

MOTOR PERFORMANCE		Winding codes	3RA	3TA		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
<b>Fp</b>	Peak force	N	748	748		
<b>Fc</b>	Continuous force	N	220	221		
<b>Fs</b>	Standstill force	N	170	171		
<b>Ip</b>	Peak current	Arms	17.7	27.1		
<b>Ic</b>	Continuous current	Arms	2.34	3.61		
<b>Is</b>	Standstill current	Arms	1.77	2.73		
<b>vs</b>	Rated low speed	mm/s	0.15	0.15		
<b>Pc</b>	Power dissipation @ Ic	W	120	120		
<b>Fd</b>	Max. detent force (average to peak)	N	9.8	9.8		
<b>Fa</b>	Attraction force	N	1600	1600		

MOTOR SETTING		UNIT				
<b>Kt</b>	Force constant	N/Arms	100	65.4		
<b>Ku</b>	Back EMF constant (*)	Vrms/(m/s)	60.0	39.2		
<b>Km</b>	Motor constant	N/√W	25.6	25.7		
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	10.2	4.31		
<b>L</b>	Electrical inductance (*)	mH	83.4	35.5		
<b>rth</b>	Thermal time constant	s	2130	2140		
<b>Rth</b>	Thermal resistance	K/W	0.913	0.912		
<b>2tp</b>	Magnetic period	mm	32	32		
<b>mw</b>	Magnetic way mass	kg/m	3.51	3.51		
<b>mm</b>	Motor mass	kg	2.19	2.23		

MOTOR ENVIRONMENT		UNIT				
<b>Udc</b>	Nominal DC bus voltage	VDC	600	600		
<b>Gm</b>	Mechanical gap	mm	0.90	0.90		
<b>Ss</b>	Stator exchange surface	m²	0.03	0.03		
<b>x</b>	Assumed stroke	m	0.51	0.51		
<b>θamb</b>	Ambient temperature	°C	20	20		
<b>θmax</b>	Maximum coil temperature	°C	130	130		

**Notes:** (\*) terminal to terminal.  
Hypotheses and tolerances are in ETEL Integration Manual.

**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.

