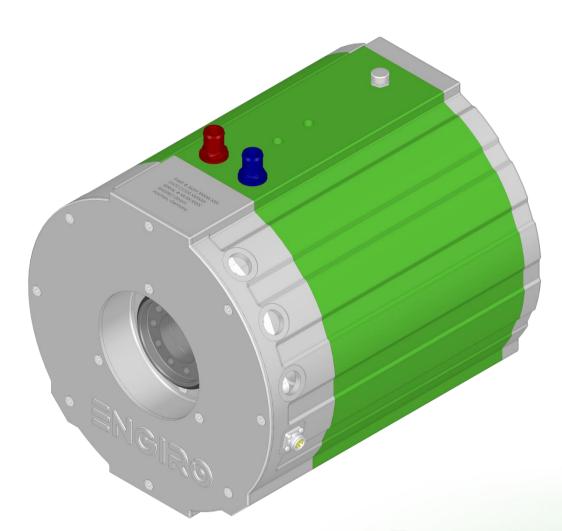


## Data Sheet 260W-10020-ABC

water-cooled motor generator with up to 115 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

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Hc

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#### Data Sheet 260W-10020-ABC

#### Technical Data Machine



Prome speedProm mIIIIISpeedNoonI3000II<	Ν	Iominal Operation (S2, 60	min, cooling a	s specified l	below)			
Nome Phase rms-current loonNome Nome NomeNome Nome NomeNome Nome NomeNome Nome NomeNome Nome NomeNome Nome NomeNome Nome NomeNome <br< th=""><th>Torque</th><th><math>T_{\sf nom}</math></th><th></th><th>241</th><th></th><th>221</th><th>Nm</th></br<>	Torque	$T_{\sf nom}$		241		221	Nm	
Asso ms-current Base ms-current Base ms-current Base ms-current Base ms-current Cos( $\varphi$ )Image matheff Base ms-current Cos( $\varphi$ )Image matheff Base ms-current Cos( $\varphi$ )Image matheff Base ms-currentImage matheff Base ms-current Cos( $\varphi$ )Image matheff Base ms-current Cos( $\varphi$ )Image matheff Base ms-current Cos( $\varphi$ )Image matheff Base ms-current Cos( $\varphi$ )Image matheff Base ms-current Cos matheff Cos matheff Cos matheff Cos matheff Base ms-current Cos matheff Cos mathef	Power	P <sub>nom</sub>		75		115	kW	
	Speed	N <sub>nom</sub>		3000		5000	rpm	
Litectic frequency     farm     250     416     Hz       Power factor     cos(φ)     0.92     0.89     0.89       Power factor     cos(φ)     0.92     0.89     0.89       Forque     Tmm     532     S52     Nm       Power     Pmm     134     239     KV       Power     Pmm     4922     4922     A       Statery voltage (DC)     Umm     4922     4922     A       Speed     mm     0     -500     pm       Electric frequency     f_d, mm     0     -5     V       Speed     mm     0     -5     V     V       Mumber of pole pairs     Electric trequency     f_d, mm     V     Nm/Ams       Vumber of pole pairs     S     Maximal efficiency     T/1     Nm/Ams       Vumber of pole pairs     S     Maximal efficiency     Nm/Ams     Min/Ams       Vur constant (AC) at a temperature of 30°C     rms:     0.160     peak:     0.249     V(roto's       Viconstant	Phase rms-current	I <sub>nom</sub>		180 <sup>1,2)</sup>		161 <sup>1,2)</sup>	А	
Now factorCos( $\varphi$ )0.920.920.93Power factor $Maximal efficiencyT_{max}0.920.920.920.92PowerP_{max}0.920.920.920.920.920.92PowerP_{max}0.920.920.920.920.920.92PowerP_{max}0.920.920.920.920.920.92Pase rms-ourrentI_{max}0.920.920.920.920.920.92SpeedP_{max}0.920.920.920.920.920.920.92SpeedP_{max}0.92$	Battery voltage (DC)	U <sub>nom</sub>		400		700	V	
Maximal Values (S2, 10s, cooling as specified below)forque $T_{max}$ 532SNmforque $T_{max}$ 134239KWPower $P_{max}$ 49294929KWPhase ms-current $I_{max}$ 49294929KWSattery voltage (DC) $U_{max}$ 49294929KWSpeed $n_{max}$ $ $	Electric frequency	f <sub>el,nom</sub>		250		416	Hz	
TorqueT_maxS32S32NmPowerPmax	Power factor	cos(φ)		0.92		0. 89		
Promo< PowerPromoPromPromoPromoPromoPro		Maximal Values (S2, 10	s, cooling as s	pecified belo	ow)			
Phase ms-currentImax	Torque	T <sub>max</sub>		532		532	Nm	
Phase ms-currentImax	Power	P <sub>max</sub>		134		239	kW	
SpeednmaxImageFigurefigureElectric frequencyfe_maxImageImageImageElectric frequencyImageImageNumber of phasesImageImageNumber of pole pairsImageImageMaximal efficiencyImage <td colsp<="" td=""><td>Phase rms-current</td><td></td><td></td><td>492<sup>2)</sup></td><td></td><td>492<sup>2)</sup></td><td>А</td></td>	<td>Phase rms-current</td> <td></td> <td></td> <td>492<sup>2)</sup></td> <td></td> <td>492<sup>2)</sup></td> <td>А</td>	Phase rms-current			492 <sup>2)</sup>		492 <sup>2)</sup>	А
Image: Part of parameter of parameter of parameter of parameter of parameter of parameter of a set of parameter of	Battery voltage (DC)	U <sub>max</sub>				850	V	
Electric frequency   fet.max   Electrical Data   500 mm     Number of phases   Image: Second Secon	Speed	n <sub>max</sub>				6000	rpm	
Number of phasesImage: Second Se	Electric frequency	f <sub>el, max</sub>				500	Hz	
Number of pole pairsImage: Second Secon		Elec	ctrical Data					
Maximal efficiency $\end{tabular}$ $tabu$	Number of phases					3		
