

Maximum yield

- > Efficiency of up to 96.1%
- > Option of combining to three-phase units with a power of up to 18 kW
- > Integrated Power Balancer
- > OptiCool: continuous operation even at high temperatures

Easy Installation

- > Free choice of mounting location
- > Free choice of turbine due to programmable power curve
- > Certified for the most important countries of installation (SMA grid guard)

Safe operation

- > Electric separation
- > Compatible with Windy Boy Protection Box 600
- > Worldwide SMA service and SMA Service Line
- > Comprehensive SMA warranty program



WINDY BOY 5000A / 6000A

The High Performers

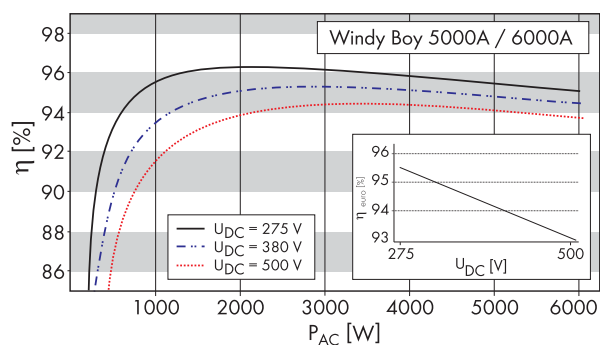
The Windy Boys 5000A and 6000A do not only impress with a maximum efficiency of 96.1%, but are also designed for the installation of three-phase grid-feeding wind energy systems: the integrated Power Balancer prevents impermissible unbalanced loads and, furthermore, the system can still feed into the grid even if individual phases fail. Its weatherproof housing and the wide temperature range allow for installation in almost every location and, thanks to SMA's patented OptiCool cooling system, the devices function with maximum performance up to an outdoor temperature of 45 °C. And should there still be any problems: The worldwide SMA service and the comprehensive warranty program ensure maximum security.

Technical Data

WINDY BOY 5000A / 6000A

	WB 5000A	WB 6000A
Input (DC)		
Max. DC power	5750 W	6300 W
Recommended generator power at 2500 full-load hours / year	4600 W	5500 W
Recommended generator power at 5000 full-load hours / year	4200 W	5100 W
Max. DC voltage	600 V	600 V
"Turbine Mode" operating range	246 V - 600 V	246 V - 600 V
Min. open circuit voltage for activating "Turbine Mode"	250 V	250 V
Max. input current	26 A	26 A
Output (AC)		
Nominal AC output power	5000 W	6000 W
Max. AC output power	5500 W	6000 W
Max. output current	26 A	26 A
Nominal AC voltage / AC operating range	220V - 240V / 180V - 260V	220V - 240V / 180V - 260V
AC grid frequency (self-adjusting) / range	50 Hz / 60 Hz / ± 4.5 Hz	50 Hz / 60 Hz / ± 4.5 Hz
Power factor (cos ϕ)	1	1
AC connection	single-phase	single-phase
Efficiency		
Max. efficiency	96.1%	96.1%
Euro ETA	95.2%	95.2%
Protective equipment		
DC reverse polarity protection	●	●
AC short circuit protection	●	●
Ground fault monitoring	●	●
Grid monitoring (SMA grid guard)	●	●
Electric separation	●	●
General Data		
Dimensions (w / h / d) in mm	468 / 613 / 242	468 / 613 / 242
Weight	62 kg	63 kg
Operation temperature range	-25 °C ... +60 °C	-25 °C ... +60 °C
Internal consumption: operation / standby	< 7 W / 0.25 W	< 7 W / 0.25 W
Topology	Low frequency transformer	Low frequency transformer
Cooling concept	OptiCool	OptiCool
Installation location: indoor / outdoor (IP65)	●/●	●/●
Features		
DC connection: MC3 / MC4 / Tyco	○/●/○	○/●/○
AC connection: screw terminal	●	●
LCD display	●	●
Interfaces: RS485 / radio	○/○	○/○
Warranty: 5 years / 10 years	●/○	●/○
Certificates and approvals	www.SMA.de	www.SMA.de
● Standard equipment ○ Optional	Values apply for nominal conditions - Version: February 2009	

Efficiency curve



Accessories Windy Boy Protection Box 600

