

# Motor Load Characteristics Curve

Motor Type: DC48-500rpm#

Rated Volt: 48.0(V)

Rated Current: 10.0(A)

Customer: Unknown

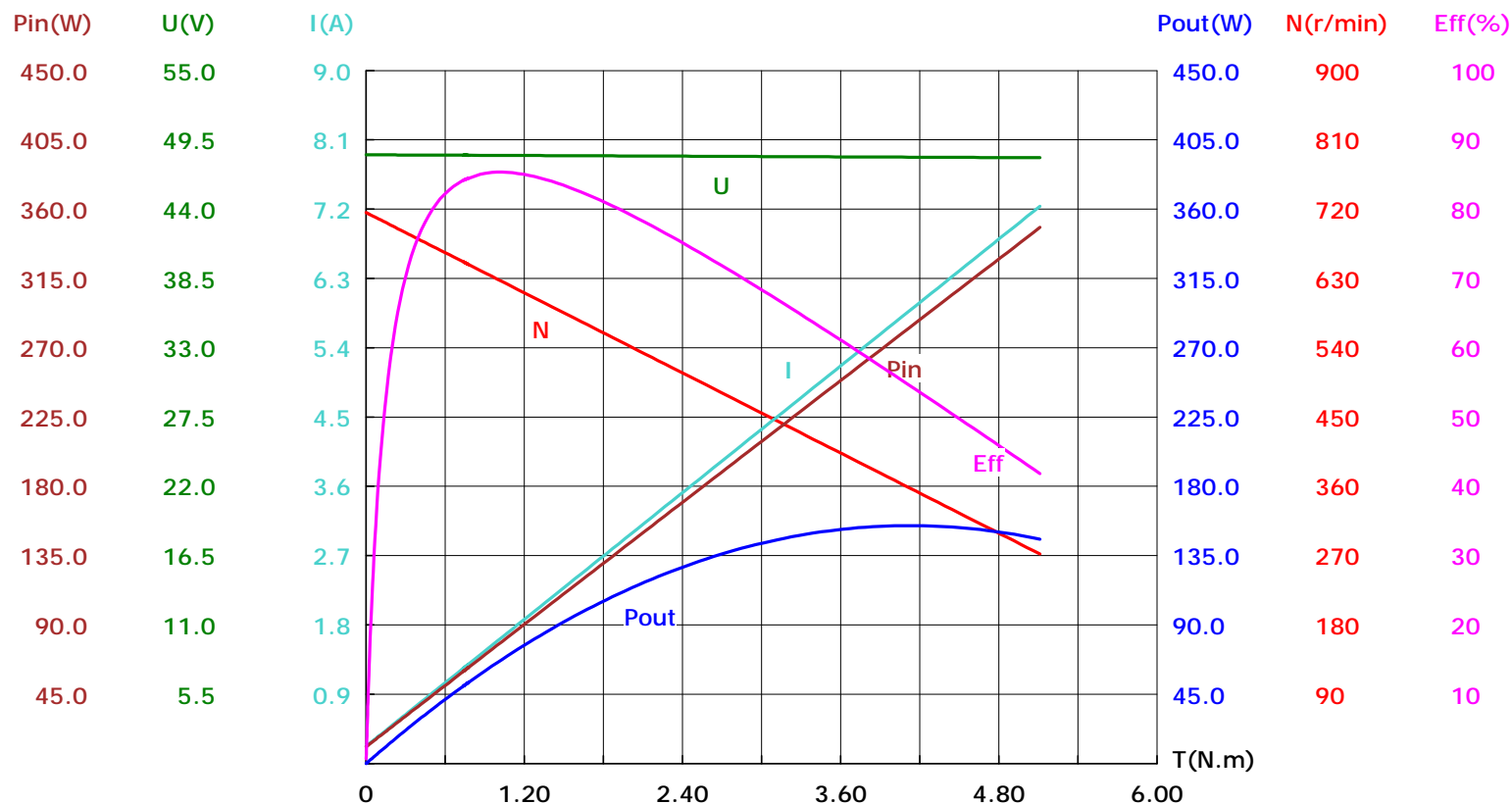
Feature: No Feature!

