

MOTOR PERFORMANCE		Winding codes	3QC			
		UNIT	FREE AIR COOLING			
<b>Fp</b>	Peak force	N	1870			
<b>Fc</b>	Continuous force	N	374			
<b>Fs</b>	Standstill force	N	282			
<b>Ip</b>	Peak current	Arms	44.7			
<b>Ic</b>	Continuous current	Arms	6.37			
<b>Is</b>	Standstill current	Arms	4.82			
<b>vs</b>	Rated low speed	mm/s	0.14			
<b>Pc</b>	Power dissipation @ Ic	W	175			
<b>Fd</b>	Max. detent force (average to peak)	N	21			
<b>Fa</b>	Attraction force	N	3600			

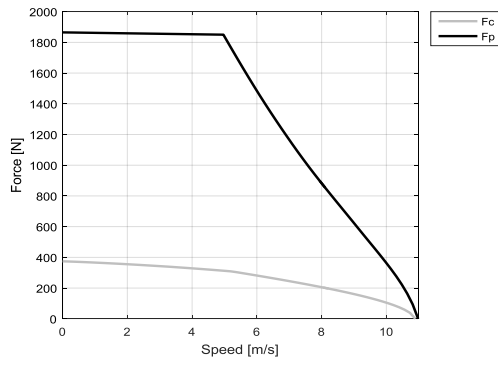
MOTOR SETTING		UNIT				
<b>Kt</b>	Force constant	N/Arms	62.3			
<b>Ku</b>	Back EMF constant (*)	Vrms/(m/s)	37.8			
<b>Km</b>	Motor constant	N/√W	35.8			
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	2.02			
<b>L</b>	Electrical inductance (*)	mH	12.9			
<b>rth</b>	Thermal time constant	s	2290			
<b>Rth</b>	Thermal resistance	K/W	0.623			
<b>2tp</b>	Magnetic period	mm	32			
<b>mw</b>	Magnetic way mass	kg/m	7.96			
<b>mm</b>	Motor mass	kg	3.21			

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	m²	0.05			
<b>x</b>	Assumed stroke	m	0.51			
<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 handbook.

**Caution:** Any use of the motor beyond speed/torque 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.

3QC - FREE AIR COOLING - 600V



3QC - FREE AIR COOLING - 300V

