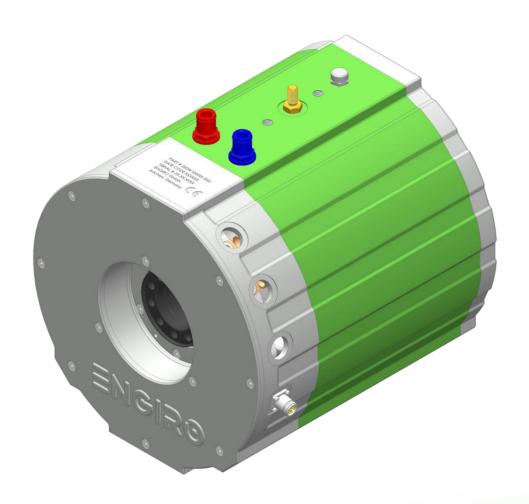


# 260W-08058-ABC

water-cooled motor / generator with 32 kW continuous 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 200V
- delivery with controller possible
- Double shaft end with screw flange

Hc

#### 260W-08058-ABC

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## **Technical Data Machine**



	Nominal Operation (	S1, cooling as spe	ecified belo	w)		
Torque	$T_{nom}$				219	Nm
Power	$P_{nom}$				44	kW
Speed	$n_{\text{nom}}$				1940	rpm
Phase rms-current	$I_{nom}$				68	А
Battery voltage (DC)	$U_{nom}$				700	V
Electric frequency	$f_{el,nom}$				161	Hz
Power factor	cos(φ)				0.75	
	Maximal Values (S2, 1	0s, cooling as sp	ecified belo	ow)		
Torque	$T_{max}$				435	Nm
Power	$P_{max}$		84 kW			kW
Phase rms-current	I <sub>max</sub>		170			А
Battery voltage (DC)	$U_{max}$				750	V
Speed	$n_{\max}$				3600	rpm
Electric frequency	f <sub>el, max</sub>				300	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>					3.22	Nm/A <sub>rms</sub>
U/n constant (AC)		rms:	194.8	peak:	275.5	V/(1000rpm
$K_{\rm e}$ constant (AC)		rms:	0.372	peak:	0.526	V/(rad*s-1)
	Ad	ditional Data				
Weight (w/o cables)			68			kg
Rotor moment of inertia			0.066			kg*m²
Protection category				II	P65 / IP69k	
Maximal motor temperature			140			°C
Allowed ambient temperature					-20 45 <sup>1)</sup>	°C
Cooling (medium, flow rate, inlet tem	ooling (medium, flow rate, inlet temperature, pressure) water/glycol 50/50,6 l/min, ≤ 45°C, ≤ 0.5 b		C, ≤ 0.5 bar			
Temperature monitoring 1 x KTY8		KTY84-130				
Type approval	approval CE, EN 6003		, EN 60034			
Customs tariff number					8501 5230	
	C	Connectors				
Power terminals	wer terminals 3 x M25 cable gland					
Signal connectors				N	M16, 10 Pin	
Cooling connectors	2 x ¾" / 19 mm					

1) other range on request

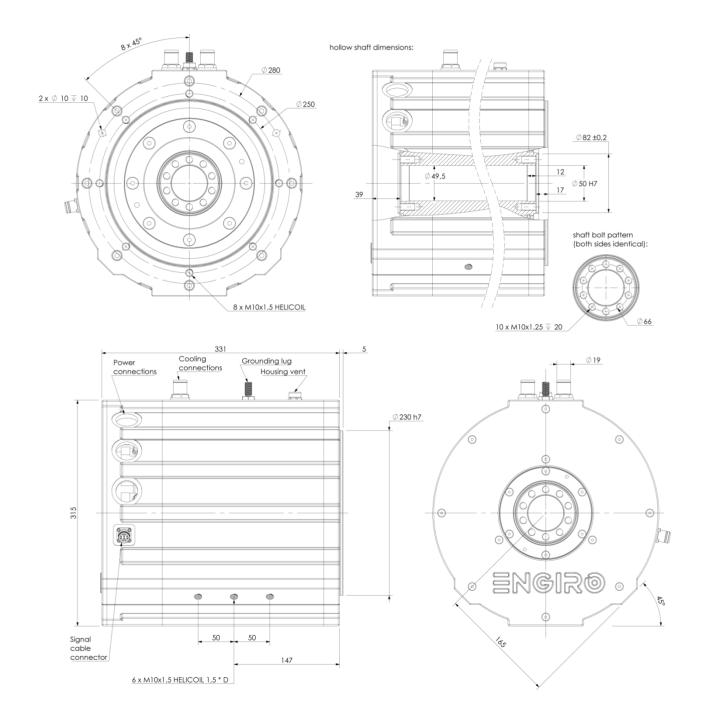
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## **Technical Drawings**



