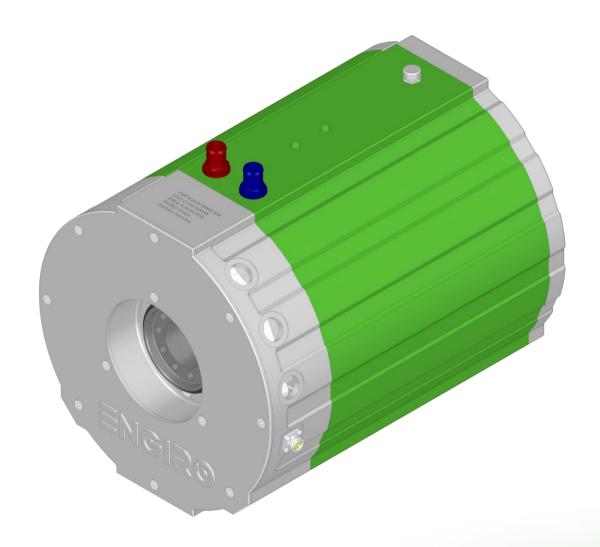


# 260W-15018-ABC

water-cooled motor/generator with up to 153 kW 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

Hc

#### 260W-15018-ABC

Page: 2

Version: 010\_02

## **Table of Content**



Section	Page
Technical Data Machine	3
Technical Drawings Machine	4
Characteristics Machine – 400V	5
Characteristics Machine – 700V	

### Technical Data Machine



Nom	ninal Operation (S2, 6	0 min. cooling	as specifie	d below)		
Torque	$T_{\text{nom}}$		451		422	Nm
Power	$P_{nom}$		93		153	kW
Speed	$n_{\text{nom}}$		1910		3350	rpm
Phase rms-current	I <sub>nom</sub>		2381,2)		2221,2)	
Battery voltage (DC)	$U_{\text{nom}}$		400 700			V
Electric frequency	$f_{el,nom}$		159 279			Hz
Power factor	cos(φ)		0.73		0.73	
N	Maximal Values (S2, 1	0s, cooling as	specified b	elow)		
Torque	$T_{\sf max}$		830		830	Nm
Power	$P_{max}$		151		273	kW
Phase rms-current	I <sub>max</sub>		546 <sup>2)</sup>		546 <sup>2)</sup>	А
Battery voltage (DC)	$U_{max}$		850			V
Speed	$n_{\max}$		6000			rpm
Electric frequency	$f_{el,\mathrm{max}}$		500			Hz
	Ele	ectrical Data				
Number of phases					3	
Number of pole pairs		5				
Maximal efficiency		96		%		
T/I constant (I <i<sub>nom)</i<sub>					1.89	Nm/A <sub>rms</sub>
U/n constant (AC) at a temperature of 30°C		rms:	113.3	peak:	175.6	V/(1000rpm
K <sub>e</sub> constant (AC) at a temperature of 30°C		rms:	0.216	peak:	0.335	V/(rad*s-1)
	Add	ditional Data				
Weight (w/o cables)			97			kg
Rotor moment of inertia			0.104			kg*m²
Protection category			IP6K9K <sup>3)</sup>			
Maximal motor temperature		140	°C			
Allowed ambient temperature			-20 45 <sup>4)</sup>			°C
Cooling (medium, flow rate, inlet temp	perature, pressure)	water/glycol 50/50, 18 l/min, ≤ 45°C, ≤ 0.5 bar				
Temperature monitoring		1 x KTY84-130				
Type approval			CE, EN 60034			
Customs tariff number					8501 5381	
	C	onnectors				
Power terminals			3 x M25 cable gland			
Signal connectors			M16, 10 Pin			
Cooling connectors			2 x ¾" / 19 mm			

 $<sup>^{\</sup>rm 1)}\,{\rm Nominal}$  current strongly dependent on cooling as specified below.

