



ELECTRIC POWERTRAIN SOLUTIONS

SMAC SERIE

TECHNICAL DATA SHEET
3-PHASE SYNCHRONOUS MOTOR

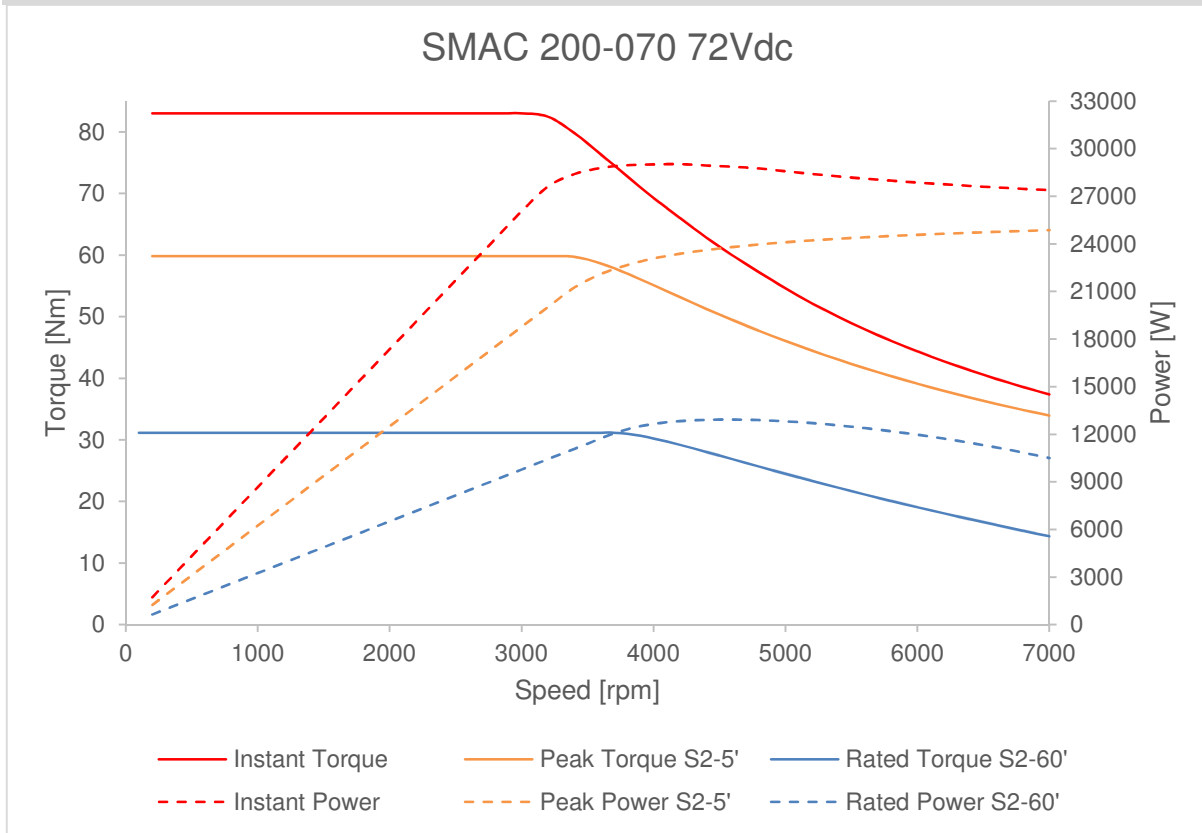
Code	51J20007028FT080400		
Rev.	01		
Date	03/03/2021		
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Motor Rated Power			10000W	
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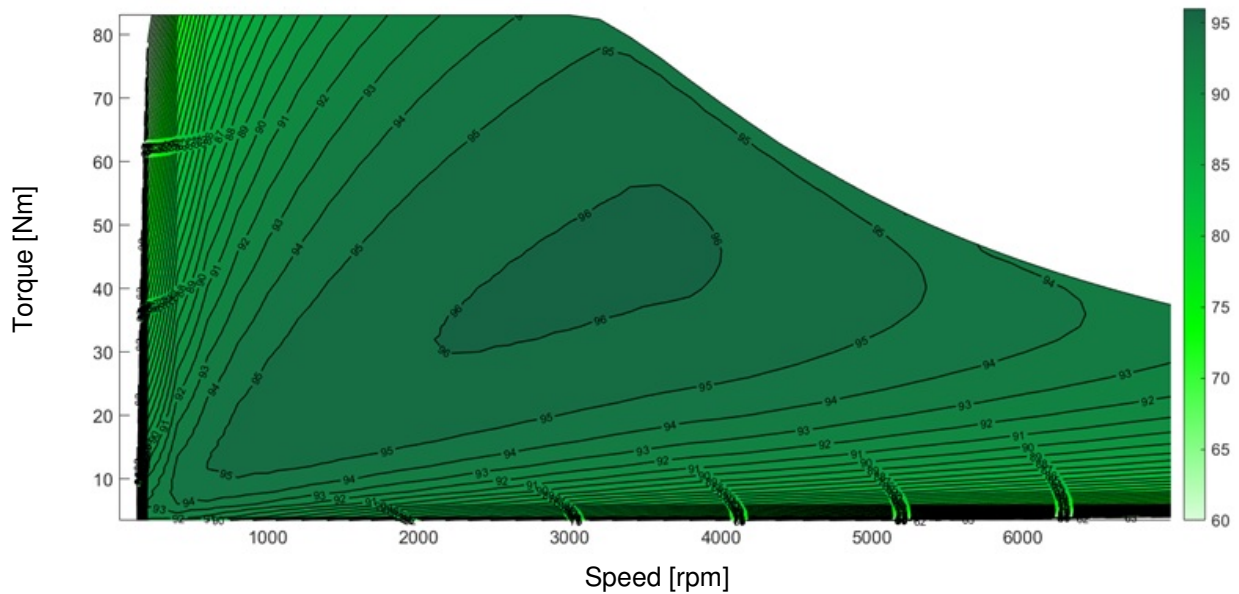
Inverter Power Supply			72Vdc	
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Description	Symbol	Unit		
Duty	-	-	S2-60min	
Nominal Speed	n_n	rpm	3000	
Frequency (N° poles)	$f (2p)$	Hz	200.0 (8)	
Costant Voltage	K_e	Vrms/Krpm	13.0	
Costant Torque	K_t	Nm/Arms	0.21	
Instant Torque	T_i	Nm	83.0	
Instant Current	I_i	Arms	448.0	
Peak Torque	T_p	Nm	60.0	
Peak Current	I_p	Arms	298.0	
Rated Torque	T_r	Nm	30.0	
Rated Current	I_r	Arms	148.0	
Rotor Inertia	J_r	kg x m ²	0.012	
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 (*)



Efficiency Map % (*)



* MTPA Field Weakening strategy control & Optimized Advance Angle