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
- 2000 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: 90x56.4x22.5 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 2 kV/DC galvanic isolation. Additionally, dedicated EMC protections will improve transmission quality and limit the impact of interference typical for an industrial environment.

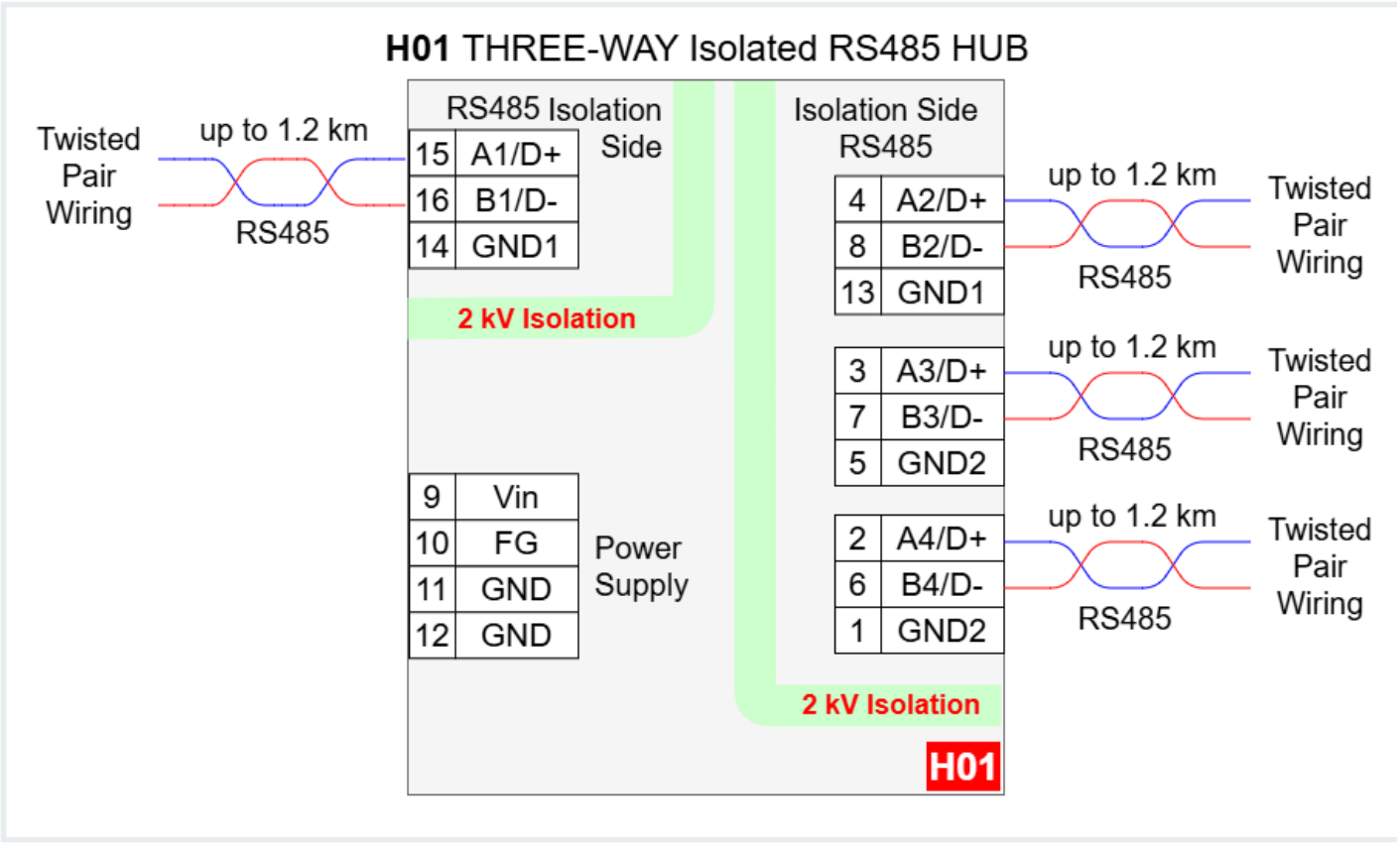
Specifications

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

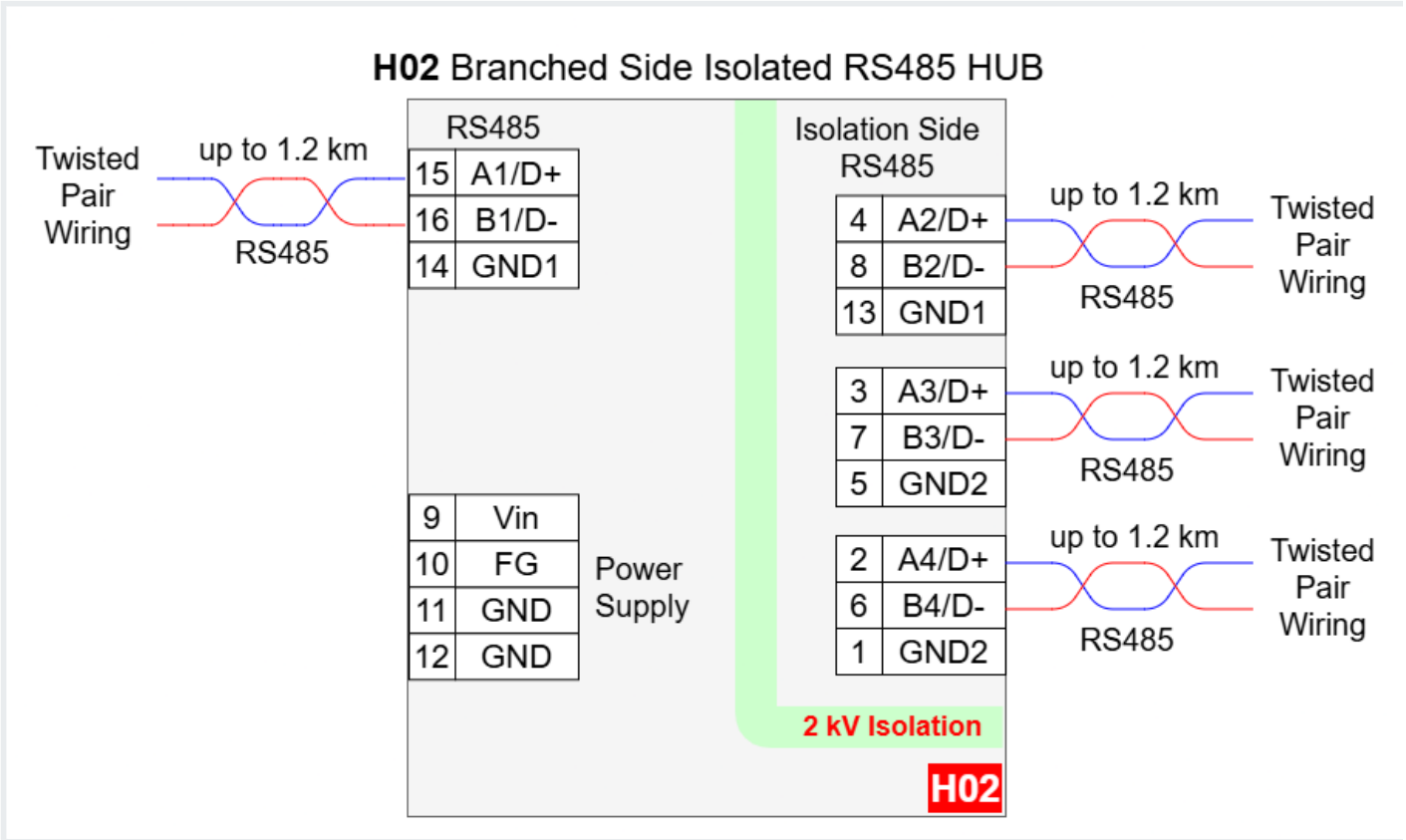
Redisage PN		H01	H02	H03			
Power	Voltage	12-30 VDC / 24 VAC	12-30 VDC				
	Power	< 1 W					
Frame ground protection		yes					
2000 VDC isolation		3-way	branched side	main side			
Baud rate		up to 115200 bps					
LED indicators		communication Tx, Rx and power					
RS485 termination		120 ohm manually 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, EMC, LVD					
Norms		61000-6-2 - Immunity standard for industrial environments 61000-6-4 - Emission standard for industrial environments					

