Technical Datasheet
AKKU*TEC* 4806

DC-UPS
NBPA1630G01002

1 Short description

The accumulator buffered DC supply works according to the standby parallel principle and guarantees, in connection with a lead accumulator and for a certain time interval, a safe upkeep of the DC supply in case of a mains failure. The overall output current is split up between consumer supply and lead accumulator charge.

The power supply is characterized by the following properties:

- Switching power supply with I/U charging characteristic
- aktiv power factor correction (PFC)
- Micro-controller supported lead accumulator management
- RS232 for monitoring and parameterization
- Temperature adjustment of the charging voltage by an external sensor

2 Norms and regulations

EMC	EN 55011 limit value class B EN 62040-2, limit value class C1 EN 61000-6-2 EN 61000-6-4
Total unit	2014/30/EU+A1+A2 EN 50178 EN 62368-1 EN 61010-1/ EN 61010-2-201
Optocoupler to ensure safe isolation primary/secondary	EN 60747-5-1, complies with SELV / PELV
Power HF transformer to ensure safe separation of primary and secondary	EN 61558 2-16, complies with SELV / PELV

3 Technical Data

INPUT	
Nominal input voltage	230 V AC ±15% (196 V AC…265 V AC)
Nominal frequency	47 Hz … 63 Hz
Nominal input current	1,6A@ (Ue = 230 V AC, Ua = 52,8 V DC, Ia = 6 A)
Inrush current	≤ 35 A / 2 ms
Nominal input power	356 W @ (Ue = 230 V AC, Ua = 52,8 V DC, Ia = 6 A)
OUTPUT	
Nominal output voltage	48VDC
Output voltage range (with temperature tracking)	43,2 V … 57,2 V DC ±0,4%
Output voltage range (without temperature tracking)	43,2 V … 52,8 V DC ±0,4%
Charging end voltage (with / without tem)	52,8 V DC ±0,4 % / 52,8 V DC…57,2 V DC ±0,4 %
Load shedding	40,8 V DC ±0,4 %
Residual ripple	< 150 mV eff.
nominal output current	6 A
Self current consumption	35 mA @ 48 VDC oder 6,4W @ 230 VAC
Max power loss ‚worst-case'	41 W @ (Ue = 230 V AC, Ua = 52,8 V DC, Ia = 6 A)
efficiency	88,5 % @ (Ue = 230 V AC, Ua = 52,8 V DC, Ia = 6 A)
Charging characteristics	I/U DIN41773
FUSING	
Internal device protection	2,5 A (T), 250 V
fuse DC-output circuit (external)	7,5 A (T), 250 V
Fuse DC-Battery circuit (external)	7,5 A (T), 250 V
Pre-fusing	5 A (T), 250 V
IN GENERAL	
Protective system	IP20
Overvoltage category	II
Degree of pollution	2
Accumulator type	VRLA lead battery*
Dimensions (HxWxD)	155 mm, 95 mm, 183 mm
Weight	1.6 Kg
Operating temperature / storage temperature	-10 °C … 50 °C
Rel. Humidity	≤95% no condensation
Max. installation altitude without load reduction	2000 m above sea level

*.basic parameterization for VRLA-Batteries (AGM, SLA)