

MANUAL



RESI-DALI-PS



Great care has been taken in the creation of the text, illustrations and program examples in this manual. RESI Informatik & Automation GmbH company, the editors and publishers accept no responsibility for any inadvertent omission of entries or for typographical or other errors herein. Nor can they be held responsible or liable for consequences arising from any errors herein.

This manual may not be copied in part or whole in any form including electronic media without the written consent of RESI Informatik & Automation GmbH. Neither may it be transferred in any other language suitable for machines or data processing facilities. Also rights for reproduction through lecture, radio or television transmission are reserved.

This documentation as well as the corresponding software are subject to copyright law and protected by RESI company. All rights reserved.

© Copyright 2009-2015 RESI Informatik & Automation GmbH

RESI Informatik & Automation GmbH	Datum:	10.02.15	Kunde:		Seiten
	Version:	03.40			
	Bearbeitet von:	DI HC SIGL	Titel:	Manual RESI-DALI-PS	
	Geprüft von:	DI HC SIGL			11
	Geprüft von:	-	Projekt:		

1 History

Date	Editor	Description
14.02.15	DI HC Sigl	First version

Proprietary data, company confidential. All rights reserved.
Confé à titre de secret d'entreprise. Tous droits réservés.
Comunicado como secreto empresarial. Reservados todos os direitos.
Confiado como secreto industrial. Nos reservamos todos los derechos.

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere für den Fall der Patenterteilung oder GM-Eintragung.

2 Contents

1	HISTORY	2
2	CONTENTS	3
3	IMPORTANT SECURITY NOTES	4
4	GENERAL INFORMATION	6
5	MOUNTING AND CONNECTIONS	8
5.1	ASSEMBLING	8
5.2	CLAMPS & LEDS.....	9
5.3	WIRING DIAGRAM.....	10
6	SPECIFICATIONS	11
6.1	DIMENSIONS	11

Proprietary data, company confidential. All rights reserved.
 Confie à titre de secret d'entreprise. Tous droits réservés.
 Comunicado como secreto empresarial. Reservados todos os direitos.
 Confiado como secreto industrial. Nos reservamos todos los derechos.

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere für den Fall der Patenterteilung oder GM-Eintragung

3 IMPORTANT SECURITY NOTES



Danger to life through electrical current!

Only skilled personal trained in electro-engineering should perform the described steps in the following chapters. Please observe the country specific rules and standards. Do not perform any electrical work while the device is connected to power.

Pay attention to the following rules:

1. Disconnect the system from power
2. Secure the system against automatic power on
3. Check that the system is de-energized
4. Cover other energized parts of the system

IMPORTANT HINT: Before you start with the installation and the initial setup of the device, you have to read this document and the attached installation guide and the actual manual for the device very carefully. You have to follow all the herein given information very accurate!

- Only authorized and qualified personnel are allowed to install and setup the device!
- The connection of the device must be done in de-energized state!
- Do not perform any electrical work while the device is connected to power!
- Disable and secure the system against any automatic restart or power on procedure!
- The device must be operated with the defined voltage level!
- Supply voltage jitters must not exceed the technical specifications and tolerances given in the technical manuals for the product. If you do not obey this issue, the proper performance of the device cannot be guaranteed. This can lead to fail functions of the device and in worst case to a complete breakdown of the device!
- You have to obey the current EMC regulations for wiring!
- All signal, control and supply voltage cables must be wired in a way, that no inductive or capacitive interference or any other severe electrical noise disturbance may interfere with the device. Wrong wiring can lead to a malfunction of the device!
- For signal or sensor cables you have to use shielded cables, to avoid damages through induction!
- You have to obey and to apply the current safety regulations given by the ÖVE, VDE, the countries, their control authorities, the TÜV or the local energy supply company!
- Obey country-specific laws and standards!
- The device must be used for the intended purpose of the manufacturer!
- No warranties or liabilities will be accepted for defects and damages resulting from improper or incorrect usage of the device!
- Subsequent damages, which results from faults of this device, are excluded from warranty and liability!
- Only the technical data, wiring diagrams and operation instructions, which are part to the product shipment are valid!
- The information on our homepage, in our datasheets, in our manuals, in our catalogues or published by our partners can deviate from the product documentation and is not necessarily always actual, due to constant improvement of our products for technical progress!
- In case of modification of our devices made by the user, all warranty and liability claims are lost!
- The installation has to fulfill the technical conditions and specifications (e.g. operating temperatures, power supply, ...) given in the devices documentation!
- Operating our device close to equipment, which do not comply with EMC directives, can influence the functionality of our device, leading to malfunction or in worst case to a breakdown of our device!

