



深圳市集创兴科技有限公司

Shenzhen TCS Precision Technology Co., Ltd

直流真空泵规格书

Specification of Dc vacuum pump

客 户: _____

Customer

品 名: 直流真空泵

Part name Dc vacuum pump

型 号: JQ2438437

Model

日 期: 2018.04.19

Date :

页 数: 共 8 页 (包括封面)

Number of pages

作成/Made	审核/Audit	核准/Approval
陈天顺		

客户承认

Customer acknowledgment

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变更履历表

Revision history

NO.	修订日期 Date	修订内容 Contents	修订单位 Revised by
A/1	2018.04.19	增加材质清单	工程

核准	审核	制定
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1. 适用范围 Application:

本规格书适用 JQB2438437 之用.

The specifications apply JQB2438437 use.

2. 测试环境 Standard test environment:

2-1	测试环境温度 Environment test	周围温度 20℃相对湿度 65%RH 为标准，如无争议发生可以在下述环境测试： 周围温度 5-45℃相对湿度 30-80%RH。 The standard of environment test is the ambient temperature of 20℃ and relative humidity of 65%RH. If no disputes occur, the test can be conducted under the blow circumstance: the ambient temperature of 5~45℃ and relative humidity of 30~80%RH.
2-2	测试姿势 (Position)	水平 (Horizontal)
2-3	额定负载 (Load)	空气(Air)
2-4	使用温度范围 Operation temperature range	5~50° C(Humidity to 30% to 80%RH)
2-5	保存温度范围 Preservation temperature range	-20 ~60° C(Humidity to 30% to 85%RH)

3. 电气特性 Electrical characteristics:

3-1	额定电压 Rated voltage	DC 6.0V	
3-2	使用电压范围 Operating voltage range:	DC5.0V~7.0V	
3-3	空载电流 No-load current	定格电压 DC 6.0V，气泵空载运行之最大电流≤0.75A Rated voltage DC 6.0V pump no-load operation of the maximum current is less than 0.75A	≤0.75A
3-4	空载流量 No load air flow	DC 6.0V 输入气泵空载时的流量≥2.8L/min While pressuring with DC6.0V the flow rate is required to be more than 2.8L/min	≥2.8L/min

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3-5	最大吸气压力 Maximum pressure	输入 DC 6.0V 之电压, 吸气压力从 0 到停止升压之最高压力值 $\leq -55\text{KPa}$ The maximum pressure value shall be more than -55KPa while pressurizing with DC 6.0 V from 0 till dead-head pressure value.	$\leq -55\text{KPa}$
3-6	吸气时间 Inspiratory time	输入 DC 6.0V 之电压, 吸气嘴接 1800CC 气缸、压力表, 压力达到 -55KPa 所需时间 Input the voltage of DC 6.0V, the suction nozzle is connected to the 1800CC cylinder, the pressure gauge, the time required for the pressure to reach the -55KPa	$< 90\text{S}$
3-7	启动电压 Starting voltage	在泵体空载情况下, 连接电源使之启动的最小电压 $< 4.0\text{V}$ In the case of pump body, the minimum voltage that is connected to the power supply to start is less than 4.0V	$< 4.0\text{V}$
3-8	噪音 Noise	下垫 5cm 之海绵, 距噪音计 30cm 之处, 依 DC6.0V 之电源气泵空载运行时所测得之 dB 值 $\leq 75\text{dB}$ The underlay 5cm sponge, the distance from the noise meter 30cm, the dB value measured by the DC6.0V power supply air pump when the operation is not loaded $\leq 75\text{dB}$	$\leq 75\text{dB}$

4. 环境试验 Environmental Tests:

在经过发下 4-1 和 4-2 项目之特殊环境测试后, 要产品须可满足项目 3-3 至 3-7 之基本性能。

After the pump has been tested through test 4-1 and 4-2, it must be suitable the basic performance required by item 3-3 to 3-7.

