

No	Item	Unit	Description		
1	Type		GC54	GC57	GC59
1.1	Wind class		IEC I	IEC II	IECIII
1.2	Rotor diameter	m	54	57	59
1.3	Swept area	m ²	2289	2550	2733
1.4	Cut in	m/s	4	4	4
1.5	Cut out	m/s	25	23	21
1.6	Survival (5s)	m/s	60	60	55
1.7	Rated power	kW	1000		
1.8	Rated wind speed	m/s	15		
1.9	Design life	Year	20		
1.10	Temperature	°C	-30~40		
2	Blade				
2.1	Material		GRP		
2.2	Number	set	2		
2.3	Length	m	25.8	27	28.3
2.4	Rotor speed	rpm	24.78	22.78	21.03
2.5	Rotation		Clockwise		
3	Gear box				
3.1	Type		2 planetary & 1 stage helical, integrated turbine bearings		
3.2	Gear ratio		62.354	67.831	73.458
3.3	Oil		Mobil SHC 630		
4	Generator				
4.1	Type		Induction		
4.2	Rated power	kW	1000		
4.3	Voltage	V	690		
4.4	Frequency	Hz	50		
4.5	Rated speed	rpm	1545		
4.6	Slip		3%		
4.7	Power factor (cos φ)		0.98-1		
4.8	Protection		IP54		
4.9	Lub type		Grease		
4.10	Isolation		H		
4.11	Grease		Mobiltemp 1		

5	Brake		
5.1	Air brake		Blade tip
5.2	Mach. brake		Disc brake in high speed shaft
5.3	Brake type		Fall safe
5.4	Oil		Mobil SHC 524
6	Yaw		
6.1	Drive		Hydraulic
6.2	Control		Active /passive
6.3	Lub. type		Grease
6.4	Grease		Mobilux EP2
6.5	Yaw speed	Deg/s	1~2
7	Control system		
7.1	Type		WP3000
7.2	Supplier		Mita-Teknik A/S
8	Compensation capacitor		
8.1	Capacity	kVAr	336
8.2	Group		8
8.3	Power factor		0.98~1
9	Lightning protection		
9.1	Standard		IEC 61400-24 Ed 1
9.3	Earthing	Ω	≤ 4
10	Tower		
10.1	Type		Tube
10.2	Height	m	60/70
10.3	Colour		RAL7035
11	Weight		
11.1	Nacelle (excl. blade)	t	40
11.2	blades (2)	t	8.8
11.3	Tower	t	47 (60m) /58 (70m)

