PMS 150 – 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	6,5 kW bis 15 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	~ 22,3 kg	Incl. sin/cos Encoder, without break

Max. rated power in continous mode (S1) at different System-Voltages and different motor-speed with aircooling at a min. airstream of 5 m/s and a good contact of the mounting surface for best thermal transfer.

	48 V DC		72 V DC		96 V DC		ab 320 V DC	
rpm [min-1]	torque [Nm]	Power [kW]	torque [Nm]	Power [kW]	torque [Nm]	Power [kW]	torque [Nm]	Power [kW]
1500	41,4	6,5	41,4	6,5	41,4	6,5	41,4	6,5
3000	27,4	8,6	36,6	11,5	36,6	11,5	36,6	11,5
4500	-		27,6	13,0	27,6	13,0	28,6	13,5
6000	-		21,5	13,5	21,5	13,5	23,8	15,0

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

Motortype	Permanent excited synchronous-Disc (pancake) motor
cooling	aircooling with a min airstream of 5 m/s
Operation mode	S1 (continous)
Polpairs	4
Magnet material	Neodynium-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 (maiting plug not included) or wire
Protection class	IP 54
Environmental temperature	-10 °C to + 40 °C
Max. Peak torque at intermittent Duty	1,5-times of rated torque for about 15 seconds
Max. pulse-torque	3-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)