



GEV MP R

200 kW

225 kW

250 kW

275 kW

TECHNICAL
DESCRIPTION



TURBINE CONCEPT

- Rated Power **200-225-250-275 kW**
- Rotor diameter 30 - 32 m (98' - 105')
- Class (IEC 61400-1) : 1999 From class II to class IV
- Blades 2 blades - downwind
- Gearbox 2-stage planetary
- Hub height 32 m (105')
- Hub Teetering hub
- Pitch Hydraulic pitch
- Generator 2 speed, asynchronous, squirrel cage generator
- Tower Tubular
3 sections of 11.8 m (38'9")
- Yaw Hydraulic active yaw
- Output Voltage & Frequency 400 V - 50 Hz or 460 / 480 V - 60 Hz
- Power control Pitch
- Reactive power control Capacitor bank

PACKING & INSTALLATION

- Nacelle weight (with rotor) 9 t (19 841 lb)
- Tower weight 11 t (24 250 lb)
- Packing
 - 2 x 40' containers + 1 x 20' + blades (1 load)
 - For road transport : conventional flatbed trucks of equivalent length.
- Concrete 50 m³ (65 cu.yd)
- Erection 60 t crane

OPERATION

- Cut in speed 3.5 m/s
- Cut out speed 25 m/s
- Max wind speed
 - Operation 32 m : 37.5 m/s (10 min avg.)
52.5 m/s (3 s gust)
 - 30 m : 42.5 m/s (10 min avg.)
59.5 m/s (3 s gust)
- Temperature
 - Operation From -10°C to +50°C (14°F to 122°F)
 - Survival -20°C (-4°F)
with Polar option: -40°C (-40°F)

SCADA

Monitoring, remote diagnosis and maintenance, power control.

POWER CURVE

Hub height Wind speed (m/s)	Power (kW) d=1.225 kg/m ³	
	Rotor 32m	Rotor 30m
3	0	0
4	3	3
5	17.9	14
6	36.5	29
7	58.4	53
8	98.1	82
9	141.1	116
10	188.7	155
11	242.8	197
12	271.7	244
13	275	272
14	275	275
15	275	275
16	275	275
17	275	275
18	275	275
19	275	275
20	275	275
25	275	275

AEP - ANNUAL ENERGY PRODUCTION

Hub height Wind speed (m/s)	Annual gross production (MWh/year)	
	Rotor 32m	Rotor 30m
4	164	137
4.5	246	206
5	342	289
5.5	449	381
6	560	481
6.5	674	585
7	785	689
7.5	893	791
8	994	890
8.5	1089	984
9	1176	1071
9.5	1254	1150
10	1324	1222
10.5	1385	1285
11	1436	1339

Weibull k=2 ; d=1.225 kg/m³

CERTIFICATION

- IEC 61400-11: 2012
- IEC 61400-12-1: 2005
- IEC 61400-21: 2008
- CE