

# Technical data sheet

## C-TEC 2420



### DC-UPS

NCPA0747G01\*\*\*

#### 1 Short description

The DC buffer power supply in the **C-TEC** range uses an ultra capacitor as energy storage. This capacitor is charged during normal operation from an external, regulated DC-power supply. In case of interruption of the dc supply the energy of the capacitors is released. The load is supplied by the buffer module until it is 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
- 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
- Big temperature range -40 °C up to 60 °C

#### 2 Norms and regulations

total unit	EN 61010-1 / EN 61010-2-201 EN 62368-1 UL 508
EMC	EN 55011 class B EN/ IEC 61000-6-4 limit value class B EN 62040-2 limit value class C1 IEC 62040-2 EN 61000-6-2 EN 62040-2 severity C2
Environmental assessment: vibration shock	EN 60068-2-6 (2 G) EN 60068-2-27 (15 G)

# Technical data sheet

## C-TEC 2420

### 3 Technical Data

<b>Input</b>	
Nominal input voltage	24 V DC -2,5 % +20,8 % SELV/PELV according EN 60204-1
Input voltage range	23,4 V – 29 V DC
Min nominal input voltage for charging operation	23,4 V DC
Max. nominal input current	20 A DC
Fusing input	FK2 40A
<b>Output</b>	
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	20,0 A
Max. power loss 'worst-case'	40 W (Ua = 25,0 V DC 100% load)
Efficiency	>90%
Energy	8 kJ
Back-up time	349 s @ 1 A / 13 s @ 20 A
<b>General Information</b>	
Max. load message contact: Mains operation, Uc>, Fault	30 V DC max. 0,5 A
Max. load message contact Shutdown	24 V DC (6 – 40 V DC)
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