

MOTOR PERFORMANCE		Winding codes	3QA			
		UNIT	FREE AIR COOLING			
Fp	Peak force	N	559			
Fc	Continuous force	N	119			
Fs	Standstill force	N	90.4			
Ip	Peak current	Arms	17.2			
Ic	Continuous current	Arms	2.41			
Is	Standstill current	Arms	1.82			
vs	Rated low speed	mm/s	0.18			
Pc	Power dissipation @ Ic	W	58.3			
Fd	Max. detent force (average to peak)	N	15			
Fa	Attraction force	N	1300			

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	51.6			
Ku	Back EMF constant (*)	Vrms/(m/s)	31.1			
Km	Motor constant	N/√W	19.4			
R20	Electrical resistance at 20°C (*)	Ohm	4.70			
L	Electrical inductance (*)	mH	27.4			
rth	Thermal time constant	s	1800			
Rth	Thermal resistance	K/W	1.87			
2tp	Magnetic period	mm	32			
mw	Magnetic way mass	kg/m	6.19			
mm	Motor mass	kg	0.878			

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600			
Gm	Mechanical gap	mm	0.90			
Ss	Stator exchange surface	m²	0.01			
x	Assumed stroke	m	0.29			
θamb	Ambient temperature	°C	20			
θmax	Maximum coil temperature	°C	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.

3QA - FREE AIR COOLING - 600V

