AKKUTEC-2403-DIN

AC/DC DC UPS 24V 3A

Short description

The battery buffered DC power supply of the series **AKKU***TEC* 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	230 V AC -15% -10%
Nominal frequency	47 – 63, Hz
System voltage	24V DC
Output voltage (depending of state of charge of the battery)	
- with temperature sensor	19,8V DC-27,8V DC
- without temperature sensor	19,8V DC-26,8V 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. During storage charge battery each 6 month.
Short circuit protection	electronic, short-circuit-proof output
Battery	External
Type of battery	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 Teil 1 Opt. Battery voltage tracking
Charge voltage	
without temperature sensor	26,8 V DC ± 0,4%
with temperature sensor at 25°	27,1V DC ± 0,4%

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 ≤ 19,8 V
LED-display	Net OK green input voltage is present Battery OK green **expires at:** -battery circuit interruption (battery fuse damaged) -voltage in UPS operation < 21,6 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 referring to earth 24 V	As shut down Software for PC
Shut down terminal (emergency stop)	Abort of the UPS- operation Potential free switch input Switch level: 24 V DC (6-45 V DC)
Battery management	Battery management via internal Microcontroller
Battery circuit control	Control battery circuit / battery fuse each 60 sec
Real battery power control	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	module
Connection	Spring type terminal
Dimensions	60 x 92,5 x 116 mm (w x h x d)
Weight	0,55kg

Options

Shut down Software	*TEC***Control**
Battery voltage tracking	By connecting the external temperature sensor moduls (option) at the terminal strip ‘IO-1’ connection 1 and 2 (to consider polarity) the temperature tracking will be automatically activated. According to the ambient temperature fluctuation of 0-45°C varying the charge voltage (and hence the output voltage) in a range from 27,85 - 26,3 V DC Battery temperatures above 45°C are indicated by the extinction of the display ’Batt OK’ Temperatures above 20°C at the batteries cause a strong reduction of the life duration of the batteries