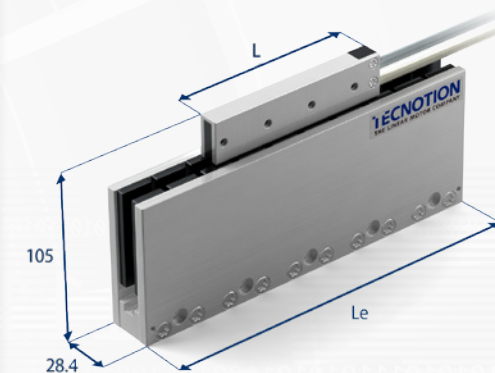


Parameter	Remarks	Symbol	Unit	UL3		UL6		UL9		UL12		UL15			
Winding type				N	S	N	S	N	S	N	S	N	S		
Motor type, max voltage ph-ph				3-phase synchronous Ironless, 230V _{ac rms} (300V _{dc})											
Peak Force @ 20°C/s increase	magnet @ 25°C	F _p	N	240		480		720		960		1200			
Continuous Force*	coils @ 110°C	F _c	N	70		140		210		280		350			
Maximum Speed**	@ 300 V	v _{max}	m/s	5	12	5	12	5	12	5	12	5	12		
Motor Force Constant	mount. sfc. @ 20°C	K	N/A _{rms}	68	27.5	68	27.5	68	27.5	68	27.5	67.5	27.5		
Motor Constant	coils @ 25°C	S	N ² /W	97		195		290		390		485			
Peak Current	magnet @ 25°C	I _p	A _{rms}	3.5	8.7	7	17.5	10.5	26.2	14.1	35	17.8	44		
Maximum Continuous Current	coils @ 110°C	I _c	A _{rms}	1.03	2.6	2.1	5.1	3.1	7.6	4.2	10.2	5.2	12.9		
Back EMF Phase-Phase _{peak}		B _{emf}	V / m/s	55.5	22.5	55.5	22.5	55.5	22.5	55.5	22.5	55.5	22.5		
Resistance per Phase*	coils @ 25°C ex. cable	R _f	Ω	15.9	2.6	8.0	1.28	5.3	0.85	4.0	0.64	3.3	0.53		
Induction per Phase	I < 0.6 I _p	L _f	mH	13	2.0	6.5	1.0	4.2	0.7	3.2	0.5	3	0.4		
Electrical Time Constant*	coils @ 25°C	τ _e	ms	0.8		0.8		0.8		0.8		0.8			
Maximum Continuous Power Loss	all coils	P _c	W	67		134		200		270		335			
Thermal Resistance	coils to mount. sfc.	R _{th}	°C/W	1.3		0.65		0.43		0.32		0.26			
Thermal Time Constant*	to max. coil temp.	τ _{th}	s	72		72		72		72		72			
Temperature Cut-off / Sensor				PTC 1kΩ / NTC											
Coil Unit Weight	ex. cables	W	kg	0.250		0.470		0.690		0.910		1.130			
Coil Unit Length	ex. cables	L	mm	106		190		274		358		442			
Motor Attraction Force		F _a	N	0		0		0		0		0			
Magnet Pitch NN		τ	mm	42		42		42		42		42			
Cable Mass		m	kg/m	0.09		0.09		0.09		0.105		0.105			
Cable Type (Power)	length 1 m	d	mm (AWG)					5.8 (20)				6.4 (18)			
Cable Type (Sensor)	length 1 m	d	mm (AWG)					4.3 (26)				4.3 (26)			



UL3 in 210mm magnet yoke shown

Approvals



Magnet yoke dimensions

Le (mm)	126	168	210	546
M5 bolts	3	4	5	13
Mass (kg/m)	11.2			

Magnet yokes can be butted together.

* These values are only applicable when the mounting surface is at 20°C and the motor is driven at maximum continuous current. If these values differ in your application, please check our simulation tool.

** Actual values depend on bus voltage. Please check the F/V diagram in our simulation tool.

