

MOTOR PERFORMANCE		Winding codes	UL	XL		
		UNIT	WATER COOLING	WATER COOLING		
<b>Tp</b>	Peak torque	Nm	12200	12200		
<b>Ti</b>	Intermittent torque	Nm	9290	9340		
<b>Tc</b>	Continuous torque	Nm	6880	6920		
<b>Ts</b>	Standstill torque	Nm	5550	5590		
<b>Ip</b>	Peak current	Arms	308	597		
<b>Ii</b>	Intermittent current	Arms	194	381		
<b>Ic</b>	Continuous current	Arms	123	241		
<b>Is</b>	Standstill current	Arms	93.1	183		
<b>ns</b>	Rated low speed	rpm	0.047	0.047		
<b>nm</b>	Maximum speed without flux weakening	rpm	102	198		
<b>nm,FW</b>	Maximum speed with flux weakening	rpm	375	729		
<b>ton,p</b>	Maximum ON time for peak cycle	s	12	13		
<b>ton,i</b>	Maximum ON time for intermittent cycle	s	3.1	3.1		
<b>Pp</b>	Power dissipation @ Ip	W	73600	72700		
<b>Pi</b>	Power dissipation @ Ii	W	36500	36800		
<b>Pc</b>	Power dissipation @ Ic	W	14600	14700		
<b>Td</b>	Max. detent torque (average to peak)	Nm	32	32		

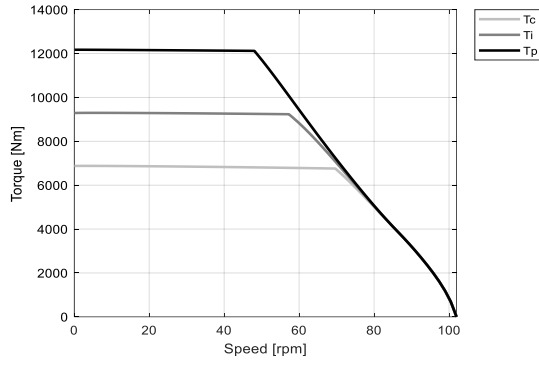
MOTOR SETTING		UNIT				
<b>Kt</b>	Torque constant	Nm/Arms	66.8	34.4		
<b>Ku</b>	Back EMF constant (*)	Vrms/(rad/s)	39.0	20.1		
<b>Km</b>	Motor constant	Nm/√W	79.7	80.1		
<b>R20</b>	Electrical resistance at 20°C (*)	Ohm	0.468	0.123		
<b>Ld/Lq</b>	Electrical inductance (*)	mH	5.84 / 5.10	1.55 / 1.35		
<b>Isc</b>	Maximum short-circuit current	Arms	117	227		
<b>nb</b>	Base speed	rpm	69.7	146		
<b>nb,i</b>	Base speed at intermittent duty cycle	rpm	57.2	123		
<b>nb,p</b>	Base speed at peak duty cycle	rpm	48.1	106		
<b>nn</b>	Rated speed	rpm	61.6	130		
<b>Tn</b>	Rated torque	Nm	6780	6590		
<b>In</b>	Rated current	Arms	121	230		
<b>rth</b>	Thermal time constant	s	193	193		
<b>Rth</b>	Thermal resistance	K/W	0.00621	0.00620		
<b>2p</b>	Number of poles	-	132	132		
<b>J</b>	Rotor inertia	kg·m²	14.0	14.0		
<b>mr</b>	Rotor mass	kg	140	140		
<b>ms</b>	Stator mass	kg	197	198		

MOTOR ENVIRONMENT		UNIT				
<b>Udc</b>	Nominal DC bus voltage	VDC	600	600		
<b>Di</b>	Intermittent duty cycle	%	40	40		
<b>Dp</b>	Peak duty cycle	%	5.0	5.0		
<b>Sr</b>	Rotor exchange surface	m²	0.720	0.720		
<b>θamb</b>	Ambient temperature	°C	20	20		
<b>θmax</b>	Maximum coil temperature	°C	130	130		
<b>θw</b>	Inlet water temperature	°C	20	20		
<b>Δθw</b>	Water temperature difference for Pc	K	10	10		
<b>qw</b>	Minimum water flow for Δθw	l/min	23	23		
<b>Δpw</b>	Max. pressure drop at qw	bar	1.2	1.2		

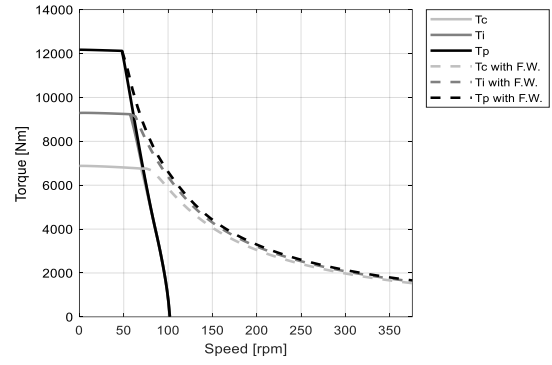
**Notes:** (\*) terminal to terminal.  
Hypotheses and tolerances are in ETEL Integration Manual.

**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.

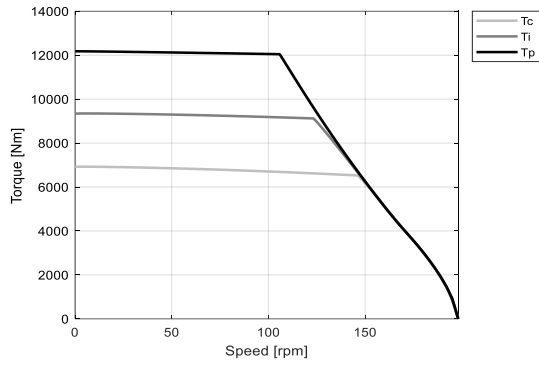
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