Variants

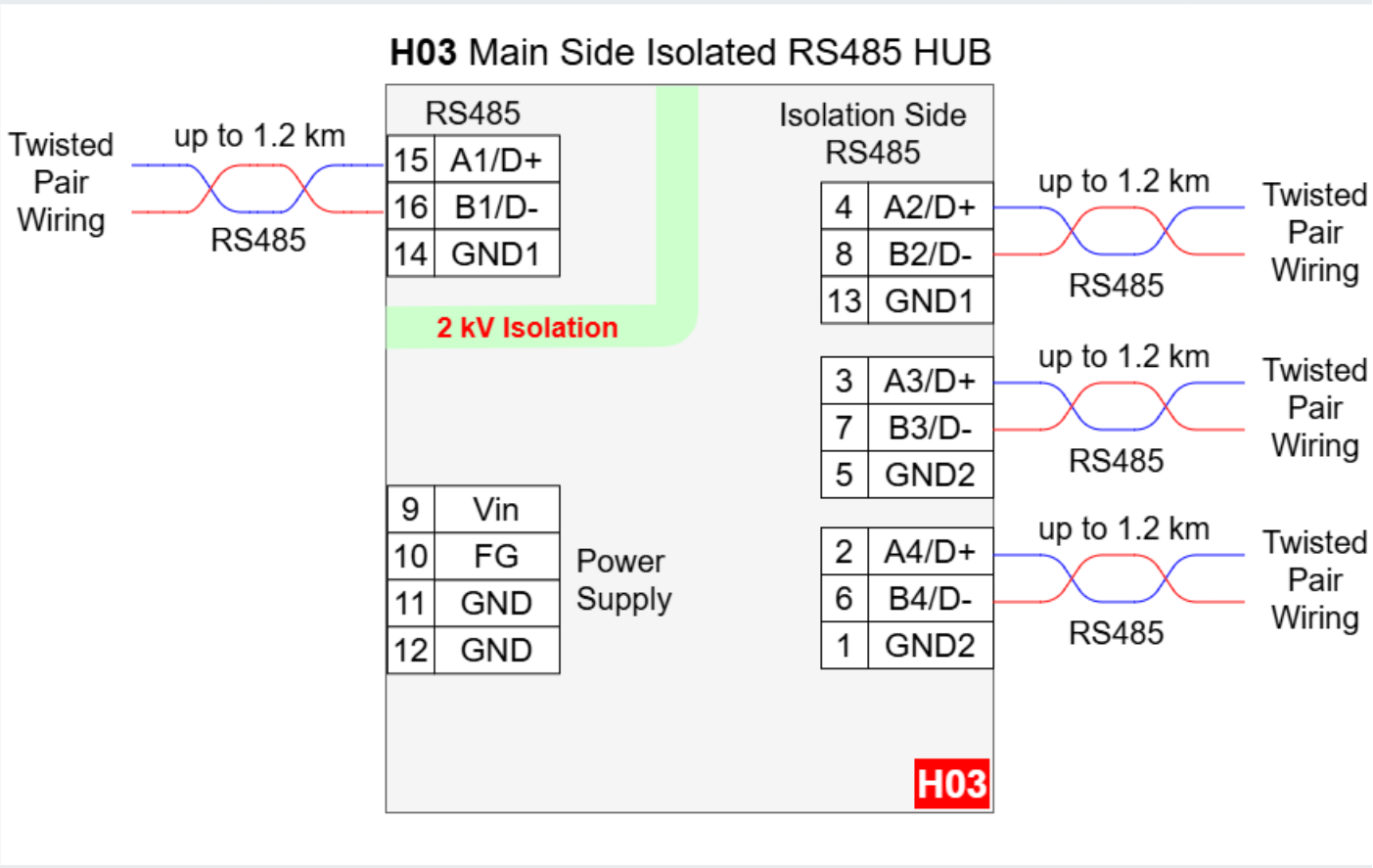
H01 - THREE-WAY Isolated RS485 HUB



H02 - Branched Side Isolated RS485 HUB



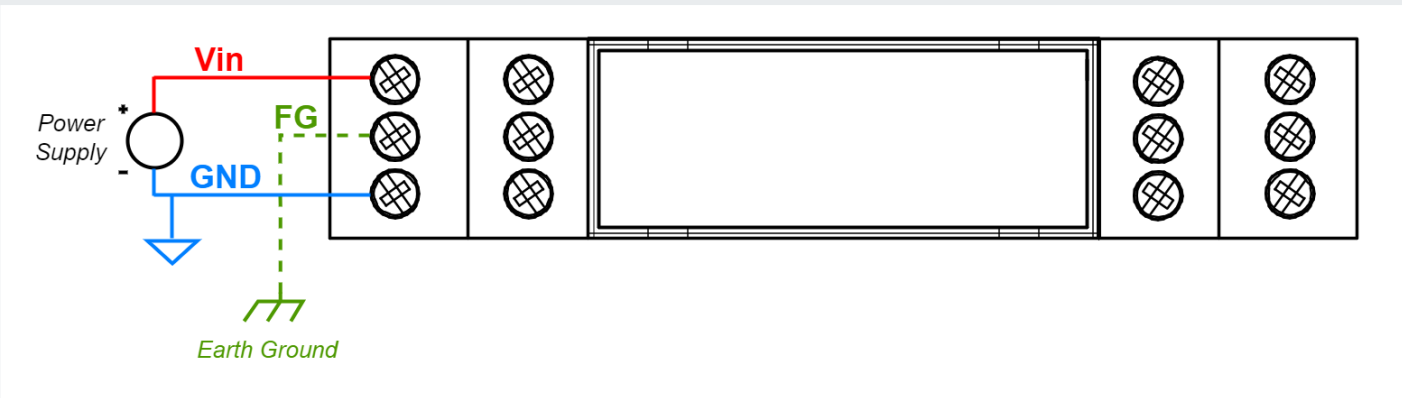
H03 - Main Side Isolated RS485 HUB



Frame ground FG

Electronic circuits are constantly prone to electrostatic discharge ESD. Redisage 