T/I constant (IIIINm/AmsU/n constant (AC) at a temperature of 30°Crms:84peak:130.2V/(1000K <sub>a</sub> constant (AC) at a temperature of 30°Crms:0.160peak:0.249V/(rad*sAdditional DataVeight (w/o cables)VVKg*ma*Rotor moment of inertiaVVKg*ma*Protection categoryVVKg*ma*Maximal motor temperatureVVVKg*ma*Allowed ambient temperatureVVCVCooling (medium, flow rate, inlet temperature, pressure)water/glycol 50/50/50/50/50 × 16 l/min, ≤ 45°C, ≤ 0.5 barVFremperature monitoringVVX KTY84-130VCustoms tariff numberVSton 33 x M25 cable glandSton 33 x M25 cable glandSignal connectors	Number of pole pairs					5		
U/n constant (AC) at a temperature of 30°C   rms:   84   peak:   130.2   V/(1000000000000000000000000000000000000	Maximal efficiency					97	%	
Kg constant (AC) at a temperature of 30°C   rms:   0.160   peak:   0.249   V/(rad's)     Additional Data     Weight (w/o cables)   Image: State	T/I constant (I <i<sub>nom)</i<sub>					1.4	Nm/A <sub>rms</sub>	
Additional DataWeight (w/o cables)77kgRotor moment of inertia0.077kg*m²Protection categoryIP6K9K³*********************************	<i>U/n</i> constant (AC) at a temperature of 30°C		rms:	84	peak:	130.2	V/(1000rpm	
Weight (w/o cables)kgRotor moment of inertia0.0077kg*m²Protection categoryIP6K9K³'CMaximal motor temperature0'CAllowed ambient temperature20	$K_{\rm e}$ constant (AC) at a temperature of 30°C		rms:	0.160	peak:	0.249	V/(rad*s-1)	
Rotor moment of inertia0.077kg*m²Protection categoryIP6K9K³IP6K9K³Maximal motor temperature140°CAllowed ambient temperature-20 454°CCooling (medium, flow rate, inlet temperature, pressure)water/glycol 50/50, 16 l/min, ≤ 45°C, ≤ 0.5 bar°CFemperature monitoring1 x KTY84-130°CType approvalCE, EN 60034°CCustoms tariff number8501 5381°CPower terminals3 x M25 cable gland°CSignal connectorsM16, 10 Pin°C		Addi	itional Data					
Protection categoryIP6K9K3Maximal motor temperature140°CAllowed ambient temperature-20 451°CCooling (medium, flow rate, inlet temperature, pressure)water/glycol 50/50, 16 l/min, ≤ 45°C, ≤ 0.5 barIFemperature monitoring1 x KTY84-130Type approvalCE, EN 60034Customs tariff number8501 5381Power terminals3 x M25 cable glandSignal connectorsM16, 10 Pin	Weight (w/o cables)			77				
Maximal motor temperature140°CAllowed ambient temperature-20 454°CCooling (medium, flow rate, inlet temperature, pressure)water/glycol 50/50, 16 l/min, ≤ 45°C, ≤ 0.5 barFemperature monitoring1 x KTY84-130Type approvalCE, EN 60034Customs tariff number8501 5381Power terminals3 x M25 cable glandSignal connectorsM16, 10 Pin	Rotor moment of inertia			0.077				
Allowed ambient temperature-20 454°CCooling (medium, flow rate, inlet temperature, pressure)water/glycol 50/50, 16 l/min, ≤ 45°C, ≤ 0.5 barIFemperature monitoring1 x KTY84-130IType approvalCE, EN 60034ICustoms tariff number8501 5381ICover terminals3 x M25 cable glandSignal connectorsM16, 10 PinI	Protection category			IP6K9K <sup>3)</sup>				
Cooling (medium, flow rate, inlet temperature, pressure)water/glycol 50/50, 16 l/min, < 45°C, < 0.5 barFemperature monitoring1 x KTY84-130Type approvalCE, EN 60034Customs tariff number8501 5381ConnectorsPower terminals3 x M25 cable glandSignal connectorsM16, 10 Pin	Maximal motor temperature			140				
Temperature monitoring1 x KTY84-130Type approvalCE, EN 60034Customs tariff number8501 5381ConnectorsPower terminals3 x M25 cable glandSignal connectorsM16, 10 Pin	Allowed ambient temperature			-20 454)				
Type approval   CE, EN 60034     Customs tariff number   8501 5381     Connectors   Signal connectors	Cooling (medium, flow rate, inlet temperature, pressure)		water	water/glycol 50/50, 16 l/min, ≤ 45°C, ≤ 0.5 bar				
Customs tariff number 8501 5381   Connectors   Power terminals 3 x M25 cable gland   Signal connectors M16, 10 Pin	Temperature monitoring			1 x KTY84-130				
Connectors   Power terminals 3 x M25 cable gland   Signal connectors M16, 10 Pin	Type approval			CE, EN 60034				
Power terminals 3 x M25 cable gland   Signal connectors M16, 10 Pin	Customs tariff number				8	501 5381		
Signal connectors M16, 10 Pin		Co	onnectors					
	Power terminals			3 x M25 cable gland				
Cooling connectors 2 x ¾" / 19 mm	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

