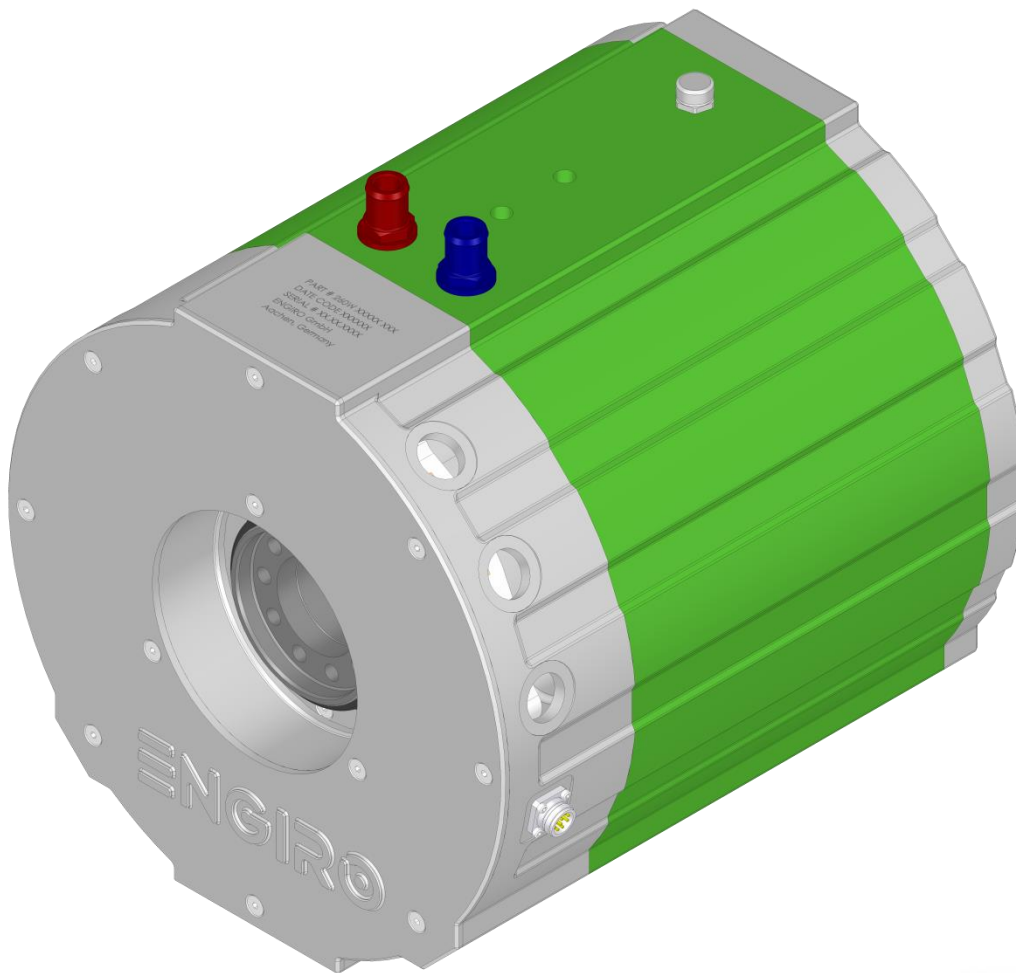


# 260W-08028-ABC

water-cooled motor / generator with 93 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

Section	Page
Technical Data Machine	3
Technical Drawings Machine	4
Characteristics Machine	5

Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice and are intended for general information only. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.

## Nominal Operation (S2, 60min, cooling as specified below)

Torque	$T_{nom}$	212	Nm
Power	$P_{nom}$	93	kW
Speed	$n_{nom}$	4200	rpm
Phase rms-current	$I_{nom}$	141 <sup>1,2)</sup>	A
Battery voltage (DC)	$U_{nom}$	700	V
Electric frequency	$f_{el,nom}$	340	Hz
Power factor	$\cos(\varphi)$	0.73	

## Maximal Values (S2, 10s, cooling as specified below)

Torque	$T_{max}$	443	Nm
Power	$P_{max}$	162	kW
Phase rms-current	$I_{max}$	352 <sup>2)</sup>	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 ( $I < I_{nom}$ )		1.56	Nm/A <sub>rms</sub>
$U/n$ constant (AC) at a temperature of 30°C	rms:	94.0	peak: 145.7 V/(1000rpm)
$K_e$ constant (AC) at a temperature of 30°C	rms:	0.180	peak: 0.278 V/(rad*s <sup>-1</sup> )

## Additional Data

Weight (w/o cables)	68	kg
Rotor moment of inertia	0.066	kg*m <sup>2</sup>
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 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 M25 cable gland	
Signal connectors	M16, 10 Pin	
Cooling connectors	2 x ¾" / 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.

