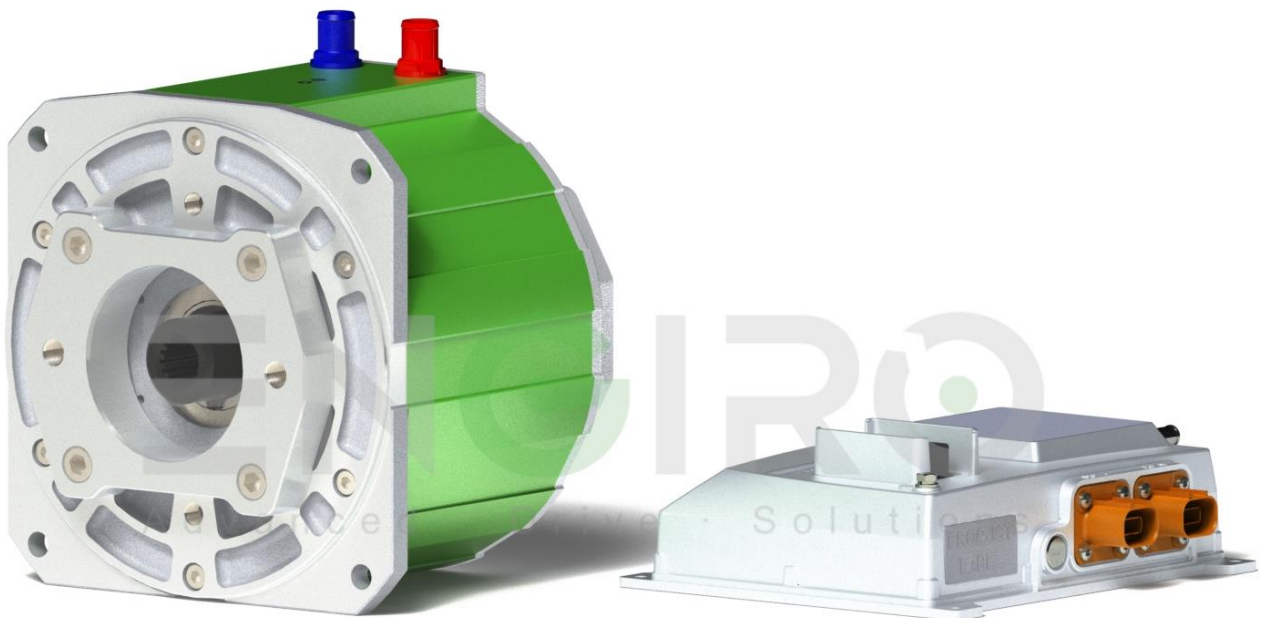


205W-04191-CDR 800V Hydraulic Set

14 kW drive set for hydraulic applications

Art.-No.: 1741



KEY FEATURES

- Interior permanent magnet synchronous machine
- 800V 3-phase motor controller
- Water-cooled
- ANSI B92.1 15 teeth splined shaft for hydraulics application
- SAE B flange

Section	Page
Operating Range	3
Additional Data	4
Certifications	5
Performance Plots	6
Technical Drawings	7
Delivery Content	9

