



Primary switch mode power supplies CP range

Power and productivity
for a better world™



ABB power supply units: CP range



Modern power supply units are a vital component in most areas of energy management and automation technology. ABB as your global partner in these areas pays the utmost attention to the resulting requirements. Innovation is the key to a substantial enlargement of our power supply product program:

CP-D

The CP-D range of power supply units in MDRC design (modular DIN rail components) fits into all domestic installation and distribution panels.

CP-E

The CP-E range offers enhanced functionality while the number of different types has been considerably reduced. Now all power supply units can be operated at an ambient temperature of up to +70 °C.

CP-T

The CP-T range of three-phase power supply units is ABB's youngest member of the power supply family.

CP-S

The CP-S range is ABB's standard range, a high-end power supply unit optimised for serial applications.

CP-C

The CP-C range's pluggable function modules adapt these power supply units exactly to your application's needs. Of course, all ABB power supply units feature primary switch mode technology – environmentally sound and cost-efficiency. This represents the highest level of innovative industrial electronics.


Application manual

For today's applications, e.g. in control engineering, it is essential to make the right decision regarding the selection and planning of the power supply unit. Incorrect dimensioning or incorrect connection of a power supply unit can seriously affect the safety and/or availability of the entire installation.

ABB's "Power Supply Units" application manual provides a general overview of switch mode power supply units, thus helping you to choose the ideal power supply unit and avoid

problems during engineering and commissioning. The manual generally shows and explains the fundamental characteristics of and the differences between power supply units, and provides a detailed introduction to the ABB product range on the basis of the selection criteria. Finally, it describes and explains application examples for engineering.

The manual is available in English and German.
English Version: 2CDC 114 048 M0202
German Version: 2CDC 114 048 M0102



The image shows an ABB CP-C 24/5.0 power supply unit. It is a rectangular, blue and silver device with a DIN rail mounting bracket on top. The front panel features a red label with the ABB logo and the model number 'CP-C 24/5.0'. Below the label, there are two indicator lights: 'OUTPUT OK' and 'OUTPUT ALARM 22-28V DC'. The input terminals are labeled 'INPUT 110-240V AC/DC' and the output terminals are labeled 'OUTPUT 24V DC'. A wiring diagram is printed on the front panel, showing the connection points for L, N, PE, and the output terminals. The top of the unit has a perforated metal grille for ventilation.

Fast mounting

Fast, easy and fail-safe mounting on a DIN rail using sturdy metal snap sliders.

Clear labelling

High ease of use thanks to clearly labelled terminals, thus further facilitating wiring campaigns.

LED

OUTPUT OK LED for status indication of output.

Primary switch mode technology for maximum efficiency

All CP range devices are power supply units with primary switch mode technology. This technology reduces heat loss and ensures maximum efficiency.

Wide range of AC or DC supply voltages

Due to the primary switch mode technology the CP range power supply units can be operated with both AC or DC supply voltages. Therefore they are often used in highly fluctuating networks and battery-powered plants.

Ambient temperature range of up to +70°C

The lifetime of any electronic device depends on the weakest electronic component. Due to the fact that heat stresses the components, practically all components used in the CP range power supply unit are rated for 105°C. This guarantees a "long" lifetime.

Safety

Closed construction. Touch-proof connecting terminals. Electrical isolation. Approval by independent testing institutes with regard to all relevant international standards guarantees maximum safety in operation.