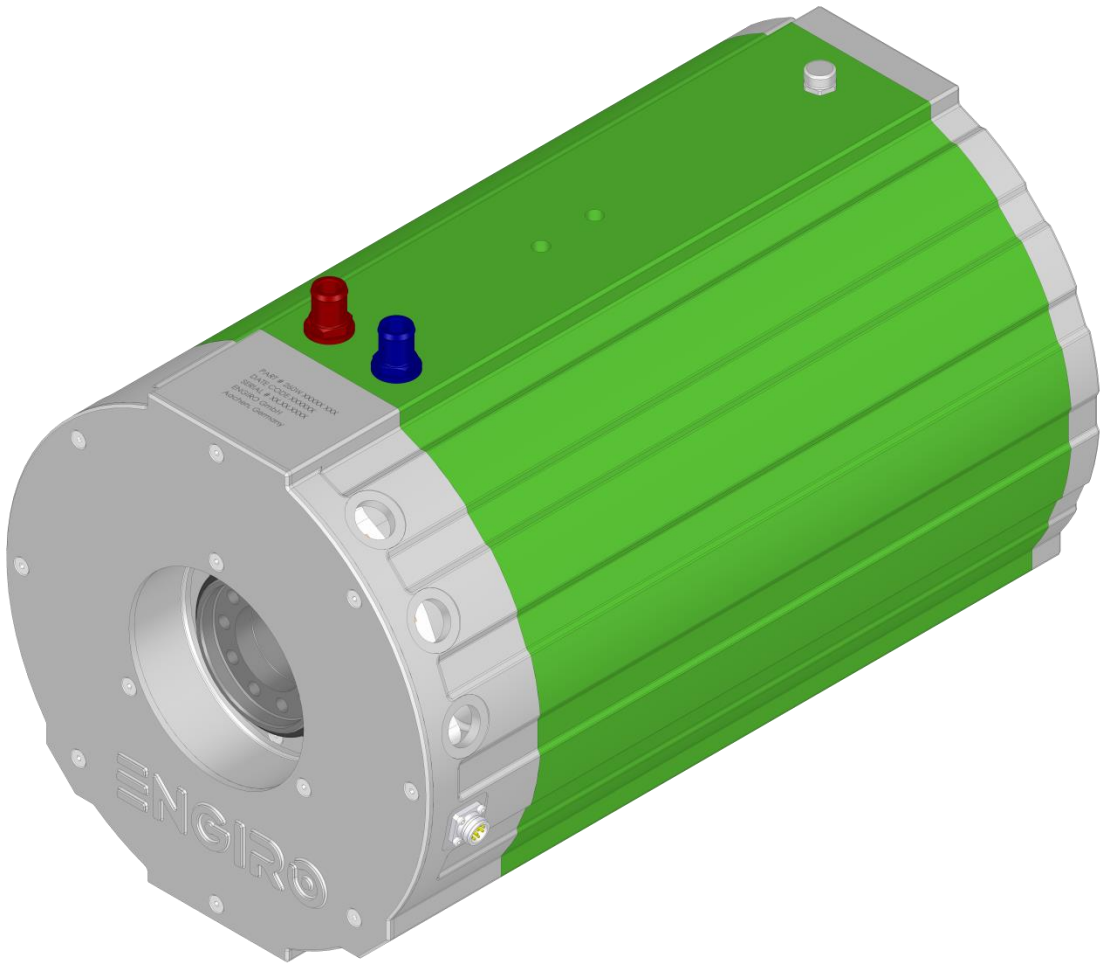
260W-25011-ABC

water-cooled motor / generator with 276 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

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Technical Data Machine

ENGIRO
Advanced · Drive · Solutions

Nominal Operation (S2, 30min, cooling as specified below)			
Torque	T_{nom}	754	Nm
Power	P_{nom}	276	kW
Speed	n_{nom}	3500	rpm
Phase rms-current	I_{nom}	397[1,2)]	A
Battery voltage (DC)	U_{nom}	700	V
Electric frequency	$f_{el,nom}$	292	Hz
Power factor	cos(φ)	0.72	

Maximal Values (S2, 10s, cooling as specified below)			
Torque	T_{max}	1386	Nm
Power	P_{max}	449	kW
Phase rms-current	I_{max}	895[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})				1.93	Nm/A_{rms}
U/*n* constant (AC) at a temperature of 30°C	rms:	115.5	peak:	179.0	V/(1000rpm)
K_e constant (AC) at a temperature of 30°C	rms:	0.221	peak:	0.342	$V/(rad*s^{-1})$

