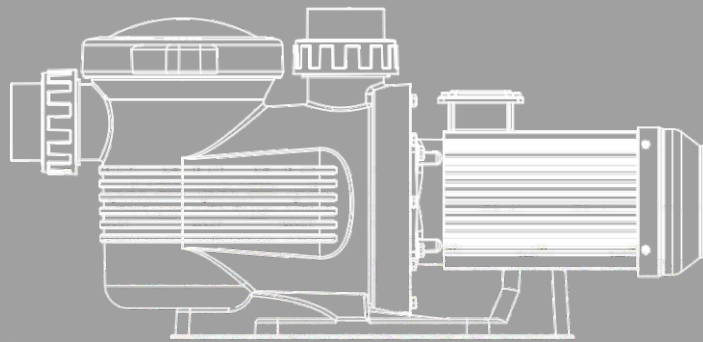




# ULTRA-POWER COMMERCIAL PUMP

HIGH PERFORMANCE & HEAVY DUTY

For residential and semi-commercial pools



## USER MANUAL



**Model: UPH Series**

# TABLE OF CONTENT 目录

PAGE	②	....	WARNINGS AND SAFETY INSTRUCTIONS 安全警告与说明
	③	....	SUCTION ENTRAPMENT HAZARD 吸入危险
	④	....	1. UPH SERIES PUMP OVERVIEW UPH系列水泵概述
			2. PRODUCT INFORMATION 产品信息
	⑤	....	3. IMPORTANT SAFETY INSTRUCTIONS 重要安全说明
	⑥	....	4. INSTALLATION 安装
			4.1 PIPING 连接管道
			4.2 ELECTRICAL WIRING 接线
	⑦	....	5. START UP 启动
	⑧	....	6. ROUTINE MAINTENANCE 日常维护
			7. WINTERIZING 防冻
	⑨	....	8. REPLACEMENT PARTS 零部件清单
	⑩	....	9. TROUBLE SHOOTING 故障排除
			10. TERMS OF THE WARRANTY 保修条款

# WARNINGS AND SAFETY INSTRUCTIONS 警告与安全说明

## GENERAL WARNING 警告

These instructions contain general safety information for the use of pumps in Pool and SPA installations. For specific pump models, refer to the respective manual. Components such as the filtration system, pumps and heaters should not be located in an area used by young children for access to the pool.

此说明包含在游泳池和水疗设施中泵的安全使用信息。有关具体的水泵型号，请参阅相应的手册。过滤系统、泵和加热器等设备不应放于儿童使用的泳池区域。



## RISK OF ELECTRICAL SHOCK 电击风险

This appliance should be installed by qualified electrical personnel in accordance with National Electrical Code and all applicable local codes and ordinances. Hazardous voltage can shock, burn, and cause death or serious property damage. In order to reduce the risk of electric shock, "DO NOT" use an extension cord to connect the unit to an electricity supply.

本设备应由专业的电气人员按照国家电气规范和当地所有适用的规范条例进行安装。危险电压会导致电击、灼伤和财产损失，严重的可导致死亡。为了降低触电风险，请勿使用延长线将设备连接至电源。

- The pump should be permanently connected to an individual circuit breaker.  
水泵应连接上单独的断路器。
- Pump must be connected to a residual current device (RCD) having a rated residual operating current not exceeding 30 mA or receptacle with ground fault circuit interrupt (GCFI).  
水泵必须连接到有效工作电流不超过30mA的漏电保护器或带接地故障中断的插座（GCFI）。
- Electrical grounding must be connected before connecting to electrical power. Failure to ground all electrical equipment can cause serious or fatal electrical shock hazard.  
在连接电源之前，必须先接地。所有电气设备接地故障可能导致严重或致命的电击危险。
- Bonding: Use at least #8 AWG (#6 AWG for Canada) a solid copper conductor, run a continuous wire from external bonding lug (if available) to the pressure wire connector provided on the electrical equipment and to all metal parts of swimming pool, spa, or hot tub, and metal piping (except gas piping), and conduit within 1.5m (5 ft) of inside walls of swimming pool, spa, or hot tub.  
连接：使用至少#8 AWG（加拿大为#6 AWG）实心铜导体，从外部接合接线片（如果有）到电气设备上提供的压力线连接器和游泳池的所有金属部件上铺设连续导线、水疗中心或热水浴缸，以及金属管道（燃气管道除外），以及距离游泳池、水疗中心或热水浴缸内壁1.5m（5英尺）以内的导管。
- Never open the inside of the drive motor enclosure. There is a capacitor bank that holds a mains supply voltage charge even when there is no power to the unit. The voltage should be referred to the individual pump operation voltage.  
切勿打开驱动电机外壳的内部。有一个电容器组，即使在设备没有电源时也能保持主电源电压电荷。该电压应参考各个泵的工作电压。
- The pump is capable of high flow rates; use caution when installing and programming to limit pumps performance only.  
该泵属于大流量水泵，安装和编程时要小心，以防限制泵的性能。
- Switch OFF pump power before servicing and disconnecting the main circuit to the pump.  
在维修和断开泵的主电路之前，请关闭电源。
- Never change the filter control valve position while the pump is running.  
水泵运行时，切勿操作过滤器控制阀门。



## COMPRESS AIR HAZARDOUS 压缩空气危险

Enclosed pre-filter / filter system will become pressurized. Compressed air can cause the lid to separate which can result in serious injury or death.

Pool and spa circulation systems operate under high pressure. When any part of the circulating system (i.e. lock ring, pump, filter, valves, etc.) is serviced, air can enter the system and become pressurized. Filter tank lid and pre-filter cover must be properly secured to prevent violent separation. Set the pre-filter / filter air relief valve in the open position and wait for all pressure

in the system to be relieved before remove the lid to access the basket for cleaning.

封闭式预滤器/过滤系统将加压。压缩空气会导致盖子分离，从而导致严重的人员伤害或死亡。

泳池和水疗循环系统在高压下运行。当循环系统的任何部分（即锁环、泵、过滤器、阀门等）工作时，空气可以进入系统并加压。过滤器箱盖和预过滤器盖子必须正确固定，以防止剧烈分离。将预滤器/过滤器空气安全阀设置在打开位置，并等到系统中的所有压力释放后拆下盖子，以便清洁篮子。



## HYPERTHERMIA 高热

SPA water temperature excess 38°C (104°F) may be hazardous to health. Test water temperature before entering spa water.

Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body.

温泉水温超过38°C (104°F) 可能对健康有害。在进入温泉水之前需测试水温。

当体内温度达到比正常体温98.6°F (37°C)高几度时，就会中暑。中暑的症状包括嗜睡以及体内温度升高。



## SUCTION ENTRAPMENT HAZARD 吸入危险

This pump produces high levels of suction and creates a strong vacuum at the main drain at the bottom of your pool and spa. This suction is so strong that it can trap adults or children under water if they come in close proximity to a pool or spa drain or a loose or broken drain cover or grate.

该泵可产生很强的吸力，并在泳池和水疗中心底部的主排水管处形成强大的真空。这种吸力非常强，如果成年人或儿童靠近游泳池或温泉排水沟或松散或破损的排水盖或格栅，就会将他们困在水下。

Commercial pools or spas constructed on or after December 19, 2008, shall utilize:

2008年12月19日当天或之后建造的商业泳池或温泉应使用:

1. A multiple main drain system without isolation capability with suction outlet covers that meet ASME/ANSI A112.19.8a Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs and either:

多主排水系统，无隔离能力，吸水口盖符合 ASME/ANSI A112.19.8a 用于游泳池、浅水池、水疗中心和热水浴缸的吸水配件，以及

- 1.1 A safety vacuum release system (SVRS) meeting ASME/ANSI A112.19.17 Manufactured Safety Vacuum Release systems (SVRS) 符合 ASME/ANSI A112.19.17 制造的安全真空释放系统 (SVRS) 的安全真空释放系统 (SVRS)

For Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems and/or ASTM F2387 Standard 适用于住宅和商业游泳池、水疗中心、热水浴缸和浅水池吸水系统和/或 ASTM F2387 标准

Specification for Manufactured Safety Vacuum Release Systems (SVRS) for Swimming pools, Spas and Hot Tubs or 用于游泳池、水疗中心和热水浴缸的制造安全真空释放系统 (SVRS) 规范或

- 1.2 A properly designed and tested suction-limiting vent system or

适当设计和测试的吸力限制通风系统或

- 1.3 An automatic pump shut-off system.

水泵自动关闭系统。

Commercial pools and spas constructed prior to December 19, 2008, with a single submerged suction outlet shall use a suction outlet cover that meets ASME/ANSI A112.19.8a and either:

2008年12月19日之前建造的具有单个浸没式吸入口的商业水池和水疗馆应使用符合ASME/ANSI A112.19.8a的吸入口盖，并且

1. A SVRS meeting ASME / ANSI A112.19.17 and/or ASTM F2387, or 符合ASME/ANSI A112.19.17和/或ASTM F2387的SVRS，或

2. A properly designed and tested suction-limiting vent system, or 设计和测试合格的受限通风系统或

3. An automatic pump shut-off system, or 水泵自动关闭系统，或

4. Disabled submerged outlets, or 禁用的水下出口，或

5. Suction outlets shall be reconfigured into return inlets. 吸入口应重新配置为回流入口

There are five types of suction entrapment according to The Virginia Graeme Baker (VGB) Pool and Spa Safety Act

根据《弗吉尼亚州格雷姆·贝克（VGB）泳池和水疗安全法案》，有五种类型的吸入截留

1. **Body Entrapment** a section of the torso becomes entrapped

身体卡滞躯干部分卡滞

2. **Limb Entrapment** an arm or leg is caught by or pulled into an open drainpipe

手臂或腿被打开的排水管夹住或拉入排水管

3. **Hair Entrapment** or entanglement hair is pulled into and/or wrapped around the grate of the drain cover

头发被卷入或缠绕头发被拉入和/或缠绕在排水盖的格栅上

4. **Mechanical Entrapment** the bather's jewelry or clothing gets caught in the drain or the grate

沐浴者的珠宝或衣服卡在排水管或格栅中

5. **Evisceration** the victim's buttocks come into contact with the pool suction outlet and he or she is disemboweled

取出内脏受害者的臀部与泳池吸入口接触，他或她被取出内脏



### TO REDUCE ENTRAPMENT HAZARD RISK

To prevent entrapment, two functioning suction outlets per pump must be installed. The minimum separation of suction on the same floor or wall must be at least 1 meter (3ft). This will avoid "dual blockage" by bather.

If the drain or its cover is damaged, broken, cracked, missing or not securely attached, shut down the pool and replace it immediately.

A vacuum safety release or vent system is recommended to be installed for suction entrapment release.



**WARNING:**

为防止截留，每个泵必须安装两个正常工作的吸入口。同一地板或墙壁上的最小吸力间隔必须至少为1米（3英尺）。这将避免沐浴者的“双重堵塞”。如果排水管或其盖损坏、破裂、开裂、缺失或连接不牢固，应关闭水池并立即更换。建议安装真空安全释放或通风系统，以释放吸入截留物。

# 1. UPH SERIES ULTRS POWER PUMP OVERVIEW UPH系列超强动力泵概述

Ultra-Power is a series of high-performance pumps designed to achieve the highest flows among similar pumps on the market. By utilizing state-of-the-art engineering, the one-piece molded pump body with a large capacity 8-liter strainer basket makes it unique among all comparable pumps. Built with corrosion and chemical resistant glass-reinforced thermoplastic and superior seawater graded mechanical seal guarantee a long working life.

