

PERFORMANCE		Winding codes	3TAS	3TBS
		UNIT	FREE AIR CONVECTION (with glued stator)	FREE AIR CONVECTION (with glued stator)
<b>Tp</b>	Peak torque	Nm	218	218
<b>Tc</b>	Continuous torque	Nm	46.6	46.6
<b>Ts</b>	Stall torque	Nm	35.4	35.4
<b>Kt</b>	Torque constant	Nm/Arms	11.0	5.49
<b>Ku</b>	Back EMF constant (*)	Vrms/(rad/s)	6.35	3.18
<b>Km</b>	Motor constant	Nm/√W	3.45	3.45
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	6.76	1.69
<b>L1</b>	Electrical inductance (*)	mH	29.6	7.40
<b>Ip</b>	Peak current	Arms	28.1	56.2
<b>Ic</b>	Continuous current	Arms	4.31	8.63
<b>Is</b>	Stall current	Arms	3.27	6.54
<b>Pc</b>	Max. continuous power dissipation	W	261	261

SPECIFICATIONS		UNIT		
<b>Udc</b>	Nominal input voltage	VDC	600	600
<b>τth</b>	Thermal time constant	s	1460	1460
<b>Rth</b>	Thermal resistance	K/W	0.376	0.376
<b>2p</b>	Number of poles	-	44	44
<b>J</b>	Rotor inertia	kg.m <sup>2</sup>	0.0146	0.0146
<b>Mr</b>	Rotor mass	kg	2.45	2.45
<b>Ms</b>	Stator mass	kg	5.01	5.01
<b>Td</b>	Max. detent torque (average to peak)	Nm	1.0	1.0
<b>ns</b>	Stall speed	rpm	0.019	0.019

**Notes:** (\*) terminal to terminal. Ambient temperature = 20 °C. Max. coil temperature = 130 °C.  
Hypothesis and tolerances are in ETEL's Handbook. Stator connected to a total surface of 0.10 m<sup>2</sup> and rotor to a total surface of 0.056 m<sup>2</sup>

**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.

