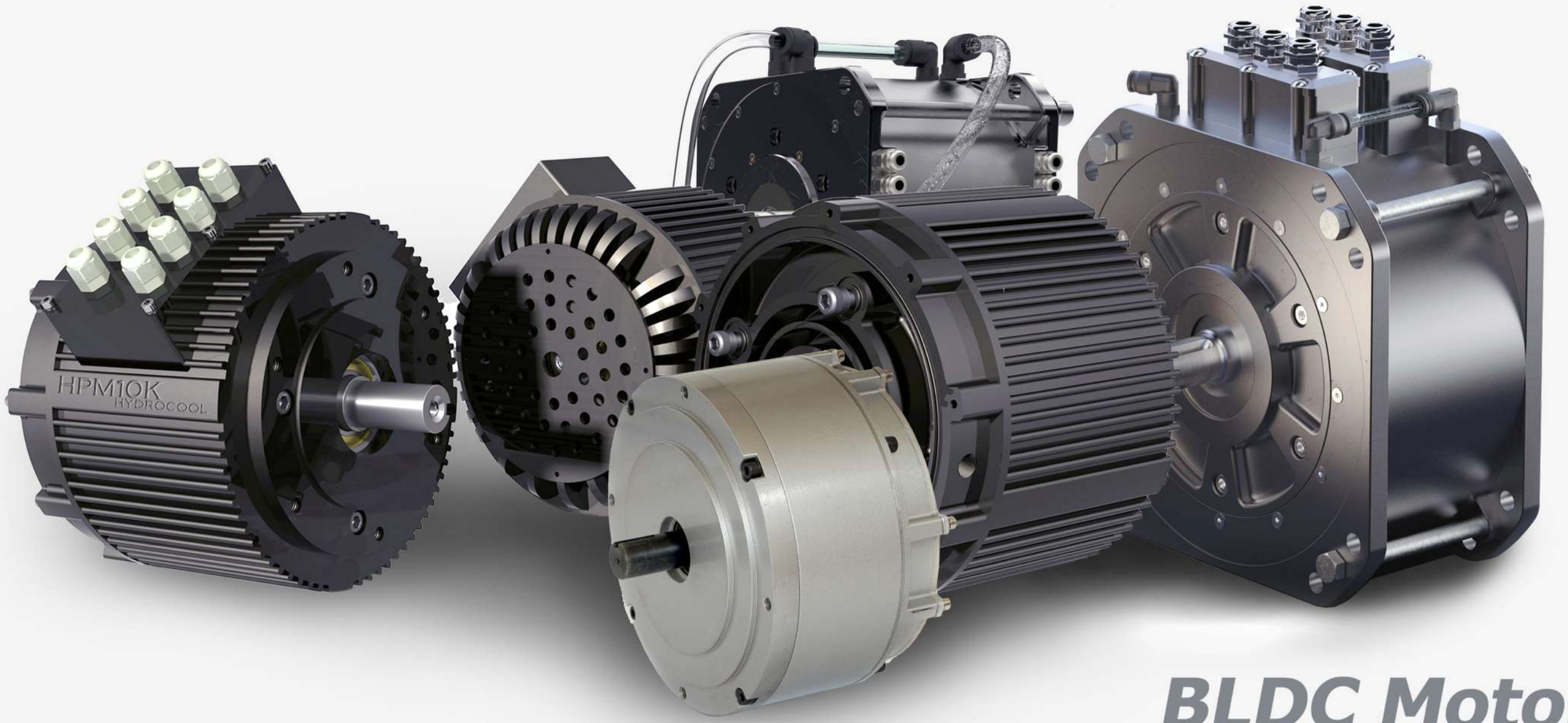


BLDC Motor

High Efficiency + Very Compact

1.5/3/5/10/15/20KW

SBC040001-A/0 Date:2024-4-3

Golden Motor

We are leading manufacturer of general-purpose brushless dc (BLDC) motors with power range from 200W to 20KW, and the voltage range from 24V to 120V DC. It has been widely used for many applications, eg., auto industry, battery powered bikes, scooters, electric cars, forklifts, golf buggies, boats etc. It has better performances than other traditional dc motors.

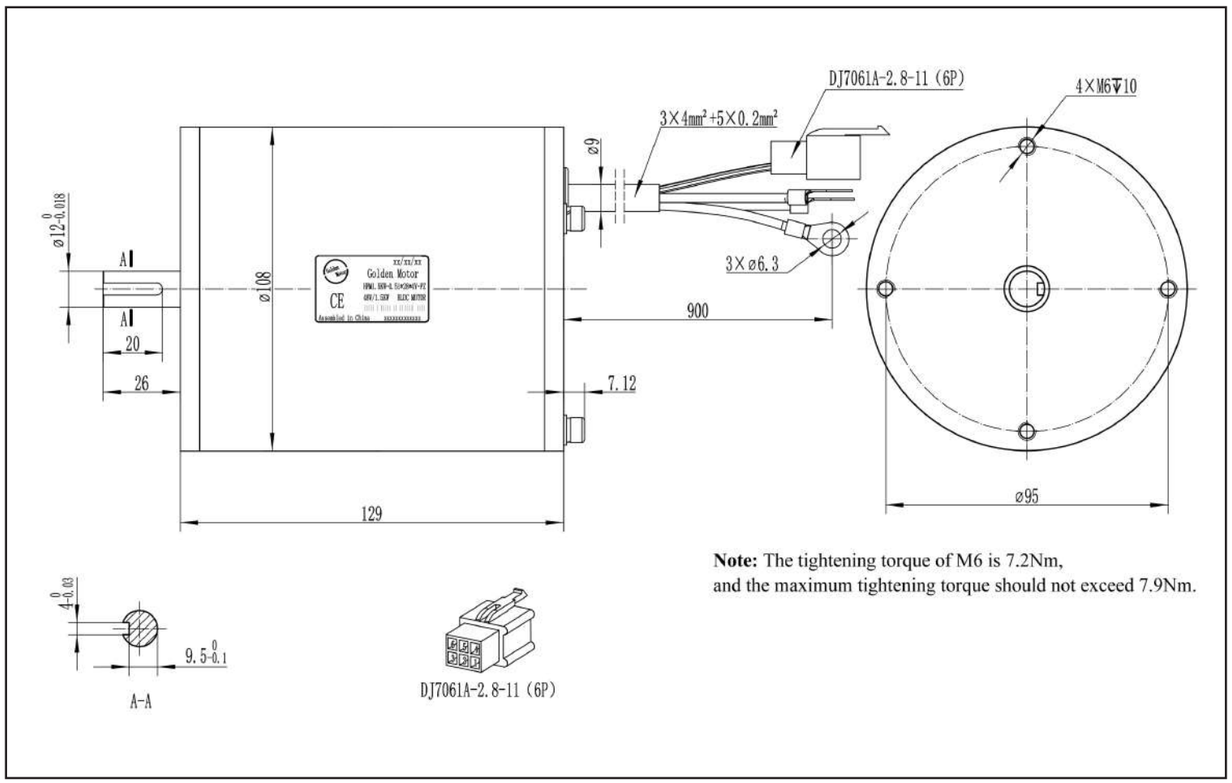
GoldenMotor BLDC High Power Motor Parameters

	HPM1.5KW			HPM03KW				HPM05KW				HPM10KW				HPM15KW			HPM20KW		
																					
Rated Power(W)	1500			3000				5000				10000				15000			20000		
Voltage(V)	48	60	72	48	60	72	96	48	72	96	120	48	72	96	120	72	96	120	72	96	120
Rated Current(A)	40	/	/	75	60	55	40	125	85	60	48	245	165	125	95	245	185	/	325	245	196
Max Phase Current(A)	120	/	/	240	220	220	100	300	260	200	160	500	500	400	300	800	600	/	1000	700	500
Max Current Duration(s)	15	/	/	10	10	10	10	10	10	10	10	10	10	10	10	10	10	/	10	10	10
Rated Speed(rpm)	4000	/	/	3600	3600	3600	3400	3700	3700	3700	3700	3700	3700	3700	3700	3500	3500	/	3200	3200	3200
Rated Torque(N.m)	3.5	/	/	8	8	8	8	13	13	13	13	26	26	26	26	40	40	/	55	55	55
Peak Torque(N.m)	15	/	/	25	25	25	25	45	45	45	45	85	85	85	85	100	100	/	160	160	160
Interphase Resistance(mΩ)	29	/	/	13.8	23	24.5	53	7.3	12	28	35	3.8	5.3	10.5	15.2	5.3	8	/	3.2	5.5	8.8
Inductance(μH)	87	/	/	118	186	280	480	81	190	335	435	48	104	182	240	48	85	/	75	125	155
Hall Electrical Angle	120°			120°				120°				120°				120°			120°		
Phase Angle Offset	-120			-120				-120				-120				-120			-120		
Number of Pole-Pairs	5			4				4				4				4			4		
Insulation Grade	H			H				H				H				H			H		
Protection Levels	IP54			IP65				IP65				IP65				IP65			IP65		
Magnetic Field Type	Radial			Axial				Axial				Axial				Axial			Axial		
Cooling Type	Natural			Fan/Liquid				Fan/Liquid				Fan/Liquid				Liquid			Liquid		
Diameter (mm)	108			182				206				206				230			283		
Height(mm)	129			107(Fan) / 110(Liquid)				127(Fan) / 127(Liquid)				168(Fan) / 166(Liquid)				162			255		
Shaft Diameter(mm)	12			20				22				25				30			30		
Net Weight(kg)	4			7.6				11				17				25			39		
Package Size(mm)	4PCS in 380x310x280			380×310×280				380×310×280				380×310×310				350×330×450			350×330×450		

Working environment temperature: -20℃ ~55℃
Relative humidity: ≤90% (at 25℃)
Altitude :<6000 meters

