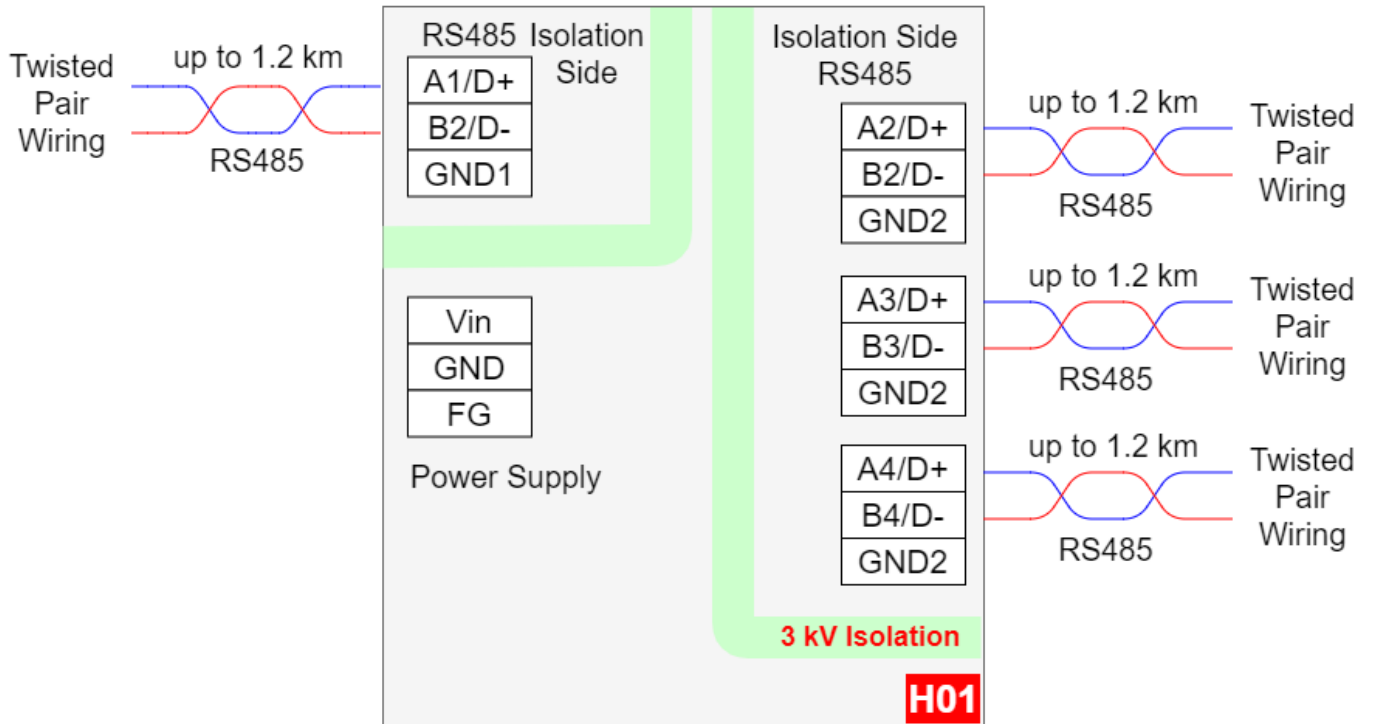
| Redisage PN | H01 | H02 | H03 |
|-------------|----------------------------------|-----|-----|
| Input | 1 x RS485 channel; Data+, Data- | | |
| Output | 3 x RS485 channels; Data+, Data- | | |

| Redisage PN | | H01 | H02 | H03 |
|-------------------------|---------|---|---------------|-----------|
| Power | Voltage | 12-30 VDC / 24 VAC | 12-30 VDC | |
| | Power | < 1 W | | |
| Frame ground protection | | yes | | |
| 3000 VDC isolation | | 3-way | branched side | main side |
| Baud rate | | up to 115200 bps | | |
| LED indicators | | communication Tx, Rx and power | | |
| RS485 termination | | 120 ohm manually enabled | | |
| Connector | RS485 | 8-pin terminal block max. 2.5 mm ² wire | | |
| | Power | 3-pin terminal block max. 2.5 mm ² wire | | |
| Transmission distance | RS485 | max. 1,200 m at 9.6 kbps; max. 400 m at 115.2 kbps (Belden 9841 2P twisted-pair cable, if different cables are used, the transmission distance may change) | | |
| Mounting and enclosure | | DIN rail, plastic PA - UL 94 V0, black/green | | |
| Temperatures | | -40°C to +75°C operating and storage | | |
| Humidity | | 10 - 90% RH, non-condensing | | |
| ESD protection | | ±4 kV contact discharge / ±8 kV air discharge | | |
| Certification | | CE, RoHS | | |

