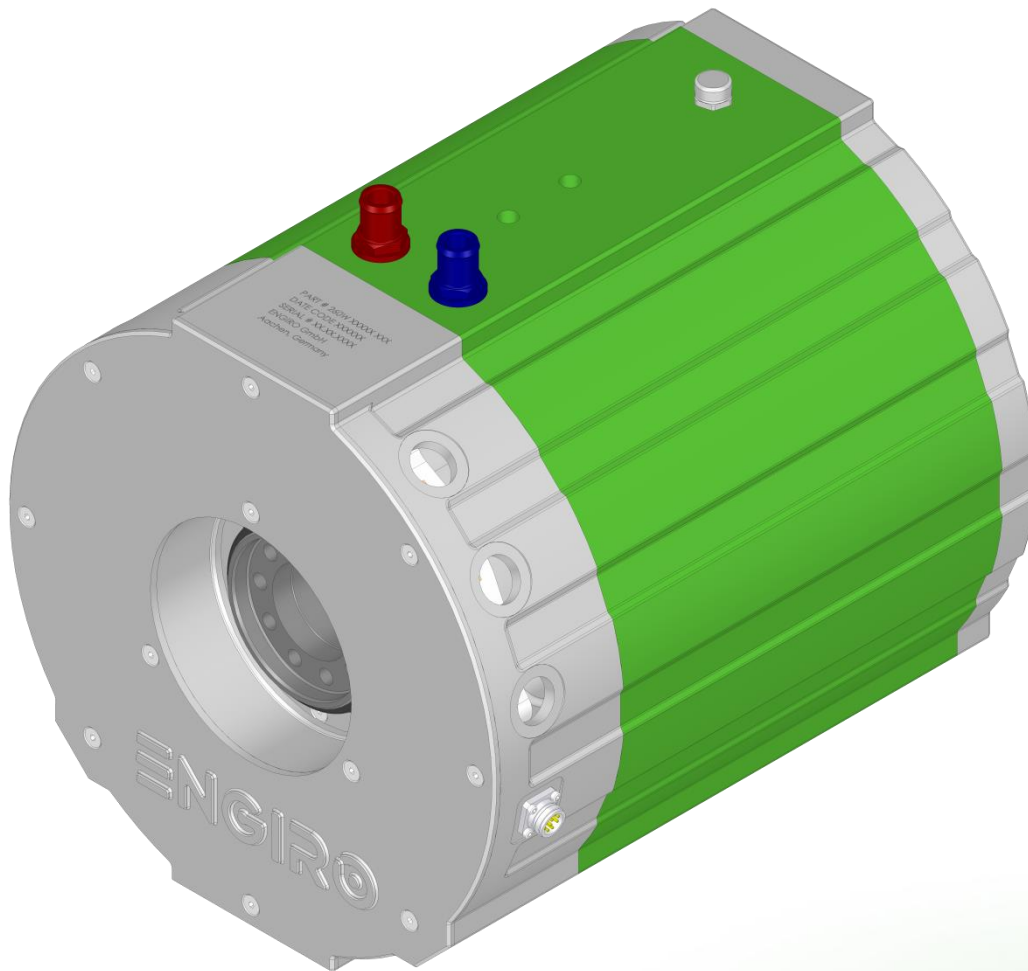


Data Sheet

260W-10020-ABC

water-cooled motor generator with up to 115 kW power



KEY FEATURES

- permanent magnet synchronous machine
- water-cooled
- high peak power for motor applications
- convincing cost-benefit ratio
- recommended voltage range from 300V to 850V
- delivery with controller possible

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Nominal Operation (S2, 60 min, cooling as specified below)

Torque	T_{nom}	241	221	Nm
Power	P_{nom}	75	115	kW
Speed	N_{nom}	3000	5000	rpm
Phase rms-current	I_{nom}	180 ^{1,2)}	161 ^{1,2)}	A
Battery voltage (DC)	U_{nom}	400	700	V
Electric frequency	$f_{\text{el, nom}}$	250	416	Hz
Power factor	$\cos(\varphi)$	0.92	0.89	

Maximal Values (S2, 10s, cooling as specified below)

