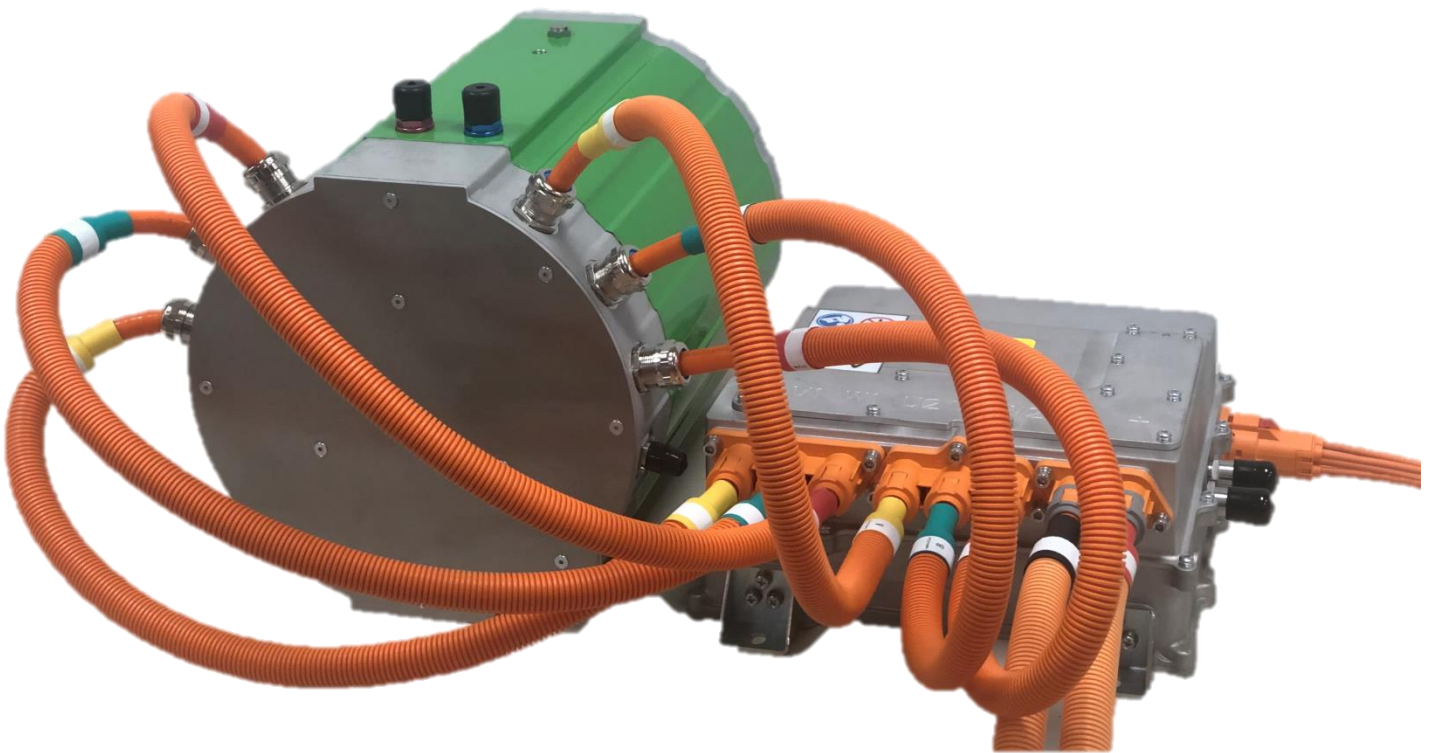


# 260W-13202-SFR Set

water-cooled drive set with 115 kW continuous power



## KEY FEATURES

- permanent magnet synchronous machine
- Delivery with 6 phase motor controller
- water-cooled
- high peak power for motor applications
- convincing cost-benefit ratio
- recommended voltage range from 300V to 450V
- Double shaft end with screw flange possible

