

TORQUE MOTOR

TML0360-150

PERFORMANCE		Winding codes	3XBN	3UFN
		UNIT	FREE AIR CONVECTION	FREE AIR CONVECTION
Tp	Peak torque	Nm	2120	2120
Tc	Continuous torque	Nm	463	477
Ts	Stall torque	Nm	353	365
Kt	Torque constant	Nm/Arms	28.9	19.3
Ku	Back EMF constant (*)	Vrms/(rad/s)	16.7	11.1
Km	Motor constant	Nm/√W	18.7	19.4
R20	Electrical resistance at 20°C (*)	Ohm	1.59	0.661
L1	Electrical inductance (*)	mH	14.5	6.43
Ip	Peak current	Arms	117	175
Ic	Continuous current	Arms	16.3	25.2
Is	Stall current	Arms	12.3	19.1
Pc	Max. continuous power dissipation	W	874	874

SPECIFICATIONS		UNIT		
Udc	Nominal input voltage	VDC	600	600
τth	Thermal time constant	s	2530	2530
Rth	Thermal resistance	K/W	0.114	0.114
2p	Number of poles	-	66	66
J	Rotor inertia	kg.m ²	0.327	0.327
Mr	Rotor mass	kg	16.5	16.5
Ms	Stator mass	kg	35.1	35.1
Td	Max. detent torque (average to peak)	Nm	13	13
ns	Stall speed	rpm	0.0072	0.0072

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 0.51 m² and rotor to a total surface of 0.280 m²

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.

