

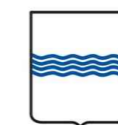
- |                       |                     |
|-----------------------|---------------------|
| 1 Rotor cover         | 9 Yaw system        |
| 2 Pitch system        | 10 High speed shaft |
| 3 Blade bearings      | 11 Generator        |
| 4 Blades              | 12 Transformer      |
| 5 Low speed shaft     | 13 Nacelle cover    |
| 6 Gearbox             | 14 Cooling system   |
| 7 Electrical cabinets | 15 Wind sensors     |
| 8 Hydraulic group     | 16 Beacon system    |

### Technical Specifications

<b>Rotor</b> Type ..... 3-bladed, horizontal axis Position ..... Upwind Diameter ..... 145 m Swept area ..... 16,506 m <sup>2</sup> Power regulation ..... Pitch & torque regulation with variable speed Rotor tilt ..... 6 degrees	<b>Generator</b> Type ..... Asynchronous, DFIG
<b>Blade</b> Type ..... Self-supporting Blade length ..... 71.0 m Root chord ..... 2.856 m Aerodynamic profile ..... Siemens Gamesa proprietary airfoils Material ..... GRE (Glassfiber Reinforced Epoxy) Surface gloss ..... Semi-gloss, <30 / ISO2813 Surface color ..... Light grey, RAL 7035 or Papyrus White, RAL 9018	<b>Grid Terminals (LV)</b> Baseline nominal power ..... 4.5 MW Voltage ..... 690 V Frequency ..... 50 Hz or 60 Hz
<b>Aerodynamic Brake</b> Type ..... Full span pitching Activation ..... Active, hydraulic	<b>Yaw System</b> Type ..... Active Yaw bearing ..... Externally geared Yaw drive ..... Electric gear motors Yaw brake ..... Active friction brake
<b>Load-Supporting Parts</b> Hub ..... Nodular cast iron Main shaft ..... Forged steel Nacelle bed frame ..... Nodular cast iron	<b>Controller</b> Type ..... SGR Wind Turbine Control architecture SCADA system ..... SGR SCADA System
<b>Mechanical Brake</b> Type ..... Hydraulic disc brake Position ..... Gearbox rear end	<b>Tower</b> 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
<b>Nacelle Cover</b> Type ..... Totally enclosed Surface gloss ..... Semi-gloss, <30 / ISO2813 Color ..... Papyrus White, RAL 9018	<b>Operational Data</b> 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
	<b>Weight</b> Modular approach ..... All modules weight lower than 95 t for transport



REGIONE BASILICATA



Provincia Potenza



COMUNE DI FORENZA (PZ)



**PROGETTO DEFINITIVO RELATIVO ALLA REALIZZAZIONE DI UN IMPIANTO EOLICO COSTITUITO DA 11 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 I**  
 P.I. 1530401108  
 Via Vincenzo Bellini,  
 22 00198 Roma

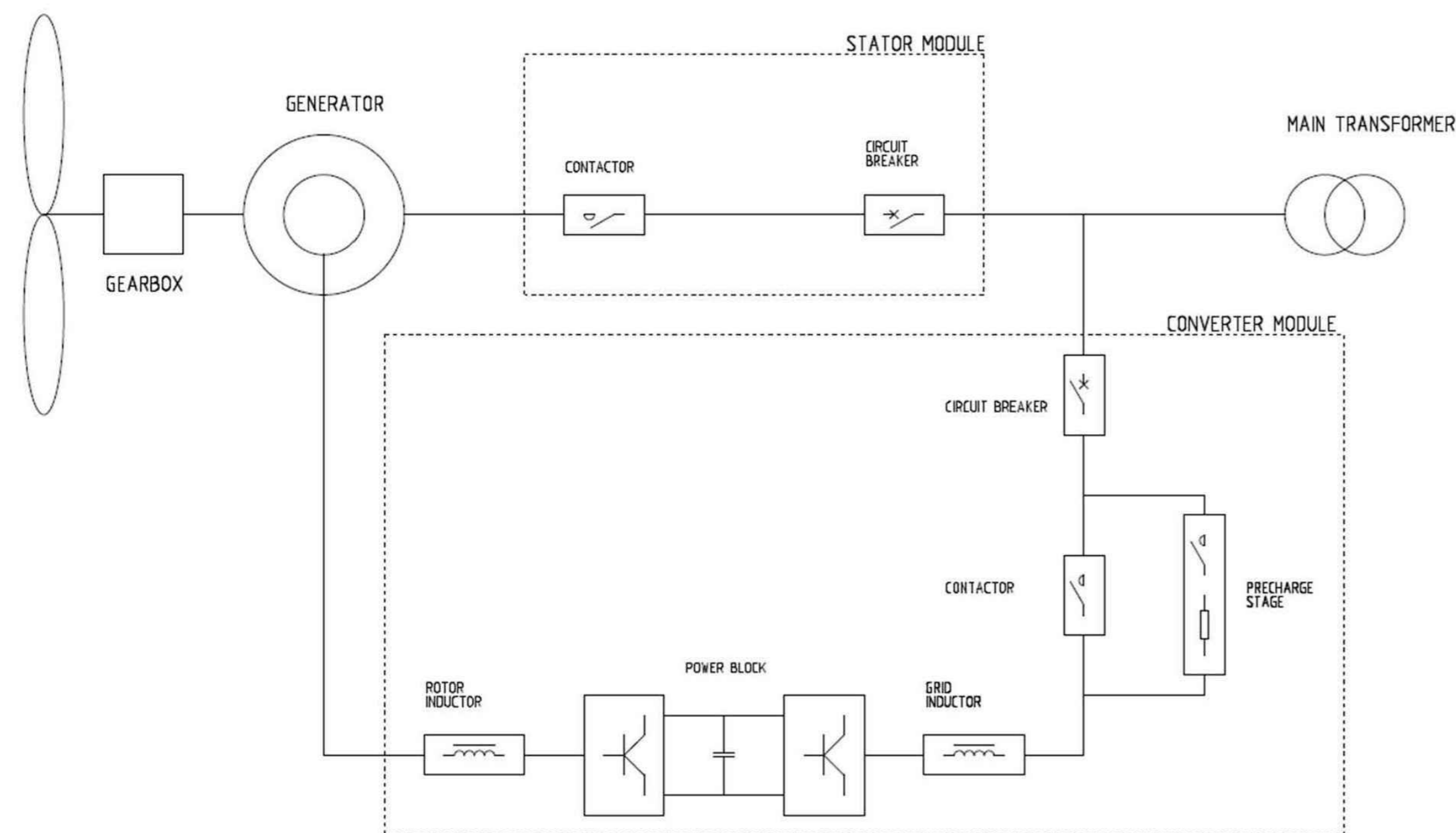
PROGETTO E SIA:



Il DIRETTORE TECNICO  
 Dott. Ing. Orazio



CONSULENZA:



0	MARZO 2021	B.B.	A.A. - O.T.	A.A. - O.T.	Progetto definitivo
EM./REV.	DATA	REDATTO	VERIFICATO	APPROVATO	DESCRIZIONE