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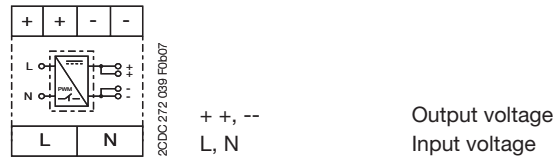
# Power supply CP-D 24/4.2

## Primary switch mode power supply

### Data sheet

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#### Connection diagram(s)



#### Safety instructions and warnings

The device must be installed by qualified persons only and in accordance with the specific national regulations (e. g. VDE, etc.).

CP-D power supplies are chassis-mounted units. They are maintenance-free and do not contain any integral setting elements and should therefore not be opened.

##### **Before any installation, maintenance or modification work:**

Disconnect the system from the supply network and protect against switching on!

##### **Before start of operation the following must be ensured:**

- Connect to main according to the specific national regulations.
- Power supply cables and unit must be sufficiently fused. A disconnecting device has to be provided for the end product to disengage unit and supply cables from supply mains if required.
- Rate the output lines for the output current of the power supply and connect them with the correct polarity.
- In order to ensure sufficient air-cooling the distance to the other devices has to be considered.

Attention! Improper installation/operation may impair safety and cause operational difficulties or destruction of the unit.

##### **In operation pay attention to:**

- Do not modify the installation (primary and secondary side)! High current! Risk of electric arcs and electric shock (danger to life)!
- Risk of burns: Depending on the operation conditions the enclosure can become very hot.
- If the internal fuse blows, most probably the device is defect. In this case, an examination of the switch mode power supply by the manufacturer is necessary.

#### Attention! Danger to life!



Disconnect the system from the supply network before executing any works at the device and protect against switching on!

The power supply contains components with high stored energy and circuits with high voltage! Do not introduce any objects into the unit and do not open the unit.

With some units of this range the output is capable of providing hazardous energy. Ensure that the service personnel is protected against inadvertent contact with parts carrying energy.

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#### Technical data

Data at  $T_a = 25\text{ °C}$ ,  $U_{IN} = 230\text{ V AC}$  and rated values, if nothing else indicated

<b>Input circuits - Supply circuits</b>		1SVR 427 045 R0400	
Rated input voltage $U_{IN}$	L, N	100-240 V AC	
Typical current / power consumption	100-240 V AC	110 V AC	230 V AC
		1800 mA / 117.3 W	900 mA / 114.4 W
Input voltage range	AC	90-264 V AC	
	DC	120-370 V DC	
Frequency range	AC	47-63 Hz	
Inrush current		60 A max. 3 ms	
Power failure buffering time		min. 60 ms	
Internal input fuse (apparatus protection, not accessible)		3.15 A slow-acting / 250 V AC	
<b>Indication of operational states</b>		1SVR 427 045 R0400	
Output voltage	DC ON: green LED	┌───┐: output voltage applied	
	DC LOW: red LED	┌───┐: output voltage too low	
<b>Operating controls</b>		1SVR 427 045 R0400	
Potentiometer - OUTPUT Adjust: Potentiometer	OUTPUT Adjust	Output adjustment	
<b>Output circuits</b>		1SVR 427 045 R0400	
Rated output voltage	++,--	24 V DC	
Tolerance of the output voltage		$\pm 1\%$	
Adjustment range of the output voltage		24-28 V DC	
Rated output power		100 W	
Rated output current $I_r$	$T_a \leq 60\text{ °C}$	4.2 A	
Derating of the output current	$60\text{ °C} < T_a \leq 70\text{ °C}$	2.5 %/K	
Deviation	load change statical	max. 1 %	
	load change dynamical 10-90 %		
	change of input voltage within the input voltage range	max. 1 %	
Control time		< 1 ms	
Starting time after applying supply voltage	at $I_r$	1000 ms	
Rise time	at rated load	typ. 1 ms	
Residual ripple and switching peaks	BW = 20 MHz	50 mV	
Parallel connection		no	
Series connection		yes, to increase voltage	
Resistance to reverse feed		35 V / 1 s	
Power factor correction (PFC)		no	
Output curve		U/I curve	
Short-circuit protection		continuous short-circuit stability	
Short-circuit behaviour		continuation with output power limitation	
Current limitation at short circuit		typ. 11.5 A	
Overload protection		output power limitation	
No-load protection		continuous no-load stability	
Starting of capacitive loads		unlimited	