Variants

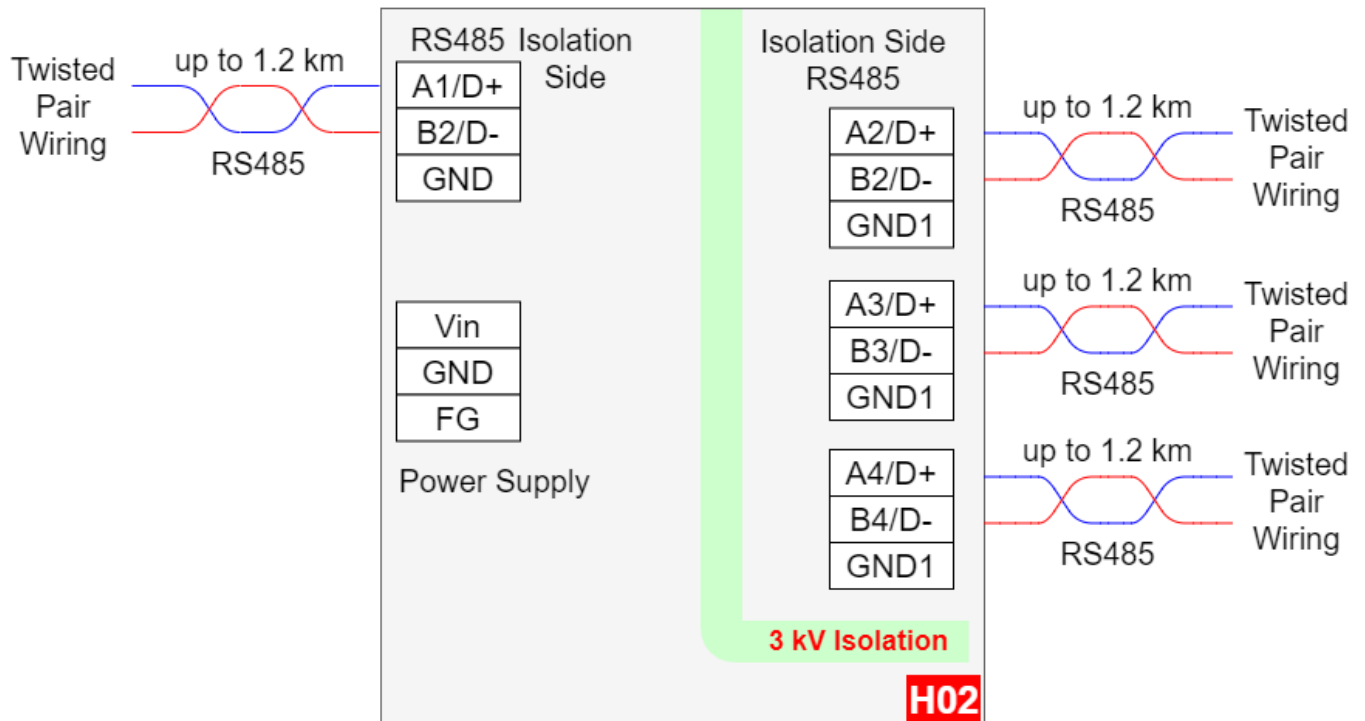
H01 - THREE-WAY Isolated RS485 HUB

H01 THREE-WAY Isolated RS485 HUB

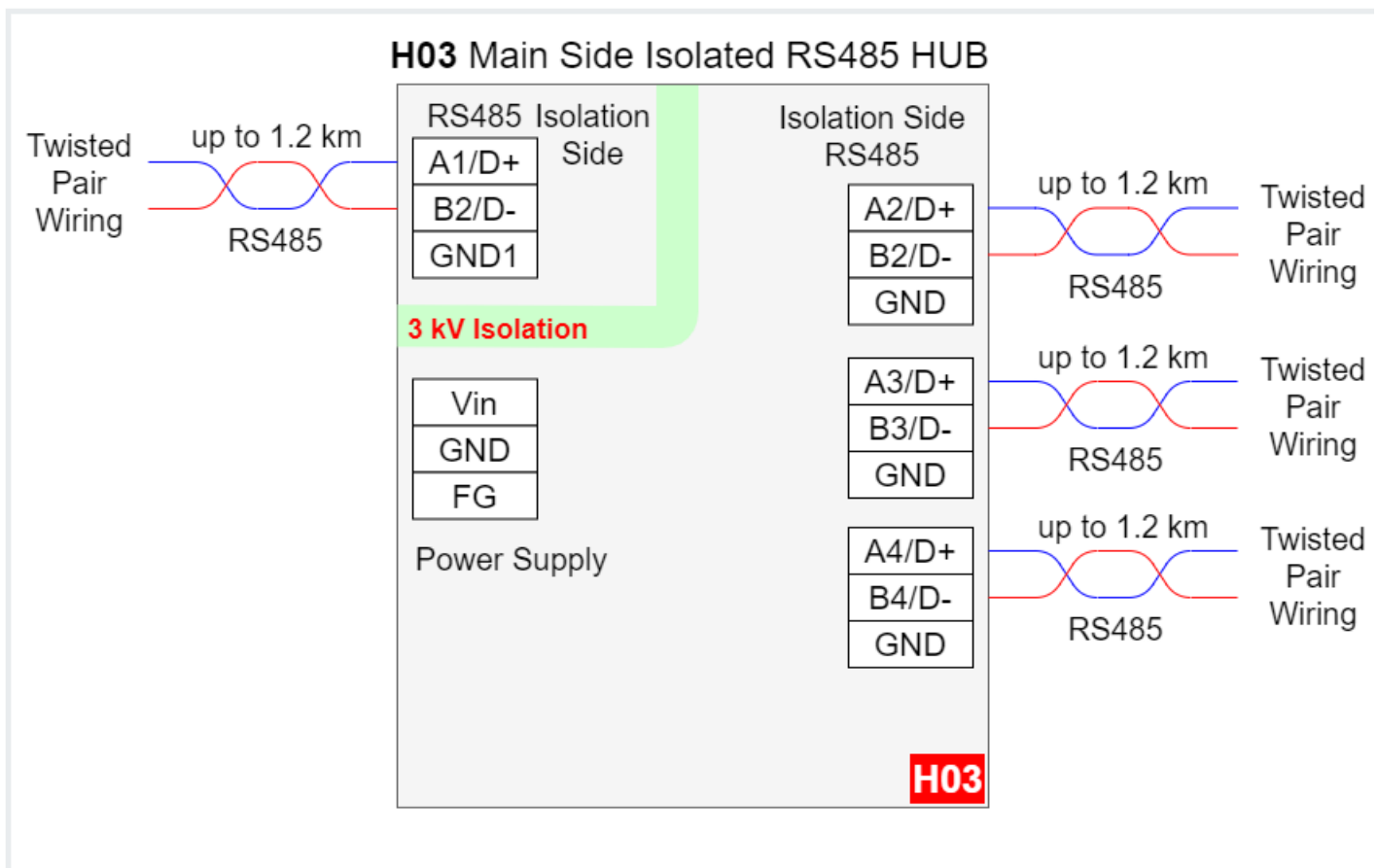


H02 - Branched Side Isolated RS485 HUB

H02 Branched Side Isolated RS485 HUB



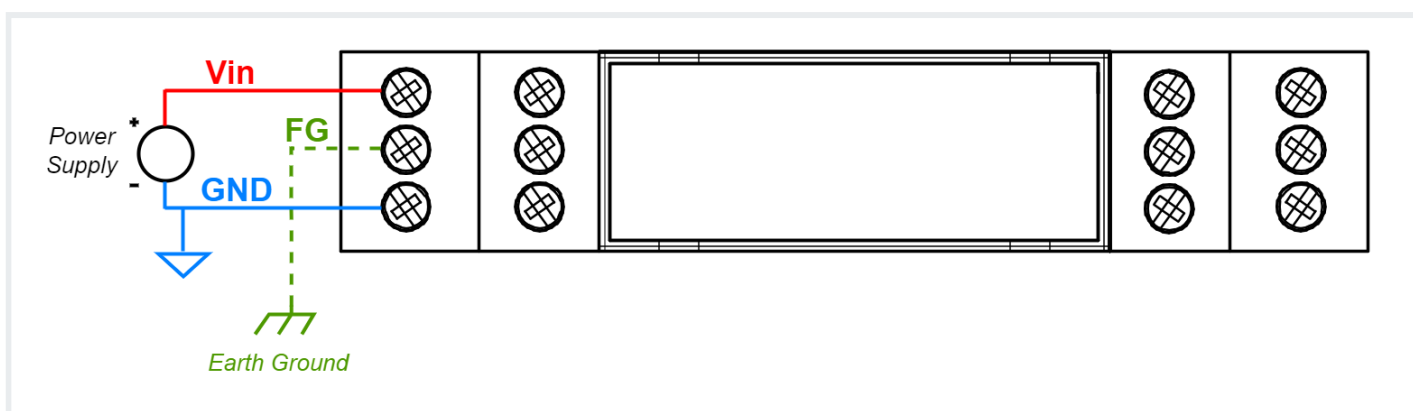
