



## PMS 156 W – Permanentmagnet Synchronous motor

### Applications

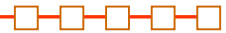
- Battery powered application with Voltages from 24 V DC, 36 V DC or 48 V DC (for traction applications; Compressors, Pumps etc.)
- Industrial applications with a DC Bus current of 320 V DC or 560 V DC (Fans; industrial machinery etc. )

Rpm	1500 min-1 to 6000 min-1	Depending on the windings, adapted to the System Voltage
Rated Power	9,5 kW bis 30,0 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	~ 31,0 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	-	-	-	-	-	-	63,6	11,0
3000	-	-	41,3	13,0	54,1	17,0	57,3	18,0
4500	-	-	34,0	16,0	42,8	20,0	48,8	23,0
6000	-	-	25,5	16,0	36,6	23,0	47,7	30,0

**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 156 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
Temperatursensors	KTY84-130 or PTC (NAT=120°C)