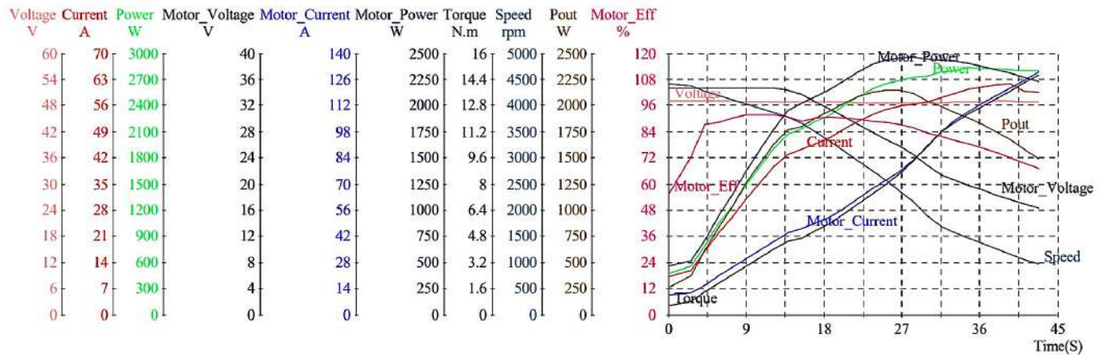
HPM1.5KW

Specification



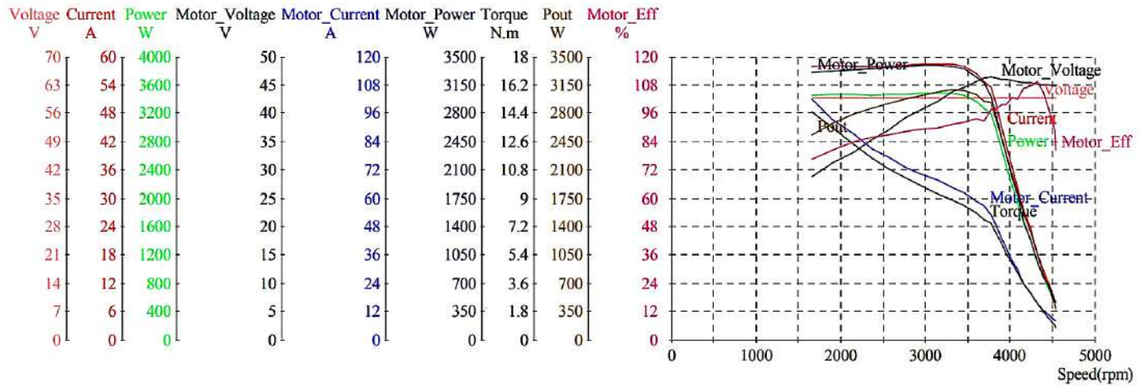
Note: The tightening torque of M6 is 7.2Nm,
and the maximum tightening torque should not exceed 7.9Nm.

1.5KW 48V



State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	49.09	10.07	475.6	34.66	10.85	470.2	0.722	369.19	0.56	4425.6	259.5	98.9	55.2	54.6	0.000
Eff_max	48.80	39.61	1911	34.65	39.52	1780	0.751	322.34	4.02	3870.3	1630	93.2	91.5	85.3	12.26
Pout_max	48.64	55.71	2691	25.76	76.84	2457	0.716	201.99	8.65	2370.0	2146	91.3	87.4	79.8	26.72
Torque_max	48.73	59.42	2793	16.27	129.8	2232	0.610	162.05	14.65	973.2	1493	79.9	66.9	53.5	42.79
End	48.73	59.42	2793	16.27	129.8	2232	0.610	162.05	14.65	973.2	1493	79.9	66.9	53.5	42.79

1.5KW 60V

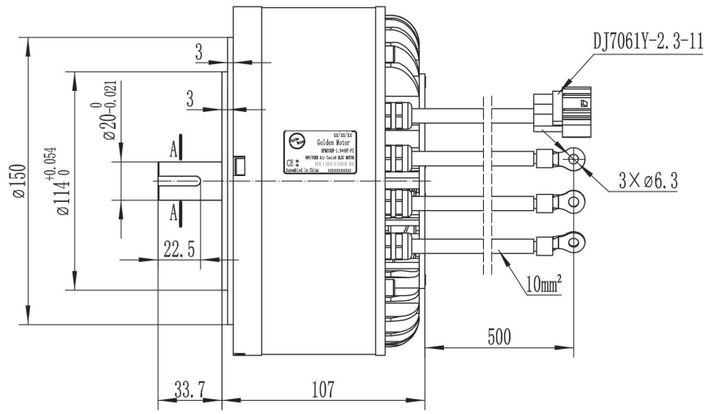


State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	59.74	7.858	463.3	44.80	7.922	479.1	0.779	378.78	0.81	4540.3	385.0	103.4	80.4	83.1	0.000
Eff_max	59.74	18.30	1091	45.13	15.53	970.2	0.799	360.39	2.34	4324.2	1059	88.9	109.2	97.1	4.259
Pout_max	59.75	58.29	3478	43.72	64.76	3385	0.690	275.20	8.90	3310.3	3085	97.3	91.1	88.7	13.99
Torque_max	59.82	57.99	3455	28.74	102.0	3300	0.650	274.21	14.52	1661.1	2525	95.5	76.5	73.1	20.48
End	59.82	57.99	3455	28.74	102.0	3300	0.650	274.21	14.52	1661.1	2525	95.5	76.5	73.1	20.48

HPM03KW

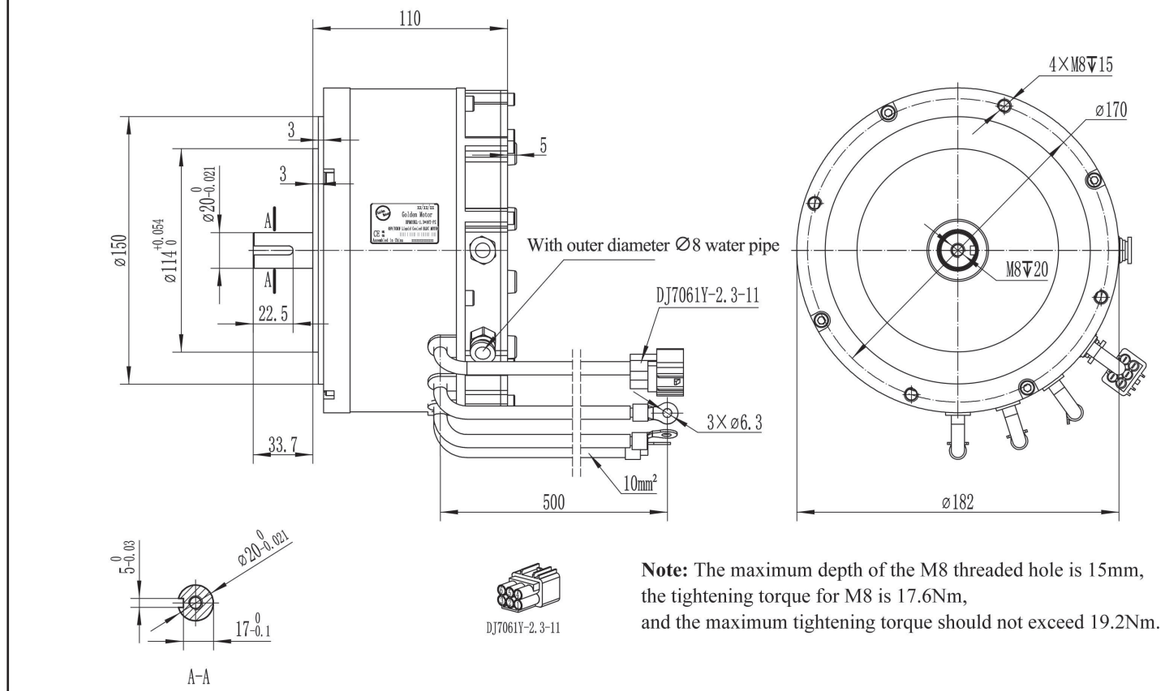
Specification

Fan Cooling



Note: The maximum depth of the M8 threaded hole is 15mm,
the tightening torque for M8 is 17.6Nm,
and the maximum tightening torque should not exceed 19.2Nm.

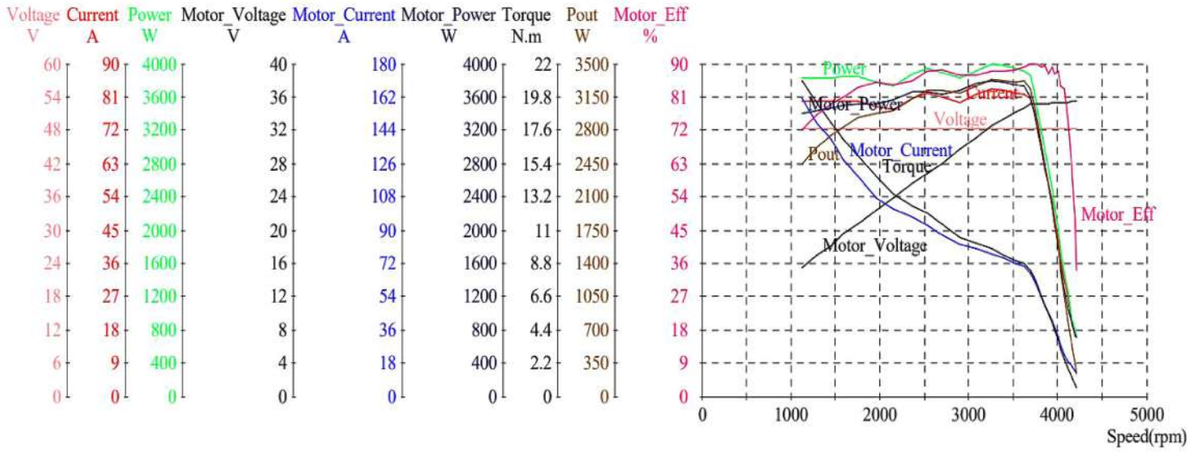
Liquid Cooling



Note: The maximum depth of the M8 threaded hole is 15mm,
the tightening torque for M8 is 17.6Nm,
and the maximum tightening torque should not exceed 19.2Nm.

