



## PMS 150 W – Permanentmagnet Synchronous motor

### Applications

- Battery powered application with Voltages from 24 V DC, 36 V DC or 48 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-1 to 6000 min-1	Depending on the windings, adapted to the System Voltage
Rated Power	6,0 kW bis 20,0 kW	Depending on rpm
Peak Torque	80 Nm	Pulse-Peak torque only up to 30 % of rated rpm
Motor-Impuls-torque	~ 95 Nm	Impulstorque for max. 0,5 sec. and rpm < 50 rpm
Motorfeedback	Analog Hallsensors (sin/cos); Resolver or Encoders	Depending on controller-specifications
Weight	~ 23,6 kg	Incl. sin/cos Encoder, without break

**Max. power at different motor-speed with watercooling at a max.temperature of 60°C , and 4 l / min of cooling-liquid flow.**

rpm [min-1]	48 V DC		72 V DC		96 V DC		ab 320 V DC	
	torque [Nm]	Power [kW]	torque [Nm]	Power [kW]	torque [Nm]	Power [kW]	torque [Nm]	Power [kW]
1500	47,7	7,5	50,1	8,0	50,1	8,0	50,1	8,0
3000	27,4	8,6	39,8	12,5	44,5	14,0	47,8	15,0
4500	-		28,7	13,5	33,9	16,0	38,2	18,0
6000	-		21,5	13,5	27,1	17,0	31,8	20,0

**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 150 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 15 seconds
Max. pulse-torque	~2,5-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)