



## WT-100 SPECIFICATIONS

### GENERAL CONFIGURATION

Model	Renewtech WT100
Configuration	3 Blades, horizontal axis, upwind
Applications	Direct Grid-Tie
Design Class	IEC IIA (air density = 0.0768 lb/ft <sup>3</sup> )
Design Lift	20 Years
Hub Height	80' / 115'
Power Regulation	Fixed Pitch, Stall Control
Tower Type	Upgraded Tubular Steel Monopole

### DESCRIPTION

### ROTOR

Rotor Diameter	20.8m
Swept Area	339.8 m <sup>2</sup>
Blade Length/Weight	10m / 514.4 lbs
Blade Material	Fiberglass/Polyester
Power Regulation	Stall Control (constant speed)

### DESCRIPTION

### PERFORMANCE

Rated Electrical Power	HD Induction Generator 20kW (Optional)/99 kW, 3 Phase, 480 VAC, 60 Hz
Rated Wind Speed	36 MPH
Maximum Rotation Speed	62 rpm
Cut-In Wind Speed	6.8 mph
Cut-Out Wind Speed	65 mph
Extreme Wind Speed	110 mph

### DESCRIPTION

### WEIGHT

Rotor (20.8-meter) & Nacelle (standard)	12,623 lbs
Tower (80' & 115')	80'/19,000 lbs, 115'/59,600 lbs

### DESCRIPTION

### DRIVE TRAIN

Generator Configuration	(1) 20 kW (1225 rpm) (Optional) , (1) 99kW (1214 rpm) 3-Phase, 6-Pole, Asynchronous
Transmission Type	Hansen HD

### DESCRIPTION

### BRAKING SYSTEM

Service Brake Type

Automatic Shut Down Triggered By

### DESCRIPTION

3 Hydraulic Controlled Calipers

High Wind Speed, Grid Failure, Over-Speed

### YAW SYSTEM

Controls

### DESCRIPTION

Active, Electromechanically Driven with Wind Direction/Speed Sensors & Automatic Cable Unwind

### CONTROL/ELECTRICAL SYSTEM

Control System

### DESCRIPTION

Programmable Logic Controller (PLC)

User Interface

Wireless or Wired Network Software Interface for Remote Monitoring & Control

Controller Type

Micro-Processor

Monitoring System

Indusoft-Beckoff Remote Monitoring System, ModBus TCP Over Ethernet

Power Factor

Between 0.9 Lagging and 0.9 Leading

### ENVIRONMENTAL SPECIFICATIONS

Operational Temperature Range

### DESCRIPTION

-10° F to 120° F

### WARRANTY

Turbine & Blades

### DESCRIPTION

1 Year Parts & Labor Included

Controller

1 Year Parts & Labor Included