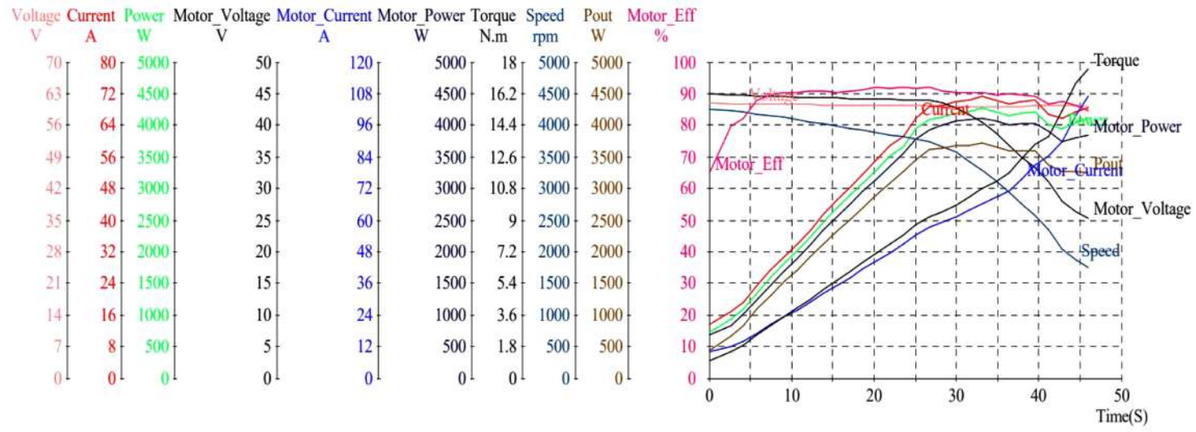
HPM03KW Specification

3KW 48V



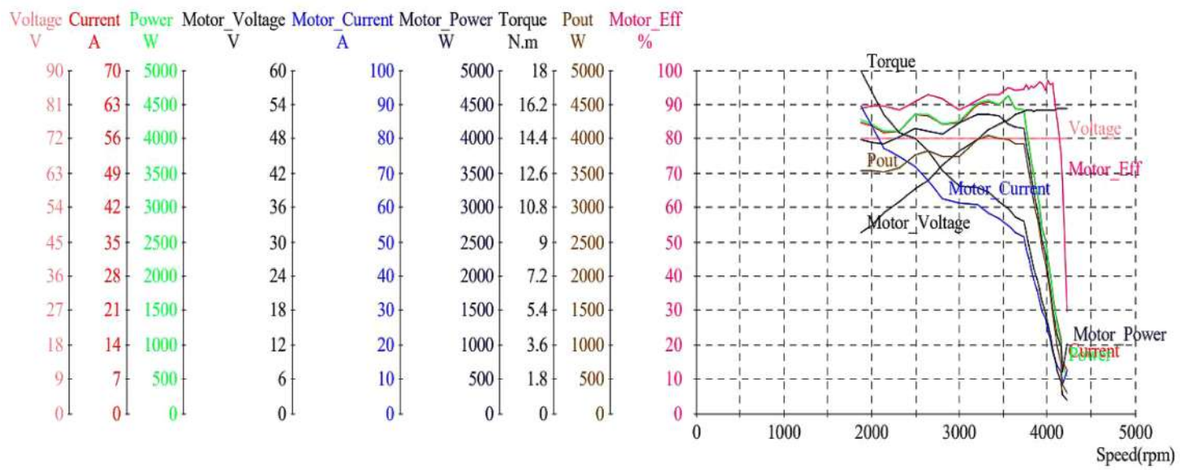
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	48.32	16.02	735.8	35.56	13.10	706.9	0.876	281.01	0.55	4215.4	242.7	96.1	34.3	33.0	0.000
Eff_max	48.26	81.56	3904	34.62	70.37	3729	0.883	240.54	8.77	3621.8	3326	95.5	89.2	85.2	13.18
Pout_max	48.29	83.28	3999	32.49	77.28	3796	0.872	218.69	9.80	3255.2	3340	94.9	88.0	83.5	15.62
Torque_max	48.31	79.68	3836	15.55	161.0	3395	0.783	78.36	20.83	1124.1	2452	88.5	72.2	63.9	25.35
End	48.31	79.68	3836	15.55	161.0	3395	0.783	78.36	20.83	1124.1	2452	88.5	72.2	63.9	25.35

3KW 60V



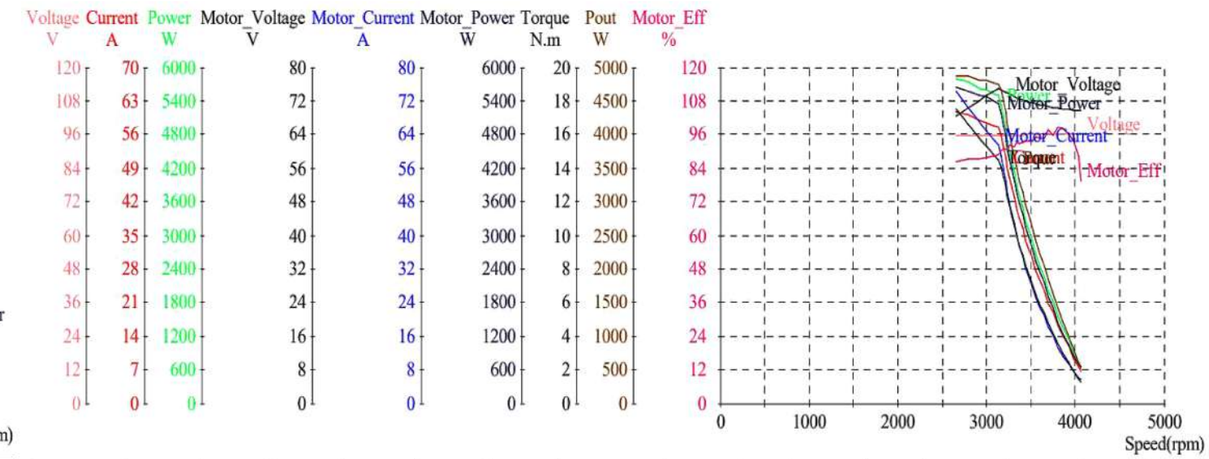
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	60.85	13.70	725.2	44.88	10.29	694.3	0.869	284.10	1.01	4261.5	450.6	95.7	64.9	62.1	0.000
Eff_max	60.32	61.14	3665	44.01	50.75	3551	0.918	254.40	8.18	3812.4	3265	96.9	91.9	89.1	23.51
Pout_max	60.22	71.34	4267	40.42	66.28	4107	0.885	219.74	10.81	3280.8	3713	96.2	90.4	87.0	33.15
Torque_max	60.21	68.41	4102	25.29	106.9	3835	0.819	117.88	17.63	1761.8	3252	93.5	84.8	79.3	46.01
End	60.21	68.41	4102	25.29	106.9	3835	0.819	117.88	17.63	1761.8	3252	93.5	84.8	79.3	46.01

3KW 72V



State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	72.10	8.643	542.2	53.23	12.34	1009	0.885	280.95	0.68	4222.8	300.6	186.1	29.8	55.5	0.000
Eff_max	72.09	58.02	4141	52.89	47.76	3903	0.891	250.63	9.49	3759.7	3736	94.2	95.7	90.2	13.18
Pout_max	72.13	63.52	4554	49.49	58.52	4364	0.869	221.98	11.63	3328.4	4053	95.8	92.9	89.0	17.24
Torque_max	72.16	59.31	4270	31.60	89.49	3988	0.813	126.42	17.95	1884.5	3542	93.4	88.8	82.9	24.54
End	72.16	59.31	4270	31.60	89.49	3988	0.813	126.42	17.95	1884.5	3542	93.4	88.8	82.9	24.54

3KW 96V

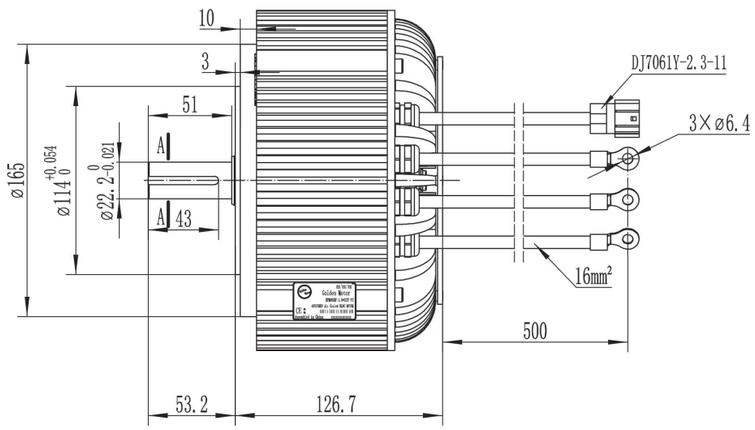


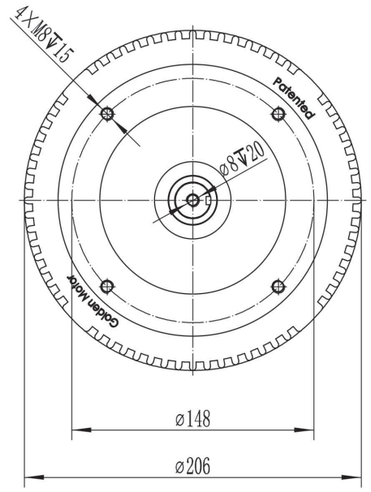
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	96.36	6.721	647.5	69.71	5.830	658.0	0.935	270.71	1.23	4059.5	522.8	101.6	79.5	80.7	0.000
Eff_max	96.10	20.90	2008	70.63	18.14	1902	0.857	246.98	4.81	3694.0	1860	94.7	97.8	92.6	8.112
Pout_max	95.66	60.66	5797	68.45	74.17	5635	0.641	183.32	17.51	2650.5	4859	97.2	86.2	83.8	30.42
Torque_max	95.66	60.66	5797	68.45	74.17	5635	0.641	183.32	17.51	2650.5	4859	97.2	86.2	83.8	30.42
End	95.66	60.66	5797	68.45	74.17	5635	0.641	183.32	17.51	2650.5	4859	97.2	86.2	83.8	30.42

