

Product Features

Application : - 2-Wheeler

Motor Type : - Hub Motor

Motor Specifications

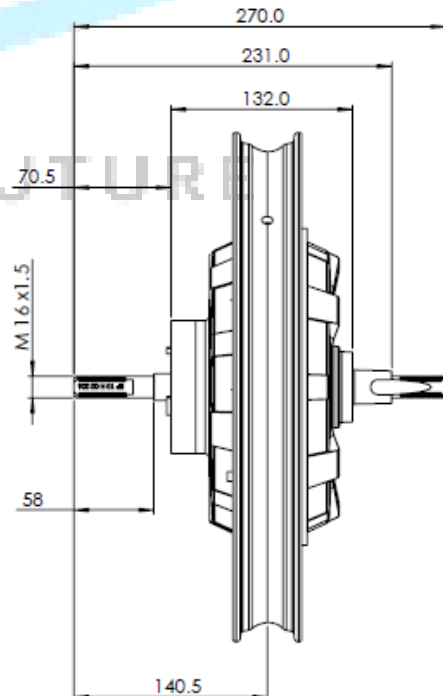
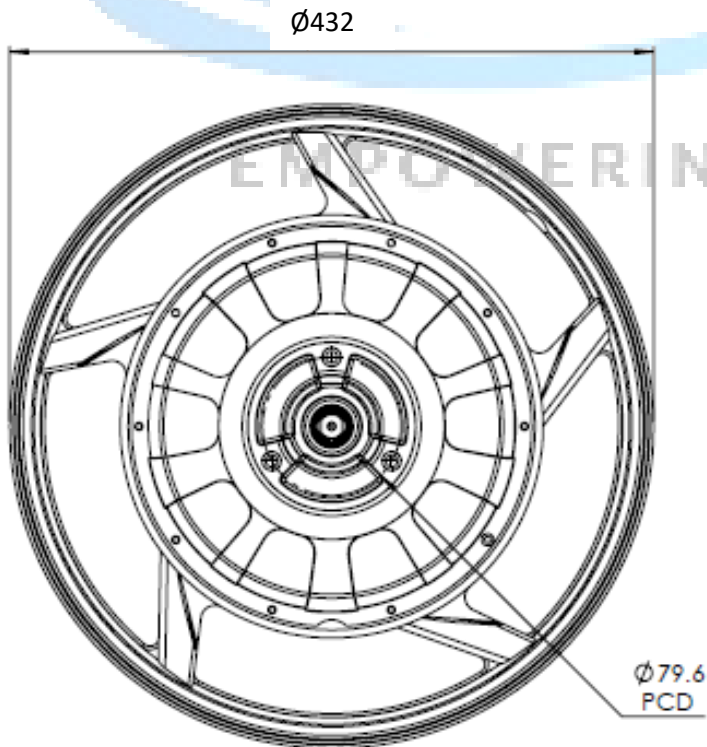
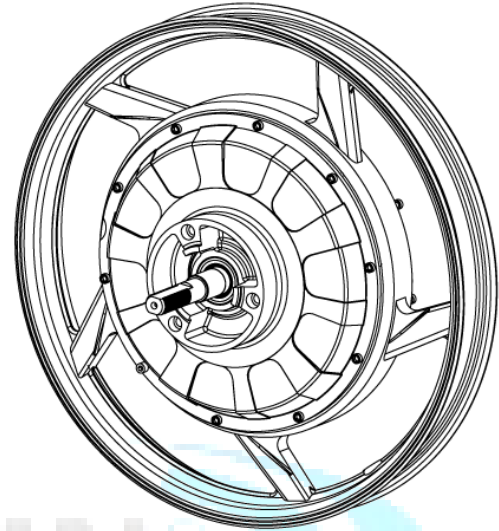
Outer Diameter : - 432 mm