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.

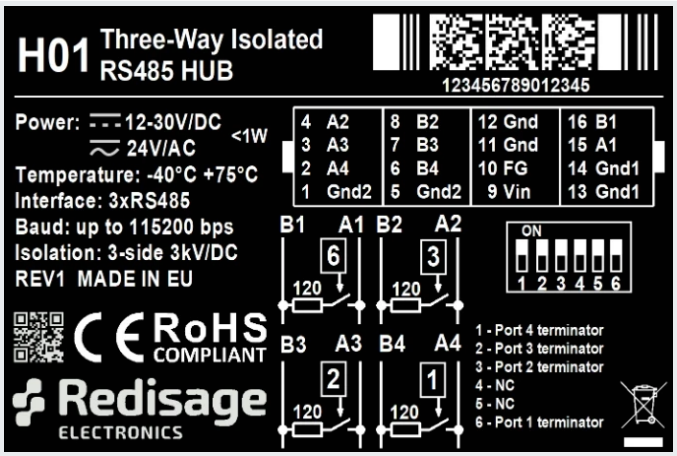
Frame Ground FG connection reference drawing is provided below.



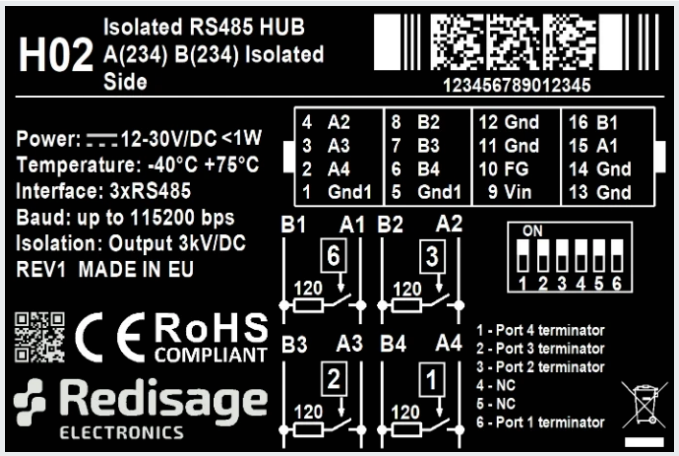
If earth ground is not available FG can be left floating or it can be connected with the power supply GND.

