

参数 Parameters	备注Remarks	符号Symbol	单位Unit	TMSL210-65	TMSL210-85	TMSL210-105
绕组类型Winding Type				N	N	N
电机类型Motor type Max. voltage ph-ph	三相同步无铁芯 3 phases synchronous Ironless >=220Vac rms (320Vdc)					
电机性能参数Performance						
峰值扭矩 Peak torque@20°C/s increase	磁铁Magnet@25°C	Tp	Nm	35.00	52.00	70.00
持续扭矩Continuous torque	线圈Coil@110°C	Tc	Nm	13.60	21.00	29.00
堵转扭矩Stall torque	线圈Coil@110°C	Ts	Nm	10	15	20
最大速度Maximum Speed	@Tc@320Vdc	nmax	rpm	1100	780	586
电机力矩常数Motor Torque Constant	持续电流 up to Ic	Kt	Nm/Arms	1.74	2.63	3.50
电机常数Motor Constant	线圈Coils@25°C	Km	Nm ² /W	0.257	0.439	0.628
电气性能参数Electrical						
峰值电流Peak Current	磁铁Magnet@25°C	Ip	Arms	21.0	21.0	21.0
最大持续电流Max.Continuous Current	线圈Coil@110°C	Ic	Arms	7.8	8.0	8.3
反电动势常数 Back EMF Phase to Phase peak	25°C +/-10%	Ke _p	V/krpm	150	226	301
反电动势常数 Back EMF Phase to Phase RMS	25°C +/-10%	Ke	V/krpm	106	160	213
单相电阻Resistance Per Phase	线圈Coil@25°C	R _{ph}	Ω	3.93	5.25	6.50
单相电感Induction Per Phase	<0.63Ip	L _{ph}	mH	15.50	22.00	28.00
电气时间常数Electrical Time Constant	线圈Coil@25°C	te	ms	3.9	4.2	4.3
最大持续功耗 Max. Continuous Power Loss	所有线圈All coils	Pc	W	936	1305	1740
极数Poles		N _{mag.}	nr	38.0	38.0	38.0
热性能参数Thermal						
热阻Thermal Resistance	线圈与装配面Coils to mount. S _f	R _{th}	°C/W	0.096	0.069	0.052
温度传感器 Temperature Sensor				Optional PTC 110/NTC 10KΩ	Optional PTC 110/NTC 10KΩ	Optional PTC 110/NTC 10KΩ
机械参数Mechanical						
定子外径Stator OD		O _{ds}	mm	210	210	210
转子内径Rotor ID		I _{dr}	mm	140	140	140
转子惯量Rotor inertia		J _R	Kg*m ²	9.00E-03	1.40E-02	1.90E-02
转子重量Rotor Mass		W _r	kg	1.6	2.4	3.2
总重量Total Mass	Excluding cables	W _s	kg	5.5	7.9	10