Additional Data		
Weight (w/o cables)	137	kg
Rotor moment of inertia	0.158	$kg*m^2$
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, 24 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 M32 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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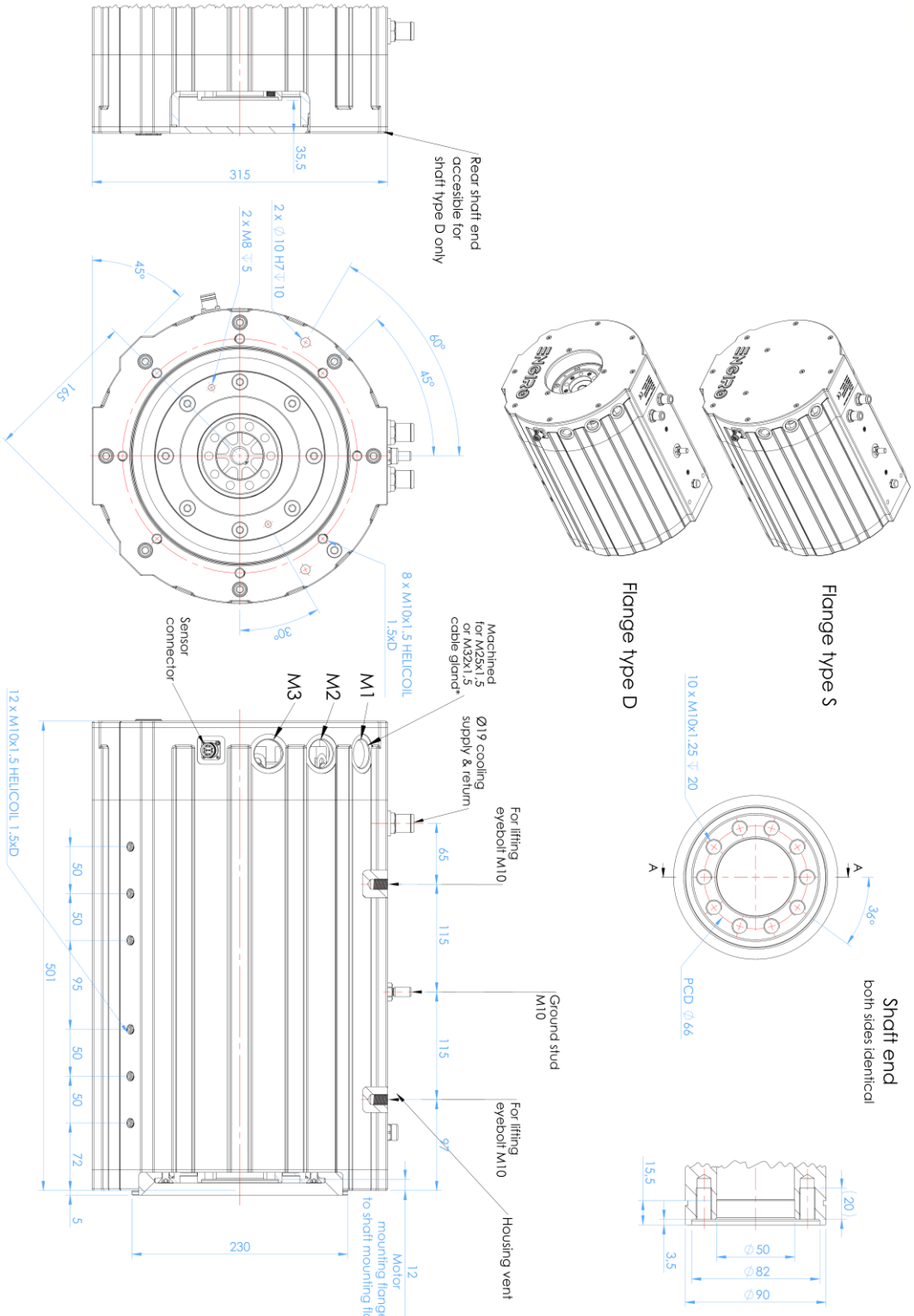
Technical Drawings

Available Type Variants			
type number	A: flange	B: shaft	C: position sensor
260W-25011-	S: standard	F: hollow shaft with two screw flanges	R: resolver
	D: double		N: none



*) Machine types with a winding code < 12 are machined for M32x1,5 cable glands
Machine types with a winding code > 12 are machined for M25x1,5 cable glands

