

MOTOR PERFORMANCE		Winding codes	3QC			
		UNIT	FREE AIR COOLING			
Fp	Peak force	N	2120			
Fc	Continuous force	N	429			
Fs	Standstill force	N	324			
Ip	Peak current	Arms	44.7			
Ic	Continuous current	Arms	6.37			
Is	Standstill current	Arms	4.82			
vs	Rated low speed	mm/s	0.14			
Pc	Power dissipation @ Ic	W	175			
Fd	Max. detent force (average to peak)	N	28			
Fa	Attraction force	N	4760			

MOTOR SETTING		UNIT				
Kt	Force constant	N/Arms	71.6			
Ku	Back EMF constant (*)	Vrms/(m/s)	43.3			
Km	Motor constant	N/√W	41.2			
R20	Electrical resistance at 20°C (*)	Ohm	2.02			
L	Electrical inductance (*)	mH	12.9			
rth	Thermal time constant	s	2290			
Rth	Thermal resistance	K/W	0.623			
2tp	Magnetic period	mm	32			
mw	Magnetic way mass	kg/m	7.96			
mm	Motor mass	kg	3.21			

MOTOR ENVIRONMENT		UNIT				
Udc	Nominal DC bus voltage	VDC	600			
Gm	Mechanical gap	mm	0.90			
Ss	Stator exchange surface	m ²	0.05			
x	Assumed stroke	m	0.51			
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.

3QC - FREE AIR COOLING - 600V