



NBPA0347G01***

1 Brief description

The **AKKUTEK** is a battery-buffered power supply and it works in accordance with the standby parallel principle. The batteries are charged in grid mode. The connected consumers are supplied simultaneously. At grid failure the **AKKUTEK** in conjunction with the batteries ensures that a safe supply of direct current remains intact for a specific period of time.

The **AKKUTEK** has the following properties:

- Primary clocked, switched-mode supply with I/U charging curve
- Active power factor correction (PFC)
- Microcontroller-supported battery management
- Operating and display panel for installation in control cabinet door
- Temperature tracking of the charging voltage via external sensor

2 Standards and regulations

| | |
|--------------|---|
| Total device | 2014/35/EU (Low Voltage Directive) 2011/65/EU with 2015/863/EU (RoHS) 1907/2006/EG (REACH) 2009/125/EC (Eco-Design) EN 61010-1 / EN 61010-2-201 EN 62368-1 |
| EMC | 2014/30/EU (EMC Directive) EN 55011 Limit Class B Group 1 EN 61000-6-2 EN 61000-6-4 |

3 Technical data

| Input | |
|--|---|
| Rated input voltage range | 110 - 240 V AC |
| Perm. input voltage tolerance | ±10 % |
| Frequency | 50 / 60 Hz ±3 Hz |
| Rated input current | 1.4 A @ 230 V AC |
| Switch-on current | ≤65 A/3 ms |
| Rated input power | 313 W @ (U _e = 230 V AC, U _a = 13.4 V DC, I _a = 20 A) |
| Output | |
| Rated output voltage | 12 V DC |
| Output voltage (without temperature tracking) | 9.9 - 13.4 V DC ±0.4% |
| Output voltage (with temperature tracking) | 9.9 - 14.0 V DC ±0.4% |
| Output voltage (heavy charging) | 14.3 V DC |
| Plateau charging voltage with/without temperature tracking | 13.4 V DC ±0.4% / 13.25 - 14.0 V DC ±0.4% |
| Load shedding (deep discharge protection) | 9.9 V DC ±0.4% |
| Rated output current | 20 A |
| Charging current limit | 21.5 A ±0.5 A |
| Internal consumption in buffer mode | 135 mA |
| Power loss | 48 W @ (U _e = 230 V AC, U _a = 13.4 V DC, I _a = 20 A) |
| Efficiency | 84.7 % @ (U _e = 230 V AC, U _a = 13.4 V DC, I _a = 20 A) |
| Charging characteristic** | IU curve DIN 41773-1 |
| Fusing | |
| Fusing of the battery circuit | Max. 25 A |
| Fusing – output | External |
| Recommended prefusing | Max. 10 A |
| General | |
| Protection rating of the enclosure | IP20 |
| Overvoltage category | II |
| Pollution Degree | 2 |
| Battery type | Lead-acid battery* |
| Dimensions (H x W x D) standard device | 241 mm x 101 mm x 234 mm |
| Weight of the standard device (without batteries) | 2.9 kg |
| Operating temperature | 0 °C - +40 °C |
| Storage temperature | 0 °C - +50 °C |
| Relative humidity | ≤95% non-condensing |
| Max. elevation above sea level | 2000 m |

*Basic parameter settings for VRLA lead-acid battery (AGM, SLA, gel battery)

**Parameters can be set for other battery types