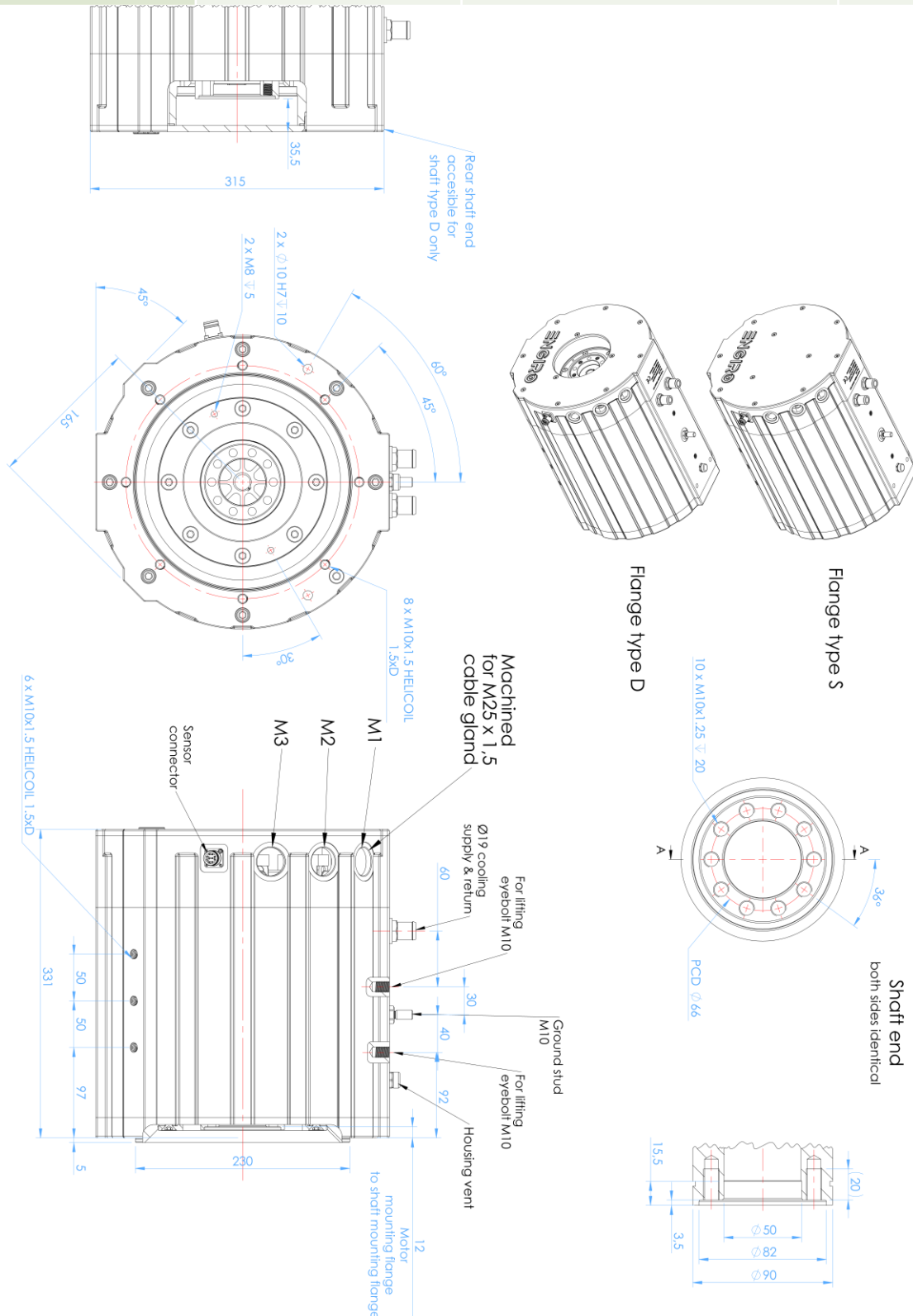
<sup>3)</sup> Please note that the IP6K9K rating is only valid if the machine is installed with suitable cable glands and an appropriate sealed interface at the drive side of the motor (flange and/or shaft). Please contact ENGIRO for further questions. / Only applies to SFR Variant /

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

Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice and are intended for general information only. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.