No: FA2103300002

Rated Power: 150.0(W)

TestDate: 2021/03/30

Vol tage: 48.32(V)



At No Load: 0.001(N.m)  
Speed: 716(r/min)  
Current: 0.228(A)

At Maximum Efficiency: 85.4(%)  
Torque: 1.033(N.m)  
Speed: 626(r/min)  
Current: 1.644(A)  
Output Power: 67.73(W)

At Maximum Torq: 5.113(N.m)  
Speed: 272(r/min)  
Current: 7.241(A)  
Output Power: 145.70(W)

At Maxim OutPower: 154.57(W)  
Torque: 4.120(N.m)  
Speed: 358(r/min)  
Current: 5.879(A)

Item	Time(s)	T(N.m)	N(r/min)	Pout(W)	U(V)	I(A)	Pin(W)	Eff(%)
Eff Platform	----	0.504	672	35.47	48.30	0.918	44.33	80.0
	----	1.922	549	110.49	48.23	2.863	138.11	80.0

Operate: Administrator

## AutoTest Data Report

No: FA2103300002

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 Customer: Unknown      Feature: No Feature!      TestDate: 2021/03/30

Index	Time(s)	Torque(N.m)	Speed(r/min)	Output Power(W)	Voltage(V)	Current(A)	Input Power(W)	Efficiency(%)
1	0.0	0.001	716	0.07	48.32	0.228	11.01	0.7
2	0.7	0.001	716	0.07	48.32	0.228	11.01	0.7
3	1.3	0.001	716	0.07	48.32	0.228	11.01	0.7
4	2.0	0.002	715	0.15	48.32	0.229	11.07	1.4
5	2.6	0.003	715	0.22	48.32	0.231	11.14	2.0
6	3.2	0.003	715	0.22	48.32	0.231	11.14	2.0
7	3.8	0.003	715	0.22	48.32	0.231	11.14	2.0
8	4.5	0.003	715	0.22	48.32	0.231	11.14	2.0
9	5.1	0.003	715	0.22	48.32	0.231	11.14	2.0
10	5.7	0.003	715	0.22	48.32	0.231	11.14	2.0
11	6.3	0.003	715	0.22	48.32	0.231	11.14	2.0
12	6.9	0.003	715	0.22	48.32	0.231	11.14	2.0
13	7.6	0.004	715	0.30	48.32	0.232	11.21	2.7
14	8.1	0.005	715	0.37	48.32	0.233	11.27	3.3
15	8.7	0.006	715	0.45	48.32	0.235	11.34	4.0
16	9.3	0.008	715	0.60	48.32	0.237	11.47	5.2
17	9.9	0.009	715	0.67	48.32	0.239	11.54	5.8
18	10.5	0.011	715	0.82	48.32	0.241	11.67	7.1
19	11.1	0.013	715	0.97	48.32	0.244	11.80	8.2
20	11.7	0.014	714	1.05	48.32	0.246	11.87	8.8
21	12.3	0.017	714	1.27	48.32	0.250	12.07	10.5
22	12.9	0.019	714	1.42	48.32	0.252	12.20	11.6
23	13.5	0.021	714	1.57	48.32	0.255	12.33	12.7
24	14.1	0.024	714	1.79	48.32	0.259	12.53	14.3
25	14.7	0.026	713	1.94	48.32	0.262	12.66	15.3
26	15.3	0.029	713	2.17	48.32	0.266	12.86	16.8
27	15.9	0.032	713	2.39	48.32	0.270	13.06	18.3
28	16.6	0.036	713	2.69	48.32	0.276	13.33	20.2
29	17.2	0.040	712	2.98	48.32	0.281	13.59	21.9
30	17.8	0.045	712	3.35	48.32	0.288	13.92	24.1
31	18.5	0.050	711	3.72	48.32	0.295	14.25	26.1
32	19.1	0.054	711	4.02	48.32	0.300	14.52	27.7
33	19.7	0.060	710	4.46	48.32	0.309	14.92	29.9
34	20.3	0.067	710	4.98	48.32	0.318	15.38	32.4
35	20.9	0.073	709	5.42	48.32	0.327	15.78	34.4
36	21.5	0.081	709	6.01	48.32	0.338	16.31	36.9
37	22.2	0.089	708	6.60	48.32	0.349	16.84	39.2
38	22.7	0.098	707	7.26	48.32	0.361	17.44	41.6
39	23.3	0.109	706	8.06	48.32	0.376	18.16	44.4
40	23.9	0.118	705	8.72	48.32	0.388	18.76	46.5
41	24.5	0.130	704	9.59	48.32	0.405	19.56	49.0
42	25.1	0.142	703	10.46	48.32	0.421	20.35	51.4
43	25.7	0.156	702	11.47	48.31	0.440	21.28	53.9
44	26.3	0.169	701	12.41	48.31	0.458	22.14	56.0
45	26.9	0.186	700	13.63	48.31	0.482	23.27	58.6
46	27.5	0.202	698	14.77	48.31	0.504	24.33	60.7
47	28.1	0.222	696	16.19	48.31	0.531	25.65	63.1

## AutoTest Data Report

No: FA2103300002

Motor Type: DC48-500rpm#      Rated Volt: 48.0(V)      Rated Current: 10.0(A)      Rated Power: 150.0(W)      Operate: Administrator  
 Customer: Unknown      Feature: No Feature!      TestDate: 2021/03/30

