Technical Datasheet
AKKU*TEC* 2420 3ph

J. Schneider Elektrotechnik

DC-UPS
NBPA0313G01002

1 Short description

The battery backed up DC power supply in the **AKKU***TEC* range uses the standby-parallel principle of operation and, in conjunction with a lead accumulator, ensures that the DC power supply is reliably maintained in the case of a mains power failure.

The power supply has the following features:

- battery charger system with I/U charging characteristic
- Microcontroller-based battery management
- Temperature compensation for charging voltage by means of external sensor module (optional module)
- control and operation panel for mounting in the front door of a cabinet or open-frame (optional)

2 Norms and regulations

power- HF- transducer to ensure safe separation of primary and secondary	EN 61558 2-17 (VDE 0570 2-17)
Optocouplers for protective separation against electric shock, requirements - tests	VDE 0884
EMC	EN 55011 / 1998 /..Klasse A EN 61000-3-2 und EN 61000-3-3 / Klasse A EN 50082-2 / 1995
environmental tests	EN 60068-2-6
overall unit	EN 50178 / EN 62368-1 EN 61010-1 / EN 61010-2-201

3 Technical Data

Input	
Input voltage	400…500 V AC -15 % / +10 % (340…550 V AC)
Frequency	47…63 Hz
Input current	0,91 A @ (400 V AC, Ua = 26,8 V DC, Ia = 20 A)
Inrush current	≤ 15 A/0,5 ms
Nominal input power	596 W @ (Ue = 400 V AC, Ua = 26,8 V DC, Ia = 20 A)
Output	
Nominal output voltage	24VDC
Output voltage (without temperature tracking)	19,8…26,8 V DC ±0,4 %
Output voltage (with temperature tracking)	19,8…28,0 V DC ±0,4 %
Output voltage (boost charging)	28,6 V DC
Final charging voltage with/without temperature tracking	26,8 V DC ±0,4 % / 26,5…28,0 V DC ±0,4 %
Load rejection	19,8 V DC ±0,4 %
Nominal output current	20 A
Constant current limitation	1,05…1,1*I_{Nom}
Self-consumption current (in back-up operation)	95 mA
Max. power loss ‚worst-case'	66 W
efficiency	90 % @ (Ue = 400 V AC, Ua = 26,8 V DC, Ia = 20 A)
Charging characteristics	IU-characteristics DIN 41773-1
Fusing	
Fusing battery circuit (external)	25 A (T), 250 V
Fusing output (external)	25 A (T), 250 V
Pre-fusing	2 A (T), 250 V
General	
Protective system housing	IP20
Overvoltage category	II
Degree of pollution	2
Battery type	Lead accumulator*
dimensions (H x W x D) standard device dimensions (H x Wx D) Mounting plate 7 Ah / 12 Ah	240,5 mm x 100,5 mm x 244 mm 256 mm x 340 mm x 252 mm
Weight standard device (without batteries) Weight standard device with mounting plate 7 Ah Weight standard device with mounting plate 12 Ah	2,6 kg 9,5 kg 13,0 kg
Operational temperature	0°C…+40°C
Storage temperature	0°C…+50°C
Relative humidity	≤95 % non-condensing
Max. height above sealevel (without power reduction)	2000 m