GENERAL ELECTRIC GE 1.5sle – 1.5sl – 1.5s – 1.5se

Technical specifications	1.5sle	1.5sl	1.5s	1.5se
Operating data				
• Rated capacity:	1,500 kW	1,500 kW	1,500 kW	1,500 kW
• Cut-in wind speed:	3.5 m/s	3.5 m/s	4 m/s	4 m/s
• Cut-out wind speed				
600 s average:	25 m/s	20 m/s	WZ II: 22 m/s WZ III, IEC II: 25 m/s	25 m/s
30 s average:	IEC s: 28 m/s	WZ II: 23 m/s	WZ II: 25 m/s WZ III, IEC II: 28 m/s	IEC I: 28 m/s
3 s average:	IEC s: 30 m/s	WZ II: 25 m/s	WZ II: 27 m/s WZ III, IEC II: 30 m/s	IEC I: 30 m/s
• Cut-back-in wind speed				
300 s average:	IEC s: 22 m/s	WZ II: 17 m/s	WZ II: 19 m/s WZ III, IEC II: 22 m/s	IEC I: 22 m/s,
• Rated wind speed:	12 m/s	12 m/s	12 m/s	12 m/s
Rotor				
• Number of rotor blades:	3	3	3	3
• Rotor diameter:	77 m	77 m	70.5 m	70.5 m
• Swept area:	4,657 m²	4,657 m²	3,904 m²	3,904 m²
• Rotor speed (variable):	10.1 – 20.4 rpm	10.1 – 20.4 rpm	11.1 – 22.2 rpm	11.1 – 22.2 rpm
Tower				
• Hub heights (m):	61.4⁺ / 64.7⁺ / 80⁺ / 85⁺	61.4* / 64.7* / 80* 85* / 100*	64.7* / ** / 80* / ** 85* / ** / 100*	52.6*** / 54.7*** / 64.7***
Power control:	Active blade pitch control	Active blade pitch control	Active blade pitch control	Active blade pitch control

Operating limits (outside temperature)
- cold weather light: -20° C to +40° C
- cold weather extreme: -30° C to +40° C / -40° C to +50° C survival without operation

Control system
- PLC (Programmable logic controller) Remote control and monitoring system

Gearbox
- Three step planetary spur gear system

Generator
- Doubly fed three-phase asynchronous generator

Braking system (fail-safe)
- Electromechanical pitch control for each blade (3 self-contained systems)
- Hydraulic parking brake

Yaw system
- Electromechanical driven with wind direction sensor and automatic cable unwind

Converter
- Pulse-width modulated IGBT frequency converter

Tower design
- Multi-coated, conical tubular steel tower with safety ladder to the nacelle
- Load lifting system, load-bearing capacity over 200 kg
- Service platform for 100 m hub height (service lift optional)

Noise reduction
- Impact noise insulation of the gearbox and generator
- Sound reduced gearbox
- Noise reduced nacelle
- Rotor blades with minimised noise level

Lightning protection system
- Lightning receptors installed on blade tips
- Surge protection in electrical components

* for WZ II ** for WZ III / IEC II
*** for IEC I + for IEC s

Subject to technical alterations, errors and omissions.