



# PMG 1650 – 6400 kW

136 – 414 rpm



### 100% purpose-built for wind

The Switch is fully committed to wind power generation. With our purpose-built permanent magnet generators (PMG), we cover all wind power applications. Each PMG is designed with special magnet shapes and arrangements to match specific wind conditions for smooth operation and maximum efficiency.

The Switch PMGs provide excellent availability and productivity. By eliminating cogging, we have reduced the overall mechanical stress. This improves reliability and extends the turbine's lifetime.

The Switch medium-speed PMGs typically feature a single- or two-stage gearbox and have a much higher annual energy production compared with conventional generators. As an option, The Switch offers a highly integrated medium-speed PMG version as an optimized solution.

Features	Advantages
Bearings	Part of integrated structure; designed to last more than 20 years, well beyond turbine lifetime
Neodymium magnets	Strongest commercially available magnets, in a corrosion-resistant metal seal
Windings	Strong form-wound construction offers greater precision and excellent insulation
Cooling concept	Protects the generator effectively against demagnetization and ensures a longer lifetime

### Technical specifications

These specifications are based on one nominal operational point example. Our generators can easily be adapted to other operational points.

All generators are also available for medium voltage.

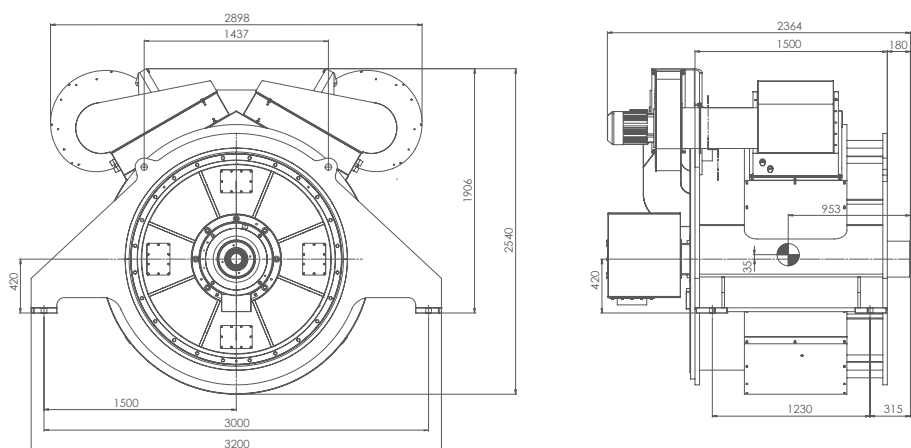
Please contact us to get precise values for your turbine rated parameters.

	PMG1650-150	PMG3120-414	PMG3300-136	PMG3300-365	PMG6400-400 <sup>1</sup>
Power [MW]	1.65	3.12	3.3	3.3	6.4
Speed [rpm]	150	414	136	365	400
Shaft-height [mm]	1350	1000	1350	1000	1100
Weight [t]	15	12.7	28	13.9	20
Voltage [V]	690	690	690	690	690
Current [A]	1480	2750	3000	2900	5650
Power factor	0.93	0.95	0.92	0.95	0.95
Efficiency [100% load]	96.4	96.8	96.5	97.5	98.0
Efficiency [75% load]	96.3	96.6	96.5	97.6	98.0
Efficiency [50% load]	96.2	96.1	96.3	97.4	97.8
Efficiency [25% load]	95.4	93.8	95.6	96.4	97.4
Protection class	IP54	IP54	IP54	IP54	IP54
Insulation class	F	F	F	F	F
Thermal class	B	F	B	B	B
Cooling	Air-to-liquid	Air-to-liquid	Air-to-liquid	Air-to-liquid	Air-to-liquid

<sup>1</sup> Preliminary specification data

### Technical drawings

Careful material selection for each component and accurate dimensioning of the generators guarantees flawless functionality at all operating points.



The Switch PMG3120-414