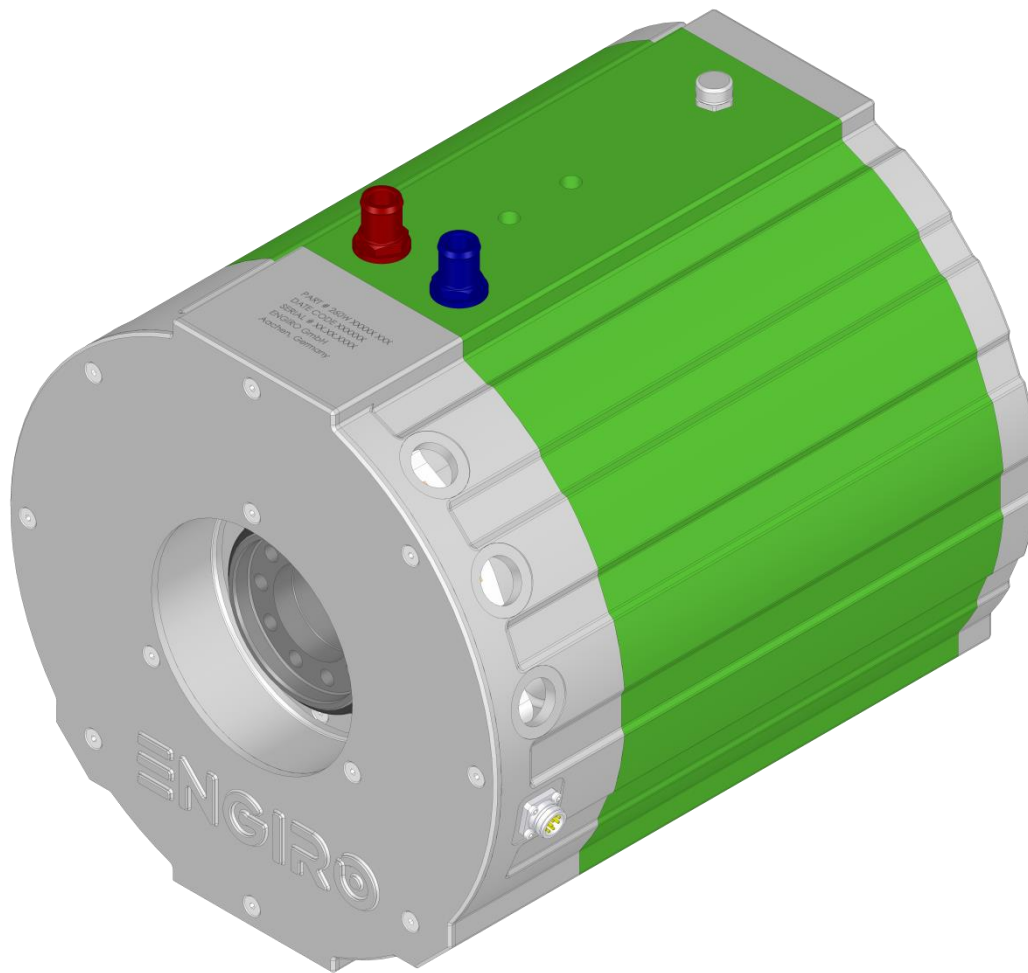


260W-10020-ABC

water-cooled motor generator with up to 122 kW continuous 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
- Double shaft end with screw flange

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Technical Drawings Machine	4
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Characteristics Machine – 700 V	6

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Nominal Operation (S1, cooling as specified below)					
Torque	T_{nom}	273	258	Nm	
Power	P_{nom}	72	122	kW	
Speed	N_{nom}	2580	4520	rpm	
Phase rms-current	I_{nom}	194 ^{1,2)}	184 ^{1,2)}	A	
Battery voltage (DC)	U_{nom}	400	700	V	
Electric frequency	$f_{el,nom}$	215	377	Hz	
Power factor	$\cos(\varphi)$	0.73	0.73		
Maximal Values (S2, 10s, cooling as specified below)					
Torque	T_{max}	543	543	Nm	
Power	P_{max}	134	238	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	$f_{el,max}$		500	Hz	
Electrical Data					
Number of phases			3		
Number of pole pairs			5		
Maximal efficiency			96	%	
T/I constant ($I < I_{nom}$)			1.4	Nm/A _{rms}	
U/n constant (AC) at a temperature of 30°C	rms:	84	peak:	130.2	V/(1000rpm)
K_{ϕ} 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			IP65 / IP69k		
Maximal motor temperature			140	°C	
Allowed ambient temperature			-20 ... 45 ³⁾	°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.