Torque	T_{max}	532	532	Nm
Power	P_{max}	134	239	kW
Phase rms-current	I_{max}	492 ²⁾	492 ²⁾	A
Battery voltage (DC)	U_{max}		850	V
Speed	n_{max}		6000	rpm
Electric frequency	$f_{\text{el, max}}$		500	Hz

Electrical Data

Number of phases		3	
Number of pole pairs		5	
Maximal efficiency		97	%
T/I constant ($I < I_{\text{nom}}$)		1.4	Nm/A _{rms}
U/n constant (AC) at a temperature of 30°C	rms:	84	peak: 130.2 V/(1000rpm)
K_e constant (AC) at a temperature of 30°C	rms:	0.160	peak: 0.249 V/(rad*s ⁻¹)

Additional Data

Weight (w/o cables)	77	kg
Rotor moment of inertia	0.077	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, 16 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	

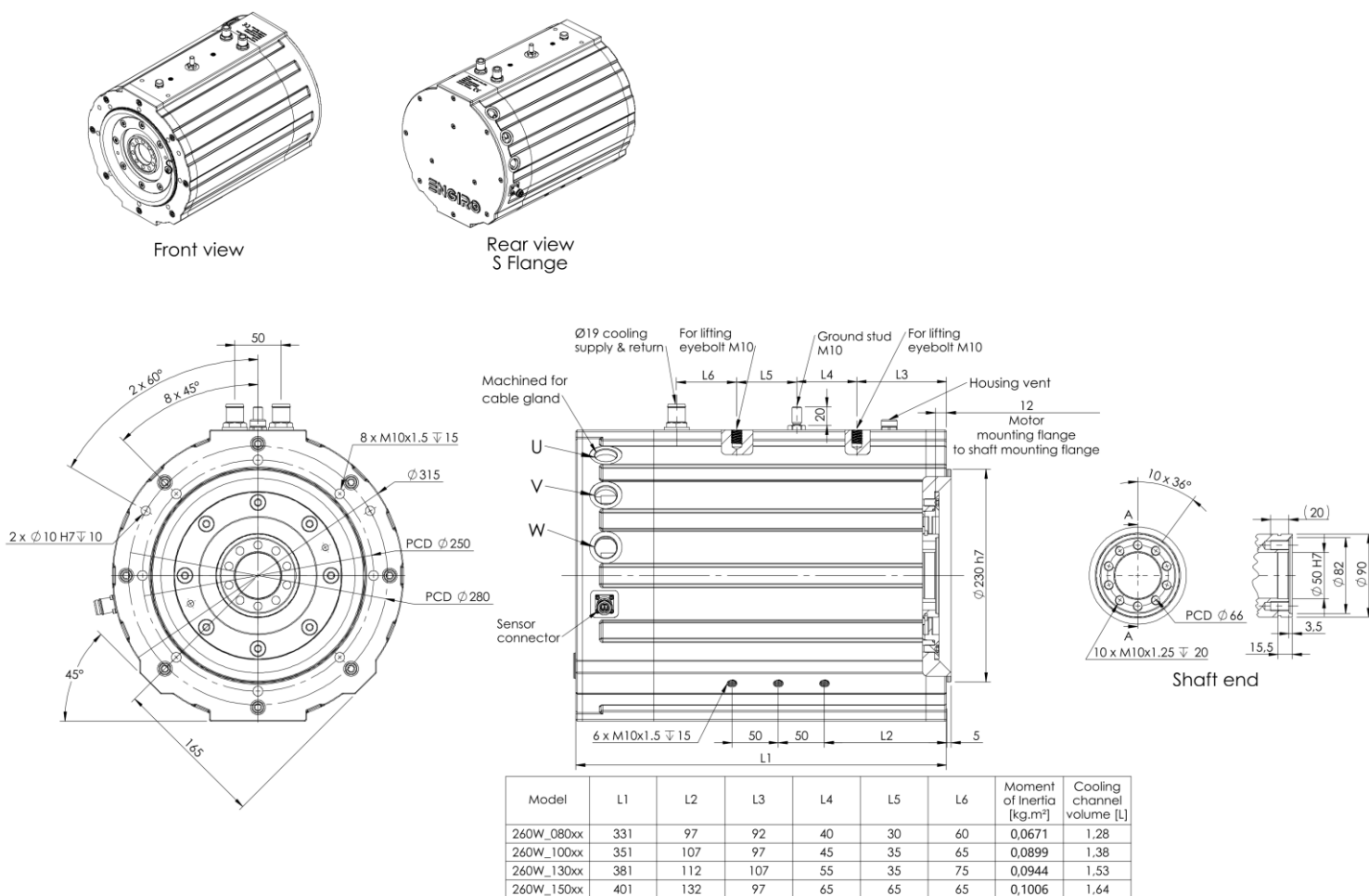
¹⁾ Nominal current strongly dependent on cooling as specified below.²⁾ The cables must not exceed a temperature of 140 °C at any time. Temperature and service life depend on the installation condition.³⁾ Please note that the IP6K9K rating is only valid if the machine is installed with suitable cable 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-10020-ABC		Flange (A)
		S (Standard)
Shaft (B)	F (Hollow shaft with two screw flanges)	
Position Sensor (C)		R: Resolver

