

MOTOR PERFORMANCE		Winding codes	3RA	3TA		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	585	585		
Fc	Continuous force	N	176	177		
Fs	Standstill force	N	137	138		
Ip	Peak current	Arms	18.6	28.5		
Ic	Continuous current	Arms	2.48	3.82		
Is	Standstill current	Arms	1.88	2.89		
vs	Rated low speed	mm/s	0.16	0.16		
Pc	Power dissipation @ Ic	W	89.9	90.0		
Fd	Max. detent force (average to peak)	N	11	11		
Fa	Attraction force	N	1320	1320		

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	76.7	50.1		
Ku	Back EMF constant (*)	Vrms/(m/s)	45.7	29.9		
Km	Motor constant	N/√W	24.0	24.1		
R20	Electrical resistance at 20°C (*)	Ohm	6.81	2.88		
L	Electrical inductance (*)	mH	58.6	24.9		
rth	Thermal time constant	s	1990	2000		
Rth	Thermal resistance	K/W	1.22	1.22		
2tp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	3.51	3.51		
mm	Motor mass	kg	1.50	1.52		

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.02	0.02		
x	Assumed stroke	m	0.47	0.47		
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.

