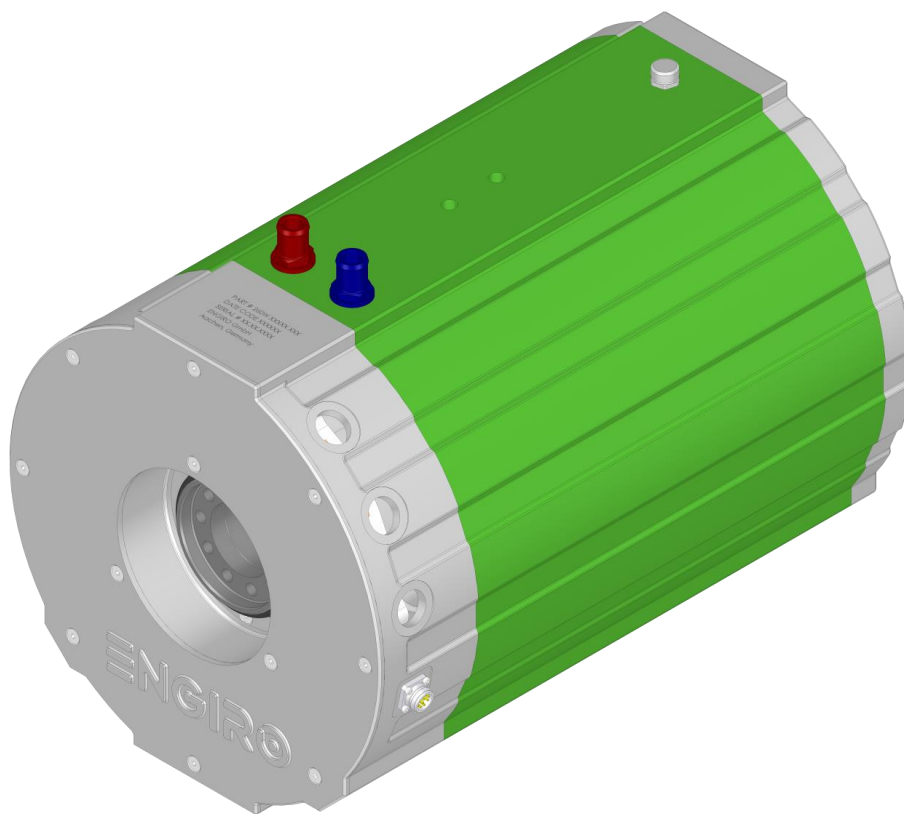


Data Sheet

260W-20014-ABC

water-cooled motor / generator with 186 kW power



KEY FEATURES

- permanent magnet synchronous machine
- water-cooled
- high peak power for motor applications
- convincing cost-benefit ratio
- recommended voltage range from 500V to 850V
- delivery with controller possible

Section	Page
Technical Data Machine	3
Table Shaft and Flange Combinations	4
Technical Drawings Machine	4
Characteristics Machine	5

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Nominal Operation (S2, 60 min, cooling as specified below)					
Torque	T_{nom}		509	Nm	
Power	P_{nom}		186	kW	
Speed	n_{nom}		3500	rpm	
Phase rms-current	I_{nom}		290 ^{1,2)}	A	
Battery voltage (DC)	U_{nom}		700	V	
Electric frequency	$f_{el,nom}$		292	Hz	
Power factor	$\cos(\varphi)$		0.73		
Maximal Values (S2, 10s, cooling as specified below)					
Torque	T_{max}		1108	Nm	
Power	P_{max}		346	kW	
Phase rms-current	I_{max}		703 ²⁾	A	
Battery voltage (DC)	U_{max}		850	V	
Speed	n_{max}		6000	rpm	
Electric frequency	$f_{el,max}$		500	Hz	
Electrical Data					
Number of phases			3		
Number of pole pairs			5		
Maximal efficiency			96	%	
T/I constant ($I < I_{nom}$)			1.96	Nm/A _{rms}	
U/n constant (AC) at a temperature of 30°C	rms:	117.6	peak:	182.3	V/(1000rpm)
K_e constant (AC) at a temperature of 30°C	rms:	0.225	peak:	0.348	V/(rad*s ⁻¹)
Additional Data					
Weight (w/o cables)			117	kg	
Rotor moment of inertia			0.131	kg*m ²	
Protection category			IP6K9K ³⁾		
Maximal motor temperature			140	°C	
Allowed ambient temperature			-20 ... 45 ⁴⁾	°C	
Cooling (medium, flow rate, inlet temperature, pressure)			water/glycol 50/50, 20 l/min, ≤ 45°C, ≤ 0.5 bar		
Temperature monitoring			1 x KTY84-130		
Type approval			CE, EN 60034		
Customs tariff number			8501 5381		
Connectors					
Power terminals			3 x M25 cable gland		
Signal connectors			M16, 10 Pin		
Cooling connectors			2 x 3/4" / 19 mm		

¹⁾ Nominal current strongly dependent on cooling as specified below.

²⁾ The cables must not exceed a temperature of 140 °C at any time. Temperature and service life depend on the installation condition.

