

3.2 Mounting the power supply

3.2.1 Dimensions

The illustrations below show the dimensions and mounting depth of the power supplies DPW 01, DPW 02 and DPW 03 in mm. Please note that only power supply DPW 01 is described in the following text. All specifications analogously apply to DPW 02 and DPW 03.



Always **read and observe the documentation delivered with the power supplies**. The units may be different from the illustrations seen in this manual due to further development and model modifications.

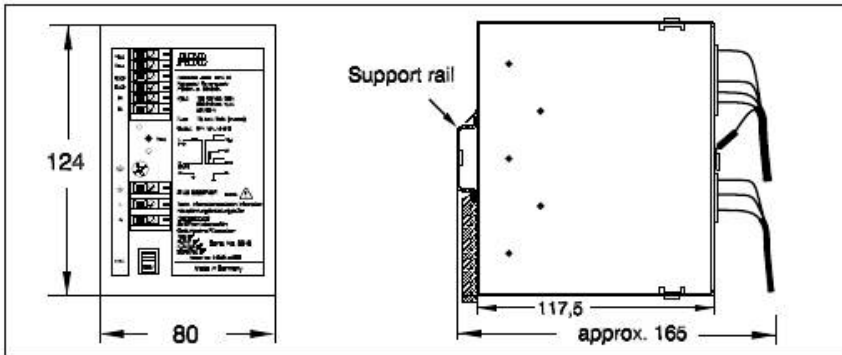


Fig. 3-11 Dimensions and mounting depth of the power supply DPW 01 in mm (115/230 V AC)

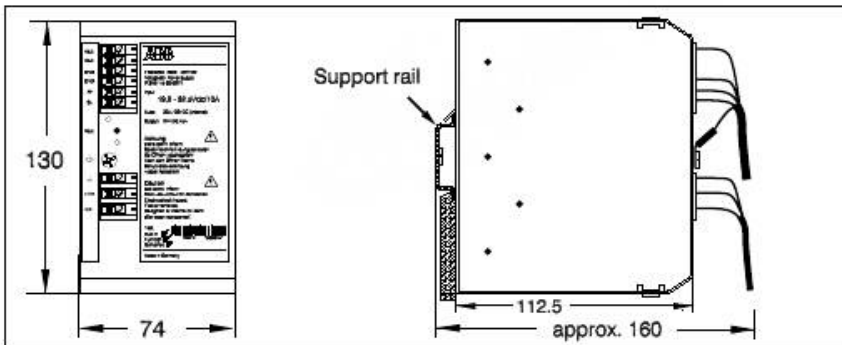
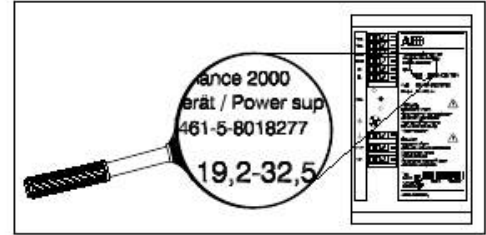


Fig. 3-12 Dimensions and mounting depth of the power supply DPW 02 in mm (24 V DC)

4.1.2 Power supply DPW 02 (24 V DC)

Check the rating plate to see if the power supply is a DPW 02 one for connection to a 24 V DC mains.



Cable the power supply DPW 02 as shown in Figure 4-3. Use the 24 V cable DSU 10 for the power supply output. The 24 V mains cable should have a cross-sectional area of at least 2.5 mm.²

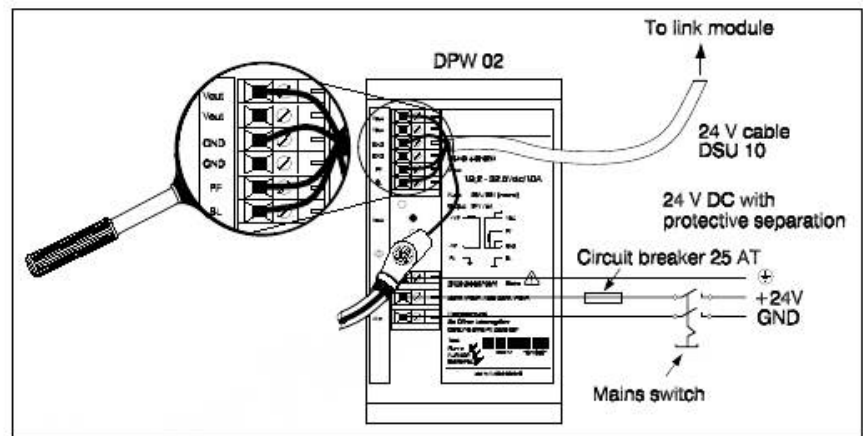


Fig. 4-3 Cabling power supply DPW 02



The input and output of power supply DPW 02 are electrically isolated from each other. However, DPW 02 must not be supplied with any voltage other than the **extra low voltage with protective separation** from other circuits.

When installing the power supply DPW 02 observe the following:

- The power supply has **no mains switch** and must be provided with one.
- It is recommended to use a 25 A T fuse.
- **Do not use** the power supply **without** a protective earth conductor.
- Provide a **functional grounding** as described in Section 3.2.3.
- **Rated voltage 24 V DC.**
Permissible input voltage range 19.2 ... 32.5 V DC.
- Connection to a **three-phase mains** via a **three-phase bridge rectifier** is possible. However, a protective separation is mandatory.
- Do **not** connect **additional power consumers**.
- **Lay mains cable separately**, as shown in the figure below.

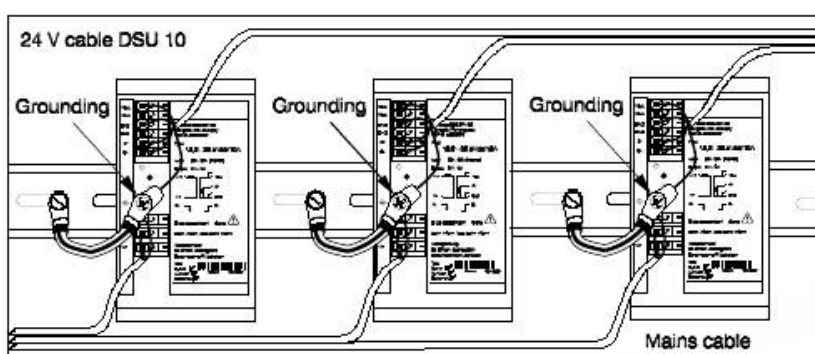


Fig. 4-4 Cabling power supply DPW 02/ link module

- Power supply DPW 02 has a 24 V DC input and output. It provides for electrical isolation between the input and output. Additionally, it suppresses mains noise, acts as a buffer for up to 20 ms in case of power failure, and generates a power-fail signal. Therefore, operation without a power supply is not possible.



Do not use central units and I/O units on a 24 V DC mains without a power supply DPW 02.

The external supplies for the output modules DDO 01 and DAO 01 can be connected directly to a 24 V DC mains. For details see Sections 4.8.9.3 and 4.8.18.3.