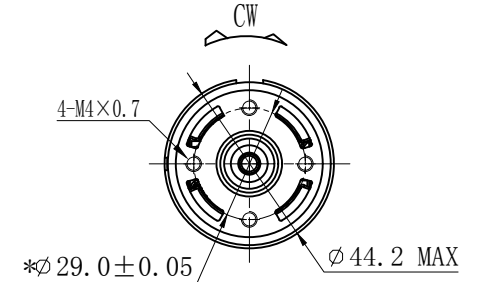
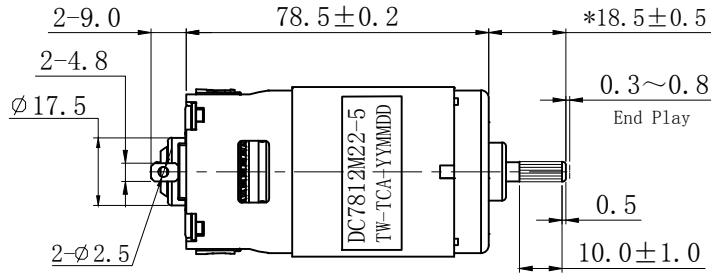
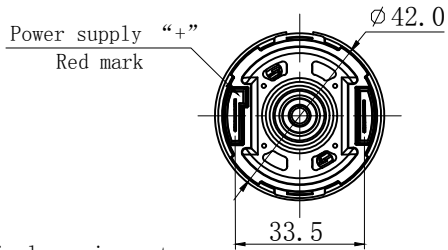


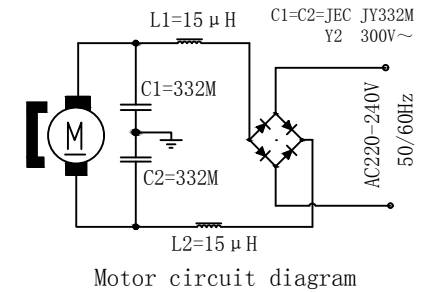
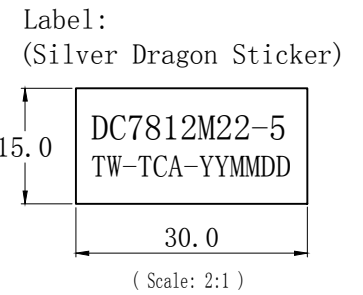
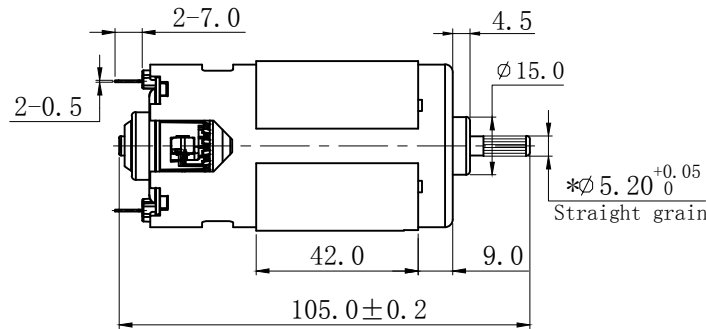
FPS.DC7812M22-5-105KC

Revision record			
Version	REVISION	Date	Signature
A	Initial Release.	2023-5-17	HHF



Technical requirements:

