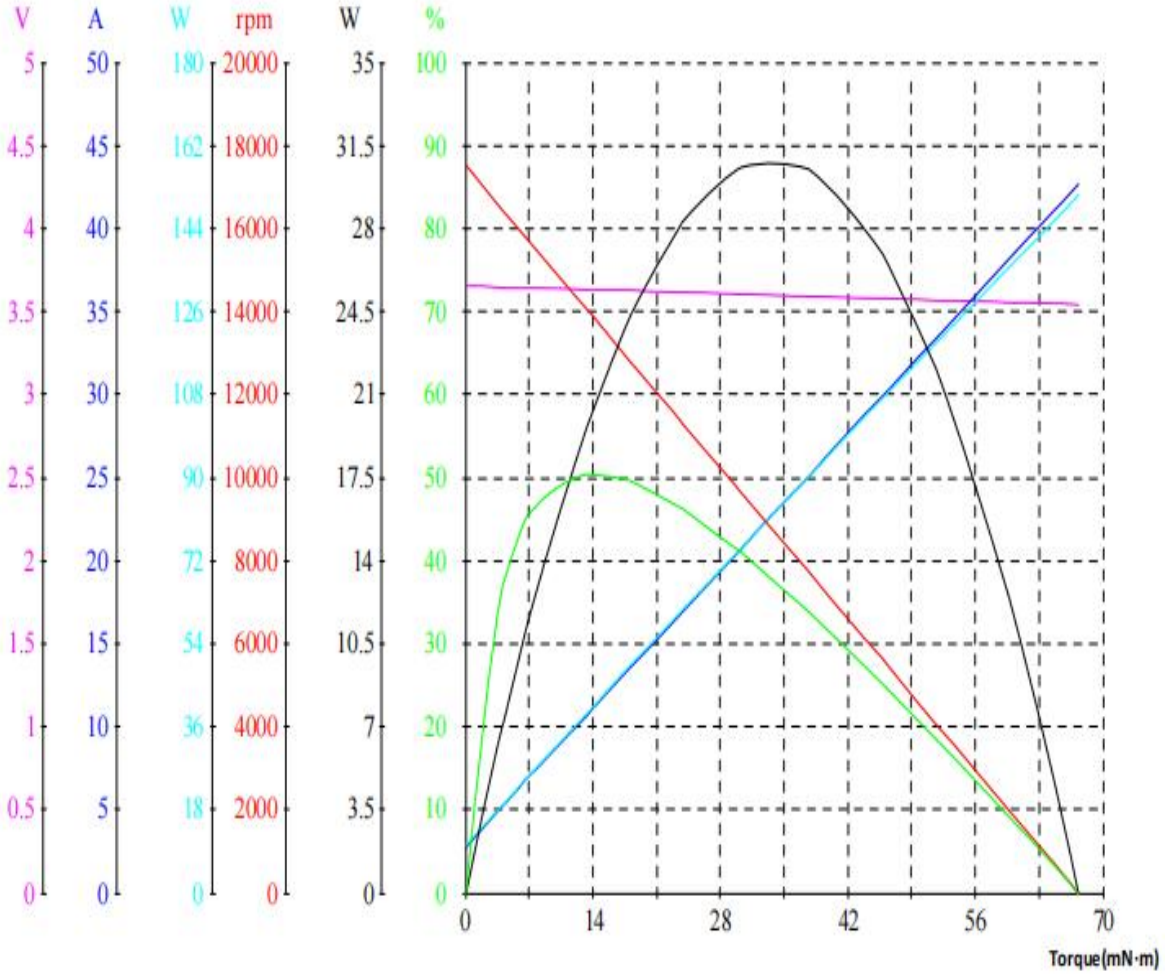
ZXR380SH/385SH

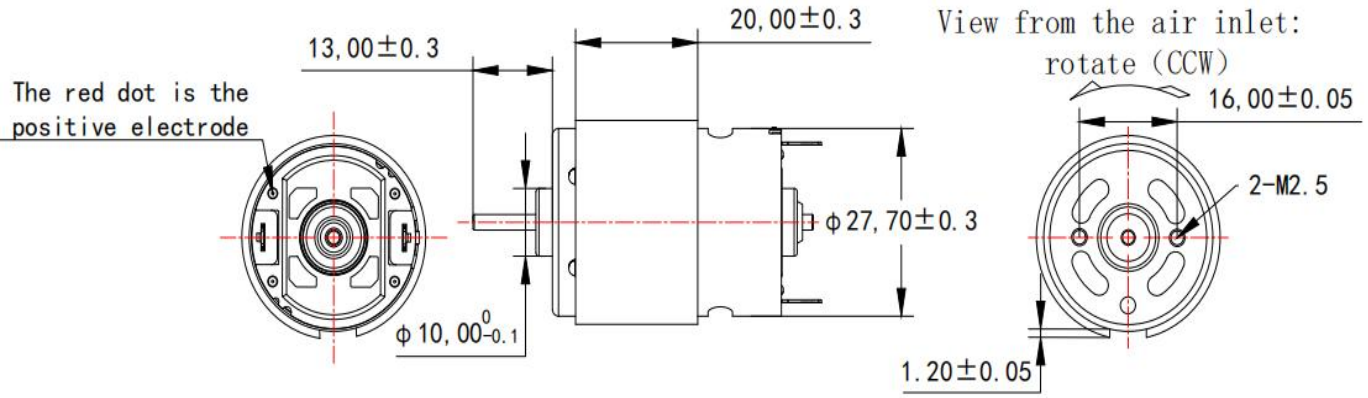
typical applications:

1、Household appliances: hair dryers, massagers, vibrators, mite removers;

2. Power tools: electric screwdrivers







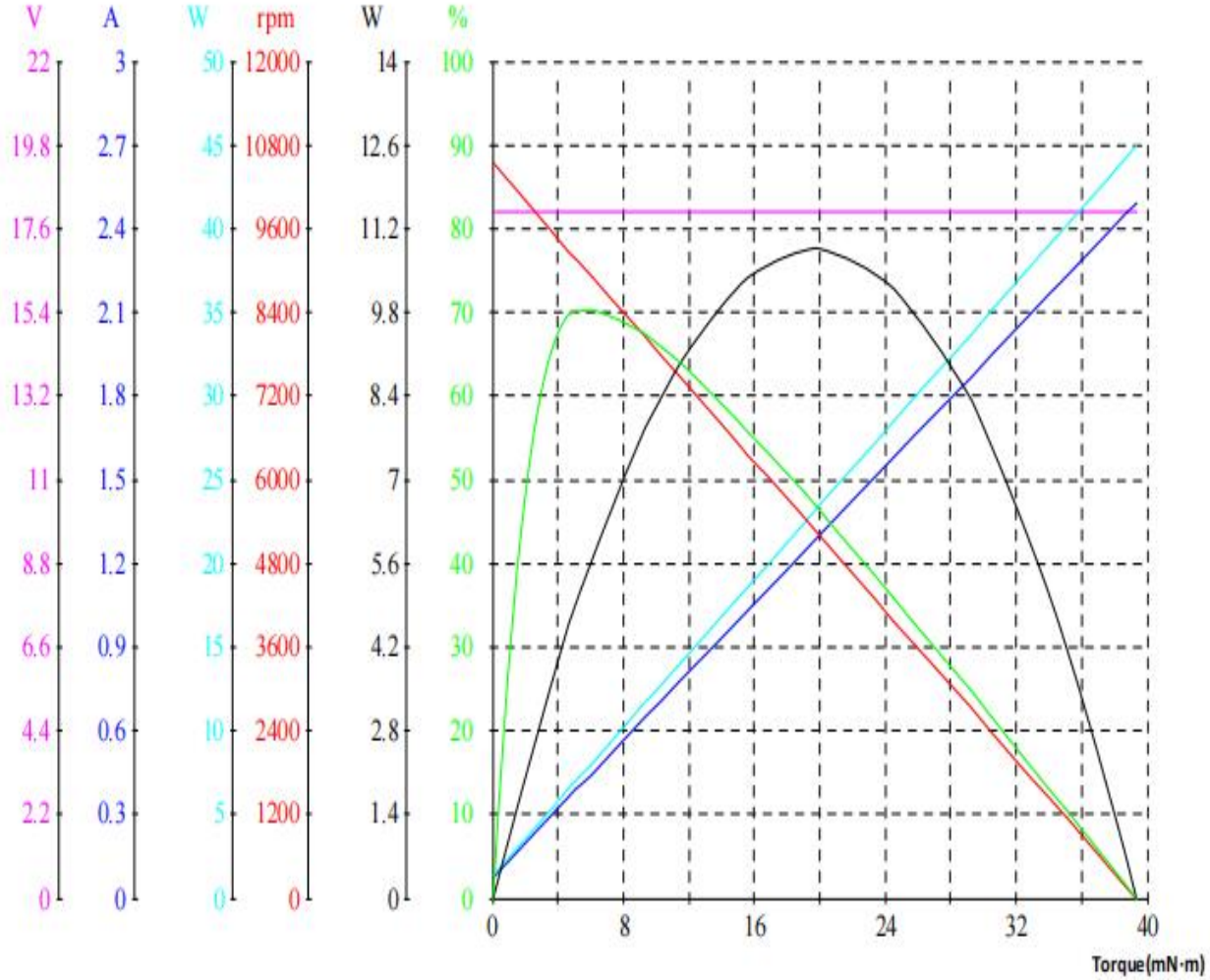
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	3.648	5.537	19.98	4.1	16649	7.116	35.6	0.000
Rated value								
Maximum efficiency point (Eff_max)	3.602	20.45	73.43	30.3	9858	31.31	42.6	26.02
End point	3.606	31.40	113.0	46.3	5482	26.55	23.5	31.02

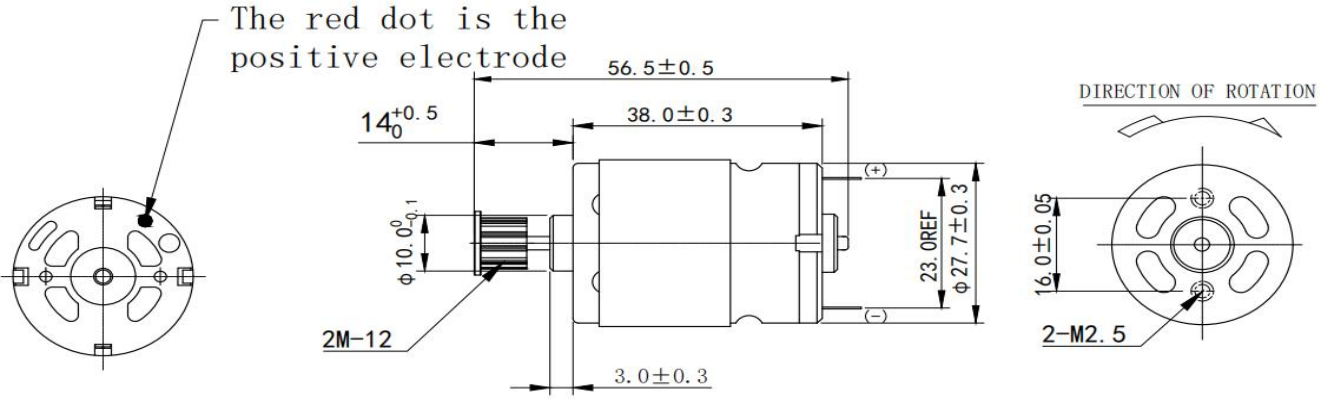
ZXR380SA/385SA

Typical applications:

