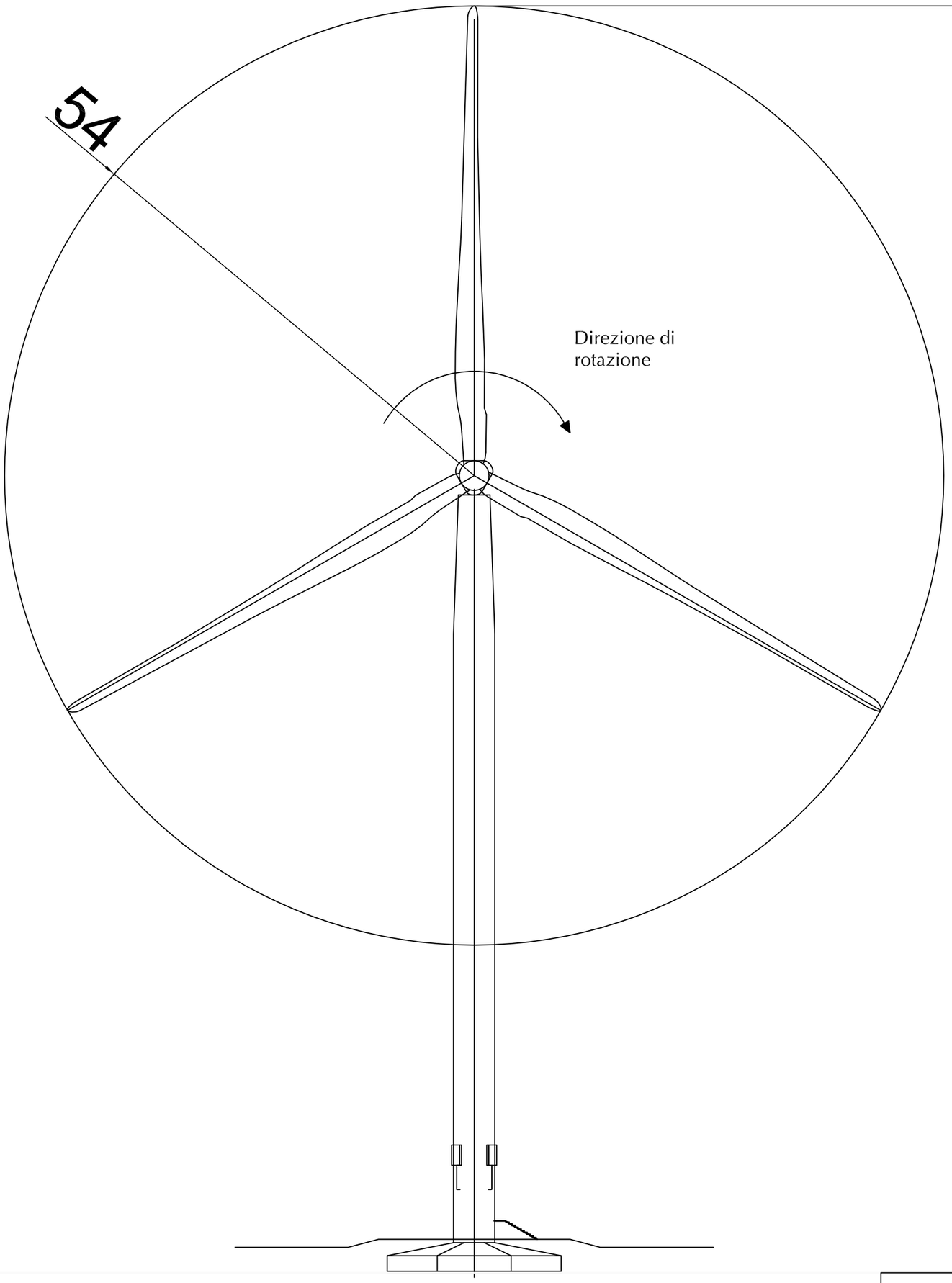
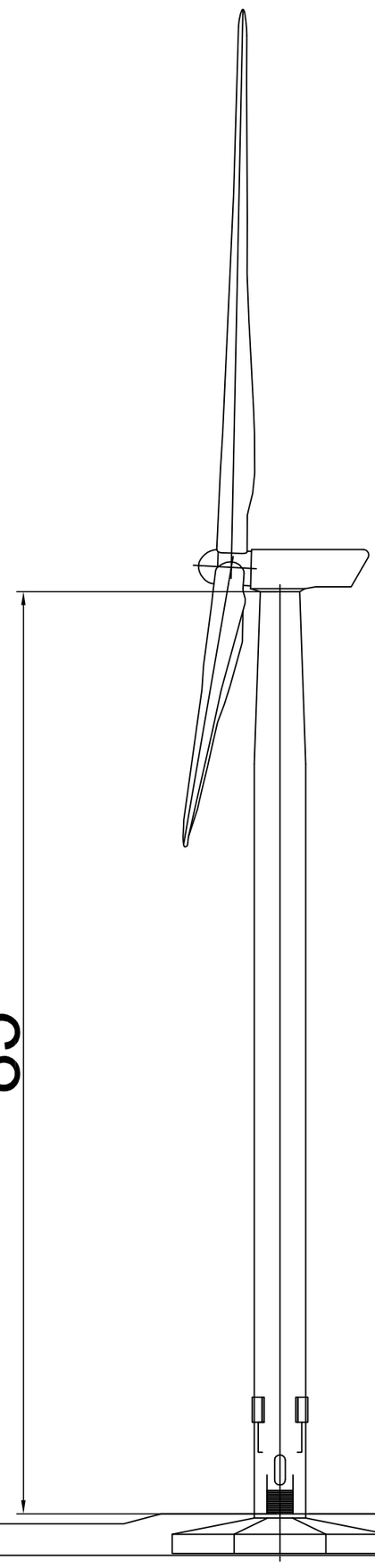