4-1	低温放置试验 Low-temperature characteristic	放置在 -20°C 经 72 小时后, 再取出置于常温 ($20 \pm 5^\circ\text{C}$) 中 2 小时依下列专案测试无异状 3-3, 3-4, 3-5, 3-7. Putting the pump in the temperature at negative -20°C for 72 hours; then taking it out and putting it in a room temperature at $20 \pm 5^\circ\text{C}$ for 2 hours, Under this circumstance, running through test 3-3, 3-4, 3-5, 3-7 and finding out that the pump still performs well.
4-2	高温放置试验 High-temperature characteristic	在 60°C 经 72 小时放置后, 在放常温 ($20 \pm 5^\circ\text{C}$) 中 2 小时依下列专案测试无异状 3-3, 3-4, 3-5, 3-7. Putting the pump in the temperature at 60°C for 72 hours; then taking it out and

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		putting it in a room temperature at $20 \pm 5^{\circ}\text{C}$ for 2 hours, Under this circumstance, running through test 3-2,3-3, 3-4, 3-5, 3-7, and finding out that the pump still performs well.
4-3	高温高湿放置试验 High-temperature & High humidity	在温度 60°C , 湿度 95% 环境中经 72 小时取出置于常温($20 \pm 5^{\circ}\text{C}$) 中 2 小时依下列专案测试无异状 3-3, 3-4, 3-5, 3-7. Putting the pump in the temperature at 60°C and the humidity at 95% for 72 hours ; then taking it out and putting it in a room temperature at $20 \pm 5^{\circ}\text{C}$ for 2 hours. Under this circumstance, running through test 3-3, 3-4, 3-5, 3-7 and finding out that the pump still performs well.
4-4	寿命试验 Life test	2000cc 气缸, DC6.0V 输入, 气泵吸气 90s, 排气 90s 为一次, 寿命在 2000 次以上. In 2000 cc cylinder, DC6.0V input, Air pump suction 30s, exhaust 10s for one time, life over 2000 times.

5. 特殊环境测试 Thermal test performance:

5-1	低温环境测试 Low-temperature environment test	在温度 5°C 经五小时后, 立即在此温度下依下列专案测试无异状, 3-3,3-4,3-5,3-7. Under a temperature of 5°C for 5 hours, then examining the pump by test 3-3,3-4,3-5,3-7.and finding out it still perform well.
5-2	高温环境测试 High-temperature environment test	在温度 50°C 经五小时后, 立即在此温度下依下列专案测试无异状, 3-3,3-4,3-5,3-7. Under a temperature of 50°C for 5 hours, then examining the pump by test 3-3,3-4,3-5,3-7. and finding out it still perform well.

6. 其它 Others:

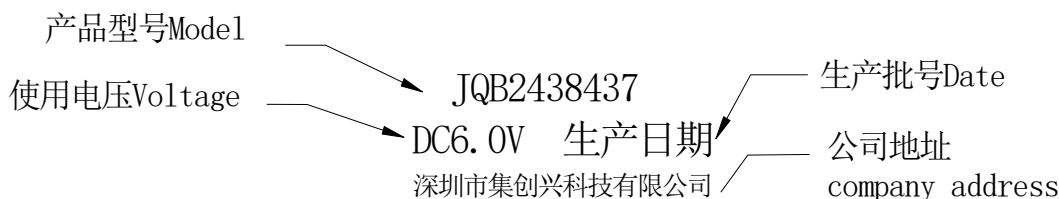
6-1	端子强度 The lead tension	以 0.5 公斤法码与端子平行负载无异常. Hanging a 0.5 Kg static load on the terminal of the pump will not cause a damage on the pump.
6-2	落下实验 Fall test	使用标准的包装方式, 在水泥地上将其从 50cm 的高度分别从正面, 侧面, 及边角落下, 其性能及结构需无异常. Basic performance and the structure shall not be defected after following test; With a standard packaging conditions, then dropping it at the front, side, and edges part