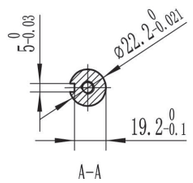
HPM05KW

Specification

Fan Cooling

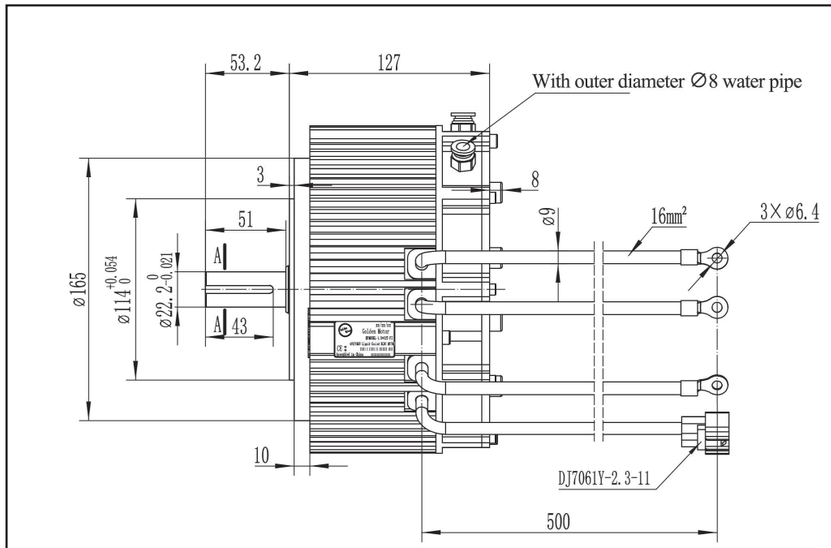


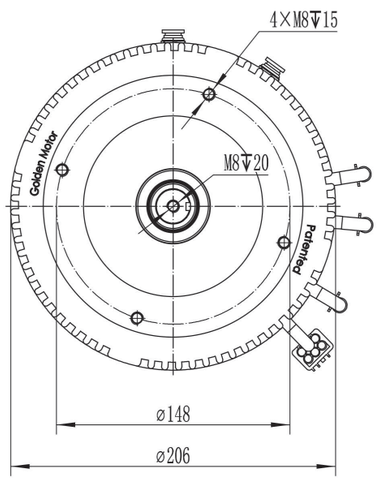


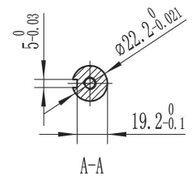


Note: The maximum depth of the M8 threaded hole is 15mm,
the tightening torque for M8 is 17.6Nm,
and the maximum tightening torque should not exceed 19.2Nm.

Liquid Cooling



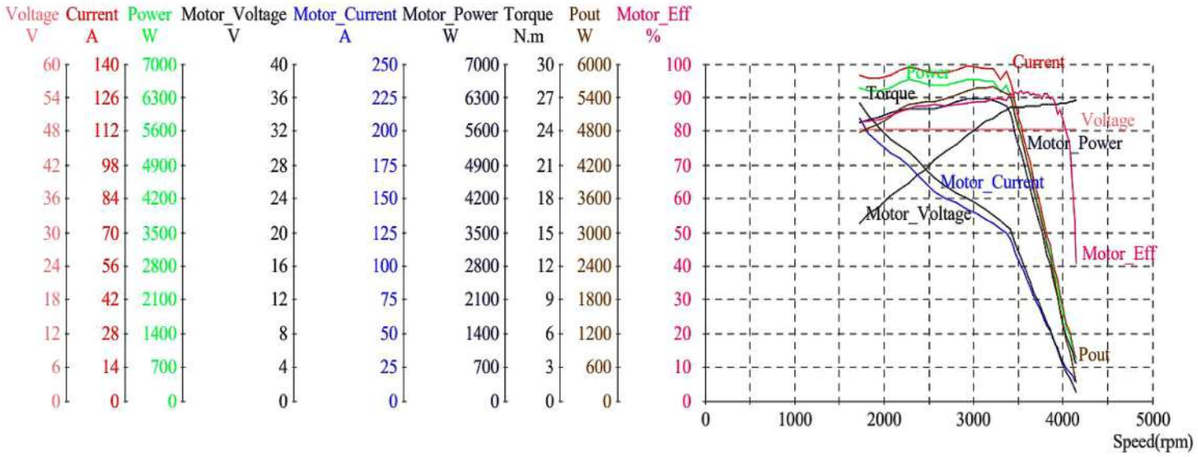




Note: The maximum depth of the M8 threaded hole is 15mm,
the tightening torque for M8 is 17.6Nm,
and the maximum tightening torque should not exceed 19.2Nm.

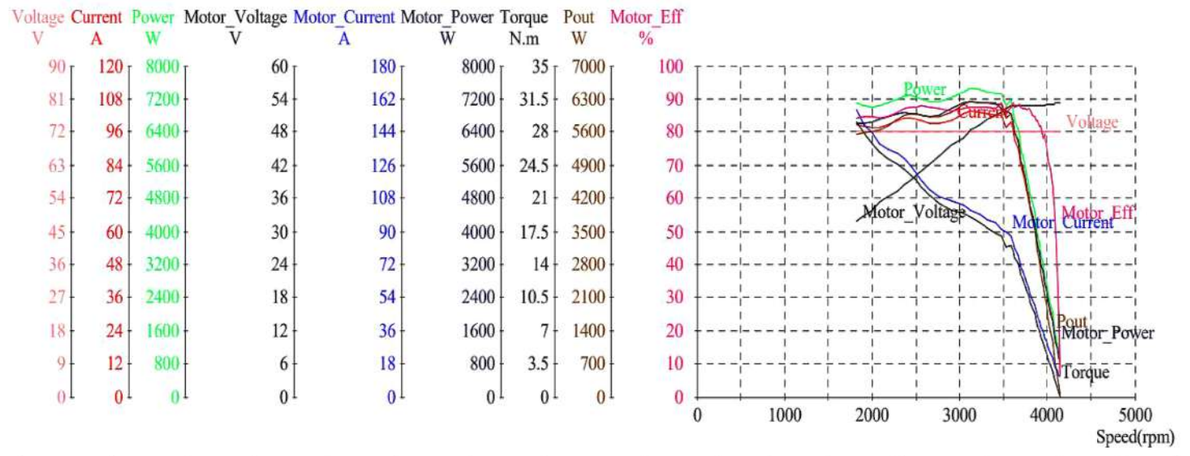
HPM05KW Specification

5KW 48V



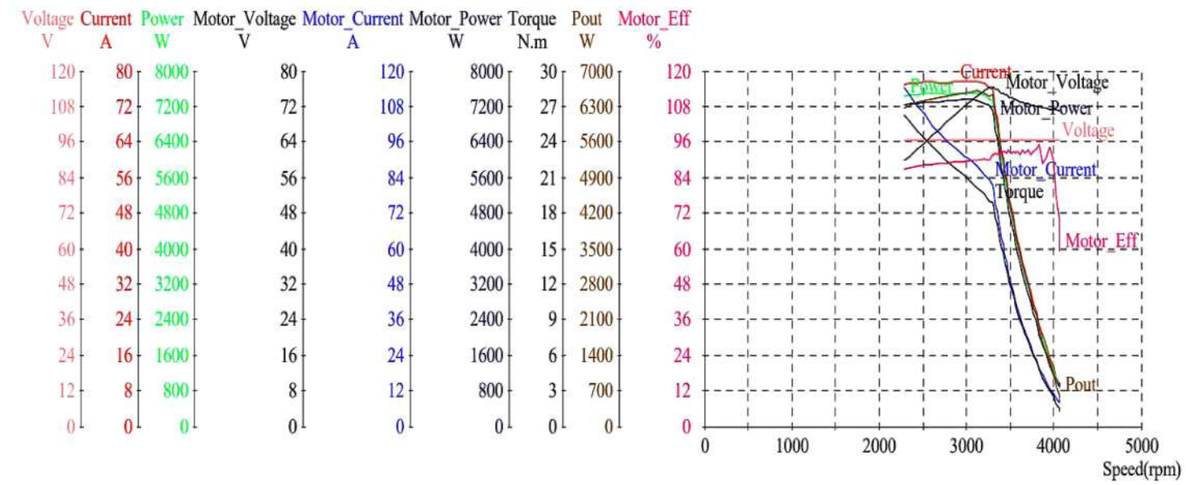
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	48.30	18.34	849.7	35.63	14.82	798.2	0.872	276.30	0.75	4142.3	325.3	93.9	40.7	38.3	0.000
Eff_max	48.23	109.4	5254	34.89	96.45	4966	0.852	236.93	12.16	3554.7	4526	94.5	91.1	86.1	17.24
Pout_max	48.26	137.8	6633	33.53	131.6	6236	0.816	214.97	16.55	3222.4	5584	94.0	89.5	84.2	23.73
Torque_max	48.22	135.1	6496	21.10	209.8	5789	0.755	114.18	26.50	1724.1	4784	89.1	82.6	73.6	35.09
End	48.22	135.1	6496	21.10	209.8	5789	0.755	114.18	26.50	1724.1	4784	89.1	82.6	73.6	35.09

