

MOTOR PERFORMANCE		Winding codes	3RA	3TA		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	1310	1310		
Fc	Continuous force	N	356	353		
Fs	Standstill force	N	271	268		
Ip	Peak current	Arms	17.7	28.2		
Ic	Continuous current	Arms	2.24	3.53		
Is	Standstill current	Arms	1.69	2.67		
vs	Rated low speed	mm/s	0.13	0.13		
Pc	Power dissipation @ Ic	W	154	153		
Fd	Max. detent force (average to peak)	N	17	17		
Fa	Attraction force	N	2600	2600		

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	169	106		
Ku	Back EMF constant (*)	Vrms/(m/s)	101	63.4		
Km	Motor constant	N/√W	36.4	36.1		
R20	Electrical resistance at 20°C (*)	Ohm	14.3	5.75		
L	Electrical inductance (*)	mH	140	55.1		
rth	Thermal time constant	s	2420	2420		
Rth	Thermal resistance	K/W	0.713	0.713		
2tp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	6.19	6.19		
mm	Motor mass	kg	3.25	3.26		

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.04	0.04		
x	Assumed stroke	m	0.51	0.51		
θamb	Ambient temperature	°C	20	20		
θmax	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.

