

Product Approval Sheet

产品确认书

Issued No. | 编号 00212

Product Name | 产品名称 Ultrasonic Atomizer Kit 超声波雾化组件

Model No. | 型号 WHQ2412/2060-24N

Customer | 用户

Supplier | 供应方

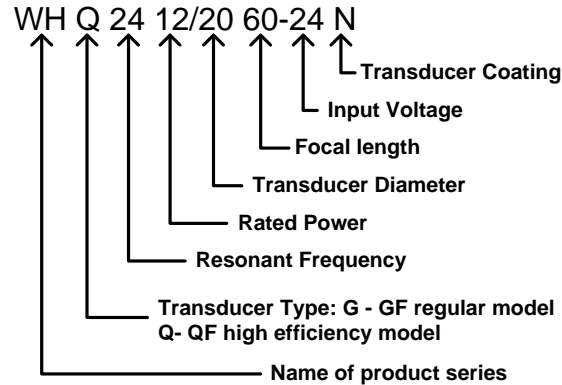
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CUSTOMER			SUPPLIER		
			CHECKED	CONFIRMED	APPROVALED
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1. APPLICATION 用途

It's suitable for ultrasonic humidifier, atomizer and nebulizer.
用于各种超声波加湿器和雾化器。

2. MODEL NO. 型号



3. SPECIFICATION 规格

3.1. DIMENSIONS 外形

See the drawing in the last page 见尾页附图

3.2. PARAMETERS

Test Condition 测试条件

Room Temp. 室内温度: 20-30°C; Room Humidity 室内湿度: 40%-60%

Item	Value	项目	数值
Input Voltage (V DC)	24	输入电压 (V DC)	24
Rated Current (mA)	500	额定电流 (mA)	500
Frequency (MHz)	2.40 ± 0.08	工作频率 (MHz)	2.40± 0.08
Transducer Coating	Nickel	换能器电极	镍
Recommended Water Temp. (°C)	30 ± 5	最佳水温 (°C)	30 ± 5
Recommended Water Level (mm)	25-35	最佳水位 (mm)	25-35
Fog output (ml/h)	> 180	雾化量 (ml/h)	> 180

3.3 TRANSDUCER LIFE 换能器寿命

The life that is set to be the period of continuous time where the current level of fog production decreased to 60% relative to initial level. The expected service life depends on input power, water quality and water temperature. For example, the life expectancy can be increased by lowering input power rate.

换能器寿命是指在输入功率、水温等条件不变的情况下，换能器不间断工作，其发雾量减小到初始值的 60%时所用的时间。寿命与输入功率、水质和水温有关。例如，降低输入功率可能会使换能器寿命提高。

Water temp. = 20~40 °C,

当水温在 20~40°C时，10000 小时

In case of water temp 50~60 °C

当水温在 50~60°C时，5000 小时

In case of water temp 60~90 °C

当水温在 60~90°C时，3000 小时

* All data are measured under the standard input rate of power in pure water.

