

Safety Instructions

Read instructions!

Before working with the device, read these instructions carefully. Make sure you have understood all information described in this document.

Warning!

Risk of electric shock

External power supplies must be installed and put into service by qualified personnel.



Ensure compliance with the relevant regulations.

Ground the controller.

Disconnect both AC and battery power supply before working on the controller.

Caution!

Risk of explosion of lead acid battery

The battery can explode if it is replaced incorrectly.



Replace only with the same type as recommended by the manufacturer.

Dispose used batteries according to the battery manufacturer's instructions.

Caution!

Risk of fire

Before disposing a used battery, review the battery warning label. DO NOT disassemble, expose to extreme heat, crush or puncture, short circuit external contacts, or dispose of in fire or water.



Warning!

Danger of electrocution



Do not touch exposed components when connected to the power supply.

Always disconnect the power supply before making wiring changes.

Notice!

Risk of damage to equipment

Protect the hardware from electrostatic discharge by observing ESD instructions before unpacking of touching connectors of electronics.



Always switch off power of the device before modifying the installation.

Do not connect or disconnect plug connectors, data cables, or screw connectors while power is on.

Do not overload or connect a short-circuit load.



Old electrical and electronic appliances

Electrical or electronic devices that are no longer serviceable must be collected separately and sent for environmentally compatible recycling (in accordance with the European Waste Electrical and Electronic Equipment Directive).

To dispose of old electrical or electronic devices, you should use the return and collection systems put in place in the country concerned.

Important Information

Remarks

This hardware is part of a security system. Access should be limited to authorized persons only.

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Robert-Bosch-Ring 5

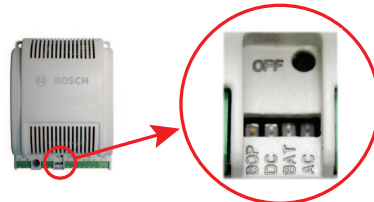
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Internet

If you are interested in further information on this product or information on other products, please consult our website at <http://www.boschsecurity.com>.

System Overview

Functions



The PSU-60 includes the following LED voltage status indicators:

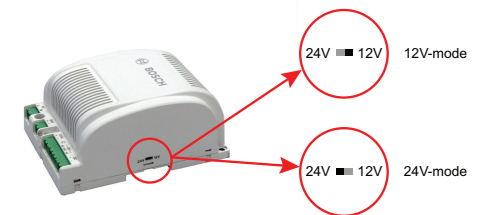
- If the input voltage (AC) is greater than 85 VAC, the green LED lights up next to AC and the AC relay is closed.

- If the output voltage (DC) is greater than 12 V or 24 V (depending on the mode), the green LED lights up next to DC and the DC relay is closed.
- If the battery voltage is greater than 11 V or 22 V (depending on the mode), the green LED lights up next to BAT and the BAT relay is closed.

The following applies to the battery mode:

- If the input voltage is less than 85 VAC, the power supply switches to "Battery operation" mode and the yellow LED lights up next to BOP.
- The OFF button is only activated in "Battery operation" mode. Press this button to switch off the PSU-60.
- Restart is only possible when the alternating current supply is restored.

- This power supply unit can be switched to 12 V or 24 V mode. To do this, the switch must be configured as shown below, when there is **no voltage input** on the power supply.

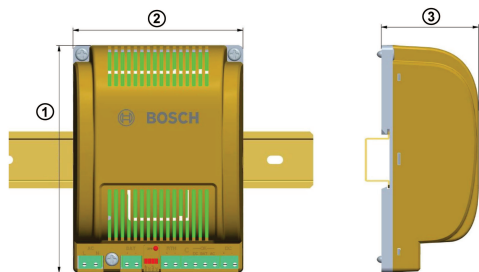


Notice!

The power supply must only be installed by qualified personnel.

Installation

The PSU-60 can be mounted on rails and installed in the AMC housing. The PSU-60 dimensions are shown in the diagrams below:



1	140 mm (5.51 in.)	3	60 mm (2.36 in.)
2	105 mm (4.13 in.)		

Technical data

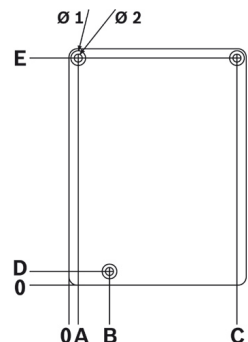
Output values

Output voltage:	12V mode	10-15V
	24V mode	20-30V
Output current:	12V mode	max. 5A
	24V mode	max. 2.5A
Output power:		60 W (constant)
Over voltage protection at:	12V mode	16.5V
	24V mode	33V

Input values

Input voltage:	AC 100-240V~, 50-60Hz
Input current (AC):	Max. 2A, to the specified max. load at 85 VAC

Alternatively, it can be screw-mounted to the wall using pre-drilled holes of the housing.



Ø 1	8.6 mm (0.34 in.)	C	99.5 mm (3.92 in.)
Ø 2	4.5 mm (0.18 in.)	D	8.1 mm (0.32 in.)
A	5.5 mm (0.22 in.)	E	134.5 mm (5.30 in.)
B	24 mm (0.94 in.)		

* Include tolerances (in mm) 0 – 5 mm = ±0.10 30 – 100 mm = ±0.30
5 – 30 mm = ±0.20 100 – 500 mm = ±0.50

Input protection in case of a failure, the primary voltage is cut off from the power supply by a fuse.

Battery information

Output voltage:	12V mode	10-15V
	24V mode	20-30V
Output current for charging the battery:	12V mode	700mA *
	24V mode	350mA †

* according to battery capacity 14Ah

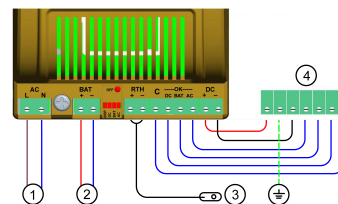
† according to battery capacity 7Ah

Periodic battery checks – approx. every 5 minutes.

Protection from total battery discharge:	12V mode	9.5V
	24V mode	19V

The power supply switches to normal operation as soon as the AC incoming voltage has normalized.

The following diagram shows the connections to the AMC.



1	AC power	3	Temperature sensor
2	Battery connection	4	Power supply to AMC wiring connection *

* For cables exceeding 3m, it is recommended to use a cylindrical Ferrite Core:

- impedance @ 100 MHz = 90 or 140 Ω
- min. inner diameter = 7.0 ± 0.8 mm
- 100 MHz > Freq > 25 MHz

Temperature equalization is performed by an external NTC resistor.

Reverse polarity protection.

Environment variables

Working temperature:	-20°C to 60°C (-4°F to 140°F)
Storage temperature:	-40°C to 85°C (-40°F to 185°F)
Relative humidity:	5% to 95%

PSU-60 - AMC Power Supply Unit APS-PSU-60



en Quick Installation Guide

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