



DC-UPS NBPAQ33G1M01

1 Short description

The battery-buffered DC power supply of the AKKUTEC series operates according to the standby parallel principle and, in conjunction with a lead accumulator, ensures that the DC voltage supply is safely maintained in the event of a power failure. The buffer time depends on the charge state of the accumulator and the discharge current

The power supply has the following characteristics:

- Battery charger with I/U-charging characteristics
- Micro controller-supported battery management
- Temperature tracking of the charge voltage by external sensor module (option)

2 Technical Data

Input	
Input voltage	115...230 V AC ± 15 % (98...265 V AC)
Frequency	47...63 Hz
Input current	0,9 A @ 115 V AC / 0,5 A @ 230 V AC
Inrush current	≤ 30 A/2 ms
Nominal input power	60 W @ (U _e = 230 V AC, U _a = 26,8 V DC, I _a = 2 A)
Output	
Nominal output voltage	24 V DC
Output voltage (without temperature tracking)	19,8...26,8 V DC $\pm 0,4$ %
Output voltage (with temperature tracking)	19,8...27,8 V DC $\pm 0,4$ %
Final charging voltage (with/without temperature tracking)	26,8 V DC $\pm 0,4$ % / 26,8...27,8 V DC $\pm 0,4$ %
Load shedding	19,8 V DC $\pm 0,4$ %
Nominal output current	2 A
Self consumption current (in back-up operation)	65 mA
Max power loss "worst case"	12 W
Efficiency	87 % @ (U _e = 230 V AC, U _a = 26,8 V DC, I _a = 2 A)
Charging characteristics	IU-characteristics DIN 41773-1
Fusing	
Internal device protection	2 A (T), 250 V
Fusing battery circuit (external)	3 A (T), 250 V
Fusing output (external)	3 A (T), 250 V
Pre-fusing	5 A (T), 250 V
In General	
Protective system housing	IP20
Overvoltage category	II

Technical Datasheet

AKKUTEC 2402

Degree of pollution	2
Battery type	Lead accumulator*
dimensions (H x S x D) standard unit	92,5 mm x 60 mm x 116 mm
weight standard unit (without batteries)	0,6 kg
Operational temperature	0 °C ... +45 °C
Operational temperature (UL tested)	+10 °C ... +40 °C
Storage temperature	0 °C ... +50 °C
Relative humidity	≤95 % non-condensing
Max. height above sea level (without power reduction)	2000 m

3 Norms and regulations

Power HF transformer to ensure safe separation of primary and secondary	EN 61558 2-17 (VDE 0570 2-17)
Optocoupler to ensure safe isolation primary/secondary	VDE 0884
Ermited interference:	EN 61000-3-2 und EN 61000-3-3 Klasse A EN 55011 Klasse B
Interference immunity EN 61000-6-2	EN61000-4-2 EN61000-4-3 EN61000-4-4 EN61000-4-5 EN61000-4-6 EN61000-4-11 (Spannungseinbrüche)
Total unit	EN 50178 / EN 62368-1 / EN 61010-1 / EN 61010-201