

**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.

**2. Specifications**

| Parameter                                                                 | Value                               |
|---------------------------------------------------------------------------|-------------------------------------|
| <b>Output parameters</b>                                                  |                                     |
| Nominal output voltage                                                    | 24 V DC                             |
| Rated output current                                                      | 0.63 A                              |
| Rated power                                                               | 15 W                                |
| Output voltage adjustment                                                 | ±8 %                                |
| Output voltage regulation, including:                                     | max. 2 %                            |
| • line regulation                                                         | max. ±0.5 %                         |
| • load regulation                                                         | max. ±1 %                           |
| • temperature coefficient                                                 | max. ±0.015 % / °C                  |
| Output ripple and noise voltage (peak-to-peak, maximum)                   | 120 mV                              |
| <b>Input parameters</b>                                                   |                                     |
| 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                                  | 45 – 65 Hz                          |
| Operating DC input power voltage range                                    | 110 – 370 V                         |
| Rated input current                                                       | 0.27 / 0.17 A                       |
| Inrush current                                                            | max. 6 A                            |
| Efficiency at rated load                                                  | min. 85 %                           |
| <b>Protection</b>                                                         |                                     |
| Output overcurrent protection mode                                        | Limiting output current with HICCUP |
| Output current limiting threshold                                         | 104 ... 116% of rated current       |
| Output overvoltage protection mode                                        | Limiting output voltage             |
| Output voltage limiting threshold:                                        |                                     |
| • at no load                                                              | 160% of nominal output voltage      |
| • at rated load                                                           | 110% of nominal output voltage      |
| <b>Safety and EMC</b>                                                     |                                     |
| 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, output-housing) | 3 000 V                       |
| Insulation resistance (input-output-housing) at 500 V             | 20 MΩ                         |
| <b>General</b>                                                    |                               |
| Average service life                                              | 10 years                      |
| Mean time between failures (MTBF)                                 | 50 000 h                      |
| Weight                                                            | max. 0.1 kg                   |
| Type of circuit breaker                                           | 1 A, type C<br>or 2 A, type B |

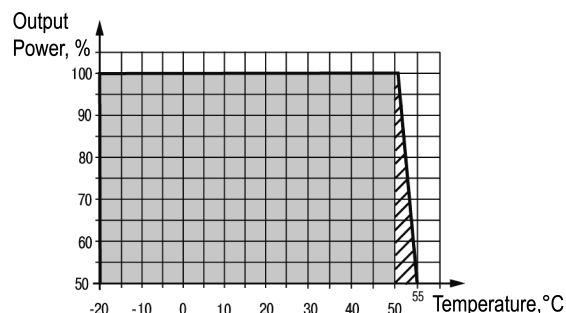


Fig. 1 – Output Power vs. Ambient Temperature

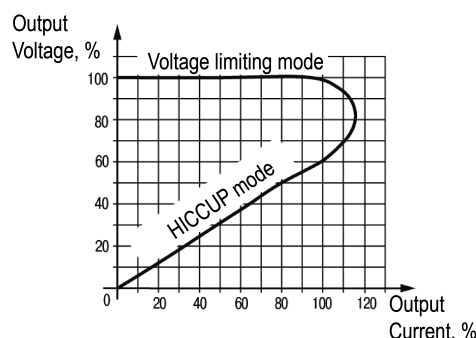


Fig. 2 – Output Voltage vs. Output Current

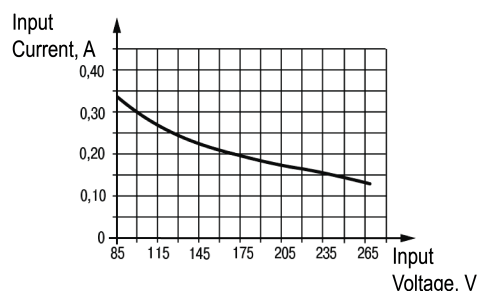


Fig. 3 – Input Power Supply Current vs. Input Power Supply Voltage

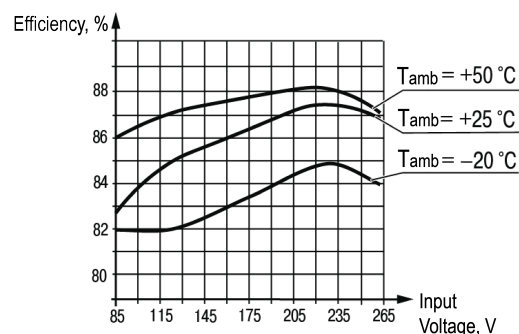


Fig. 4 – Efficiency vs. Input Power Supply Voltage and Ambient Temperature

### 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.

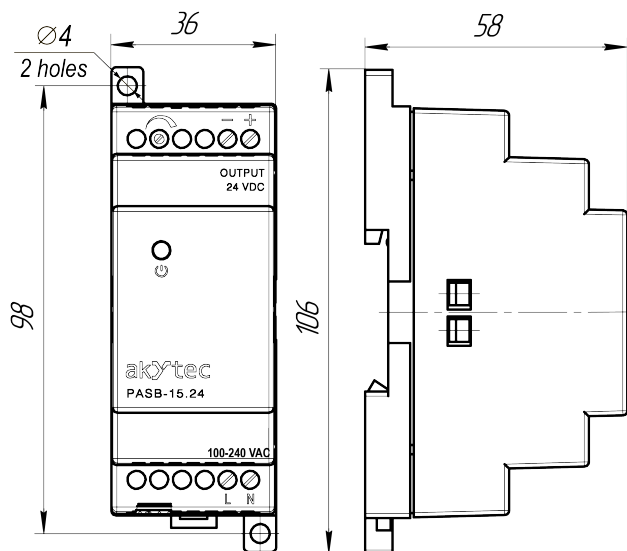


Fig. 5 – Dimensions



#### NOTE

Position of the legends may slightly vary without design changing.

#### DIN rail montage:

##### 1) Installation:

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

##### 2) Removing:

1. Disconnect all wires from the device terminals.
2. Insert a screwdriver into the eyelet of the slide interlock at the bottom of the device.
3. 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.

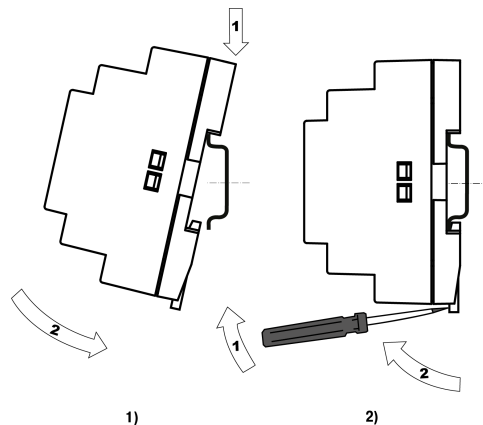
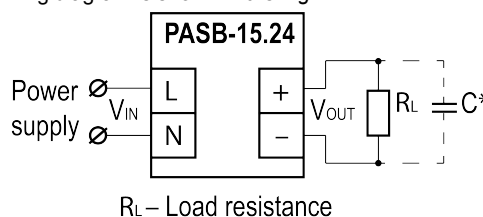


Fig. 6 – Installation (1) and Removing (2)

#### Montage on a vertical surface:

1. Place the device on an even vertical surface.
2. 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 diagram is shown in the Fig. 7.



$R_L$  – 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  $\mu$ F, the capacitor rated voltage must be not less than  $1.5 \times V_{OUT}$ .

### 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-15.24       | – | 1 pc. |
| Short Guide (EN) | – | 1 pc. |
| Short Guide (DE) | – | 1 pc. |