



C-TEC 2410

NCPA0606G01*** / NCPA0607G01***
NCPA0608G01*** / NCPA0609G01***

1 Brief 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** has the following properties:

- Maintenance-free due to long-life ultracapacitors
- Microcontroller-based charging and discharging of the ultracapacitors
- Operating and charging status monitoring via LEDs
- Superfast charging due to active charging current control
- IPC management due to shutdown function triggered by time and output current
- Numerous customer-specific parameterisation options via USB interface

2 Standards and regulations

Total device	2011/65/EU with 2015/863/EU (RoHS) 1907/2006/EC (REACH) 2009/125/EC (Ecodesign) 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 Value Class C1 EN 55011 + A1 Limit Value Class B Group 1 EN 61000-6-2 EN 61000-6-4

3 Technical data

Input		
Rated input voltage		12 V DC / 24 V DC (SELV / PELV)
Input voltage range for charging mode		
Rated input voltage 12 V DC (decoupled / not decoupled)		11,9 - 17,4 V DC $\pm 0\%$ / 11,4 - 17,4 V DC $\pm 0\%$
Rated input voltage 24 V DC (decoupled / not decoupled)		23,9 - 27 V DC $\pm 0\%$ / 23,4 - 27 V DC $\pm 0\%$
Rated input current		10 A @ (U _e = 24,0 V DC, U _a = 23,2 V DC, I _a = 9,9 A)
Switch-on current		≤ 35 A / 2 ms
Charging current		Max. 7 A; active charging current control,
Rated input power		240 W @ (U _e = 24,0 V DC, U _a = 23,2 V DC, I _a = 10 A)
Output		
Rated output voltage		12 V DC / 24 V DC
Output voltage in buffer mode (system voltage)*		
Rated input voltage 12 V DC		11,2 V DC $\pm 4\%$
Rated input voltage 24 V DC		23,2 V DC $\pm 2\%$
Rated output current		10 A
Current limiting in buffer mode		11,25 A $\pm 0,75$ A
Limit current monitoring in buffer mode through shutdown		10,3 A $\pm 0,1$ A after 1,5 s
Energy content (typical)	NCPA0607G01	27,6 kJ (kWs) @ (U _a = 23,2 V DC, I _a = 2 A)
	NCPA0606G01	13,4 kJ (kWs) @ (U _a = 23,2 V DC, I _a = 2 A)
	NCPA0608G01	5,8 kJ (kWs) @ (U _a = 23,2 V DC, I _a = 2 A)
	NCPA0609G01	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 withstand capability	Mains mode Buffer mode	Conditional short-circuit proof Short-circuit proof
Fusing		
Fusing – output		External
General		
Protection rating of the enclosure		IP20
Overvoltage category		II
Pollution degree		2
Dimensions (H x W x D)	NCPA0607G01 / 27.6 kJ (kWs)	170 mm x 189 mm x 147.9 mm
	NCPA0606G01 / 13.4 kJ (kWs)	172,4 mm x 116 mm x 143 mm
	NCPA0608G01 / 5.8 kJ (kWs)	172,4 mm x 116 mm x 143 mm
	NCPA0609G01 / 2.0 kJ (kWs)	172 mm x 70 mm x 143 mm
Weight	NCPA0607G01 / 27.6 kJ (kWs)	3.6 kg
	NCPA0606G01 / 13.4 kJ (kWs)	2.2 kg
	NCPA0608G01 / 5.8 kJ (kWs)	1.8 kg
	NCPA0609G01 / 2.0 kJ (kWs)	1.3 kg
Operating temperature / storage temperature		-40 - 60 °C
Relative humidity		$\leq 95\%$
Max. elevation above sea level (without capacity reduction)		2000 m

*Basic settings