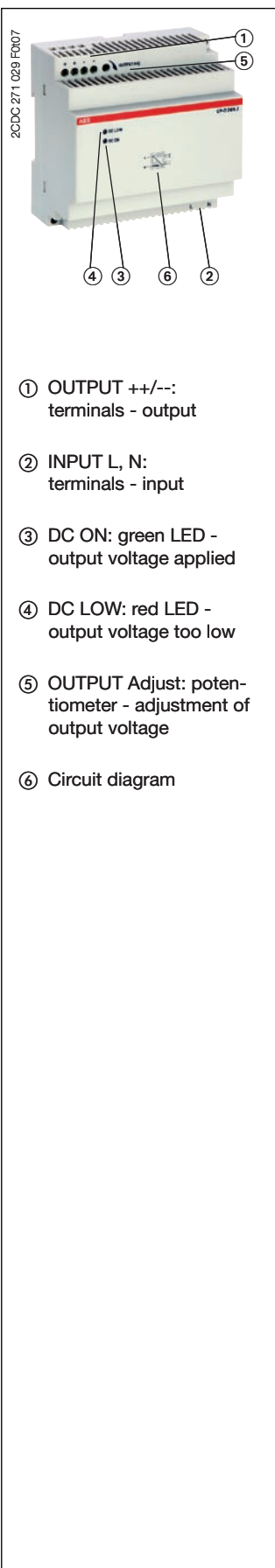


# Power supply CP-D 24/4.2

## Primary switch mode power supply

### Data sheet



- ① OUTPUT ++/--: terminals - output
- ② INPUT L, N: terminals - input
- ③ DC ON: green LED - output voltage applied
- ④ DC LOW: red LED - output voltage too low
- ⑤ OUTPUT Adjust: potentiometer - adjustment of output voltage
- ⑥ Circuit diagram

### Features

- Rated output voltage 24 V DC
- Output voltage adjustable via front-face potentiometer "OUTPUT Adjust"
- Rated output current 4.2 A
- Rated output power 100 W
- Wide range input 100-240 V AC (90-264 V AC, 120-370 V DC)
- Efficiency of typ. 89 %
- Low power dissipation and low heating
- Free convection cooling (no forced cooling with ventilators)
- Ambient temperature range during operation -25...+70 °C
- Open-circuit, overload and short-circuit stable
- Integrated input fuse
- U/I characteristic (fold-forward behaviour at overload - no switch-off)
- LEDs for status indication
- Structural form ideal for installation in distribution panels
- Light-grey enclosure in RAL 7035

### Approvals

- UL 508, CAN/CSA C22.2 No.14 \*)
  - UL 60950, CAN/CSA C22.2 No.60950 \*)
  - GOST
  - CCC \*)
- \*) Approval refers to rated input voltage  $U_{IN}$

### Marks

- CE CE
- C-Tick pending

### Order data

Type	Rated input voltage	Rated output voltage / current	Order code
CP-D 24/4.2	100-240 V AC	24 V DC / 4.2 A	1SVR 427 045 R0400

### Application

The primary switch mode power supply has two voltage input ranges. This enables the supply with AC or DC. Furthermore it is equipped with two generous capacitors, which ensure mains buffering of at least 60 ms. That is why the device can be used worldwide also in high fluctuating networks and battery-powered plants.

### Operating mode

#### Adjustable output voltage

This device features an continuously adjustable output voltage from 24-28 V DC. Thus they can be optimally adapted to the application, e.g. compensating the voltage drop caused by a long line length.

# Power supply CP-D 24/4.2

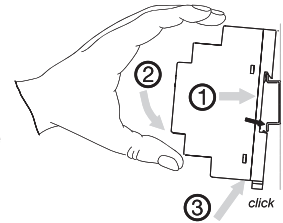
## Primary switch mode power supply

### Data sheet

#### Installation

##### Mounting

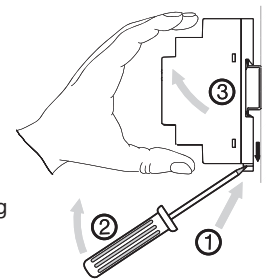
The switch mode power supply can be snapped on a DIN rail according to EN 60715 as shown in the accompanying picture. For that the device is set with its mounting rail slide on the upper edge of the mounting rail and locked by lifting it downwards.