Index	Time(s)	Torque(N.m)	Speed(r/min)	Output Power(W)	Voltage(V)	Current(A)	Input Power(W)	Efficiency(%)
48	28.7	0.241	695	17.53	48.31	0.557	26.91	65.2
49	29.3	0.257	693	18.66	48.31	0.579	27.97	66.7
50	29.9	0.277	692	20.06	48.31	0.606	29.30	68.5
51	30.5	0.299	690	21.60	48.31	0.637	30.75	70.2
52	31.2	0.322	688	23.19	48.31	0.668	32.28	71.8
53	31.8	0.344	686	24.71	48.31	0.698	33.74	73.2
54	32.4	0.370	684	26.49	48.31	0.734	35.46	74.7
55	33.1	0.393	682	28.05	48.30	0.766	36.98	75.9
56	33.7	0.420	679	29.88	48.30	0.803	38.77	77.1
57	34.3	0.447	677	31.69	48.30	0.840	40.56	78.1
58	34.9	0.476	674	33.62	48.30	0.879	42.48	79.1
59	35.5	0.505	672	35.53	48.30	0.919	44.40	80.0
60	36.1	0.535	669	37.50	48.30	0.960	46.39	80.8
61	36.7	0.563	667	39.32	48.30	0.999	48.24	81.5
62	37.3	0.595	664	41.38	48.30	1.043	50.36	82.2
63	37.9	0.630	661	43.61	48.29	1.091	52.68	82.8
64	38.5	0.661	658	45.57	48.29	1.133	54.73	83.3
65	39.1	0.695	655	47.70	48.29	1.180	56.98	83.7
66	39.7	0.729	652	49.81	48.29	1.227	59.23	84.1
67	40.3	0.766	649	52.08	48.29	1.277	61.68	84.4
68	40.9	0.778	648	52.81	48.29	1.294	62.47	84.5
69	41.5	0.738	652	50.36	48.29	1.239	59.82	84.2
70	42.1	0.866	641	58.09	48.28	1.415	68.30	85.1
71	42.7	0.905	637	60.39	48.28	1.468	70.88	85.2
72	43.3	0.955	633	63.29	48.28	1.537	74.19	85.3
73	43.9	0.994	629	65.52	48.28	1.590	76.77	85.4
74	44.5	1.033	626	67.73	48.28	1.644	79.35	85.4
75	45.1	1.071	623	69.85	48.27	1.696	81.86	85.3
76	45.8	1.111	619	72.05	48.27	1.751	84.51	85.3
77	46.4	1.153	616	74.34	48.27	1.808	87.28	85.2
78	47.1	1.195	612	76.59	48.27	1.866	90.06	85.0
79	47.7	1.238	608	78.86	48.27	1.925	92.91	84.9
80	48.3	1.276	605	80.84	48.26	1.977	95.42	84.7
81	48.9	1.318	601	83.00	48.26	2.035	98.20	84.5
82	49.5	1.361	598	85.18	48.26	2.094	101.04	84.3
83	50.1	1.407	594	87.47	48.26	2.157	104.08	84.0
84	50.7	1.455	589	89.82	48.26	2.223	107.25	83.7
85	51.3	1.493	586	91.65	48.25	2.275	109.77	83.5
86	51.9	1.540	582	93.87	48.25	2.339	112.87	83.2
87	52.5	1.584	578	95.92	48.25	2.400	115.78	82.8
88	53.1	1.633	574	98.16	48.25	2.467	119.02	82.5
89	53.7	1.678	570	100.18	48.25	2.529	121.99	82.1
90	54.3	1.724	566	102.21	48.24	2.592	125.03	81.7
91	54.9	1.774	562	104.37	48.24	2.660	128.33	81.3
92	55.5	1.818	558	106.23	48.24	2.721	131.24	80.9
93	56.1	1.869	554	108.34	48.24	2.791	134.61	80.5
94	56.7	1.916	549	110.25	48.24	2.855	137.71	80.1

## AutoTest Data Report

No: FA2103300002

Motor Type: DC48-500rpm#      Rated Volt: 48.0(V)      Rated Current: 10.0(A)      Rated Power: 150.0(W)      Operate: Administrator  
 Customer: Unknown      Feature: No Feature!      TestDate: 2021/03/30

