Technical Datasheet
AC C-*TEC* 1203-1

J. Schneider Elektrotechnik

DC-UPS
NCPA0724G10002

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 realesed 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 hast he following characteristics:

- Maintenance-free because of long-life ultra-capacitors
- Mikrocontroller based charging and discharging oft he ultra-capacitors
- Control of operation and status of charge with potential-free contacts and LED
- Capacity extension possible with external capacitor extension modules

2 Norms and regulations

Terminal voltage	SELV / PELV according to EN 60950 EN 50178
Ermitted 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 (Static discharge ESD) 8kV/6kV EN 61000-4-3 (electromagnetic fields) 10V/m 27 – 1000MHz 3V/m 1400 - 2700MHz EN 61000-4-4 (fast transients / Burst) DC IN, DC OUT 2kV others 1kV EN 61000-4-5 (Stoßstrombelastung / Surge) DC IN 0.5kV EN 61000-4-6 (conducted noise immunity) 10V 150kHz – 80MHz EN 61000-4-11 (voltage interruptions) back-up with ultra capacitors
Total unit	EN 50178 EN 60950

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Reg.-Nr. 2750

3 Technical Data

Nominal input voltage	115 V … 230 V AC (±15%)
Input voltage range for charging operation	97,8 V … 264,5 V AC
Nominal frequency	47 Hz … 63 Hz
Max. nominal input current	0,84 A @ 115 V AC 0,42 A @ 230 V AC
Max. inrush current	30 A / 2 ms
Max. nominal ouput current	2 A DC (with nominal capacity)
Current limitation	1,05 … 1,5 x I_{Nenn}
Nominal output voltage (in mains operation)	12,3 V DC ±2 %
Output voltage (in back-up operation)	11,5 V DC ±2 %
Energy	1 kJ
Max power loss ‚worst-case'	12 W
efficiency	88% @ (U_e=230 V AC; U_a=24,3 V DC; I_a=I_{Nenn})
Internal device protection	2 A (T), 250 V
Fuse DC-output circuit (external)	3,15 A (T)
Parallel operation	yes
Serial operation	yes
Type of connection: input Ue	Spring terminal max. 2,5 mm²
Type of connection: output Ua	Spring terminal max. 2,5 mm²
Type of connection: message contact	Spring terminal max. 1,0 mm²
Max. load message contact (Ue-OK[1])	30 V/ 0,5 A potentialfree relay contact
Max. load message contact (Uc>[1])	30 V/ 0,5 A potentialfree relay contact
Protective system	IP20 u. EN 60529
Environmental temperature	-20 °C … 60 °C
Storage temperature	-20 °C … 60 °C
Rel. humidity	≤95% condensation not permissible
Max. mounting height (without load reduction)	1000 m ü. NN
Dimensions (H x W x D)	152,5 mm, 72 mm, 130 mm
weight	0,85 Kg

[1] The message contacts are coupled with the LED display (see 4.1). The illumination of a LED effects the activation of the corresponding relay.