

- 1 Rotor cover
- 2 Pitch system
- 3 Blade bearings
- 4 Blades
- 5 Low speed shaft
- 6 Gearbox
- 7 Electrical cabinets
- 8 Hydraulic group
- 9 Yaw system
- 10 High speed shaft
- 11 Generator
- 12 Transformer
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- 14 Cooling system
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Technical Specifications

Rotor Type 3-bladed, horizontal axis Position Upwind Diameter 145 m Swept area 16,506 m ² Power regulation Pitch & torque regulation with variable speed Rotor tilt 6 degrees	Generator Type Asynchronous, DFIG
Blade Type Self-supporting Blade length 71.0 m Root chord 2.856 m Aerodynamic profile Siemens Gamesa proprietary airfoils	Grid Terminals (LV) Baseline nominal power 4.5 MW Voltage 690 V Frequency 50 Hz or 60 Hz
Material GRE (Glassfiber Reinforced Epoxy) Surface gloss Semi-gloss, < 30 / ISO2813 Surface color Light grey, RAL 7035 or Papyrus White, RAL 9018	Yaw System Type Active Yaw bearing Externally geared Yaw drive Electric gear motors Yaw brake Active friction brake
Aerodynamic Brake Type Full span pitching Activation Active, hydraulic	Controller Type SGR Wind Turbine Control architecture SCADA system SGR SCADA System
Load-Supporting Parts Hub Nodular cast iron Main shaft Forged steel Nacelle bed frame Nodular cast iron	Tower Type Tubular steel / Hybrid Hub height 90 - 157 m, site-specific Corrosion protection Painted Surface gloss Semi-gloss, < 30 / ISO-2813 Color Papyrus White, RAL 9018
Mechanical Brake Type Hydraulic disc brake Position Gearbox rear end	Operational Data Cut-in wind speed 3 m/s Rated wind speed 10.7 m/s (steady wind without turbulence, as defined by IEC61400-1) Cut-out wind speed 27 m/s Restart wind speed 24 m/s
Nacelle Cover Type Totally enclosed Surface gloss Semi-gloss, < 30 / ISO2813 Color Papyrus White, RAL 9018	Weight Modular approach All modules weight lower than 95 t for transport



REGIONE BASILICATA



Provincia Potenza



COMUNE DI GENZANO DI LUCANIA (PZ)



PROGETTO DEFINITIVO RELATIVO ALLA REALIZZAZIONE DI UN IMPIANTO EOLICO COSTITUITO DA 10 AEROGENERATORI E DALLE RELATIVE OPERE DI CONNESSIONE ALLA R.T.N.

SCHEMI FUNZIONALI DEI SINGOLI AEROGENERATORI

ELABORATO

A.16.b.3

PROPONENTE:

BLUE STONE renewable V
 Via Vincenzo Bellini 22
 00188 Roma Italia
 P.I. 15305051007

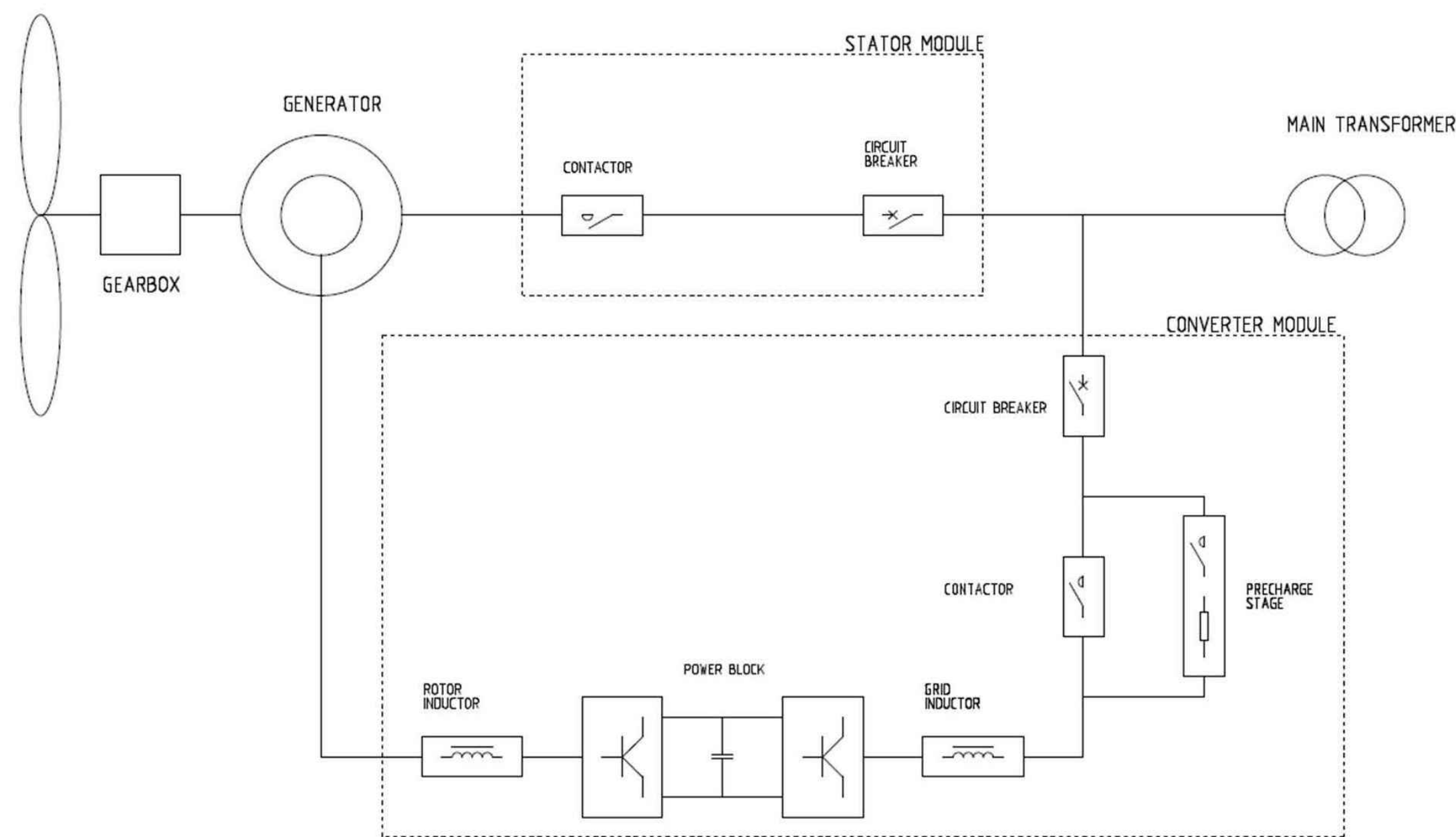
PROGETTO E SIA:

TECH
 SOCIETÀ DI INGEGNERIA & SERVIZI PER L'INGEGNERIA
 Via della Repubblica, 18 - 70122 Bari - tel. 080 3241948 - fax 080 2020954

Il DIRETTORE TECNICO
 Dott. Ing. Orazio Tricario



CONSULENZA:



0	DIC 2020	B.B.	A.A. - O.T.	A.A. - O.T.	Progetto definitivo
EM./REV.	DATA	REDATTO	VERIFICATO	APPROVATO	DESCRIZIONE