深圳市集创兴科技有限公司

Shenzhen TCS Precision Technology Co., Ltd

热水泵规格书

Specification of hot water pump

客　　户：H041

Customer

品　　名：直流热水泵

Part name: Dc hot water pump

型　　号：JSB2438278

Model

日　　期：**2018-10-16**

Date

页　　数：共 **8** 页（包括封面）

Number of pages: eight pages

作成/Made	审核/Audit	核准/Approval
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客户承认

Customer acknowledgment

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	2018-10-12	增加支架及变更引线	工程

1. 适用范围 Application：

本规格书适用 JSB2438278 之用.

The specifications apply JSB2438278 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 5-30℃相对湿度 40-85%RH。 The standard of environment test is the ambient temperature of 20℃ and relative humidity of 65%RH. lf no disputes occur, the test can be conducted under the blow circumstance: the ambient temperature of 5~30℃ and relative humidity of 40~85%RH.
2-2	測試姿势（Position）	水平（Horizontal）
2-3	额定负载（Load）	水压 2.0~5.5PSI（Water pressure is 2.0~5.5PSI）
2-4	使用温度范围（水温） Operation temperature range	5 ~100° C(Humidity to 30% to 85%RH)
2-5	工作介质 Media	清水 Clean water
2-6	外接出水孔标准 External drainage holes	内径尺寸：Φ1.2±0.05mm 长度：10±0.1mm
2-7	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	DC12.0V	
3-2	使用电压范围 Operating voltage range:	DC9.0V~14.4V	
3-3	额定电流 Rated current	DC12.0V，在 2.0~5.5PSI 的压力下抽水的最高电流＜200mA。 Under DC12.0V ,the pump discharge should be less than 200mA when the pump at the pressure of 2.0~5.5PSI.	**＜200mA**
3-4	负载流量 Load Flow	DC12.0V，出水口接Φ1.2mm 孔，测试的水流量为 410±10％毫升/分钟. Under DC12.0V, the outlet is connected with 1.2mm hole, water flow test is 410 + 10% ml / min.	**410±10％ mL/min**

3-5	额定出水压力 Rated discharge pressure	在 DC12.0V，出水口接Φ1.2mm 孔，测试稳定值的压力为 2.0~5.5PSI. Under DC12.0V, the outlet is connected with 1.2mm test hole, stable value of pressure is 2.0~5.5PSI	**2.0~5.5PSI**
3-6	噪音 Noise	下垫5cm之海綿, 距噪音计30cm之处, 依DC 12.0V 之电源，抽水时噪音小于 50dB Putting a 5 cm sponge under the pump, and placing it about 30 cm away from the noise meter, Suction noise less than 50dB with DC 12.0V .	**＜50dB**
3-7	最大水压 pressure	DC12.0V，出水口堵死时的最大水压值 Under DC12.0V, max water pressure with outlet blocked. Keep the max water pressure.	**28~55PSI**

在经过以下 4-1 至 4-5 和 5-1、5-2 项目测试后，产品须可满足项目 3-3~3-7,之基本性能。但是噪音＜61dB 即为合格。

After the pump has been tested through test 4-1 to 4-5 and 5-1、5-2, it must be suitable the basic performance required by item 3-3~3-7. However，it to be OK that the dropped pressure value shall be noise level shall be less than 61dB.

4 环境试验 Environmental Tests：

4-1	低温放置试验 Low-temperature characteristic	放置在-20℃经 72 小时后, 再取出置于常温(20±5℃)中 2 小时依下列专案测试无异状 3-3~3-7. Putting the pump in the temperature at negative 20℃ for 72 hours; then taking it out and putting it in a room temperature at 20±5℃ for 2 hours, Under this circumstance, running through test 3-3~3-7，and finding out that the pump still performs well.
4-2	高温放置试验 High-temperature characteristic	在 60℃经 72 小时放置后, 在放常温(20±5℃)中 2 小时依下列专案测试无异状 3-3~3-7. Putting the pump in the temperature at 60℃ for 72 hours; then taking it out and putting it in a room temperature at 20±5℃ for 2 hours, Under this circumstance, running through test 3-3~3-7. And finding out that the pump still performs well.
4-3	高温高湿放置试验	在温度 60℃,湿度 85%环境中经 72 小时取出置于常温(20±

	High-temperature & High humidity	5℃)中 2 小时依下列专案测试无异状 3-3~3-7. Putting the pump in the temperature at 60℃ and the humidity at 85% for 72 hours; then taking it out and putting it in a room temperature at 20±5℃ for 2 hours. Under this circumstance, running through test 3-3~3-7. And finding out that the pump still performs well.
4-4	寿命试验 Life test	DC 12.0V，出水口接Φ1.2mm 孔，抽水(85~95℃)70 秒，停 10 秒为一个循环，测试 20000 次经下列专案测试无异状 3-3~3-7. DC 12.0V， the outlet is connected with 1.2mm test hole,，ON 70S and OFF 10S as one cycle，test pump performance after 20,000 cycles. After no abnormal test by following project 3-3~3-7.

