



DC-UPS

NBPAQ33G1M19

1 Short description

The battery buffered DC power supply of the series **AKKUTEK** 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)

2 Technical Data

Nominal input voltage	115 - 230 V AC -15% +10%
Nominal frequency	47 – 63, Hz
Nominal output voltage	52,8 V DC \pm 0,4% (without battery)
In battery operation depending on state of charge of the battery	39,6 V DC ... 52,8 V DC
output rated current	1,1 A DC
Constant current limitation	current limit at 1,1 x I nominal
Protective system	IP 20
Safe separation (safety separation between input and output)	According to EN61558-2-17 (VDE0570 2-17)
Operating temperature	0 ... 40 °C Optimum storage temperature for battery 20°C. Must be charged every 6 month during storage
short-circuit protection	Electronic, Short-circuit proof output
Battery	External
Batterietype	Pb-Akku, maintenance-free (Option with changed characteristic)
Battery backup	external
Backup time	Depending on the battery and load
charging characteristic	I/U DIN 41773 part 1 Opt temperature tracking
Charge current for 100% load	0.1 A
Charge current for 0% load	1,1 A



deep charge protection of the battery	By load rejection at a battery voltage $\leq 39,6$ V
LED-display	Power OK green power present Battery OK green goes out when - Battery circuit interruption (Battery fuse def.) - The voltage in UPS operation $< 43,2$ V (Batt.low) - The battery temperature > 45 ° C. LED is blinking when - Low Battery
Relais outputs	Mains/UPS-works 0,5 A /48 V DC general error 0,5 A /48 V DC
Shut down	abortion UPS operation potential free contact input Switching level: 24 V DC (6-48 V DC)
battery management	Battery management on internal microcontroller
Battery monitoring	Monitoring battery circuit / battery backup, all 60sec
Real battery life measurement	Battery stress test during mains operation. (Stress of the battery with voltage measurement at the same time) every 24 hours.
EMC regulations	EN 55011/03/91 EN 50082-1/1.92 EN 61000-4-2,3,4,5,6,11 EN 50178 EN 60950
Terminals	Spring type
Dimensions (H x W x D)	60 x 92,5 x 116 mm
Optionen	TECControl
Shut down Software	with the temperature sensor on the terminal block IO- 1 and 2, the charging voltage is adapted automatically according to the ambient conditions. (48.4 to 54.6 V) Over temperature at the batteries (over 45 ° C) is displayed and monitored.
Temperature tracking	Temperatures above 20 ° C at the batteries cause a drastic reduction of the life of the batteries.