*所有数据均在额定功率下纯水中测得。

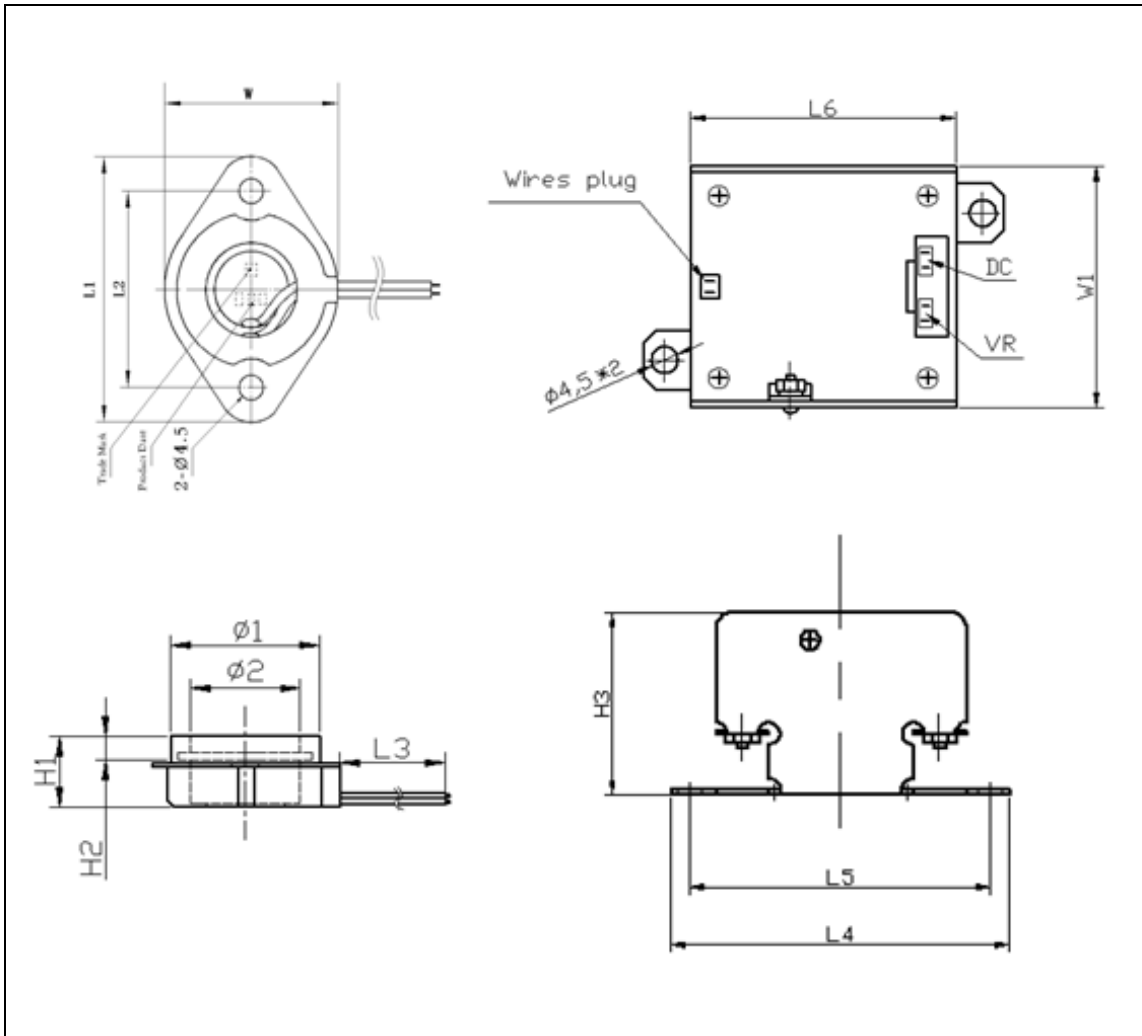
4. TECHNICAL NOTES 注意事项

- **Air cooling MUST be applied to the heatsink on PCB.** Otherwise, the circuit will be burnt shortly.
- 'VR' port on the PCB is used for power control by connecting a 5.1kΩ voltage regulator (variable resistor). When 'VR' port is in 'short-circuit', the power is full. When 'VR' port is off, the power is zero. Therefore, 'VR' port is normally used for the power switch as well.
- **Please make sure the transducer has been connected to PCB before switching on the circuit.** PCB will be burnt without the transducer connected.

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- The transducers should NEVER work without liquid in contact with them even though in a very short time (a few seconds). Recommend to provide a protective “low liquid” shut-off circuit.
- Make sure no voltage difference appears between surface of transducer and water. We highly recommend the float switch for liquid level control. PLEASE DON'T USE ELECTRODE CONTROL FOR “LOW WATER” PROTECTION! OTHERWISE THE TRANSDUCER COATING CAN BE ELECTROLYZED OUT.
- Transducers (except the anti-corrosion model) should work in drinking water or similar liquids. If liquids have an acidity of less than pH5, it could make the output performance decay, even permanently destroy the transducer. Therefore, if the liquid is strong acid (PH<5), you should select anti-corrosion model or contact us for technical suggestions.
- The surface of transducers should be cleaned at times. It will NOT be considered as the quality problem on transducers, if the atomizing effect of transducers decays due to substances contained in liquid such as Ca, Na, Mg and Si etc. adhering to the transducers surface.
- PCB 需要强制风冷散热，否则电路会过热烧毁。
- PCB 上的 ‘VR’ 端为功率控制端口，可接— 5.1kΩ 电位器用来调节输出功率（雾化量）。‘VR’ 端短路时，电路工作在额定功率；‘VR’端开路时，电路功率为 0，因此‘VR’端亦可作为电路开关。
- 在接通电源时，请务必确定换能器晶片已与 PCB 连接。未连接换能器晶片接通电源，会烧毁 PCB。
- 换能器严禁在无液体情况下工作！建议提供“无水”保护电路。
- 液体与雾化换能器表面不得存在电位差。我们强烈建议使用磁浮开关作为液位控制开关。请勿使用探针式液位开关！否则雾化换能器电极将因电腐蚀而损坏。
- 除选配防腐型雾化换能器以外，换能器应工作在饮用水或相似性质的液体中。如果液体 PH 值小于 5，可能会影响雾化组件输出性能，甚至损坏换能器。
- 雾化换能器表面需定期清理。如由于雾化换能器表面结垢（钙镁离子沉积）造成雾化量降低，不视为产品质量问题。



No.	Qty.	Description	东方金荣超声电器有限公司 Siansonic Technology Co., Ltd.							
			超声波雾化组件 WHQ2412/2060-24N							
			Φ1	Φ2	H1	H2	L1	L2	L3	W
			23.7	17	11.5	3.5	42	32	300	30
			H3	L4	L5	L6	W1			
			32	60	53	45	36			