

**NEW**

## Ultra capacitor based buffer modules

### CP-B range




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Power supply systems have to be highly reliable in most areas of energy management and automation technology. Often batteries are used for supporting the supply system in case of mains failures. Batteries have limited lifetimes depending on environmental parameters and have to be maintained regularly, which causes efforts and costs.

Using the latest ultra-capacitor technology, ABB offers an innovative and completely maintenance free new product for buffering the 24 V DC supply in case of interrupted mains on the primary side of the switch mode power supply.

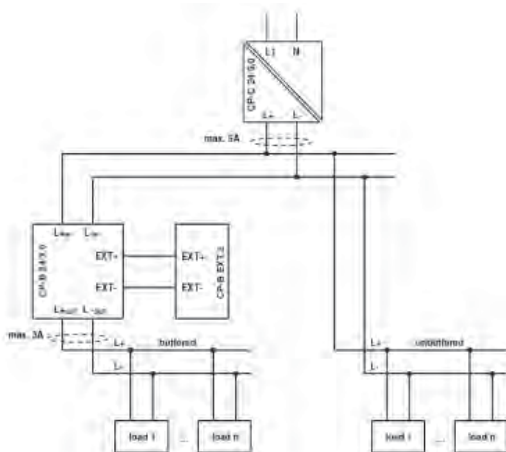
The CP-B range is an ultra-capacitor buffer energy storage for power supply units which ensures a short term uninterrupted power supply system. In case of a power loss, the energy stored in the capacitor guarantees that the load is continually provided up to several hundred seconds depending on the load current.

#### Characteristics

- 3 buffer modules for buffering 24 V DC:
  - CP-B 24/3.0 (3 A / 1 kW<sup>1)</sup>)
  - CP-B 24/10.0 (10 A / 10 kW<sup>1)</sup>)
  - CP-B 24/20.0 (20 A / 8 kW<sup>1)</sup>)
- CP-B 24/3.0 and CP-B 24/20.0 expandable with additional extension module(s) CP-B EXT.2 (2 kW<sup>1)</sup>)
- LEDs for status indication
- Relay contacts for status messaging
- Very high backup times (e.g. with CP-B 24/10.0 up to 8 minutes at 1 A load current)
- Short charging times
- High efficiency, higher than 90%
- Wide temperature range
- DIN rail mountable, compact enclosures
- Advantages in comparison to battery buffers
  - Maintenance free
  - No deep discharge
  - Temperature resistant
-  approval (UL508, CSA22.2 No 14)<sup>2)</sup>

<sup>1)</sup> internal energy buffer; <sup>2)</sup> pending

#### Application example



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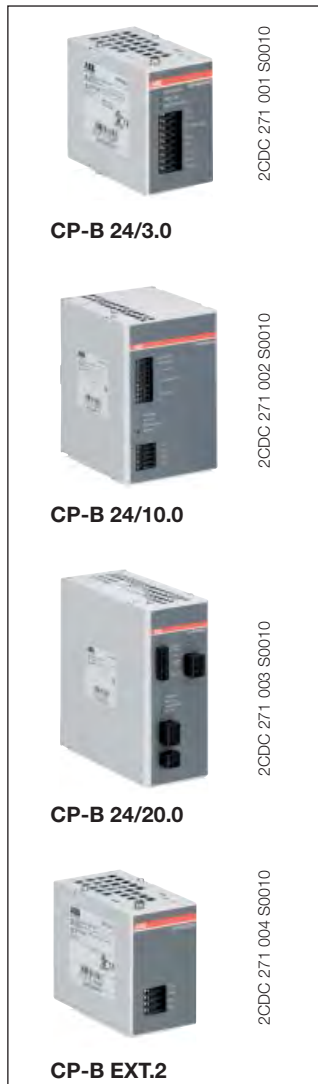
## Ultra capacitor based buffer modules CP-B range

### Product selection table

		<b>CP-B 24/3.0</b>	<b>CP-B 24/10.0</b>	<b>CP-B 24/20.0</b>	<b>CP-B EXT.2</b>
Order code		1SVR427060R0300	1SVR427060R1000	1SVR427060R2000	1SVR427065R0000
Rated input voltage		24 V DC	24 V DC	24 V DC	-
Rated current		3 A DC	10 A DC	20 A DC	-
Energy storage (min.)		1.000 Ws	10.000 Ws	8.000 Ws	2.000 Ws
Typical charging time at load current	100 %	65 s	120 s	68 s	
	0 %	56 s	82 s	62 s	
Typical buffer time <sup>1)</sup> at load current	100 %	14 s	40 s	15 s	
	50 %	28 s	80 s	30 s	
	25 %	74 s	140 s	60 s	
	10 %	148 s	380 s	150 s	
<b>Dimensions</b>					
Width		60.00 mm	127.00 mm	84.00 mm	60.00 mm
Height		92.50 mm	163.00 mm	192.00 mm	92.50 mm
Depth		116.00 mm	150.00 mm	198.00 mm	116.00 mm

<sup>1)</sup> buffering time =  $\frac{\text{energy storage} \times 0.9}{\text{current} \times \text{output voltage}}$

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Type	Rated input voltage	Rated current	Order code	Pack. unit pieces	Price 1 piece	Weight 1 piece kg / lb
<b>CP-B range</b>						
<b>CP-B 24/3.0</b>	24 V DC	3 A DC	<b>1SVR 427 060 R0300</b>	1		0.55 / 1.21
<b>CP-B 24/10.0</b>	24 V DC	10 A DC	<b>1SVR 427 060 R1000</b>	1		2.10 / 4.63
<b>CP-B 24/20.0</b>	24 V DC	20 A DC	<b>1SVR 427 060 R2000</b>	1		2.20 / 4.85
<b>CP-B EXT.2</b>	-	-	<b>1SVR 427 065 R0000</b>	1		1.00 / 2.21