³⁾ Please note that the IP6K9K rating is only valid if the machine is installed with suitable cable glands and an appropriate sealed interface at the drive side of the motor (flange and/or shaft). Please contact ENGIRO for further questions. / Only applies to SFR Variant /

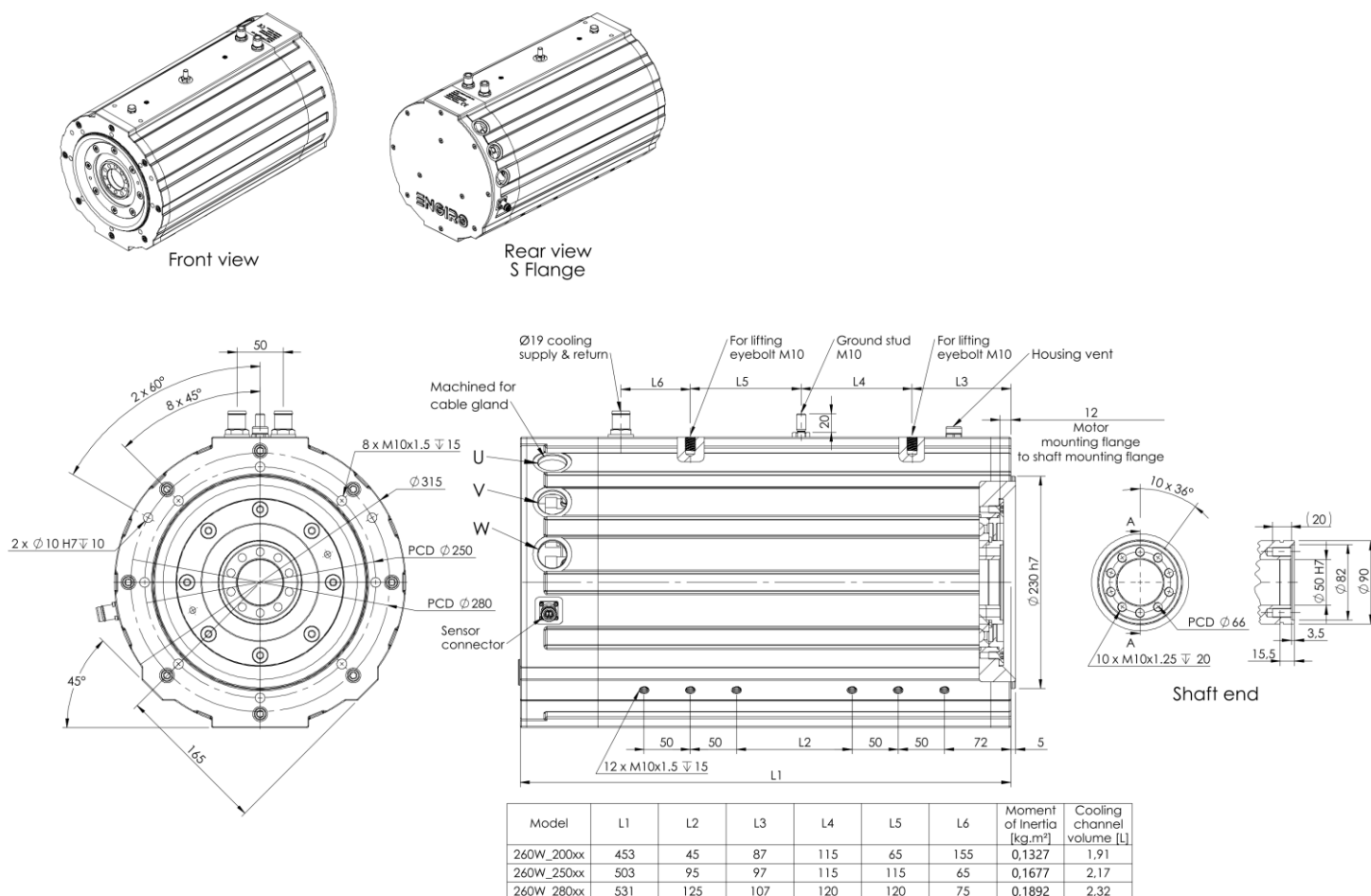
⁴⁾ other range on request

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Shaft and Flange Combinations for 260W-20014-ABC		Flange (A)
Shaft (B)		S (Standard)
Position Sensor (C)		R: Resolver

Other individual combinations are also possible on request.