Shaft Length : - 270 mm

Break Size : - Disc Brake

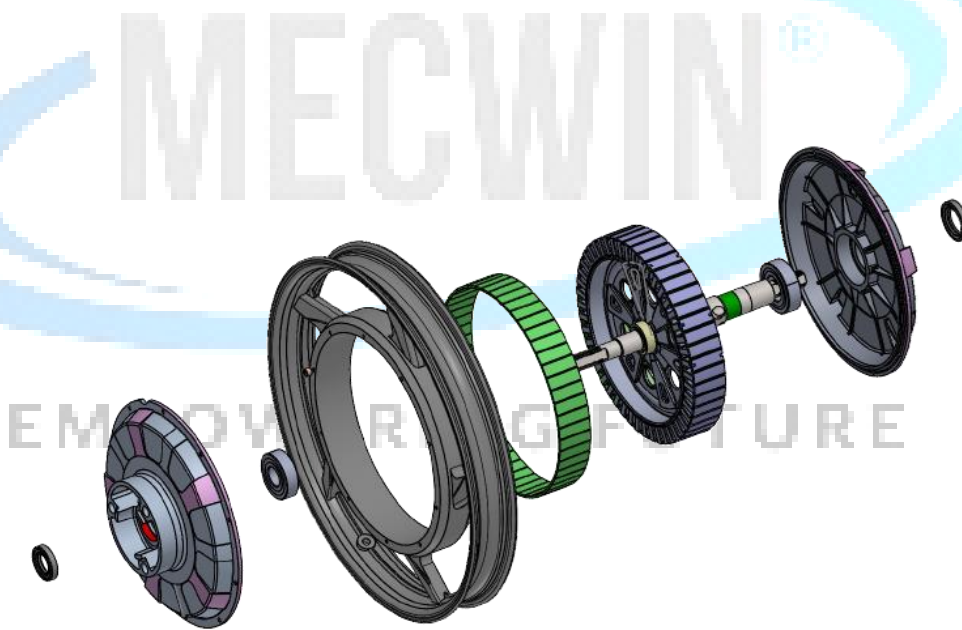
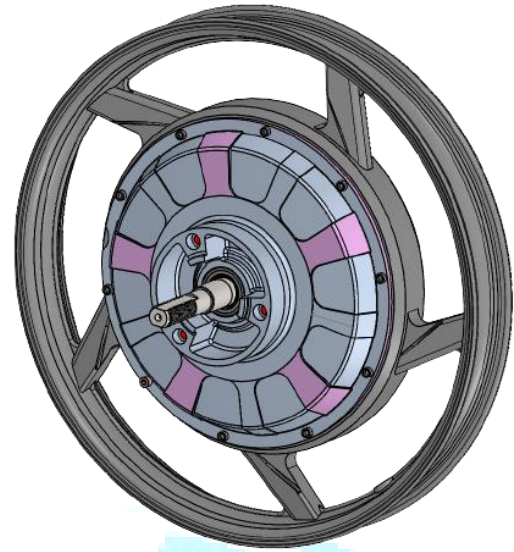
Swing Arm Distance:- 173 mm

IP Level :- IP67



Motor Specifications

Operating Voltage	48 V
Rated Power	1.5 kW
Peak Power	2.7 kW
Rated Torque	23 N-m
Peak Torque@ 50 RPM	104 N-m
Max DC Current	70 A
Max Speed	713 RPM

