

MOTOR PERFORMANCE		Winding codes	3QB	3QD		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	2030	2030		
Fc	Continuous force	N	433	433		
Fs	Standstill force	N	327	327		
Ip	Peak current	Arms	29.8	59.6		
Ic	Continuous current	Arms	4.44	8.88		
Is	Standstill current	Arms	3.36	6.73		
vs	Rated low speed	mm/s	0.15	0.15		
Pc	Power dissipation @ Ic	W	198	198		
Fd	Max. detent force (average to peak)	N	27	27		
Fa	Attraction force	N	4510	4510		

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	103	51.3		
Ku	Back EMF constant (*)	Vrms/(m/s)	62.0	31.0		
Km	Motor constant	N/√W	38.7	38.7		
R20	Electrical resistance at 20°C (*)	Ohm	4.70	1.17		
L	Electrical inductance (*)	mH	27.4	6.85		
rth	Thermal time constant	s	2130	2130		
Rth	Thermal resistance	K/W	0.550	0.550		
2tp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	6.19	6.19		
mm	Motor mass	kg	3.18	3.18		

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.06	0.06		
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.

