Technical Datasheet
AKKU*TEC* 2410

J. Schneider Elektrotechnik

DC-UPS
NBPAN33G1M01

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 amount of time, a safe backup operation 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 back-up time depends on the state of charge of the accumulators and the discharge current.

The power supply is characterized by the following properties:

- Primary switched power supply with I/U charging characteristic
- Active power factor correction (PFC)
- Micro-controller supported lead accumulator management
- RS232 for monitoring and parameterization
- Optionally temperature tracking of the charging voltage by an external sensor
- Optionally display and control panel for mount-in cabinet door or built up

2 Norms and Regulations

EMC	EN 55011 limit value class B EN 62040-2, limit value class C1 EN 61000-3-2 EN 61000-3-3 class A EN 61000-6-2 EN 61000-6-4 EN 50130-4+A1+A2
Total unit	2014/30/EU+A1+A2 EN 50178 EN 62368-1 EN 61010-1/ EN 61010-2-201
Optocoupler for guaranteeing a safe primary / secondary separation	EN 60747-5-1, complie with SELV / PELV
Power HF-transmitter to ensure the safe separation of primary and secondary.	EN 61558 2-17, complies with SELV / PELV

3 Technical Data

INPUT	
Input voltage	230 V AC ±15 % (196…265 V AC)
Frequency	47…63 Hz
Input current	1,4A@230VAC
Inrush current	≤ 35 A/2 ms
Nominal input power	303 W @ (Ue = 230 V AC, Ua = 26,4 V DC, Ia =10 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
Charging end voltage with/without temperature tracking	26,8 V DC ±0,4 % / 26,5…28,0 V DC ±0,4 %
Load shedding	19,8 V DC ±0,4 %
Residual ripple	< 150 mVeff
Nominal output current	10 A
Constant current limitation	1,05…1,1*I_{Nom}
Self current consumption (in back-up operation)	65 mA
Max. power loss ‚worst-case'	44 W
efficiency	87 % @ (Ue = 230 V AC, Ua = 26,4 V DC, Ia = 10 A)
Charging characteristics	IU-characteristics DIN 41773-1
FUSING	
Internal device protection	2 A (T), 250 V
Fuse battery circuit (external)	FKS/FK215A/10A(T)
Fuse output (external)	FKS/FK215A/10A(T)
Pre-fusing	5 A (T), 250 V
IN 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 W x D) Mounting plate 7 Ah / 12 Ah	216,5 mm x 90,5 mm x 175 mm 256 mm x 340 mm x 183 mm
weight standard unit (without batteries) weight standard unit with mounting plate 7 Ah weight standard unit with mounting plate 12 Ah	1,7 kg 6,6 kg 9,3 kg
Betriebstemperatur Betriebstemperatur UL geprüft	0°C…+40°C +10 °C … +40 °C
Storage temperature	0°C…+50°C
Relative humidity	≤95 % non-condensing
Max. height above sea level (without load reduction)	2000 m