



Representative Image

## Catalog No. 1SVR360763R2001

**Description:** CP-C.1 24/20.0-C Power supply In:100-240VAC/90-300VDC Out:DC 24V/20A

**UPC No** 4013614503863

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The CP-C.1 24/20.0-C is a power supply from the CP-C.1 range with coated PCBA. The primary switch mode power supply offers a wide range input of 85-264 V AC and 90-300 V DC, rated input voltage is 110-240 V AC. The rated output power is 480 W, rated output current is 20 A at an output voltage of 24 V DC. The output voltage is adjustable within a range of 22.5 to 28.5 V DC. The power supply provides a U/I output characteristic with a power reserve of up to 30 % and allows parallel operation to increase capacity and to enable redundancy. Further features are: power factor correction acc. to EN 61000-3-2. Redundancy unit and buffer modules are available as accessories

### Descriptors

|          |                |
|----------|----------------|
| Category | Power Supplies |
|----------|----------------|

### Specifications

|                                 |                                                                                                                                                                                       |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Main Type               | CP-C.1                                                                                                                                                                                |
| Number of phases                | 1                                                                                                                                                                                     |
| Input Voltage                   | 85 ... 264 V AC<br>90 ... 300 V DC                                                                                                                                                    |
| Output Voltage                  | 24 V DC                                                                                                                                                                               |
| Output Current                  | 20 A                                                                                                                                                                                  |
| Output Power                    | 480 W                                                                                                                                                                                 |
| Function                        | Switch mode power supply                                                                                                                                                              |
| Rated Input Voltage             | 100 ... 240 V AC<br>90 ... 300 V DC                                                                                                                                                   |
| Typical Input Current           | (115 V AC) 4.6 A<br>(230 V AC) 2.3 A                                                                                                                                                  |
| Hold-up Time                    | (230 V AC) min. 40 ms                                                                                                                                                                 |
| Rated Frequency                 | 50 Hz<br>60 Hz                                                                                                                                                                        |
| Rated Frequency Limits          | 45 ... 65 Hz                                                                                                                                                                          |
| Characteristic of Output        | U/I characteristic curve with power reserve                                                                                                                                           |
| Rated Output Power              | 480 W                                                                                                                                                                                 |
| Rated Output Voltage            | 24 V DC                                                                                                                                                                               |
| Rated Output Current            | -25 °C ... +60 °C 20 A<br>-40 °C ... +40 °C 26 A                                                                                                                                      |
| Output Current Maximum          | 26 A                                                                                                                                                                                  |
| Rated Impulse Withstand Voltage | Input Circuit 4 kV<br>Output Circuit 4 kV<br>Input Circuit 4 kV<br>PE 4 kV<br>Input Circuit 4 kV<br>Relay Contact 4 kV<br>Output Circuit 0.5 kV<br>PE 0.5 kV<br>Output Circuit 0.5 kV |
| Rated Insulation Voltage        | Input Circuit / Output Circuit 300 V<br>Input Circuit / PE 300 V<br>Input Circuit / Relay Contact 300 V<br>Output Circuit / PE 50 V                                                   |