5KW 72V



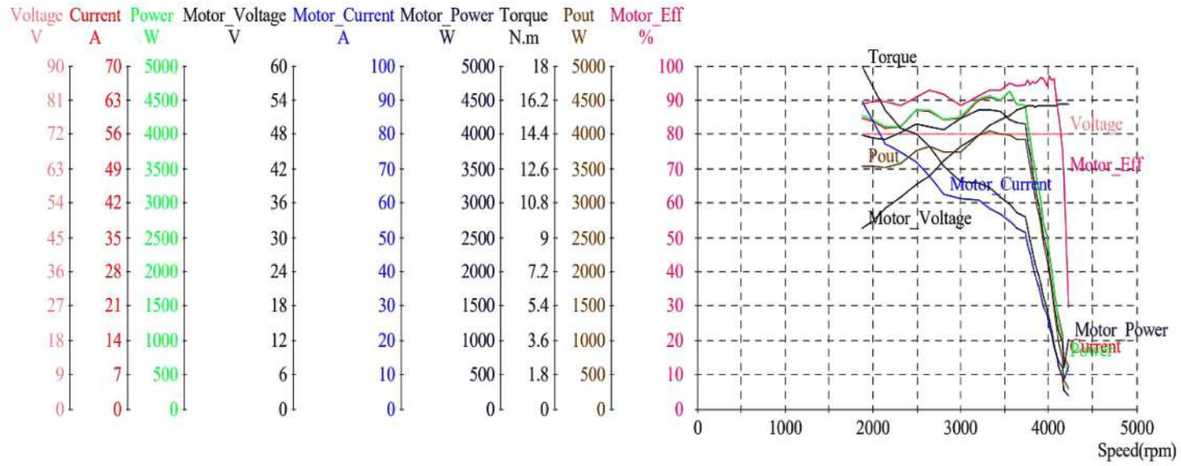
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	72.12	12.74	856.5	53.30	11.61	905.0	0.844	276.05	0.14	4144.2	60.75	105.7	6.7	7.1	0.000
Eff_max	72.08	96.41	6912	52.66	83.48	6576	0.864	240.32	15.47	3607.0	5842	95.1	88.8	84.5	22.11
Pout_max	72.09	103.7	7455	48.27	101.7	7131	0.839	209.84	19.05	3127.8	6239	95.7	87.5	83.7	27.78
Torque_max	72.07	98.73	7099	31.78	155.9	6603	0.770	121.69	29.05	1829.1	5563	93.0	84.2	78.4	39.14
End	72.07	98.73	7099	31.78	155.9	6603	0.770	121.69	29.05	1829.1	5563	93.0	84.2	78.4	39.14

5KW 96V



State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	96.77	9.284	877.0	71.11	8.884	963.5	0.880	271.20	1.34	4065.4	570.4	109.9	59.2	65.0	0.000
Eff_max	96.77	52.90	5115	74.22	52.27	4946	0.736	231.75	12.70	3473.5	4619	96.7	93.4	90.3	17.24
Pout_max	96.84	77.55	7502	74.23	87.66	7335	0.651	207.75	20.16	3126.4	6599	97.8	90.0	88.0	27.78
Torque_max	96.77	77.04	7439	59.73	114.5	7231	0.611	304.88	26.25	2283.0	6275	97.2	86.8	84.3	35.90
End	96.77	77.04	7439	59.73	114.5	7231	0.611	304.88	26.25	2283.0	6275	97.2	86.8	84.3	35.90

5KW 120V

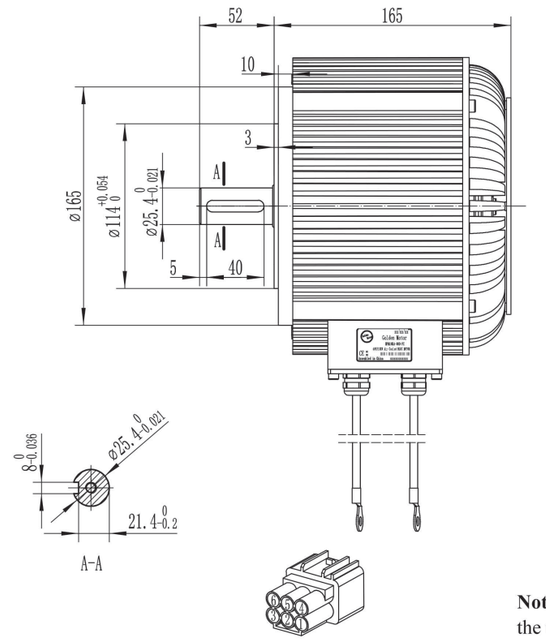


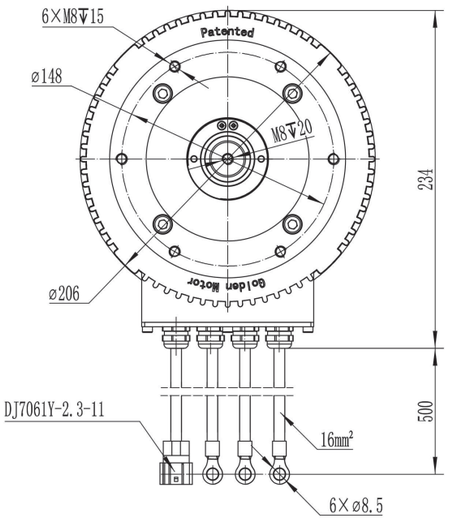
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	72.10	8.643	542.2	53.23	12.34	1009	0.885	280.95	0.68	4222.8	300.6	186.1	29.8	55.5	0.000
Eff_max	72.09	58.02	4141	52.89	47.76	3903	0.891	250.63	9.49	3759.7	3736	94.2	95.7	90.2	13.18
Pout_max	72.13	63.52	4554	49.49	58.52	4364	0.869	221.98	11.63	3328.4	4053	95.8	92.9	89.0	17.24
Torque_max	72.16	59.31	4270	31.60	89.49	3988	0.813	126.42	17.95	1884.5	3542	93.4	88.8	82.9	24.54
End	72.16	59.31	4270	31.60	89.49	3988	0.813	126.42	17.95	1884.5	3542	93.4	88.8	82.9	24.54

HPM10KW

Specification

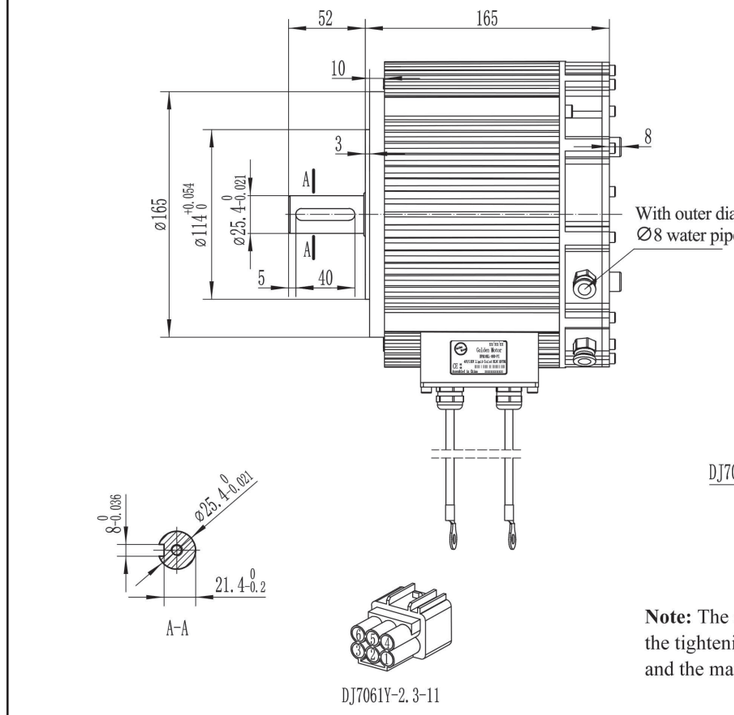
Fan Cooling

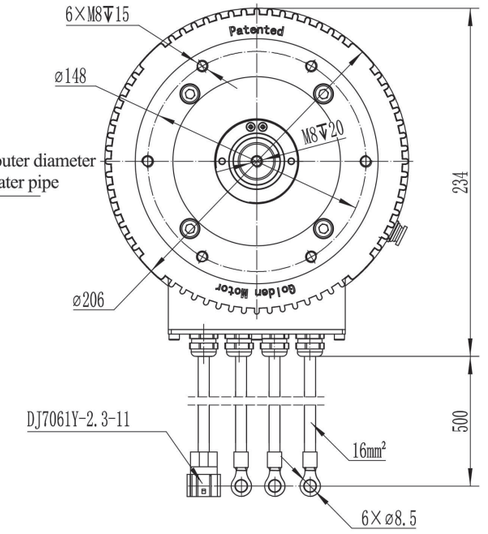




Note: The maximum depth of the M8 threaded hole is 15mm,
the tightening torque for M8 is 17.6Nm,
and the maximum tightening torque should not exceed 19.2Nm.

Liquid Cooling

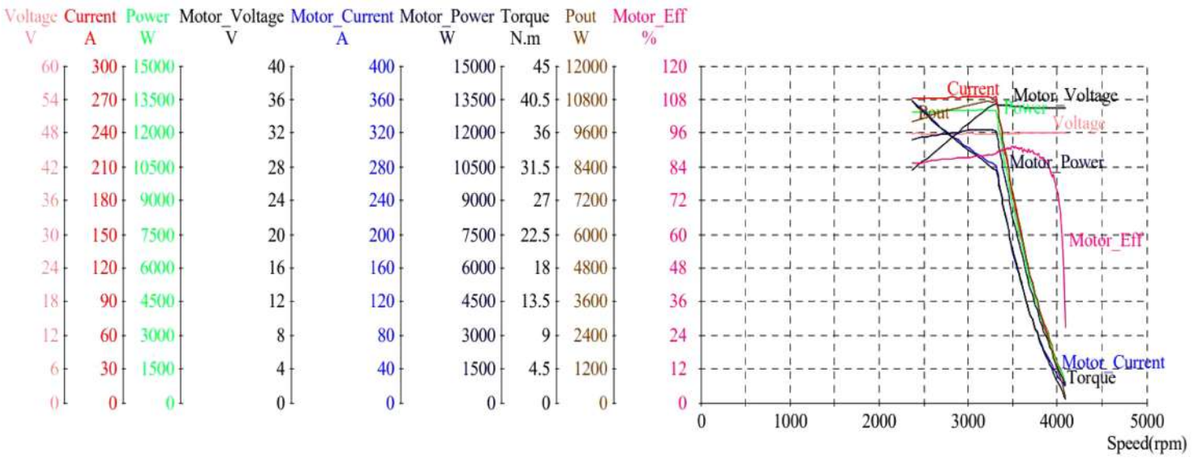




Note: The maximum depth of the M8 threaded hole is 15mm,
the tightening torque for M8 is 17.6Nm,
and the maximum tightening torque should not exceed 19.2Nm.