1. Household appliances: hair dryers, massagers, vibrators, mite removers;
2. Power tools: electric screwdrivers





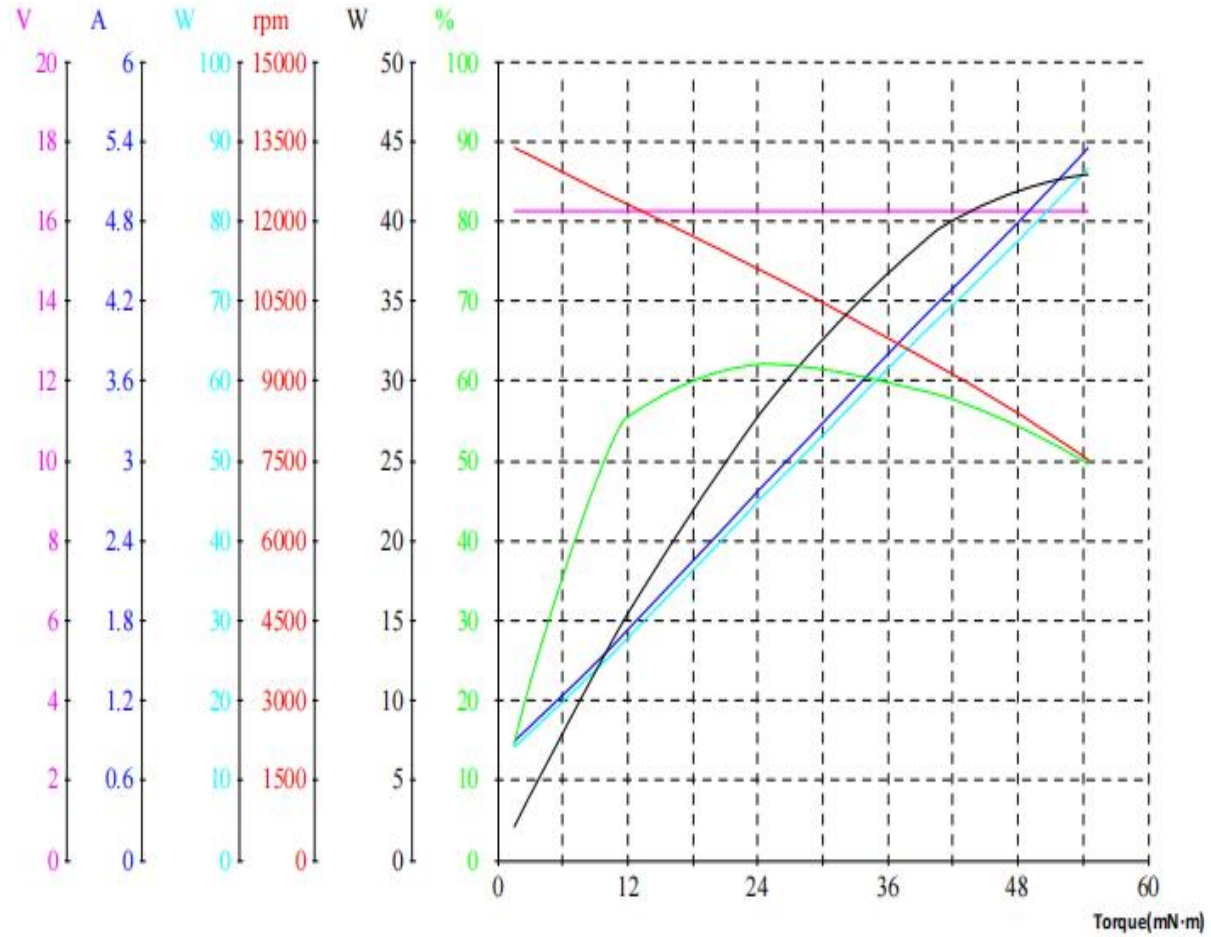


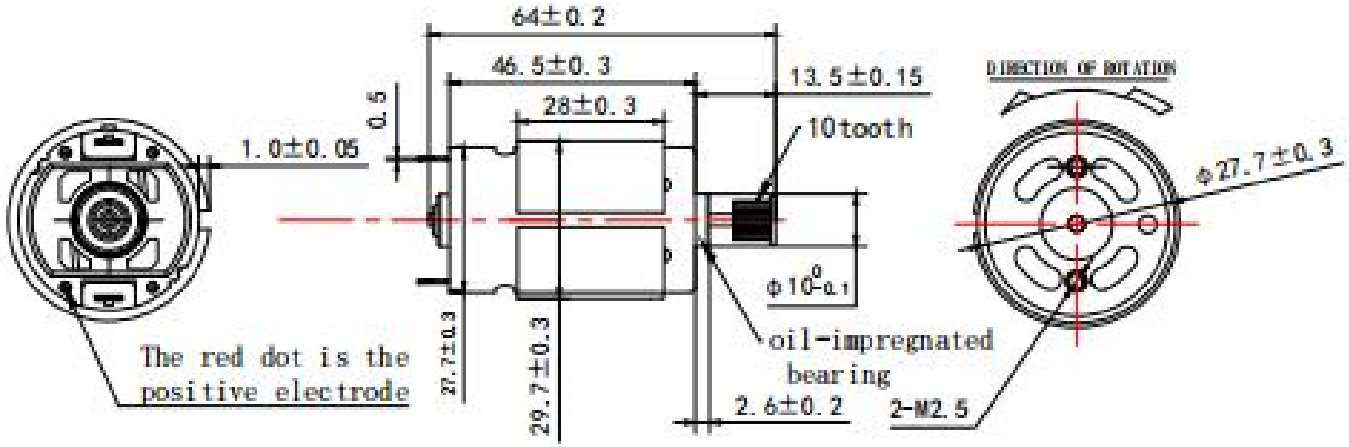
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	18.01	0.410	7.294	5.4	9028	5.058	69.3	0.000
Rated value								
Maximum efficiency point (Eff_max)	18.02	0.781	14.00	11.5	7461	8.979	64.1	16.02
End point	18.01	1.253	22.50	19.8	5435	11.27	50.1	21.02

ZXR390SH/395SH

Typical applications:
1. Household appliances: hair dryers, massagers, vibrators, mite removers;
2. Power tools: electric screwdrivers







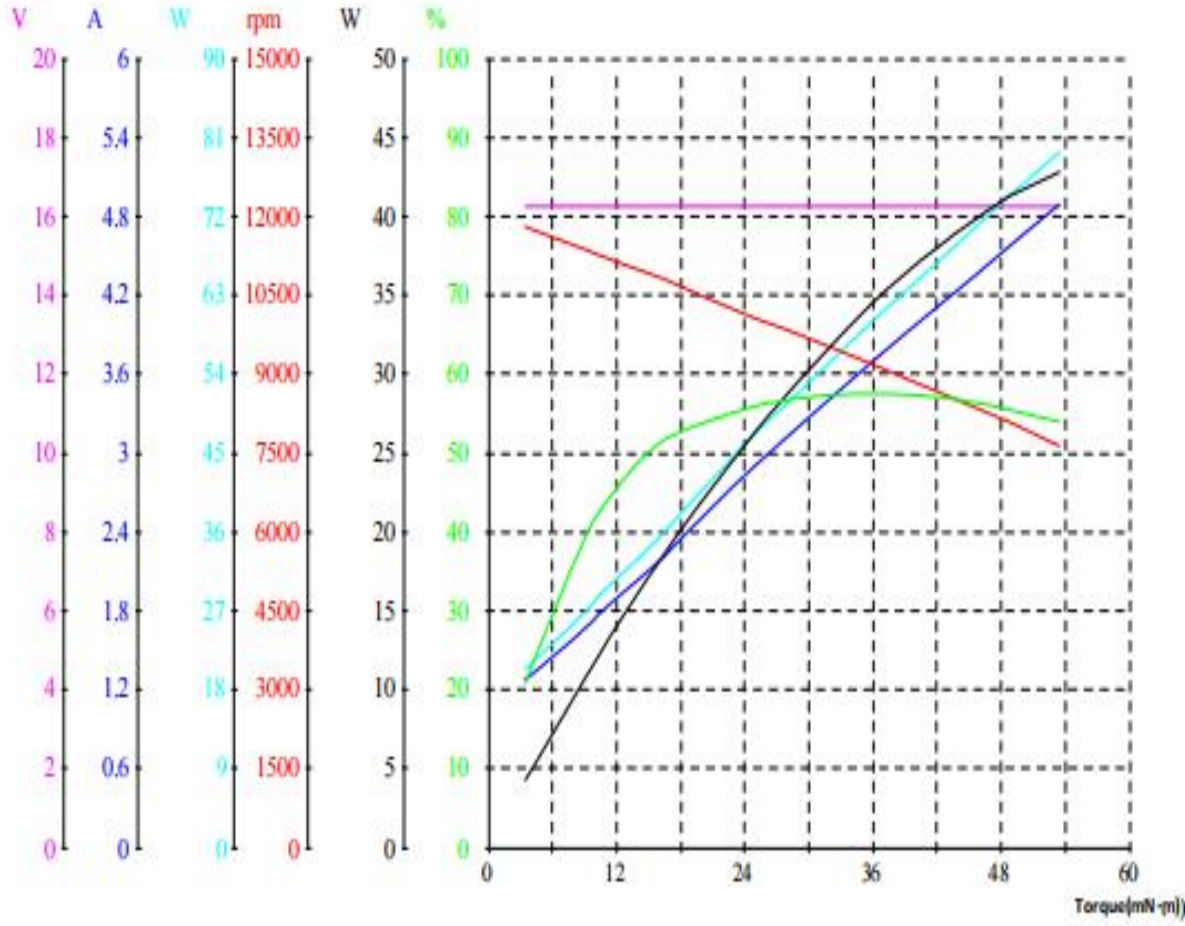
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	16.23	0.899	14.28	1.5	13379	2.051	14.4	0.000
Rated value								
Maximum efficiency point (Eff_max)	16.23	2.789	45.17	24.2	11067	28.06	62.1	16.02
Maximum output power point (Pout_max)	16.23	5.349	86.69	54.5	7526	42.98	49.6	28.52
Maximum torque point (Torque_max)	16.23	5.349	86.69	54.5	7526	42.98	49.6	28.52
End point	16.23	5.349	86.69	54.5	7526	42.98	49.6	28.52

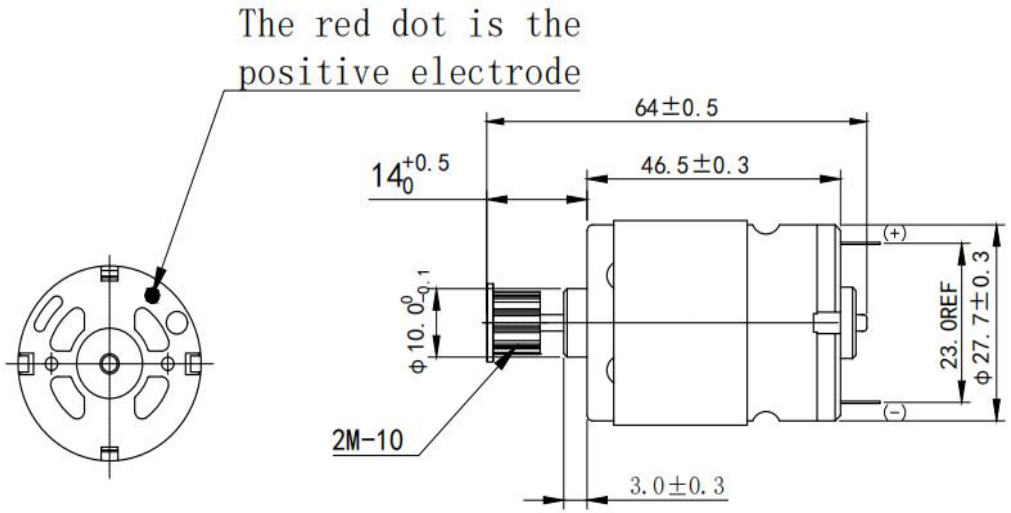
ZXR390SA/395SA

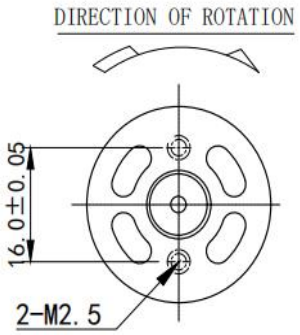
Typical applications:

1. Household appliances: hair dryers, massagers, vibrators, mite removers;
2. Power tools: electric screwdrivers









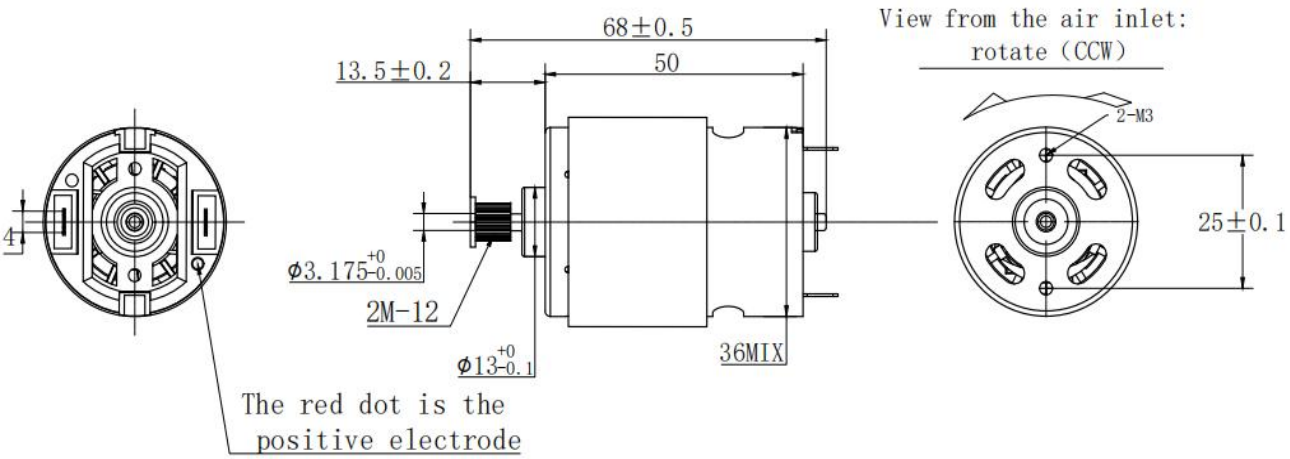
Characteristic points	Voltage	Current	Interior input power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	16.25	1.274	20.29	3.4	11789	4.242	20.9	0.000
Rated value								
Maximum efficiency point (Eff_max)	16.25	3.969	64.35	39.9	8858	37.02	57.5	33.52
Maximum output power point (Pout_max)	16.25	4.888	79.33	53.4	7651	42.74	53.9	41.02
Maximum torque point (Torque_max)	16.25	4.888	79.33	53.4	7651	42.74	53.9	41.02
End point	16.25	4.888	79.33	53.4	7651	42.74	53.9	41.02

