



## PMS 156 W – Permanentmagnet Synchronous motor

### Applications

- Battery powered application with Voltages from 48 V DC to 96 V DC (for traction applications; Compressors, Pumps etc.)
- Industrial applications with a DC Bus current of 320 V DC or 560 V DC (Fans; industrial machinery etc.)

Rpm	1500 min <sup>-1</sup> to 6000 min <sup>-1</sup>	Depending on the windings, adapted to the System Voltage
Rated Power	9,5 kW to 30 kW	Depending on rpm
Peak Torque	80 Nm	Pulse-Peak torque only up to 30 % of rated rpm
Motorfeedback	Analog Hallsensors (sin/cos); Resolver or Encoders	Depending on controller-specifications
Weight	~ 31 kg	Incl. sin/cos Encoder, without break

**Max. power at different motor-speed with watercooling at a max.temperature of 60°C , and 6 l / min of cooling-liquid flow.**

Motor Speed	Rated Power	Rated Torque	Peak Torque	Efficiency
1500 min <sup>-1</sup>	9,5 kW	60,2 Nm	80 Nm	91 %
3000 min <sup>-1</sup>	18,0 kW	57,3 Nm	80 Nm	93 %
4500 min <sup>-1</sup>	25,0 kW	53,1 Nm	80 Nm	94 %
6000 min <sup>-1</sup>	30,0 kW	47,7 Nm	80 Nm	94 %

**Other motor speed, torque and power ratings for customised Applications can be checked by request, as well as a direct mounting of gearings and breaks**



### General technical specs for the PMS 0156 W

Motortype	Permanent excited synchronous-Disc ( pancake) motor
cooling	watercooling with max. 60 °C , a mx. Pressure of 3 bar and a minimum liquid-flow of 6 l / min
Operation mode	S1 (continuous)
Polpairs	4
Magnet material	Neodymium-Iron-Bor
Insulation Class	Class F according VDE 0530
Electrical strength	VDE 0530 – 2000V / 10s
Type of construction	Flange type according IM B14
Electrical connections	Plugs (mating plug not included ) or wire
Protection class	IP 54
Environmental temperature	-10 °C to + 40 °C
Demagnetization temperature	> 5 x I <sub>N</sub>
Max. Peak torque at intermittent Duty	1,5-times of rated torque for about 5 seconds
Max. pulse-torque	~2-times of rated torque for max. 0,5 seconds
Motorfeedback	Resolver 2-poles, Encoder or Analog Hallsensors with sin/cos output
Temperaturesensors	KTY84-130 or PTC (NAT=120°C)