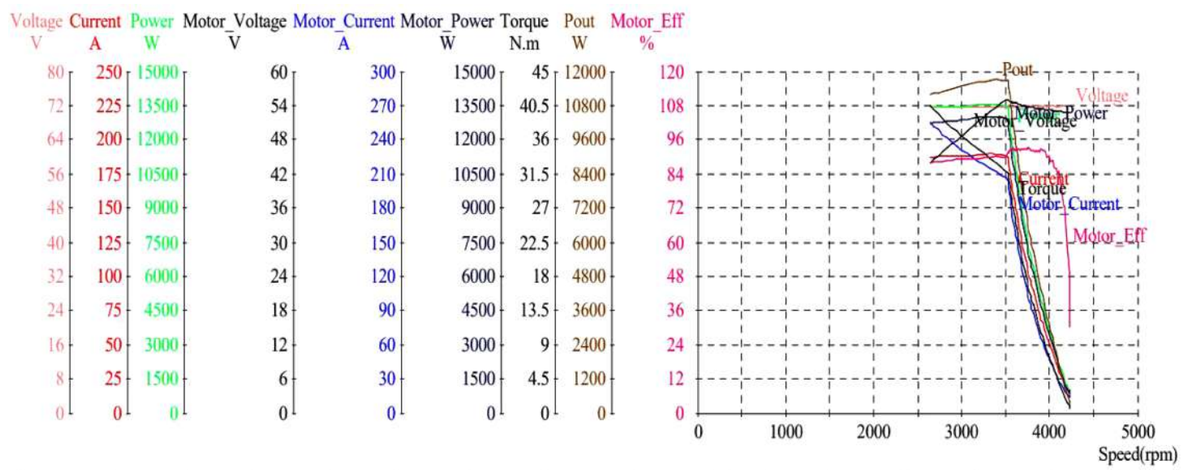
HPM10KW Specification

10KW 48V



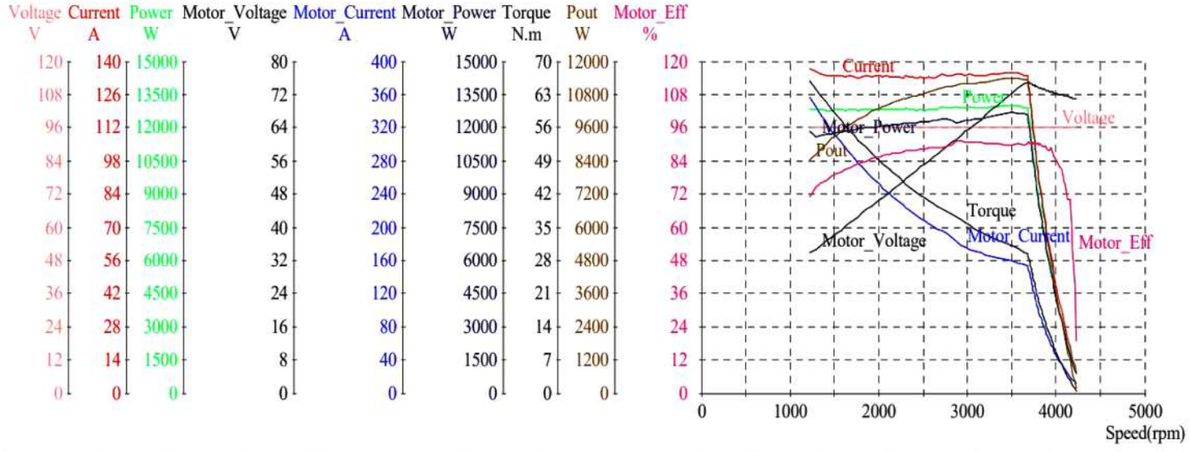
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	48.01	17.65	845.1	35.00	20.03	841.8	0.693	272.95	0.53	4093.9	227.2	99.6	27.0	26.9	0.000
Eff_max	47.93	171.3	8196	35.18	166.4	7747	0.764	235.52	19.12	3531.8	7070	94.5	91.3	86.3	26.16
Pout_max	47.90	272.3	13016	35.41	281.6	12104	0.701	220.96	31.01	3315.1	10763	93.0	88.9	82.7	41.57
Torque_max	47.94	270.8	12949	27.65	358.5	11738	0.684	315.75	40.23	2374.0	9999	90.7	85.2	77.2	54.55
End	47.94	270.8	12949	27.65	358.5	11738	0.684	315.75	40.23	2374.0	9999	90.7	85.2	77.2	54.55

10KW 72V



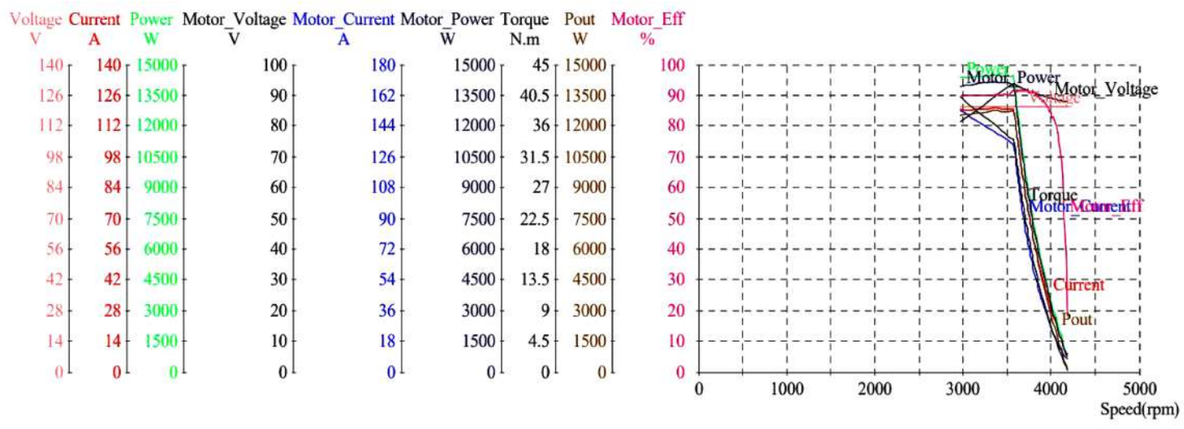
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	71.82	11.54	826.3	52.72	15.83	1007	0.697	282.12	0.69	4233.1	305.8	121.9	30.4	37.0	0.000
Eff_max	71.80	113.8	8163	53.90	114.7	7816	0.730	248.03	18.65	3720.2	7264	95.8	92.9	89.0	25.35
Pout_max	71.69	189.5	13568	53.66	211.5	12996	0.661	226.02	32.92	3396.2	11706	95.8	90.1	86.3	44.01
Torque_max	71.76	187.3	13421	43.95	255.6	12710	0.653	208.46	40.46	2637.2	11172	94.7	87.9	83.2	54.55
End	71.76	187.3	13421	43.95	255.6	12710	0.653	208.46	40.46	2637.2	11172	94.7	87.9	83.2	54.55

10KW 96V



State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	96.32	8.970	860.7	70.96	12.04	868.5	0.587	281.24	0.37	4226.6	163.7	100.9	18.9	19.0	0.000
Eff_max	96.25	117.5	11300	74.44	131.8	11046	0.650	248.32	25.62	3725.2	9993	97.8	90.5	88.4	66.89
Pout_max	96.28	135.4	13020	72.24	159.5	12671	0.635	233.45	31.12	3500.9	11407	97.3	90.0	87.6	81.36
Torque_max	96.25	136.8	12842	34.03	356.7	11847	0.564	111.17	65.78	1221.6	8413	92.3	71.0	65.5	153.7
End	96.25	136.8	12842	34.03	356.7	11847	0.564	111.17	65.78	1221.6	8413	92.3	71.0	65.5	153.7