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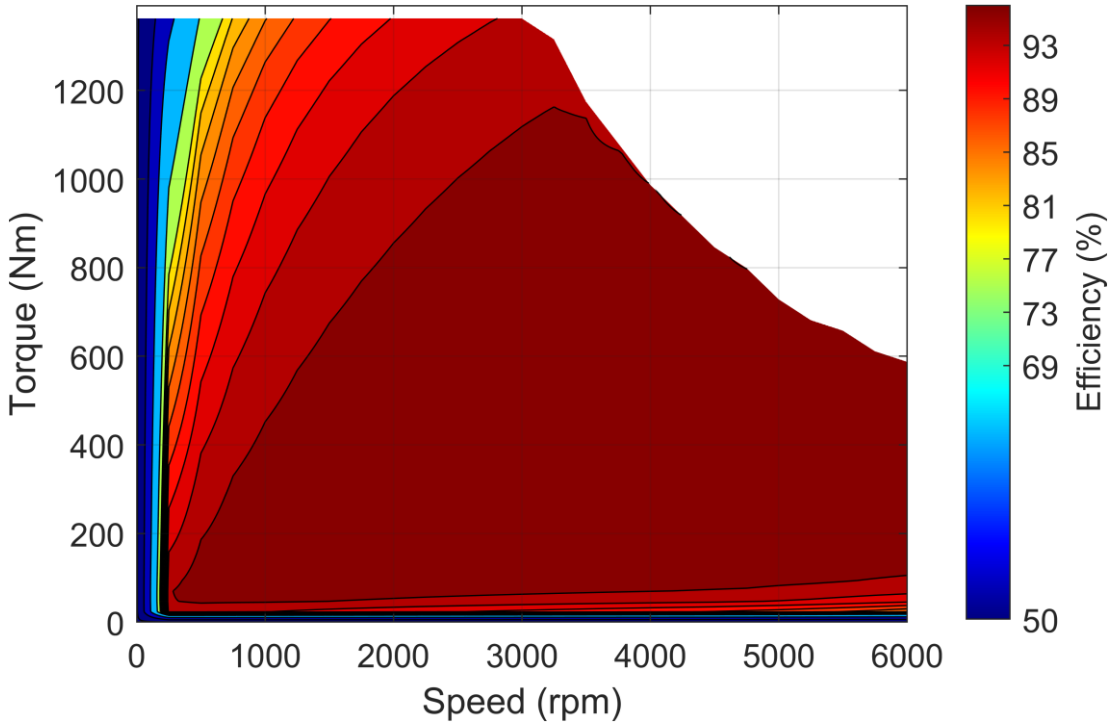
Characteristics Machine

Simulated Efficiency of Motor Application

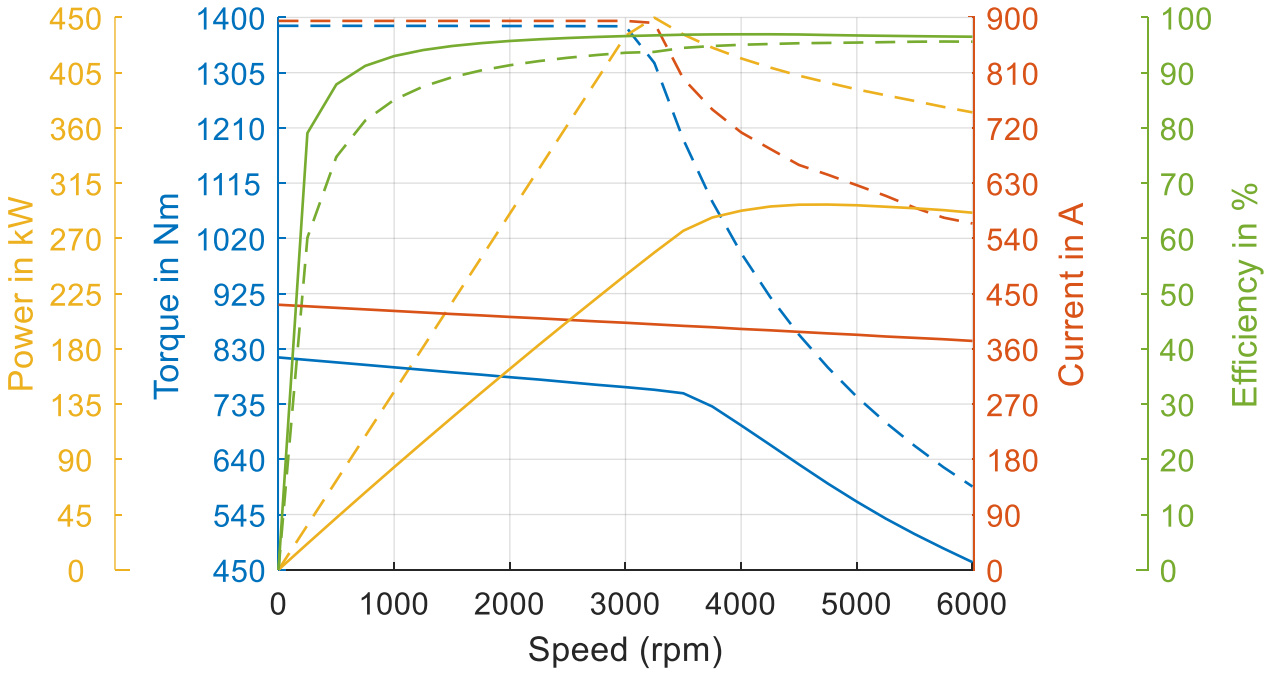
(electric machine only; U_{nom} = 700 V; machine at 140 °C;)



Simulated Characteristic Motor Parameters

U_{nom} = 700 V

solid lines: S2, 30 min; dashed lines: maximum;



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