SPECIFICHE TECNICHE



SWT-2.3-108

Rotor	
Type	3-bladed, horizontal axis
Position	Upwind
Diameter	108 m
Swept area	9144 m²
Speed range	6-16 rpm
Power regulation	Pitch regulation with variable speed
Rotor tilt	6 degrees

Blade	
Type	Self-supporting
Blade length	53 m
Root chord	3.4 m
Aerodynamic profile	NACA63.xxx, FFAxxx, SWPxxx
Material	GRE
Surface gloss	Semi-gloss, <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 bearing	Spherical roller bearing
Main shaft	Alloy steel
Nacelle bed plate	Steel

Transmission system	
Coupling hub - shaft	Flange
Coupling shaft - gearbox	Shrink disc
Gearbox type	3-stage planetary/helical
Gearbox ratio	1:91
Gearbox lubrication	Splash/forced lubrication
Oil volume	Approx. 400 l
Gearbox oil filtering	Inline and offline
Gearbox cooling	Separate oil cooler
Gearbox designation	PEAB 4456 (Winergy) or EH851 (Hansen)
Coupling gear - generator	Double flexible coupling

Mechanical brake	
Type	Hydraulic disc brake
Position	High speed shaft
Number of callipers	2

Canopy	
Type	Totally enclosed
Material	Steel
Surface gloss	Semi-gloss, 25-45, ISO2813
Colour	Light grey, RAL 7035

Generator	
Type	Asynchronous
Nominal power	2,300 kW
Protection	IP 54
Cooling	Integrated heat exchanger
Insulation class	F

Grid Terminals (LV)	
Nominal power	2,300 kW
Voltage	690 V
Frequency	50 Hz or 60 Hz

Yaw system	
Type	Active
Yaw bearing	Externally geared slew ring
Yaw brake	Passive friction brake
Yaw drive	Eight electric gear motors with frequency converter

Controller	
Type	Microprocessor
SCADA system	WPS via modem
Controller designation	KK WTC 3.0
Controller manufacturer	KK Electronic A/S

Tower	
Type	Cylindrical and/or tapered tubular
Hub height	80 m or site-specific
Corrosion protection	Painted
Surface gloss	Semi-gloss, 25-45, ISO2813
Colour	Light grey, RAL 7035

Operational data	
Cut-in wind speed	3-4 m/s
Rated power at	11-12 m/s
Cut-out wind speed	25 m/s
Maximum 3 s gust	59.5 m/s (IEC version)

Weights (approximately)	
Rotor	60,000 kg
Nacelle	82,000 kg

REGIONE LIGURIA

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PROVINCIA di SAVONA

COMUNI DI CAIRO MONTENOTTE

e SAVONA

SOIMAR ENERGY srl
Via Schina, 15
10143, TORINO (TO)
P.IVA: 10311390016

IMPIANTO/PLANT: CAIRO MONTENOTTE - SAVONA, SURITE DEL CUCULO	PROGETTO/JOB: SEN-654
APPR./APPROVED: SNT	TITOLO/TITLE: TIPICO AEROGENERATORE
CONTR./CHECKED: SV	
DIS./DRAWN: SV	
DATA/DATE: 23/03/2015	DISEGNO/DRAWING N.: TAV.112 — REV.: 1
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