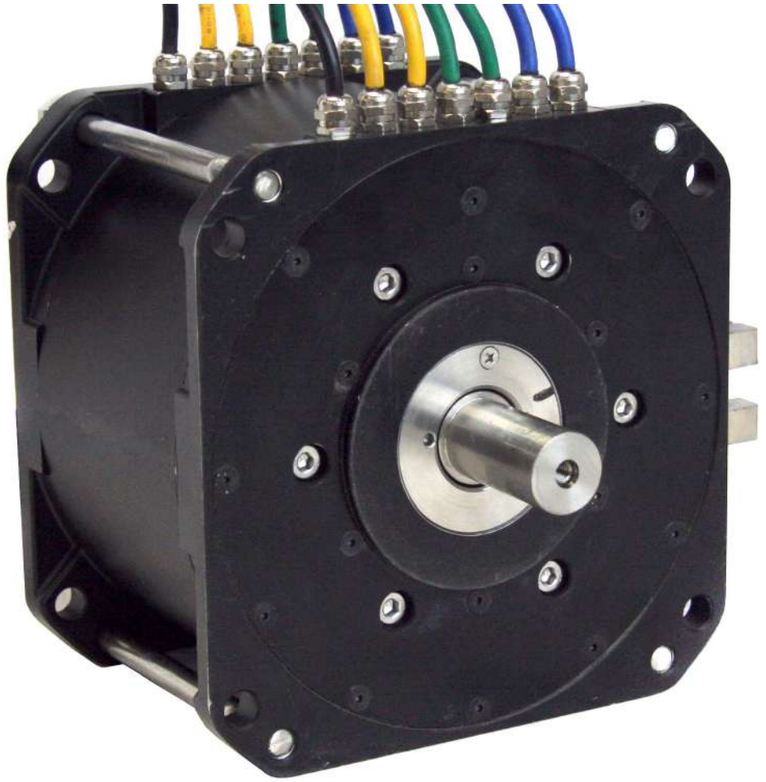
10KW 120V



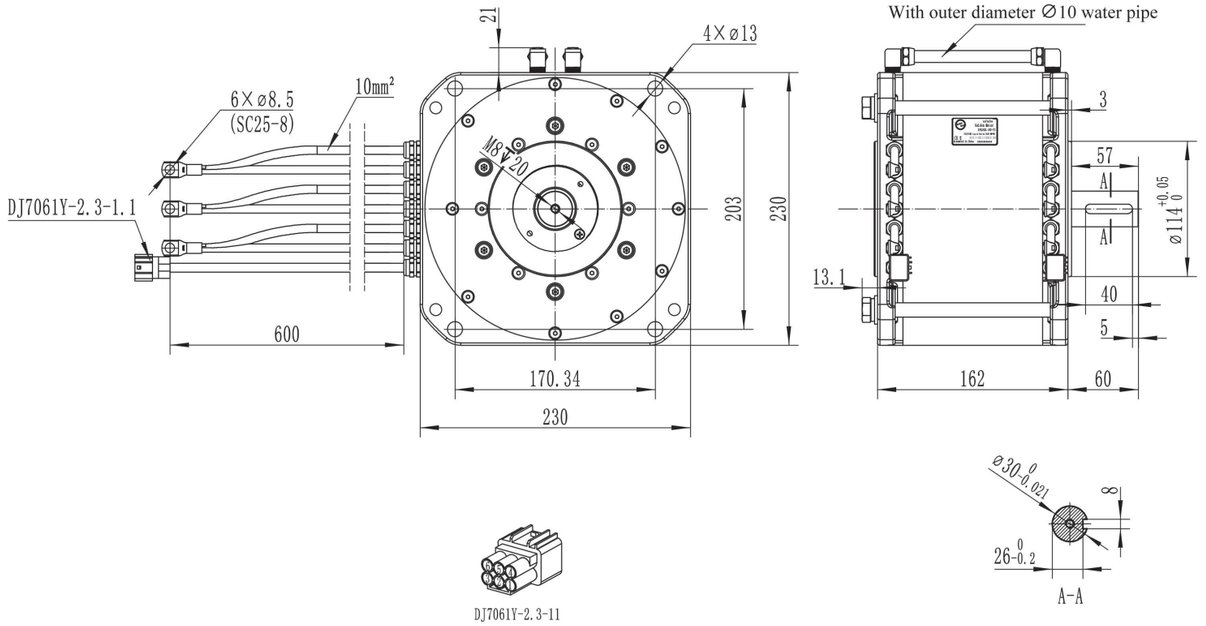
State	Input Voltage	Input Current	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N.m	rpm	W	%	%	%	S
No_Load	120.6	7.017	843.8	87.85	8.097	863.8	0.701	278.85	0.36	4182.6	157.7	102.4	18.3	18.7	0.000
Eff_max	120.5	100.6	12115	92.80	108.5	11836	0.678	242.36	28.47	3635.8	10838	97.7	91.6	89.5	38.33
Pout_max	120.5	119.8	14428	93.64	132.8	13963	0.648	238.55	34.09	3574.6	12759	96.8	91.4	88.4	45.63
Torque_max	120.5	119.5	14382	81.39	153.4	13954	0.645	252.52	40.21	2974.4	12522	97.0	89.7	87.1	54.55
End	120.5	119.5	14382	81.39	153.4	13954	0.645	252.52	40.21	2974.4	12522	97.0	89.7	87.1	54.55

HPM15KW

Specification

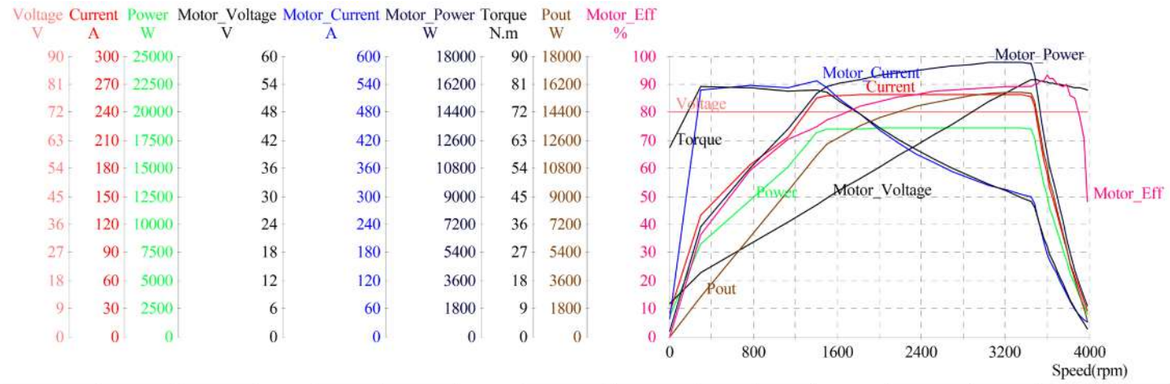


Liquid Cooling



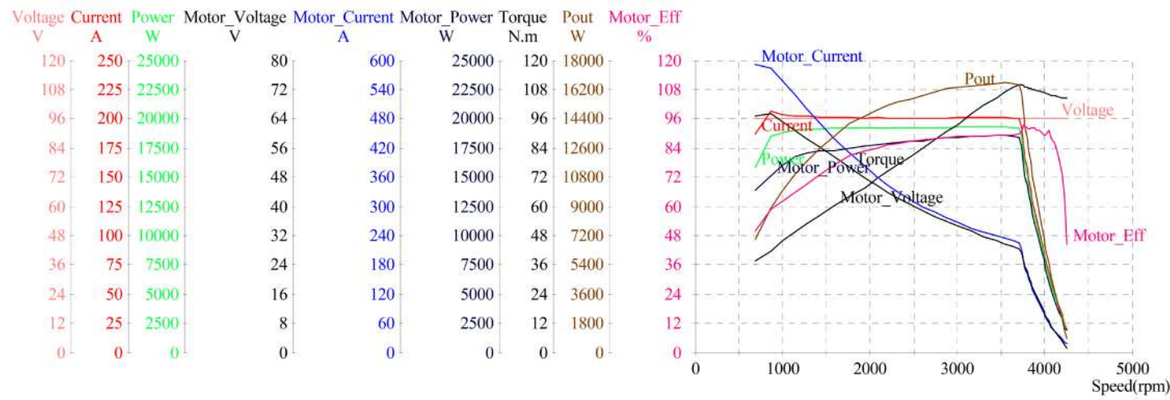
HPM15KW Specification

15KW 72V



State	Input Current	Input Voltage	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N. m	rpm	W	%	%	%	S
No_Load	72. 07	27. 49	1970	52. 84	29. 58	1986	0. 734	265. 65	2. 3	3983. 0	959. 1	100. 8	48. 3	48. 7	0. 000
Eff_max	72. 04	147. 0	10583	54. 15	149. 6	10059	0. 717	243. 64	24. 2	3653. 8	9258	95. 1	92. 0	87. 5	17. 29
Pout_max	71. 97	258. 8	18609	52. 20	313. 3	17619	0. 622	213. 77	46. 6	3216. 5	15693	94. 7	89. 1	84. 3	35. 38
Torque_max	72. 06	129. 3	8245	13. 64	528. 3	7019	0. 562	30. 17	80. 3	302. 2	2541	85. 1	36. 2	30. 8	60. 72
End	72. 06	25. 36	1827	7. 009	39. 13	331. 4	0. 725	26. 35	60. 8	0	0	18. 1	0. 0	0. 0	62. 53

15KW 96V

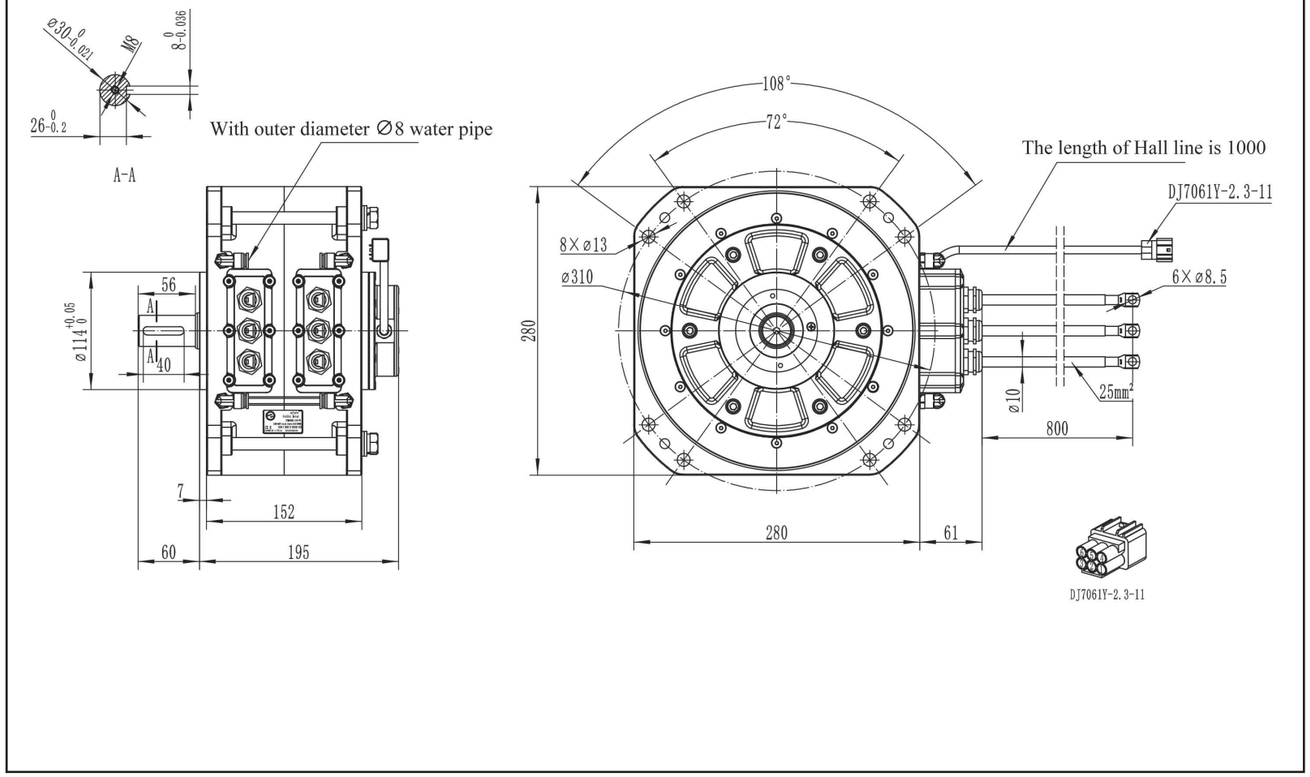


State	Input Current	Input Voltage	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N. m	rpm	W	%	%	%	S
No_Load	96. 12	19. 69	1891	69. 66	18. 95	1901	0. 832	283. 72	1. 9	4255. 2	846. 5	100. 6	44. 5	44. 8	0. 000
Eff_max	96. 09	129. 1	12395	72. 05	128. 4	11819	0. 737	257. 66	27. 0	3862. 1	10918	95. 4	92. 4	88. 1	16. 63
Pout_max	96. 03	201. 8	19362	71. 45	234. 9	18618	0. 640	236. 31	44. 7	3549. 6	16612	96. 2	89. 2	85. 8	28. 64
Torque_max	96. 12	206. 9	18519	27. 85	583. 8	15131	0. 537	59. 40	98. 0	863. 7	8862	81. 7	58. 6	47. 9	51. 47
End	96. 17	186. 6	15870	25. 07	591. 8	13859	0. 539	49. 63	96. 9	684. 3	6943	87. 3	50. 1	43. 7	52. 67

