

PSU-60 - AMC Power Supply Unit

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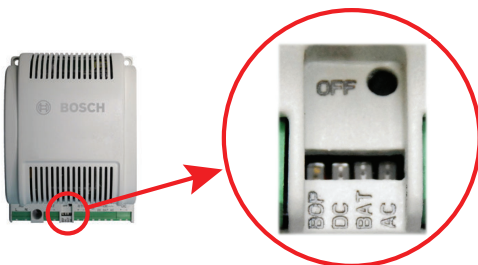
BOSCH
Invented for life



- ▶ Supports 12 V/7 Ah, 12 V/14 Ah and 24 V/7 Ah batteries
- ▶ Selectable 12 VDC or 24 VDC voltage output
- ▶ Selectable 5 A @ 12 VDC or 2.5 A @ 24 VDC current output
- ▶ Overvoltage protection
- ▶ Regulates battery charging voltage

The PSU-60 is a power supply unit with an integrated battery charging device.

Functions



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.

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.





Notice

The power supply must only be installed by qualified personnel.

Certifications and approvals

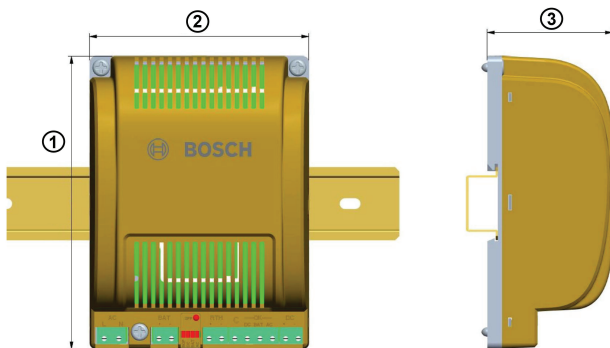
The product is classified in accordance with the following standards:

- EN 55022 Class B
- EN 55024
- IEC / UL / EN 60950 & CSA (product safety)
- CE
- RCM (Australia)
- RoHS 2.0

Please refer to <http://www.boschsecurity.com> for further information.

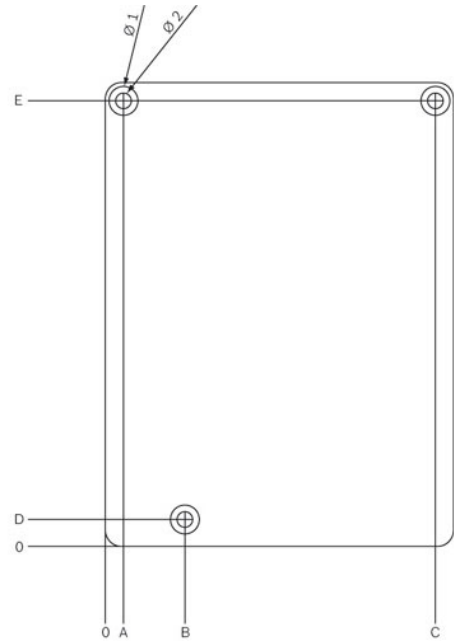
Installation/configuration notes

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.)
- 2 105 mm (4.13 in.)
- 3 60 mm (2.36 in.)

Alternatively, it can be screw-mounted directly to the wall. There are pre-drilled holes for this purpose on the base of the housing. These holes have the following dimensions:

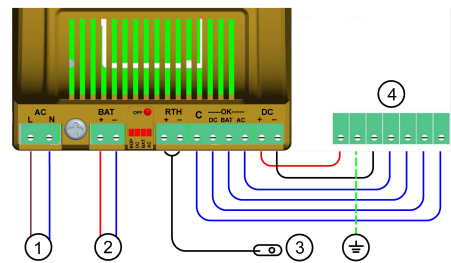


- Ø1 8.6 mm (0.34 in.)
- Ø2 4.5 mm (0.18 in.)
- A 5.5 mm (0.22 in.)
- B 24 mm (0.94 in.)
- C 99.5 mm (3.92 in.)
- D 8.1 mm (0.32 in.)
- E 134.5 mm (5.30 in.)

* Include tolerances (in mm)

- 0 – 5 mm = ±0.10
- 5 – 30 mm = ±0.20
- 30 – 100 mm = ±0.30
- 100 – 500 mm = ±0.50

The following diagram shows the connections to the AMC.



- 1 AC power
- 2 Battery connection
- 3 Temperature sensor
- 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

Parts included

The components supplied are as follows:

- Power supply
- Plug
 - 1 x 2-pin for mains (primary AC) connection
 - 3 x 2-pin
 - 1 x 4-pin
- Accompanying documentation (installation manual)

Technical specifications

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

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.

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%

Ordering information

PSU-60 - AMC Power Supply Unit

A power supply unit with an integrated battery charging device, that supports 12 V/7 Ah, 12 V/14 Ah and 24 V/7 Ah batteries, with selectable 12 VDC or 24 VDC voltage output.

Order number **APS-PSU-60**

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