

**WARNING**

Dangerous voltage! Electric shock could kill or seriously injure. All electrical connections must be performed by a fully qualified electrician.

**CAUTION**

De-energize the device and all connected equipment before mounting the device at the installation site. Apply the supply voltage only after all works have been completed.

**CAUTION**

Observe polarity when connecting load to the device output! Reverse polarity may cause the connected equipment damage.

**NOTICE**

Only tools intended for electrical installation works should be used for the device montage.

1. Features

- Output overvoltage and overcurrent protection.
- Input overvoltage and surge protection.
- Overload, short circuit, and overheating protection.
- Adjusting the output voltage with a trimmer.
- Both parallel and series output connections of the power supply units with no any additional output current sharing and protection equipment needed.

2. Specifications

Parameter	Value
Output parameters	
Nominal output voltage	24 V DC
Rated output current	2.5 A
Rated power	60 W
Output voltage adjustment	±8 %
Output voltage regulation, including:	
• line regulation	max. ±2 %
• load regulation	max. ±0.2 %
• temperature coefficient	max. ±0.5 %
Output ripple and noise voltage (peak-to-peak, maximum)	max. ±0.015 % / °C
120 mV	
Input parameters	
Operating AC input power voltage range (RMS)	100 – 240 V AC
AC input power nominal voltage (RMS)	110 / 230 V AC
Operating AC input power frequency range	47 – 63 Hz
Operating DC input power voltage range	110 – 370 V
Rated input current	0.5 A
Inrush current	max. 30 A
Efficiency at rated load	min. 85 %
Protection	
Output overcurrent protection mode	Limiting output current
Output current limiting threshold	104 ... 116% of rated current
Output overvoltage protection mode	Limiting output voltage
Output voltage limiting threshold:	150% of nominal output voltage
Safety and EMC	
Electromagnetic immunity according to EN 61000-4:2010	class A
Electromagnetic emission level by power port according to EN 61000-4:2010	class B
IP Code according to EN 60529:2014	IP20
Appliance class according to EN 61140:2016	II
Insulation according to EN 61010-1:2010	reinforced
Overvoltage category according to EN 61010-1:2010	II
Pollution degree according to IEC 60364-4-443:1995	2

Parameter	Value
Dielectric strength:	
• input-output, input-housing	3 000 V
• output-housing	750 V
Insulation resistance (input-output-housing) at 500 V	10 MΩ
General	
Average service life	10 years
Mean time between failures (MTBF)	50 000 h
Weight	max. 0.25 kg
Type of circuit breaker	10 A, type C or 16 A, type B

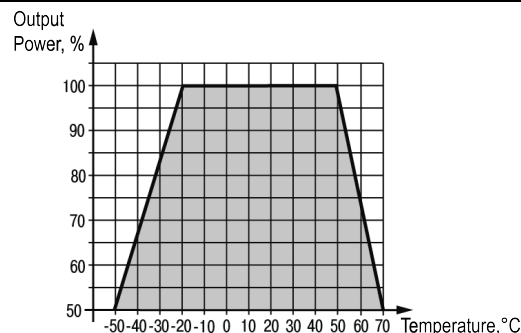


Fig. 1 – Output Power vs. Ambient Temperature

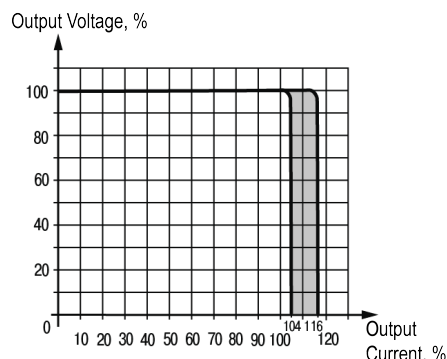


Fig. 2 – Output Voltage vs. Output Current

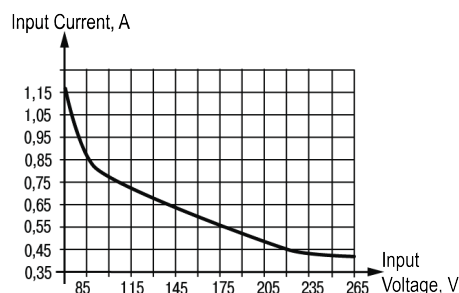


Fig. 3 – Input Power Supply Current vs. Input Power Supply Voltage

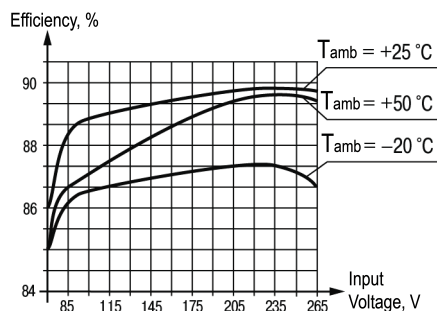


Fig. 4 – Efficiency vs. Input Power Supply Voltage and Ambient Temperature

3. Environmental conditions

The device must be used in non-hazardous areas, free of corrosive or flammable gases and chemically active substances.

