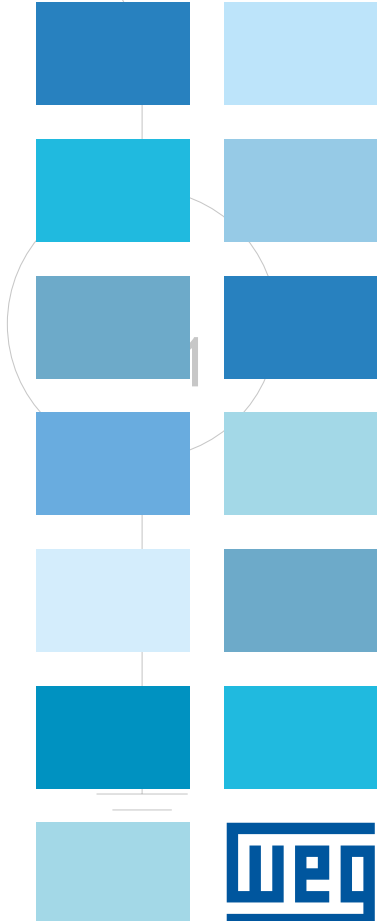
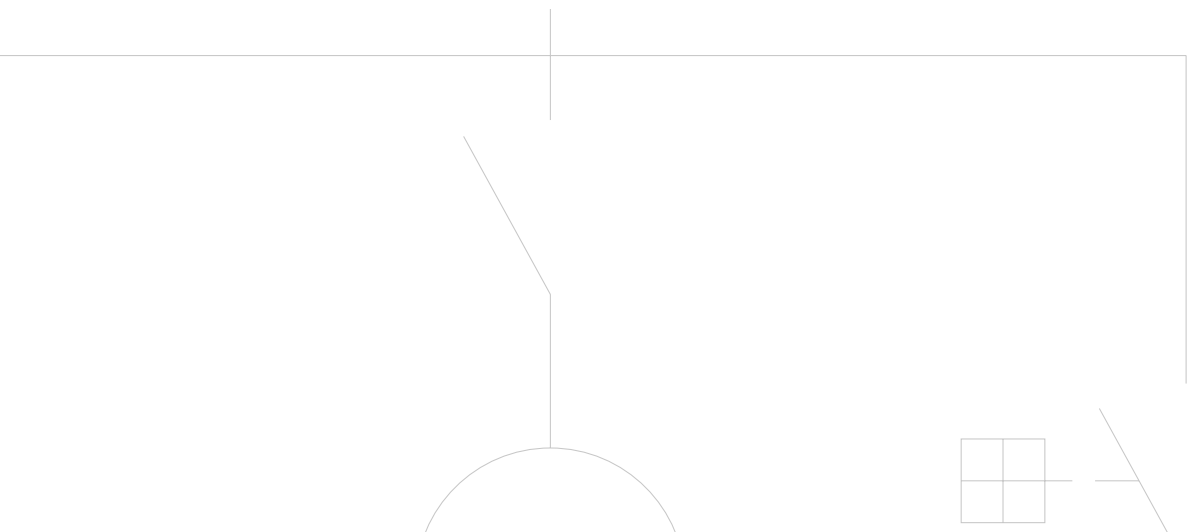


Wind Turbine

AGW 110 / 2.1

AGW 110 / 2.2



Direct-Drive Permanent Magnet Wind Turbine

Operating Data

Model	AGW 110 / 2.1; AGW 110 / 2.2
Rated power	2,100 kW; 2,200 kW
Wind class (IEC 61400-1)	S
Turbulence category	B
Cut-in wind speed	3 m/s
Cut-out wind speed	20 m/s
Operation temperature range	From -10 °C to 40 °C

Rotor

Rotor diameter	110 m
Swept area	9,503 m ²
Power regulation	Variable speed with electric drive pitch control (independent per blade, including ultra capacitor backup)

Generator

Type	Synchronous with permanent magnets
Drive train	Direct drive (no gearbox)
Grid connection	Full power converter
Cooling	Thermal fluid
Stator impregnation	VPI (Vacuum Pressure Impregnation)

Converter

Type	Full conversion, Type 4 (IEEE)
Output voltage	690 V
Frequency	50 Hz or 60 Hz
Power factor ¹⁾	0.95 IND - 0.95 CAP
Cooling	Liquid cooling

Nacelle

Yaw system	Active, driven by electric gear motors
Main brake	Aerodynamic (blade feathering)
Secondary brake	Electromechanical
Auxiliary brake	Electromechanical lock pin
Ventilation	Open (standard) for inland environment Closed (optional) for maritime environment

Transformer

Output voltage ²⁾	23 kV, 33 kV or 34.5 kV
Cooling	Passive air cooling

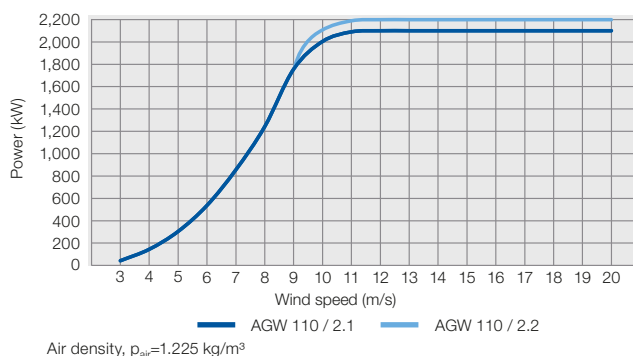
Tower

Hub height	80 m, 95 m or 120 m
Type	Modular tubular steel (80 m, 95 m) or concrete (120 m)
Nacelle access	Lift and service ladder

Additional Information

Service life	20 years
Control system	PLC and MPU
SCADA system	Wind Power SCADA
Lightning protection	Built-in in blades, rotor and tower, in compliance with IEC 61400-24
Grid codes	Complies with international regulations
Onboard crane hoist lift capacity	700 kg, inside the nacelle
Optional	50/60 Hz, inland, marine environment, low temperature, high temperature, aviation lights, aviation markings, extended power factor range

Power Curve



Notes: 1) Power factor at converter output terminals, before transformer input terminals (low voltage side).
2) Other transformer output voltage available on request.



WEG Group - Energy Business Unit
Jaraguá do Sul - SC - Brazil
Phone: +55 47 3276 4000
energia@weg.net
www.weg.net

