

## PROTECT C 3000 WD

Single phase UPS

Rugged & reliable systems  
Qualified for windmills applications



### Uninterruptible power security for critical applications, including windmills control and lighting systems.

Protect C series is a range of online double conversion Uninterruptible Power Supply (UPS) securing power for essential loads.

Protect C 3000 WD benefits of the consistent continued development of this well-proven and highly reliable series and of AEG PS specific expertise in applications for windmills. The system is robust and highly reliable and its technical specifications are fulfilling demanding requirements to secure power for critical applications at the heart of windmills operations: yaw control systems or turbine obstruction lighting.

#### Typical applications

- Yaw control systems
- Turbine obstruction lighting
- Backup power for all types of critical loads in remote environments

## FEATURES

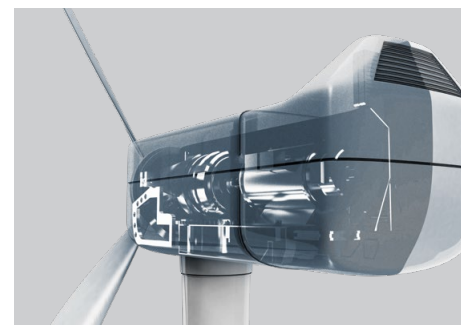
- VFI topology (online/double conversion) protection against all mains network problems
- Very wide input voltage window of 140 VAC to 276 VAC without stress on the internal battery system and with a stable output voltage
- ECO Mode for high efficiency operation
- Expansion slot for SNMP, potential free contacts, remote display
- LED display
- Configuration options (password protected) via the operator terminal
- Internal hardware data logger with plain text display and date/time stamp
- Emergency power off on terminal block (potential-free)
- Cold start
- Auto-shutdown delay time settable up to 60 s

## BENEFITS

- Reduced OPEX: easy and economical maintenance thanks to the hot swappable battery, which allow replacement on-site
- Improved uptime: no downtime for regular battery maintenance over system lifetime
- Seamless integration with windmill supervisory systems (control, alarms, battery test) thanks to embedded communications
- Easy maintenance: hot swappable battery directly from the front panel



Hot swappable battery for easy and quick maintenance.



# Specifications

Power type rating	3000 VA 2400 W
<b>UPS INPUT</b>	
Input voltage	208 VAC   220 VAC   230 VAC (Default)   240 VAC
Voltage range without battery mode (load dependent)	140 – 276 VAC
Frequency (auto selection)	50 Hz / 60 Hz
Frequency range	40 – 70 Hz
Synchronization range	±1 – 10 % configurable, default ±6 %
Input power factor / THDi	≥0.99 / <4 %
Current consumption at nominal load (max.)	12,6 A
<b>UPS OUTPUT</b>	
Rated output voltage (adjustable)	200 VAC   220 VAC   230 VAC (default)   240 VAC ±1 %
Voltage waveform	Sinusoidal
Output voltage distortion	Linear load THDU <3 % (<4 % at low battery (11VDC/battery)) Non-linear load THDU <5 % (<7 % at low battery (11VDC/battery))
Frequency (selectable)	50 Hz / 60 Hz
Frequency in battery	Free run mode 50 Hz / 60 Hz ±0.25 Hz
Nominal output current	(At 230 VAC) 13 A
Overload response	(Double conversion mode) <130 % for 12 s   130 % – 150 % for 2 s   >150 % for 100 ms (Battery mode) <130 % for 12 s   130 % – 150 % for 2 s   >150 % for 100 ms
Crest factor	3:1
Short circuit response	Inverter limits the current >150 % for 100 ms
<b>STATIC BYPASS</b>	
Bypass input range	User selectable +20/-20 % of nominal voltage (default +15/-20 %)
Frequency range	50 / 60 Hz ±1 – 10 % of nominal value, (default 5 %)
Overload capacity	100 – 110 % overload warning   110 - 130 % for 5 min   130 % – 150 % for 15 s   >150 % for 300 ms
<b>BATTERY</b>	
Type	Sealed, maintenance free, integrated, hot swappable, 12 V   7.0 Ah VRLA
Rated voltage	96 VDC (8 battery blocks 12 V each)
Max recharge current	1.7 A
Battery management	Automatic and manual battery test
<b>COMMUNICATION</b>	
Interfaces	RS232, dry contacts, slot for network communication card
<b>GENERAL DATA</b>	
Efficiency	(ECO+ mode) ≥96 % (Double conversion mode) ≥91 %
Efficiency at nominal load	(Double conversion mode) ≥91 %
Operating temperature range	0 – 40 °C
Storage temperature range	-25 – +55 °C (without battery, with battery recommendation 0 – 25 °C)
Humidity	0 – 96 % (without condensation)
Operation altitude at nominal load	Up to 2000 m at 0 – 40 °C Up to 3000 m at 35 °C without derating
Product safety	IEC 62040-1
EMC	EN 62040-2 C2, EN 61000-3-2, EN 61000-3-3
Protection class	IP20
Pollution degree	PD 2
Acoustic noise (1 m distance)	<50 dB(A)
Input and out connectors	Terminals
Dimensions (net), W x H x D (mm)	UPS 214 x 346 (w/cover)   412 (terminal cover)
Dimensions (with packing) W x H x D (mm)	320 x 490 x 576
Weight approx.	UPS incl. integrated battery 35 kg, with packing 37 kg
Shipment	Mains input cord 1200 mm, output power cord 1200 mm, communications cable 1200 mm, Operating & safety instructions
Conformity	CE, ROHS

## AEG Power Solutions

Approach your local AEG Power Solutions representative for further support. Contact details can be found on: [www.aegps.com](http://www.aegps.com)