Index	Time(s)	Torque(N.m)	Speed(r/min)	Output Power(W)	Voltage(V)	Current(A)	Input Power(W)	Efficiency(%)
95	57.3	1.965	545	112.19	48.23	2.922	140.95	79.6
96	57.9	2.019	541	114.29	48.23	2.996	144.52	79.1
97	58.5	2.064	537	115.99	48.23	3.058	147.49	78.6
98	59.1	2.116	532	117.91	48.23	3.129	150.92	78.1
99	59.7	2.171	527	119.89	48.22	3.205	154.55	77.6
100	60.4	2.215	524	121.44	48.22	3.265	157.46	77.1
101	61.0	2.270	519	123.32	48.22	3.341	161.09	76.6
102	61.7	2.320	514	124.98	48.22	3.409	164.39	76.0
103	62.3	2.371	510	126.63	48.21	3.479	167.75	75.5
104	62.9	2.423	505	128.26	48.21	3.551	171.18	74.9
105	63.5	2.477	501	129.90	48.21	3.625	174.75	74.3
106	64.1	2.528	496	131.41	48.21	3.695	178.11	73.8
107	64.7	2.580	492	132.89	48.21	3.766	181.54	73.2
108	65.3	2.636	487	134.44	48.20	3.843	185.24	72.6
109	65.9	2.690	482	135.87	48.20	3.917	188.80	72.0
110	66.5	2.738	478	137.10	48.20	3.983	191.96	71.4
111	67.1	2.795	473	138.51	48.20	4.061	195.72	70.8
112	67.7	2.846	469	139.72	48.19	4.131	199.08	70.2
113	68.3	2.903	464	141.01	48.19	4.209	202.84	69.5
114	68.9	2.958	459	142.20	48.19	4.285	206.47	68.9
115	69.5	3.014	454	143.36	48.19	4.361	210.16	68.2
116	70.1	3.066	450	144.39	48.18	4.433	213.59	67.6
117	70.7	3.119	445	145.38	48.18	4.506	217.08	67.0
118	71.3	3.175	440	146.38	48.18	4.582	220.77	66.3
119	71.9	3.229	436	147.28	48.18	4.656	224.33	65.7
120	72.5	3.285	431	148.17	48.17	4.733	228.02	65.0
121	73.1	3.339	426	148.96	48.17	4.807	231.57	64.3
122	73.7	3.394	421	149.72	48.17	4.883	235.20	63.7
123	74.4	3.458	416	150.53	48.17	4.971	239.41	62.9
124	75.0	3.507	411	151.11	48.16	5.038	242.64	62.3
125	75.7	3.562	407	151.70	48.16	5.113	246.26	61.6
126	76.3	3.619	402	152.25	48.16	5.191	250.01	60.9
127	76.9	3.673	397	152.72	48.16	5.266	253.57	60.2
128	77.5	3.733	392	153.18	48.15	5.348	257.52	59.5
129	78.1	3.786	387	153.53	48.15	5.421	261.00	58.8
130	78.7	3.843	382	153.85	48.15	5.499	264.76	58.1
131	79.3	3.900	377	154.11	48.15	5.577	268.51	57.4
132	79.9	3.955	373	154.31	48.14	5.652	272.13	56.7
133	80.5	4.009	368	154.45	48.14	5.727	275.68	56.0
134	81.1	4.062	363	154.54	48.14	5.799	279.16	55.4
135	81.7	4.120	358	154.57	48.14	5.879	282.98	54.6
136	82.3	4.173	354	154.55	48.13	5.952	286.47	54.0
137	82.9	4.227	349	154.48	48.13	6.026	290.02	53.3
138	83.5	4.289	344	154.33	48.13	6.111	294.09	52.5
139	84.1	4.337	339	154.17	48.13	6.177	297.25	51.9
140	84.7	4.391	335	153.93	48.12	6.251	300.80	51.2
141	85.3	4.446	330	153.64	48.12	6.326	304.42	50.5

## AutoTest Data Report

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 Customer: Unknown      Feature: No Feature!      TestDate: 2021/03/30

Index	Time(s)	Torque(N.m)	Speed(r/min)	Output Power(W)	Voltage(V)	Current(A)	Input Power(W)	Efficiency(%)
142	85.9	4.499	325	153.30	48.12	6.399	307.90	49.8
143	86.5	4.555	321	152.89	48.12	6.476	311.58	49.1
144	87.1	4.607	316	152.46	48.11	6.547	315.00	48.4
145	87.7	4.660	311	151.97	48.11	6.620	318.48	47.7
146	88.3	4.708	307	151.48	48.11	6.686	321.63	47.1
147	89.0	4.761	303	150.90	48.11	6.758	325.11	46.4
148	89.6	4.813	298	150.27	48.10	6.830	328.53	45.7
149	90.3	4.864	294	149.61	48.10	6.900	331.88	45.1
150	90.9	4.916	289	148.89	48.10	6.971	335.30	44.4
151	91.5	4.964	285	148.18	48.10	7.037	338.45	43.8
152	92.1	5.015	281	147.38	48.09	7.107	341.80	43.1
153	92.7	5.065	276	146.54	48.09	7.175	345.08	42.5
154	93.3	5.113	272	145.70	48.09	7.241	348.23	41.8