



DC-UPS

NCPA1034G01001

1 Short description

The DC-back-up module of the series C-TEC includes inside the housing ultracapacitors as energy- storage. These capacitors are charged with an external, regulated DC-power supply during normal operation. If the DC supply is interrupted, the energy of the ultracapacitors is released. The load is charged from the back-up module until it is discharged. The back-up time depends on the state of charge of the capacitors and of the load current.

The back-up module has the following characteristics:

- Maintenance-free because of long-life ultra capacitors.
- Microcontroller based charging and discharging of the ultra capacitors.
- Control of operation and status of charge via potentialfree contacts and LED's
- Single cell monitoring on over- and undervoltage
- Monitoring on overtemperature of the energy storage

2 Norms and regulations

Terminal voltage	SELV / PELV according to EN 60204-1
Emitted interference	EN 61000-3-2 and EN 61000-3-3 class A, EN 55011 class B, EN 62040-2
Interference resistance	EN 62040-2, EN 61000-6-2 EN61000-4-2 (Static discharge ESD) 8kV/6kV EN61000-4-3 (Electromagnetic fields) 10V/m 27 – 1000MHz 3V/m 1400 - 2700MHz EN61000-4-4 (fast transient / Burst) DC IN, DC OUT 2kV (other 1kV) EN61000-4-5 (surge current load / Surge) DC IN 0.5kV EN61000-4-6 (conducted noise immunity) 10V 150kHz – 80MHz EN61000-4-11 (voltage drops) back-up with Ultracapacitor
Total unit	EN 50178 EN 61010-1 / EN 61010-2-201 / EN 62368-1 UL 508 / C22.2 Nr.107-01

Technical Datasheet

C-TEC 2440 P



3 Technical Data

Nominal input voltage	24V DC $\pm 10\%$ SELV/PELV according to EN 60204-1	fusing +/- Cap	40A slow acting internal
	21,6-26,4V DC	Type of connection 'Input' type of connection 'Output'	Plug-in connector With screw type terminals 0,75-10mm ² (AWG20- 6) 1,8 Nm (15,9lbf in)
Input voltage range	23V DC	Type of connection messages 'I/O'	Plug-in connector With screw type terminals 0,14-1,5mm ² (AWG28- 16) 0,25 Nm (2,2lbf in)
Min. charge voltage	40,0 A	Protective system	IP 20 u. EN 60529
	19-25,5V	weight	3,4kg
Nominal input current	40A DC	Storage temperature / ambient temperature	-20...60°C
Output voltage in back-up operation	>90%	dimensions	193 x 84 x 198 mm (H x W x D)
Nominal output current	10W (charging operation) 30W (discharge operation)		