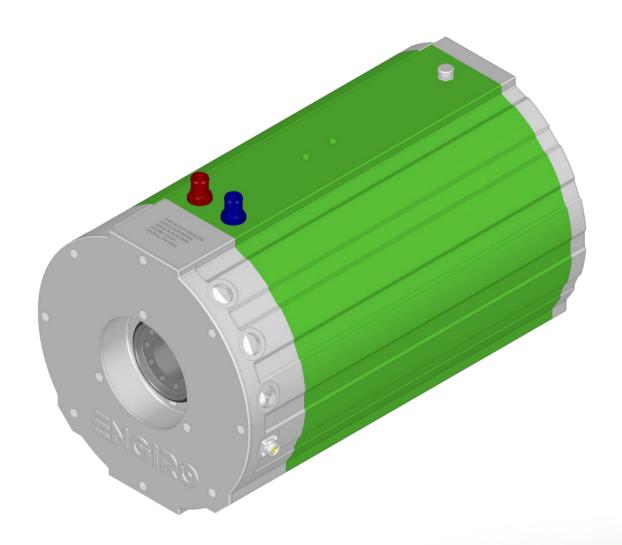


260W-25018-ABC

water-cooled motor/generator with up to 134 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 500V to 750V
- delivery with controller possible
- Double shaft end with screw flange

Hc

260W-25018-ABC

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Technical Data Machine



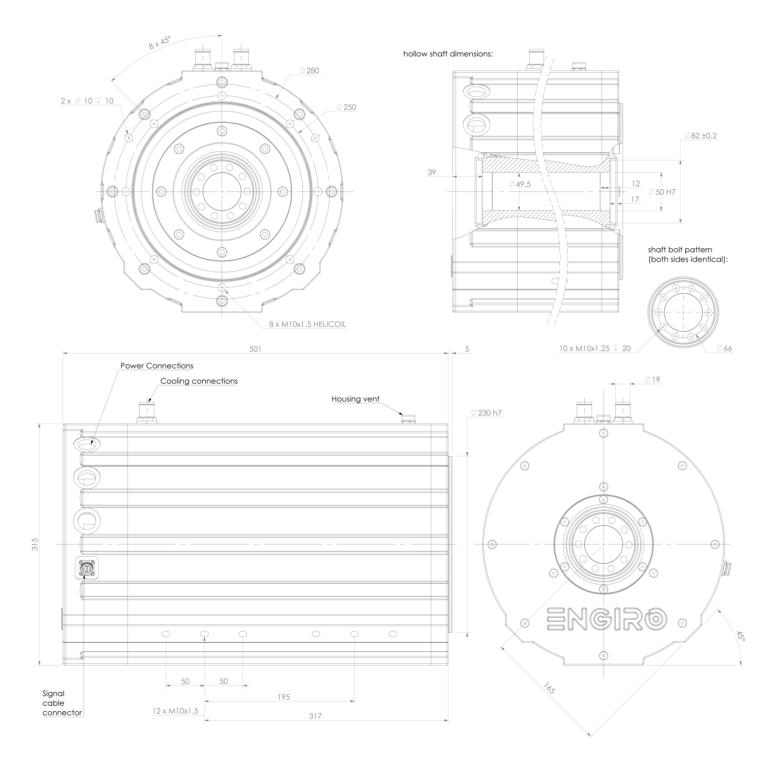
	Nominal Operation (S	1, cooling as spe	ecified belo	w)		
Torque	T_{nom}		688		688	Nm
Power	P_{nom}		115		134	kW
Speed	n_{nom}		1600		1860	rpm
Phase rms-current	I _{nom}		546		218	А
Battery voltage (DC)	U_{nom}		560		650	V
Electric frequency	$f_{ m el,nom}$		113		155	Hz
Power factor	cos(φ)		0.73		0.73	
	Maximal Values (S2, 1	0s, cooling as sp	ecified belo	ow)		
Torque	T_{max}		1361		1361	Nm
Power	P_{max}		221		258	kW
Phase rms-current	I _{max}		546		546	А
Battery voltage (DC)	U_{max}				750	V
Speed	n _{max}				3740	rpm
Electric frequency	$f_{\rm el,\; max}$				312	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>					3.16	Nm/A _{rms}
U/n constant (AC)		rms:	188.9	peak:	267.2	V/(1000rpm
K _e constant (AC)		rms:	0.361	peak:	0.510	V/(rad*s-1)
	Ado	ditional Data				
Weight (w/o cables)			137			kg
Rotor moment of inertia			0.158 k			kg*m²
Protection category				IF	P65 / IP69k	
Maximal motor temperature			140 '			°C
Allowed ambient temperature			-20 45¹) °C			°C
Cooling (medium, flow rate, inlet temperature, pressure) water/gly		lycol 50/50, 1	4 I/min, ≤ 45°C	c, ≤ 0.5 bar		
Temperature monitoring			1 x KTY84-130			
Type approval			CE, EN 60034			
ustoms tariff number 8501 538		8501 5381				
	С	onnectors				
ower terminals 3 x M25 cable gland						
Signal connectors				N	116, 10 Pin	
Cooling connectors				2 x ³ /	⁄₄" / 19 mm	