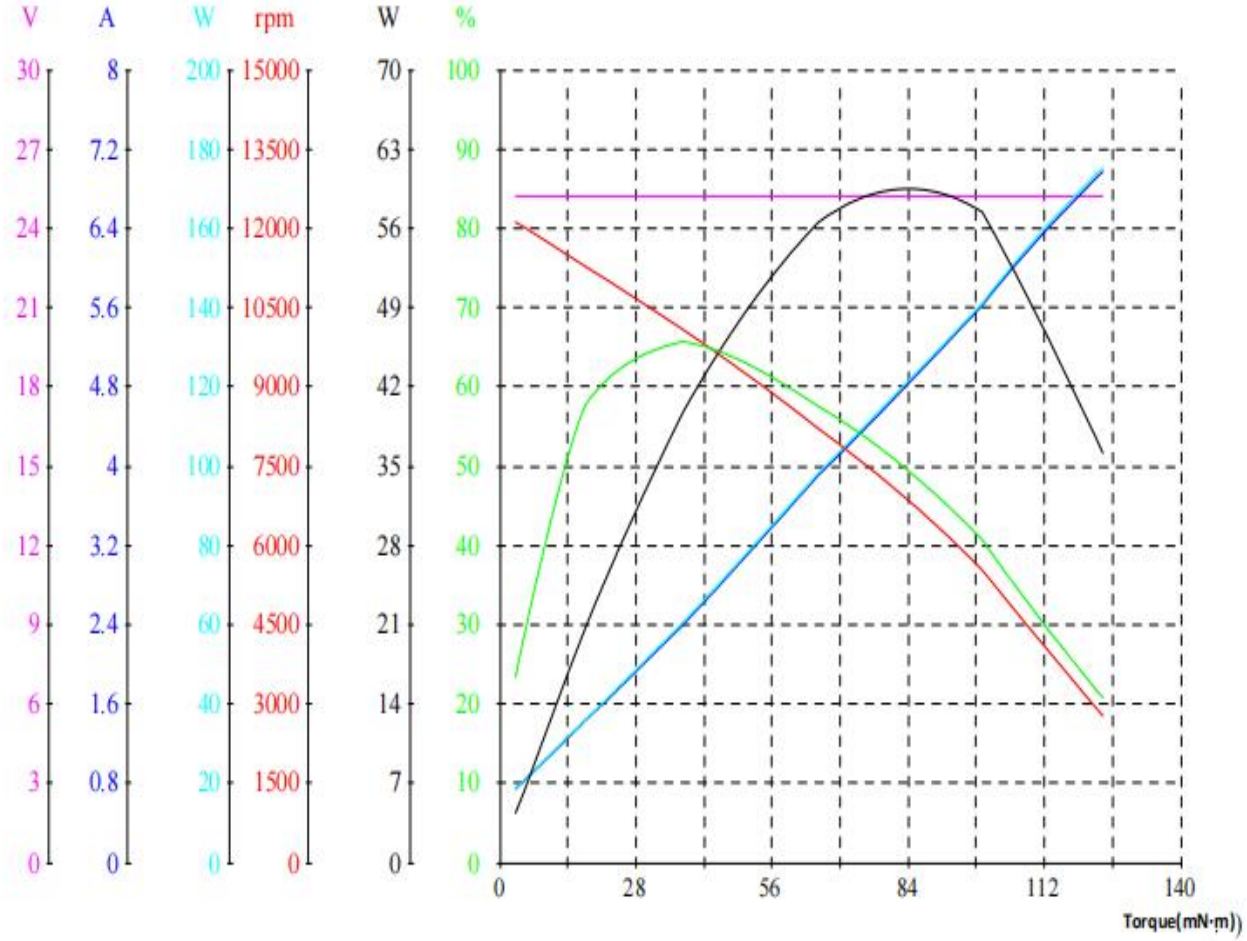
ZXR540SH/545SH

Typical applications:

1. Household appliances:vacuum cleaner fans,hair dryers, massagers, vibrators;
2. Power tools: electric screwdrivers,electric drills







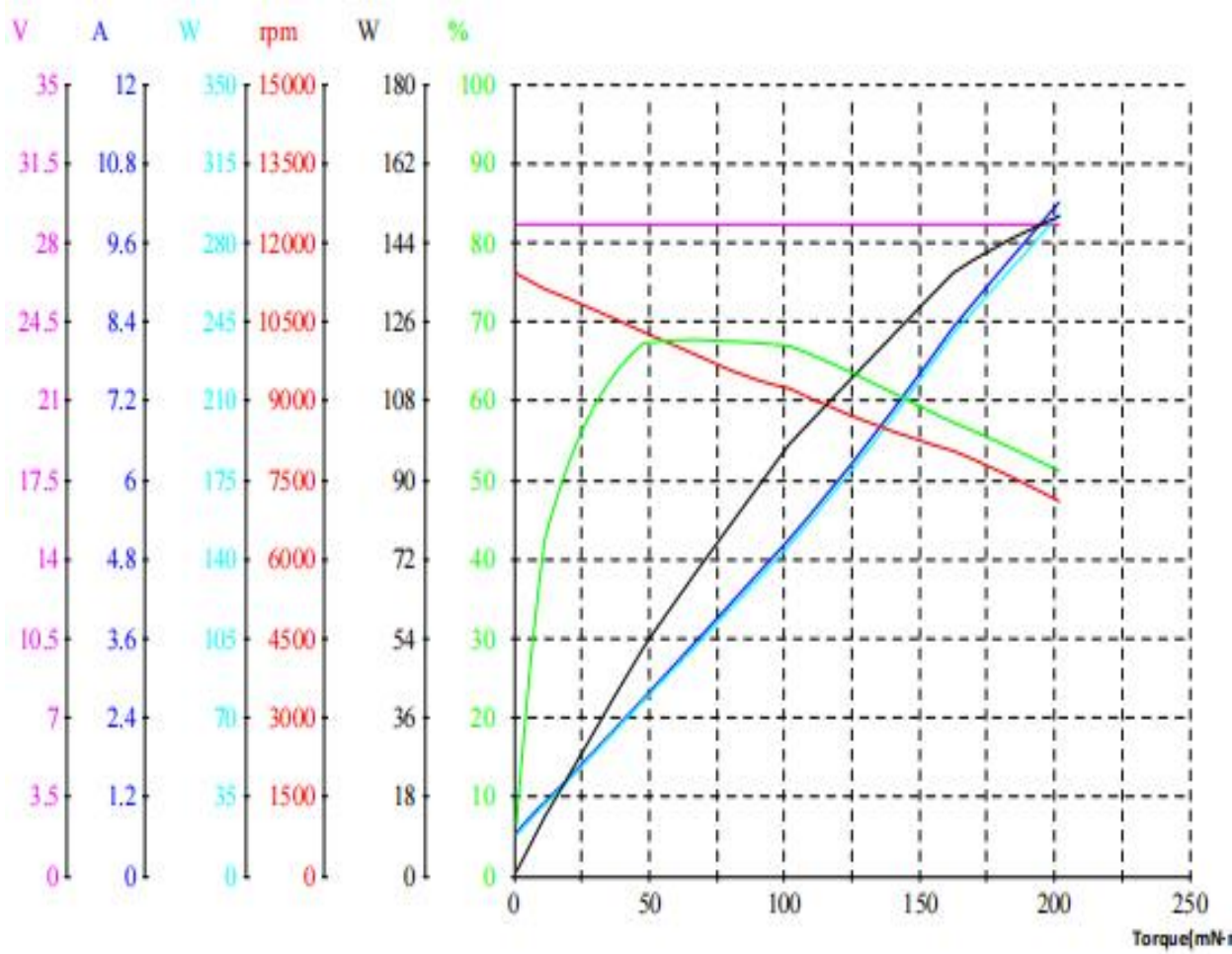
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productivenes s	Time
	V	A	W	mN. m	rpm	W	%	S
No Load Point	25.22	0.743	18.66	3.4	12099	4.341	23.3	0.000
Rated value								
Maximum efficiency point (Eff_max)	25.22	2.405	60.53	37.7	10080	39.80	65.8	16.03
Maximum output power point (Pout_max)	25.22	5.005	126.0	87.4	6620	60.60	48.1	28.53
Maximum torque point (Torque_max)	25.22	6.964	175.3	123.9	2793	36.24	20.7	36.03
End point	25.22	6.964	175.3	123.9	2793	36.24	20.7	36.03

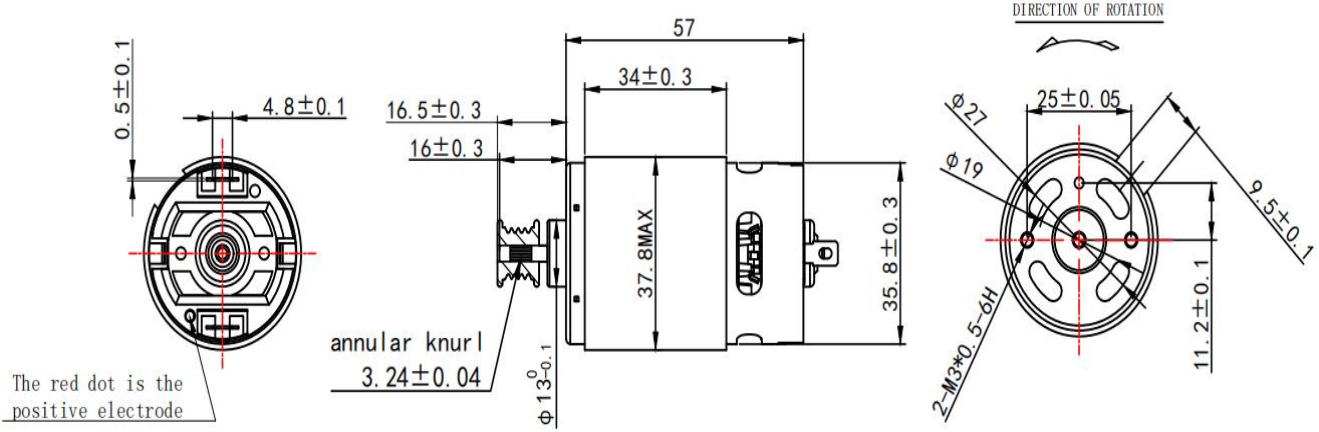
ZXR550SH/555SH

Typical applications:

1. Household appliances:vacuum cleaner fans,hair dryers, massagers, vibrators;
2. Power tools: electric screwdrivers, electric drills;
3. Cleaning appliances: floor scrubbers.







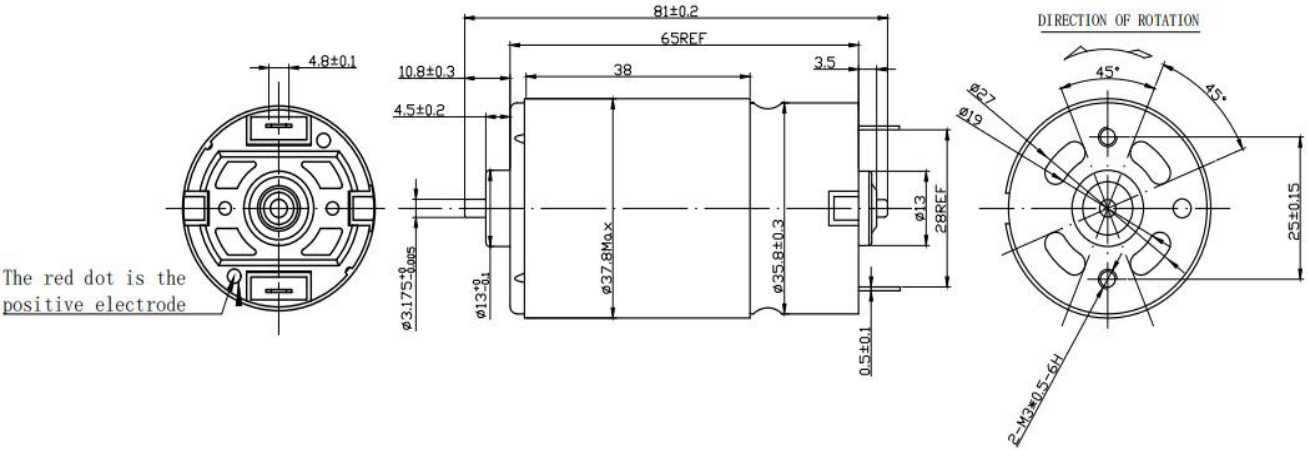
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	28.82	0.672	18.53	1.0	11414	1.225	6.6	0.000
Rated value								
Maximum efficiency point (Eff_max)	28.83	3.410	97.84	64.1	9953	66.83	68.3	15.02
Maximum output power point (Pout_max)	28.82	10.20	292.6	201.9	7087	149.8	51.2	29.02
Maximum torque point (Torque_max)	28.82	10.20	292.6	201.9	7087	149.8	51.2	29.02
End point	28.82	10.20	292.6	201.9	7087	149.8	51.2	29.02

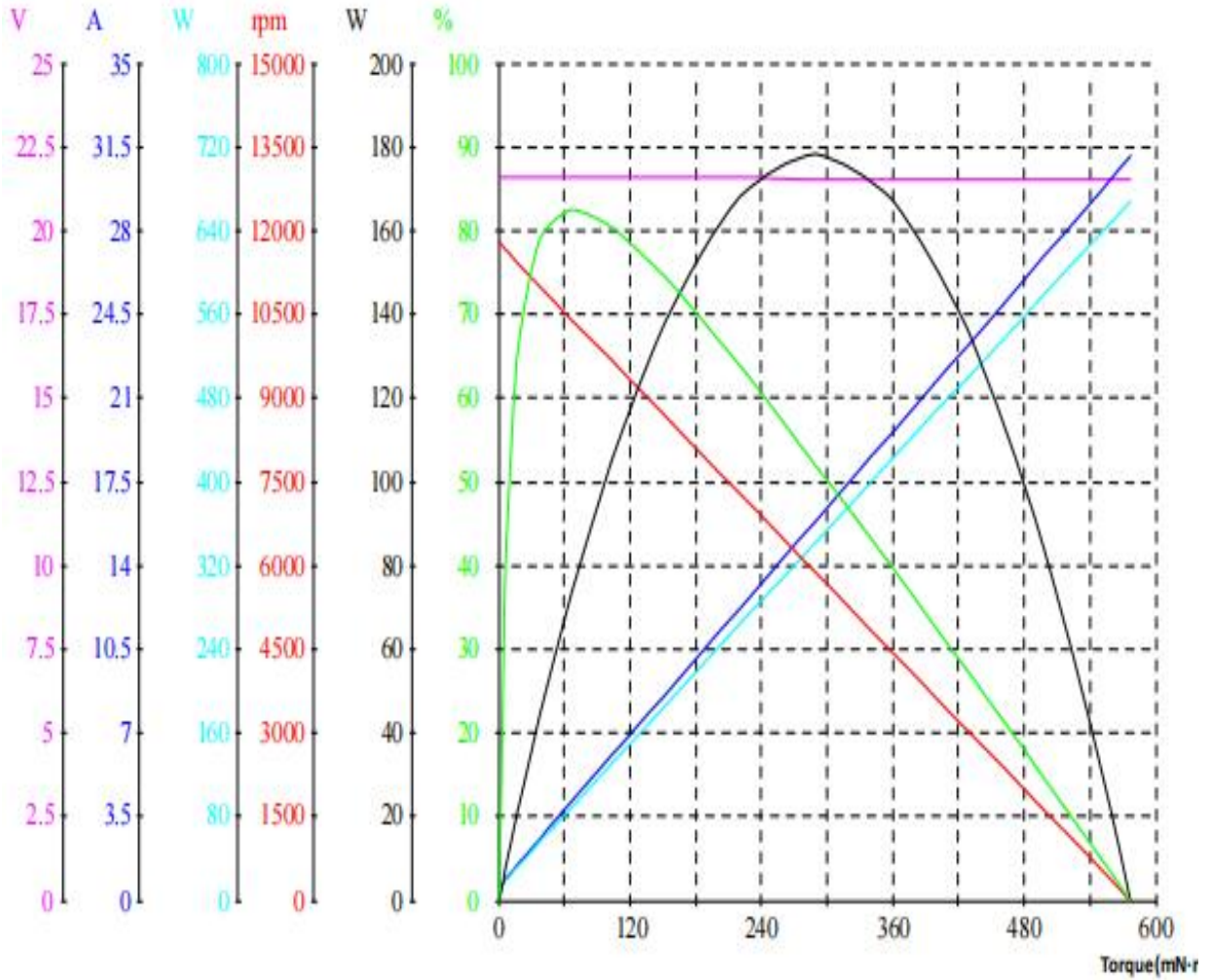
ZXR570SH/575SH

Typical applications:

1. Household appliances:vacuum cleaner fan;
2. Power tools: electric screwdriver,electric drill;
3. Cleaning equipment: floor scrubber.





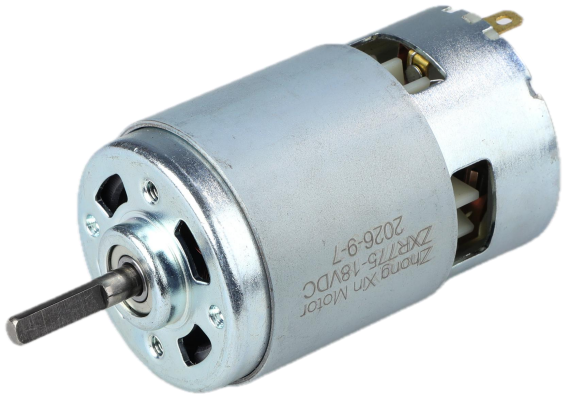


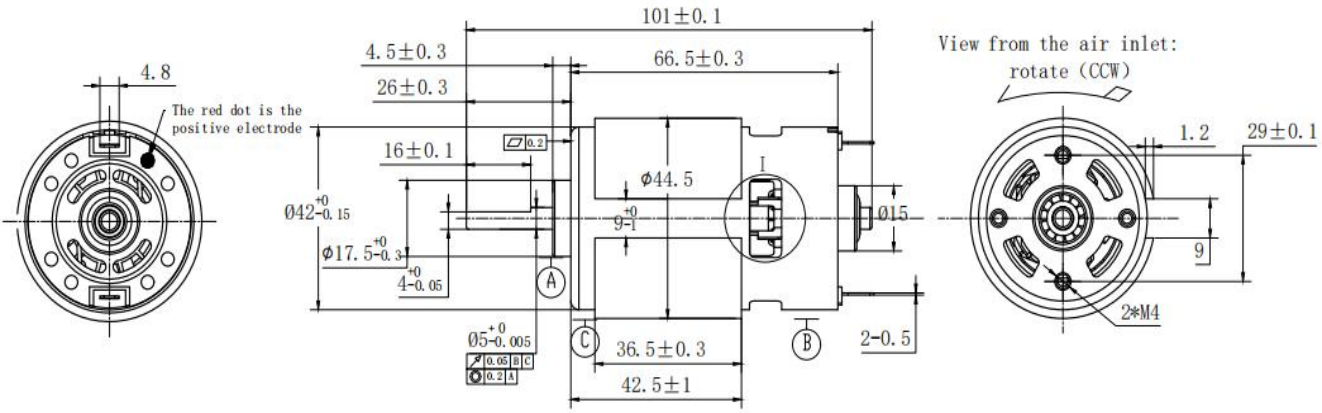
Characteristic points	Voltage	Current	Interior input power	Torque	Speed	Output power	Productiveness s	Time
	V	A	W	mN. m	rpm	W	%	S
No Load Point	21.59	0.812	16.83	4.5	11659	5.447	32.4	0.000
Rated value								
Maximum efficiency point (Eff_max)	21.58	4.734	102.0	78.9	10175	84.05	82.4	38.52
End point	21.56	7.377	158.7	128.1	8994	120.7	76.0	48.52

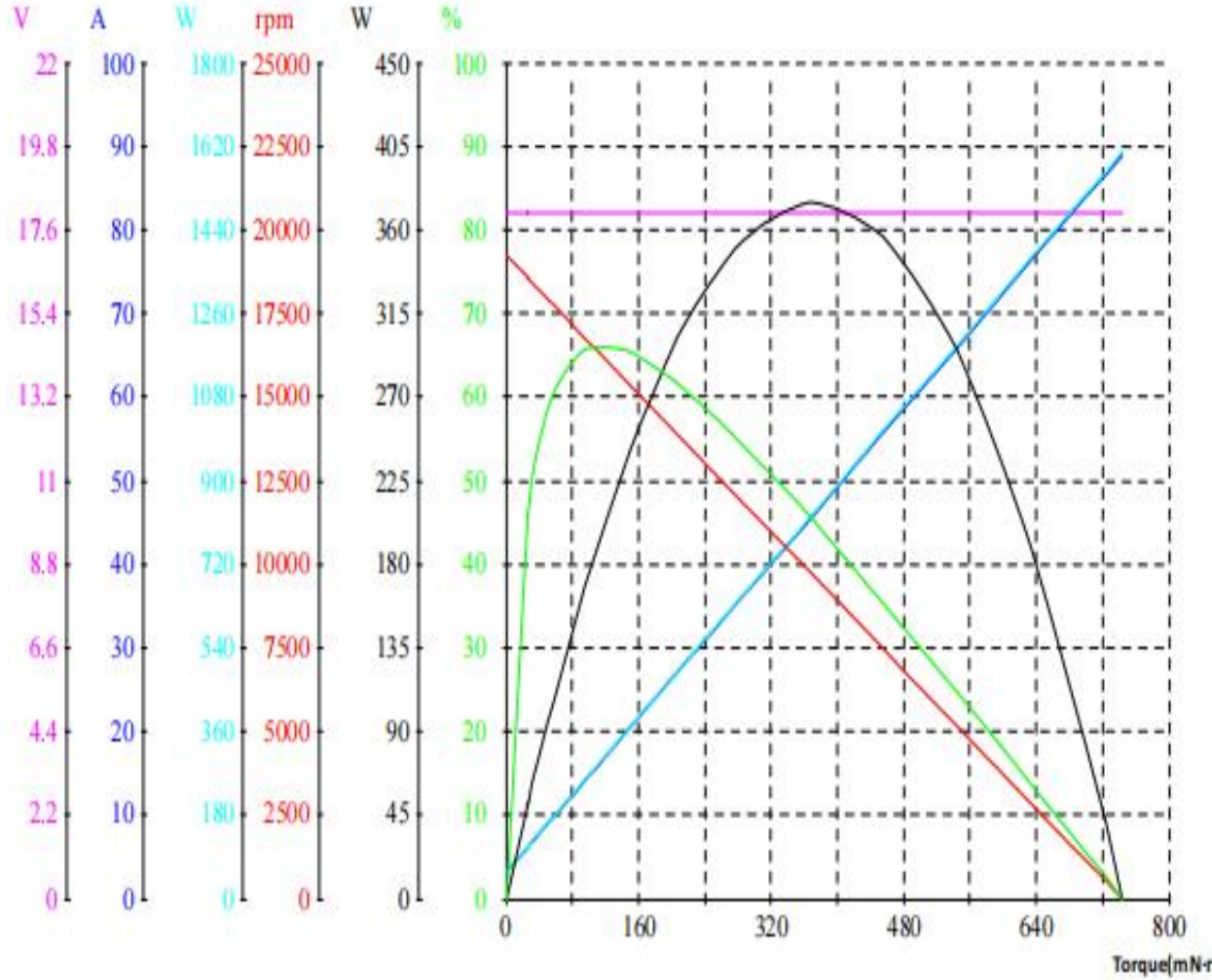
ZXR-775SH

Typical applications:

