



DC-UPS

NCPA0609G01

1 Short description

The DC UPS of the **C-TEC** series has inside of the housing ultracaps as energy storage. In mains operation, the ultracaps will be charged by an external controlled DC power supply. In the event of interruption of DC power supply, the energy of the ultracaps will be released in a controlled way. The load will be fed until the **C-TEC** is discharged.

The buffer time depends on the output current and the energy of the ultracaps.

The **C-TEC 2410** is characterized by the following properties:

- Maintenance-free due to durable ultracaps
 - Micro-controller supported charging and discharging of the ultracaps
 - Operation monitoring and charge status monitoring by LEDs
 - Fast charging by active current charging control
 - IPC management by time triggered and output current triggered shutdown function
- Numerous customer-specific parametrization settings by USB interface

2 Technical Data

Input		
Nominal input voltage*		12 V DC / 24 V DC (SELV / PELV)
Input voltage range in charge mode		
Nominal input voltage 12 V DC (decoupled / non-decoupled)		11.9...17.4 V DC $\pm 0\%$ / 11.4...17.4 V DC $\pm 0\%$
Nominal input voltage 24 V DC (decoupled / non-decoupled)		23.9...27 V DC $\pm 0\%$ / 23.4...27 V DC $\pm 0\%$
Nominal input current		10 A @ (U _e = 24.0 V DC, U _a = 23.2 V DC, I _a = 9.9 A)
Inrush current		≤ 35 A / 2 ms
Charging current		Max. 7 A; active charging current control
Nominal input power		240 W @ (U _e = 24.0 V DC, U _a = 23.2 V DC, I _a = 10 A)
Output		
Nominal output voltage		12 V DC / 24 V DC
Nominal output voltage in buffer mode (system voltage)**		
Nominal input voltage 12 V DC		11.2 V DC $\pm 4\%$
Nominal input voltage 24 V DC		23.2 V DC $\pm 2\%$
Nominal output current		10 A
Current limitation in discharge operation		11.25 A ± 0.75 A
Limiting current monitoring in discharge operation by switching-off		10.3 A $\pm 0,1$ A after 1.5 s
Energy capacity (typical)	NCPA0606G01	2,0 kJ (kWs) @ (U _a = 23.2 V DC, I _a = 2 A)
Efficiency		95,1 % @ (U _e = 24.0 V DC, U _a = 23.2 V DC, I _a = 10 A)
Internal consumption in buffer mode		1.7 W
Short-circuit resistance	Mains operation Buffer mode	Conditional short-circuit proof Short-circuit proof
Fuse		
Fuse output circuit		External

Technical Datasheet

C-TEC 2410 2 kJ



J. Schneider
Elektrotechnik

General	
Protection class of the housing	IP20
Overvoltage category	II
Pollution degree	2
Dimensions (H x W x D)	6.78 in x 2.78 in x 5.65 in (172 mm x 70 mm x 143 mm)
Weight	2.87 lbs (1.3 kg)
Operating temperature / storage temperature	-40 °F (-40 °C)...140 °F (+60 °C)
Operating temperature UL tested	50 °F (+10 °C)...140 °F (+60 °C)
Relative humidity	≤95 % non-condensing
Max. height above sea level (without power reduction)	6561.1 ft (2000 m)

3 Norms and regulations

Complete device	2011/65/EU with 2015/863/EU (RoHS Directive) 1907/2006/EG (REACH) 2009/125/EG (Eco Design Directive) EN 61010-1 / EN 61010-2-201 EN 62368-1 UL 508 / C22.2 No. 107.1
EMC	2014/30/EU (EMC Directive) EN 62040-2 limit class C1 EN 55011+ A1 limit class B group 1 EN 61000-6-2 EN 61000-6-4