

参数 Parameters	备注Remarks	符号Symbol	单位Unit	TMSL290-65	TMSL290-85	TMSL290-105
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)					
<b>电机性能参数Performance</b>						
峰值扭矩 Peak torque@20°C/s increase	磁铁Magnet@25°C	Tp	Nm	80.00	120.00	160.00
持续扭矩Continuous torque	线圈Coil@110°C	Tc	Nm	30.00	47.00	65.00
堵转扭矩Stall torque	线圈Coil@110°C	Ts	Nm	21	33	46
最大速度Maximum Speed	@Tc@320Vdc	nmax	rpm	513	342	260
电机力矩常数Motor Torque Constant	持续电流 up to Ic	Kt	Nm/Arms	4.00	6.00	7.90
电机常数Motor Constant	线圈Coils@25°C	Km	Nm <sup>2</sup> /W	0.904	1.523	2.114
<b>电气性能参数Electrical</b>						
峰值电流Peak Current	磁铁Magnet@25°C	Ip	Arms	27.0	27.0	27.4
最大持续电流Max. Continuous Current	线圈Coil@110°C	Ic	Arms	7.5	7.8	8.2
反电动势常数 Back EMF Phase to Phase peak	25°C +/-10%	Kep	V/krpm	344	517	680
反电动势常数 Back EMF Phase to Phase RMS	25°C +/-10%	Ke	V/krpm	244	365	481
单相电阻Resistance Per Phase	线圈Coil@25°C	Rph	Ω	5.90	7.88	9.84
单相电感Induction Per Phase	l<0.63lp	Lph	mH	23.50	34.00	45.00
电气时间常数Electrical Time Constant	线圈Coil@25°C	te	ms	4.0	4.3	4.6
最大持续功耗 Max. Continuous Power Loss	所有线圈All coils	Pc	W	1294	1886	2598
极数Poles		Nmag.	nr	38.0	38.0	38.0
<b>热性能参数Thermal</b>						
热阻Thermal Resistance	线圈与装配面Coils to mount. Sf	Rth	°C/W	0.070	0.048	0.035
温度传感器 Temperature Sensor				Optional PTC 110/NTC 10KΩ	Optional PTC 110/NTC 10KΩ	Optional PTC 110/NTC 10KΩ
<b>机械参数Mechanical</b>						
定子外径 Stator OD		Ods	mm	290	290	290
转子内径Rotor ID		ldr	mm	220	220	220
转子惯量Rotor inertia		JR	Kg*m2	2.13E-02	2.80E-02	3.50E-02
转子重量Rotor Mass		Wr	kg	2.3	3.5	4.7
总重量Total Mass	Excluding cables	Ws	kg	6.6	9.4	12.4