- Our devices must not be used for monitoring applications, which solely serve the purpose of protecting persons against hazards or injury, or as an emergency stop switch for systems or machinery, or for any other similar safety-relevant purposes!
- Dimensions of the enclosures or enclosures accessories may show slight tolerances on the specifications provided in these instructions!
- Modifications of this documentation is not allowed!
- In case of a complaint, only complete devices returned in original packing will be accepted!

Proprietary data, company confidential. All rights reserved.
Confé à titre de secret d'entreprise. Tous droits réservés.
Comunicado como segredo empresarial. Reservados todos os direitos.
Confiado como secreto industrial. Nos reservamos todos los derechos.

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadenersatz. Alle Rechte vorbehalten, insbesondere für den Fall der Patenterteilung oder GMZ-Eintragung

4 General Information

A DALI network consist out of a maximum of 64 lamp ballasts with DALI interface, a DALI power supply and at least one DALI master to send commands to the DALI lamps (e.g. Our RESI-DALI-MOBBUS or RESI-DALI-ASCII converter fulfill this task). Out power supply RESI-DALI-PS offers true 200mA to supply the DALI bus line with power.

- DALI power supply for a DALI lamp system with up to 64 DALI ballasts
- Maximum of 200mA load on the DALI bus
- Primary power supply: 24V=
- Primary power consumption: <5W
- DALI power supply and 24Vdc power supply are galvanically insulated
- Mountable onto a EN50022 DIN rail

Type	Description	Voltage	Power	Weight
RESI-DALI-PS	Power supply for DALI system with 24V= input voltage and 200mA output current for up to 64 DALI ballasts	24 V=	<5W	65 g

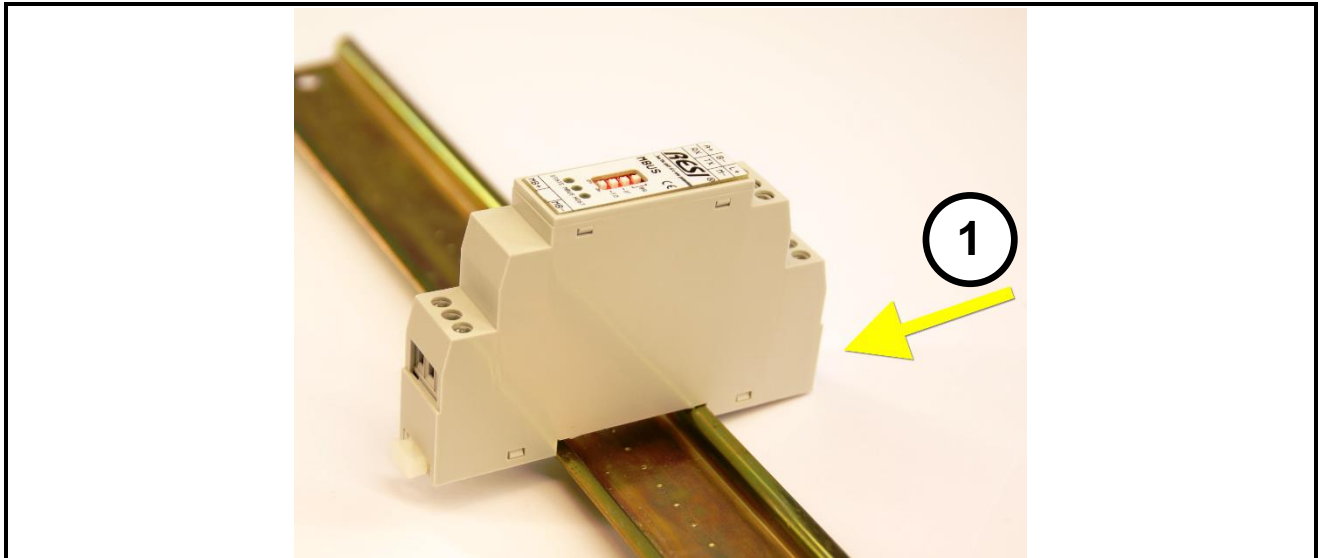
Technical Data			
Power supply			
Supply voltage	24 V= +/-10%	Storage temperature	-20...85 °C
Power LED	Yes	Operating Temperature	0...60°C
Power consumption	<5W	Humidity	25...90 % rH non-condensing
		Protection Class	IP20 (EN 60529)
		Dimensions LxWxH	17,5mm x 90mm x 58mm
		Weight	65g
		Mounting	on DIN EN50022 rail
DALI power supply			
DALI output voltage	Max. 15Vdc, typ. 14Vdc	DALI bus cabling	
DALI output current	Max. 200mA	Cable type	JYStY 2 x 1,5mm ²
Cable connection	Via clamps		
Galvanic insulation to primary power supply			
LED indicator	Yes		
Clamps			
Clamp wire cross section	Max. 1,5 mm ²	CE conformity	Yes
Tightening torque	Max. 0.5Nm		