1. Household appliances;
2. Power tools:cordless drills,gardening tools;
3. Electric toys





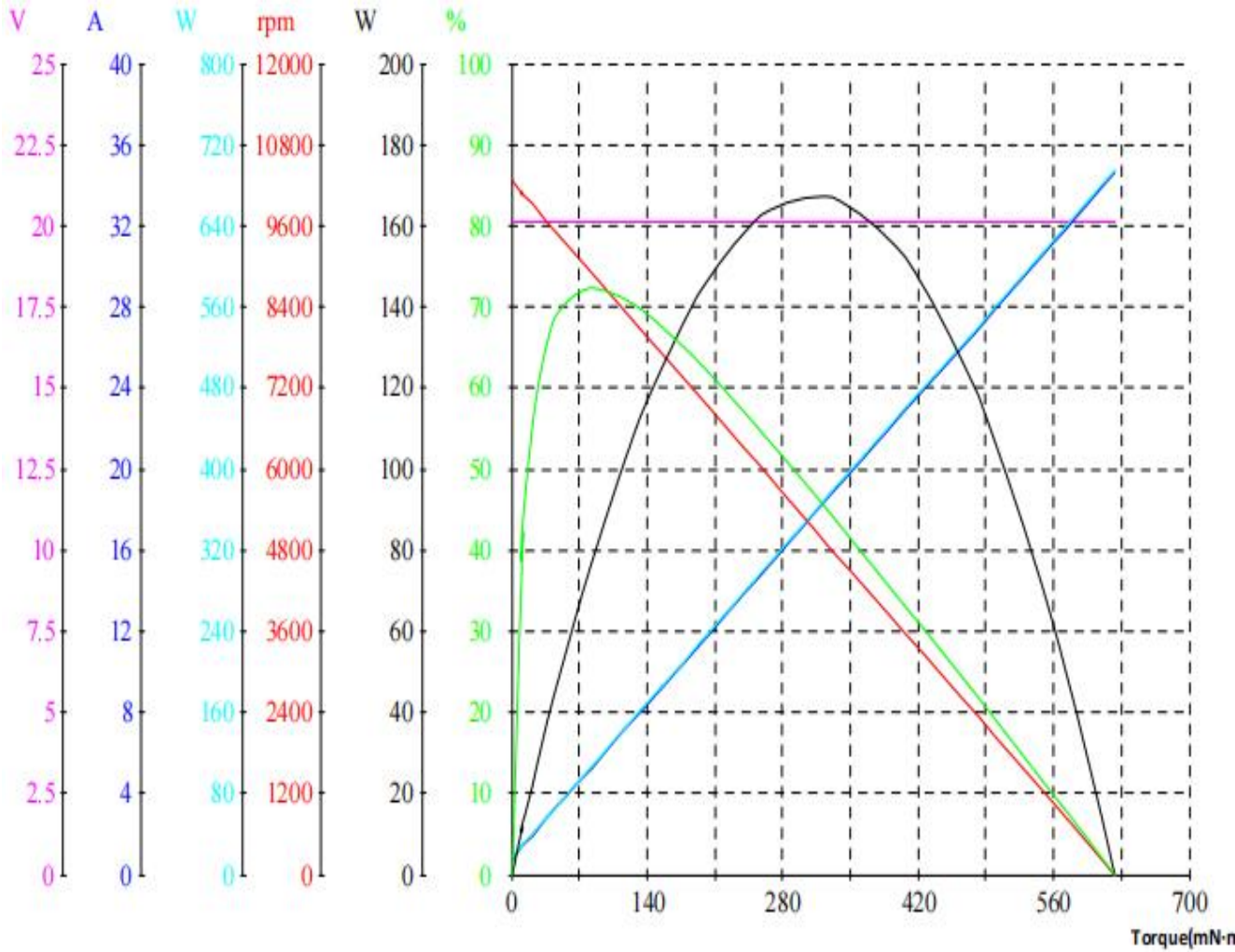


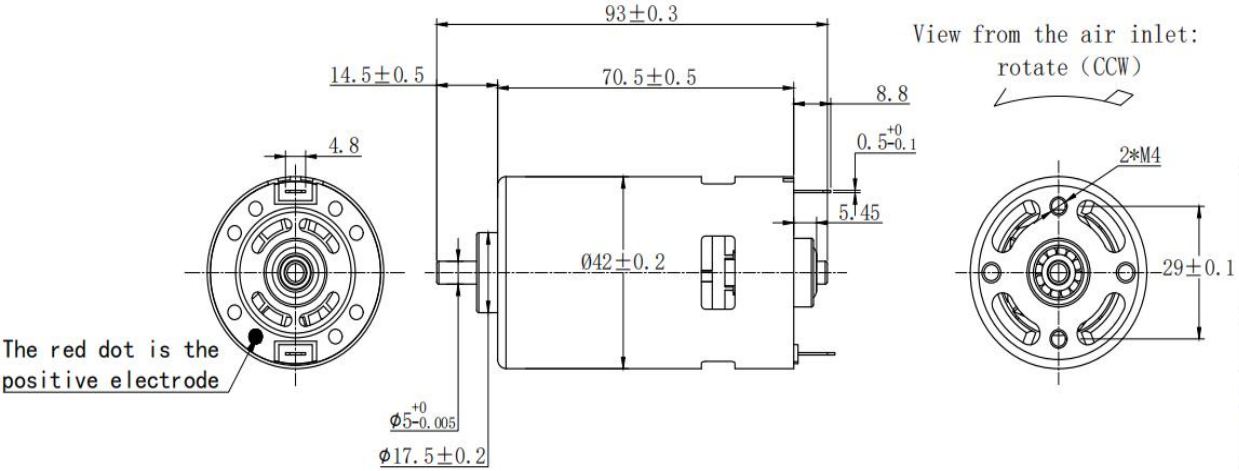
Characteristic points	Voltage	Current	Interior input power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	18.04	6.220	111.1	26.2	18495	50.70	45.6	0.000
Rated value								
Maximum efficiency point (Eff_max)	18.06	18.16	327.0	130.4	15866	216.6	66.2	48.52
End point	18.04	31.64	569.3	247.0	13369	345.7	60.7	63.52

ZXR-785SH

Typical applications:
1. Household appliances:robotic vacuum cleaners;
2. Power tools: cordless drills,gardening tools;
3. Electric toys







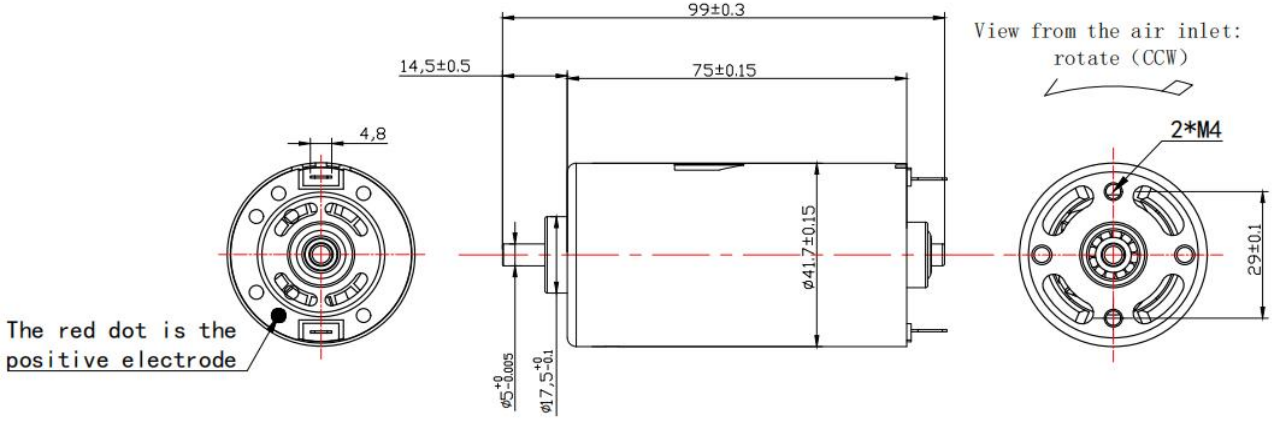
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN. m	rpm	W	%	S
No Load Point	20.09	1.485	29.25	12.0	10079	12.68	43.4	0.000
Rated value								
Maximum efficiency point (Eff_max)	20.09	6.121	122.7	98.1	8635	88.69	72.3	46.02
End point	20.08	13.16	263.8	232.0	6697	162.7	61.7	63.52

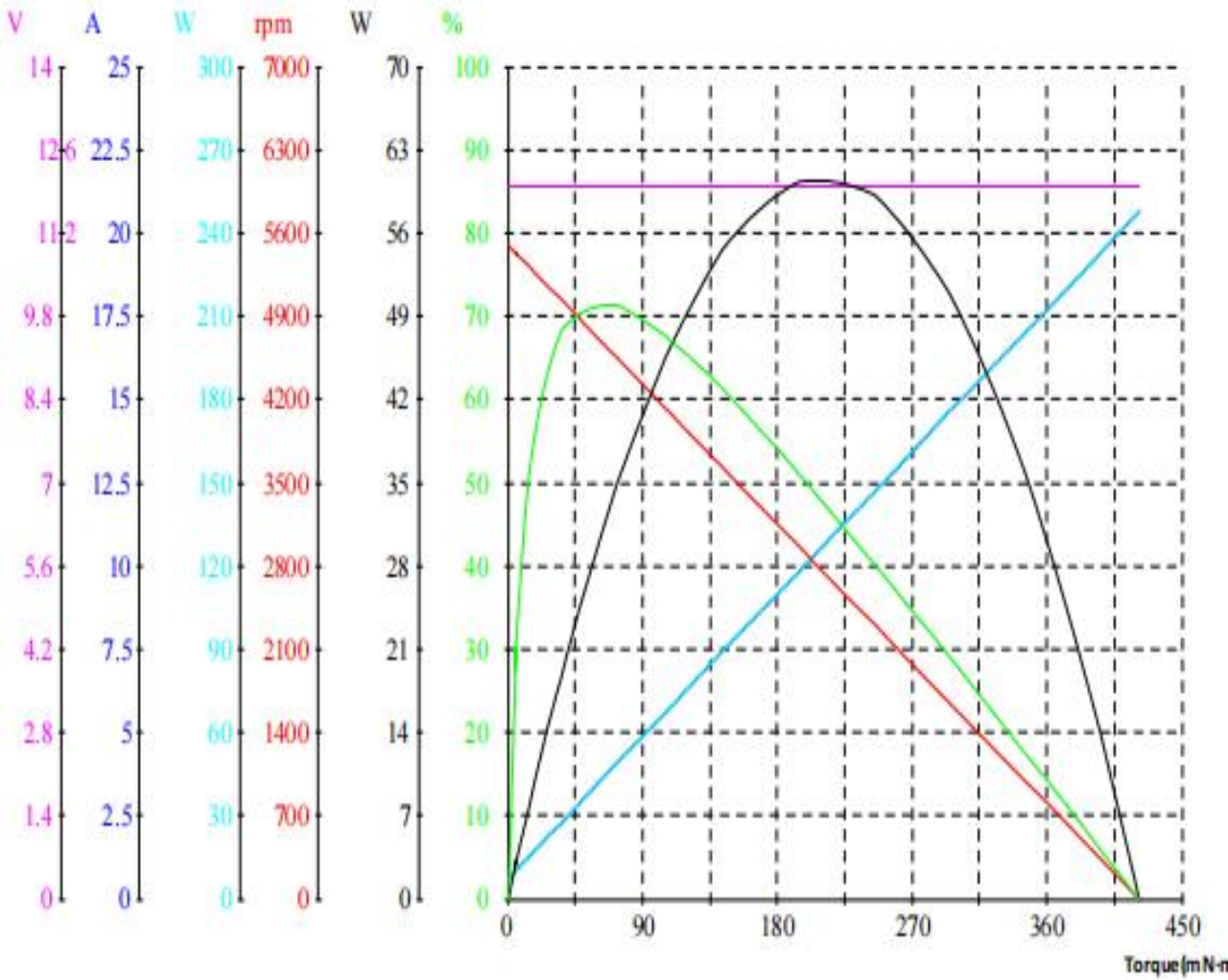
ZXR-795SH

Typical applications:

1. Household appliances:robotic vacuum cleaners, smart clothes drying racks;
2. Power tools: cordless drills,gardening tools;
3. Electric toys





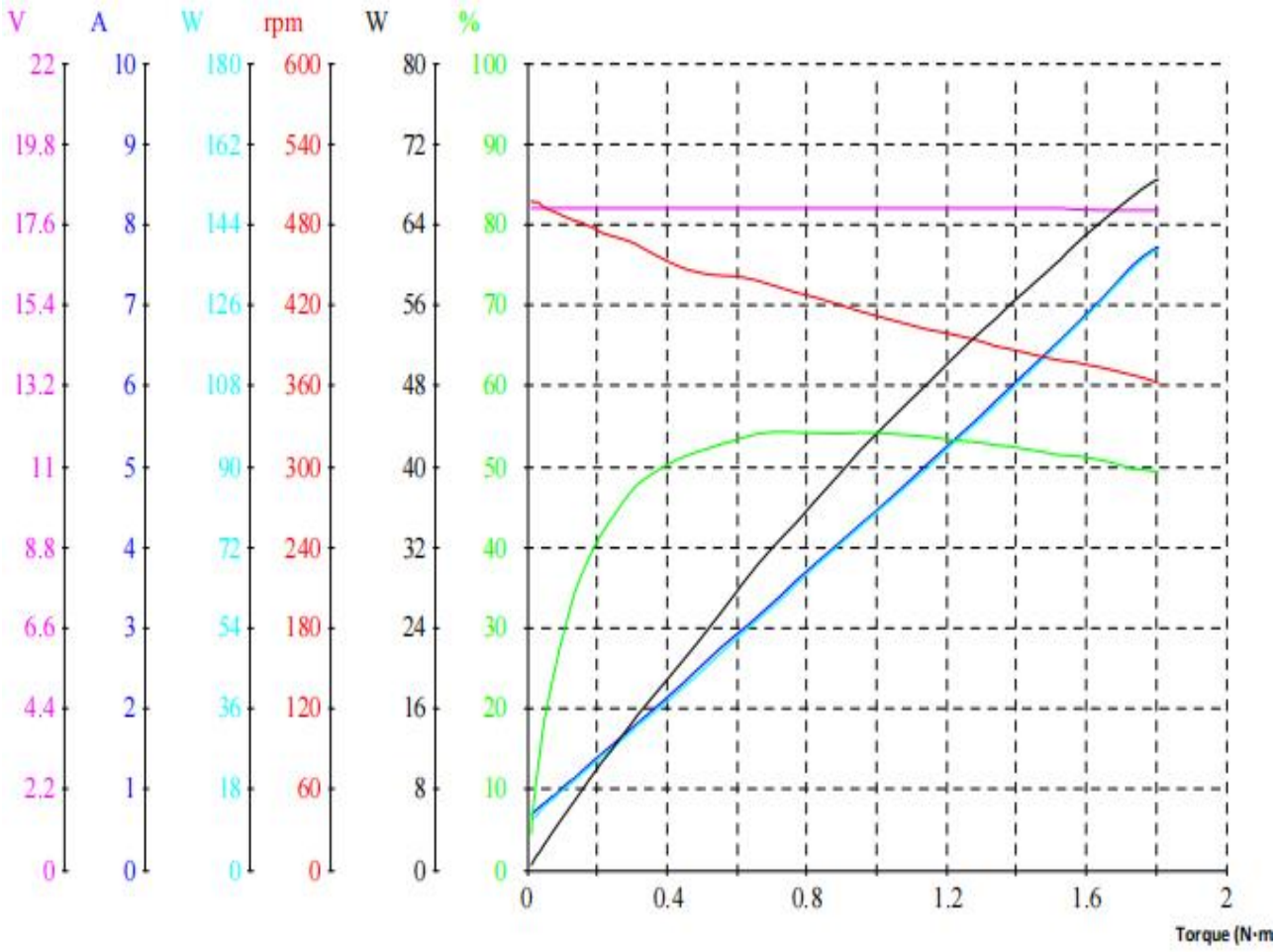


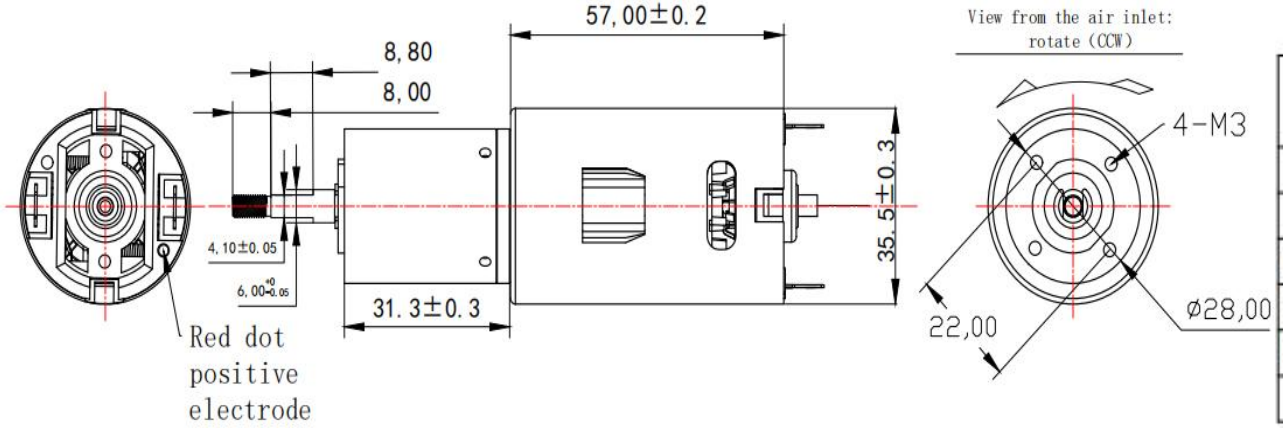
Characteristic points	Voltage	Current	Interior input power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN. m	rpm	W	%	S
No Load Point	11.99	0.946	11.07	6.0	5422	3.383	30.6	0.000
Rated value								
Maximum efficiency point (Eff_max)	12.00	4.128	49.43	73.7	4582	35.35	71.5	43.52
End point	11.99	6.753	80.88	126.5	4023	53.27	65.9	51.02