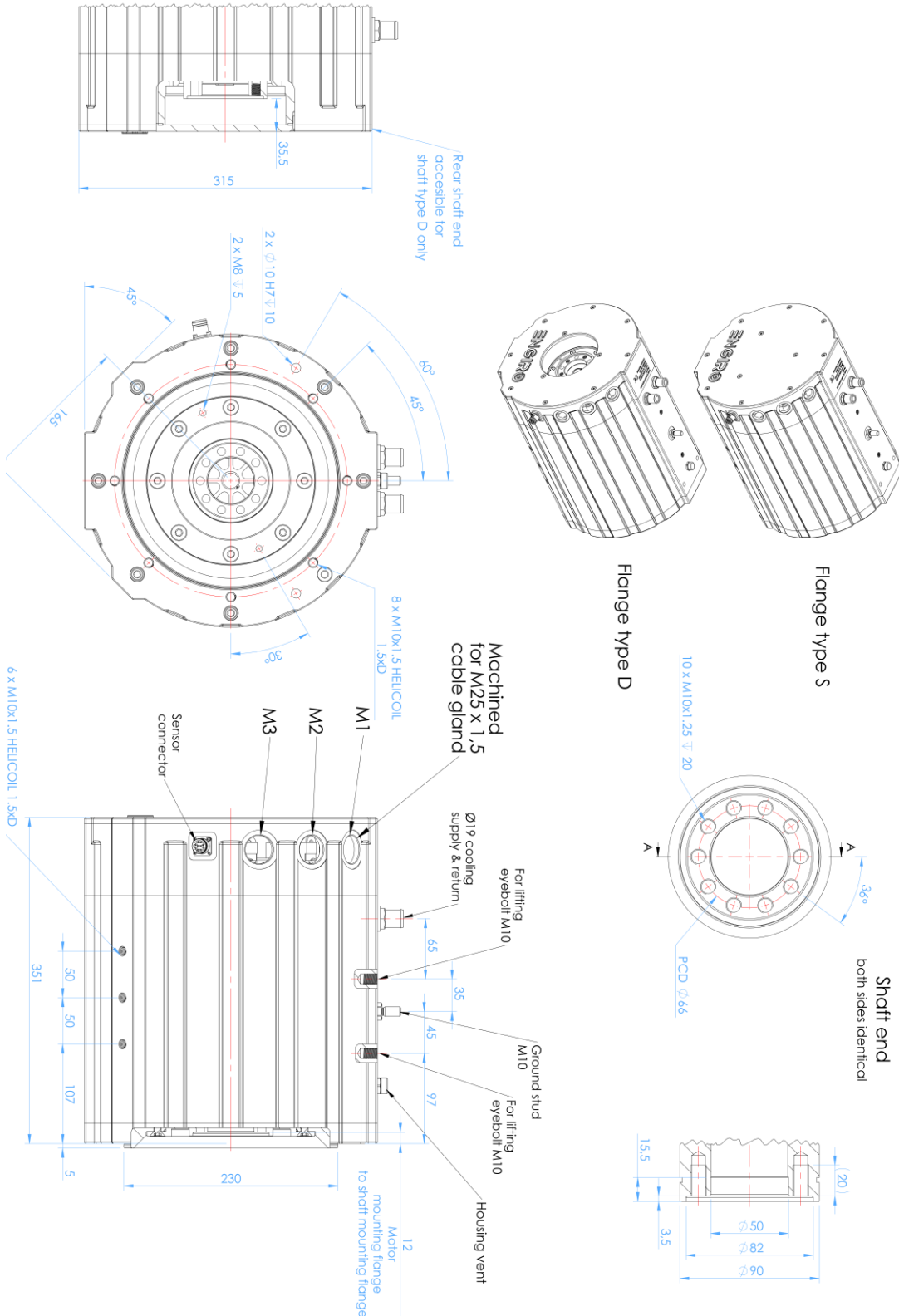
²⁾ The cables must not exceed a temperature of 140 °C at any time. Temperature and service life depend on the installation condition.

³⁾ other range on request

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Available Type Variants

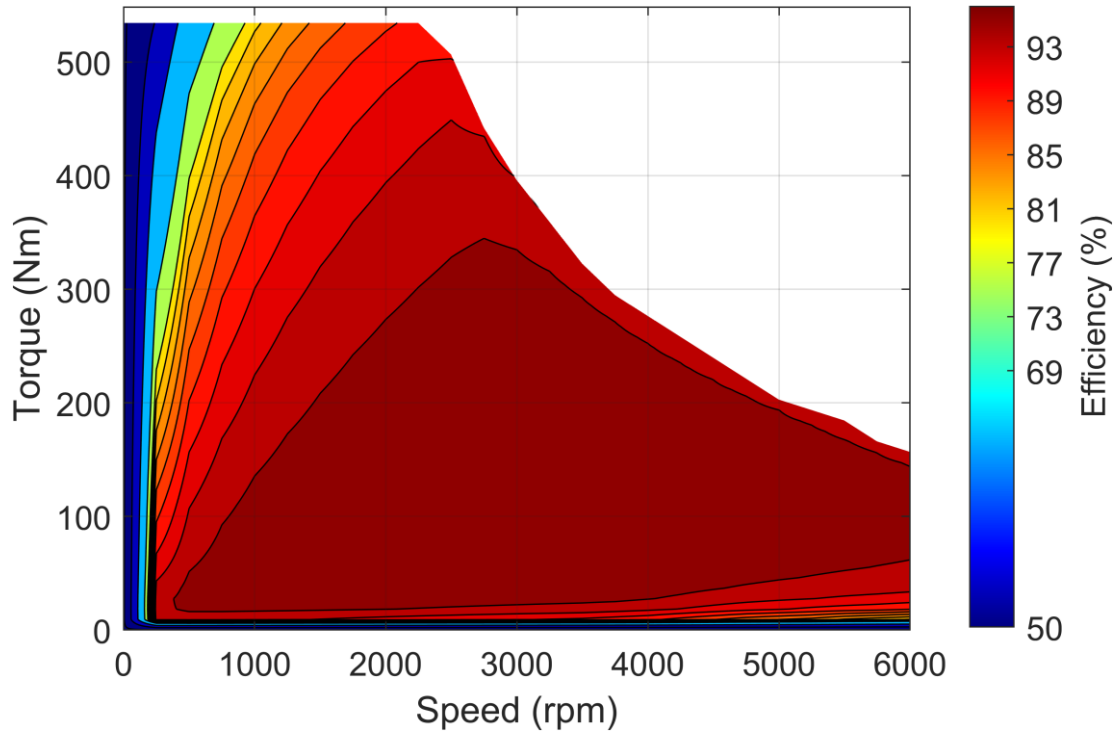
type number	A: flange	B: shaft	C: position sensor
260W-10020-	S: standard	F: hollow shaft with two screw flanges	R: resolver
	D: double		N: none



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Simulated Efficiency of Motor Application

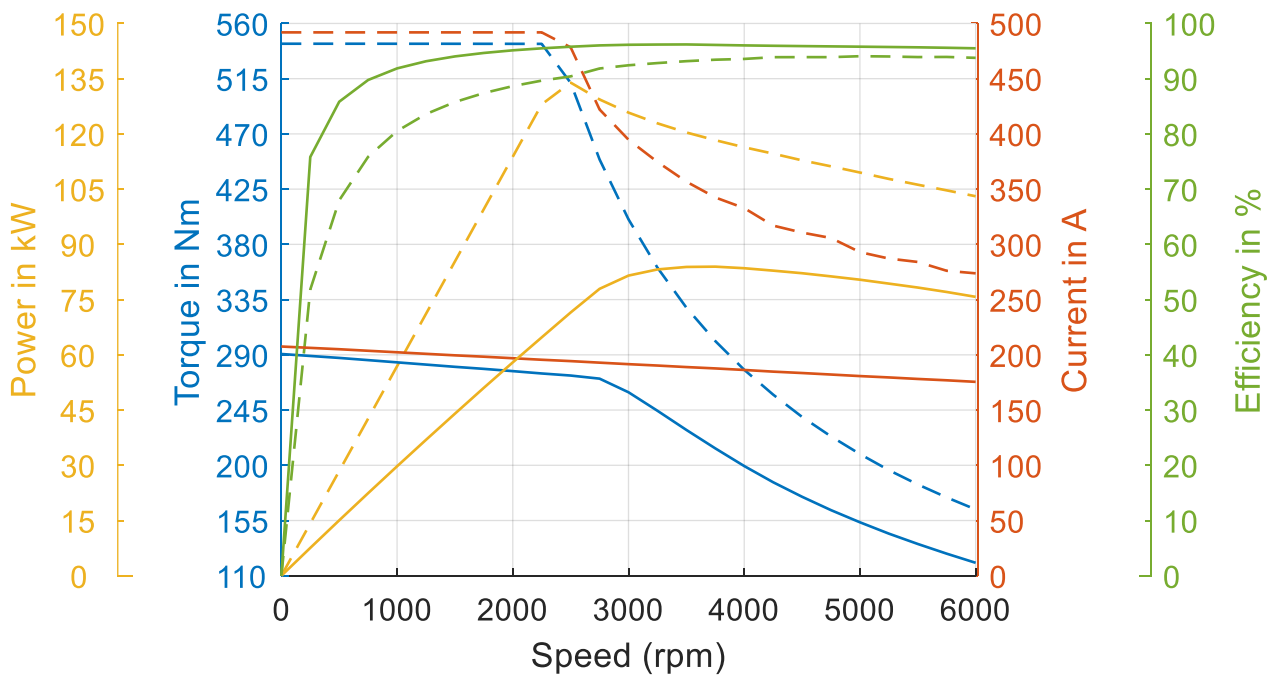
(electric machine only; $U_{nom} = 400\text{ V}$; machine at 140 °C ;)



Simulated Characteristic Motor Parameters

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

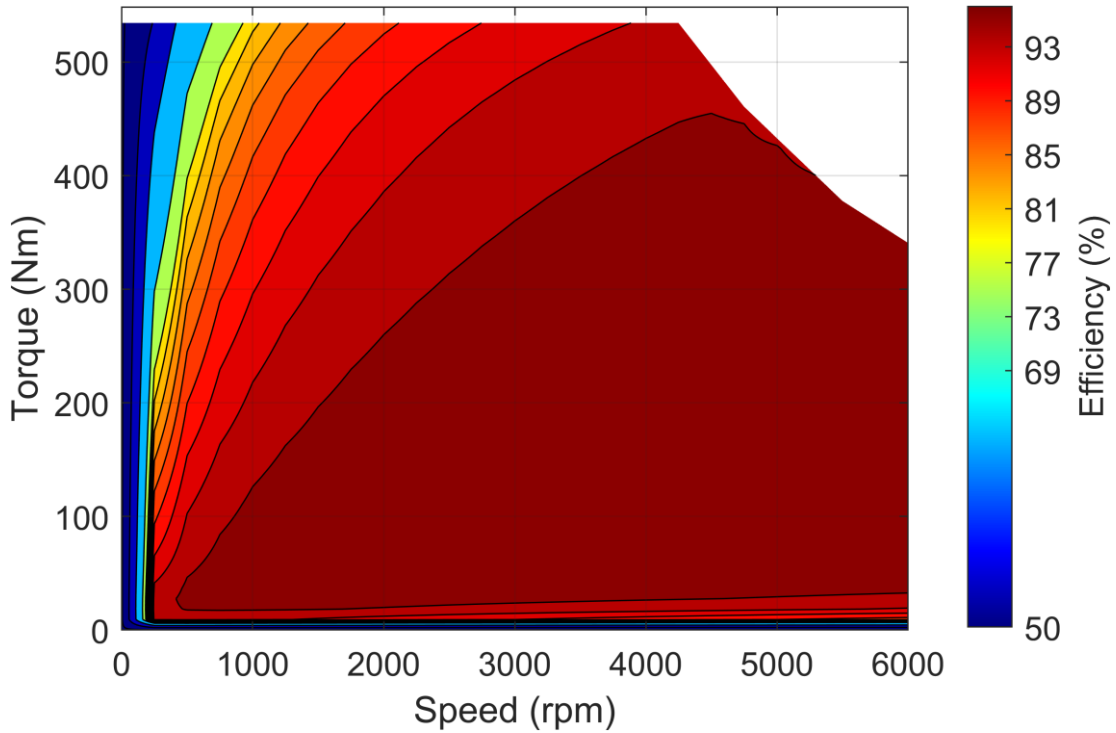
solid lines: continuous; dashed lines: maximum;



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Simulated Efficiency of Motor Application

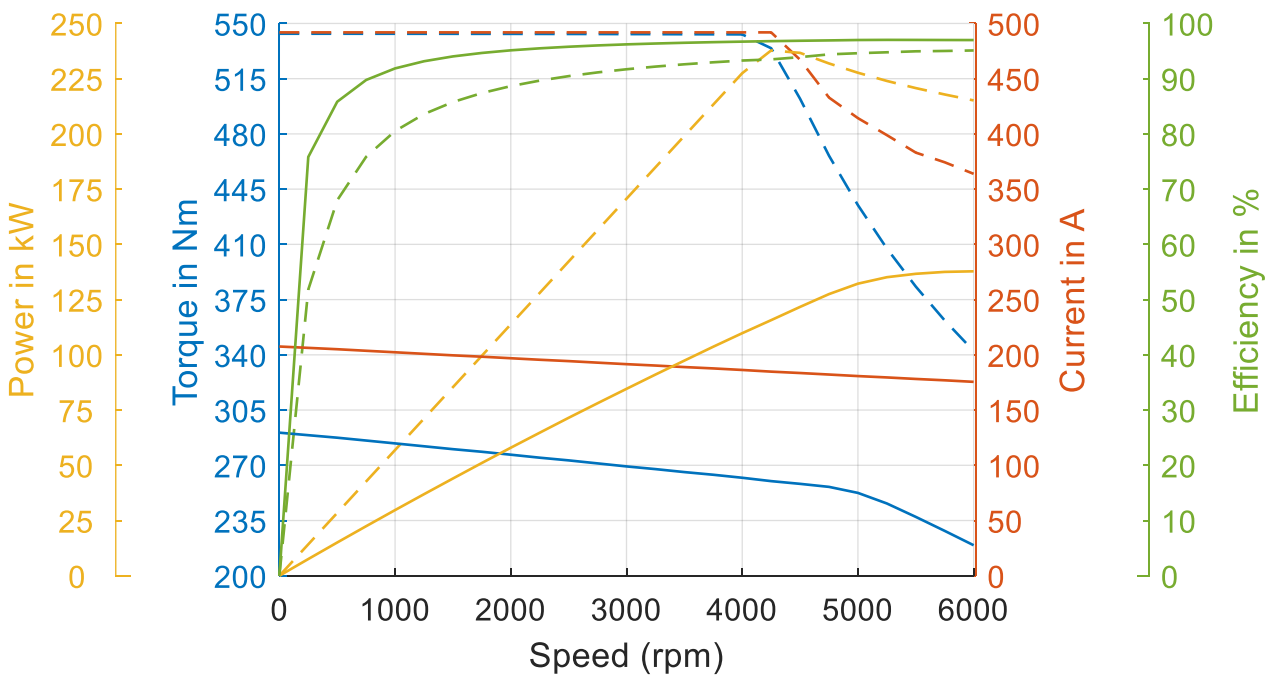
(electric machine only; $U_{nom} = 700\text{ V}$; machine at 140 °C ;)



Simulated Characteristic Motor Parameters

$U_{nom} = 700\text{ V}$

solid lines: continuous; dashed lines: maximum;



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