

CP-C.1 - Giving the power to control ABB's high-performance power supplies



The CP-C.1 power supplies are ABB's high-performance and most advanced range. With excellent efficiency, high reliability and innovative functionality, it is prepared for the most demanding industrial applications. These power supplies have a 50% integrated power reserve and operate at a high efficiency up to 94%. They are equipped with overheat protection and active power factor correction. Combined with a broad AC and DC input range and extensive worldwide approvals, the CP-C.1 power supplies are the preferred choice for professional DC applications. Giving the power to control.



Continuous operation

Up to 50% integrated power reserve

- Power reserve to allow performance with 50% more current
- Parallel connection to increase power or fail-safe redundancy
- Long lifetime
- High peak currents for switching on capacitive loads are supported

Project cost reduction

Operate at 94% efficiency

- Save money on energy during operation thanks to high efficiency
- Lower need of external cooling in the enclosure
- Small size to reduce space required in panel



Harsh environment Operate anywhere

- Applicable in environments from -25°C (-40°C coated versions) to +70°C
- High MTBF values

Power reserve

The primary switch mode power supply CP-C.1 is equipped with a power reserve to handle particularly heavy loads, e.g. during the start-up of a process or a motor.

The CP-C.1 will deliver up to 150% of the rated current to secure operation on heavy loads. A yellow LED gives a clear visual status when the power reserve is in use.

Characteristics

- 24 V DC output voltage
- Power reserve delivers up to 150% at Ta ≤ 40°C
- Output voltage adjustable from 22.5 to 28.5 V via front-face rotary potentiometer
- 100-240 V AC, 90-300 V DC input voltage range
- High efficiency up to 94%

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- Low power dissipation and low heating
- Free convection cooling (no forced cooling)
- Ambient temperature range during operation of -25°C (-40°C coated versions) to +70°C

Signaling output

The CP-C.1 is equipped with a relay output to signal output OK as well as a transistor output to indicate when the power reserve is active. These signals can be used for communication to a higher level control system, e.g. a PLC.

- Open-circuit, overload and short-circuit stable
- Integrated input fuse
- DC OK signaling output "13-14" (relay), Power reserve signaling output "I > IR (transistor)
- Redundancy unit CP-C.1-A-RU offers true redundancy, available as an accessory
- Versions with coated printed circuit board assembly (PCBA) offer operating temperatures down to -40°C and ATEX certification

CP-C.1 ordering details				
Input voltage range	Rated output voltage and current	Туре	РСВА	Order code
100-240 V AC, 90-300 V DC	24 V DC / 5 A	CP-C.1 24 / 5.0	uncoated	1SVR360563R1001
	24 V DC / 10 A	CP-C.1 24 / 10.0	uncoated	1SVR360663R1001
	24 V DC / 20 A	CP-C.1 24 / 20.0	uncoated	1SVR360763R1001
100-240 V AC, 90-300 V DC	24 V DC / 5 A	CP-C.124 / 5.0-C	coated	1SVR360563R2001
	24 V DC / 10 A	CP-C.124 / 10.0-C	coated	1SVR360663R2001
	24 V DC / 20 A	CP-C.124 / 20.0-C	coated	1SVR360763R2001



Achieve true redundancy with CP-C.1-A-RU

The redundancy unit CP-C.1-A-RU increases the operational reliability and eliminates power supply outages. It provides decoupling of two CP-C.1 units and automatic redundancy of power supply for critical applications. The CP-C.1-A-RU has two inputs, each up to 20 A, and one output up to 40 A.

Redundancy unit ordering details			
Suitable for decoupling two 24 V DC power supply units	Туре	РСВА	Order code
≤ 28.5 V et ≤ 40 A	CP-C.1-A-RU	Uncoated	1SVR360060R1001
	CP-C.1-A-RU-C	Coated	1SVR360060R2001

Additonal Information

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