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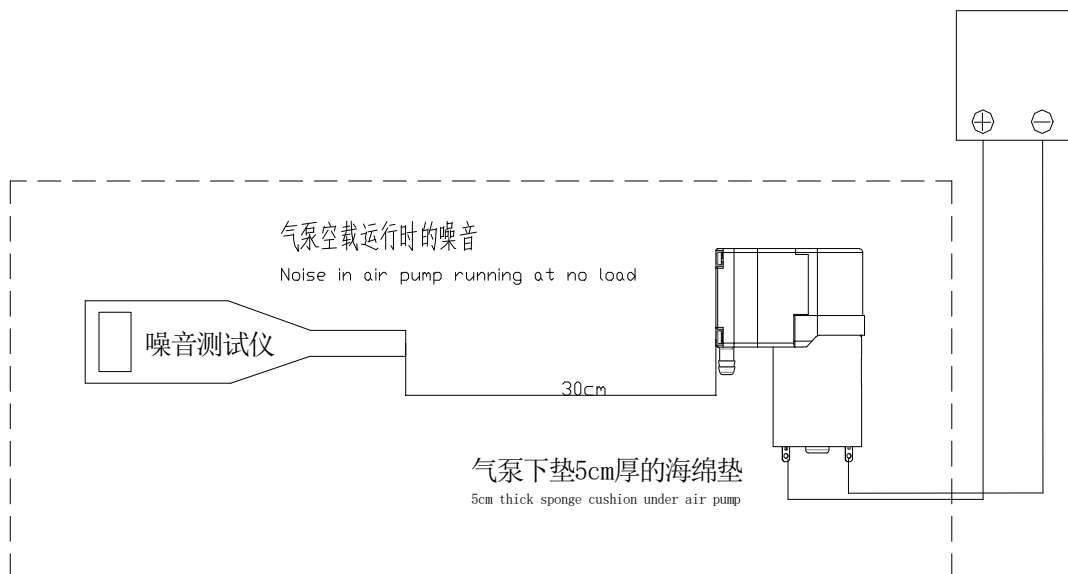
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		from the height of 50 cm to the concrete floor.
6-3	外观 Appearance	产品无不适当的外观和刮伤, 脏污...等. The appearances of the pump shall not contain cracks and impurities.
6-4	异常试验 Unusual test	以 DC7.0V 连续 8 小时通电无燃烧,发烟现象. There is no burning and smoking occurrence while the power is on with DC 7.0V for 8 hours continuously.
6-5	焊锡要求 Solder requirements	马达端子焊锡作业需在焊锡温度 380℃ 下,2 秒内操作完成. Motor terminal for Soldering process the heat temp. is controlled by 380 °C ,and operating time is for 2 sec only.

7. 标签内容 Labels:



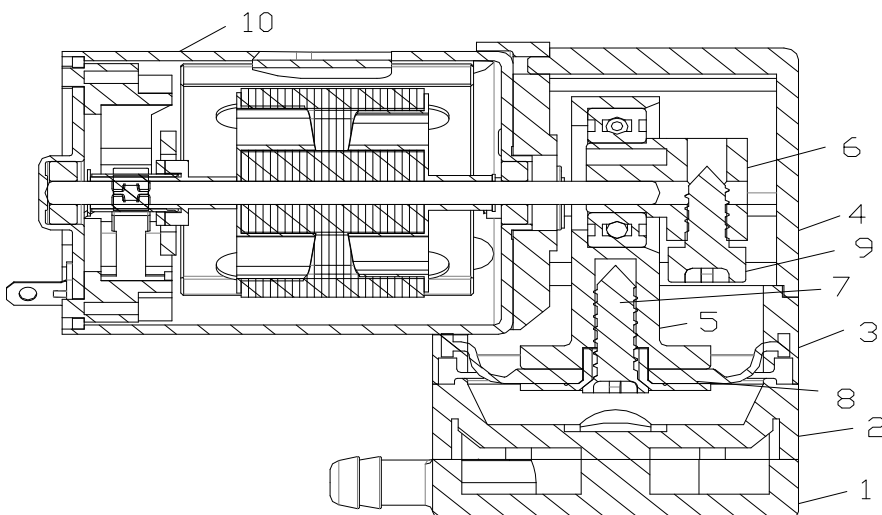
8. 噪音测试线路图 Noise test circuit diagram:



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9.结构图 Structural drawing:



