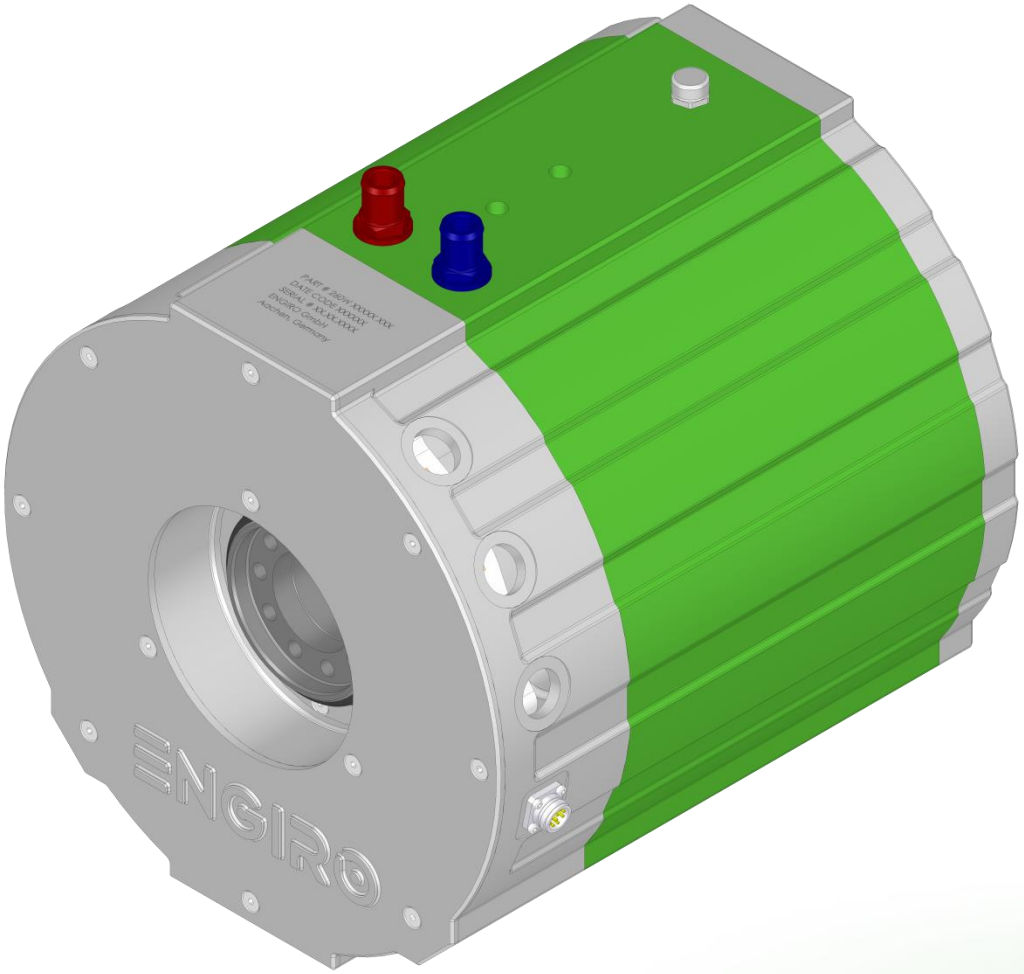
Data Sheet
260W-08011-ABC

water-cooled motor/generator with up to 32 kW power



KEY FEATURES

- permanent magnet synchronous machine
- water-cooled
- high peak power for motor applications
- convincing cost-benefit ratio
- recommended voltage range from 48V to 96V
- delivery with controller possible
- Double shaft end with screw flange

ENGIRO GmbH · Avantisallee 51 · 52072 Aachen · Germany
Tel. +49 (0)241 99798-0 · E-Mail: engineering@engiro.de · www.engiro.de

Table of Content

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Nominal Operation (S2, 30min, cooling as specified below)			
Torque	T_{nom}	221	Nm
Power	P_{nom}	32	kW
Speed	n_{nom}	1400	rpm
Phase rms-current	I_{nom}	379[1,2)]	A
Battery voltage (DC)	U_{nom}	96	V
Electric frequency	$f_{el,nom}$	116	Hz
Power factor	cos(φ)	0.74	
Maximal Values (S2, 10s, cooling as specified below)			
Torque	T_{max}	444	Nm
Power	P_{max}	57	kW
Phase rms-current	I_{max}	895[2)]	A
Battery voltage (DC)	U_{max}	200	V
Speed	n_{max}	3500	rpm
Electric frequency	$f_{el,\ max}$	291	Hz
Electrical Data			
Number of phases		3	
Number of pole pairs		5	
Maximal efficiency		96	%
T/I constant ($I<I_{nom}$)		0.62	Nm/A_{rms}
U/n constant (AC) at a temperature of 30°C	rms: 37.0	peak: 57.4	V/(1000rpm)
K_e constant (AC) at a temperature of 30°C	rms: 0.071	peak: 0.11	$V/(rad*s^{-1})$
Additional Data			
Weight (w/o cables)		68	kg
Rotor moment of inertia		0.067	$kg*m^2$
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 50/50,14 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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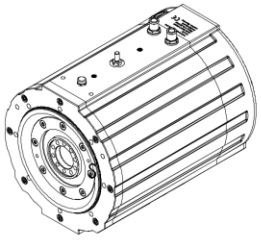
Table Shaft and Flange Combinations