Other individual combinations are also possible on request.

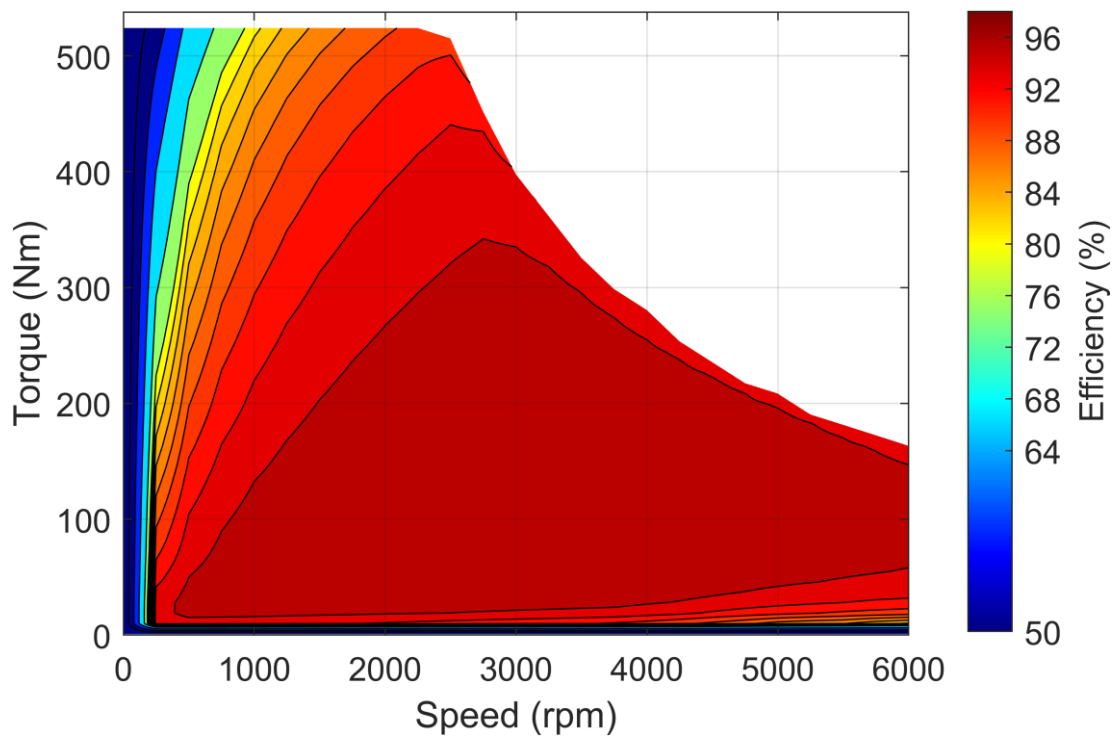
Technical Drawings



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Simulated Efficiency of Motor Application