H03 - Main Side Isolated RS485 HUB



Frame ground FG

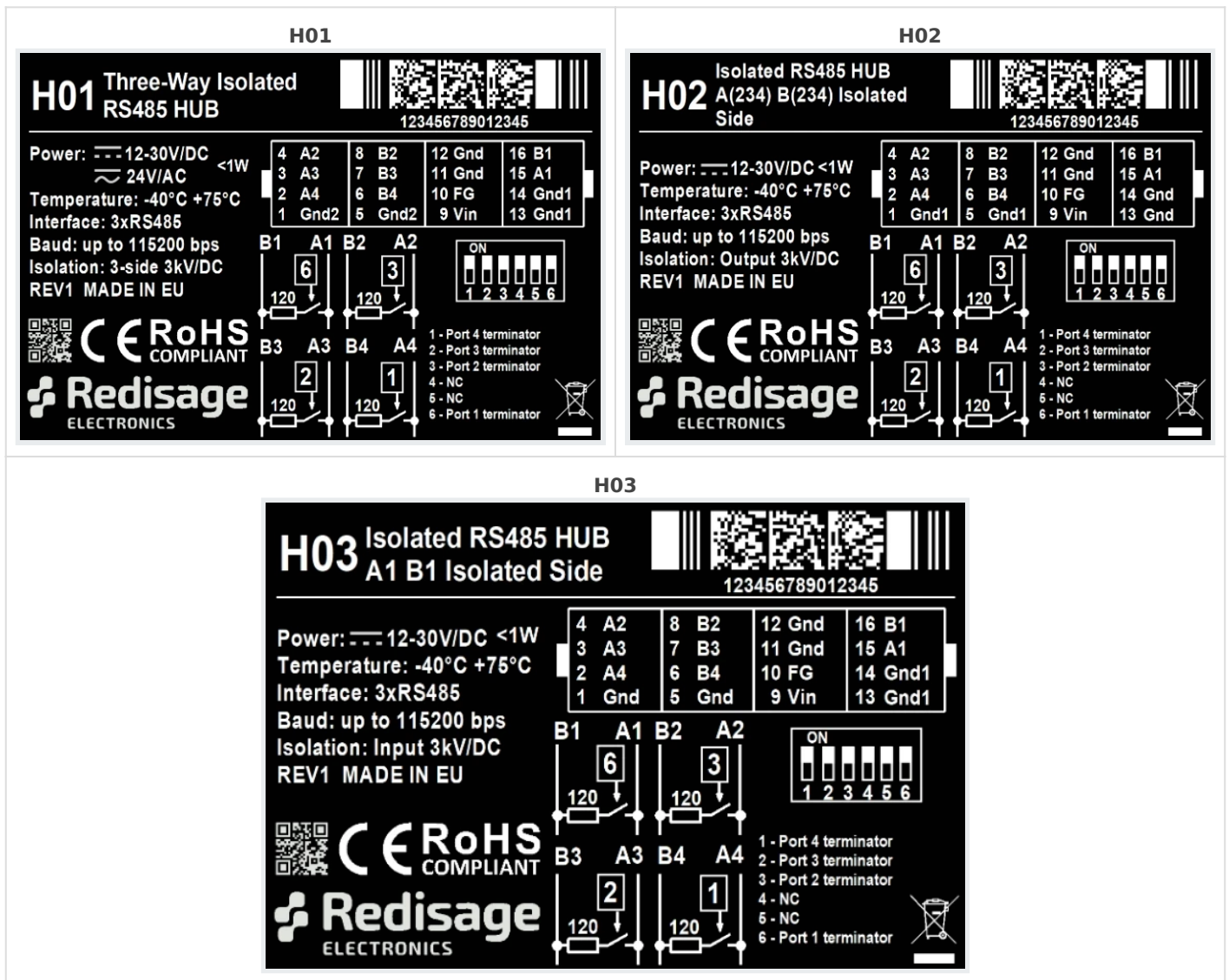
Electronic circuits are constantly prone to electrostatic discharge ESD. Redisaige Electronics modules feature a design for the frame ground terminal block FG. The frame ground provides a path for bypassing ESD, which provides enhanced static protection ESD abilities and ensures the module is more reliable. Connecting FG terminal block to the earth ground will bypass the ESD disturbances outside the device so will provide a better level of protection against ESD.