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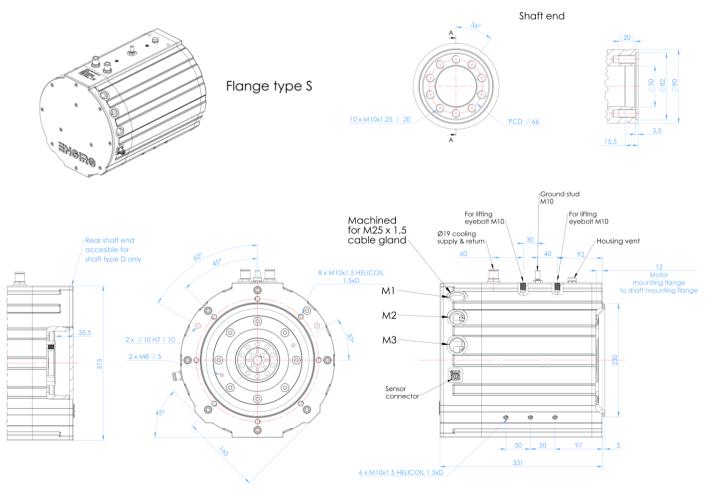
#### Table Shaft and Flange Combinations



Shaft and Flange Combinations For 260W-10020-ABC		Flange (A)		
		<b>S</b> (Standard)		
Shaft (B)	<b>F</b> (Hollow shaft with two screw flanges)	۰		
Position Sensor (C)		R: Resolver		

Other individual combinations are also possible on request.