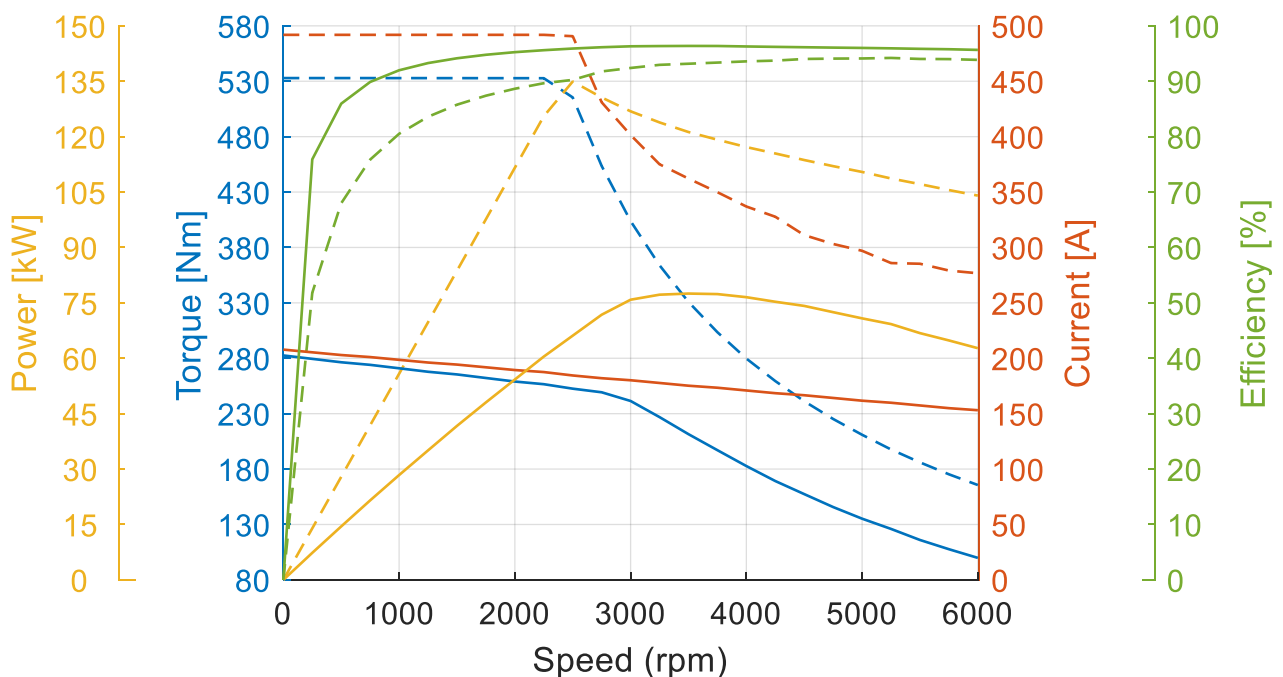
(electric machine only; $U_{nom} = 400\text{ V}$; machine at 140 °C ;)



Simulated Characteristic Motor Parameters

$U_{nom} = 400\text{ V}$

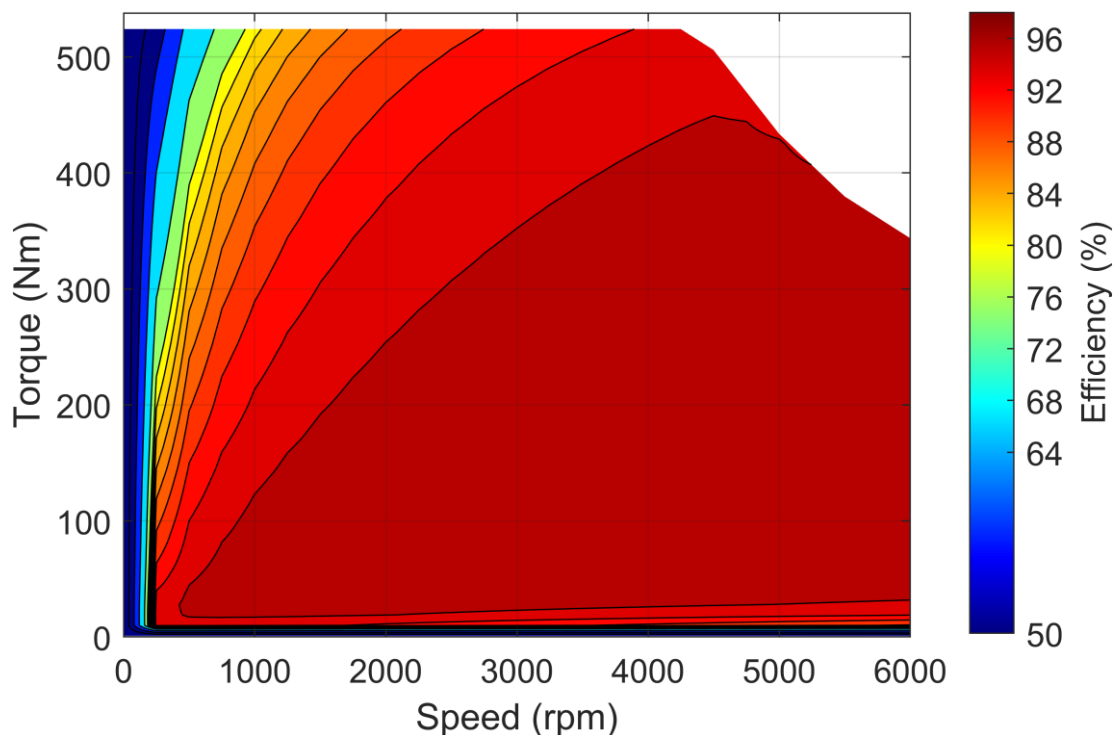
solid lines: S2 60min; dashed lines: maximum;