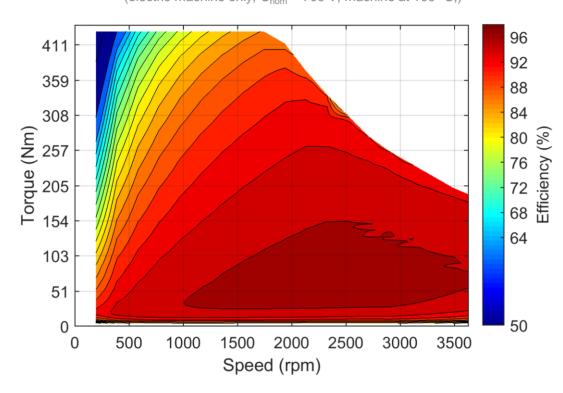
Available Type Variants						
type number	A: flange	B: shaft	C: position sensor			
260W-08058-	S: standard	F: hollow shaft with two screw flanges	R: resolver			
			N: none			



### **Characteristics Machine**



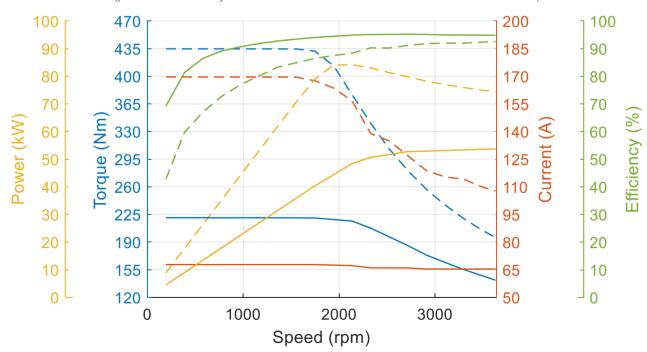
# Simulated Efficiency of Motor Application (electric machine only; $U_{\text{nom}} = 700 \text{ V}$ ; machine at 100 °C;)



### Simulated Characteristic Motor Parameters

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

solid lines: continuous; dashed lines: maximum; (jitter is caused by numerical inaccuracies in the simulation software)



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# Technical Data Inverter Set



Nominal Operation Drive Set (S1)						
Torque	$T_{nom}$	194	Nm			
Power	$P_{nom}$	39	kW			
Speed	$n_{\text{nom}}$	1940	rpm			
Phase rms-current	$I_{nom}$	60	А			
Battery voltage	$U_{nom}$	700	V			
Electric frequency	$f_{el,\mathrm{nom}}$	161	Hz			
Power factor	$cos(\phi)$	0.76				
Maximal Values Drive Set (S2, 1-10s)						
Torque	$T_{\rm max}$	435	Nm			
Power	$P_{max}$	84	kW			
Phase rms-current	I <sub>max</sub>	170	А			
Battery voltage	$U_{max}$	700	V			
Speed	$n_{max}$	3600	rpm			
Electric frequency	f <sub>el, max</sub>	300	Hz			

#### Simulated Efficiency and Motor Characteristic of Motor Application (electric machine only; $U_{\text{nom}} = 700 \text{ V}$ ; machine at 100 °C;)