- Rated voltage:  
AC230V/50Hz (full wave rectification);
- Motor no-load performance:  
(after 15 seconds of no-load operation);  
No load power: 45.0W MAX  
No load current: 0.25A MAX  
No load speed: 15500 ± 12% RPM
- Motor load performance: (simulated blade: 80\*25\*2.0t)  
Load power: 160± 12% W      Load current: 0.82± 12% A  
Load speed: 12000 ± 12% RPM
- Locked rotor power: ≥ 900W (peak);
- Motor running direction: CCW (straight line end view);
- Axial virtual position: 0.3~0.8 mm;
- No load: Spark ≤ 11/2 levels, vibration ≤ 12mm/s;
- No-load noise: ≤ 72dB (A), at a distance of 30cm from the level of the test prototype, Environmental noise ≤ 45dB (A);
- Insulation and voltage withstand test: 1500VAC/5mA/1Sec;
- Insulation level: Class H;
- Temperature rise test: According to IEC-60335 testing standard combined with product testing requirements, Motor temperature rise ≤ 140K;
- Locked rotor test: Rated voltage 230V/50Hz (rectified), locked rotor for 30 seconds or final result, The motor does not show open flames, the winding temperature rise is ≤ 260 °C, and the high voltage is 1250V/8.3mA/1min through;
- Life test: rated voltage with simulated load 80\*25\*2.0t blade, 1 minute on/1 minute off It is a small cycle, and a 30 minute rest after every five consecutive small cycles is a systemic circulation, Accumulated work ≥ 450 systemic circulation (≥ 37.5 hours);
- Dimensions with "\*" are the main control dimensions;
- The materials used comply with the relevant requirements of RoHS&REACH;
- Label: (Silver Dragon Sticker)



Customer Approval:		Unit: mm	TEAMWORK GLOBAL GROUP LIMITED	
Signature		Date	Motor Outline Drawing	
Draw		Model: DC7812M22-5		
Examine		FPS.DC7812M22-5-105KC		
Approve		Version A		
Undeclared tolerance standards: GB/T 1804 - g				
Linear dimensions	>M1-6	>6-30	>30-120	>120-400
	M0	M2	M3	M5
Angle	>10	>10-30	>30-120	>120-400
	45°	30°	20°	10°
Scale: 1:1			The number of pages: 1 of 1	

# MOTOR CHARACTERISTICS (电机曲线图)

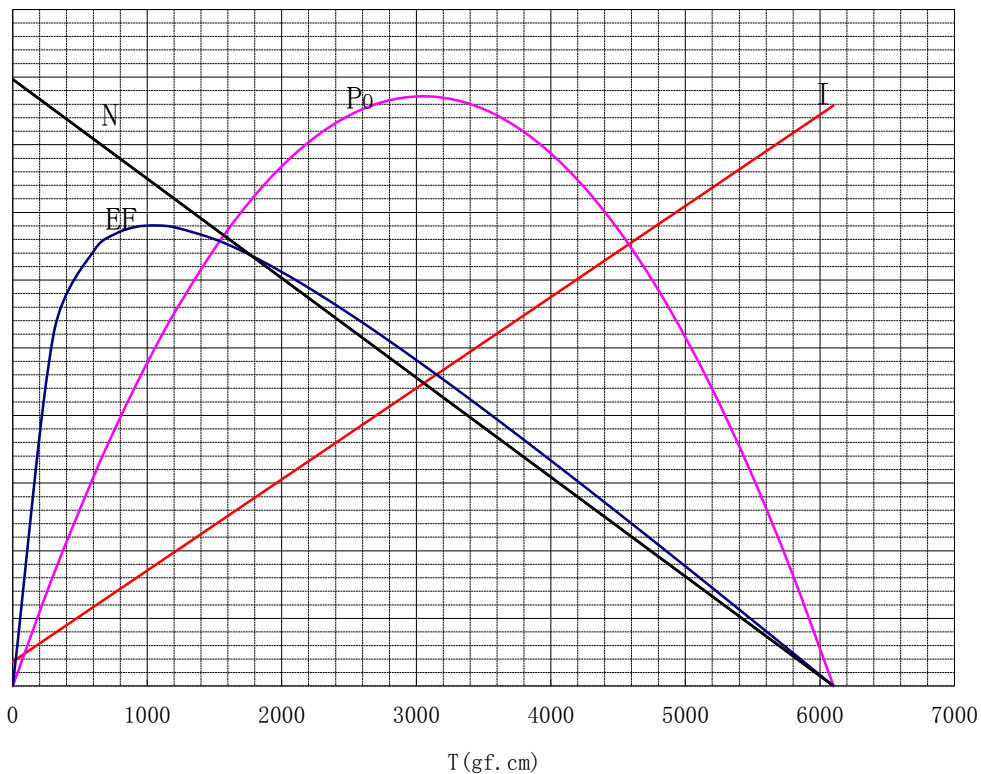
Motor code number (电机编号或型号): DC7812M22-5 220-240V

