

PERFORMANCE		Winding codes	3TA	3TB
		UNIT	FREE AIR CONVECTION	FREE AIR CONVECTION
Fp	Peak force	N	3650	3650
Fc	Continuous force	N	956	956
Fs	Stall force	N	725	725
Kt	Force constant	N/Arms	300	150
Ku	Back EMF constant (*)	Vrms/(m/s)	174	86.8
Km	Motor constant	N/√W	71.1	71.1
R20	Electrical resistance at 20°C (*)	Ohm	11.9	2.98
L1	Electrical inductance (*)	mH	162	40.4
Ip	Peak current	Arms	20.2	40.5
Ic	Continuous current	Arms	3.32	6.63
Is	Stall current	Arms	2.51	5.02
Pc	Max. continuous power dissipation	W	281	281

SPECIFICATIONS		UNIT		
Udc	Nominal input voltage	VDC	600	600
τth	Thermal time constant	s	2200	2200
Rth	Thermal resistance	K/W	0.391	0.391
2τp	Magnetic period	mm	32	32
Mw	Magnetic way mass	kg/m	12.8	12.8
Mm	Motor mass (magnetic way excluded)	kg	11.9	11.9
Fa	Attraction force	N	7900	7900
Fd	Max. detent force (average to peak)	N	27	27
vs	Stall speed	mm/s	0.15	0.15
Gm	Mechanical gap	mm	0.80	0.80

Notes: (*) terminal to terminal. Ambient temperature = 20 °C. Max. coil temperature = 130 °C.
 Hypothesis and tolerances are in ETEL's Handbook. Carriage's dissipation area is 0.15 m² and minimal stroke is 2 times the motor length.
 Caution: Any use of the motor beyond speed/force limit could lead to hazardous voltage and serious injuries. Customer is responsible for setting safeties/limitations that will keep the motor in its safe operating area. ETEL cannot be held responsible if the motor is used in an improper way.