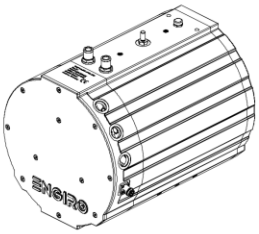
Shaft and Flange Combinations for 260W-08011-ABC		Flange (A)	
		S (Standard)	D (Flange for fan without insert)
Shaft (B)	F (Hollow shaft with two screw flanges)	●	●
Position Sensor (C)		R: Resolver	

Other individual combinations are also possible on request.

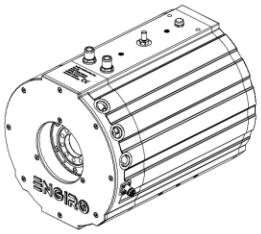
Technical Drawings



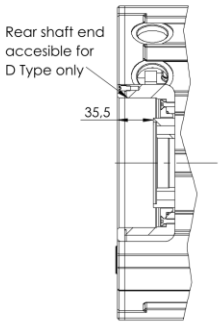
Front view



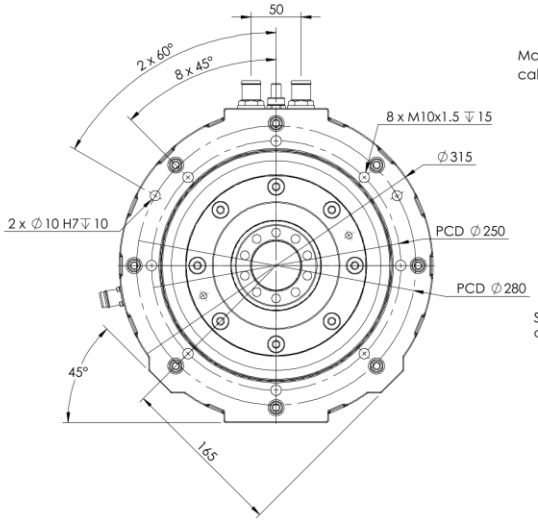
Rear view
S Flange

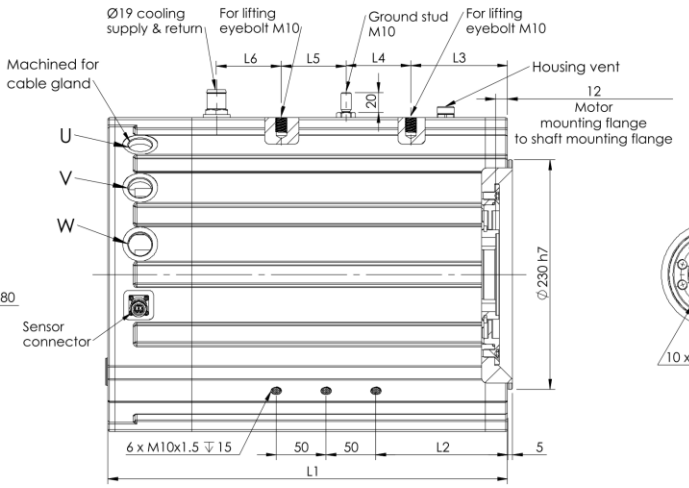


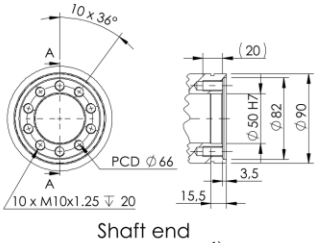
Rear view
D Flange



D Type Detail







Shaft end
both sides identical[1)]

Model	L1	L2	L3	L4	L5	L6	Moment of Inertia [kg.m²]	Cooling channel volume [L]
260W_080xx	331	97	92	40	30	60	0,0671	1,28
260W_100xx	351	107	97	45	35	65	0,0899	1,38
260W_130xx	381	112	107	55	35	75	0,0944	1,53
260W_150xx	401	132	97	65	65	65	0,1006	1,64

