2022

Product Family Overview

Power Supplies

Product Marketing

Document ID.: Rev.:

Primary switch mode power supplies

CP Power Supplies

The CP range offers the latest technology in a more compact package. Modern power supply units are a vital component in most areas of energy management and automation technology. ABB works with customers as a global partner in these areas, responding quickly to changing requirements and evolving demands of markets and applications. Five power supplies families

- Single and three-phase devices
- Economic and high-end variants
- Space saving designs
- Redunancy and buffering units
- Accepts a wide input voltage

Primary switch mode power supplies

Overview

CP-D range

- Power supplies in modular DIN rail component housing with a height of 91 mm (3.583 in)

CP-E range

- High segment standard power supplies for your application with a perfect price/ performance ratio

CP-T range

- High segment standard three-phase power supplies, the extension of the CP-E range up to to 960 W (40 A)

CP-S.1 range

- High segment automation power supply range – up to 960 W, compact design, power reserve and marine approval

CP-C.1 range

- High segment universal power supply range, power reserve continuously, ATEX/ IECEx, marine approval – Giving you the power to control

Primary switch mode power supplies

Overview - Assessories

CP redundancy modules

- CP-D RU in MDRC housing
- CP-C.1-A-RU for a true redundant setup of two up to 56V DC power supplies

CP-B buffer modules

- Buffering 24VDC supply of up to 572 s
- Maintenance free, ultra-capacitor technology
- Temperature resistant
- no deep charge

EPD24 protection device

- Selective load protection, one electronic tripping characteristic.
- Active current limitation on overload/short circuit
- Current ratings 0.5...12 A

Power Supply

CP-D

Main Benefits

- Output voltages 12 and 24 V DC
- Output currents 0.42 A / 0.83 A / 1.3 A / 2.1 A / 2.5 A / 4.2 A
- Power range 10 W, 25 W, 30 W, 60 W, 100 W
- Wide range input 100-240 V AC (90-264 V AC, 120-375 V DC)
- High efficiency of up to 89 %
- Low power dissipation and low heating

Main Features

- With narrow widths of just 18 to 90 mm, the CP-D range of switch mode power supplies are ideal for installation in distribution panels
- Continuously adjustable output voltage (CP-D > 10 W) means units can be optimally adapted to each application, for example compensating for voltage drops caused by long line lengths
- Additional redundancy unit CP-RUD provides true redundancy

Compact Modular DIN Rail

Power Supply

CP-E

Main Benefits

- Adjustable output voltages 5 V, 12 V, 24 V, 48 V DC
- Output currents 0.625 A / 0.75 A / 1.25 A / 2.5 A / 3 A / 5 A / 10 A / 20 A
- Power range 15 W, 18 W, 30 W, 60 W, 120 W, 240 W, 480 W
- High efficiency of up to 90 %
- Low power dissipation and low heating
- Ambient temperature range during operation -40...+70 °C

Main Features

- Continuously adjustable output voltage: optimally adaptable to each application, for example compensating for voltage drops caused by long line lengths
- 24 V > 18 W devices offer an output/contact for output voltage monitoring and remote diagnosis
- Redundance modules available to establish true redundancy

Cost Efficient Power Supply

Power Supply

CP-S.1

Main Benefits

- Rated supply voltage range from 100-240 V AC / 100-250 V DC
- Rated output voltage 24 V DC
- Rated output current of 3.0 A, 5.0 A, 10.0 A, 20.0 A and 40.0 A
- High efficiency of up to 94 %
- Power reserve design of 150 % for 5 s to start heavy loads
- Output voltage adjustable via front-face rotary potentiometer “OUTPUT Adjust”, 24-28 V

Main Features

- Saves the valuable installation space of the control cabinet due to compact design and high efficiency
- Coated PCBA and marine certification enables usage for e.g. wind, solar, marine applications
- Parallel operation to increase power output or provide redundancy

High Efficiency and Reliability

Power Supply

CP-T

Main Benefits

- Rated output voltages 24 V, 48 V DC
- Rated output currents 5 A, 10 A, 20 A, 40 A
- Rated output powers 120 W, 240 W, 480 W, 960 W
- Typical efficiency of 93 %
- Ambient temperature range during operation -40...+70 °C (480 W variants: -30...+70 °C)
- Free convection cooling – no forced ventilator cooling

Main Features

- Solid state output for function monitoring and remote diagnostics
- For use in 340 - 575 V AC or 480 - 820 V DC supply systems
- Continuously adjustable output voltage means units can be optimally adapted to each application, for example compensating for voltage drops caused by long line lengths

Advanced Three-Phase Power Supply

Power Supply

CP-C.1

Main Benefits

- Rated output voltage 24 V DC
- Rated output currents 5 A, 10 A, 20 A
- Rated output powers 120 W, 240 W, 480 W
- High efficiency up to 94 %
- Ambient temperature range during operation -25...+70 °C
- Extended ambient temperature range during operation -40...+70 °C with coated PCBA version

Main Features

- Power reserve and switching of high peak currents help maximize system availability
- High efficiency of up to 94 % lowers energy consumption, saving money and space and minimizing heat
- Reliable in harsh environments due to application under extreme temperature conditions

High-Performance for Demanding Applications

Power Supply

CP-B Buffering Unit

Main Benefits

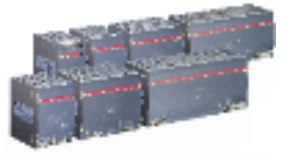
- Rated input voltage 24 V DC
- Rated currents 3 A DC, 10 A DC, 20 A DC
- Expandable with CP-B EXT.2 module
- LEDs for status indication
- Latest ultracapacitor technology
- High efficiency of more than 90%

Main Features

- Maintenance-free
- No deep discharge
- Temperature resistant

Ultracapacitor-based buffering

Complete Offering



CP-T
(3-phase)

CP-S.1

CP-C.1

CP-E

CP-B
(buffering unit)

CP-D

Performance

Cost Effective

Additional Features


ABB