1) other range on request

Technical Drawings



Available Type Variants			
type number	A: flange	B: shaft	C: position sensor
260W-25018-	S: standard	F: hollow shaft with two screw flanges	R: resolver
			N: none

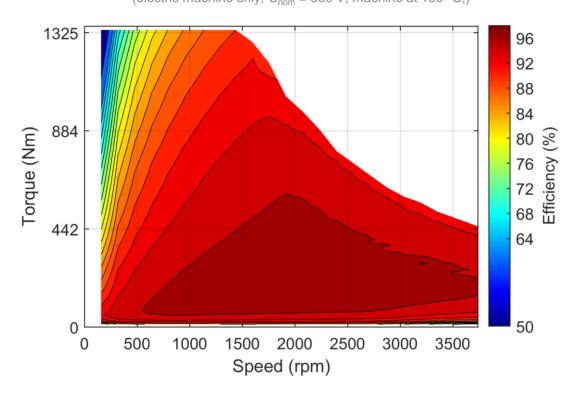


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Characteristics Machine



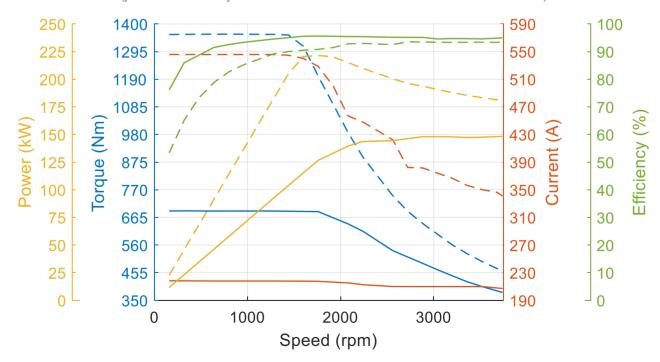
Simulated Efficiency of Motor Application (electric machine only; $U_{\text{nom}} = 560 \text{ V}$; machine at 100 °C;)



