Specifications

Parameter	Symbol	Units	LEU-15-1		LEU-15-2		LEU-15-3		LEU-30-1		LEU-30-2		LEU-30-3	
Cooling Method			**NC**		**NC**		**NC**		**NC**		**NC**		**NC**	
Continuous Force [1,5]	F_{cTmax}	N (lb_f)	7.5 (1.7)		14.9 (3.4)		22.4 (5.0)		13.1 (2.9)		26.1 (5.9)		39.2 (8.8)	
Peak Force [2]	F_p	N (lb_f)	22 (5.0)		45 (10.0)		67 (15.1)		39 (8.8)		78 (17.6)		117 (26.4)	
Motor Constant [1]	K_m	$N/\sqrt{w}$ ($lb_f/\sqrt{w}$)	1.7 (0.39)		2.4 (0.55)		3.0 (0.67)		2.7 (0.61)		3.8 (0.86)		4.7 (1.06)	
Thermal Resistance	R_{th}	°C/W	5.34		2.67		1.78		4.32		2.16		1.44	
Max Power Dissipation	P_{cTmax}	W	19		37		56		23		46		69	
Max Applied Bus Voltage [6]	V_{DC}	Volts	160		160		160		160		160		160	
Electrical Cycle Length	E_c	mm	15		15		15		15		15		15	
Electrical Time Constant	τ_e	msec	0.12		0.12		0.12		0.12		0.12		0.12	
Max Coil Temp	T_{max}	°C	125		125		125		125		125		125	
Max Coil Temp			**D**	**E**	**D**	**E**	**D**	**E**	**D**	**E**	**D**	**E**	**D**	**E**
Force Constant [1]	K_F	N/A_{pk} (lb_f/A_{pk})	2.7 (0.6)	6.64 (1.49)	5.3 (1.2)	8.48 (1.91)	8.0 (1.8)	12.66 (2.85)	5.3 (1.2)	10.69 (2.4)	10.7 (2.4)	16.97 (3.81)	16.0 (3.6)	N/A
Back EMF Constant p-p [3,4]	K_e	V_p/m/s (V_p/in/s)	3.1 (0.08)	7.84 (0.2)	6.3 (0.16)	10.02 (0.25)	9.4 (0.24)	14.95 (0.38)	6.3 (0.16)	12.63 (0.32)	12.6 (0.32)	20.04 (0.51)	18.9 (0.48)	N/A
Peak Current [1,4]	I_p	A_{pk} (A_{rms})	8.4 (5.9)	3.3 (2.3)	8.4 (5.9)	5.3 (3.7)	8.4 (5.9)	5.3 (3.7)	7.3 (5.2)	3.7 (2.6)	7.3 (5.2)	4.6 (3.3)	7.3 (5.2)	N/A
Continuous Current [1,4,5]	I_{cTmax}	A_{pk} (A_{rms})	2.8 (2.0)	1.12 (0.8)	2.8 (2.0)	1.78 (1.3)	2.8 (2.0)	1.78 (1.3)	2.4 (1.7)	1.2 (0.85)	2.4 (1.7)	1.51 (1.1)	2.4 (1.7)	N/A
Resistance [3] **@20°C**	R_{25}	ohm	2.19	13.98	4.37	11.06	6.56	16.59	3.53	14.20	7.06	17.85	10.59	N/A
Inductance p-p [3]	L	mH	0.25	1.63	0.51	1.28	0.76	1.93	0.43	1.74	0.86	2.19	1.29	N/A
Mechanical Parameters														
Magnetic Attraction	F_a	N (lb_f)	0 (0)		0 (0)		0 (0)		0 (0)		0 (0)		0 (0)	
Coil Mass	M_c	kg (lb_m)	0.022 (0.049)		0.044 (0.097)		0.066 (0.146)		0.030 (0.066)		0.060 (0.132)		0.090 (0.198)	
Magnetic Track Mass	M_n	kg/m (lb/in)	2.32 (0.13)		2.32 (0.13)		2.32 (0.13)		3.87 (0.22)		3.87 (0.22)		3.87 (0.22)	

Notes:

Motor performance specifications are with sinusoidal commutation.

All specifications are ±10%. Phase-to-phase inductance is ±30%.

1. Continuous forces, motor constant and currents listed are with coils at maximum temperature 125°C, mounted to a 12.7 mm (0.5") aluminum heat sink thickness whose area equals 3 times the coil area, with the heat sink at 20°C ambient.
2. Max on time 1 sec, assuming correct rms Force and Current, consult Anorad.
3. All winding parameters listed are measured line-to-line (phase-to-phase).
4. All currents and voltages listed are measured 0-peak of the sine wave unless noted rms.
5. Continuous forces and currents are based on coil moving with all phases sharing the same load in sinusoidal commutation.
6. Recommended amplifier maximum input voltage of 115 VAC.