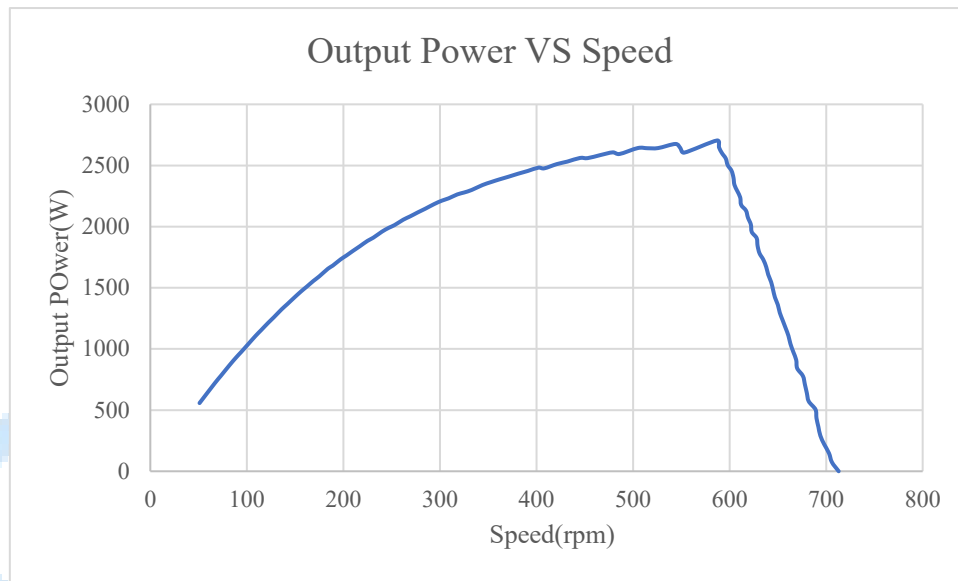


Performance Details

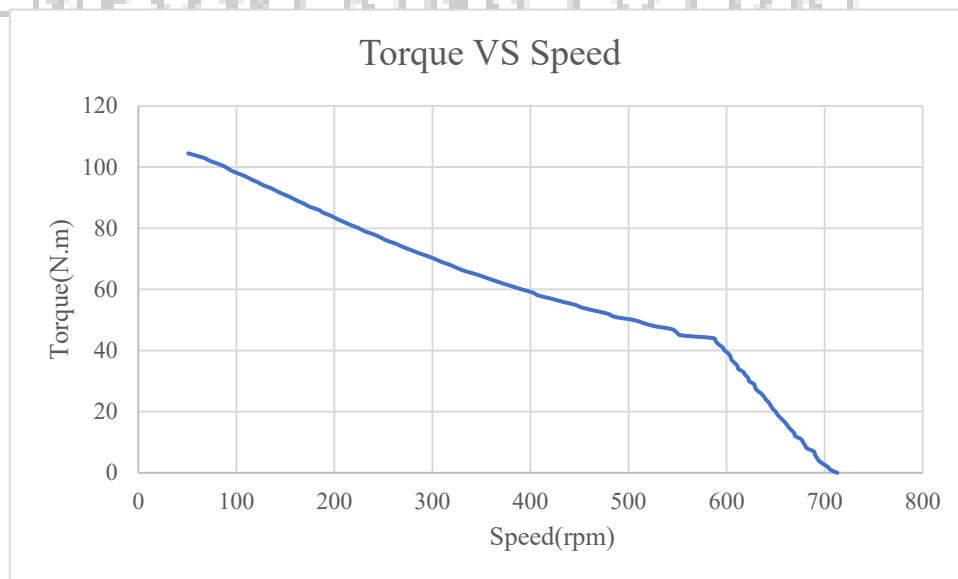
Parameters	DC Voltage	DC Current	RMS Line to Line Voltage	RMS Line Current	Input Power	Torque	Speed	Output power	System Efficiency
	V	A	V	A	W	N-m	rpm	W	%
No Load	48.0	4.65	38.58	4.29	223	0.0	713	0	0.0
Max Torque	48.0	69.22	10.75	126.99	3323	104.5	51	558	16.8
Max Input Power	48.0	67.94	29.40	69.79	3262	52.0	479	2608	79.9
Max Output Power	48.0	67.84	35.69	62.56	3256	44.0	587	2705	83.1
Max Efficiency	48.0	47.00	36.28	45.86	2256	31.0	622	2018	89.5

