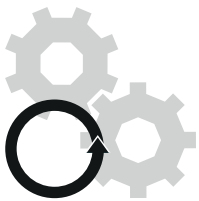


CP-C.1 - Giving the power to control

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 an integrated power reserve of up to 50% and operate at an efficiency of up to 94%. They are equipped with overheat protection and active power factor correction. Combined with a broad AC and DC input voltage range and extensive worldwide approvals the CP-C.1 power supplies are the preferred choice for professional DC applications. Additional versions with coated PCBAs and ATEX certification are available.



Continuous operation

Up to 50% integrated power reserve

- Power reserve design to allow performance with up to 50% more current than rated
- True redundant setup possible with redundancy unit
- Long lifetime
- High peak currents for switching on capacitive loads are supported



Project cost reduction

Operate at 94% efficiency

- Up to 94% efficiency saves money for energy during operation
- Less need for external cooling in the cabinet
- Small size to reduce space needed 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 supplies of the CP-C.1 range are equipped with a power reserve to handle particularly heavy loads for example during the start-up of a process or a motor.

The CP-C.1 will deliver up to 50 % of the rated current to secure the operation of the application also on heavy loads. This status is indicated by the yellow LED giving a clear visual status of the operation mode.

Characteristics

- Rated output voltage 24 V DC
- Power reserve design delivers up to 150% at $T_a \leq 40^\circ\text{C}$
- Output voltage adjustable via front-face rotary potentiometer "OUTPUT Adjust", 22.5-28.5 V
- Input voltage range 100-240 V AC, 90-300 V DC
- High efficiency up to 94%
- Low power dissipation and low heating
- Free convectional cooling (no forced cooling)

Signaling output

A signaling output relay is part of the CP-C.1 power supply. A transistor output switches to show that the device is now running on power reserve mode. This signaling could be used as a way to communicate to a higher level control system e.g. a PLC. The CP-C.1 includes an output relay to indicate the status of the voltage (OUTPUT OK).

Depending on the logic of the higher level control system an appropriate action is initiated by forwarding the signal. The receptor of this signal could be a contactor, a signal tower or an interface relay.

- Ambient temperature range during operation -25°C (-40°C coated versions) to $+70^\circ\text{C}$
- 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 accessory
- Versions with coated PCBAs offer operating temperatures down to -40°C and ATEX certification

Ordering details CP-C.1

Input voltage range	Rated output voltage current	Type	PCBA	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.1 24 / 5.0-C	coated	1SVR360563R2001
	24 V DC / 10 A	CP-C.1 24 / 10.0-C	coated	1SVR360663R2001
	24 V DC / 20 A	CP-C.1 24 / 20.0-C	coated	1SVR360763R2001



Achieve true redundancy provided by the 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 power supply units and automatic redundant power supply operation for critical applications. The CP-C.1-A-RU has two inputs, each up to 20 A, and one output up to 40 A.

Ordering Details Redundancy Unit

Input voltage range	Redundancy for	Type	PCBA	Order code
100-240 V AC, 90-300 V DC	24 V DC / 40 A	CP-C.1-A-RU	uncoated	1SVR360060R1001

Additional Information

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB AG does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB AG
Copyright© 2017 ABB - All rights reserved.

Contact us

ABB STOTZ-KONTAKT GmbH
Eppelheimer Straße 82
69123 Heidelberg
Germany

abb.com/lowvoltage