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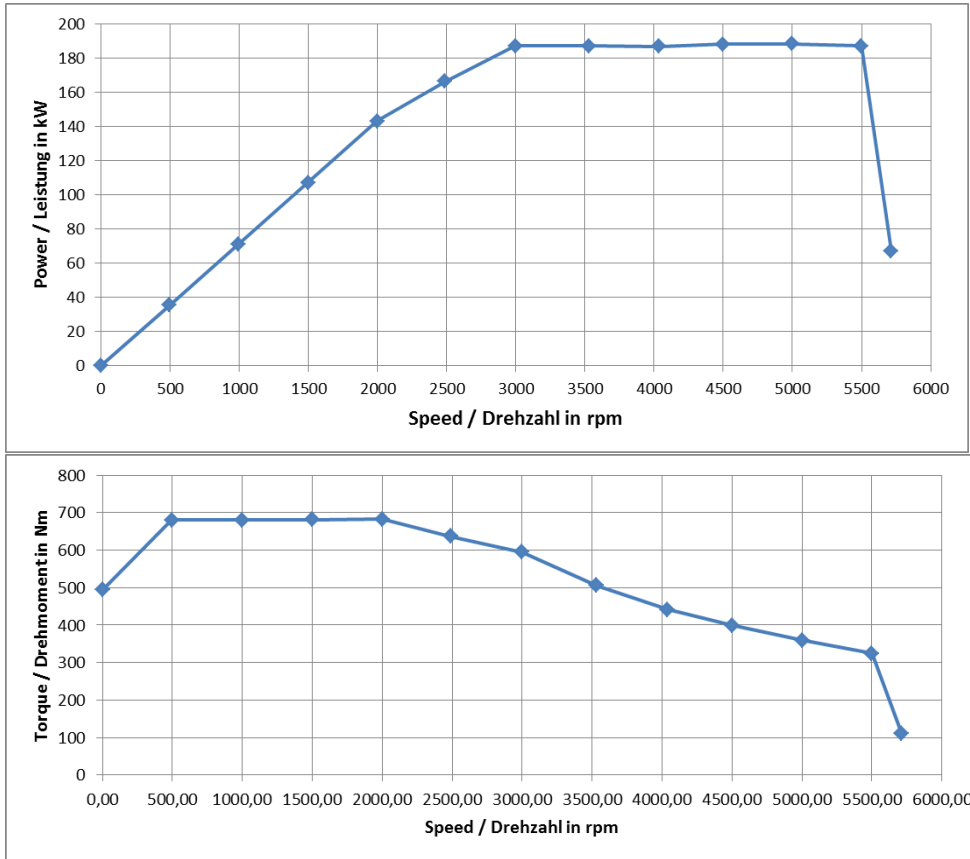
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Nominal Operation (S1, cooling as specified below)				
Torque	$T_{nom}$		282	Nm
Power	$P_{nom}$		115	kW
Speed	$n_{nom}$		3900	rpm
Phase rms-current	$I_{nom}$		154	A
Battery voltage (DC)	$U_{nom}$		380	V
Electric frequency	$f_{el,nom}$		325	Hz
Maximal Values (S2, 10s, cooling as specified below)				
Torque	$T_{max}$		683	Nm
Power	$P_{max}$		190	kW
Phase rms-current	$I_{max}$		423	A
Battery voltage (DC)	$U_{max}$		450	V
Speed	$n_{max}$		5750	rpm
Electric frequency	$f_{el,max}$		500	Hz
Electrical Data				
Minimal Battery voltage (DC)	$U_{min}$		190	V
Number of phases			6	
Number of pole pairs			5	
Maximal efficiency			>96	%
$T/I$ constant ( $I < I_{nom}$ )			1.83	Nm/A <sub>rms</sub>
$U/n$ constant (AC)		rms: 54.6	peak: 77.2	V/(1000rpm)
$K_e$ constant (AC)		rms: 0.104	peak: 0.147	V/(rad*s <sup>-1</sup> )
Additional Data				
Weight complete set (w/o cables)			106	kg
Rotor moment of inertia			0.095	kg*m <sup>2</sup>
Protection category	Motor:	IP69k	Inverter:	IP67
Maximal motor temperature			140	°C
Allowed ambient temperature			-20 ... 45 <sup>1)</sup>	°C
Cooling (medium, flow rate, inlet temperature, pressure)			water/glycol 50/50, ≥ 12 l/min, ≤ 45°C, ≤ 0.5 bar	
Cooling connectors	Motor:	2 x ¾" / 19 mm	Inverter:	2x 20mm
Temperature monitoring			2 x KTY84-130	
Type approval			CE, EN 60034, R85 certificate	
Customs tariff number	motor	8501 5381	Inverter	8504 4088 90
Communication and Control Modes				
Communication			J1939 compatible CAN-Bus, 500 kbps	
Control modes			Speed control, torque control	
For manuals, CAD models and detailed information on protocols and connectors please contact ENGIRO <a href="https://www.engiro.de/en/kontakt">https://www.engiro.de/en/kontakt</a>				

