

MOTOR PERFORMANCE		Winding codes	3QA	3QC		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
<b>Fp</b>	Peak force	N	1320	1320		
<b>Fc</b>	Continuous force	N	277	277		
<b>Fs</b>	Standstill force	N	209	209		
<b>Ip</b>	Peak current	Arms	14.9	44.7		
<b>Ic</b>	Continuous current	Arms	2.19	6.56		
<b>Is</b>	Standstill current	Arms	1.66	4.97		
<b>vs</b>	Rated low speed	mm/s	0.15	0.15		
<b>Pc</b>	Power dissipation @ Ic	W	144	144		
<b>Fd</b>	Max. detent force (average to peak)	N	15	15		
<b>Fa</b>	Attraction force	N	2600	2600		

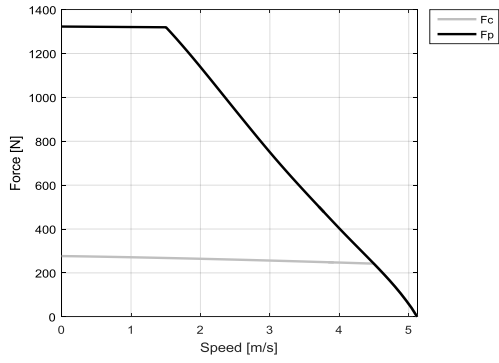
MOTOR SETTING		UNIT				
<b>Kt</b>	Force constant	N/Arms	134	44.5		
<b>Ku</b>	Back EMF constant (*)	Vrms/(m/s)	81.0	27.0		
<b>Km</b>	Motor constant	N/√W	29.0	29.0		
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	14.1	1.57		
<b>L</b>	Electrical inductance (*)	mH	83.0	9.23		
<b>rth</b>	Thermal time constant	s	2110	2110		
<b>Rth</b>	Thermal resistance	K/W	0.757	0.757		
<b>2tp</b>	Magnetic period	mm	32	32		
<b>mw</b>	Magnetic way mass	kg/m	6.19	6.19		
<b>mm</b>	Motor mass	kg	2.41	2.41		

MOTOR ENVIRONMENT		UNIT				
<b>Udc</b>	Nominal DC bus voltage	VDC	600	600		
<b>Gm</b>	Mechanical gap	mm	0.90	0.90		
<b>Ss</b>	Stator exchange surface	m²	0.04	0.04		
<b>x</b>	Assumed stroke	m	0.51	0.51		
<b>θamb</b>	Ambient temperature	°C	20	20		
<b>θmax</b>	Maximum coil temperature	°C	130	130		

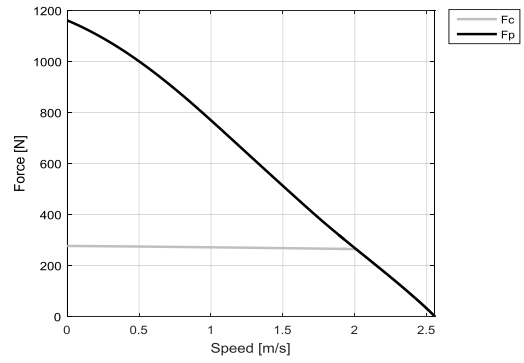
**Notes:** (\*) terminal to terminal.  
Hypotheses and tolerances are in ETEL handbook.

**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.

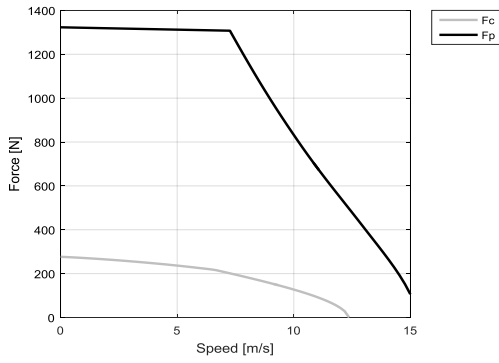
**3QA - FREE AIR COOLING - 600V**



**3QA - FREE AIR COOLING - 300V**



**3QC - FREE AIR COOLING - 600V**



**3QC - FREE AIR COOLING - 300V**

