

**Guaranteed Values of the Sound Power Level for the E-53 with 800 kW rated power**

Hub height $V_{Wind}$ in 10m height	60 m	73 m	75 m (India/Brasil)
4 m/s	92.0 dB(A)	92.5 dB(A)	92.8 dB(A)
5 m/s	93.7 dB(A)	94.2 dB(A)	94.5 d(B)A
6 m/s	97.2 dB(A)	97.7 dB(A)	97.9 dB(A)
7 m/s	99.7 dB(A)	100.1 dB(A)	100.3 dB(A)
8 m/s	101.3 dB(A)	101.5 dB(A)	101.8 dB(A)
95% rated power	102.5 dB(A)	102.5 dB(A)	102.5 dB(A)
10 m/s	102.5 dB(A)	102.5 dB(A)	102.5 dB(A)

Measured value at 95% rated power			100.9 dB(A) MBBM 69915/1
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1. A tonality value  $K_{TN}$  of 0-1 dB is guaranteed over the whole operational range (valid in the near vicinity of the turbine according to IEC).
2. An impulsivity value  $K_{IN}$  of 0 dB is guaranteed over the whole operational range (valid in the near vicinity of the turbine according to IEC).
3. The sound power values given in the table are valid for the **Operational Mode I** (defined through the rotational speed range of 12 – 29 rpm). The respective power curve is the Calculated Power Curve E-53 dated June 2005 (Rev. 1.x).
4. The guarantee is based on official and internal measurements of the sound power level. The official measured values are given in this document as a reference. The extracts of the official measurements are available and are valid in combination with this guarantee document. The measurements are being carried out according to the recommended national and international standards and norms (mentioned on the respective extracts).
5. In order to account for the uncertainties of measurement and sound prediction calculations, to increase the acceptance at the authorities and to avoid eventual verification measurements ENERCON recommends a safety factor of 1 dB(A) on the guaranteed values when carrying out sound propagation calculations. In countries where safety factors are already mandatory due to local regulations, the ENERCON recommendation is not applicable.  
  
Should this recommendation be neglected for any reasons, it is hereby explicitly referred to 6.
6. Due to the measurement uncertainties of sound measurements the verification of the guaranteed values is successful, if the measurement result of a measurement that has been carried out according to the accepted standards is in the range of +/- 1dB(A) of the guaranteed values [guarantee fulfilled when measurement result = guaranteed value +/- 1dB(A)].
7. For noise-sensitive sites it is possible to operate the E-53 with reduced rotational speed and reduced rated power during the night. The reduced sound power levels are given in a separate document.

<b>Document information:</b>		<b>ENERCON reserves the right to technical modifications</b>	
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