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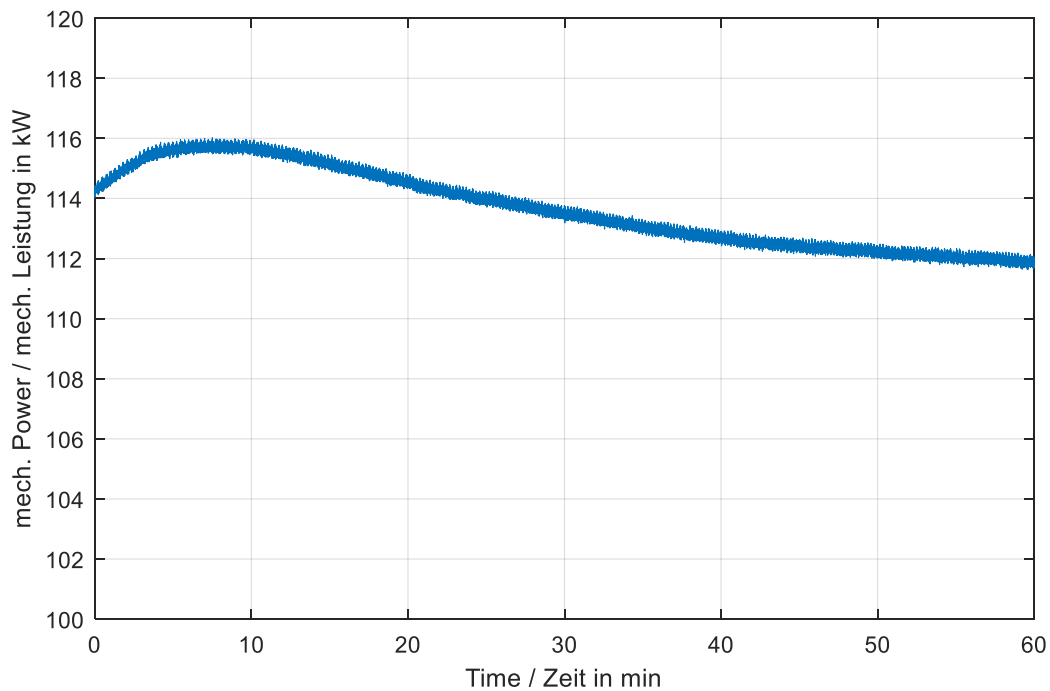
Measured peak power and torque curve

$U_{dc} = 380\text{ V}$



Measured continuous power curve

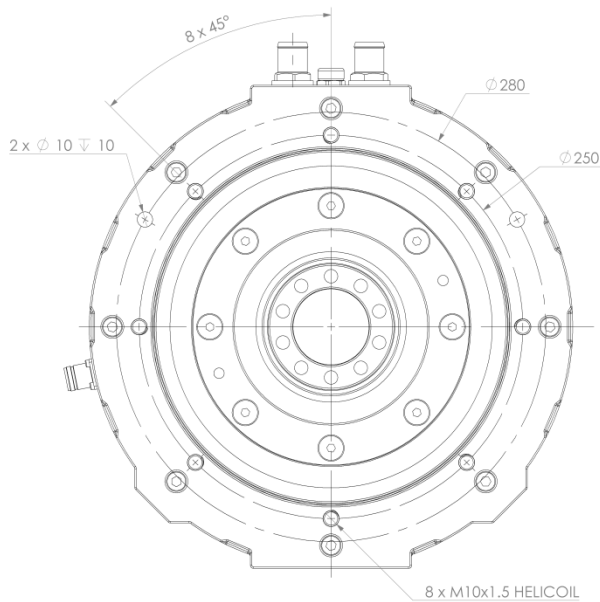
$U_{dc} = 380\text{ V}$  ,  $n = 3900\text{ rpm}$  ,  $T_{inlet} = 45^\circ\text{C}$



