

UPS – System

Battery-buffered power supply

manufacturer: J. Schneider Elektrotechnik GmbH

type : **AKKUTEC 1203**

art.-No. : NBPAQ33G1M13



Short description

The battery buffered DC power supply of the series **AKKUTEC** is working according the stand-by parallel mode and ensures in connection with a lead-acid accumulator a safe continuous DC power supply in case of mains failure.

The back-up time is depending from the state of charge of the accumulator and of the discharge current.

The power supply has the following features:

- Battery charger with I/U-charging characteristics
- Battery management by micro-controller
- Battery voltage tracking of the charging voltage by external sensor module (optional)

Nominal input voltage	115 / 230 V AC +/-15%
Nominal frequency	47 – 63, Hz
System voltage	12 V DC
Output voltage (depending of state of charge of the battery) - without temperature sensor	9,9 – 13,2 V DCV DC
Nominal output current	2,85 A at 100% ED current limiting at 1,1 x I Nenn
Protective system	IP 20
Secure separation (safe separation between input and output)	According to EN61558-2-17 (VDE 0570 2-17)
Operational temperature	0 - 40 °C optimal storage temperature for battery 20°C. Durin g storage charge battery each 6 month.
Short circuit protection	Electronic, short-circuit-proof output
Battery	External
Battery type	Pb-Akku, maintenance free Pb- Akku maintenance free (Option with modified characteristic curve)
Battery fuse	external
Back-up time	Depending on battery
Charging characteristics	I/U DIN 41773 part 1 Opt. Battery voltage tracking
Charging current at 100% load	0.25 A
Charging current at 0% load	2.85 A
Deep discharge protection of the battery	Load rejection at a battery voltage $\leq 9,9$ V

LED-display	Ua green voltage is present at the output Net OK green input voltage is present Battery OK green expires at: -battery circuit interruption (battery fuse damaged) -voltage in UPS operation < 10,8 V (battery low) -battery temperature above 45°C LED is blinking at -battery low (damaged battery)
Relais-outputs	mains/UPS-operation 0,5 A /30 V DC general error 0,5 A /30 V DC
Control input mass relation 24 V Shut down terminal (emergency stop)	As Shutdown software for PC Abort of the UPS- operation Potential free switch input Switch level: 12 V DC (6-45 V DC)
Battery management Battery circuit control Real Battery power control	Battery management via internal Microcontroller Control battery circuit / battery fuse each 60 sec Battery load test during mains operation (load of the battery with simultaneous voltage measurement each 24h)
EMC-regulation	EN 55011/03/91 EN 50082-1/1.92 EN 61000-4-2,3,4,5,6,11 EN 50178 EN 60950
Type of construction connection Dimensions Battery voltage tracking	module Spring type 60 x 92,5 x 116 mm (w x h x d) With the temperature-sensor at the terminal strip IO-1 and 2 the final charging voltage is automatically adjusted according the environmental conditions (0-45 V). Over temperature at the batteries (above 45°C) is displayed and announced . Temperatures above 20°C at the batteries cause a strong reduction of the life duration of the batteries