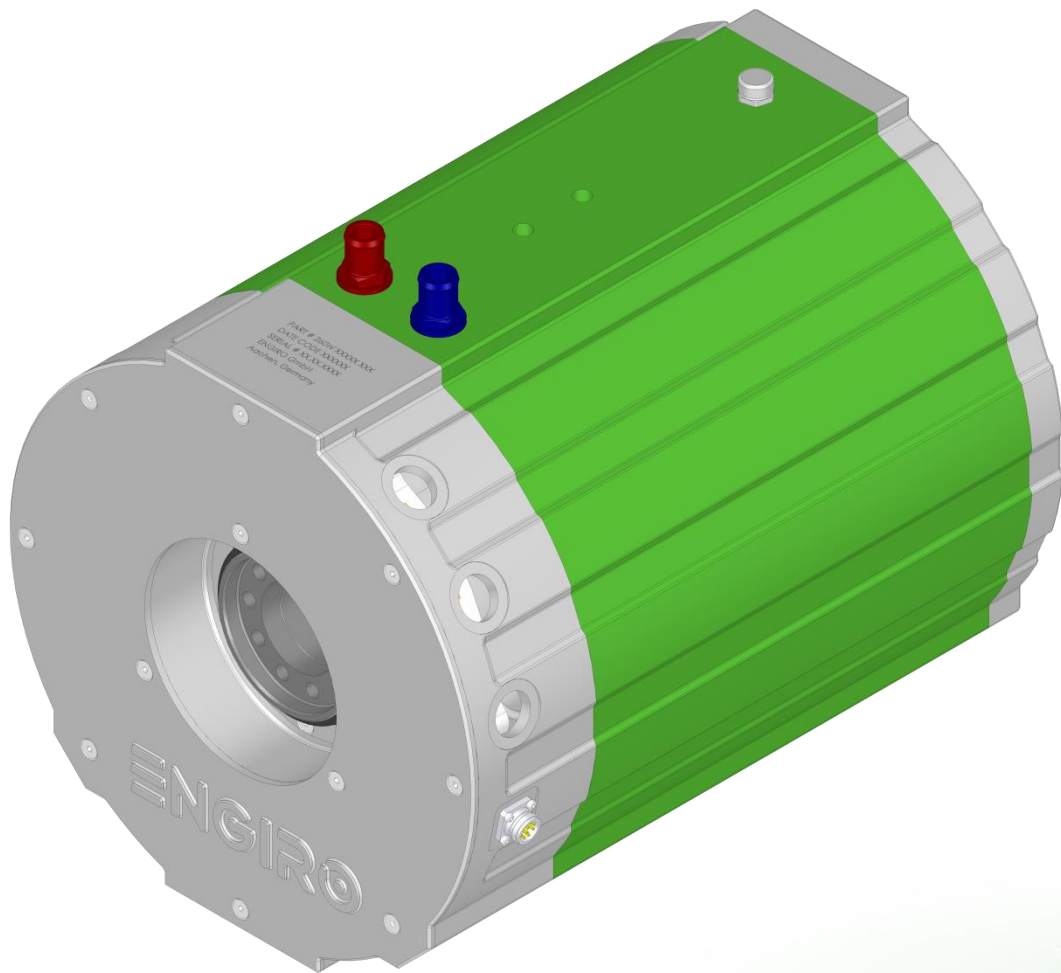


Data Sheet

260W-15031-ABC

water-cooled motor / generator with 94 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
- Double shaft end with screw flange available

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Nominal Operation (S2, 60min, cooling as specified below)				
Torque	T_{nom}		451	Nm
Power	P_{nom}		94	kW
Speed	n_{nom}		1940	rpm
Phase rms-current	I_{nom}		138 ^{1,2)}	A
Battery voltage (DC)	U_{nom}		700	V
Electric frequency	$f_{el,nom}$		161	Hz
Power factor	$\cos(\varphi)$		0.83	
Maximal Values (S2, 10s, cooling as specified below)				
Torque	T_{max}		830	Nm
Power	P_{max}		152	kW
Phase rms-current	I_{max}		318 ²⁾	A
Battery voltage (DC)	U_{max}		700	V
Speed	n_{max}		3620	rpm
Electric frequency	$f_{el,max}$		302	Hz
Electrical Data				
Number of phases			3	
Number of pole pairs			5	
Maximal efficiency			96	%
T/I constant ($I < I_{nom}$)			3.2	Nm/A _{rms}
U/n constant (AC) at a temperature of 30°C		rms:	195.2	peak: 302.5 V/(1000rpm)
K_e constant (AC) at a temperature of 30°C		rms:	0.373	peak: 0.578 V/(rad*s ⁻¹)
Additional Data				
Weight (w/o cables)			97	kg
Rotor moment of inertia			0.104	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, 18 l/min, ≤ 45°C, ≤ 1 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 ¾" / 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 /