Frame Ground FG connection reference drawing is provided below.



If earth ground is not available FG can be left floating or it can be connected with the power supply GND.

Pin assignments

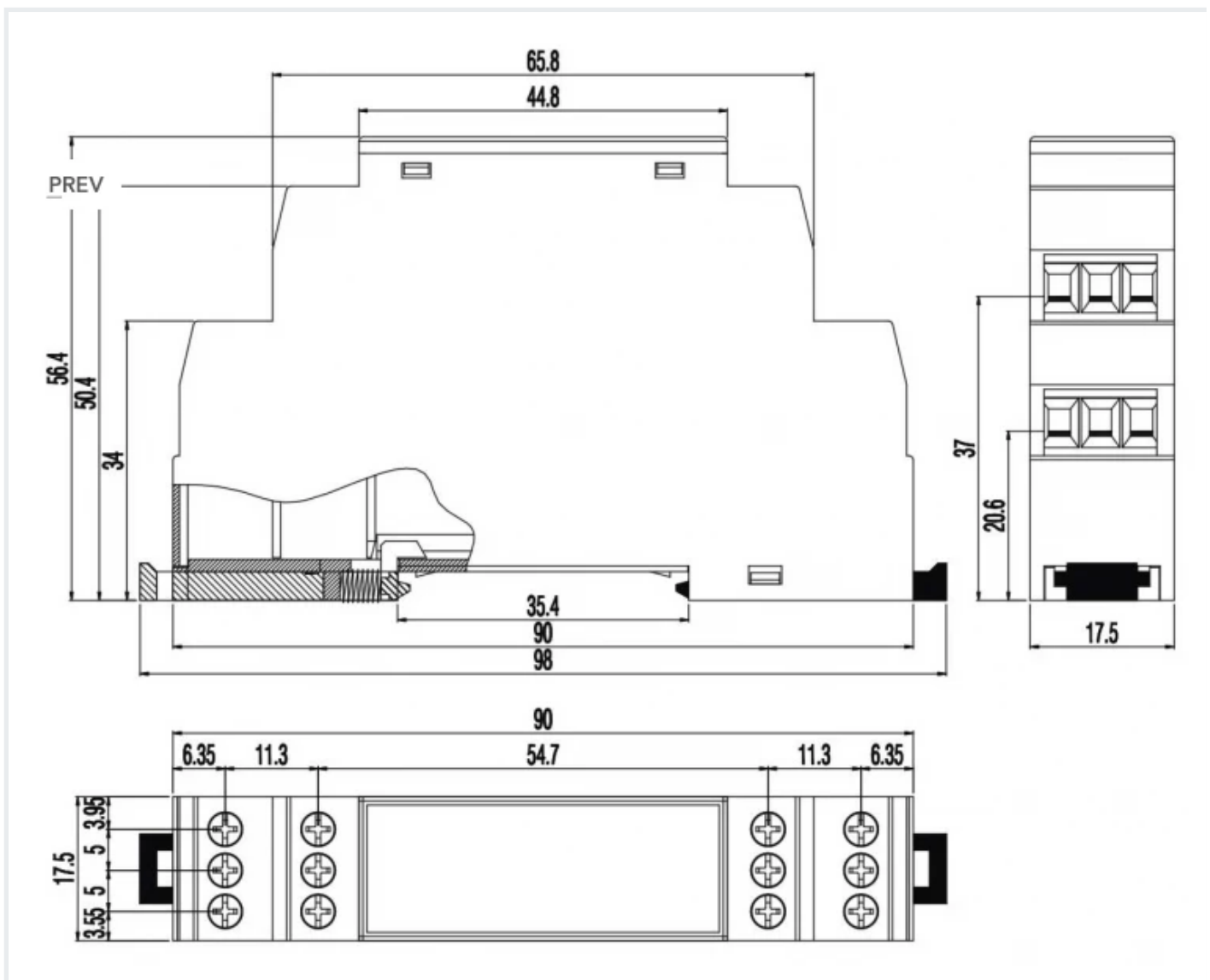


Enclosure dimensions

1U Module Enclosure

98 x 17.5 x 56.4

Units: mm



Additional notes

| Related information and links | | |
|--------------------------------------|-----------------------------|----------------------------------|
| Ordering information | Accessories | Similar products |

Products family sample photo



<https://redisage.com>

DISCLAMER NOTES

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Datasheet-ID:

SR-D

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