Performance Curves

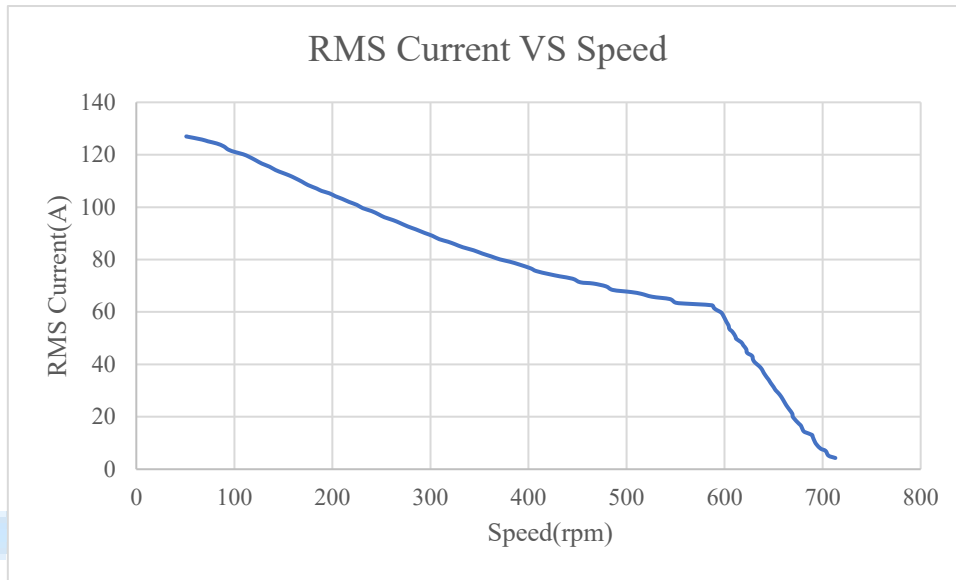
Output Power vs Speed



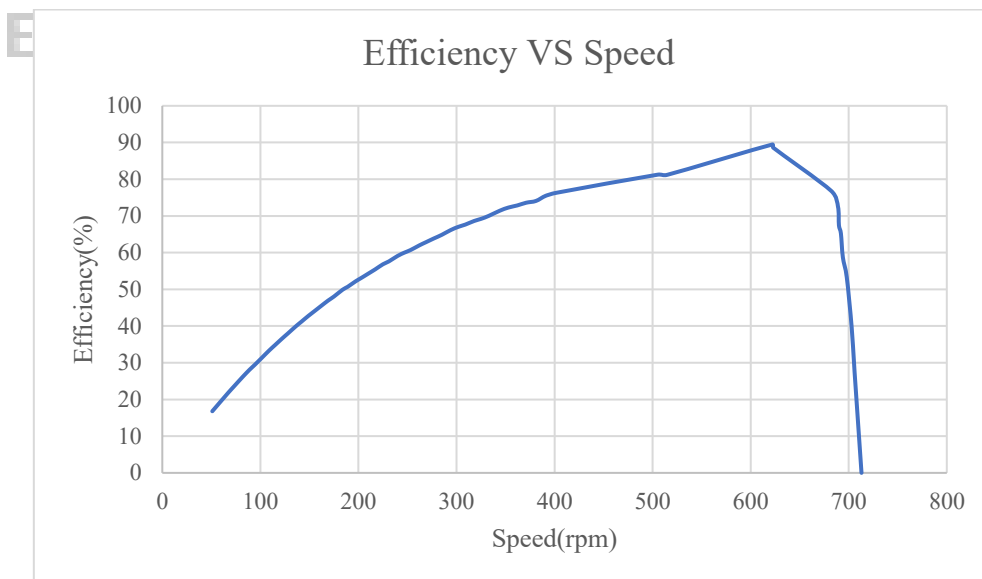
Torque vs Speed



Current vs Speed



Efficiency vs Speed



Load Test Data

DC Voltage	DC Current	RMS line to line Voltage	RMS line Current	Input Power	Torque	Speed	Output Power	System Efficiency
V	A	V	A	W	N-m	rpm	W	%
48.0	4.65	38.58	4.29	223	0.0	713	0	0.0
48.0	5.64	38.48	5.19	271	1.0	706	74	27.3
48.0	7.74	38.26	7.01	372	2.0	703	147	39.6
48.0	8.63	38.18	7.85	414	3.0	698	221	53.3
48.0	10.33	38.11	9.35	496	4.0	694	291	58.7
48.0	11.59	37.99	10.53	556	5.0	692	363	65.2
48.0	13.41	37.86	12.28	644	6.0	690	434	67.4
48.0	14.49	37.86	13.14	696	7.0	689	505	72.6
48.0	15.50	37.68	14.14	744	8.0	682	572	76.9
48.0	16.20	37.53	14.85	778	9.0	680	641	82.4
48.0	18.01	37.41	16.56	864	10.0	678	710	82.2
48.0	19.18	37.39	17.32	921	11.0	676	778	84.5
48.0	21.53	37.22	19.76	1033	12.0	670	842	81.5
48.0	23.03	37.18	21.22	1105	13.0	669	910	82.4
48.0	25.03	37.13	22.81	1201	14.0	666	976	81.2
