AKKUTEC-2405-USB-DIN

AC/DC DC UPS 24V 5A with USB interface

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)
- USB interface: with corresponding drivers and Schneider *TEC***Control** Software the message contacts can be controlled and a Shut-Down/Restart can be made.

Nominal input voltage	115 - 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	5 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
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
Charge voltage	Opt. Battery voltage tracking
without temperature sensor	
with temperature sensor	26,8 V DC ± 0,4%
at 25°	27,1V DC ± 0,4%

Charging current at 100% load	0.5 A
Charging current at 0% load	5.5 A
Deep discharge protection of the battery	Load rejection at a battery voltage ≤ 19,8 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 < 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
communication USB	for parameterisation for operation with optional TECControl software 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 2.5 mm² power Spring type terminal 1,5 mm² messages
Dimensions	75 x 160 x 150 mm (w x h x d)
Weight	1,6kg

Options

Shut down Software	TEC Control
Battery voltage tracking	With the temperature-sensor at the terminal strip IO-1 and 2 the final charging voltage is automatically adjusted according the environmental conditions(26,2-27,3 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