

Technical Datasheet

AC C-TEC 2420-8



DC-UPS

NCPA0746G01xxx

1 Short-description

The DC-UPS of the series **AC C-TEC** includes ultra-capacitors as energy storage inside the housing. During normal operation the power supply supplies the connected loads and charges at the same time the capacitors. In case of an interruption of the mains 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 capacitors 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
- Low wiring effort necessary because of the integration of mains adaptor and energy store
- compatible to **TECControl** shutdown-software
- Communication with an IPC via USB or RS232 cable possible
- adjustable with USB interface
- Capacity extension possible with external capacitor extension modules
- Cyclic capacitor test during mains operation
- Big temperature range -40 C up to 60 C

2 Technical Data

Input	
Nominal input voltage	400 / 500 V AC
Nominal frequency	45 – 66 Hz
Nominal input voltage range	340 V – 550 V AC
Rated input current	0,95 A AC (U _e = 400 V AC)
Max. pre-fusing	3 x 2 A (T)
Max input current	32 A / 0,5 ms
Output	
Nominal output voltage (in mains operation)	24,0 V DC ± 0,5 V
Nominal output voltage (in back-up operation)	24,0 V DC
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 _a = 24,0 V DC)
Energy	8 kJ
Back-up time	344 s @ 1 A / 12 s @ 20 A

General information	
Max. load message contact: Mains operation, $U_c >$, error	30 V DC max. 0,5 A
Max. load message contact Shutdown	24 V DC (6 – 40 V DC)
Earth leakage current	< 3,5 mA
Parallel operation	no
Serial operation	no
Protective system	IP20
Operational temperature	-40 ... 60 °C
Storage temperature	-40 ... 70 °C
Relative humidity	< 95 % condensation not permissible
Max. mounting height (without load reduction)	2000 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 60950  Industrial Control Equipment 2VD5
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 Separation primary/secondary	EN 61558 2-17 (VDE 0570 2-17)
Opto-coupler to ensure the safe separation primary / secondary	VDE 0884