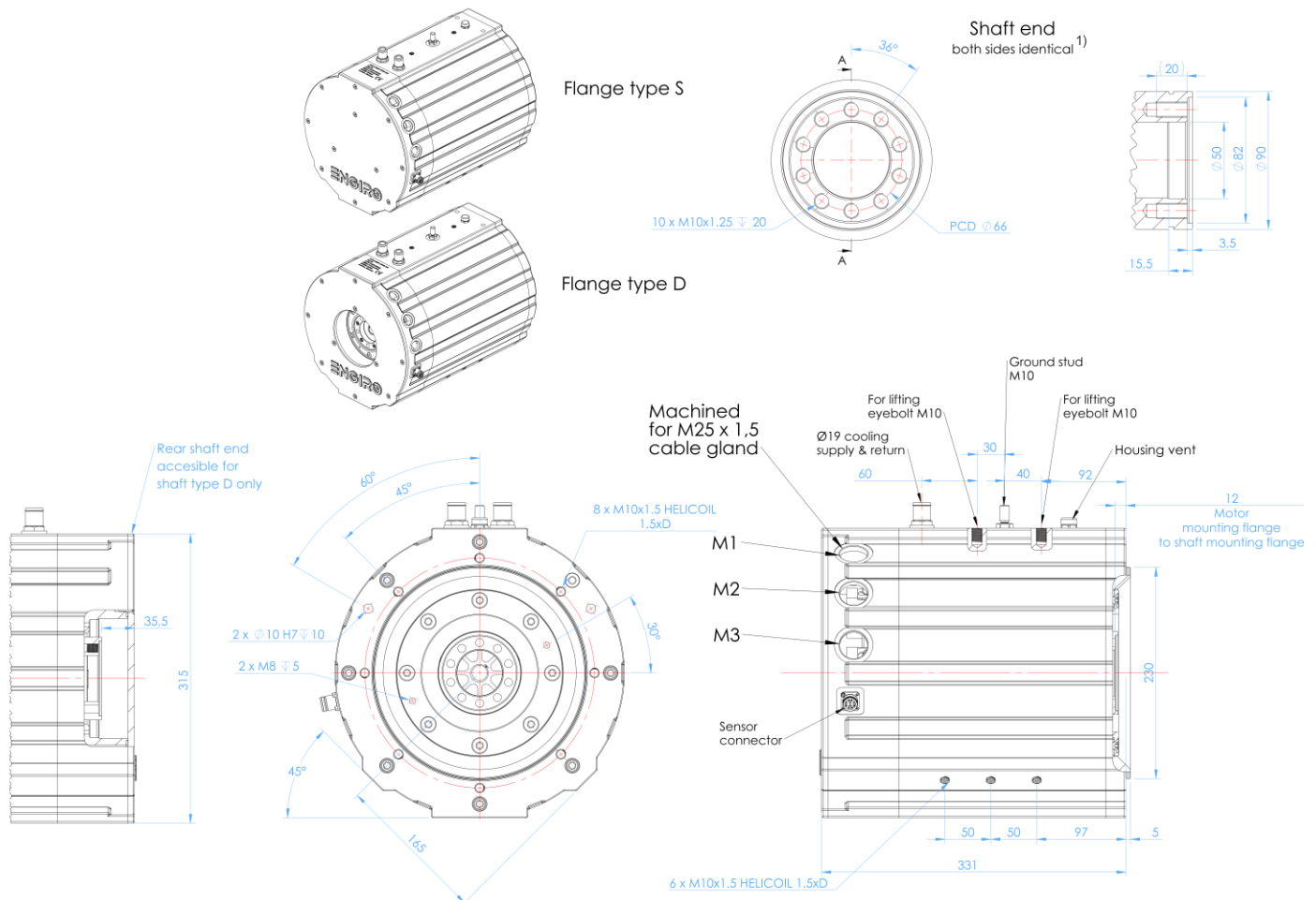
⁴⁾ other range on request

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Shaft and Flange Combinations for 260W-15031-ABC		Flange (A)	
		S (Standard)	D (Double)
Shaft (B)	F (Hollow shaft with two screw flanges)		
Position Sensor (C)		R: Resolver	

Other individual combinations are also possible on request.

