

Sound Power Level Curve # IC-11-GE-AC-001-EN

1. Reference documents

- [R1] IEC 61400-11:2006 standard "Wind turbine generator systems – Part 11: Acoustic noise measurement techniques"
- [R2] Acoustic Noise Emission report no.21.1603.0 by CENER¹, member of MEASNET²

2. GEV MP-C 32/275

A measurement campaign of acoustic noise emission has been performed in 2010 on the GEV MP-C 32/275 in our test site in Gommerville, France, by the certification body CENER. Sound power levels have been computed according to standard [R1] and documented in document [R2].

Table 1 here below indicates the measured sound power levels.

Standardised wind speed m/s ³	6	7	8	9	10
Apparent power level dB(A) ⁴	99.32	102.70	104.54	104.67	103.90

Table 1 - GEV MPC 32/275 sound power levels acc. IEC 61400-11

3. GEV MPC 30/275

For a 30m diameter rotor, the blade tip speed is lower which notoriously reduces the aerodynamic generated noise. However, since no specific measurement campaign has been performed on a GEV MPC 30/275, developpers should consider that the sound power levels given in Table 1 will not be exceeded.

4. OTHER RATED POWERS THAN 275 kW

No standardized measurements have been done with GEV MPCs rated below 275kW nominal power. Developpers can however reasonably consider that GEV MPC wind turbines with other rated powers such as GEV MP 32/200 (200 kW) or 32/250 (250 kW) will not exceed the sound power levels of the GEV MP 32/275 for the same hub height and wind speeds.

¹ Refer to <http://www.cener.com>

² Refer to <http://www.measnet.com/members.html>

³ Standardised wind speed calculated at 10m (32' 10") AGL

⁴ Combined uncertainty Uc=2.38 dB(A)

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