5 Mounting and Connections

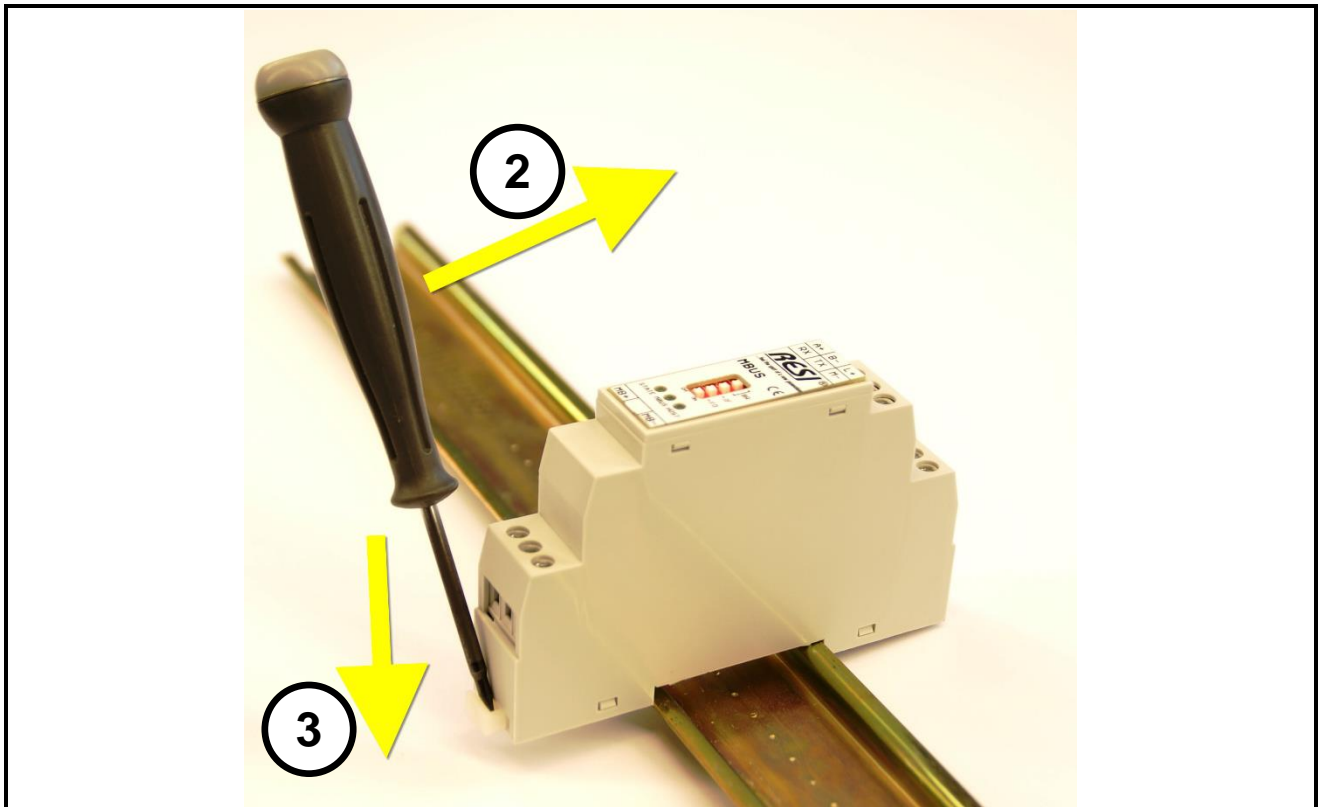
5.1 Assembling

Our RESI-DALI-MODBUS converters and our RESI-DALI-PS power supplies are designed for mounting on a 35mm DIN-EN50022 rail. Please note, that there are symbol photos used in the mounting pictures below.