48.0	26.59	37.10	24.38	1276	15.0	663	1042	81.7
48.0	28.21	37.01	25.64	1354	16.0	661	1107	81.7
48.0	30.10	36.97	27.53	1444	17.0	658	1171	81.1
48.0	31.60	36.93	29.00	1516	18.0	655	1234	81.4
48.0	33.00	36.83	30.18	1584	19.0	652	1297	81.9
48.0	34.00	36.77	31.37	1632	20.0	650	1361	83.4
48.0	35.00	36.72	32.93	1680	21.0	647	1421	84.6
48.0	36.00	36.68	34.13	1728	22.0	645	1485	86.0
48.0	38.00	36.66	35.10	1824	23.0	643	1548	84.9
48.0	39.00	36.64	36.75	1872	24.0	640	1608	85.9
48.0	40.00	36.58	38.15	1920	25.0	638	1669	86.9
48.0	42.00	36.53	39.44	2016	26.0	635	1729	85.8
48.0	43.00	36.52	40.72	2064	27.0	631	1783	86.4
48.0	44.00	36.41	41.85	2112	28.0	629	1843	87.3
48.0	45.00	36.36	43.25	2160	29.0	628	1907	88.3
48.0	46.00	36.33	44.42	2208	30.0	623	1956	88.6
48.0	47.00	36.28	45.86	2256	31.0	622	2018	89.5
48.0	50.00	36.26	47.34	2400	32.0	619	2075	86.4
48.0	52.86	36.22	48.46	2537	33.0	617	2131	84.0
48.0	54.13	36.09	49.72	2598	34.0	612	2178	83.8
48.0	55.33	36.05	50.70	2655	35.0	611	2239	84.3

