



ELECTRIC POWERTRAIN SOLUTIONS

SMAC SERIE
TECHNICAL DATA SHEET
3-PHASE SYNCHRONOUS MOTOR

Code	51J20003528ET080200		
Rev.	01		
Date	03/03/2021		
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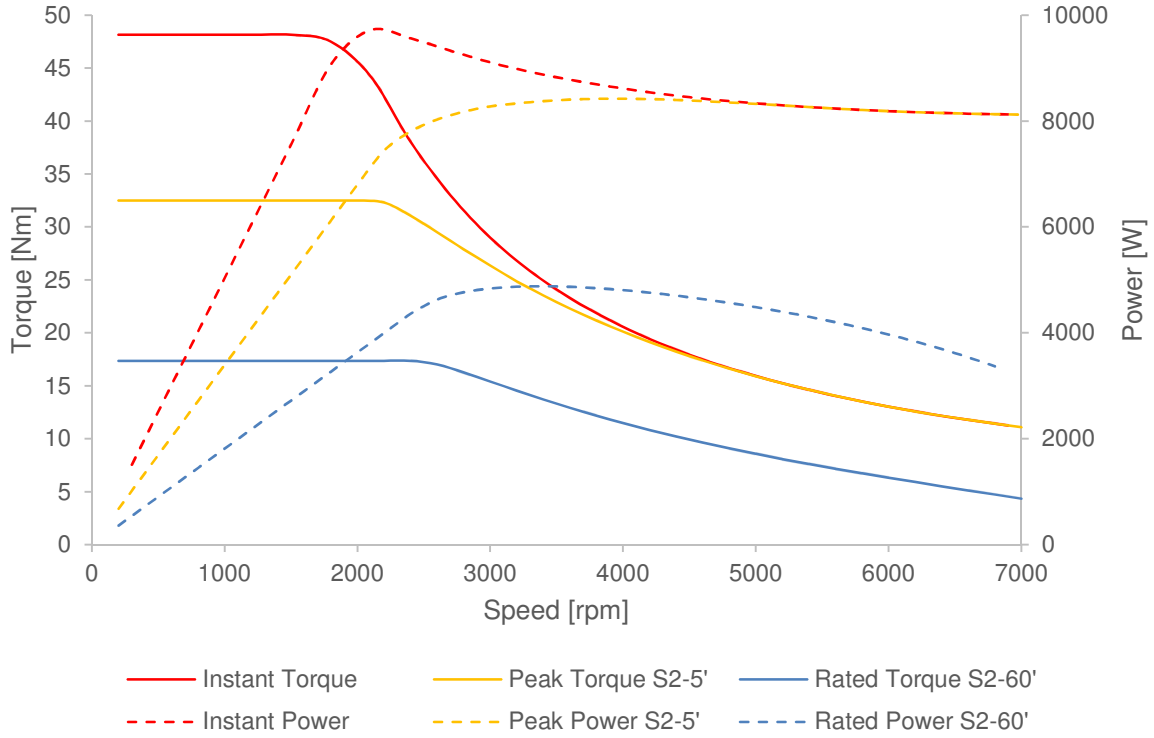
Motor Rated Power			4500W	
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Inverter Power Supply			48Vdc	
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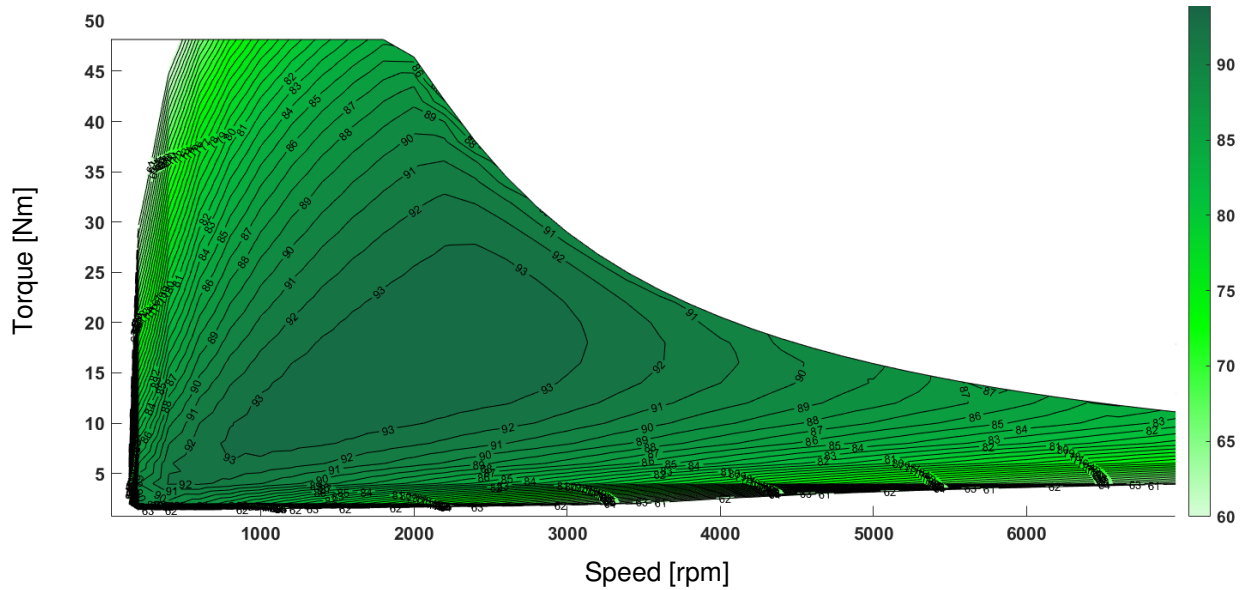
Description	Symbol	Unit		
Duty	-	-	S2-60min	
Nominal Speed	n_n	rpm	2500	
Frequency (N° poles)	$f (2p)$	Hz	166.6 (8)	
Costant Voltage	K_e	Vrms/Krpm	13.0	
Costant Torque	K_t	Nm/Arms	0.21	
Instant Torque	T_i	Nm	48.0	
Instant Current	I_i	Arms	300.0	
Peak Torque S2-5min.	T_p	Nm	32.0	
Peak Current S2-5min.	I_p	Arms	170.0	
Rated Torque S2-60min.	T_r	Nm	17.5	
Rated Current S2-60min.	I_r	Arms	85.0	
Rotor Inertia	J_r	kg x m ²	0.018	
Ambient Temperature	θ_a	°C	-15 ÷ +40	
Protection Degree	IP		IP 54	up to IP67
Insulation Class	-	-	F	
Thermal protection	-	-	KTY 84-130	
Cooling system			Air	

Speed-Torque & Speed Power Motor Curves (*)

SMAC 200-035 48Vdc



Efficiency Map % (*)



* MTPA Field Weakening strategy control & Optimized Advance Angle