

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.



Characteristics

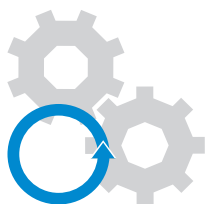
- 24 V DC output voltage
- Power reserve delivers up to 150% at $T_a \leq 40^\circ\text{C}$
- Output voltage adjustable from 22.5 to 28.5 V via front-face rotary potentiometer
- 100-240 V AC, 90-300 V DC input voltage range
- High efficiency up to 94%
- Low power dissipation and low heating
- Free convection cooling (no forced cooling)
- -25 to $+70^\circ\text{C}$ ambient temperature range during operation
- Open-circuit, overload and short-circuit stable
- Integrated input fuse
- DC OK - signaling output relay, power reserve signaling output transistor
- CP-A RU unit offering true redundancy, available as accessory

Ordering details - CP-C.1

| Input voltage range | Rated output voltage/ current | Type | Order code | Dimensions WxHxD (mm) | Weight (1 pce) kg (lb) |
|---------------------------|----------------------------------|----------------|-----------------|--------------------------|---------------------------|
| 100-240 V AC, 90-300 V DC | 24 V DC / 5 A | CP-C.1 24/5.0 | 1SVR360563R1001 | 40.0 x 129.4 x 144.8 | 0.75 (1.653) |
| | 24 V DC / 10 A | CP-C.1 24/10.0 | 1SVR360663R1001 | 60.0 x 129.4 x 144.8 | 1.20 (2.866) |
| | 24 V DC / 20 A | CP-C.1 24/20.0 | 1SVR360763R1001 | 82.0 x 129.4 x 144.8 | 2.83 (6.23) |

Related products

| Description | Redundancy for | Type | Order code | Weight (1 pce) kg (lb) |
|--|----------------------------|---------|-----------------|-------------------------------------|
| 2 inputs each up to 20 A and 1 output up to 40 A | ≤ 40 V and ≥ 5 A | CP-A RU | 1SVR427071R0000 | 60.0 x 130.0 x 144.5 0.89 (1.96) |



Continuous operation

- 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

- 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

- -25 to +70°C ambient temperature
- 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 used.

Signaling outputs

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.

Approvals



UL 508, CSA-C22.2 NO. 107.1



UL 60950-1, CAN/CSA C22.2 No.60950-1

SEMI F47

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