



AKKUTEC 1220

NBPA0347G01***

1 Brief description

The **AKKUTEC** 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 **AKKUTEC** in conjunction with the batteries ensures that a safe supply of direct current remains intact for a specific period of time.

The **AKKUTEC** 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