

SYNOPSIS

IS /IEC 61400-12-1:2017 ETD 42 Doc. (13135)

Wind Turbines Part 12: Electricity producing Wind Turbines Sec 1: Measurement of Power performance

The standard specifies a procedure for measuring the power performance characteristics of a single wind turbine and applies to the testing of wind turbines of all types and sizes connected to the electrical power network. In addition, this standard describes a procedure to be used to determine the power performance characteristics of small wind turbines (as defined in IEC 61400-2) when connected to either the electric power network or a battery bank. The procedure can be used for performance evaluation of specific wind turbines at specific locations, but equally the methodology can be used to make generic comparisons between different wind turbine models or different wind turbine settings when site-specific conditions and data filtering influences are taken into account. This new edition includes the following significant technical changes with respect to the previous edition: new definition of wind speed, inclusion of wind shear and wind veer, revision of air density correction, revision of site calibration, revision to definition of power curve, interpolation to bin centre method, revision of obstacle model, etc.

Disclaimer: