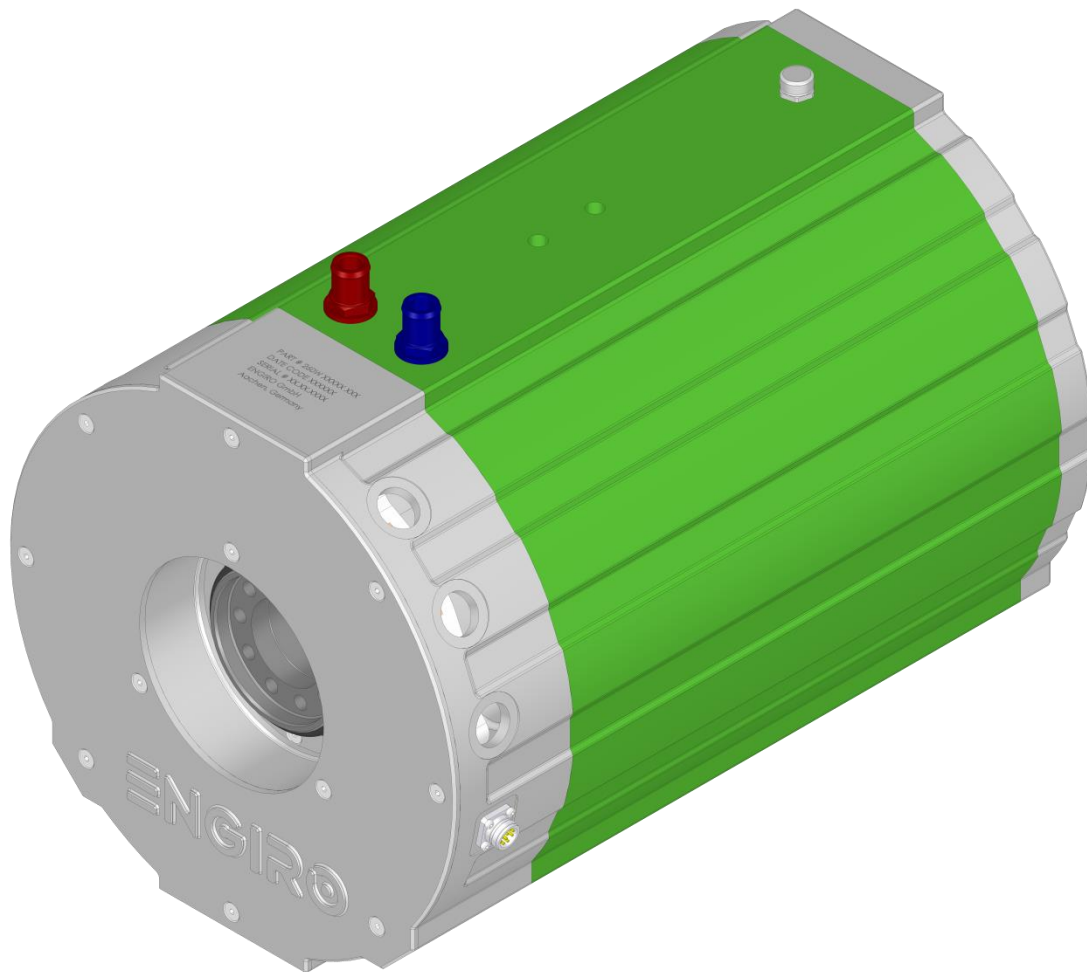


# 260W-20020-ABC

water-cooled motor / generator with 127 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 500V to 850V
- delivery with controller possible
- Double shaft end with screw flange

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Nominal Operation (S1, cooling as specified below)				
Torque	$T_{nom}$		540	Nm
Power	$P_{nom}$		127	kW
Speed	$n_{nom}$		2260	rpm
Phase rms-current	$I_{nom}$		215 <sup>1,2)</sup>	A
Battery voltage (DC)	$U_{nom}$		700	V
Electric frequency	$f_{el,nom}$		188	Hz
Power factor	$\cos(\varphi)$		0.73	
Maximal Values (S2, 10s, cooling as specified below)				
Torque	$T_{max}$		1108	Nm
Power	$P_{max}$		242	kW
Phase rms-current	$I_{max}$		492 <sup>2)</sup>	A
Battery voltage (DC)	$U_{max}$		850	V
Speed	$n_{max}$		4210	rpm
Electric frequency	$f_{el,max}$		351	Hz
Electrical Data				
Number of phases			3	
Number of pole pairs			5	
Maximal efficiency			96	%
$T/I$ constant ( $I < I_{nom}$ )			2.8	Nm/A <sub>rms</sub>
$U/n$ constant (AC)		rms: 167.9	peak: 260.2	V/(1000rpm)
$K_e$ constant (AC)		rms: 0.321	peak: 0.497	V/(rad*s <sup>-1</sup> )
Additional Data				
Weight (w/o cables)			117	kg
Rotor moment of inertia			0.131	kg*m <sup>2</sup>
Protection category			IP65 / IP69k	
Maximal motor temperature			140	°C
Allowed ambient temperature			-20 ... 45 <sup>3)</sup>	°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	

<sup>1)</sup> Nominal current strongly dependent on cooling as specified below.

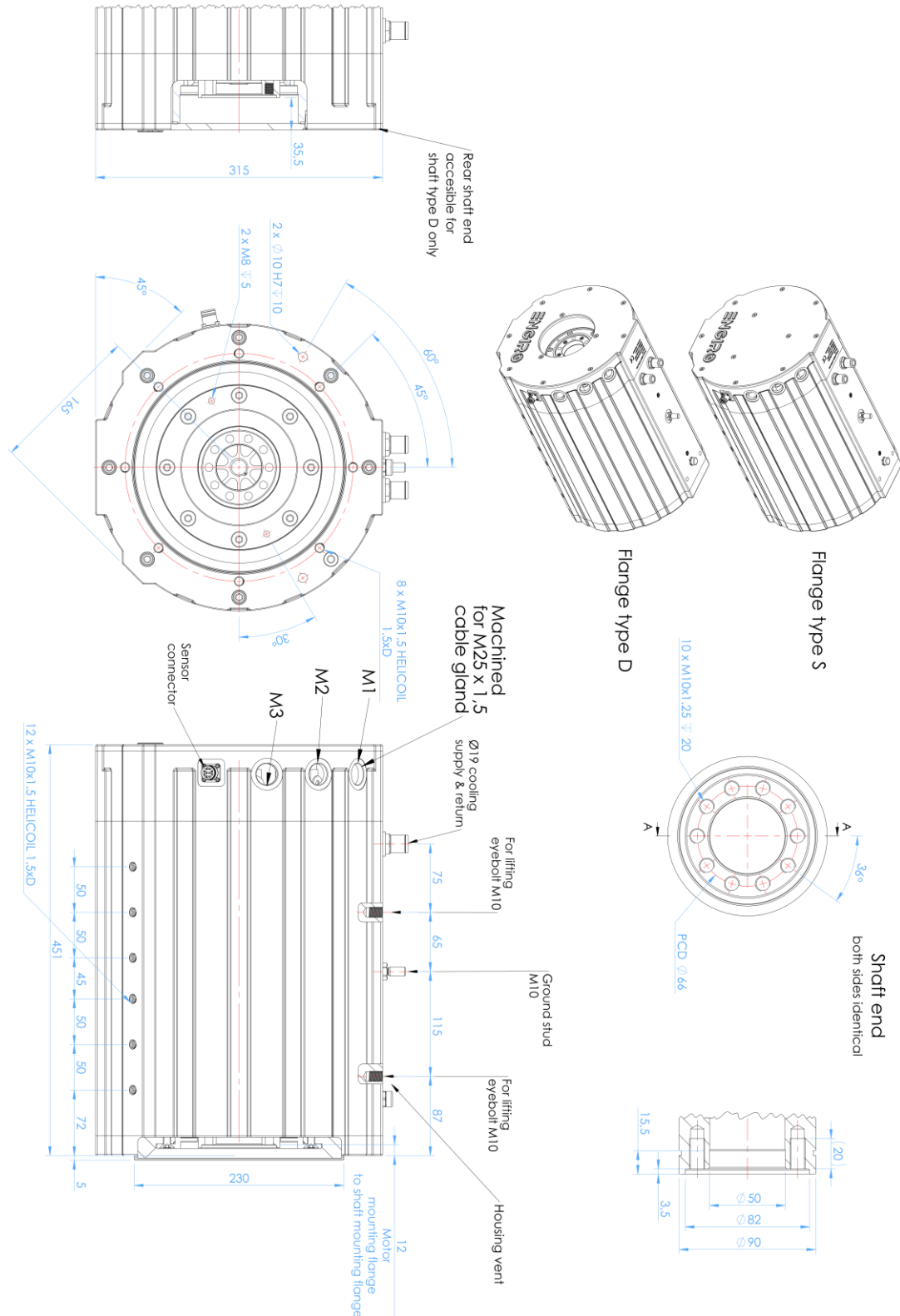
<sup>2)</sup> The cables must not exceed a temperature of 140 °C at any time. Temperature and service life depend on the installation condition.

<sup>3)</sup> other range on request

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Available Type Variants

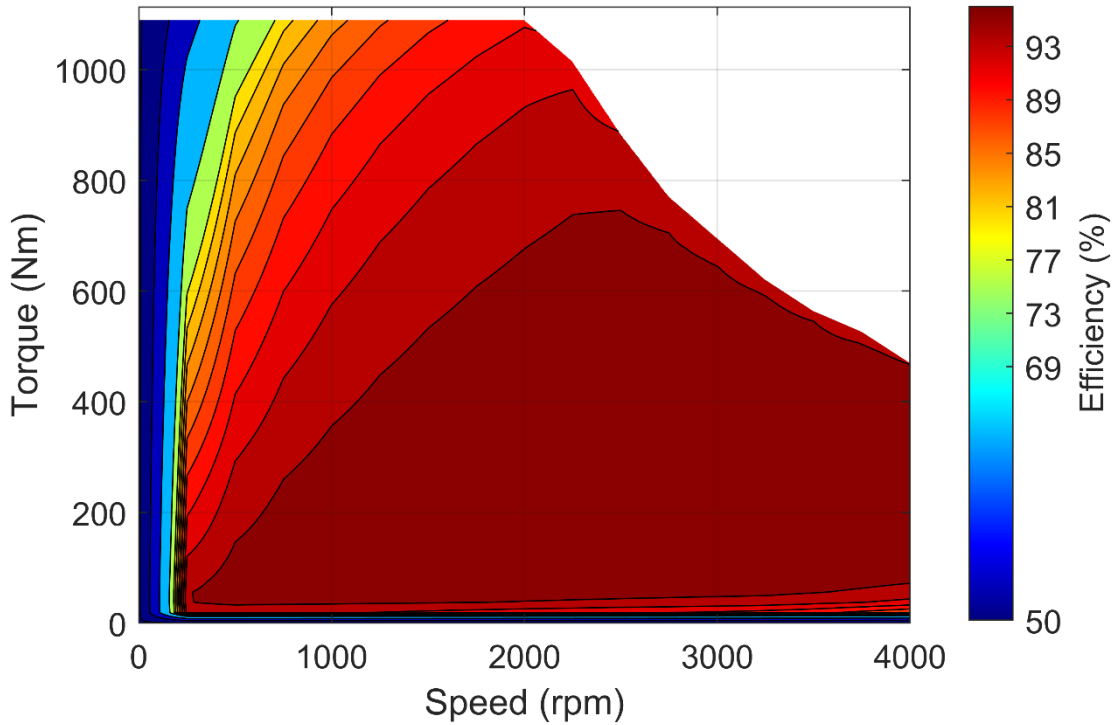
type number	A: flange	B: shaft	C: position sensor
260W-20020-	S: standard	F: hollow shaft with two screw flanges	R: resolver
	D: double		N: none



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Simulated Efficiency of Motor Application

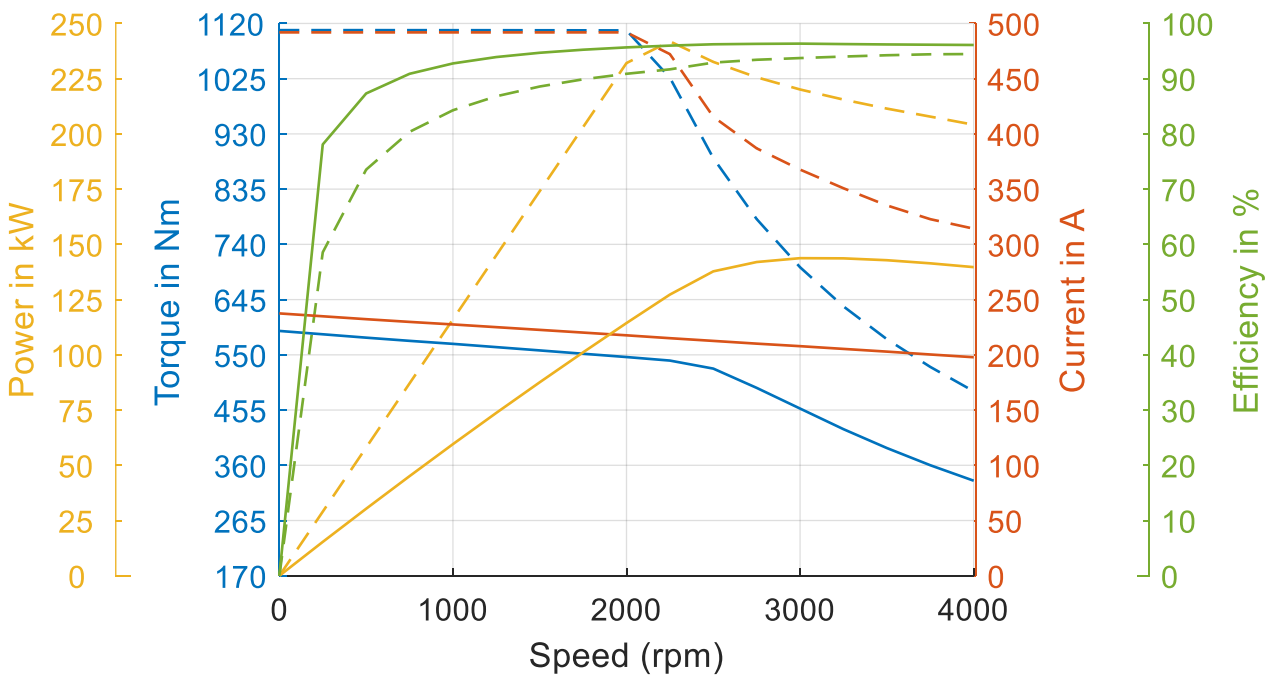
(electric machine only;  $U_{nom} = 700\text{ V}$ ; machine at  $140\text{ °C}$ ;)



Simulated Characteristic Motor Parameters

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

solid lines: continuous; dashed lines: maximum;



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