



AKKUTEC 2440

NBPAP33G1***

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
- 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
AKKUTEC 2440	UL 508 / C22.2 no. 107.1
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	3x 400 – 500 V AC
Perm. input voltage tolerance	-15 % +10 %
Frequency	50 / 60 Hz ±3 Hz
Rated input current	2.9 A @ 400 V AC
Switch-on current	≤65 A/5 ms
Rated input power	1171 W @ (U _e = 400 V AC, U _a = 26.8 V DC, I _a = 40 A)
Output	
Rated output voltage	24 V DC (SELV / PELV)
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 (heavy charging)	28.6 V DC
Plateau charging voltage with/without temperature tracking	26.8 V DC ±0.4% / 26.5 – 28.0 V DC ±0.4%
Load shedding (deep discharge protection)	19.8 V DC ±0.4%
Rated output current	40 A
Charging current limit	43 A ±1 A
Internal consumption in buffer mode	135 mA
Power loss	109 W @ (U _e = 400 V AC, U _a = 26.8 V DC, I _a = 40 A)
Efficiency	90.7 % @ (U _e = 400 V AC, U _a = 26.8 V DC, I _a = 40 A)
Charging characteristic**	IU curve DIN 41773-1
Fusing	
Fusing of the battery circuit	Max. 45 A
Fusing – output	External
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	233 mm x 292 mm x 138 mm
Weight of the standard device (without batteries)	3.6 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