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Simulated Efficiency of Motor Application

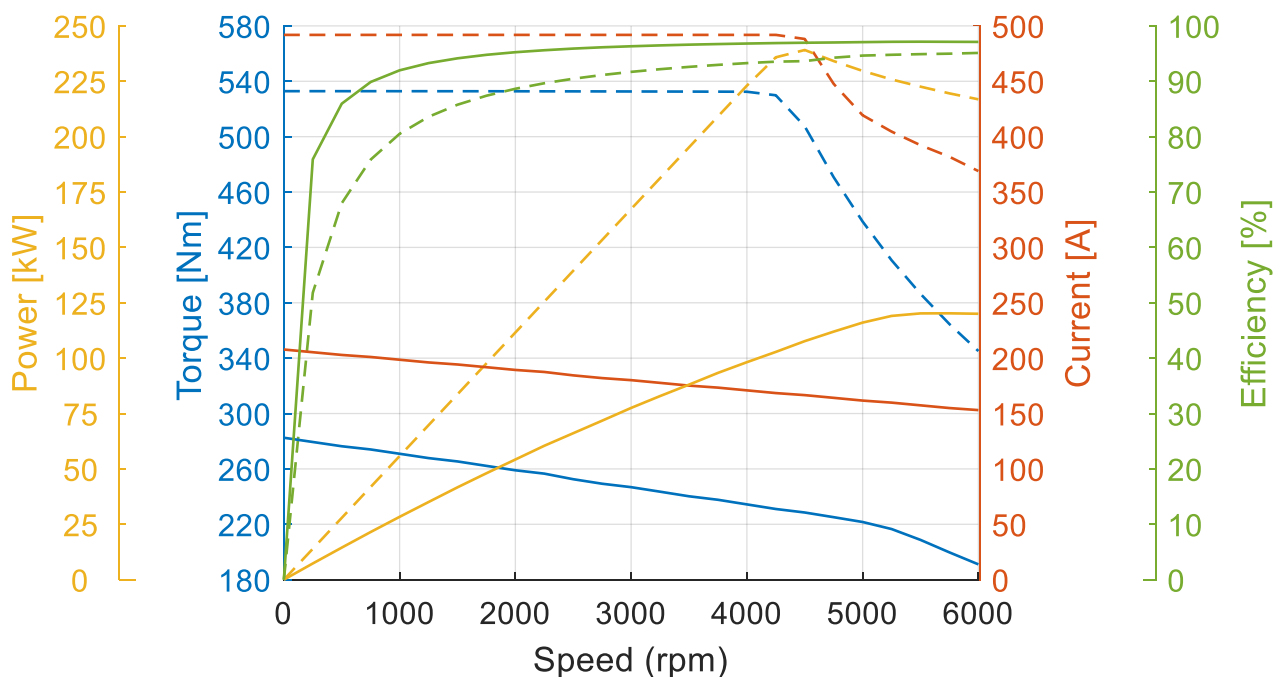
(electric machine only; $U_{nom} = 700$ V; machine at 140 °C;)



Simulated Characteristic Motor Parameters

$U_{nom} = 700$ V

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



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