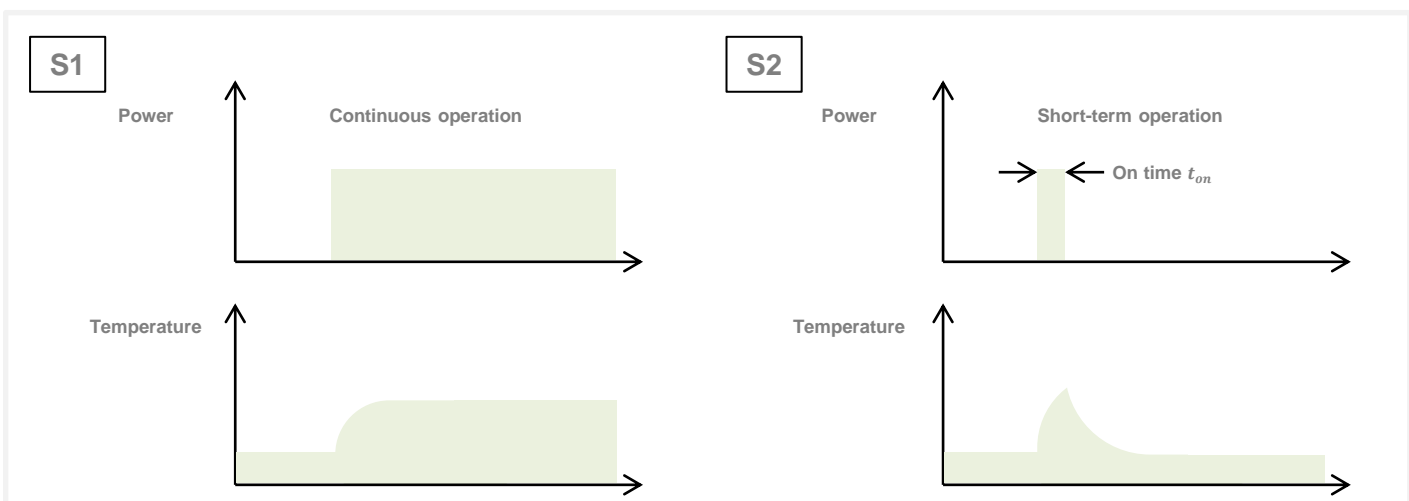
Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice and are intended for general information only. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names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

Characteristic Operation Points³⁾ (cooling as specified on next page)

		S1	S2	S2	
Feasible operation time	t_{on}	30 min	180 sec	60 sec	
Torque	T	44	66	82	Nm
Power	P	14	19	23	kW
Phase rms-current (AC)	I_{rms}	25	39	53	A
Battery current (DC)	I_{DC}	22	29	33	A
Battery voltage (DC)	U_{DC}	700	700	700	V
Speed	n	3100	2700	2360	rpm
Electric frequency	f_{el}	207	180	157	Hz
Set Efficiency	η_{tot}	94	91	87	%

Maximum Operating Range

		Min.	Nom.	Max.	
Torque	T_{max}	-	44	82	Nm
Power	P_{max}	-	14	23	kW
Phase rms-current	$I_{rms,max}$	-	22	33	A
Battery current (DC)	$I_{DC,max}$	-	25	53 ²⁾	A
Battery voltage (DC)	U_{max}	150	700	850 ¹⁾	V
Speed	n_{max}	-	3100	8000	rpm
Electric frequency	$f_{el,max}$	-	207	533	Hz



- 1) Non-operational overvoltage limit
- 2) Peak rating for max. 60 seconds on time
- 3) Defined Range only valid for a power factor of 1 at DC input

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.