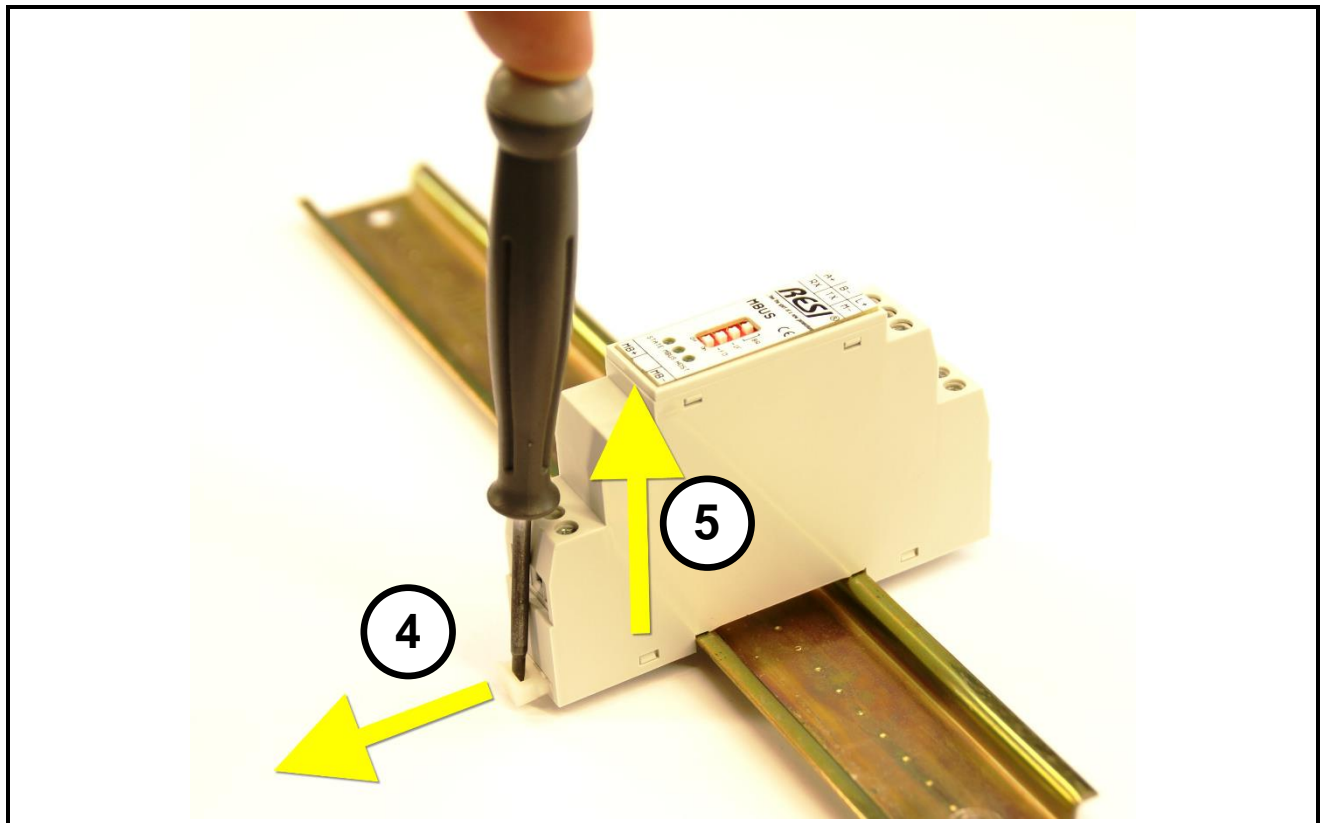
At first, put the converter with the top side on the DIN rail (1).



Then open the clamp lever on the bottom side with a screw driver (2) and press the device on the DIN rail (3). Release the clamp lever. The module is now placed correctly on the DIN rail.



To dismount the module from the DIN rail first open the clamp lever with a screwdriver on the bottom side (4). Hold the clamp lever opened while you lift the module from the DIN rail (5). Then remove the converter from the bar with while pulling it on the top side.



5.2 Clamps & LEDs

	RESI-DALI-PS
L+	Power supply
M-	L+: 24 V= M-: Ground
D+ D-	Interface to DALI devices
POWER	Power-LED, is ON when the power supply has input voltage
ERR	Error LED of Power supply, is short on, when a DALI telegram is on the bus, when permanent on, the power supply has a malfunction or there is a bus error in the DALI system
DALI	DALI activity LED, is permanent on. When transmitting a DALI telegram the LED switches off of a few milliseconds.

Table: Description of connectors of the RESI-DALI-PS module

5.3 Wiring diagram

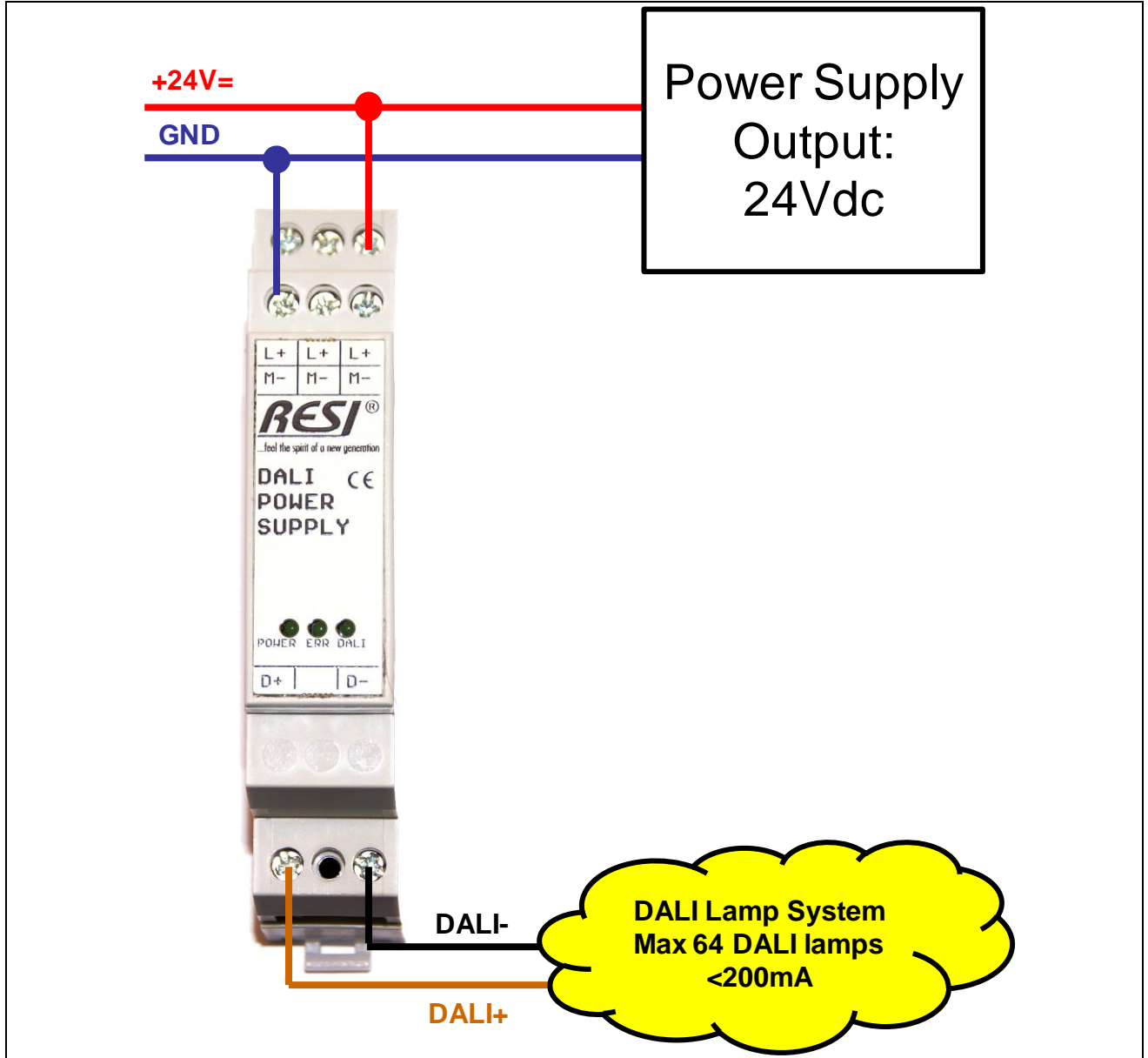


Illustration: Wiring diagram of the RESI-DALI-PS power supply

Proprietary data, company confidential. All rights reserved.
 Confie à titre de secret d'entreprise. Tous droits réservés.
 Comunicado como secreto empresarial. Reservados todos os direitos.
 Confiado como secreto industrial. Nos reservamos todos los derechos.

