SWT-3.0-101
Technical Specifications

Rotor
Type .....3-bladed, horizontal axis
Position.....Upwind
Diameter.....101 m
Swept area .....8000 m²
Speed range.....6-16 rpm
Power regulation.....Pitch regulation with variable speed
Rotor tilt.....6 degrees

Blade
Type .....Self-supporting
Blade length .....49 m
Tip chord .....0.63 m
Root chord.....3.4 m
Aerodynamic profile.....NACA63.xxx, FFAxxx, SWPxxx
Material.....GRE
Surface gloss.....Semi-mat, < 30 / ISO2813
Surface colour ..... Light grey, RAL 7035

Aerodynamic Brake
Type .....Full span pitching
Activation.....Active, hydraulic

Load-Supporting Parts
Hub.....Nodular cast iron
Main shaft.....Nodular cast iron
Nacelle bed plate..... Nodular cast iron

Mechanical Brake
Type .....Hydraulic disc brake
Position.....Generator rear end
Number of callipers.....3

Canopy
Type .....Totally enclosed
Surface gloss.....Silk mat, 30-40 / ISO2813
Colour.....Light grey, RAL 7035
Material.....Fire retardant GFRP with inlayed EMC shielding

Generator
Type .....Synchronous, PMG
Nominal power .....3000 kW

Grid Terminals (LV)
Nominal power .....3000 kW
Voltage .....690 V
Frequency .....50 Hz or 60 Hz

Yaw System
Type .....Active
Yaw bearing .....Externally geared
Yaw drive.....8 (optional10) electric gear motors
Yaw brake .....Passive friction brake

Controller
Type .....Microprocessor
SCADA system.....WPS
Controller designation.....WTC 3.0

Tower
Type .....Cylindrical and/or tapered tubular
Hub height.....79.5 m or site-specific
Corrosion protection .....Painted
Surface gloss.....Silk mat, 30-40 / ISO2813
Colour.....Light grey, RAL 7035

Operational Data
Cut-in wind speed. .....3 m/s
Nominal power at.....12-13 m/s
Cut-out wind speed .....25 m/s
Maximum 3 s gust .....70 m/s (IEC version)

Weights (approximately)
Rotor.....59,700 kg
Nacelle .....73,000 kg
Tower. .....Site-specific

Siemens Wind Power A/S reserves the right to change the above specifications without previous notice.