HPM20KW

Specification

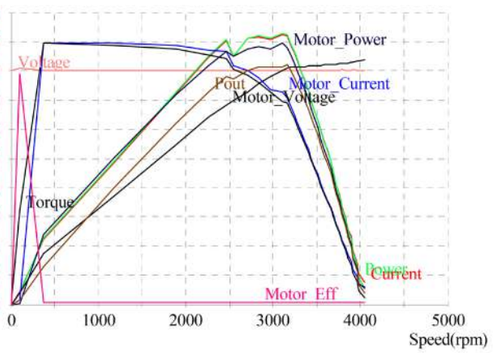
Liquid Cooling



HPM20KW Specification

20KW 72V

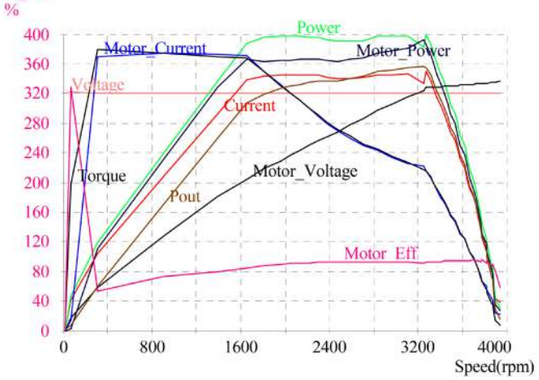
Voltage V	Current A	Power W	Motor_Voltage V	Motor_Current A	Motor_Power W	Torque N.m	Pout W	Motor_Eff %
90	350	25000	60	450	25000	90	25000	12000
81	315	22500	54	405	22500	81	22500	10800
72	280	20000	48	360	20000	72	20000	9600
63	245	17500	42	315	17500	63	17500	8400
54	210	15000	36	270	15000	54	15000	7200
45	175	12500	30	225	12500	45	12500	6000
36	140	10000	24	180	10000	36	10000	4800
27	105	7500	18	135	7500	27	7500	3600
18	70	5000	12	90	5000	18	5000	2400
9	35	2500	6	45	2500	9	2500	1200
0	0	0	0	0	0	0	0	0



State	Input Current	Input Voltage	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N. m	rpm	W	%	%	%	S
No_Load	72. 28	26. 16	1394	50. 38	26. 93	1348	0. 574	323. 22	2. 2	4044. 9	931. 7	96. 7	69. 1	66. 9	0. 000
Eff_max	72. 24	144. 6	10311	49. 41	123. 6	9753	0. 921	248. 38	24. 4	3726. 4	9520	94. 6	97. 6	92. 3	19. 13
Pout_max	72. 14	321. 6	23081	48. 66	317. 3	22020	0. 822	211. 11	62. 1	3165. 5	20582	95. 4	93. 5	89. 2	49. 31
Torque_max	72. 27	78. 33	5642	10. 33	403. 0	5981	0. 830	33. 97	80. 6	377. 0	3181	106. 0	53. 2	56. 4	69. 44
End	72. 28	0. 000	0. 000	0. 000	0. 000	0. 000	0. 000	0. 00	1. 0	0	0	0. 0	0. 0	0. 0	73. 46

20KW 96V

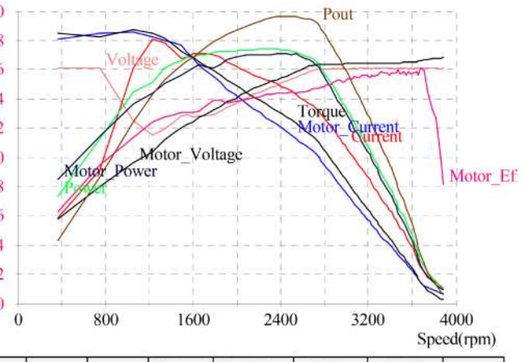
Voltage V	Current A	Power W	Motor_Voltage V	Motor_Current A	Motor_Power W	Torque N.m	Pout W	Motor_Eff %
120	300	25000	80	450	25000	120	25000	400
108	270	22500	72	405	22500	108	22500	360
96	240	20000	64	360	20000	96	20000	320
84	210	17500	56	315	17500	84	17500	280
72	180	15000	48	270	15000	72	15000	240
60	150	12500	40	225	12500	60	12500	200
48	120	10000	32	180	10000	48	10000	160
36	90	7500	24	135	7500	36	7500	120
24	60	5000	16	90	5000	24	5000	80
12	30	2500	8	45	2500	12	2500	40
0	0	0	0	0	0	0	0	0



State	Input Current	Input Voltage	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N. m	rpm	W	%	%	%	S
No_Load	96. 34	28. 48	1921	67. 33	24. 40	1699	0. 597	286. 82	2. 4	3942. 1	990. 6	88. 4	58. 3	51. 6	0. 000
Eff_max	96. 33	249. 6	23907	64. 78	249. 5	24503	0. 875	215. 61	65. 4	3247. 1	22234	102. 5	90. 7	93. 0	53. 34
Pout_max	96. 33	249. 6	23907	64. 78	249. 5	24503	0. 875	215. 61	65. 4	3247. 1	22234	102. 5	90. 7	93. 0	53. 34
Torque_max	96. 24	77. 80	7463	11. 73	415. 1	6881	0. 816	28. 52	113. 8	310. 4	3698	92. 2	53. 7	49. 6	87. 55
End	96. 21	0. 000	0. 000	0. 000	0. 000	0. 000	0. 000	0. 00	0. 8	15. 0	1. 256	0. 0	0. 0	0. 0	91. 57

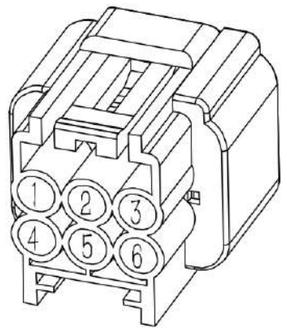
20KW 144V

Voltage V	Current A	Power W	Motor_Voltage V	Motor_Current A	Motor_Power W	Torque N.m	Pout W	Motor_Eff %
180	350	40000	120	500	40000	180	30000	120
162	315	36000	108	450	36000	162	27000	108
144	280	32000	96	400	32000	144	24000	96
126	245	28000	84	350	28000	126	21000	84
108	210	24000	72	300	24000	108	18000	72
90	175	20000	60	250	20000	90	15000	60
72	140	16000	48	200	16000	72	12000	48
54	105	12000	36	150	12000	54	9000	36
36	70	8000	24	100	8000	36	6000	24
18	35	4000	12	50	4000	18	3000	12
0	0	0	0	0	0	0	0	0

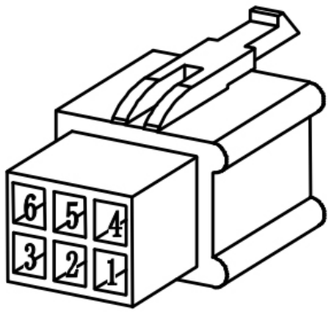


State	Input Current	Input Voltage	Input Power	Motor Voltage	Motor Current	Motor Power	Motor Power Factor	Motor Frequency	Torque	Speed	Output Power	Controller Efficiency	Motor Efficiency	Total Efficiency	Time
	V	A	W	V	A	W		Hz	N. m	rpm	W	%	%	%	S
No_Load	144. 6	18. 12	2063	100. 9	17. 54	1913	0. 623	258. 47	2. 3	3880. 2	934. 4	92. 8	48. 8	45. 3	0. 000
Eff_max	144. 6	134. 2	19050	98. 57	125. 0	18482	0. 866	218. 57	50. 4	3278. 9	17302	97. 0	93. 6	90. 8	21. 30
Pout_max	135. 9	258. 6	34665	92. 68	299. 4	34241	0. 712	160. 66	117. 0	2408. 3	29501	98. 8	86. 2	85. 1	48. 06
Torque_max	112. 5	282. 3	28885	57. 86	464. 1	27332	0. 588	75. 14	168. 7	1055. 5	18643	94. 6	68. 2	64. 5	64. 29
End	144. 7	103. 0	14645	34. 56	452. 2	17034	0. 629	39. 02	166. 4	369. 7	6442	116. 3	37. 8	44. 0	65. 91

Installation Signal Connector Cable (grey) 6 with standard hall - sensor setup

Motor Connector of 3-20KW			
Model: DJ7061Y-2.3-11 6 pin male 	1 / Yellow	Hall A	Hall sensor Phase A
	2 / Green	Hall B	Hall sensor Phase B
	3 / Blue	Hall C	Hall sensor Phase C
	4 / Red	+5 V	5V sensor supply (50mA max)
	5 / White	Temperature	Temperature sensor motor
	6 / Black/Brown	GND	Hall sensor GND

Order numbers of matching connectors for your vehicle wiring harness:
- housing 6 pin (female): Model: DJ613-2.3*0.6

Motor Connector of 1.5KW			
Model: DJ7061A-2.8-11 6 pin male 	1 / Yellow	Hall A	Hall sensor Phase A
	2 / Green	Hall B	Hall sensor Phase B
	3 / Blue	Hall C	Hall sensor Phase C
	4 / Red	+5 V	5V sensor supply (50mA max)
	5 /	NC	/
	6 / Black	GND	Hall sensor GND

Order numbers of matching connectors for your vehicle wiring harness:
- housing 6 pin (female): Model: DJ621-2.3A

Revision / History

Version	Date	Change
SBC040001-A/0	2023-04-03	Preliminary draft