**by ABB**

## Specifications

|                                                |                                                                                                                                                                                    |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Degree of Protection                           | Housing<br>Terminals IP20                                                                                                                                                          |
| Pollution Degree                               | 2                                                                                                                                                                                  |
| Connecting Capacity Input Circuit              | Flexible with Ferrule 0.5 ... 2.5 mm <sup>2</sup><br>Flexible 0.5 ... 2.5 mm <sup>2</sup><br>Rigid 0.5 ... 4 mm <sup>2</sup>                                                       |
| Connecting Capacity Output Circuit             | Flexible with Ferrule 2.5 ... 10 mm <sup>2</sup><br>Flexible 2.5 ... 10 mm <sup>2</sup><br>Rigid 2.5 ... 16 mm <sup>2</sup>                                                        |
| Tightening Torque                              | Auxiliary Circuit 0.5 N-m<br>Input Circuit 0.5 N-m<br>Output Circuit 1.2 N-m                                                                                                       |
| Wire Stripping Length                          | Auxiliary Circuit 8 mm<br>Input Circuit 8 mm<br>Output Circuit 10 mm                                                                                                               |
| Recommended Screw Driver                       | Input Circuit PH1<br>Output Circuit 0.8 x 4                                                                                                                                        |
| Minimum Mounting Distance                      | Electrical Conductive Board, Horizontal 25 mm<br>Electrical Conductive Board, Vertical 25 mm<br>Other Device Same Type, Horizontal 25 mm<br>Other Device Same Type, Vertical 25 mm |
| Mounting Position                              | Position 1, 7                                                                                                                                                                      |
| Mounting on DIN Rail                           | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715<br>TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715                                                                     |
| Standards                                      | CAN/CSA C22.2 No.107.1<br>EN 50581<br>IEC/EN 60079-0<br>IEC/EN 60079-15<br>IEC/EN 60079-7<br>IEC/EN 60950-1<br>IEC/EN 61000-6-2<br>IEC/EN 61000-6-3<br>IEC/EN 61204<br>UL508       |
| Ambient Air Temperature                        | Operation -40 ... +70 °C<br>Storage -40 ... +85 °C                                                                                                                                 |
| Resistance to Vibrations acc. to IEC 60068-2-6 | 10-58 Hz, ±0.15 mm, 58-150 Hz, 2g, 10 sweep cycles each axis                                                                                                                       |
| Resistance to Shock acc. to IEC 60068-2-27     | 30g / 3 shocks / 6 ms                                                                                                                                                              |
| Resistance to Damp Heat acc. to IEC 60068-2-30 | Test Db: 55°C, 2 cycles                                                                                                                                                            |
| RoHS Status                                    | Following EU Directive 2011/65/EU                                                                                                                                                  |
| Connecting Capacity Input Circuit UL/CSA       | Flexible with Ferrule 20-12 AWG<br>Flexible 20-12 AWG<br>Rigid 20-10 AWG                                                                                                           |
| Connecting Capacity Output Circuit UL/CSA      | Flexible 12-8 AWG<br>Rigid 12-6 AWG                                                                                                                                                |
| Tightening Torque UL/CSA                       | Input Circuit 4.4 in-lb<br>Output Circuit 10.5 in-lb                                                                                                                               |
| Object Classification Code                     | T                                                                                                                                                                                  |

## Classifications

|          |                            |
|----------|----------------------------|
| ETIM 5.0 | EC002540 - DC-power supply |
| ETIM 6.0 | EC002540 - DC-power supply |
| ETIM 7   | EC002540 - DC-power supply |

## Dimensions

|                            |          |
|----------------------------|----------|
| Product Net Width          | 82 mm    |
| Product Net Height         | 129.4 mm |
| Product Net Depth / Length | 136 mm   |
| Product Net Weight         | 1.59 kg  |

### Package Information

|                                |               |
|--------------------------------|---------------|
| Package Level 1 Width          | 110 mm        |
| Package Level 1 Depth / Length | 168 mm        |
| Package Level 1 Height         | 160 mm        |
| Package Level 1 Gross Weight   | 1.72 kg       |
| Package Level 1 EAN            | 4013614503863 |
| Package Level 1 Units          | 1 piece       |

### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1        |
| Customs Tariff Number  | 85044090 |
| ECCN                   | N        |
| ECN                    | N        |

### Electromagnetic Compatibility

|                                                                  |                                                               |
|------------------------------------------------------------------|---------------------------------------------------------------|
| Electrostatic Discharge (ESD Immunity) acc. to IEC 61000-4-2     | Level 4 Air Discharge 15 kV<br>Level 4 Contact Discharge 8 kV |
| Radiated Electromagnetic Field Immunity acc. to IEC 61000-4-3    | Level 3 10 V/m                                                |
| Electrical Fast Transient (Burst Immunity) acc. to IEC 61000-4-4 | Level 4 Power Supply Port Signal 4 kV                         |
| Surge Immunity acc. to IEC 61000-4-5                             | Level 4 Line-to-Line 2 kV                                     |
| Conducted Disturbances Immunity acc. to IEC 61000-4-6            | Level 3 10 V                                                  |
| Electromagnetic Compatibility (EMC)                              | Immunity - Class B<br>Emission - Class B                      |