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AN. ING. BANDA. 0331 541000

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## TORQUE MOTOR

PERFORMANCES		Winding code	TM 280	φ 300 x 157	TM 340	φ 369 x 192
		UNIT	FREE AIR CONVECTION		WATER COOLING	
Tp	Peak torque	Nm	500		700	
Tc	Continuous torque	Nm	250		450	
Ts	Stall torque	Nm	30		45	
Kt	Torque constant	Nm/Arms	8000		8000	
Ku	Back EMF constant (*)	Vrms/(rad/s)	28.3		36.7	
Km	Motor constant	Nm/A/W	15		15	
R20	Electrical resistance at 20°C (*)	Ohm	5		5	
L1	Electrical inductance (*)	mH	7		6	
Ip	Peak current	Arms				
Ic	Continuous current	Arms				
Is	Stall current	Arms				
Pc	Continuous power dissipation	W				

SPECIFICATIONS		UNIT	FREE AIR CONVECTION	WATER COOLING
Udc	Max DC Bus voltage	VDC		
Tth	Thermal time constant	s		
Rth	Thermal resistance	K/W		
2p	Number of poles			
J	Rotor inertia	kgm <sup>2</sup>		
Mr	Rotor mass	kg		
Ms	Stator mass	kg		
Td	Max. Detent torque (average to peak)	Nm		
ns	Stall speed	rpm		
ΔTw	Water temperature difference	K		
Fw	Minimum water flow for ΔTw	l/min		
Δp	Pressure drop at Fw	bar		

Notes: (\*) terminal to terminal  
Ambient Temperature = 20 ° Celsius, Inlet Water Temperature = 20 ° Celsius  
Max Coil Temperature = 130 ° Celsius

