Primary switch mode power supplies CP-D range



2CDC 275 031 F0007

The new CP-D range power supplies



NEW!

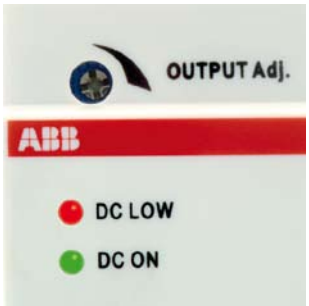
The new CP-D range of modular power supplies is ideally suited for installation in distribution panels and is the youngest member of the ABB power supply family. This range offers devices with output voltages of 12 V DC and 24 V DC at output currents of 0.42 A to 4.2 A. A high thermal efficiency corresponding to low power and heat dissipation, allow operation without forced cooling. They feature the U/I output characteristic which allows to start up loads with high inrush currents. All power supplies of the new CP-D range are approved according to all relevant world-wide standards.

Characteristics of the CP-D range

- Output voltages 12 V, 24 V
- Adjustable output voltages (devices > 10 W)
- Output currents 0.42 A / 0.83 A / 1.3 A / 2.1 A / 2.5 A / 4.2 A
- Power range 10 W, 30 W, 60 W, 100 W
- Wide range input 100-240 V AC (90-264 V AC, 120-370 V DC)
- High efficiency of up to 89 %
- Low power dissipation and low heating
- Free convection cooling (no forced cooling with ventilators)
- Ambient temperature range during operation -25...+70 °C
- Open-circuit, overload and short-circuit stable
- Integrated input fuse
- U/I characteristic (fold-forward behaviour at overload – no switch-off)
- LEDs for status indication
- Light-grey enclosure in RAL 7035



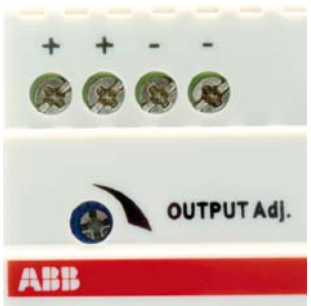
2CDC 271 027 F0007



2CDC 276 032 F0007



2CDC 276 033 F0007



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Width and structural form

With their width between 18 to 90 mm only, the CP-D range switch mode power supplies are ideally suited for installation in distribution panels.

LEDs for status indication

All actual operational states are displayed by front-face LEDs, thus simplifying commissioning and troubleshooting.

Wide range input

Optimised for world-wide applications:
The CP-D power supplies can be supplied with 90-264 V AC or 120-370 V DC.

Adjustable output voltage

The CP-D range types > 10 W feature a continuously adjustable output voltage. Thus, they can be optimally adapted to the application, e.g. compensating the voltage drop caused by a long line length.





CP-D range

		CP-D 12/0.83	CP-D 12/2.1	CP-D 24/0.42	CP-D 24/1.3	CP-D 24/2.5	CP-D 24/4.2
Rated output voltage / rated output current		**12 V / 0.83 A**	**12 V / 2.1 A**	**24 V / 0.42 A**	**24 V / 1.3 A**	**24 V / 2.5 A**	**24 V / 4.2 A**
Order code		**1SVR 427 041 R1000**	**1SVR 427 043 R1200**	**1SVR 427 041 R0000**	**1SVR 427 043 R0100**	**1SVR 427 044 R0200**	**1SVR 427 045 R0400**
Technical data, Input							
Rated input voltage U_{IN}		100-240 V AC					
Input voltage range	AC	90-264 V AC					
	DC	120-370 V DC					
Input frequency (AC)		47-63 Hz					
Power failure buffering		min. 30 ms				min. 60 ms	
Typical current consumption	at 110 V AC	200 mA	502 mA	184 mA	600 mA	1120 mA	1800 mA
	at 230 V AC	128.3 mA	277 mA	120.6 mA	344 mA	660 mA	900 mA
Inrush current		30 A (max. 3 ms)	50 A (max. 3 ms)	30 A (max. 3 ms)	50 A (max. 3 ms)	60 A (max. 3 ms)	
Internal input fuse		1 A slow / 250 V AC	2 A slow / 250 V AC	1 A slow / 250 V AC	2 A slow / 250 V AC		3.15 A slow / 250 V AC
Technical data, Output							
Rated output voltage		12 V DC ± 1 %		24 V DC ± 1 %			
Adjustable range of the output voltage		-	12-14 V DC	-	24-28 V DC		
Rated output power		10 W	30 W	10 W	30 W	60 W	100 W
Rated output current I_r ($T_a \leq 60$ °C)		0.83 A	2.1 A	0.42 A	1.3 A	2.5 A	4.2 A
Derating of the output current (60 °C < $T_a \leq$ 70°C)		2.5 %/K					
Short-circuit protection		continuous short circuit stability					
Output curve		U/I characteristic curve					
Parallel operation		no					
Other data							
Efficiency		typ. 78 %	typ. 82 %	typ. 80 %	typ. 83 %	typ. 86 %	typ. 89 %
Protection enclosure / terminals		IP20 / IP20					
Ambient temperature range during operation		-25...+70 °C					
Dimensions (W x H x D)		18 x 91 x 57.5 mm	53 x 91 x 57.5 mm	18 x 91 x 57.5 mm	53 x 91 x 57.5 mm	71 x 91 x 57.5 mm	89.9 x 91 x 57.5 mm
Weight		approx. 0.06 kg	approx. 0.19 kg	approx. 0.06 kg	approx. 0.19 kg	approx. 0.25 kg	approx. 0.32 kg

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

Approvals / Marks

UL 508, CAN/CSA C22.2 No.14 [1],

UL 1310, CAN/CSA C22.2 No.223 (Class 2 Power Supply),

UL 60950, CAN/CSA C22.2 No.60950 [1],

GOST, CCC [1] / CE, C-Tick [2]

[1] Approvals refer to rated input voltage U_{IN}

[2] pending

As part of the on-going product improvement, ABB reserves the right to modify the characteristics or the products described in this document. The information given is not-contractual. For further details please contact the ABB company marketing these products in your country.

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