

## Fortis Product Overview

| TECHNICAL SPECIFICATIONS   |  |                     |                     |                           |
|----------------------------|--|---------------------|---------------------|---------------------------|
|                            |  |                     |                     |                           |
| Model:                     | Passaat  | Montana             | Montana-Q           | Alizé                     |
| Туре                       | Upwind rotor with fixed pitch  |                     |                     |                           |
| Maximum power <sup>1</sup> | 1.4 kW   | 5.0 kW              | 6.0 kW              | 10 kW                     |
| Rated wind speed           | 16 m/sec   | 14 m/sec            | 12,5m/sec           | 13 m/sec                  |
| Cut-in wind speed          | 2.5 m/sec  | 2.5 m/sec           | 2.5 m/sec           | 3 m/sec                   |
| Output@11m/sec             | 0.9 kW   | 3.4 kW              | 4.45 kW             | 8.5 kW                    |
| Rotor diameter             | 3.12 m   | 5.0 m               | 5.25 m              | 6.3 / 6.6 / 6.9 m         |
| Number of blades           | 3  | 3                   | 3                   | 3                         |
| Swept area                 | 7.64 m²  | 19.63 m²            | 21.63m²             | 31.2 m² / 34.2m² / 37.4m² |
| Blade material             | Fibreglass-reinforced epoxy  |                     |                     |                           |
| Yaw control                | Passive aligned by tail vane   |                     |                     |                           |
| Speed regulation           | Ecliptic safety system by inclined hinged vane, 90 degree setting of tail, short circuit of generator  |                     |                     |                           |
| RPM operation range        | 180 - 775  | 120 - 450           | 120 - 450           | 25 - 300                  |
| Generator Type             | Permanent Ne-Fe-Br magnets producing 3 phase AC  |                     |                     |                           |
| Battery regulator          | Available for 24VDC / 48VDC  | Available for 48VDC | Available for 48VDC |                           |
| Grid feed inverter         | 1P-230VAC+N+PE   | 1P-230VAC+N+PE      | 3P-230VAC+N+PE      | 3P-230VAC+N+PE            |
| Guyed tower                | 12-18 m  | 12-24 m             | 12-24 m             | 18-30 m                   |
| Free standing tower        | 12-18 m  | 12-24 m             | 12-24 m             | 12-24 m                   |
| Head weight                | 75 kg  | 200 kg              | 210 kg              | 385 kg                    |
| Unique features            | <ul> <li>Conforms to IEC 61400-2 international standard</li> <li>Upwind, direct drive, fixed pitch, overvoltage protection and emergency braking</li> <li>Rectifier &amp; Grid Feed Inverter in one housing</li> <li>Power curve according to frequency or voltage</li> <li>Maintenance free, 5 year warranty, installation by Fortis Certified System Partner</li> <li>Average lifetime for Fortis Wind Turbines is over 20 years</li> <li>Made in The Netherlands</li> </ul> |                     |                     |                           |

<sup>1</sup>] maximum power output @ rated wind speed