

MOTOR PERFORMANCE		Winding codes	3RA	3TA		
		UNIT	FREE AIR COOLING	FREE AIR COOLING		
Fp	Peak force	N	748	748		
Fc	Continuous force	N	220	221		
Fs	Standstill force	N	170	171		
Ip	Peak current	Arms	17.7	27.1		
Ic	Continuous current	Arms	2.34	3.61		
Is	Standstill current	Arms	1.77	2.73		
vs	Rated low speed	mm/s	0.15	0.15		
Pc	Power dissipation @ Ic	W	120	120		
Fd	Max. detent force (average to peak)	N	9.8	9.8		
Fa	Attraction force	N	1600	1600		

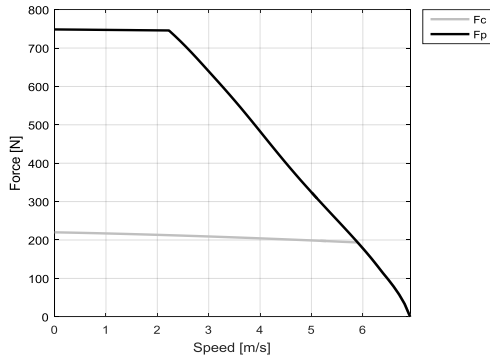
MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	100	65.4		
Ku	Back EMF constant (*)	Vrms/(m/s)	60.0	39.2		
Km	Motor constant	N/√W	25.6	25.7		
R20	Electrical resistance at 20°C (*)	Ohm	10.2	4.31		
L	Electrical inductance (*)	mH	83.4	35.5		
rth	Thermal time constant	s	2130	2140		
Rth	Thermal resistance	K/W	0.913	0.912		
2tp	Magnetic period	mm	32	32		
mw	Magnetic way mass	kg/m	3.51	3.51		
mm	Motor mass	kg	2.19	2.23		

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600	600		
Gm	Mechanical gap	mm	0.90	0.90		
Ss	Stator exchange surface	m²	0.03	0.03		
x	Assumed stroke	m	0.51	0.51		
θamb	Ambient temperature	°C	20	20		
θmax	Maximum coil temperature	°C	130	130		

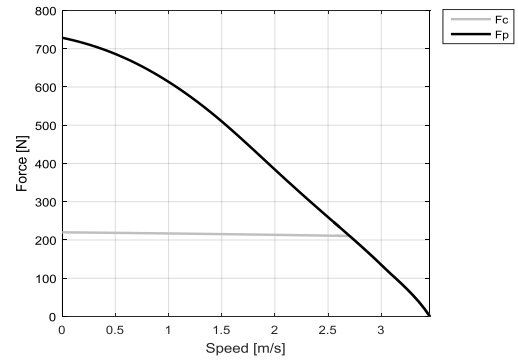
Notes: (*) terminal to terminal.
Hypotheses and tolerances are in ETEL handbook.

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.

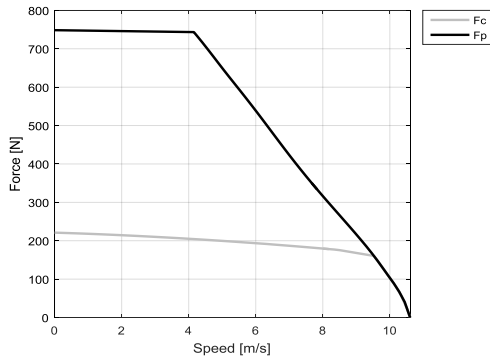
3RA - FREE AIR COOLING - 600V



3RA - FREE AIR COOLING - 300V



3TA - FREE AIR COOLING - 600V



3TA - FREE AIR COOLING - 300V