ZXR555Reduced-speed DC motor

Typical applications:
1. Cleaning tools: floor scrubber







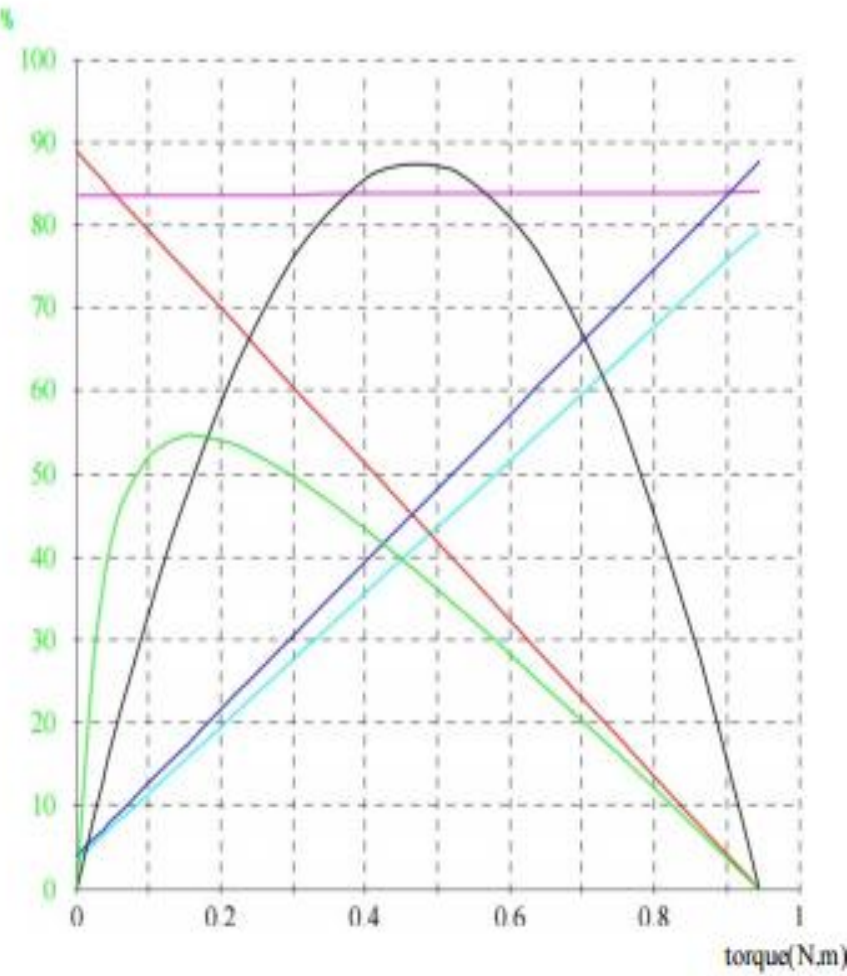
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	N.m	rpm	W	%	S
No Load Point	18.03	0.714	11.53	0.011	497	0.520	4.5	0.000
Rated value								
Maximum efficiency point (Eff_max)	18.03	3.318	59.20	0.710	434	32.26	54.5	53.02
Maximum output power point (Pout_max)	18.01	7.721	138.5	1.805	362	68.41	49.4	91.02
Maximum torque point (Torque_max)	18.01	7.721	138.5	1.805	362	68.41	49.4	91.02
End point	18.01	7.721	138.5	1.805	362	68.41	49.4	91.02

ZXR555Reduced-speed DC motor

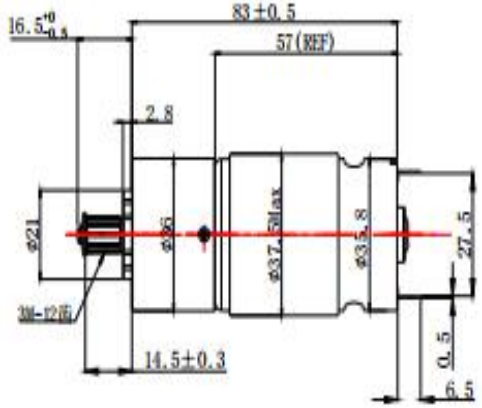
Typical applications:
1. Cleaning tools: floor scrubber

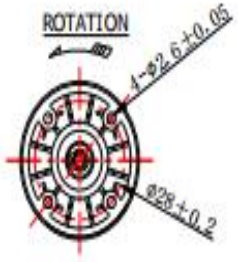


V	A	W	rpm	W	%
18	15	250	1800	45	
16.2	13.5	225	1620	40.5	
14.4	12	200	1440	36	
12.6	10.5	175	1260	31.5	
10.8	9	150	1080	27	
9	7.5	125	900	22.5	
7.2	6	100	720	18	
5.4	4.5	75	540	13.5	
3.6	3	50	360	9	
1.8	1.5	25	180	4.5	
0	0	0	0	0	









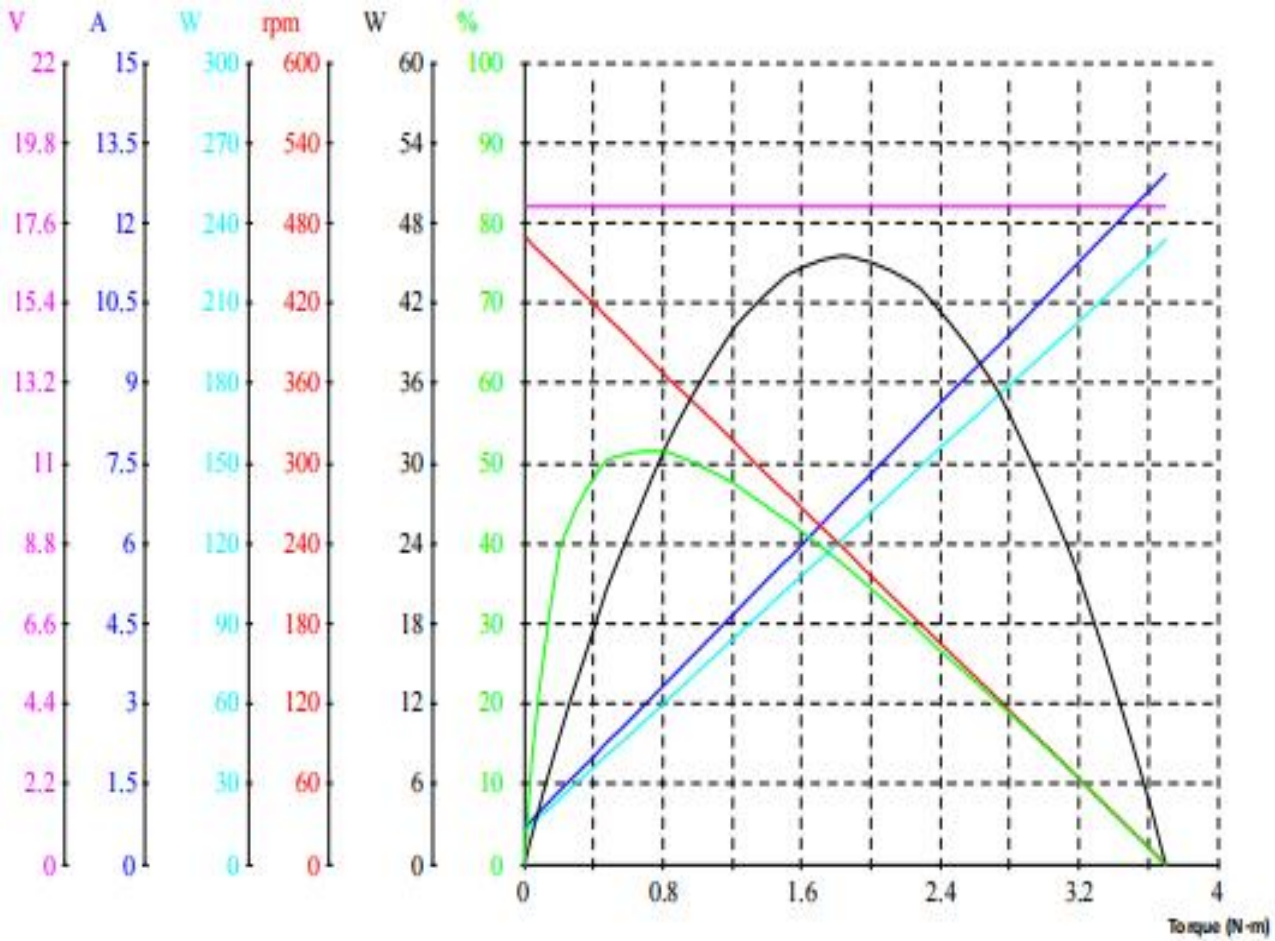
Characteristic points	Voltage	Current	Interior input power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	N.m	rpm	W	%	S
No Load Point	15.04	0.850	12.31	0.020	1564	3.275	26.6	0.000
Rated value								
Maximum efficiency point (Eff_max)	15.05	2.942	43.96	0.176	1304	23.89	54.4	31.02
End point	15.05	5.076	76.13	0.334	1035	36.09	47.4	46.02

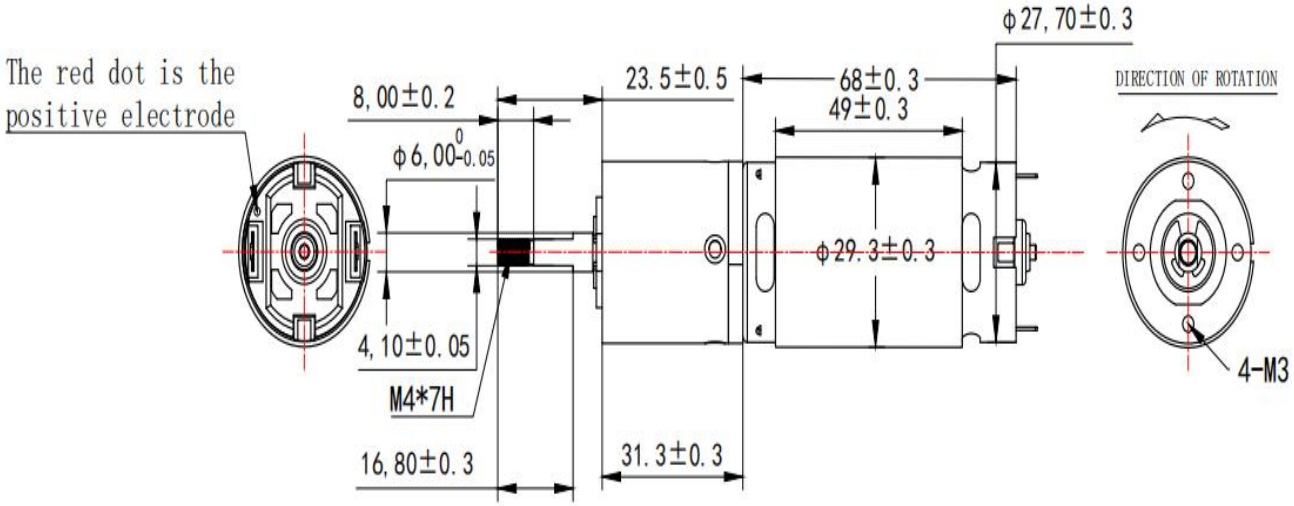
ZXR2868Reduced-speed DC motor

Typical applications:

1. Cleaning tools: floor scrubber







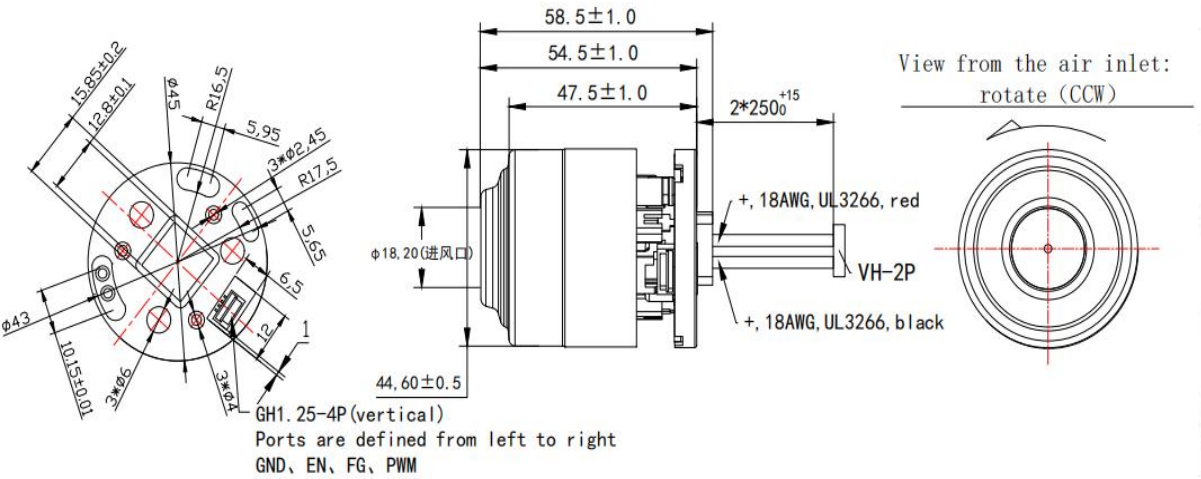
Characteristic points	Voltage	Current	Interiorinput power	Torque	Speed	Output power	Productiveness	Time
	V	A	W	N.m	rpm	W	%	S
No Load Point	18.02	0.481	8.67	0	470	0.00	0.0	0.00
Rated value								
Highest efficiency point (Eff_max)	18.02	3.003	54.12	0.7	381	27.98	51 .7	15.02
Maximum output power point(Pout_max)	18.04	6.777	122.20	1 .8	237	45.55	37.3	35.02
Maximum torque point (Torque_max)	18.06	12.93	233.60	3.7	0	0.00	0.0	0.00
End	18.06	12.93	233.60	3.7	0	0.00	0.0	0.00

ZX-BLDC45

Typical applications:

1. Cleaning tools: floor scrubbers, handheld vacuum cleaners





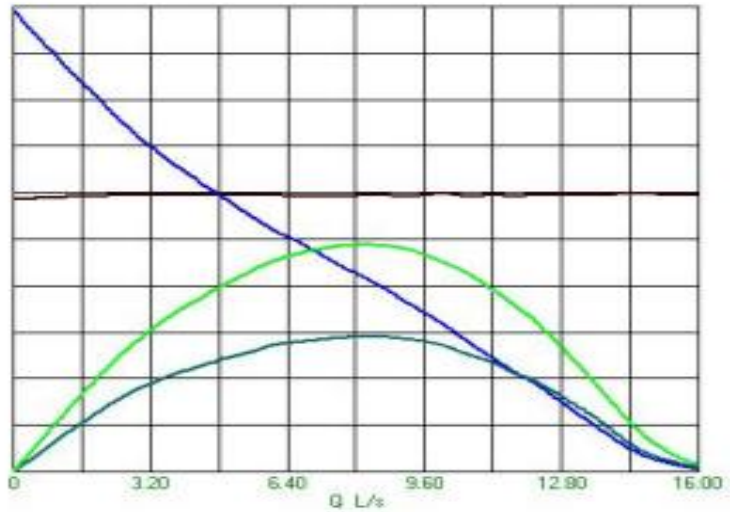
Air Performance Test Report for Vacuum Cleaner (Motor)

Air Performance Report

Report No.:		Sample No.:	BLDC45
Sample No.:	1#	Rated Voltage (RatedVolt)(V):	24.0
Frequency (Frequency) (Hz):	60.0	Rated Power (Rated Pin) (W):	120.0
Atmospheric pressure (kPa): (Atmosphere Pressure)	100.03	Ambient temperature (Environment Temp.) (℃):	24.2
Relative humidity (%): (Relative humidity)	63.4	Test Method:	IEC 62885-2

Aperture	Voltage	Current	Entry	Rate of flow				
[mm]	[V]	[A]	[W]	[W]	[L/s]	[kPa]	[kPa]	[W]	[%]
50.0	24.04	4.91	118.03	119.18	15.99	0.11	0.11	1.79	1.50
40.0	24.04	4.90	117.77	118.93	15.44	0.25	0.25	3.92	3.30
30.0	24.04	4.93	118.52	119.68	14.55	0.70	0.71	10.34	8.64
23.0	24.04	4.89	117.59	118.74	13.51	1.75	1.78	24.02	20.23
19.0	24.04	4.89	117.65	118.81	12.23	3.10	3.15	38.40	32.32
18.0	24.04	4.88	117.33	118.49	11.75	3.55	3.61	42.24	35.65
17.0	24.04	4.90	117.73	118.91	11.24	4.08	4.14	46.59	39.18
16.0	24.04	4.87	117.01	118.20	10.63	4.66	4.73	50.35	42.60
15.0	24.04	4.92	118.35	119.54	10.00	5.34	5.42	54.23	45.37
14.0	24.04	4.88	117.36	118.53	9.25	6.03	6.13	56.64	47.79
13.0	24.04	4.90	117.76	118.95	8.45	6.78	6.89	58.19	48.92
12.0	24.04	4.88	117.33	118.51	7.56	7.49	7.61	57.54	48.56
11.0	24.04	4.88	117.20	118.39	6.66	8.25	8.38	55.69	47.04
10.0	24.04	4.89	117.57	118.76	5.76	9.02	9.16	52.81	44.47
6.5	24.04	4.90	117.84	119.05	2.84	12.18	12.37	35.19	29.56
0.0	24.04	4.83	116.06	117.25	0.00	16.60	16.87	0.00	0.00
Crest value	24.04	4.93	118.52	119.68	15.99	16.60	16.87	58.19	48.92

Ps	Hs	Pout	Eth
200.0	17.00	200.0	100.0
160.0	13.60	160.0	80.00
120.0	10.20	120.0	60.00
80.00	6.80	80.00	40.00
40.00	3.40	40.00	20.00
0 W	0 kPa	0 W	0 %

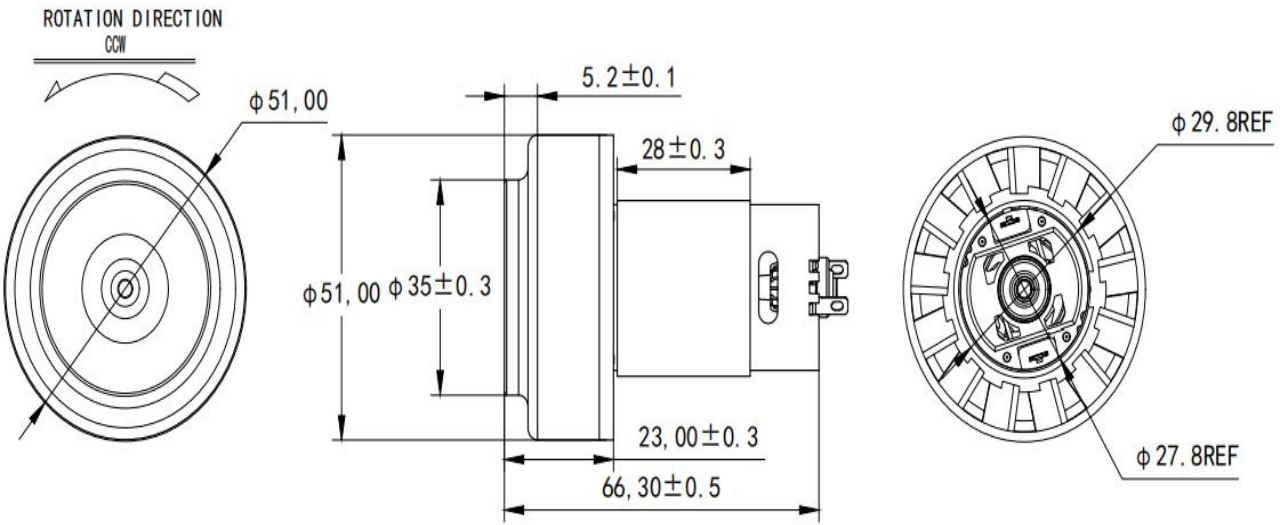


ZXR380/390SHV acuum cleaner motor

Typical applications:

1. Cleaning tools:handheld vacuum and mopping machines,high-speed household vacuum cleaners





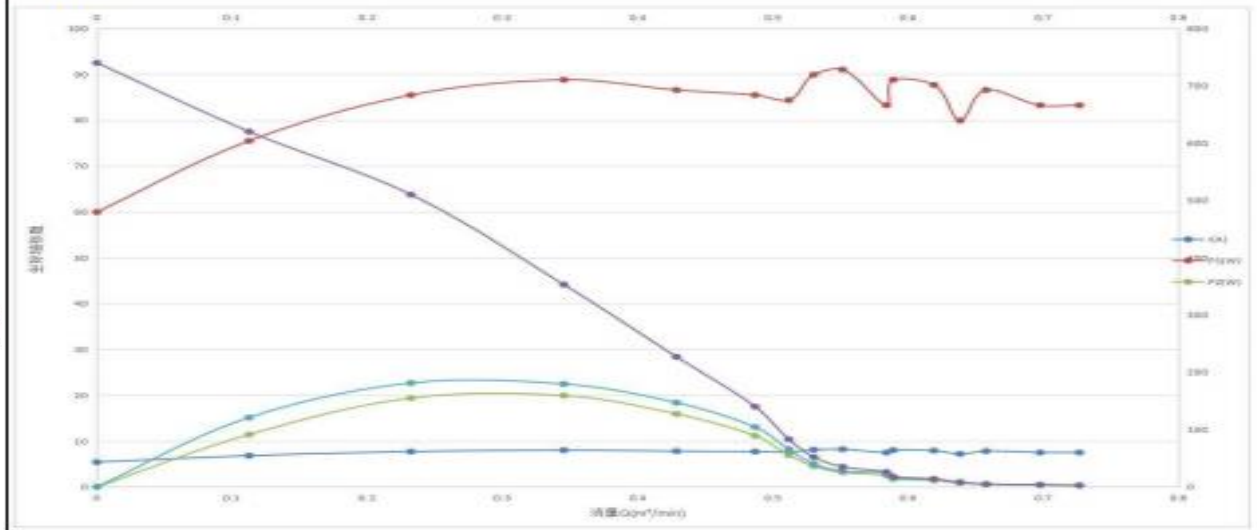
Chuzhou Zhongxin Motor Co., Ltd.

Air Performance Report

Report No.: 20250302001 — Test Date: 2025/3/2
Motor Model No.: ZXR390 (11.1V) — Rated Power: 90.0 (W)
Rated voltage: 11.1 (V) — Frequency: 50.0 (Hz)
Sample Submission Department (Dept.): — Sample Submission:
Dry ball temperature: 65.5 °F — Wet-bulb temperature: 65.5 °F
Atmospheric Pressure: 29.9985 (in.Hg)

Flow rate: m³/m	Voltage V	Current A	Entry W	Corrective input W	Vacuum degree kPa	Correct vacuum level kPa	Inhalation power W	Productivene- %
0	11.1	5.4	59.94	59.94	0.04	0.04	0	0
0.112663125	11.1	6.8	75.48	75.48	0.08	0.08	11.4136759	15.12145722
0.232347043	11.1	7.7	85.47	85.47	0.13	0.13	19.36240849	22.65404059
0.345461493	11.1	8	88.8	88.8	0.21	0.21	19.92628802	22.43951354
0.428777466	11.1	7.8	86.58	86.58	0.38	0.38	15.90412803	18.36928625
0.486940695	11.1	7.7	85.47	85.47	0.53	0.53	11.13925533	13.03294177
0.511858414	11.1	7.6	84.36	84.36	0.75	0.75	6.941926178	8.228930984
0.5303639	11.1	8.1	89.91	89.91	1.09	1.09	4.506395995	5.01211878
0.551659295	11.1	8.2	91.02	91.02	1.60	1.60	3.154939506	3.466204687
0.584130724	11.1	7.5	83.25	83.25	2.40	2.40	2.481620968	2.980926087
0.58910398	11.1	8	88.8	88.8	3.72	3.72	1.73267263	1.951207916
0.6191827	11.1	7.9	87.69	87.69	4.49	4.48	1.416442367	1.615283803
0.638513181	11.1	7.2	79.92	79.92	5.53	5.52	0.83466443	1.044374912
0.657835457	11.1	7.8	86.58	86.58	6.95	6.94	0.537451568	0.620757182
0.697799945	11.1	7.5	83.25	83.25	7.37	7.36	0.399071789	0.479365512
0.726812363	11.1	7.5	83.25	83.25	8.15	8.14	0.29690285	0.356640061

Remark:



Maximum Suction	8.15	kPa
Maximum Air Flow	0.726812363	m^3/m
Maximum Air Power (Max Air Po)	19.36240849	W
Maximum Efficiency	22.65404059	%

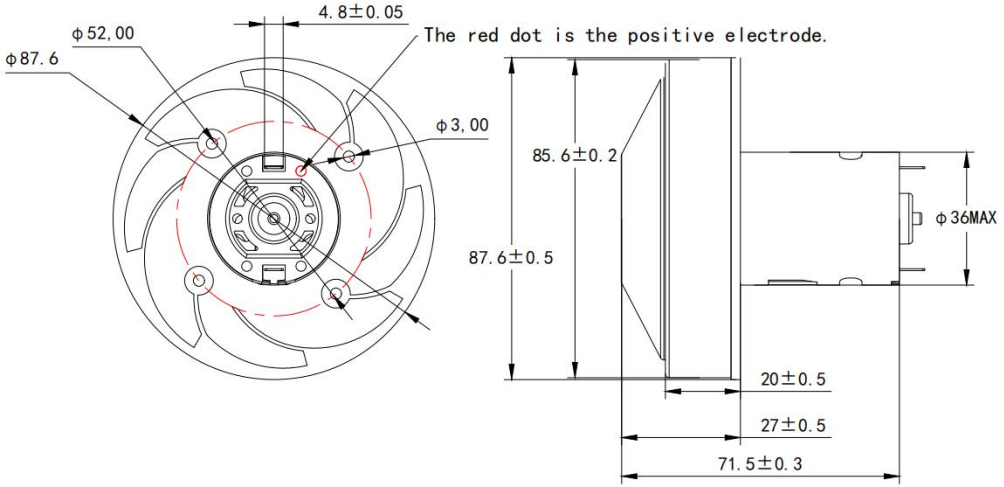
Tested: Reviewed:

ZXRBR54*LB

Typical applications:
1. Cleaning tools:handheld vacuum and mopping machines,high-speed household vacuum cleaners







Chuzhou Zhongxin Motor Co., Ltd.