5 特殊环境测试 Thermal test performance:

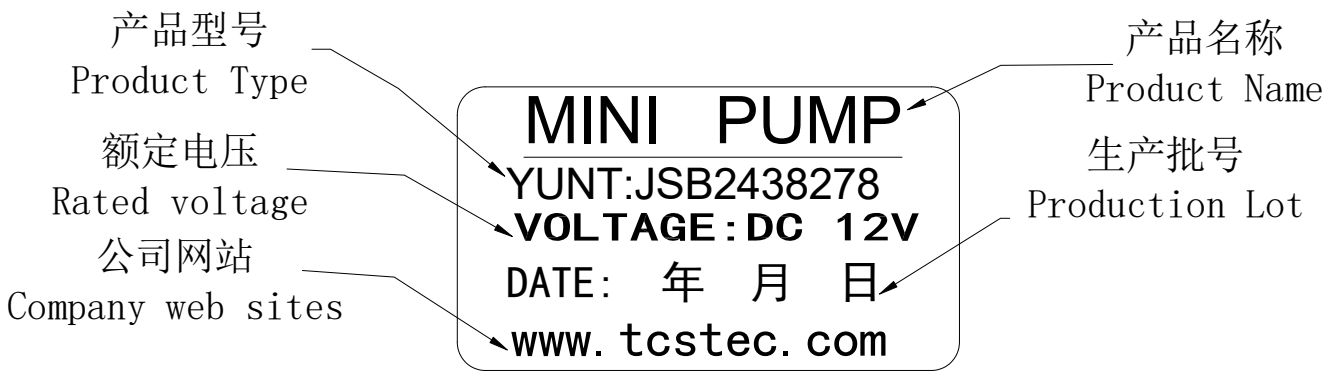
5-1	低温环境测试 Low-temperature environment test	在温度 5℃经五小时后,立即在此温度下依下列专案测试无异状，3-3~3-7. Under a temperature of 5℃ for 5 hours, then examining the pump by test3-3~3-7.And finding out it still perform well.
5-2	高温环境测试 High-temperature environment test	在温度 45℃经五小时后,立即在此温度下依下列专案测试无异状，3-3~3-7.Under a temperature of 45℃ for 5 hours, then examining the pump by test 3-3~3-7.And finding out it still perform well.

6 其它 Others:

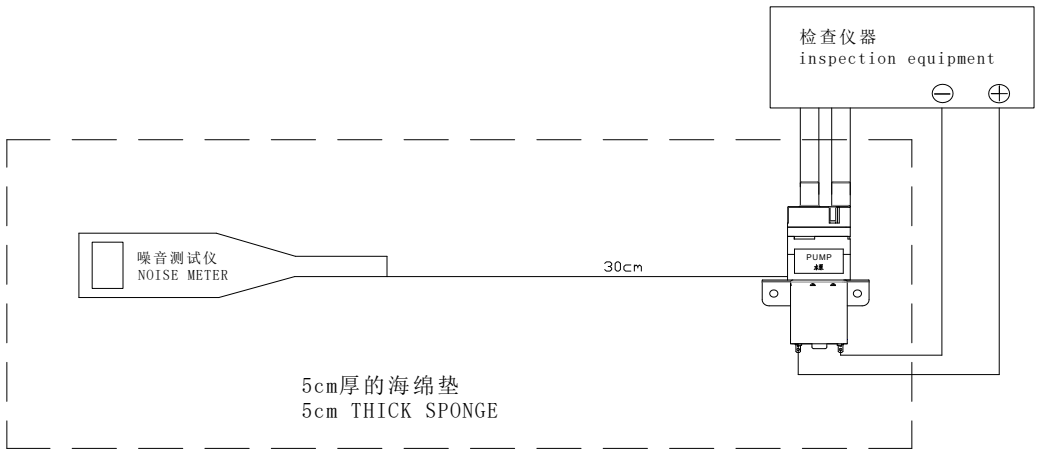
6-1	端子强度 The lead tension	以 0.5 公斤法码与端子平行负载无异常者. Hanging a 0.5 Kg static load on the terminal of the pump will not cause damage on the pump.
6-2	落下实验 Fall test	使用标准的包装方式,在水泥地上将其从 50cm 的高度分别从正面,侧面,及边角落下,其性能及结构需无异常. Basic performance and the structure shall not be defected after following test; With standard packaging conditions, then dropping it at the front side, and edges part 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 DC12.0V，堵住出气孔，全负载连续 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 12.0V，full load， for 8 hours continuously.
6-5	焊锡要求	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℃,and operating time is for 2 sec only.