## Available Type Variants

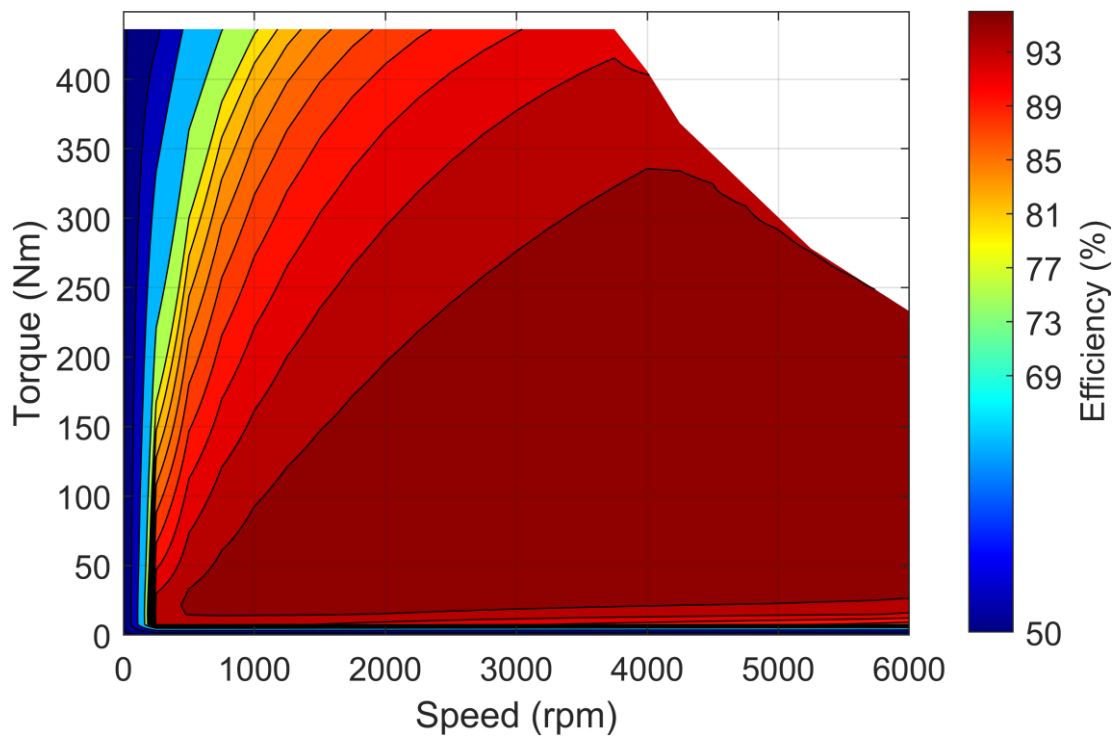
type number	A: flange	B: shaft	C: position sensor
260W-08028-	S: standard	F: hollow shaft with two screw flanges	R: resolver
	D: double		N: none



Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice and are intended for general information only. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.

### Simulated Efficiency of Motor Application

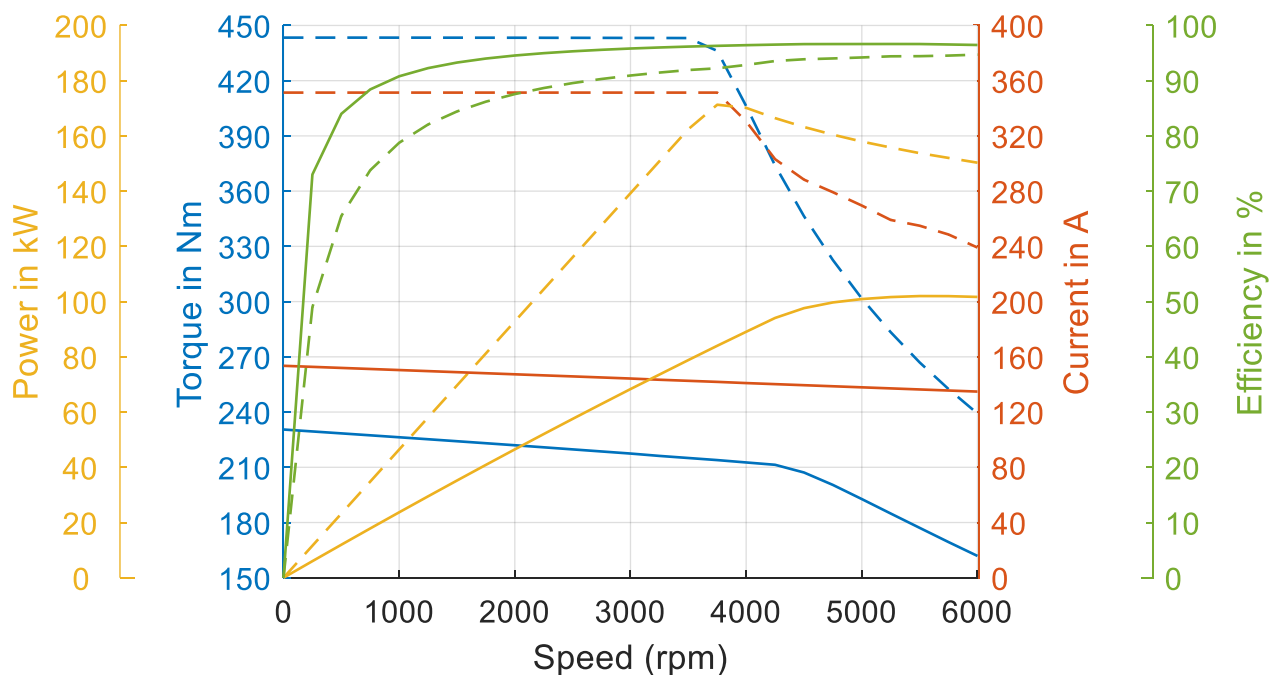
(electric machine only;  $U_{\text{nom}} = 700 \text{ V}$ ; machine at  $140 \text{ }^{\circ}\text{C}$ ;) )



### Simulated Characteristic Motor Parameters

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

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



Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice and are intended for general information only. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders.