

# Technical Datasheet

## AC C-TEC 2403-1



**DC-UPS**  
**NCPA0724G01017**

### 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
- Capacity extension possible with external capacitor extension modules

### 2 Technical Data

<b>Input</b>	
Nominal input voltage	115 V...230 V AC $\pm 15\%$
Nominal input voltage range	97,8 V...264,5 V AC $\pm 0\%$
Nominal frequency	47 Hz...63 Hz
Nominal input current	1,5 A @ 115 V AC 0,75 A @ 230 V AC
Max. inrush current	30 A / 2 ms
<b>Output</b>	
Nominal output current	3 A -13 % +9 %
Nominal output voltage (in mains operation)	24,3 V DC $\pm 2\%$
Output voltage (in back-up operation)	23,5 V DC $\pm 2\%$
Energy (typical)	1,5 kJ @ (U <sub>a</sub> = 22,8 V DC, I <sub>a</sub> = 0,6 A)
Current limitation	See chapter 5.5 Short-circuit
Max power loss ,worst-case'	12 W
efficiency	88% @ (U <sub>e</sub> =230 V AC; U <sub>a</sub> =24,3 V DC; I <sub>a</sub> =I <sub>Nenn</sub> )
<b>Fuse</b>	
Internal device protection	2,5 A (T), 250 V
Fusing DC-output circuit (external)	3,15 A (T)
<b>General</b>	
Protective System	IP20
Operational temperature	-40 °C...60 °C
Storage temperature	-40 °C...60 °C
Rel. humidity	$\leq 95\%$ no condensation
Max. installation height (without load reduction)	2000 m above sea level
Dimensions (H x W x D)	157 mm x 72 mm x 139 mm
Weight	0,85 kg

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### 3 Norms and regulations

Terminal voltage	SELV / PELV according to EN 50178
Ermited 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 EN 61000-4-3 EN 61000-4-4 EN 61000-4-5 EN 61000-4-6 EN 61000-4-11
Total unit	EN 50178 EN 61010-1 / EN 61010-2-201 EN 62368-1 UL 508 / C22.2