

MOTOR PERFORMANCE		Winding codes	3QA			
		UNIT	FREE AIR COOLING			
<b>Fp</b>	Peak force	N	795			
<b>Fc</b>	Continuous force	N	158			
<b>Fs</b>	Standstill force	N	120			
<b>Ip</b>	Peak current	Arms	17.2			
<b>Ic</b>	Continuous current	Arms	2.30			
<b>Is</b>	Standstill current	Arms	1.74			
<b>vs</b>	Rated low speed	mm/s	0.16			
<b>Pc</b>	Power dissipation @ Ic	W	68.2			
<b>Fd</b>	Max. detent force (average to peak)	N	21			
<b>Fa</b>	Attraction force	N	1720			

MOTOR SETTING		UNIT				
<b>Kt</b>	Force constant	N/Arms	72.0			
<b>Ku</b>	Back EMF constant (*)	Vrms/(m/s)	43.5			
<b>Km</b>	Motor constant	N/√W	23.9			
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	6.05			
<b>L</b>	Electrical inductance (*)	mH	35.9			
<b>rth</b>	Thermal time constant	s	1970			
<b>Rth</b>	Thermal resistance	K/W	1.60			
<b>2tp</b>	Magnetic period	mm	32			
<b>mw</b>	Magnetic way mass	kg/m	7.96			
<b>mm</b>	Motor mass	kg	1.17			

MOTOR ENVIRONMENT		UNIT				
<b>Udc</b>	Nominal DC bus voltage	VDC	600			
<b>Gm</b>	Mechanical gap	mm	0.90			
<b>Ss</b>	Stator exchange surface	m <sup>2</sup>	0.02			
<b>x</b>	Assumed stroke	m	0.29			
<b>θamb</b>	Ambient temperature	°C	20			
<b>θmax</b>	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

