

MOTOR PERFORMANCE		Winding codes	3QA	3QC		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	1510	1510		
Fc	Continuous force	N	310	310		
Fs	Standstill force	N	235	235		
Ip	Peak current	Arms	15.1	45.2		
Ic	Continuous current	Arms	2.16	6.49		
Is	Standstill current	Arms	1.64	4.91		
vs	Rated low speed	mm/s	0.15	0.15		
Pc	Power dissipation @ Ic	W	144	144		
Fd	Max. detent force (average to peak)	N	20	20		
Fa	Attraction force	N	3440	3440		

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	152	50.6		
Ku	Back EMF constant (*)	Vrms/(m/s)	91.8	30.6		
Km	Motor constant	N/√W	32.7	32.7		
R20	Electrical resistance at 20°C (*)	Ohm	14.4	1.60		
L	Electrical inductance (*)	mH	81.3	9.04		
rth	Thermal time constant	s	2110	2110		
Rth	Thermal resistance	K/W	0.757	0.757		
2tp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	6.19	6.19		
mm	Motor mass	kg	2.41	2.41		

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.