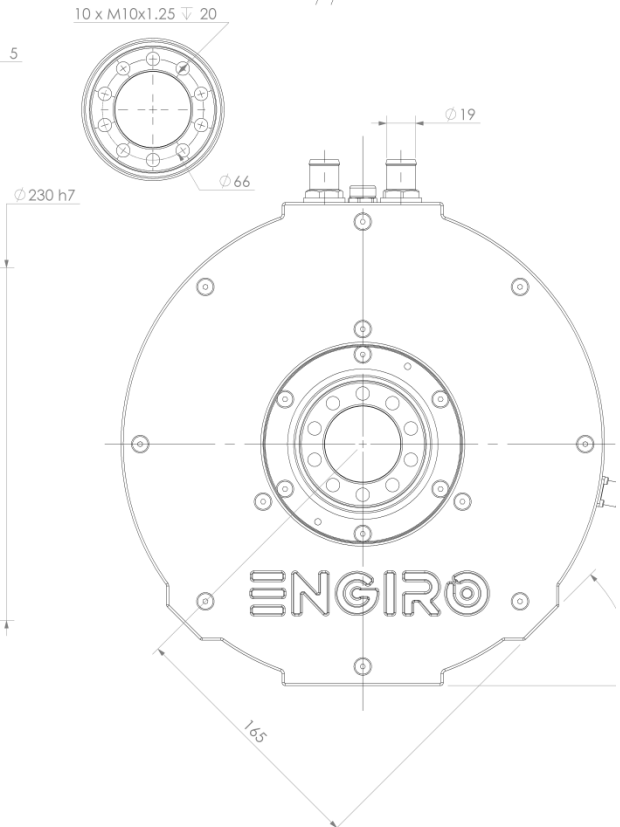
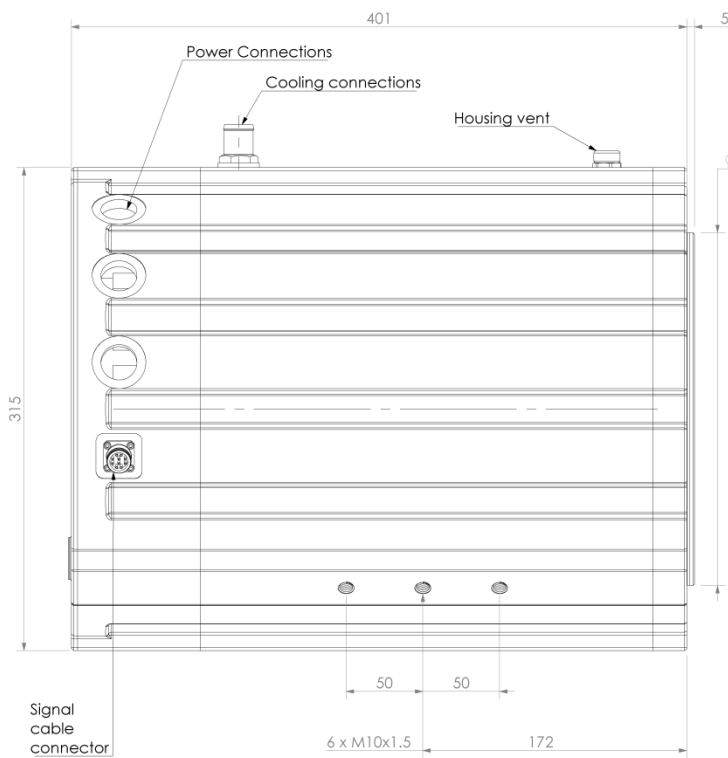
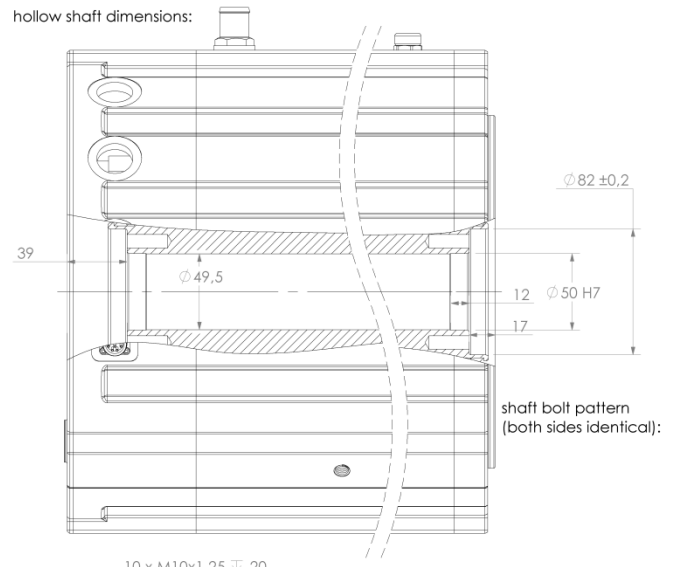
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## Available Type Variants

