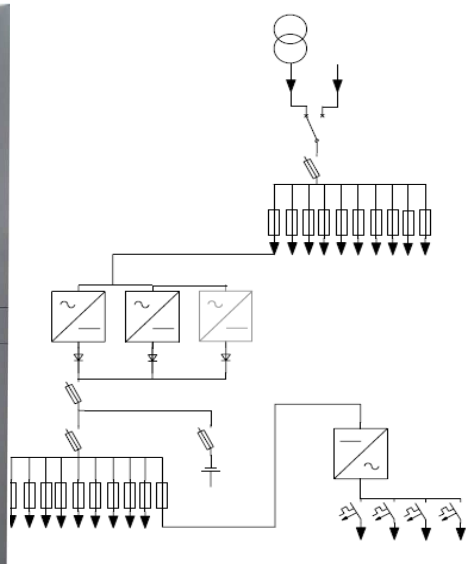
AC / DC Auxiliary Supply for Wind Farms

Voltage input	**3x400/230 VAC**
Voltage output	**108/216 VDC**
	230 VAC



This system has been specially developed to provide safe power distribution for transformer stations used in wind farms.
The systems are extremely reliable and work very efficiently.
The state-of-the-art rectifier works in a controlled IU characteristic mode according to DIN 41772.
If stepwise load changes occur in a range of 10 to 90% the dynamic voltage deviation will be below 3% and corrected within max. 1.5ms.
By using an AC / DC power supply the system is able to provide safe AC power of 230volts.
Furthemore, by using a DC/DC converter the system can also provide safe 60V DC voltage.

- Excellent reliability
- „State-of-the-art“ system
- Low maintenance required
- Complete system

All relevant electrical devices are monitored and connected to the common failure report. In addition there a several extensions available:
The system can be equipped with different kinds of various AC distributions and automatic switch-over of power sources based upon the respective priority of the circuits. This system can be build in a traditional way or realized by using PLC control systems.
Functions like deep discharge protection are also available.
A protection against high voltage in case of boost charges power is also an option.
The system can also provide other secured voltages like 48 volts for communication tasks if requested.

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Technical data:

AC input	
Voltage input	400/230 V AC +15/-15%, N, PE
Frequency input	47-63 Hz
Current input	according to type
Starting current	< current input
efficiency	>=85...93 %
DC voltage output	
DC out	108V or 216V
Charging characteristic	controlled IU characteristic mode according to DIN 41772/ DIN 41773 conversation charging 2.27V/Z NEA operation
Output current	see type list
AC voltage out (secured)	
Voltage out	230V AC
Power out	2500 VA to 5000 VA
Environmental conditions	
Temperature range	0°C to 40°C
Humidity	F
Altitude	<= 1000m above sea level, extension of range possible
Noise	< 65 dB(A) at 1m distance
Construction details	
Body	steel cabinet with front door
Size, weight	according to type
Cooling	convection
Connection	ground (standard)
Type of protection	IP20
Size of single cabinets	height 2200mm, depth 600mm width AC input 800mm DC cabinet 800mm Battery cabinet 2x600mm
Colour/surface	powder coating RAL 7035;
Standards	
Certificate	CE
Safety	EN 60950, VDE 0100 part 410, VDE 0106 part 100, EN 60146
EMC	EN 55011 class A, EN 61000
Monitoring	
Controlling	- grid control - voltage output (U<, U>) - voltmeter - ammeter
Connection	- fuse circuit breaker DC-out
Indication	- general fault with potential free-contact
Options	- battery charging monitoring unit - earth leakage monitoring - deep discharge protection - microcontroller monitoring unit with serial/USB connection

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