

# Technical Datasheet

## AC C-TEC 2420-8



## DC-UPS

### NCPA0746G01003

## 1 Short-description

The buffered DC power supply of the AC C-TEC series includes ultra-capacitors as energy storage inside the housing. During normal operation this capacitor is charged from AC-mains. The connected DC consumers are supplied as well from AC mains. In case of an interruption of the AC supply, 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

Low wiring effort due to the integration of power supply unit and energy storage

Compatible with TECControl software

Communication with an IPC via USB or RS232 cable

possible Parameterisable via USB interface

Capacity can be extended by external capacitor

modules cyclical capacitor test during mains operation

wide temperature range -40 °C to 60 °C

## 2 Technical Data

Input	
Nominal input voltage	400 V AC -15% / 500 V AC +10%
Input voltage range	340V–550VAC
Nominal frequency	45 – 66 Hz
Rated input current	0,95 A AC (U <sub>e</sub> = 400 V AC)
Max. pre-fusing	3 x 2 A (T)
Max inrush current	32 A / 0,5 ms
output	
Nominal output voltage (in mains operation)	24,6 V DC ± 2,0 %
Nominal output voltage (in back-up operation)	23,2 V DC ± 2,0 %
Max. nominal output current (in mains operation)	17,5 A DC @ 60 °C 20,0 A DC @ 50 °C
Max. nominal output current (in back-up operation)	17,5 A DC @ 60 °C 20,0 A DC @ 50 °C
Max. power loss 'worst-case'	65 W (U <sub>a</sub> = 24,0 V DC)
Energy	8 kJ
Back-up time	344 s @ 1 A / 12 s @ 20 A

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**J. Schneider**  
**Elektrotechnik**

In general	
Leackage current	< 3,5 mA
Parallel operation	Yes
Serial operation	Yes
Protective system	IP20
Operational temperature	-40 ... 60 °C
Storage temperature	-40 ... 70 °C
Relative humidity	< 95 % non-condensing
Max. mounting heighth	2000 m above sea level
dimensions (H x W x D)	192,5 mm, 170 mm, 198 mm
weight	3,5 kg

### 3 Norms and Regulations

Total unit	EN 50178 EN 61010-1 / EN 61010-2-201 EN 62368-1 UL 508
EMC	EN 55011 / 1998 / Klasse A EN 61000-3-2 und EN 61000-3-3 / Klasse A EN 61000-6-2 EN 62040-2
Power HF-transmitter to ensure safe isolation primary/secondary	EN 61558 2-17 (VDE 0570 2-17)
Optocoupler to ensure safe isolation primary/secondary	VDE 0884