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 Technical Data

Nominal input voltage	230 V AC (±15%)
Input voltage range for charging operation	195.5 V … 264.5 V
Nominal frequency	47 Hz … 63 Hz
Power consumption	350 VA
Self current consumption	75 mA @ 24 V
Max. nominal input current	1,4 A
Max. inrush current	35 A / 2 ms
Max. nominal output current	10 A
Nominal output voltage (in mains operation)	24 V DC
Output voltage range (with temperature tracking)	26.4 V … 27.7 V DC ± 0.4%
Output voltage (active boost voltage)	28.56 V DC
Charging characteristics	I/U DIN41773
Charging end voltage without temp.-Sensor	26.8 V DC ±0.4%
Deep discharge protection and load rejection	19.8 V DC ±0.4%
Max power loss ‚worst-case'	44 W
Efficiency	88,6% @ (U_e=230 V; U_a=26.4 V DC; I_a=I_{Nenn})
Residual ripple	< 150 mV eff.
Internal device protection	2,5 A (T), 250 V
Fuse DC-output circuit (external)	FK2 15 A, or 10 A (T, external)
Fuse DC-battery circuit (external)	FK2 15 A, or 10 A (T, external)
Switching in parallel	Yes
Switching in series	Yes
Max. signal contact load "Netzbetrieb" (mains-OK[1])	30 V/ 0.5 A potential-free relay-contact
Max. signal contact load "Sammelstörung" (General error[1])	30 V/ 0.5 A potential-free relay-contact
Max. signal contact load „Batterie oberhalb" (Battery above[1])	30 V/ 0,5 A potential-free relay-contact

[1] The signal contacts are coupled with LED displays. (see section **Fehler! Verweisquelle konnte nicht gefunden werden.**) The illumination of a LED effects the activating of the corresponding relay.

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Max. signal contact load „Batterie innerhalb“ (Battery within[Fehler! Textmarke nicht definiert.])	30 V/ 0,5 A potentialfree relay-contact
Max. signal contact load Shut-Down	24 V DC (16 - 80 V DC) floating ground gate input
Max. signal contact load „Starkladung“ boost charge	24 V DC (16 - 80 V DC) floating ground gate input
Type of connection: primary ‘Netz’ (mains)	Combicon-screw type terminal 2,5 mm²
Type of connection secondary ‘Ua’, ‘Batt’	Combicon-screw type terminal 2,5 mm²
Type of connection message contacts **IO-1 … 3**	Combicon-screw type terminal 1,5 mm²
Type of connection current share bus “CS”	Spring type terminal 0,5 mm²
Battery type	Lead acid accumulator, maintenance-free
Back-up time	Accumulator specific
Protective system	IP20
Operating temperature	0 °C … 40 °C
Storage temperature	0 °C … 50 °C
Rel. humidity	≤95% no condensation
Max. installation altitude	2000 m above sea level
Dimensions (HxWxD)	216,5 mm, 90,5 mm, 175 mm
Weight	1,6 Kg

3 Norms and Regulations

EMC	EN 55011 Grenzwertklasse B EN 62040-2, Grenzwertklasse C1 EN 61000-3-2 EN 61000-3-3 Klasse A EN 61000-6-2 EN 61000-6-4 EN 50130-4+A1+A2
Overall unit	2014/30/EU+A1+A2 EN 50178 EN 12101-10+B1
Optocoupler for guaranteeing a safe primary / secondary separation	EN 60747-5-1, complies with SELV / PELV
Power HF-transmitter to ensure the safe separation of primary and secondary.	EN 61558 2-16, complies with SELV / PELV