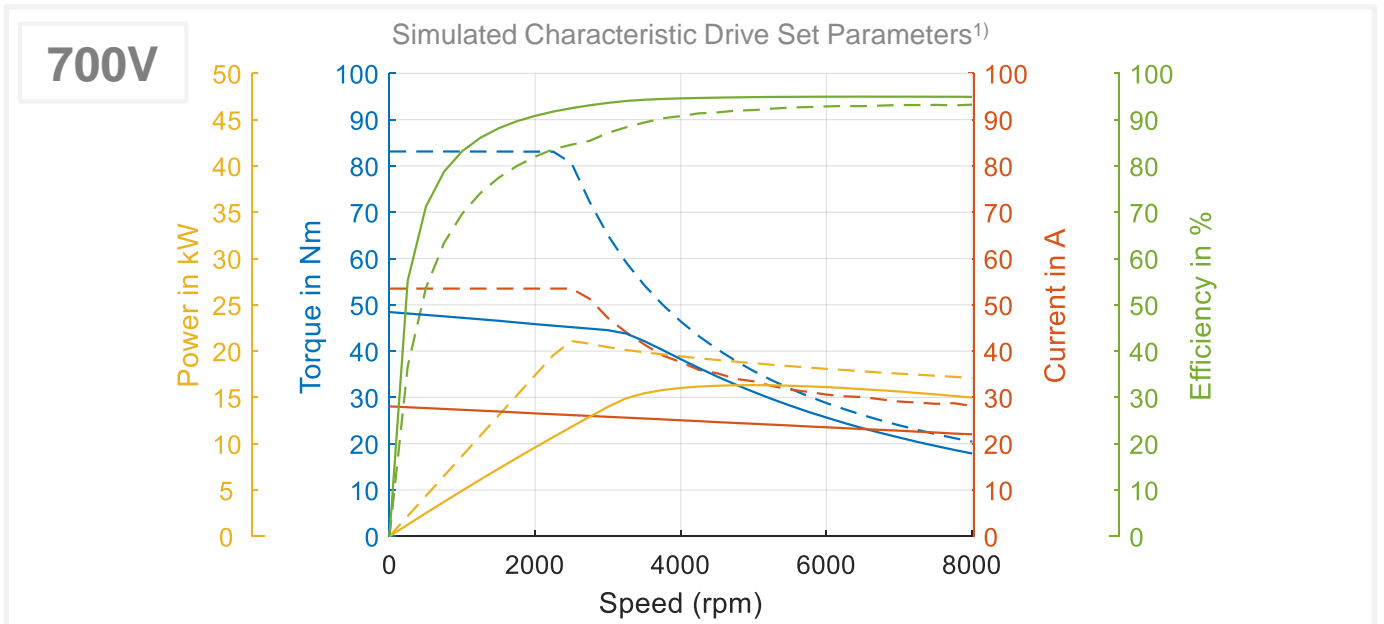
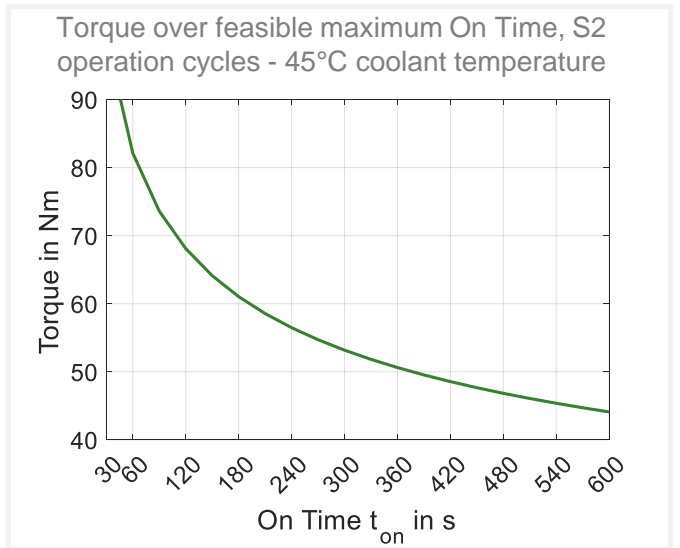
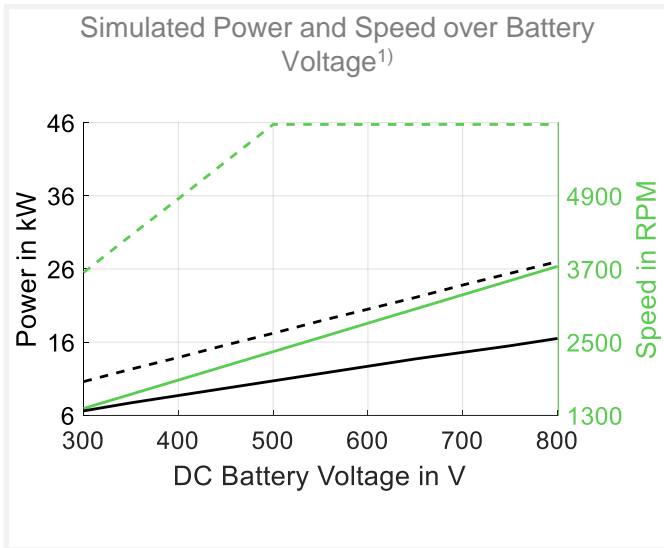
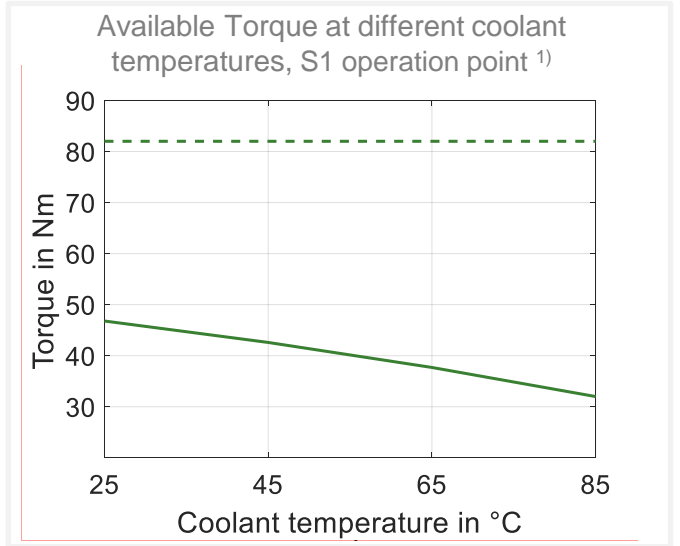
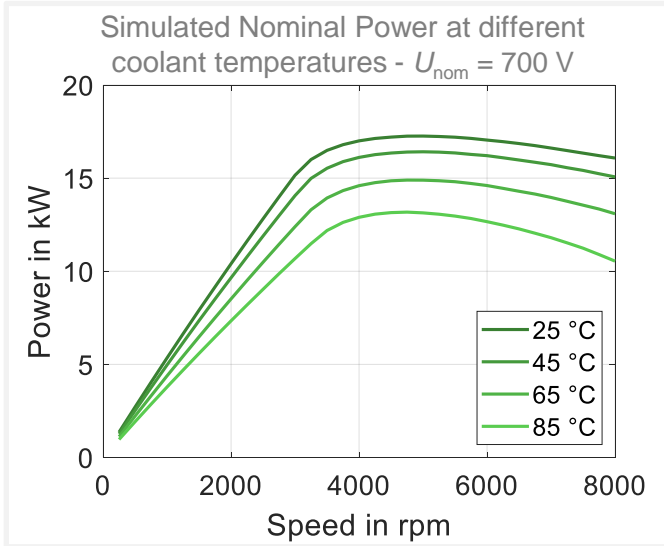
Additional Data					
		Motor	Inverter		
Weight (w/o cables)		27	2.3	kg	
Rotor moment of inertia		0.0064	-	kg*m ²	
Allowed range of ambient temperature		-20 ... +45	-10...+40	°C	
Cooling	Advised medium (OAT Coolants)	water/glycol - 50/50 ▪ TL 774-D/F ▪ VIN 878389 ▪ MAN 324 SNF ▪ MTL 5048			
	Flow rate	> 6	6-10	l/min	
	Inlet temperature	≤ 60 ¹⁾	≤ 70	°C	
	Pressure drop	0.1 - 0.5	0.1 - 0.25	bar	
	Maximum pressure	2	1	bar	
	Cooling channel volume	0.63	0.04	l	
DC link capacitance		-	120	µF	
Temperature monitoring		1 x KTY84-130	Internal		
Rotation direction		freely controllable via CAN-Bus			
Ports					
Power terminals		2-Phase HVDC, 3-Phase AC			
Signal connectors		CMC, 48-Pin			
Cooling connectors		inner Ø 15 mm, outer Ø 19 mm			
Control and Communication					
Type		I/O Slave, Motor Control			
		Speed/Torque Control freely controllable via interface			
CAN Bus	Symbol/Baud rate	1 Mbits/s (default), 500 kbits/s, 250 kbits/s, 125 kbits/s, 100 bits/s and 50 kbits/s.			
	Technology	CAN 2.0, J1939 like			
Torque Ramp		Safety limits can be set in inverter by ENGIRO.			
Speed Ramp		Safety limits can be set in inverter by ENGIRO.			