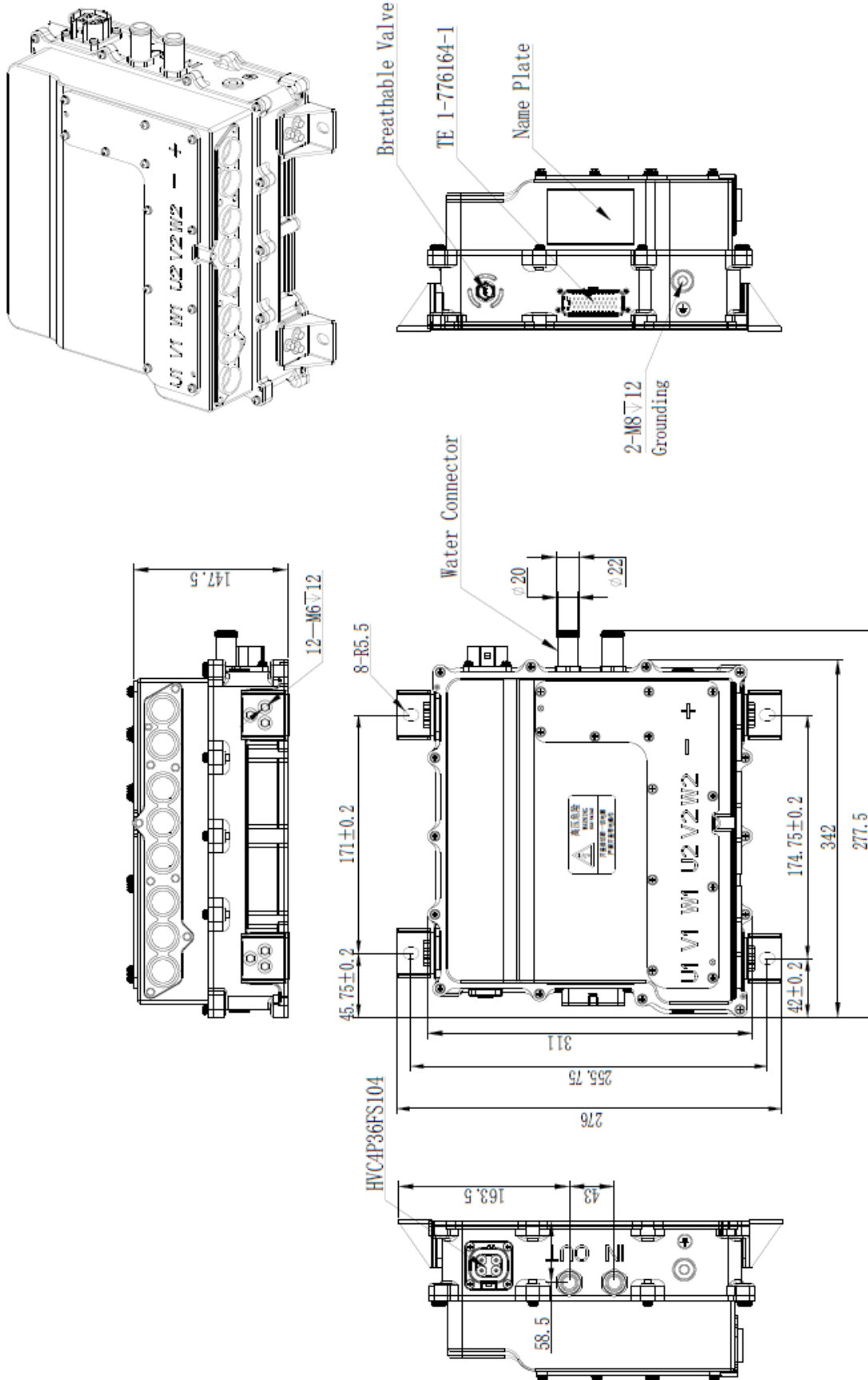
type number	A: flange	B: shaft	C: position sensor
260W-13202-	S: standard, 1 shaft end accessible	F: hollow shaft with two screw flanges	R: resolver
	D: both shaft ends accessible		



hollow shaft dimensions:



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Description	Art. Nr.	Remark
DC port 2 x 70mm <sup>2</sup> cable with connector, 10000 mm	1368	Different lengths upon request
AC port 3 x 50mm <sup>2</sup> cable with connector UVW 850 mm	1374	Different lengths upon request
AC port 3 x 50mm <sup>2</sup> cable with connector ABC 850 mm	1365	Different lengths upon request
HVDC port 4 x 4mm <sup>2</sup> cable with connector 500 mm	1369	Different lengths upon request
Data cable including motor and inverter connectors + CAN interface – 2m	1418	Different lengths upon request
Mechanical flanges	Available on customer specifications upon request	
Shaft adapters	Available on customer specifications upon request	

For further information, manuals, CAD models and detailed information on protocols and connectors please contact ENGIRO  
<https://www.engiro.de/en/kontakt>