48.0	57.04	36.09	52.44	2738	36.0	608	2291	83.7
48.0	58.14	36.01	53.50	2791	37.0	605	2343	84.0
48.0	59.64	35.99	54.88	2863	38.0	604	2402	83.9
48.0	61.31	36.00	56.17	2943	39.0	602	2457	83.5
48.0	64.39	35.92	59.08	3091	40.0	598	2504	81.0
48.0	65.22	35.87	59.95	3131	41.0	596	2558	81.7
48.0	65.77	35.78	60.73	3157	42.0	592	2602	82.4
48.0	66.88	35.73	61.58	3210	43.0	589	2650	82.5
48.0	67.84	35.69	62.56	3256	44.0	587	2705	83.1
47.6	67.68	35.13	63.36	3222	45.0	553	2605	80.9
47.6	67.34	33.62	63.74	3205	46.0	549	2643	82.4
48.0	67.65	32.95	64.95	3247	47.0	544	2676	82.4
48.0	67.52	32.33	65.82	3240	48.0	526	2643	81.6
48.0	67.78	31.65	66.93	3253	49.0	515	2641	81.2
48.0	67.78	30.70	67.59	3253	50.0	505	2643	81.2
48.0	67.70	30.13	68.41	3250	51.0	486	2594	79.8
48.0	67.94	29.40	69.79	3262	52.0	479	2608	79.9
48.0	67.92	28.75	70.86	3260	53.0	466	2585	79.3
48.0	67.39	28.02	71.32	3235	54.0	453	2560	79.2
48.0	67.80	27.40	72.69	3254	55.0	445	2562	78.7
48.0	67.70	26.80	73.60	3249	56.0	432	2532	77.9
48.0	67.70	26.20	74.44	3249	57.0	421	2511	77.3
48.0	68.30	25.70	75.60	3278	58.0	408	2477	75.6
48.0	67.77	25.21	76.68	3253	59.0	402	2482	76.3
48.0	67.77	24.57	78.07	3253	60.0	391	2455	75.5
48.0	68.42	24.19	79.18	3284	61.0	381	2433	74.1
48.0	68.19	23.69	80.05	3272	62.0	371	2408	73.6
48.0	68.28	23.24	81.20	3277	63.0	362	2387	72.9
48.0	68.15	22.76	82.28	3271	64.0	353	2365	72.3
48.0	68.27	22.33	83.54	3277	65.0	344	2340	71.4
48.0	68.44	21.87	84.70	3285	66.0	333	2300	70.0
48.0	68.62	21.46	85.85	3294	67.0	325	2279	69.2
48.0	68.72	21.10	86.80	3299	68.0	318	2264	68.6
48.0	68.73	20.69	87.78	3299	69.0	309	2232	67.6
48.0	68.76	20.30	89.06	3300	70.0	302	2213	67.0
48.0	68.81	19.97	90.17	3303	71.0	294	2185	66.1
48.0	68.99	19.60	91.53	3312	72.0	285	2147	64.8
48.0	69.03	19.21	92.62	3313	73.0	277	2116	63.9
48.0	69.05	18.84	93.95	3314	74.0	269	2083	62.9
48.0	69.16	18.56	95.04	3320	75.0	262	2057	62.0
48.0	69.10	18.17	96.16	3317	76.0	253	2013	60.7



EMPOWERING FUTURE

Hub Motor

MW-EV-HB-14"-48V-1500W

48.0	69.06	17.58	98.50	3315	78.0	240	1959	59.1
48.0	69.07	17.27	99.61	3315	79.0	231	1910	57.6
48.0	69.06	16.97	100.86	3315	80.0	225	1884	56.8
48.0	69.15	16.67	102.00	3319	81.0	217	1840	55.4
48.0	69.18	16.37	103.16	3321	82.0	210	1802	54.3
48.0	69.16	16.13	104.18	3320	83.0	203	1763	53.1
48.0	69.18	15.81	105.28	3321	84.0	197	1732	52.2
48.0	69.11	15.50	106.19	3317	85.0	189	1681	50.7
48.0	69.11	15.22	107.09	3317	86.0	184	1656	49.9
48.0	69.11	15.00	108.45	3317	87.0	175	1593	48.0
48.0	69.10	14.71	109.72	3317	88.0	169	1557	46.9
48.0	69.11	14.44	111.06	3317	89.0	162	1509	45.5
48.0	69.22	14.12	112.11	3323	90.0	156	1470	44.2
48.0	69.12	13.92	113.11	3318	91.0	149	1419	42.8
48.0	69.11	13.71	114.16	3317	92.0	142	1367	41.2
48.0	69.15	13.51	115.41	3319	93.0	136	1324	39.9
48.0	69.10	13.28	116.64	3317	94.0	128	1259	38.0
48.0	69.13	13.05	117.85	3318	95.0	122	1213	36.6
48.0	69.13	12.77	119.22	3318	96.0	115	1156	34.8
48.0	69.14	12.48	120.18	3319	97.0	109	1107	33.3
48.0	69.15	12.23	120.99	3319	98.0	101	1036	31.2
48.0	69.11	11.88	121.92	3317	99.0	94	974	29.4
48.0	69.06	11.72	123.23	3315	100.0	89	932	28.1
48.0	69.02	11.54	124.30	3313	101.0	82	867	26.2
48.0	69.04	11.26	125.12	3314	102.0	73	780	23.5
48.0	69.17	11.13	125.79	3320	103.0	67	722	21.8
48.0	69.22	10.72	126.97	3323	104.5	51	558	16.8
48.0	69.22	10.75	126.99	3323	104.5	51	558	16.8



EMPOWERING FUTURE