1) Derating for >45 °C

Certifications			
	Motor	Inverter	
Type approval	CE, EN 60034	-	
Environmental	ISO 9227	-	
Protection grade	ISO 20653 IP6k9k ¹⁾	ISO 20653 IP6k9k ¹⁾	
Vibrations	ISO 16750-3	EN 60068-2-27 (shock) ²⁾ , EN 60068-2-32 (drop) ²⁾	
EMC	-	Designed to meet: UN ECE R10, DIRECTIVE 2009/64/EC	
Functional safety	-	Designed to meet: ISO 6469, ISO16230 UNECE Reg 100	
Custom tariff number	8501 5230	8504 4088	

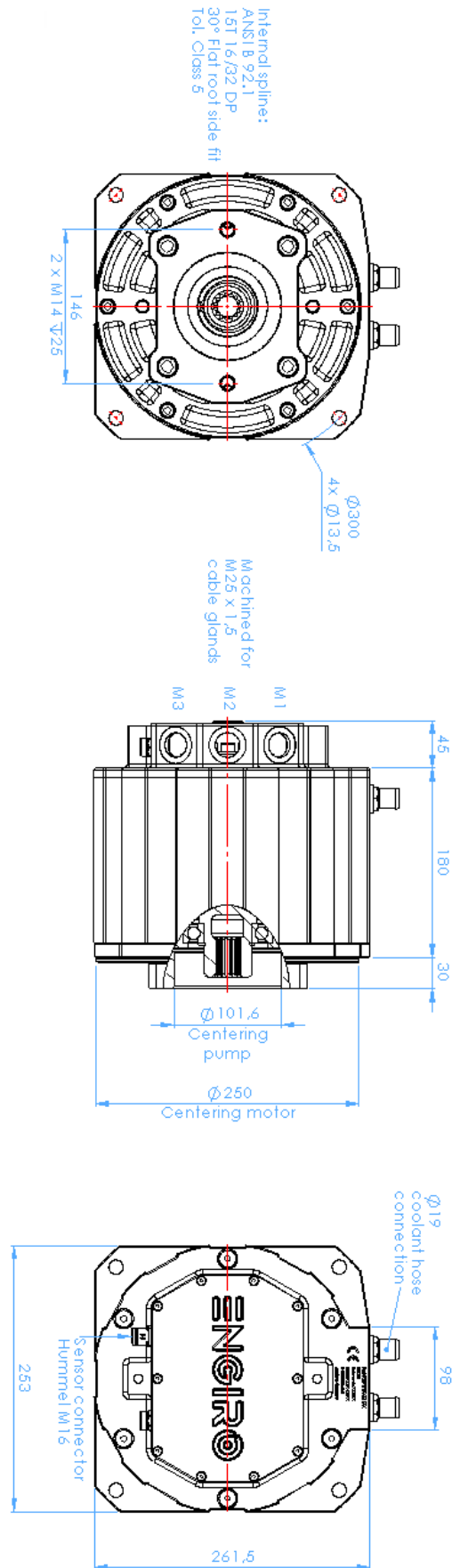
- 1) Only valid if the machines is installed with suitable cable glands and an appropriate shaft sealing.
- 2) Refer to ENGIRO for exact specifications

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.

