

GEV HP 1MW

TECHNICAL
DESCRIPTION



TURBINE CONCEPT

- Rated Power **1000 kW**
- Blades 2 blades - up wind
- Gearbox 3 stage epicyclic
- Hub Teetering hub
- Pitch Electrical pitch
- Generator Asynchronous
- Tower Tubular - 6 sections of 11.8 m
- Yaw Active yaw
- Output Voltage 690 V
- Output Frequency 50 Hz and 60 Hz
- Power control Pitch / Full scale drive
- Reactive power control Full scale drive

PACKING & INSTALLATION

- Nacelle weight 65 t
- Tower weight 78 t
- Packing All in 40' containers
Blades
- Concrete 95 m³ (124 cu.yd)
- Erection 90 t crane
Verlift[®] + Birdlike[®] :
self erecting system

OPERATION

- Cut in speed 3 m/s
- Cut out speed 25 m/s
- Hub height 70 m (230')
- Rotor diameter 62 m (203')
- Max wind speed
Operation 52,5 m/s (instant)
Survival 86 m/s
- Temperature -10°C to 40°C (14°F to 104°F)

POWER CURVE

Wind speed (m/s) d=1,225kg.m ³	Power (kW) Class III
3	7
4	43
5	95
6	168
7	269
8	399
9	560
10	731
11	859
12	929
13	969
14	990
15	1000
16	1000
17	1000
18	1000
19	1000
20	1000
21	1000
22	1000
23	1000
24	1000
25	1000

CERTIFICATION

- GERMANISCHER LLOYD