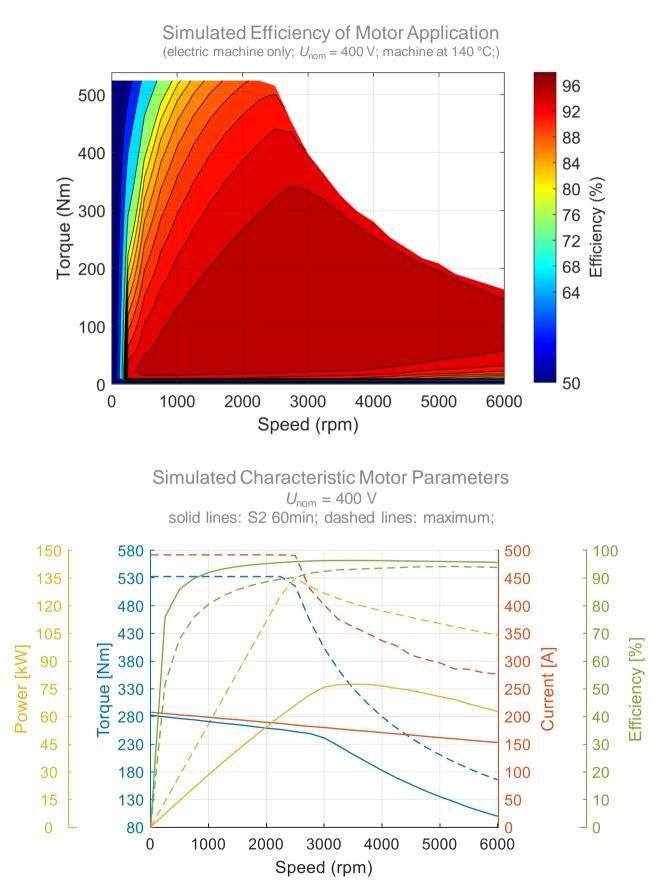


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## Characteristics Machine



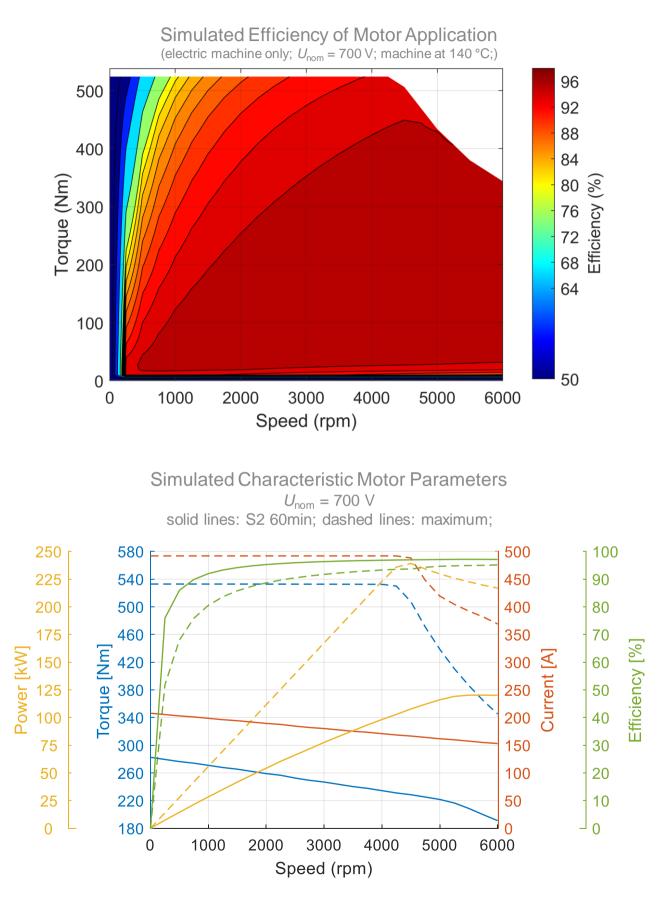


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## Characteristics Machine





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