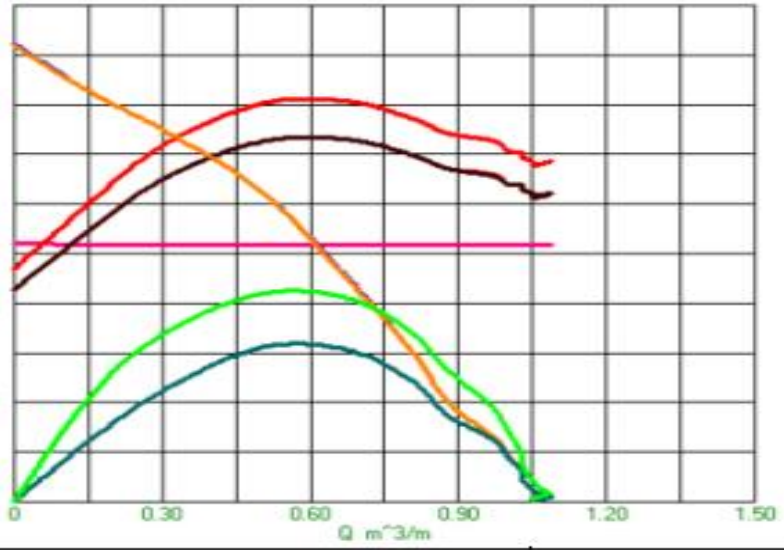
Air Performance Report

Report No.: 20250402111
Test Date: 2025/4/2
Motor Model No.: ZXR545-25.9V
Rated Power (Rated Pin): 150 (W)
Rated Voltage (RatedVolt): 25.9 (V)
Frequency: 50.0 (Hz)
Sample Submission Department (Dept.): 67.64 °F
Sample Submission: Dry Ball Temperature:
Atmospheric Pressure: 30.2093 (in.Hg)
Wet-bulb temperature: 67.64 °F

Plat [In]	Flowrat m³/m	Voltage V	Current A	Entry W	Corrective input W	Vacuum degree kPa	Correct vacuum level kPa	Inhalation power W	Producti-veness %	
2.500	1.15	25.91	5.54	123.0	122.8	0.26	0.26	1.14	0.93	
2.250	1.14	25.91	5.60	124.4	124.2	0.29	0.29	1.70	1.37	
2.000	1.09	25.90	5.63	125.0	124.8	0.33	0.33	2.34	1.88	
1.750	1.08	25.90	5.67	125.9	125.7	0.52	0.52	3.95	3.15	
1.500	1.05	25.90	5.76	127.9	127.6	0.69	0.69	6.80	5.33	
1.375	1.05	25.90	5.76	127.9	127.6	0.74	0.74	9.42	7.38	
1.250	1.05	25.90	5.83	129.3	129.0	0.97	0.97	13.36	10.35	
1.125	1.03	25.88	5.94	131.7	131.4	1.43	1.43	19.24	14.64	
1.000	0.99	25.89	6.08	134.8	134.5	2.16	2.16	27.59	20.51	
0.875	0.91	25.86	6.30	139.7	139.4	2.85	2.85	38.37	27.52	
0.750	0.82	25.86	6.55	145.2	144.9	3.86	3.86	52.10	35.96	
0.625	0.68	25.84	6.69	148.1	147.7	5.59	5.59	62.10	42.03	
0.500	0.50	25.85	6.62	146.6	146.3	7.59	7.59	62.77	42.90	
0.375	0.31	25.87	5.95	132.0	131.7	9.01	9.01	46.53	35.32	
0.250	0.16	25.92	4.93	109.5	109.3	10.03	10.03	25.83	23.63	
0.000	0.00	25.86	3.81	84.9	84.7	12.16	12.16	0.00	0.00	

Remark:

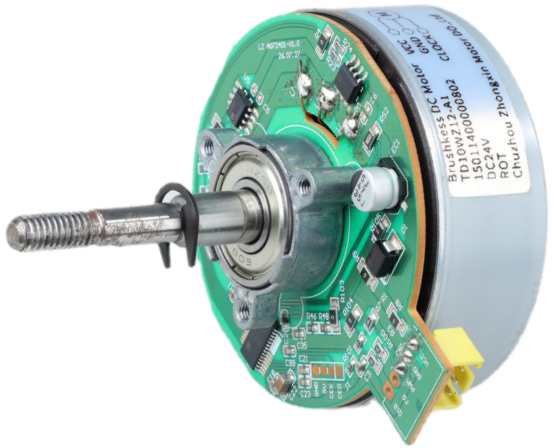
Volts	Amps	Pin	Ps	H	Hs	ΔP	Eff
50.00	7.00	200.0	200.0	12.00	12.00	200.0	100.0
40.00	5.60	160.0	160.0	9.60	9.60	160.0	80.00
30.00	4.20	120.0	120.0	7.20	7.20	120.0	60.00
20.00	2.80	80.0	80.0	4.80	4.80	80.00	40.00
10.00	1.40	40.0	40.0	2.40	2.40	40.00	20.00
0 V	0 A	0 W	0 W	0 kPa	0 kPa	0 W	0 %

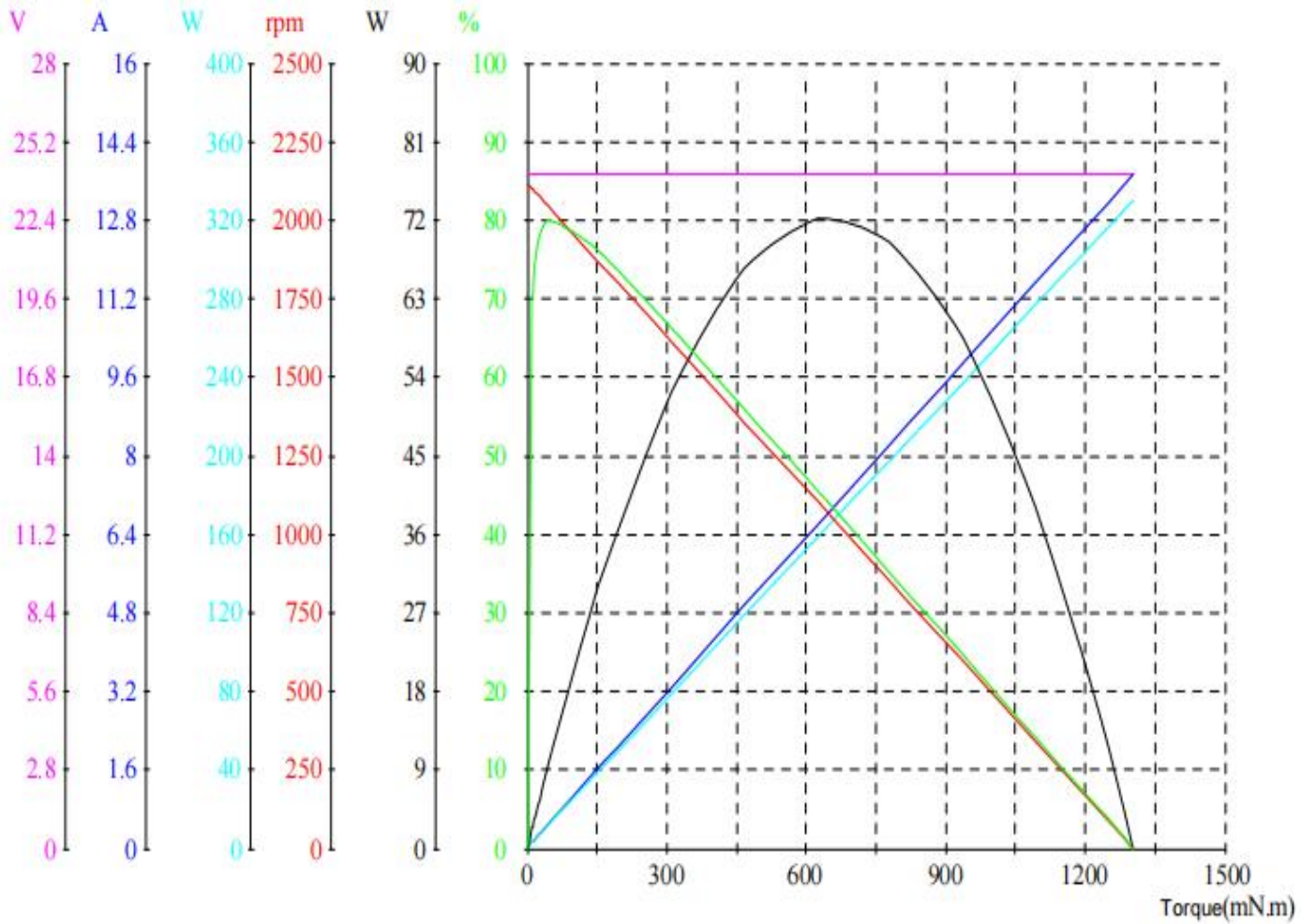


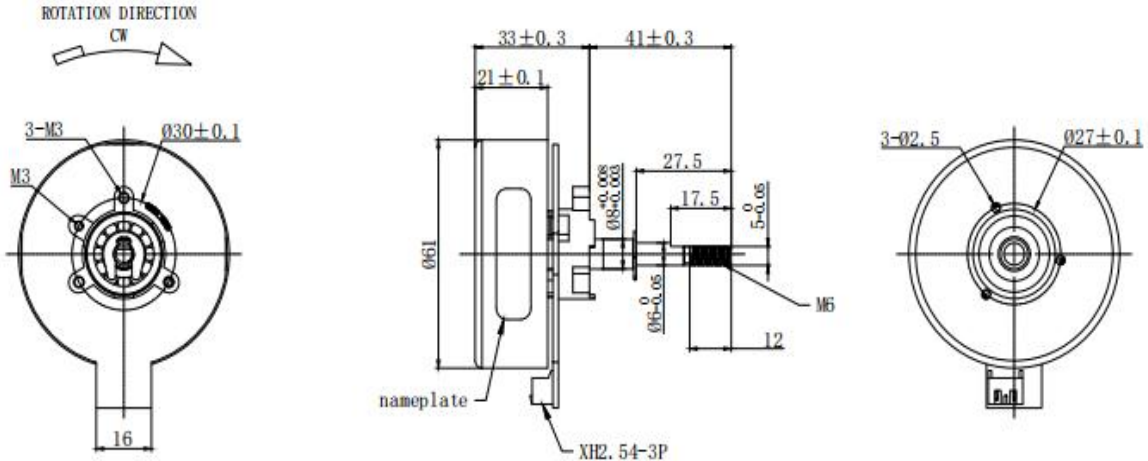
Maximum Suction:	12.16	kPa
Maximum Air Flow:	1.15	m^3/m
Maximum Air Power:	62.77	W
Maximum Efficiency:	42.9	%

BLDC6121

Typical applications:
1. Fans







Characteristic points	Current	Current	Interiorinputpower	Torque	Speed	Output power	Productiveness	Time
	V	A	W	mN.m	rpm	W	%	S
No Load Point	24.02	0.136	3.266	10.2	2100	2.234	68.4	0
Rated value								
Highest efficiency point (Eff_max)	24.02	0.552	13.27	49.9	2036	10.64	80.2	37.02
Maximum output power point(Pout_max)	24.02	7.69	184.7	728.4	935	71.27	38.6	63.02
Maximum torque point (Torque_max)	24.02	13.75	330.2	1304.1	0	0	0	87.02
End	24.02	13.75	330.2	1304.1	0	0	0	87.02