Simulated Characteristic Motor Parameters

 $U_{\text{nom}} = 560 \text{ V}$

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

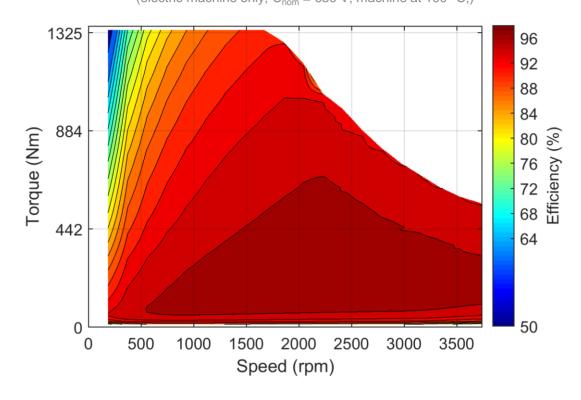


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Characteristics Machine



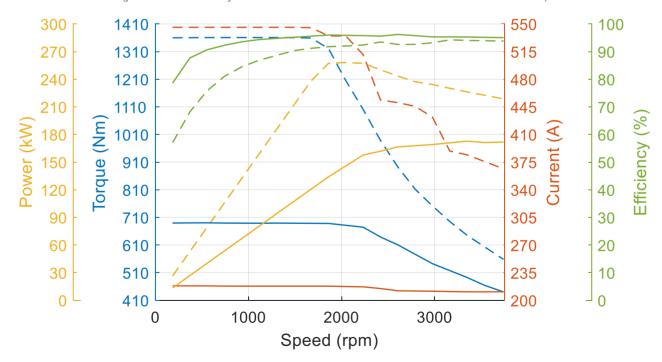
Simulated Efficiency of Motor Application (electric machine only; $U_{\text{nom}} = 650 \text{ V}$; machine at 100 °C;)



Simulated Characteristic Motor Parameters

 $U_{\text{nom}} = 650 \text{ V}$

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

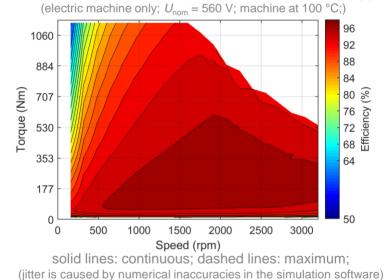


Technical Data Inverter Set



Nominal Operation Drive Set (S1)				
Torque	T_{nom}	625	Nm	
Power	P_{nom}	105	kW	
Speed	n_{nom}	1600	rpm	
Phase rms-current	I _{nom}	199	А	
Battery voltage	U_{nom}	560	V	
Electric frequency	$f_{el,nom}$	133	Hz	
Power factor	$cos(\phi)$	0.73		
Maximal Values Drive Set (S2, 1-10s)				
Torque	T_{max}	1179	Nm	
Power	P_{max}	206	kW	
Phase rms-current	I _{max}	450	А	
Battery voltage	U_{max}	560	V	
Speed	$n_{\rm max}$	3200	rpm	
Electric frequency	f _{el, max}	267	Hz	

Simulated Efficiency and Motor Characteristic of Motor Application



Efficiency (%) Power (kW) Torque (Nm

Speed (rpm)

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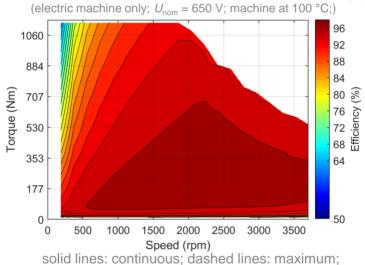
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Technical Data Inverter Set



Nominal Operation Drive Set (S1)				
Torque	T_{nom}	625	Nm	
Power	P_{nom}	122	kW	
Speed	n_{nom}	1860	rpm	
Phase rms-current	I_{nom}	199	А	
Battery voltage	U_{nom}	650	V	
Electric frequency	$f_{el, \text{nom}}$	155	Hz	
Power factor	$cos(\phi)$	0.72		
Maximal Values Drive Set (S2, 1-10s)				
Torque	T_{max}	1179	Nm	
Power	P_{max}	240	kW	
Phase rms-current	I_{max}	450	А	
Battery voltage	U_{max}	650	V	
Speed	n _{max}	3700	rpm	
Electric frequency	f _{el, max}	308	Hz	

Simulated Efficiency and Motor Characteristic of Motor Application



solid lines: continuous; dashed lines: maximum; (jitter is caused by numerical inaccuracies in the simulation software) Efficiency (%) Power (kW) Torque (Nm Speed (rpm)