 ELECTRIC POWERTRAIN SOLUTIONS	SMAC SERIE		Code	51G07702552CT060300	
	TECHNICAL DATA SHEET 3-PHASE SYNCHRONOUS MOTOR		Rev.	00	
			Date	16/03/2021	
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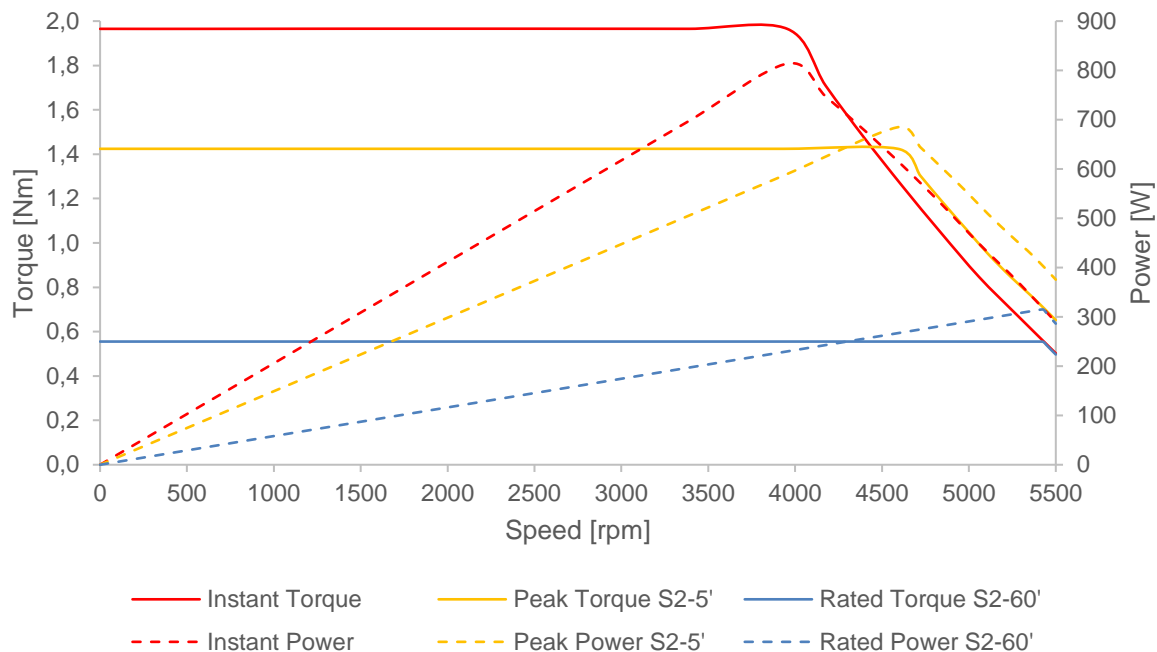
Motor Rated Power			250W	
Inverter Power Supply			24Vdc	

Description	Symbol	Unit		
Duty	-	-	S2-60min	
Nominal Speed	n_n	rpm	5000	
Frequency (N° poles)	$f (2p)$	Hz	250.0 (6)	
Maximum speed	n_{MAX}	rpm	5500	
Constant Voltage	K_e	Vrms/Krpm	2.8	
Constant Torque	K_t	Nm/Arms	0.045	
Instant Torque	T_{inst}	Nm	1.95	
Instant Current	I_{inst}	Arms	47.0	
Peak Torque S2-5min.	T_{peak}	Nm	1.40	
Peak Current S2-5min.	I_{peak}	Arms	31.0	
Nominal Torque S2-60min.	T_n	Nm	0.50	
Nominal Current S2-60min.	I_n	Arms	16.0	
Rotor Inertia	J_r	kg x m ²	0.9 x 10 ⁻⁴	
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	

PRELIMINARY

Speed-Torque & Speed Power Motor Curves

SMAC 077-025



Efficiency Map

