

DRPS8-24-40

DIN RAIL POWER SUPPLY
MODULE

Mounting and operating instructions



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SAFETY AND PRECAUTIONS



Read all the information, the datasheet, Modbus map, mounting and operating instructions and study the wiring and connection diagram before working with the product. For personal and equipment safety, and for optimum product performance, make sure you entirely understand the contents before installing, using, or maintaining this product.



For safety and licensing (CE) reasons, unauthorised conversion and /or modifications of the product are inadmissible.



The product should not be exposed to abnormal conditions, such as extreme temperatures, direct sunlight or vibrations. Long-term exposure to chemical vapours in high concentration can affect the product performance. Make sure the work environment is as dry as possible; avoid condensation.



All installations shall comply with local health and safety regulations and local electrical standards and approved codes. This product can only be installed by an engineer or a technician who has expert knowledge of the product and safety precautions.



Avoid contacts with energised electrical parts. Always disconnect the power supply before connecting, servicing or repairing the product.



Always verify that you apply appropriate power supply to the product and use appropriate wire size and characteristics. Make sure that all the screws and nuts are well tightened and fuses (if any) are fitted well.



Recycling of equipment and packaging should be taken into consideration and these should be disposed of in accordance with local and national legislation / regulations.



In case there are any questions that are not answered, please contact your technical support or consult a professional.

PRODUCT DESCRIPTION

DRPS8-24-40 are 24 VDC / 40 W DIN rail mounted power supply modules with two RJ45 connectors and terminal blocks for output voltage connection. They are Power over Modbus compatible and have a wide supply voltage range.

ARTICLE CODE

Article code	Input voltage
DRPS8-24-40	85–264 VAC / 50–60 Hz

INTENDED AREA OF USE

- Supply for 24 VDC articles such as sensors, controllers and user interfaces

TECHNICAL DATA

- Input voltage: 85–264 VAC / 50–60 Hz
- Output voltage: 24 VDC
- Output current rating I_{max} 1,67 A
- Protections: overvoltage and overload (hiccup mode)
- Output voltage green LED indication
- Protection class: IP30
- Enclosure: PC/ABS blend, colour: grey, RAL7035
- Storage temperature: -30–70 °C
- Operating ambient conditions:
 - temperature range: -30–40 °C
 - rel. humidity: 20–90 % rH (non-condensing)

STANDARDS

- Low Voltage Directive 2014/35/EC
- EMC Directive 2014/30/EC:
- EN 55022:2010 Amendment AC:2011 to EN 55022
 - EN 55024:2010
 - EN 61000-3-2:2014
 - EN 61000-3-3:2013
- RoHs Directive 2011/65/EC



WIRING AND CONNECTIONS

Wiring and connections	
L	Supply voltage, line: 85–264 VAC / 50–60 Hz
N	Supply voltage, neutral: 85–264 VAC / 50–60 Hz
Output 1	24 VDC Output voltage connection
	GND Ground for output voltage connection
Output 2	24 VDC Output voltage connection
	GND Ground for output voltage connection
Output 3	RJ45 sockets for output voltage connection
Output 4	
RJ45	
24 VDC	Output voltage 24 VDC
GND	Ground
A	Modbus RTU communication, signal A
/B	Modbus RTU communication, signal /B

MOUNTING INSTRUCTIONS IN STEPS

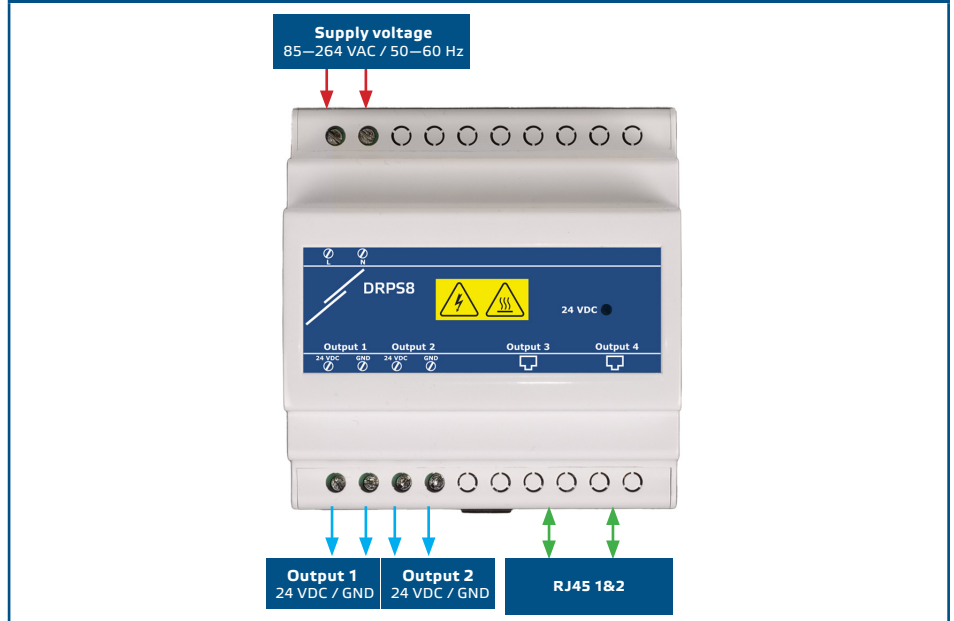
Before you start mounting the DRPS8 power supply module, read carefully “**Safety and Precautions**”. Follow these steps:

- Slide the unit along the guides of a standard 35 mm DIN rail and fix it to the rail by means of the black locking clip on the enclosure. Mind the correct position and mounting dimensions shown in **Fig. 1 Mounting dimensions** and **Fig. 2 Mounting position**.

Fig. 1 Mounting dimensions	Fig. 2 Mounting position

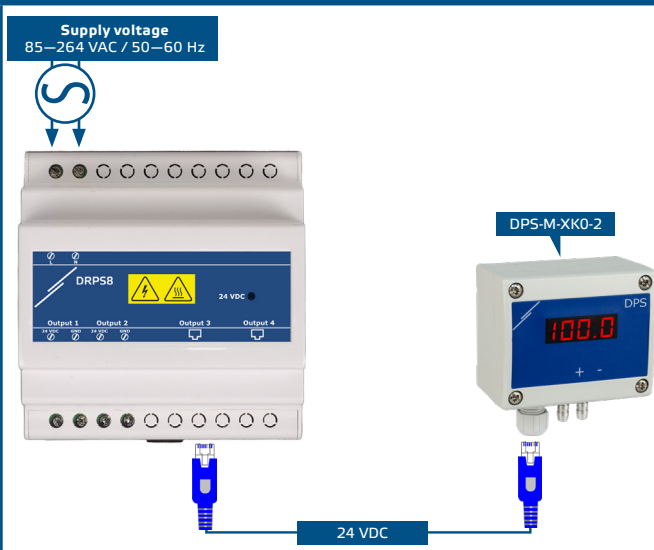
- Connect the mains supply to L and N (see **Fig. 3**) adhering to the information in section “**Wiring and connections**” above.

Fig. 3 Wiring diagram

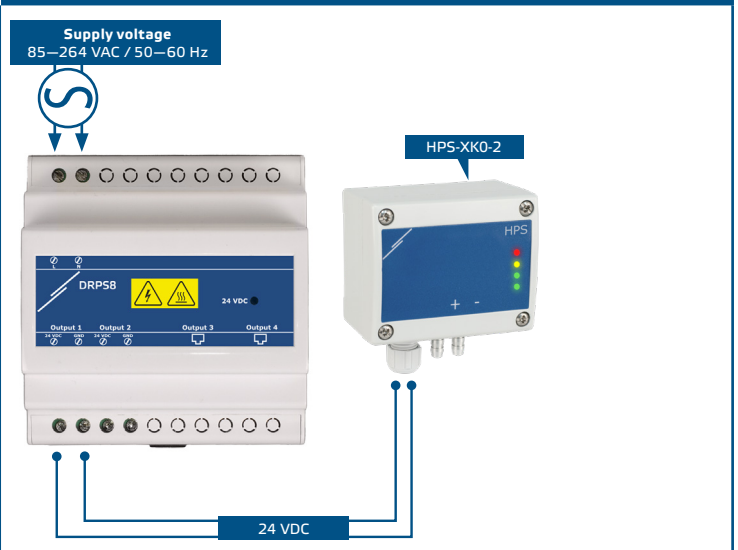


3. Plug in the RJ45 sockets and / or use the terminal blocks for output voltage connection (see **Example 1** and **Example 2** below).

Example 1: Connections via RJ45 connectors



Example 2: Connections via terminal block



4. Apply the power supply.

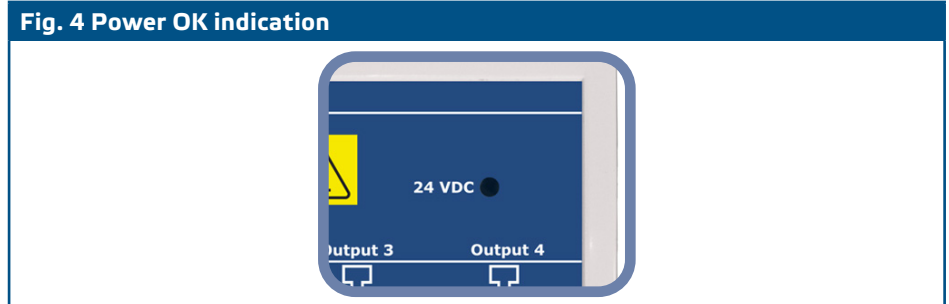
ATTENTION

The terminal block for the output voltage connection (+24 V, GND) duplicates the RJ45 connectors (parallel circuit). To calculate the total load, add all connected charges.

VERIFICATION OF INSTALLATION

After switching on the power supply, the green LED should be ON (see **Fig. 4 Power OK indication**). If this is not the case, check the connections.

Fig. 4 Power OK indication



ATTENTION

High voltage! The unit is supplied with electrical energy at voltages high enough to inflict personal injury or threat to health. Avoid contact with the unit when in operation!

ATTENTION

Hot surface! The surface of the unit may become hot and cause burns if touched. Avoid contact with the unit when in operation!

ATTENTION

Disconnect and confirm that there is no live current flowing to the unit before servicing.

ATTENTION

Avoid direct sunlight!

TRANSPORT AND STOCK KEEPING INFORMATION

Avoid shocks and extreme conditions. Stock in original packing.

WARRANTY INFORMATION AND RESTRICTIONS

Two years from the delivery date against defects in manufacturing. Any modifications or alterations to the product after the date of publication relieve the manufacturer of any responsibilities. The manufacturer bears no responsibility for any misprints or mistakes in this data.

MAINTENANCE

In normal conditions this product is maintenance-free. If soiled, clean with a dry or damp cloth. In case of heavy pollution, clean with a non-aggressive product. In these circumstances the unit should be disconnected from the supply. Pay attention that no fluids enter the unit. Only reconnect it to the supply when it is completely dry.