

MOTOR PERFORMANCE		Winding codes	3RB	3TB		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	2560	2560		
Fc	Continuous force	N	656	666		
Fs	Standstill force	N	495	503		
Ip	Peak current	Arms	35.4	54.2		
Ic	Continuous current	Arms	4.43	6.89		
Is	Standstill current	Arms	3.36	5.22		
vs	Rated low speed	mm/s	0.12	0.12		
Pc	Power dissipation @ Ic	W	258	258		
Fd	Max. detent force (average to peak)	N	28	28		
Fa	Attraction force	N	4770	4770		

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	158	103		
Ku	Back EMF constant (*)	Vrms/(m/s)	95.1	62.1		
Km	Motor constant	N/√W	52.2	52.9		
R20	Electrical resistance at 20°C (*)	Ohm	6.13	2.54		
L	Electrical inductance (*)	mH	64.7	27.5		
rth	Thermal time constant	s	2630	2640		
Rth	Thermal resistance	K/W	0.424	0.423		
2tp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	7.96	7.96		
mm	Motor mass	kg	5.67	5.75		

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.08	0.08		
x	Assumed stroke	m	0.69	0.69		
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.