Constant voltage (额定电压): 230V

Rotation (转向): CW

— N: Speed: 转速  
— I: Current: 电流  
— P: Out power: 输出功率  
— EF: Efficiency: 效率

$P_0$	EF	I	N
280	100	5000	17400
140	50	2500	8700
[W]	[%]	[mA]	r/min



T: torque: 力矩

	T (mNm)	(gf. cm)	N (r/min)	I (mA)	$P_0$ [W]	EF [%]
NO Load...N, I (空载)	0.00	0	15600	181	0.0	0.00
	4.90	50	15472	215	7.9	16.07
Start Point (起始点设定)	14.71	150	15216	282	23.4	36.09
	24.51	250	14961	349	38.4	47.73
<b>50</b>	34.31	350	14705	417	52.8	55.07
stepped control (梯度控制)	44.12	450	14449	484	66.7	59.89
	53.92	550	14193	551	80.1	63.12
	63.73	650	13938	619	92.9	65.28
<b>100</b>	73.53	750	13682	686	105.2	66.68
Rated (定格)	83.33	850	13426	754	117.0	67.53
	93.14	950	13170	821	128.3	67.97
	102.94	1050	12915	888	139.1	68.08
	112.75	1150	12659	956	149.3	67.93
	122.55	1250	12403	1023	159.0	67.58
	132.35	1350	12148	1090	168.2	67.07
	142.16	1450	11892	1158	176.9	66.42
Stop...T (堵转)	598.04	6100	0	4290	0.0	0.00
Max... $P_0$ (最大功率)	299.02	3050	7800	2236	244.0	47.46
Max...EF (最大效率)	101.91	1039	12942	881	138.0	68.08

Check (确认):	Make (作成):	Date (时间):	2023-5-17
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# TEAMWORK GLOBAL GROUP LIMITED

## Sample Test Report

Motor type	DC Motor	Motor model	DC7812M22-5	Client code		Project No	
Voltage	AC230V/50Hz (Full-wave rectifier)	Date	2023-5-17	Quantity	5PCS	Customer P/N	
Testing environment	Temperature:27°C / Humidity:62%	Reduction Ratio		Inspection Quantity	5PCS	Surveyor	Lingan.Liu

### Detected data

Project	No-load current (A)	No-load speed (rpm)	No-load power (W)	Simulated load blades:80×25 mm			Locked rotor current (A)	Locked rotor power (W)	Stall torque (g.cm)	Running direction	Noise cm/dB	vibrate mm/s	Shaft extension size mm	End play mm	Fuselage Length mm	Motor outer circle mm	Mandrel length mm	Hi-pot test
				load current (A)	Load speed (rpm)	Load power (W)												
standard	0.25 MAX	15500±12%	45 MAX	0.82±12%	12000±12%	160±12%	4.29	1026	6100	CW	30/≤72	≤12	18.5±0.5	0.3~0.8	78.5±0.2	φ 44.2 MAX	105.0±0.2	1500VAC/5mA/1Sec
1	0.180	15850	30.1	0.81	12250	160				CW	68	2.5	18.5	0.4	78.5	43.9	105.1	Passed
2	0.170	15700	29.5	0.81	12150	160				CW	69	2.4	18.7	0.5	78.5	43.9	105.0	Passed
3	0.190	16100	30.8	0.82	12330	166				CW	68	2.6	18.6	0.5	78.5	43.8	105.1	Passed
4	0.190	15820	30.8	0.81	12300	162				CW	68	2.7	18.5	0.6	78.5	43.9	105.1	Passed
5	0.170	15650	29.2	0.80	12100	160				CW	68	2.6	18.6	0.5	78.5	43.9	105.0	Passed
Customer samples	0.170	15850	28.2	0.80	12230	158	4.3	1025	6100	CW	69	2.8	18.6	0.6	78.5	43.9	105.0	Passed

Notes: (Customer sample model: HB-7812 DC220-240V 600W Class H )

Surveyor: Lingan.Liu

Approval: HaiFei.Huang

Ratify: And.Yang