Ultra-Power is Emaux's first commercial pump with a 3" union to achieve the hydraulic performance of more than 45m<sup>3</sup>/h at 18m of head (7hp model). With a wide selection of power options (4, 5.5 and 7hp) available in 3-phase motors, it becomes one of the most efficient and energy-saving solutions for various ranges of the commercial pool and seawater facilities.

Ultra Power是一系列高性能泵，旨在实现市场上同类泵中的最高流量。通过采用最先进的工程技术，一体成型泵体和大容量8升滤网篮使其在所有可比泵中独树一帜。采用耐腐蚀和耐化学腐蚀的玻璃纤维增强热塑性塑料和优质的海水分级机械密封，确保使用寿命长。

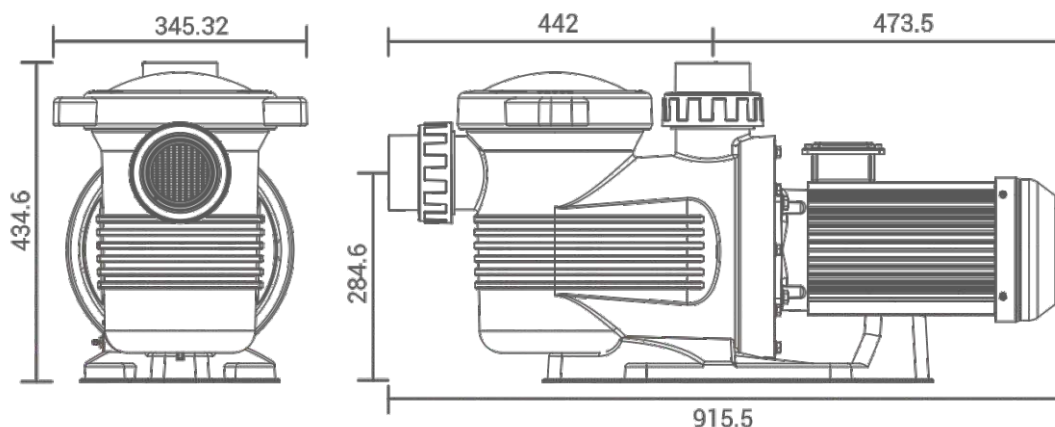
Ultra Power是Emaux的首款配有3"接头的商用泵，在18米扬程（7hp型号）下，其流量性能达到45m<sup>3</sup>/h以上。三相电机有多种电源选择（4、5.5和7hp），成为各种商用泳池和海水设施的最高节能解决方案之一。



