



-power in control

WIND POWER TECHNOLOGY



Permanent Magnet Synchronous Motors, PMSM series

Motors for wind turbine pitch or yaw
Compact and light weight
High peak torque
Maintenance-free, no fan
Five-year warranty

WIND

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Robustness

The PMSM from DEIF is a perfect choice for pitch and yaw in wind turbine applications. The motor is based on state-of-the-art technology for Permanent Magnet Synchronous Motors. Being based on a convection cooling principle, the PMSM motors have no external fan or additional components. The resulting robust construction offers low maintenance and durable motor operation.

Small and perfect

With its high peak torque capability and small size compared to other motor types, the PMSM is a perfect match for pitch applications, not least due to the fact that wind turbine hubs and blade roots offer limited space.

Fail-safe brake and feedback

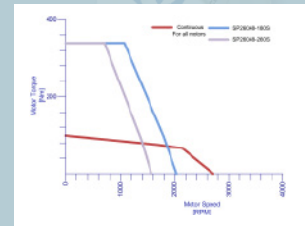
The motor features integrated electromagnetic and fail-safe braking functionality, released by an external 24 V supply. A high precision resolver secures high-accuracy positioning for closed loop control and regulation.

Surveillance and load monitoring by KTY and Pt 100 temperature sensors built into the stator windings enable you to monitor the state of the motor. All cables are easy snap connectors.

Designed for rough environments

The PMSM is IP65-protected and completely closed by the metal housing, securing high resistance towards dust, moisture and electromagnetic compatibility (EMC), a well-known problem in wind turbine hubs. With the unique motor construction, it easily resists bumps and shocks during transportation to the site and the mechanical stress in the rotating hub.

The DEIF PMSM motor has been designed to operate in temperatures ranging from -20°C to +50°C, making it applicable in nearly all environments. The standard motor is designed for onshore applications, but can also be ordered in a low temperature and/or offshore-customised model.



Performance curve

Motor data

	SP190B8	SP190C8	SP190D8	SP190F8	SP190K8	SP260A8	SP260B8
Stall torque [Nm]	20	27	33	45	67	100	150
Peak torque [Nm]	63	85	107	150	240	240	350
Max speed [Rpm]	5000	5000	5000	5000	4000	3000	3000
Weight [Kg]	24,5	29	33,5	42,5	61	150	180



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