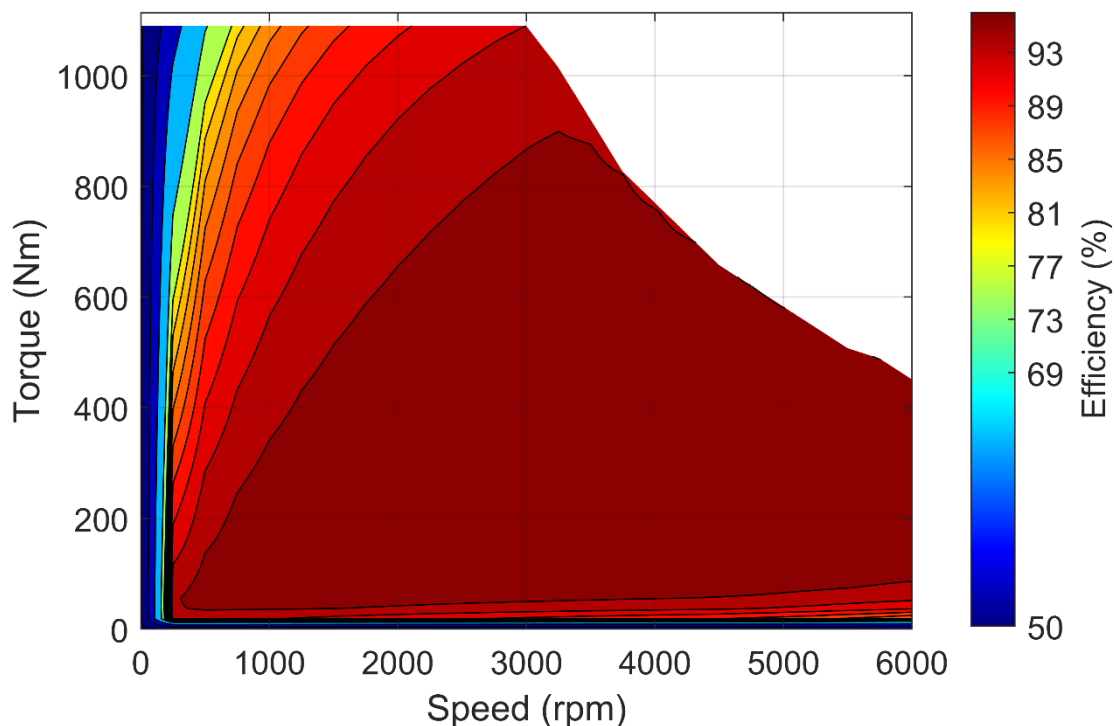
Technical Drawings



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Simulated Efficiency of Motor Application

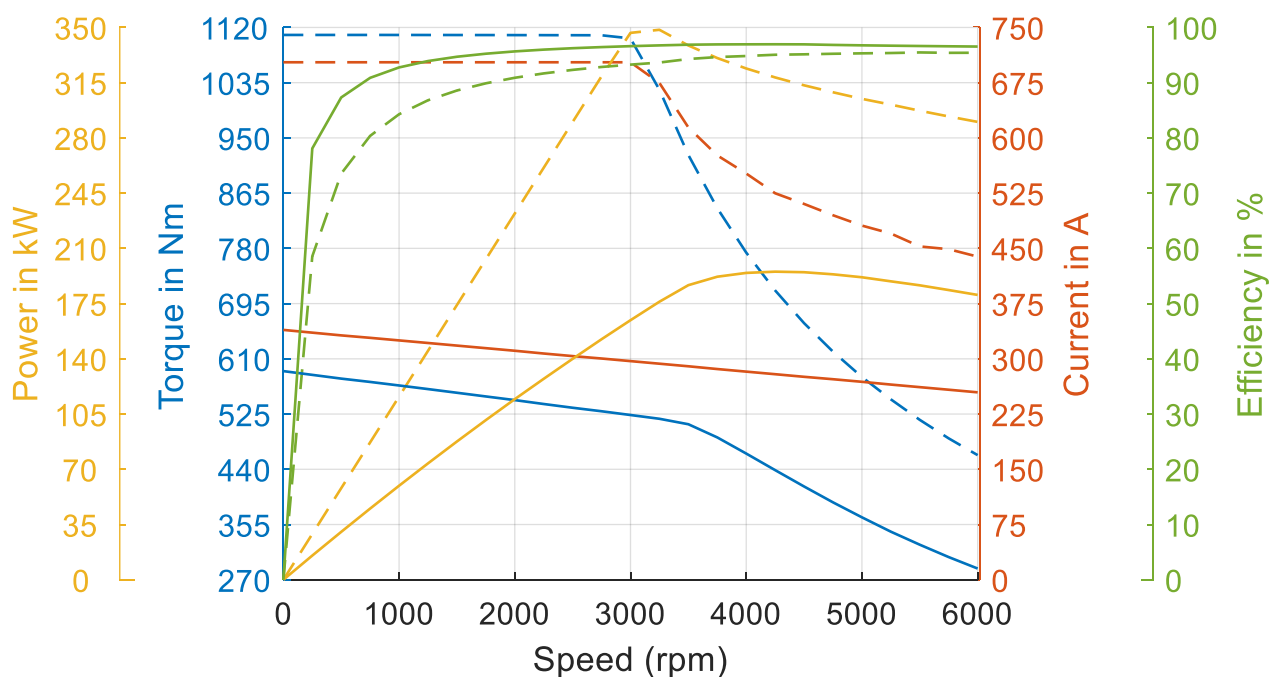
(electric machine only; $U_{nom} = 700$ V; machine at 140 °C;)



Simulated Characteristic Motor Parameters

$U_{nom} = 700$ V

solid lines: S2 60 min; dashed lines: maximum;



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