1) Applies to flange type D only

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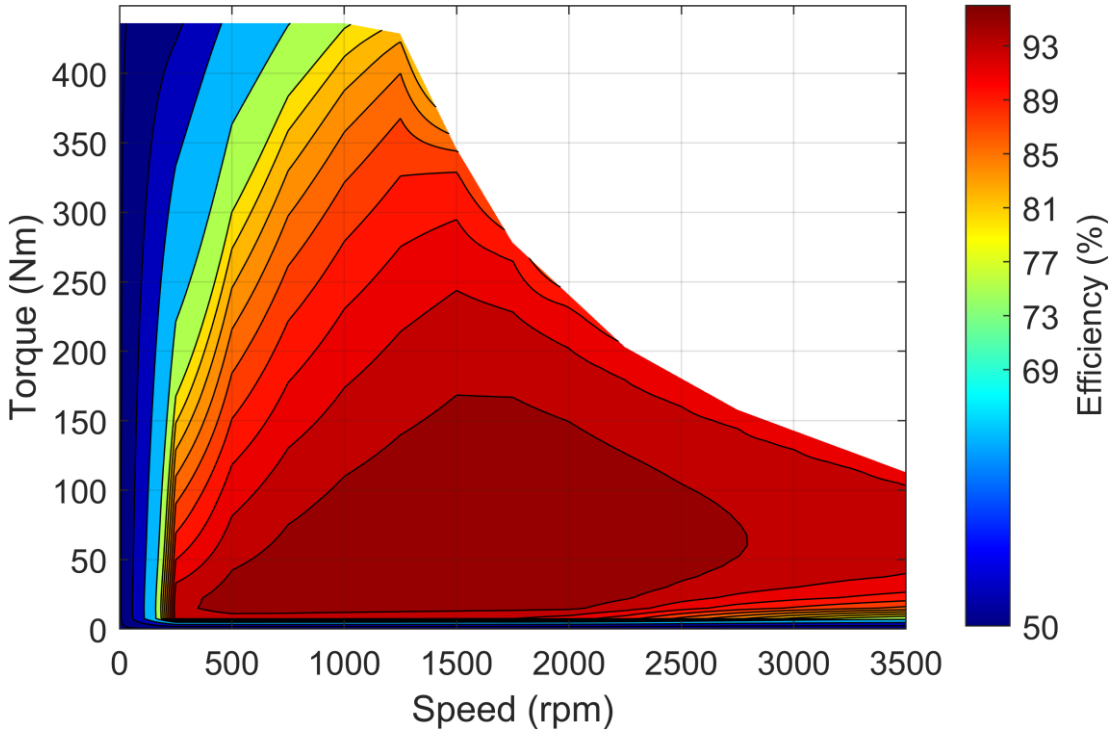
Simulated Efficiency of Motor Application

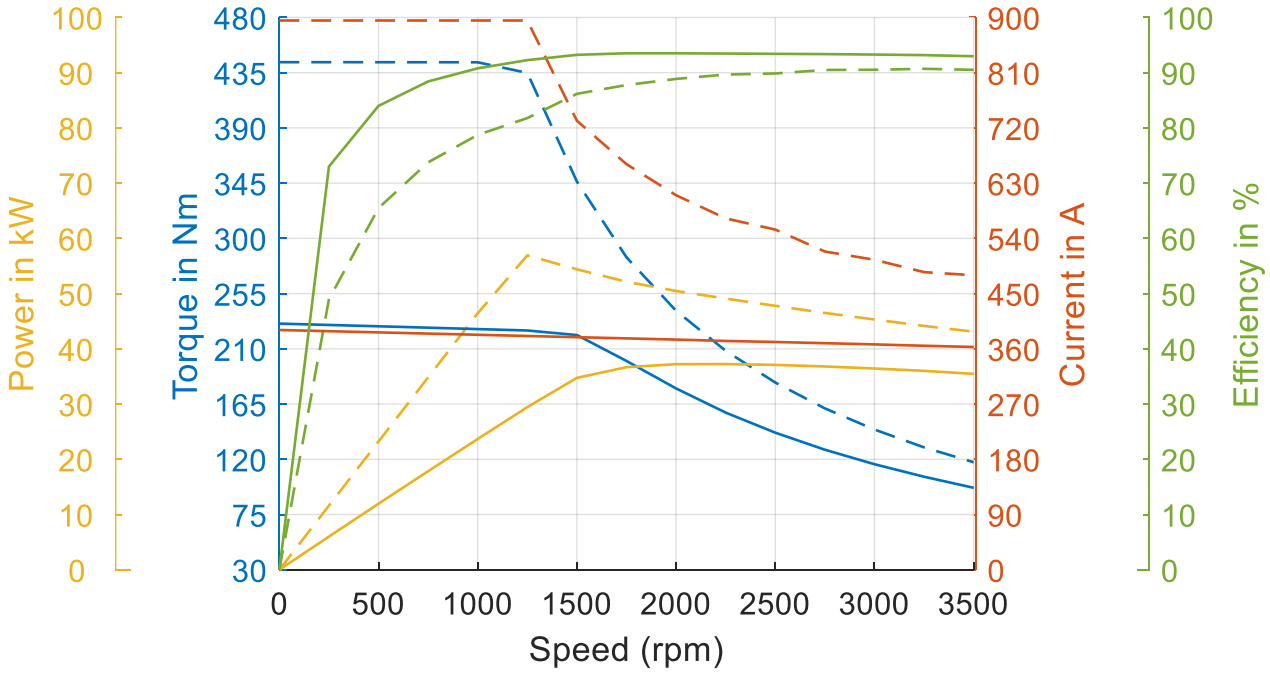
(electric machine only; U_{nom} = 96 V; machine at 140 °C;)



Simulated Characteristic Motor Parameters

U_{nom} = 96 V

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



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