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit ausdrücklich zugestanden. Alle Rechte vorbehalten, insbesondere für den Fall der Patenterteilung oder GM-Eintragung.

6 Specifications

6.1 Dimensions

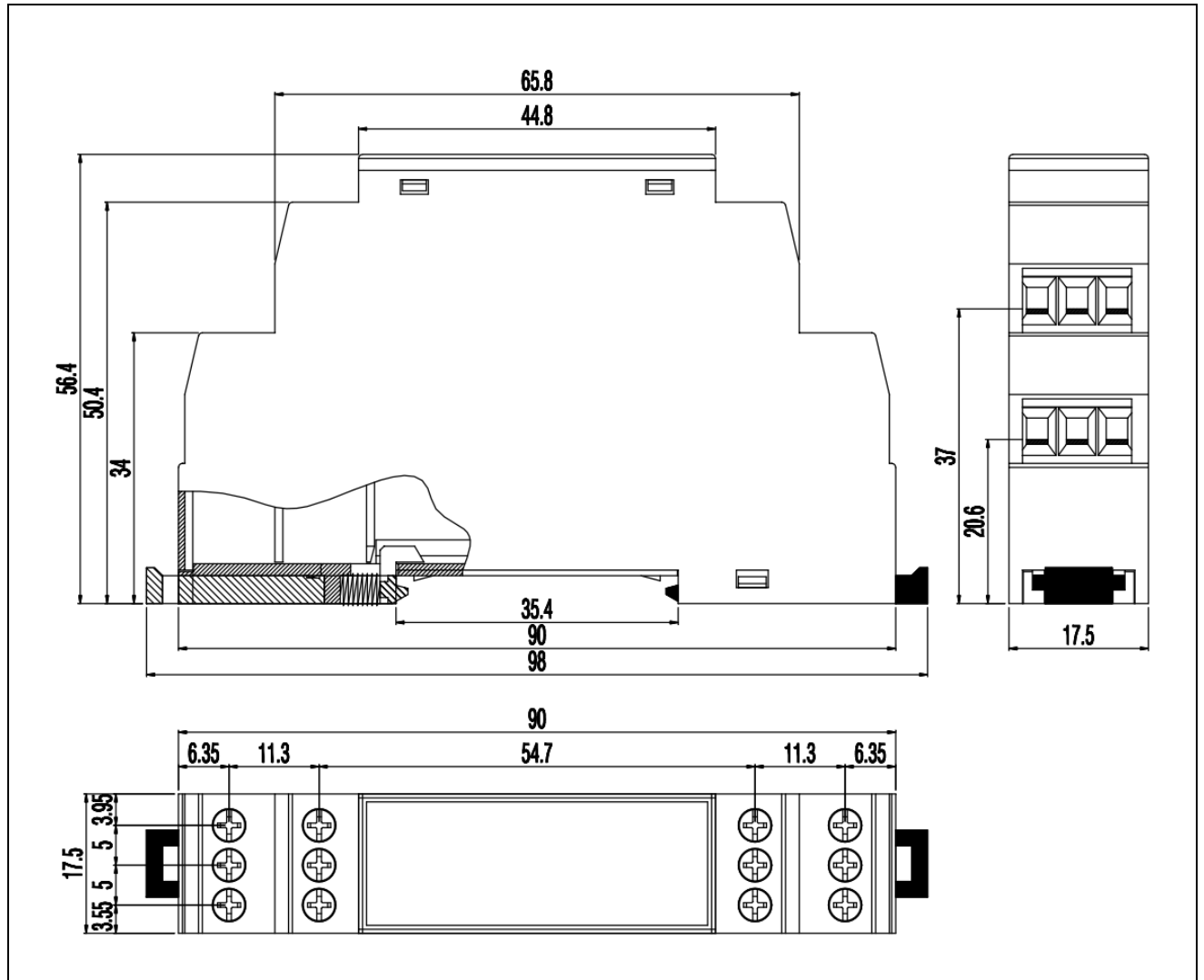


Illustration: dimension illustration in mm

Dimensions	
Enclosure dimensions L x W x H (mm)	17,5 x 90 x 58
Weight	60 g
Colour	Grey RAL7035
Material	PA - UL 94 V0
Protection class	IP20 based on DIN 40050/EN 60529

Table: Data of enclosure