



DC-UPS

NCPA1034G01001

1 Short description

The buffered DC power supply of the **C-TEC** series includes ultra-capacitors as energy storage inside the housing. During normal operation this capacitor is charged from the system voltage (Ue). The connected DC consumers are supplied as well from the system voltage. In case of an interruption of the system voltage, the energy of the ultra-capacitor is released regulated. With a dc/dc converter the load is supplied from the capacitor until it is discharged. The backup time depends on the state of charge of the capacitor and the discharge current.

The power supply has the following characteristics:

- Maintenance-free because of long-life ultra-capacitors
- Mikrocontroller based charging and discharging of the ultra-capacitors
- Control of operation and status of charge with potential-free contacts and LED
- Capacity extension possible with external capacitor extension modules

2 Norms and regulations

Terminal voltage	SELV / PELV according to EN 60950 EN 50178
Ermittled interference	EN 6100-3-2 EN 6100-3-3 class A EN 55011 class B EN 62040 -2
Noise immunity	EN 61000-6-2 EN 62040-2 EN 61000-4-2 (Static discharge ESD) 8kV/6kV EN 61000-4-3 (electromagnetic fields) 10V/m 27 – 1000MHz 3V/m 1400 - 2700MHz EN 61000-4-4 (fast transients / Burst) DC IN, DC OUT 2kV others 1kV EN 61000-4-5 (Stoßstrombelastung / Surge) DC IN 0.5kV EN 61000-4-6 (conducted noise immunity) 10V 150kHz – 80MHz EN 61000-4-11 (voltage interruptions) back-up with ultra capacitors
Total unit	EN 50178 EN 60950

Technical Datasheet

C-TEC 2440 P



J. Schneider
Elektrotechnik

3 Technical Data

Nominal input voltage	24 V DC \pm 10 %
Min. input voltage for charging operation	23 V DC
Nominal input current	40 A
Output voltage in back-up operation	25,5 – 19 V DC
Nominal output current	40 A DC
Output peak current	100 A max 0,5 sec.
Back-up time (Capacitor voltage 26 – 19 V)	4 sec. at 40 A load
Expendable with external C-modules up to .	20 sec.
Protective system	IP20
Storage temperature	- 40 ... +60 °C
Operational temperature	- 40 ... + 60 °C
Fusing capacitor circuit	40 A , internal
LED- display	UE o.k. LED green illuminates at External supply present Uc > LED green illuminates at: energy in capacitor > 80 % error: LED red
Relay outputs	Potential-free relay-contact, changer 30 V DC / 0,5 A Netz/ /Mains, changer 30 V DC / 0,5 A Uc /Vcap </>, changer 30 V DC / 0,5 A Fehler/Fault: changer 30 V DC / 0,5 A
connection, in- / output	Spring-type terminals 0,75-10 mm ²
connection, C- extension	Spring-type terminals 0,75-10 mm ²
connection, messages	Spring-type terminals 0,14-1,5 mm ²
dimensions	194 x 84 x 218 mm (without terminals)
weight	2 kg