



DC-UPS

NCPA0747G01003

(C-TEC 2420-8)

1 Short description

The DC-UPS of the series **C-TEC** includes ultra-capacitors as energy storage inside the housing. During normal operation the capacitors are charged by an external regulated DC power supply. In case of an interruption of the DC supply, the energy of the ultra-capacitors is released regulated. The load is supplied by the back-up module until the ultra-capacitors are discharged. The back-up time depends on the state of charge of the ca-pacitors and on the discharge current

The DC-UPS 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 with potential-free contacts and LED
- Compatible to **TECControl**-Software
- Communication with an IPC via USB or RS232 cable possible
- Parameterizable via USB interface
- Capacity extension possible with external capacitor extension modules
- Cyclic capacitor test during mains operation
- Wide temperature range -40° C up to 60° C

2 Technical Data

Input	
Nominal input voltage	24 V DC -2,5 % +20,8 % SELV/PELV according to EN 60204-1
Input voltage range	23,4V–29VDC
Min nominal input voltage for charging operation	23,4 V DC
Max. nominal input current	20ADC
Fusing input	FK2 40A
Output	
Nominal output voltage (in mains operation)	Input voltage – 0,5 V
Nominal output voltage (in back-up operation)	23,2 V DC
Max. nominal output current	20 A
Power loss nominal operation	5 W
Max. power loss 'worst-case'	40 W (Ua = 25,0 V DC 100% load)
Efficiency	>90%
Energy	8 kJ
Back-up time	344 s @ 1 A / 12 s @ 20 A

Technical Datasheet

C-TEC 2420-8



J. Schneider
Elektrotechnik

General Information	
Max. load message contact: Mains operation, U _c >, Fault	30 V DC max. 0,5 A
Max. load message contact Shutdown	24VDC(6–40VDC)
Parallel operation	No
Serial operation	No
Protective system	IP20
Operational temperature	-40 ... 60 °C
Storage temperature	-40 ... 60 °C
Relative humidity	< 95 % condensation not permissible
Max. mounting height (without load reduction)	2000 m above sea level
Dimensions (H x W x D)	192,5 mm, 84 mm, 193 mm
Weight	2,2 kg

3 Norms and regulations

Total unit	EN 50178 EN 61010-1 / EN 61010-2-201 EN 62368-1 UL 508
Terminal voltage	SELV / PELV according to EN 60204-1
EMC	EN 55011 / 1998 / ..class B EN/ IEC 61000-6-4: 2007 limiting value class B EN 62040-2: 2006-03 limiting value class C1 IEC 62040-2: 2005 - 10 EN 61000-6-2: 2005 EN 62040-2: 2006-03 Schärfeegrad C2
Environmental testing: vibration Shock	EN 60068-2-6 (2 G) EN 60068-2-27 (15 G)