

MOTOR PERFORMANCE		Winding codes	3TA	3VA		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
<b>Fp</b>	Peak force	N	1470	1470		
<b>Fc</b>	Continuous force	N	394	372		
<b>Fs</b>	Standstill force	N	300	283		
<b>Ip</b>	Peak current	Arms	28.5	48.9		
<b>Ic</b>	Continuous current	Arms	3.55	5.75		
<b>Is</b>	Standstill current	Arms	2.69	4.35		
<b>vs</b>	Rated low speed	mm/s	0.13	0.13		
<b>Pc</b>	Power dissipation @ Ic	W	138	137		
<b>Fd</b>	Max. detent force (average to peak)	N	25	25		
<b>Fa</b>	Attraction force	N	3300	3300		

MOTOR SETTING		UNIT				
<b>Kt</b>	Force constant	N/Arms	118	68.7		
<b>Ku</b>	Back EMF constant (*)	Vrms/(m/s)	70.4	41.1		
<b>Km</b>	Motor constant	N/√W	42.7	40.3		
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	5.08	1.94		
<b>L</b>	Electrical inductance (*)	mH	54.6	18.7		
<b>rth</b>	Thermal time constant	s	2430	2410		
<b>Rth</b>	Thermal resistance	K/W	0.794	0.796		
<b>2tp</b>	Magnetic period	mm	32	32		
<b>mw</b>	Magnetic way mass	kg/m	7.96	7.96		
<b>mm</b>	Motor mass	kg	2.98	2.91		

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	0.04	0.04		
<b>x</b>	Assumed stroke	m	0.47	0.47		
<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.