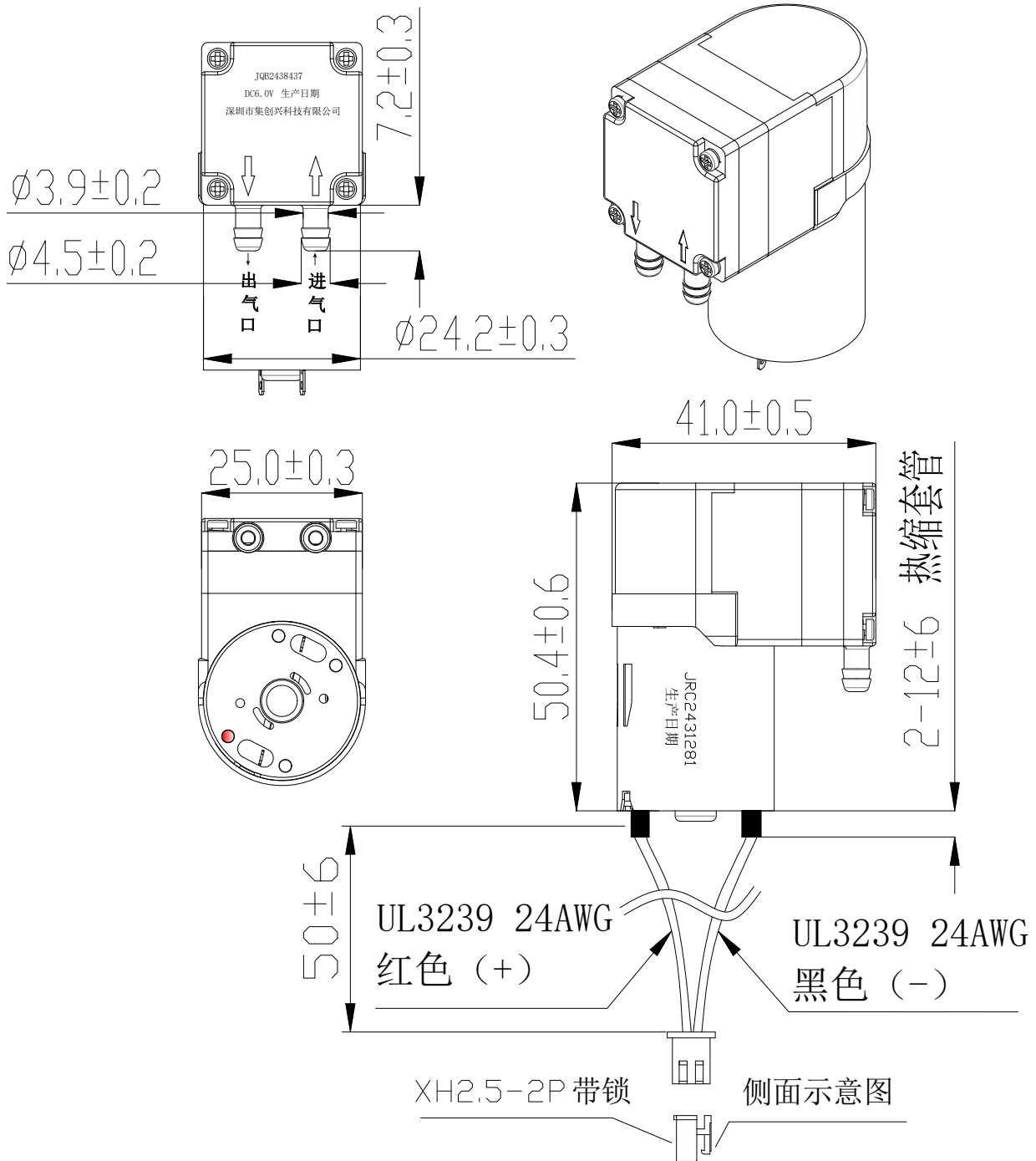
10.材料表 Material list:

号码NO.	名称NAME.	材料MATERIAL.	牌号MARK
1	塑胶B1	PLASTIC	ABS
2	塑胶B2	PLASTIC	ABS
3	塑胶B3	PLASTIC	PA66
4	塑胶B4	PLASTIC	ABS
5	塑胶B5	PLASTIC	POM
6	塑胶B6	PLASTIC	POM
7	鼓膜压片	AL	AL
8	鼓膜	RUBBER	PLASTIC
9	螺钉	A3	A3
10	马达	DC 6.0V	DC 6.0V

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11.成品外形图 Finish ed Outline:



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