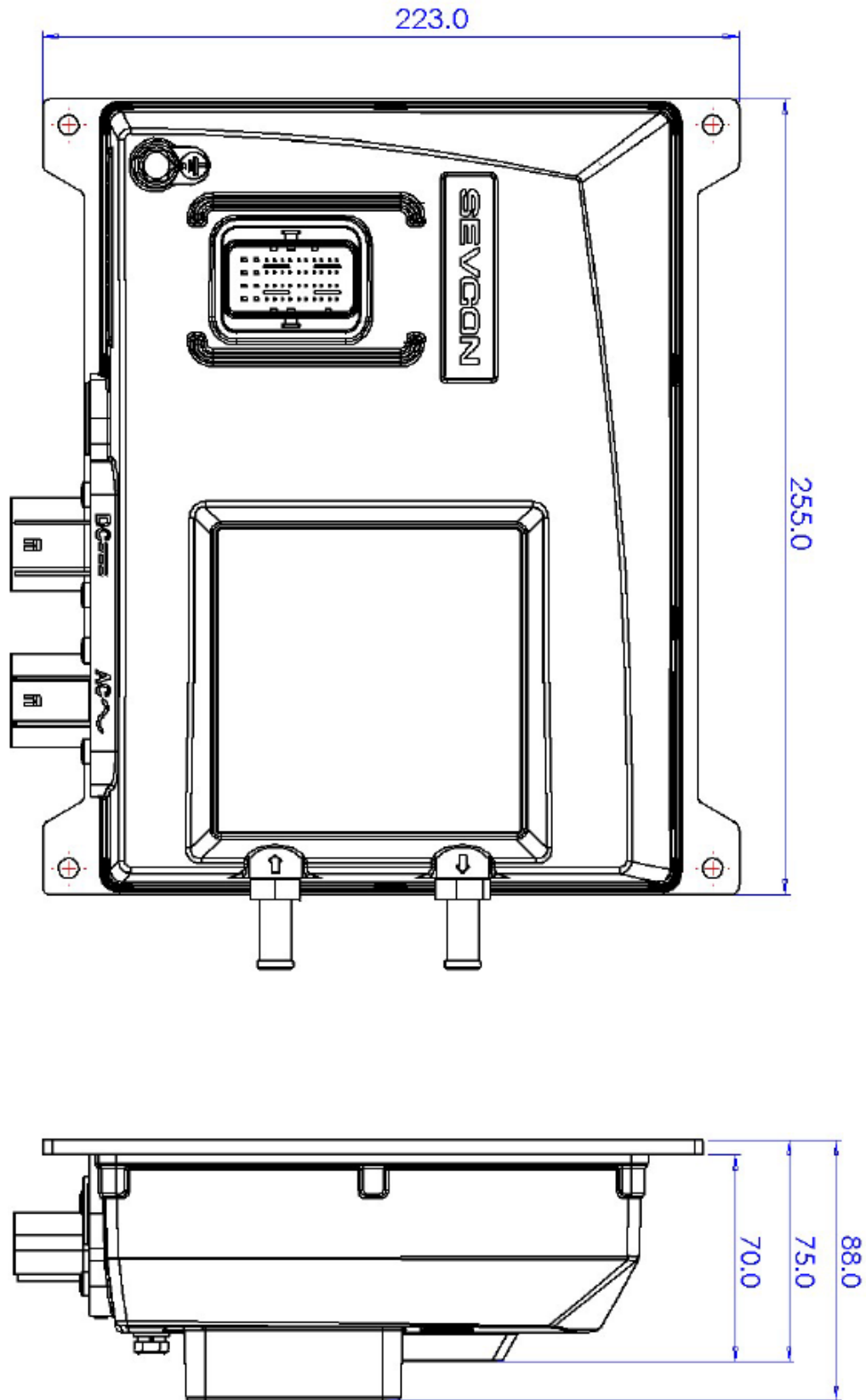


1) solid lines: continuous; dashed lines: maximum;

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.



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.



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.

205-04191-CDR 800V Set					
Item description				Article number	
	A: flange	B: shaft	C: position sensor	Components	Set
Available Motor Variants	C: flange for fan without insert	D: hollow shaft with internal splines ANSI B 92.1 with 15 teeth	R: resolver	205W_04191_CDR	1741
HVLP Inverter water				1109	included in set
Cables	HVLP DC Kabel, 2 m			1637	
	HVLP AC Kabel, 2 m			1636	
	HVLP 48P connector kit			1638	
	Resolver cable for HVLP Inverter water, length: 2m			1270	
1x Cable gland M20 shielded Pflitsch blueglobe IP6k9k				1739	
1x Pflitsch thread adapter M20/M25				1740	
2x Pflitsch dummy plug M25 with O-Ring				1646	

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.