2000 272 041 F06/07

##### Demounting

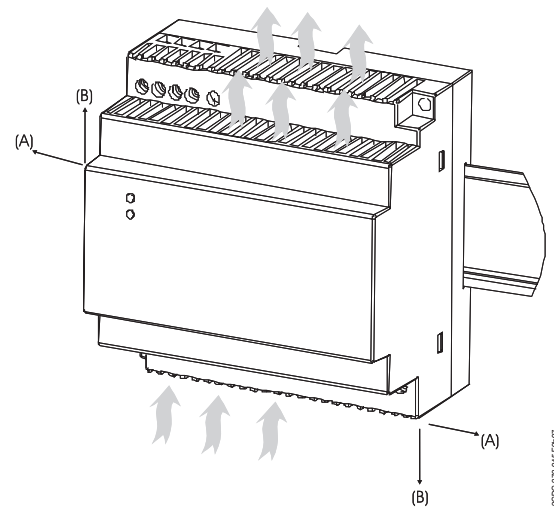
Remove the switch mode power supply as shown in the accompanying picture. For that the latching lever is pulled downwards by means of the screwdriver. Alternatively you can press the unlock button to release the device. Then in both cases the device can be unhinged from the mounting rail edge and removed.



2000 272 041 F06/07

##### Mounting position

The devices have to be mounted horizontally with the input terminals on the bottom. In order to ensure a sufficient convection, the minimum distance to other modules should not be less than 25 mm in vertical direction and horizontal direction.



2000 272 041 F06/07

##### Electrical connection

Connect the input terminals L and N. The installation must be executed acc. to EN 60950, provide a suitable disconnecting device (e. g. line protection switch) in the supply line. The input side is protected by an internal input fuse.

Rate the lines for the maximum output current or provide a separate fuse protection. We recommend to choose the cable section as large as possible in order to minimize voltage drops. Observe the polarity. Actuate plug connector only when power is off. The device is overload, short-circuit and open-circuit proof. The secondary side of the power supply is electrically isolated from the input and internally not earthed (SELV) and can therefore be earthed by the user according to the needs with + or - (PELV).

---

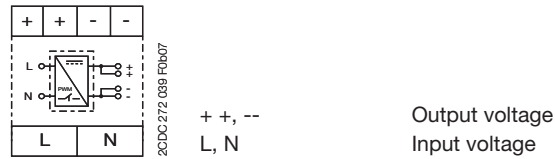
# Power supply CP-D 24/4.2

## Primary switch mode power supply

### Data sheet

---

#### Connection diagram(s)



#### Safety instructions and warnings

The device must be installed by qualified persons only and in accordance with the specific national regulations (e. g. VDE, etc.).

CP-D power supplies are chassis-mounted units. They are maintenance-free and do not contain any integral setting elements and should therefore not be opened.

##### **Before any installation, maintenance or modification work:**

Disconnect the system from the supply network and protect against switching on!

##### **Before start of operation the following must be ensured:**

- Connect to main according to the specific national regulations.
- Power supply cables and unit must be sufficiently fused. A disconnecting device has to be provided for the end product to disengage unit and supply cables from supply mains if required.
- Rate the output lines for the output current of the power supply and connect them with the correct polarity.
- In order to ensure sufficient air-cooling the distance to the other devices has to be considered.

Attention! Improper installation/operation may impair safety and cause operational difficulties or destruction of the unit.

##### **In operation pay attention to:**

- Do not modify the installation (primary and secondary side)! High current! Risk of electric arcs and electric shock (danger to life)!
- Risk of burns: Depending on the operation conditions the enclosure can become very hot.
- If the internal fuse blows, most probably the device is defect. In this case, an examination of the switch mode power supply by the manufacturer is necessary.

#### Attention! Danger to life!



Disconnect the system from the supply network before executing any works at the device and protect against switching on!

The power supply contains components with high stored energy and circuits with high voltage! Do not introduce any objects into the unit and do not open the unit.

With some units of this range the output is capable of providing hazardous energy. Ensure that the service personnel is protected against inadvertent contact with parts carrying energy.