Page: 3

Version: 010 02

<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>&</sup>lt;sup>3)</sup> 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 /

<sup>4)</sup> other range on request

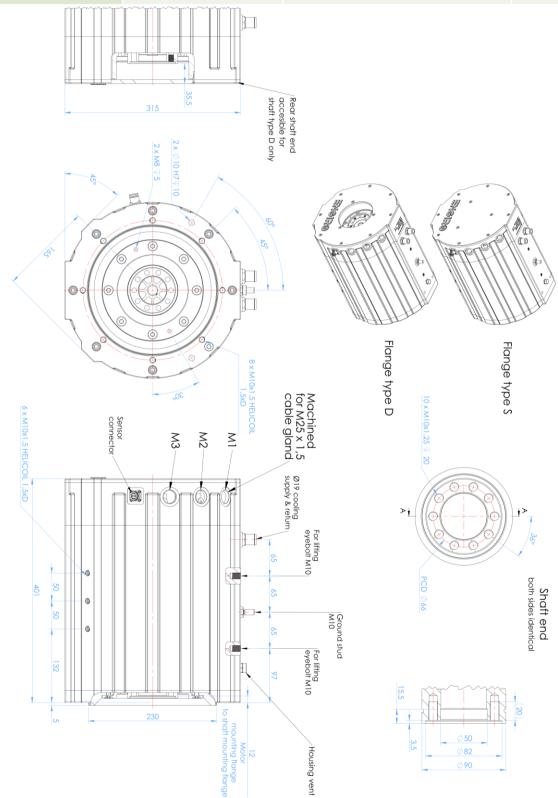
Page: 4

Version: 010\_02

# **Technical Drawings**



Available Type Variants						
type number	A: flange	B: shaft	C: position sensor			
0001/1/45040	S: standard	F: hollow shaft with two screw flanges	R: resolver			
260W-15018-	D: double		N: none			



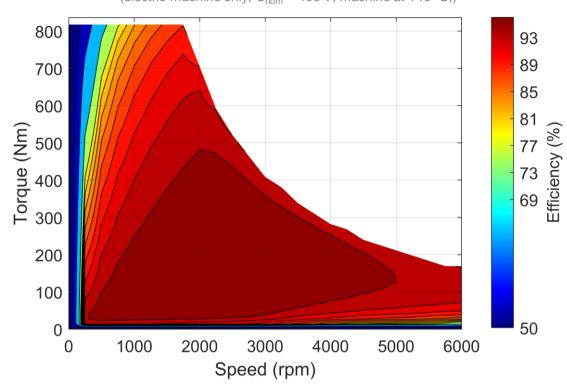
Page: 5

Version: 010 02

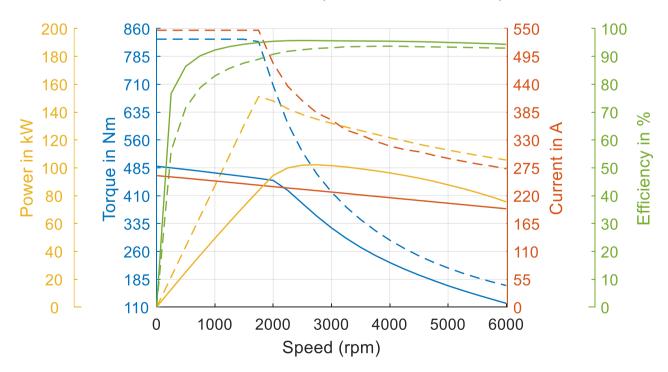
### **Characteristics Machine**



### Simulated Efficiency of Motor Application (electric machine only; $U_{\text{nom}} = 400 \text{ V}$ ; machine at 140 °C;)



# Simulated Characteristic Motor Parameters $U_{\text{nom}} = 400 \text{ V}$ solid lines: S2 60 min; dashed lines: maximum;



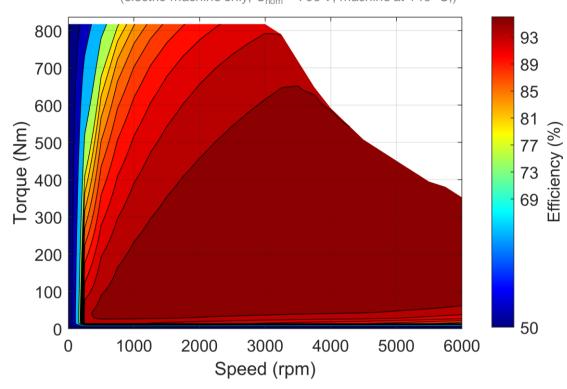
Page: 6

Version: 010 02

### **Characteristics Machine**



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



Simulated Characteristic Motor Parameters  $U_{\text{nom}} = 700 \text{ V}$  solid lines: S2 60 min; dashed lines: maximum;