Table 1 Environmental conditions

Condition	Permissible range
Ambient temperature	-20...+50 °C
Maximum ambient relative humidity (at +30 °C and lower, non-condensing)	80 %
Atmospheric pressure	84...106,7 kPa
Transportation and storage ambient temperature	-25...+70 °C
Transportation and storage ambient relative humidity (at +25 °C, non-condensing)	up to 95 %

4. Installation and connection



NOTICE

- Do not install the device in areas of direct sunlight exposure.
- Do not cover or obstruct ventilation openings of the device.
- Do not remove the device housing cover with the input power voltage applied.

The device is designed to be mounted on 35 mm DIN rail or on an even vertical surface. The device overall dimensions must be taken into account when mounting the device (see Fig. 5). It is necessary to provide free space for routing wires to be connected to the device.

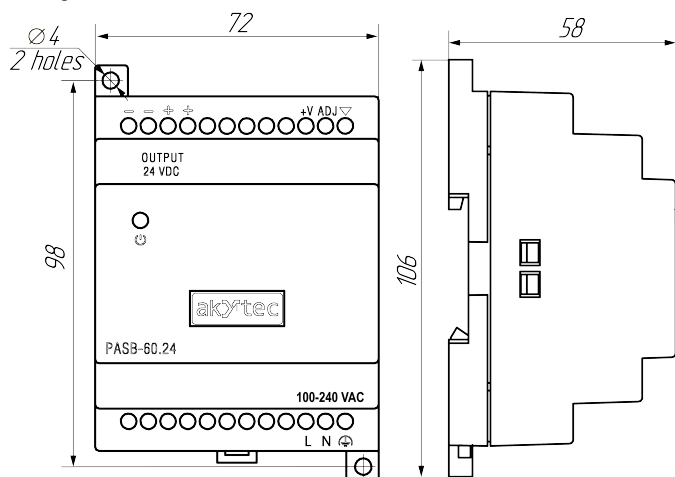


Fig. 5 – Dimensions

DIN rail montage:

1) Installation:

- Place the device on a DIN rail as shown in Fig. 6.
- Press the device firmly against the DIN rail in the direction of arrow 2 until the latch locks.
- Connect wires to the device terminals.

2) Removing:

- Disconnect all wires from the device terminals.
- Insert a screwdriver into the eyelet of the slide interlock at the bottom of the device.
- Loosen the slide interlock by pulling the screwdriver in the direction of arrow 1 and then remove the device from the DIN rail in the direction of arrow 2.

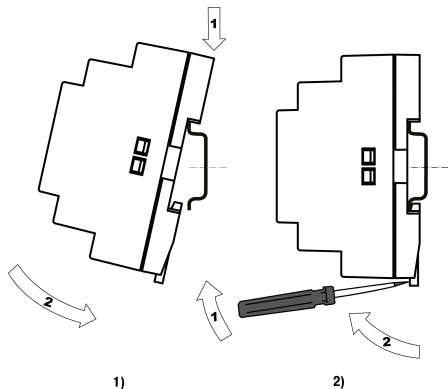


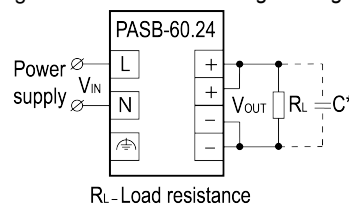
Fig. 6 – Installation (1) and Removing (2)

Montage on a vertical surface:

- Place the device on an even vertical surface.

- Secure the device on the vertical surface by screws (not included in the delivery) using the two mounting holes of the device housing (see Fig. 5).

The device wiring diagrams are shown in the Fig. 7 – Fig. 9



R_L - Load resistance

Fig. 7 – Wiring



NOTICE

* When using a load with no built-in input capacitors and the length of connected wires exceeds 1 m, it is highly recommended to put a ceramic capacitor across the load. The capacitor must be not less than 0.1 μ F, the capacitor rated voltage must be not less than $1.5 \times V_{OUT}$.

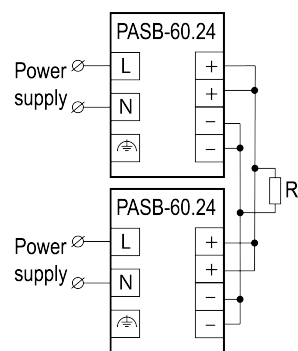


Fig. 8 – Parallel connection wiring

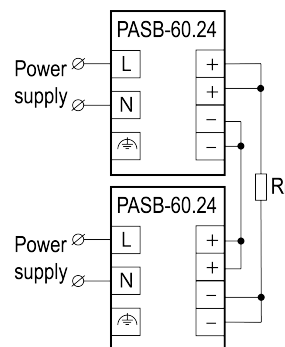


Fig. 9 – Series connection wiring

5. Maintenance

Safety precautions must be observed when performing the maintenance.

The maintenance must be carried out at least once every 6 months. The maintenance includes:

- checking the device fastening.
- tightening up the device screw terminals.
- cleaning the device housing and terminals from dust, dirt and debris.

6. Scope of delivery

PASB-60.24	–	1 pc.
Short Guide (EN)	–	1 pc.
Short Guide (DE)	–	1 pc.