



# AKKUTEK 2420 3p

NBPA0313G01\*\*\*  
NBPCL33G1\*\*\*

## 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
- 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
<b>AKKUTEK 2440</b>	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

<b>Input</b>	
Rated input voltage range	3x 400 - 500 V AC
Perm. input voltage tolerance	-15 % +10 %
Frequency	50 / 60 Hz ±5 Hz
Rated input current	0.9 A @ 400 V AC
Switch-on current	≤15 A/0.5 ms
Rated input power	591 W @ (U <sub>e</sub> = 400 V AC, U <sub>a</sub> = 26.8 V DC, I <sub>a</sub> = 20 A)
<b>Output</b>	
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	20 A
Charging current limit	21.5 A ±0.5 A
Internal consumption in buffer mode	95 mA
Power loss	60 W @ (U <sub>e</sub> = 400 V AC, U <sub>a</sub> = 26.8 V DC, I <sub>a</sub> = 20 A)
Efficiency	89.9 % @ (U <sub>e</sub> = 400 V AC, U <sub>a</sub> = 26.8 V DC, I <sub>a</sub> = 20 A)
Charging characteristic**	IU curve DIN 41773-1
<b>Fusing</b>	
Fusing of the battery circuit	Max. 25 A
Fusing – output	External
Recommended prefusing	Max. 2 A
<b>General</b>	
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
Dimensions (H x W x D) standard device with mounting plate 7 Ah / 12 Ah	256 mm x 340 mm x 241.6 mm
Weight of the standard device (without batteries)	2.6 kg
Weight of the standard device with mounting plate 7 Ah	9.5 kg
Weight of the standard device with mounting plate 12 Ah	13.0 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