Pin assignments

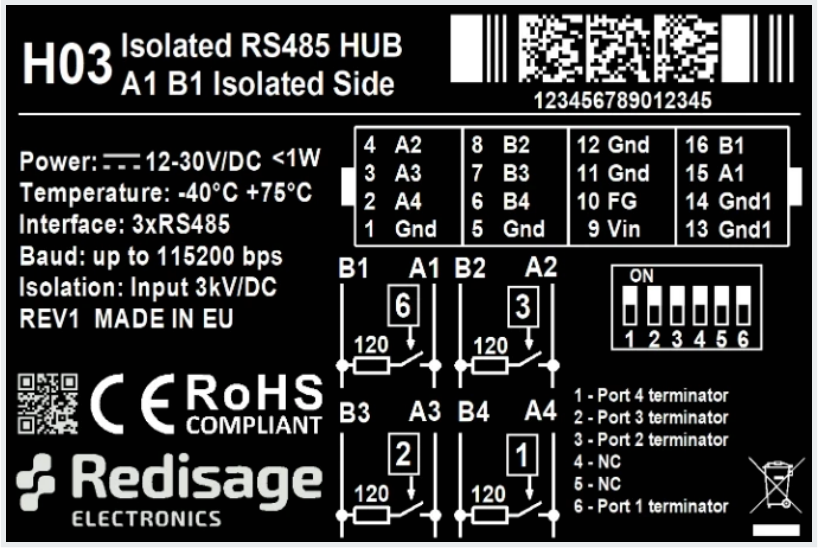
H01



H02

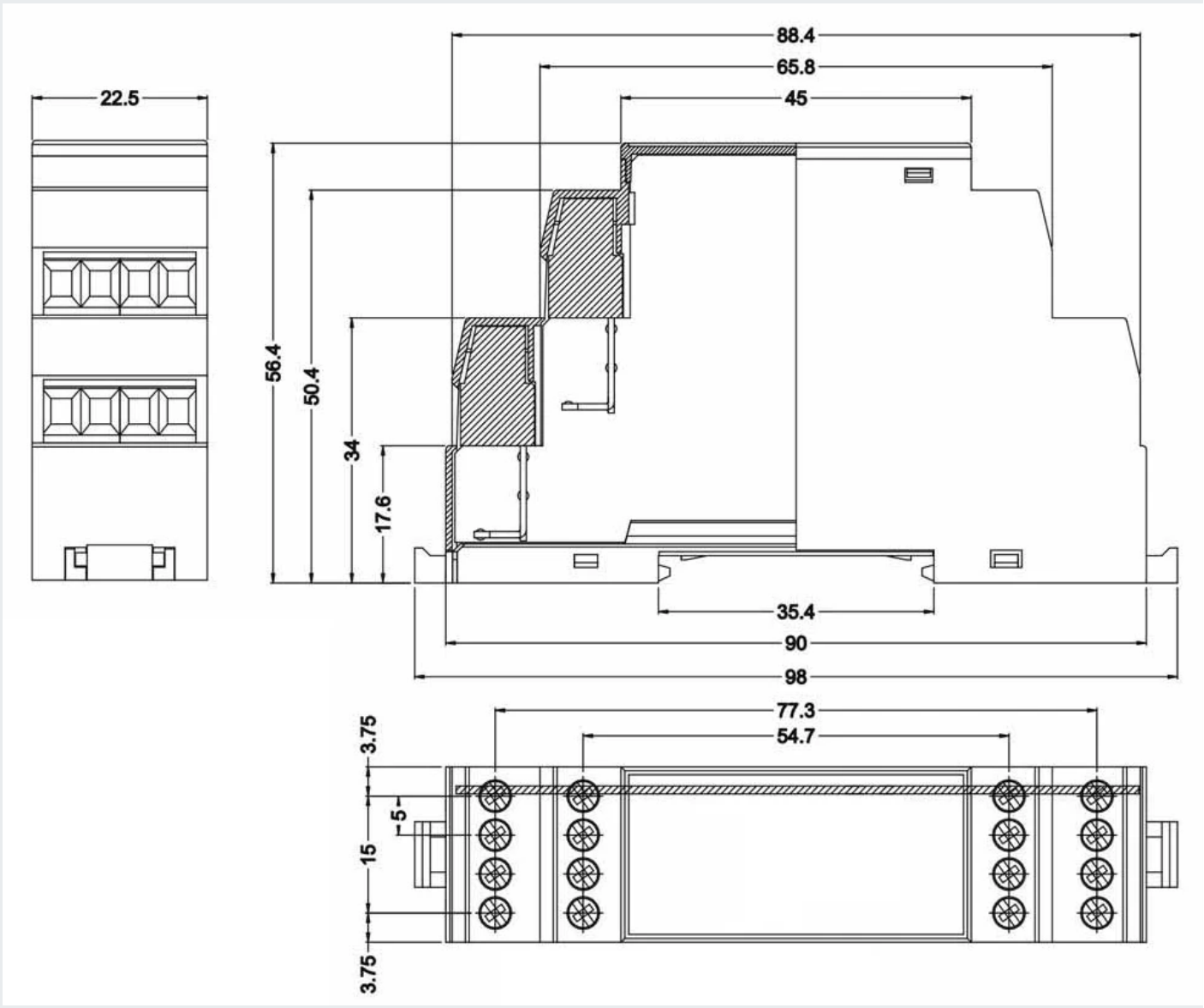


H03



Enclosure dimensions

2U Module Enclosure
98 x 22.5 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

Created 2024-04-03 11:41:10 UTC
Updated 2026-06-03 10:17:44 UTC by Michał Grabski