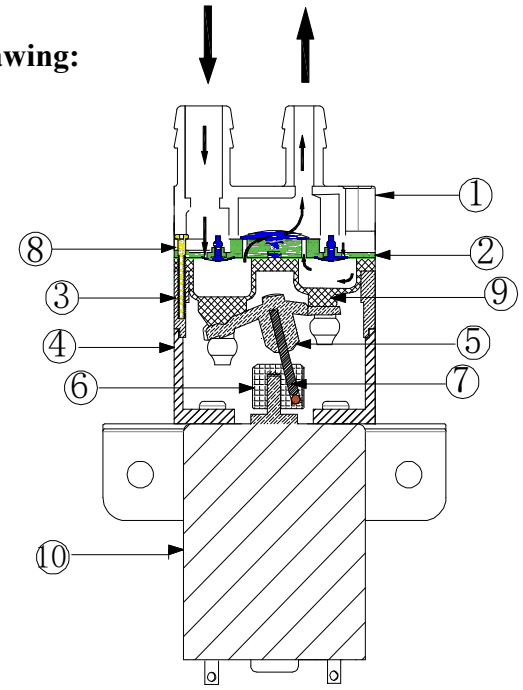
7 标签内容 Labels:



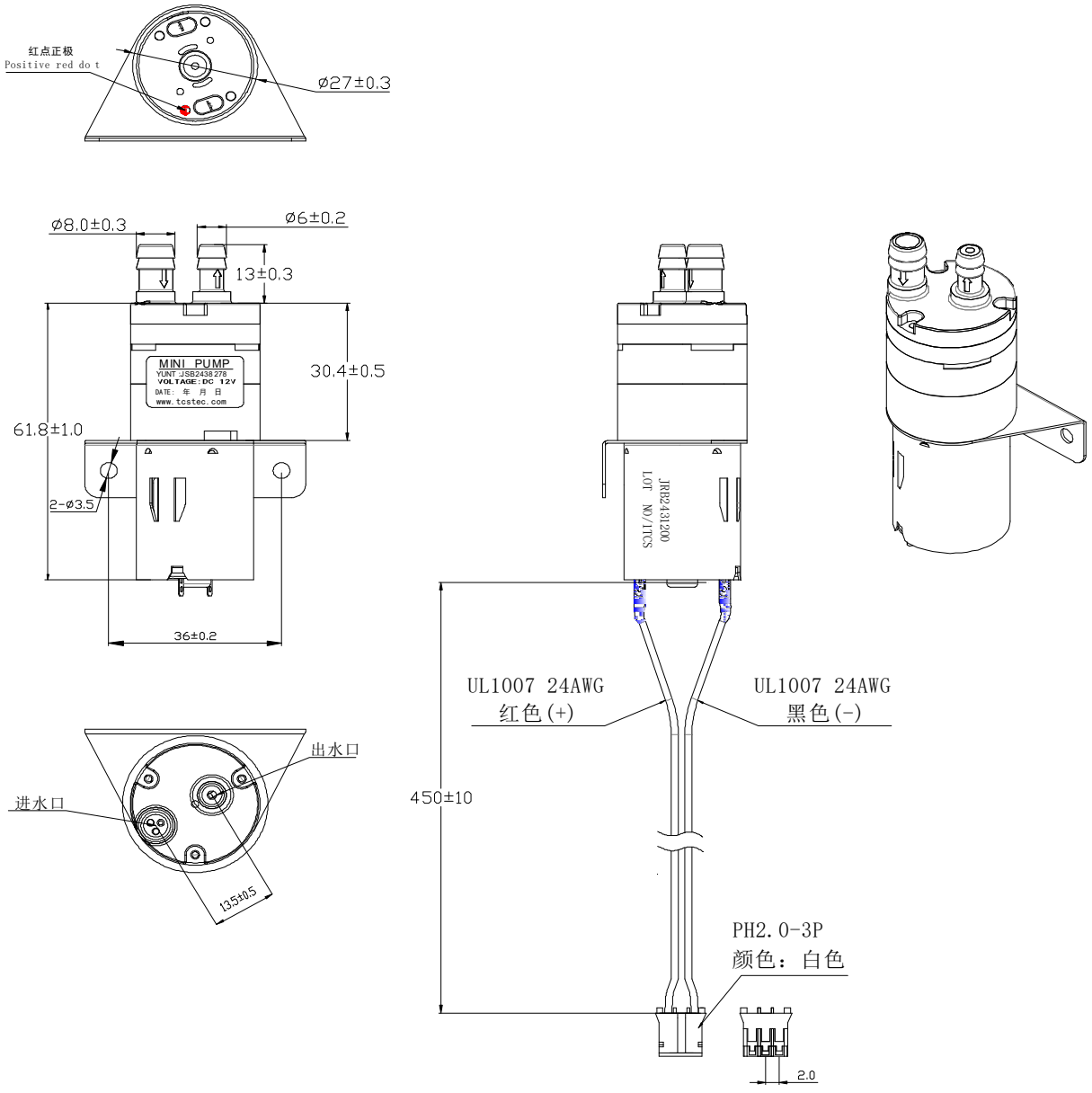
8 噪音测试线路图 Noise test circuit diagram:



9 结构图 Structural drawing:



10 材料表 Material list:

号码NO.	名称NAME.	材料MATERIAL.
1	塑胶B1	PLASTIC
2	塑胶B2	PLASTIC
3	塑胶B3	PLASTIC
4	塑胶B4	PLASTIC
5	塑胶B5	PLASTIC
6	塑胶B6	PLASTIC
7	钢针	STEEL
8	螺丝	A3
9	橡胶	RUBBER
10	马达	DC12V

11.成品外形图 Finished Outline