

**NEED-FOR-POWER
MOTOR™****Model No.****NFP-RC-365SA/360SA, 24V, 12,000RPM**

Application

This article regulates the relevant technical requirements and test methods of model NFP-RC-365SA/360SA DC Motor.

1. Standard Operating Conditions

NO.	Item	Condition
1-1	Rated voltage	24V DC
1-2	Rated load	74g.cm
1-3	Direction of rotation	CCW
1-4	Operating voltage range	DC 6.0-30VDC at motor terminals
1-5	Operating temperature humidity range	-10~50°C / 5%~85%RH (No condensation of moisture)
1-6	Motor position	All position of protruded shaft

2. Measuring Conditions

NO.	Item	Condition
2-1	Motor position	Horizontal direction
2-2	Power supply	regulated DC power supply assuring unquestionable measuring
2-3	Environment temperature And relative humidity	10-30°C & Ordinary Humidity. If the judgment is questionable, Measurement is to be made based on JIS Standard Testing Condition (25±2°C, 65±5%).
2-4	Voltage range for use	Unless otherwise specified, rated voltage to be applied
2-5	Direction of rotation	CCW-when viewed from output shaft side

3. Electrical Characteristics

NO.	Item	Specification
3-1	No load speed	12000rpm±10%
3-2	No load current	0.15A max.
3-3	Rated load speed	10000rpm±10%
3-4	Rated load current	0.65A max.
3-5	Starting voltage	1.0V max. (No Load)
3-6	Stall current	2.1A min.
3-7	Stall torque	400g.cm/min.
3-8	Insulation resistance	1 M Ω (min) DC 600V between motor terminal and motor metal housing
3-9	Reference characteristic curve see spec T.N.I.	

4. Mechanical Characteristics

NO.	Item	Specification
4-1	Dimension	As per the outline drawing No: P5/5
4-2	Appearance	No remarkable deformation and/or superficial defects
4-3	Shaft end play	0.05-0.50mm
4-4	Shaft T.I.R	0.03mm(Max) at 2/3 of output shaft side and measured by dial gauge
4-5	Maximum Axial Load	15kg max Direction of static load and support of load as shown bellow 
4-6	Vibration	To be set up with mutual consent
4-7	Mechanical noise	65dB(A)max. Motor fixed to the sponge pad, the output shaft horizontal. Under rated voltage Mechanical noise under No-load at rated voltage. Noise analyzer the Probe distance motor 30cm. (back ground noise to be 50dB max.)
4-8	Weight	50g approx.

5. Life Test

NO.	Item	Specification
5-1	Continuously running	TBA. Cycles(min.)
5-2	Intermittent running	TBA. Cycles(min.)
Test conditions		
Voltage		24.0V DC
Load		by Fan load equivalent to 74g. cm. Rated load current 0.50A Approx.
Environment		25°C±5°C / 65%±20%RH
Operation mode		Under the rated voltage, Rated load, Continuous operation
Life end defined as follows 1) When current is over±10% against the initial figure. 2) When speed is beyond±10%.against the initial figure. 3) When motor is unquestionable recognized as unusable.		

6. Storage

NO.	Item	Condition
6-1	Storage Temperature	-20°C~70°C
6-2	Storage relative humidity	5%~95%RH
Keep dry, avoid storing in high temperature, high humidity or corrosive gas environment.		

7. Cautions

NO.	Requirement
7-1	Since the performance of the motor is affected by environmental temperature, condition should be given to keep it away from out of range.
7-2	It is not allowed to operate in the high temperature with high humidity or in the rust or in the circumstance where the substances generating a harmful gas such as low molecular siloxane, cyanide, formalin, quick-dry glue or the corrosive gas such as H ₂ S, SO ₂ , CO ₂ , Cl ₂ , exist.
7-3	Do not lock the motor shaft while the electric is on. If lock state more than 1 minute would or resistor is heated up and may burn down but not start fire.
7-4	Do not give direct shock to the motor.