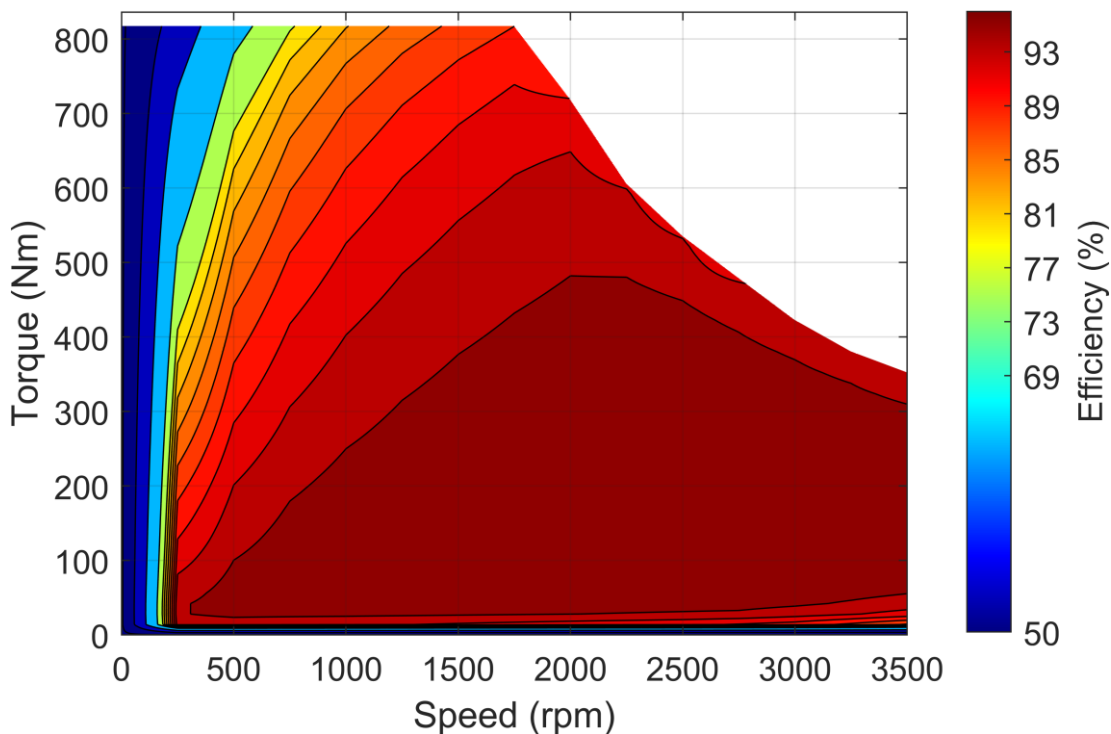
Technical Drawings



1) Applies to flange type D only

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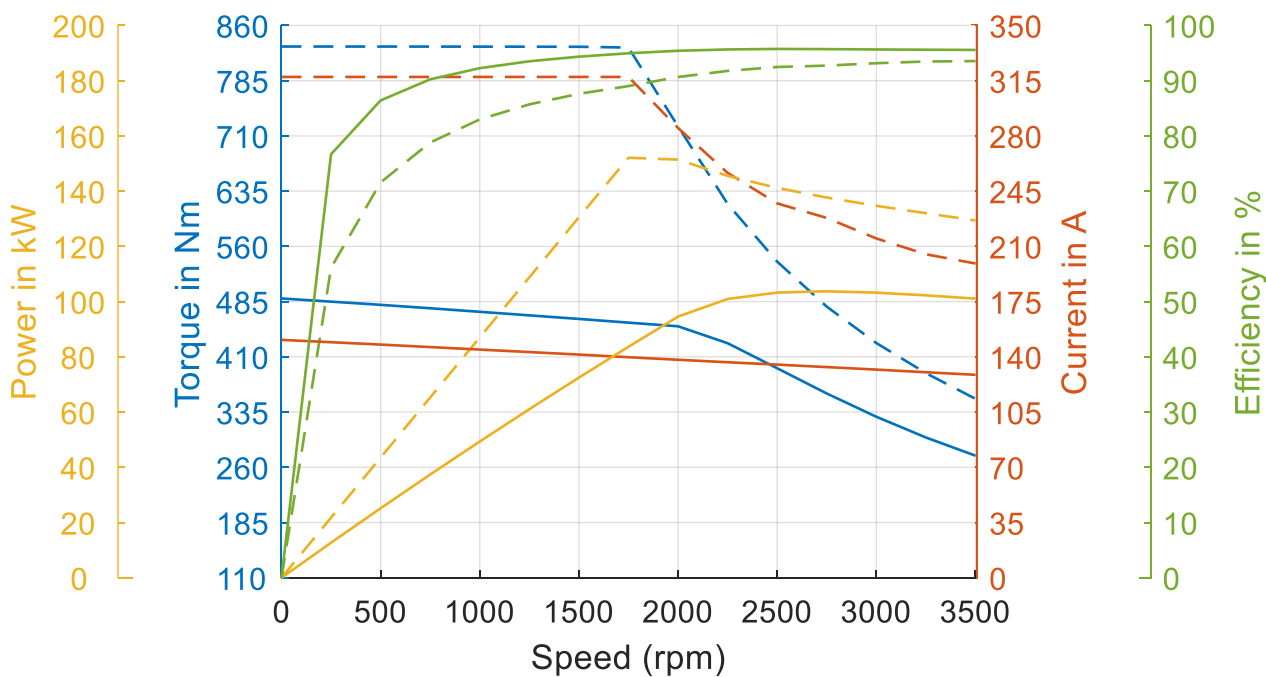
Simulated Efficiency of Motor Application
(electric machine only; $U_{nom} = 700\text{ V}$; machine at 140 °C ;)



Simulated Characteristic Motor Parameters

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

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



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