8. Remark

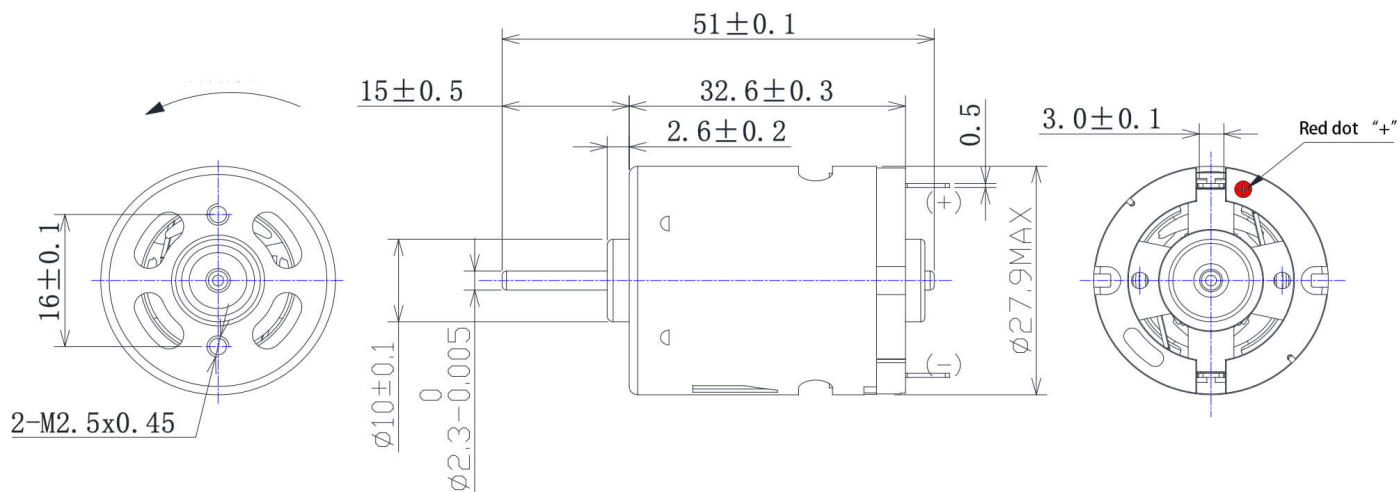
NO.	Item
8-1	Proper performance does not be guaranteed if the used in excess of specified value than indicated in the specifications.
8-2	Any revision and addition to the specification shall be made after mutual discussion and agreement.
8-3	In case those motors returned to us comply with the characteristics this technical specification, we are not liable to repair the motors free of charge.
8-4	When defects are found for the motors duly approved by your incoming inspection, the defective motors shall be returned to us together with descriptions of the faults. We are to accept such motors only if the faults for each motors are clearly mentioned.
8-5	If you have new requirement during testing our products please notice us immediately, and we will meet your demand with our top-class quality and best service.

9. Statement

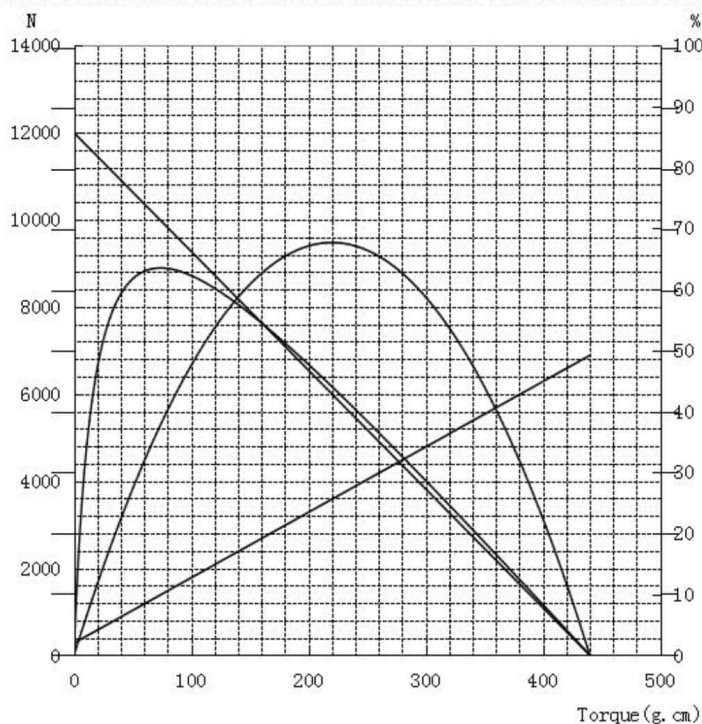
All the products are in line with the European Union ROHS directive and subsequent exemption clause norms.

10. Attachment

Motor Outline Drawing & Characteristic Curve Drawing.



Model(电机型号) :	Templet No.(样板编号):	20221014-1
Buyer No.(客户代码) :	Date(日期) :	2022/11/10



Issued(制定): _____ Approved(批准): _____

Voltage Rating(额定电压):	24.0	Volts
Direction(电机转向):	CCW	
At No Load(空载)		
Speed(转速):	12000	RPM
Current(电流):	0.100	AMPS
At Stall(堵转)		
Torque(转矩):	440.00	g.cm
Current(电流):	2.460	AMPS
At Max Efficiency(最大效率)		
Efficiency(效率):	63.26	%
Speed(转速):	9987	RPM
Torque(转矩):	73.83	g.cm
Current(电流):	0.496	AMPS
Output(输出):	7.53	Watts
At Max Power(最大功率)		
Output(输出):	13.48	Watts
Speed(转速):	6000	RPM
Torque(转矩):	220.00	g.cm
Current(电流):	1.280	AMPS

Customer Approved(客户确认):