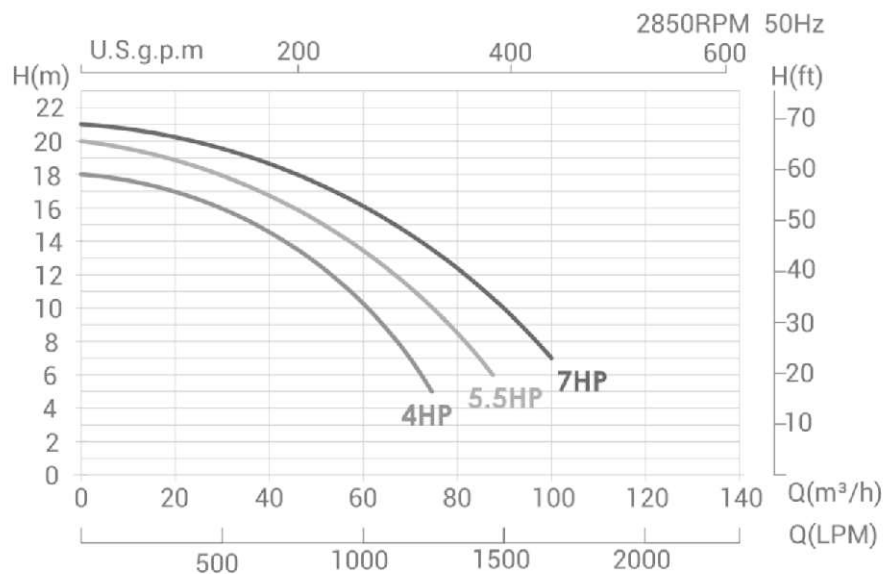
# 2. PRODUCT INFORMATION 产品信息

Code 380V/50Hz	Model	Connection Size	Horsepower (hp)	Strainer Vol(L)	RPM	Input Power (kw)	Noise (dB)	Current (AMP)	Head(m)					
									8	10	12	14	16	18
									FlowRate(m <sup>3</sup> /h)					
9024401	UPH400	3"/90mm	4	8	2850	3	70	5.5	64	62	53	42	30	-
9024402	UPH550	3"/90mm	5.5	8	2850	4	72	7	82	75	66	58	43	28
9024403	UPH700	3"/90mm	7	8	2850	5	72	9	96	90	82	72	60	45

## DIMENSIONS 规格尺寸



## PERFORMANCE DATA 性能数据



## 3. IMPORTANT SAFETY INSTRUCTIONS 重要安全说明



### WARNING:

IMPORTANT: The instruction manual you are holding includes essential information on the safety measures for installation and start-up of this equipment. Therefore, the installer as well as the user must read the instructions before beginning installation and start-up. Keep this manual for future reference.

重要提示：您持有的使用手册包括有关安装和启动本设备的安全措施的基本信息。因此，安装人员和用户必须在开始安装和启动之前阅读说明。保留本手册以备将来参考。

- A protective device is to be installed in the fixed wiring  
在固定接线中安装保护装置
- This appliance cannot be used by children (8 years or below). Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.  
儿童（8岁及以下）不得使用本器具。儿童不得玩本器具。没有超视力的儿童不得进行清洁和用户维护
- This appliance cannot be used by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety.  
身体、感觉或精神能力下降，或缺乏经验和知识的人员不得使用本设备，除非负责其安全的人员给予他们有关使用设备的监督或指导
- The appliance shall be installed in accordance with national wiring regulations and a means of disconnection must be incorporated in the fixed wiring in accordance with the wiring rules. A disconnected system must be incorporated in the fixed.  
设备应按照国家布线法规安装，并且必须按照布线规则在固定布线中加入断开装置。必须将断开连接的系统并入固定系统中
- The pump is to be supplied through a residual current device (RCD) or Ground Fault Circuit Interrupt (GFCI) having a rated residual operation current not exceeding 30mA.  
泵应通过额定剩余工作电流不超过30mA的剩余电流装置（RCD）或接地故障电路中断（GFCI）供电

Correct disposal of this product 正确处理本产品	
	<p>This symbol on the product, or in its packaging, indicates that this product may not be treated as household waste. Instead, it should be taken to the appropriate waste collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by the inappropriate waste handling of this product. For more detailed information about the recycling of this product, please contact your local council, your household waste disposal service, or the shop where you purchased the product.</p> <p>产品或其包装上的此符号表示此产品不能作为家庭废物处理。相反，应将其运至适当的废物收集点，以回收电气和电子设备。通过确保正确处置本产品，您将有助于防止因本产品废物处理不当而对环境和人类健康造成的潜在负面后果。有关本产品回收利用的更多详细信息，请联系当地议会、家庭废物处理部门或购买本产品的商店。</p>

## 4. INSTALLATION 安装

### 4.1 PIPING 连接管道

1. Install the pump as close to the pool as possible, preferably in a dry, well ventilated area away from direct sunlight. Protect the pump from excessive moisture.

将泵安装在尽可能靠近水池的位置，最好安装在通风良好、远离阳光直射的区域。防止泵受潮过多

2. Place the pump as close to the water source as possible, so that the suction pipe is short, straight and direct to reduce the friction loss. Don't install the pump at more than 10ft (3 meters) of geometrical height from water level. Pump priming time for 3m (10ft) should be at least 7 minutes at 2900 RPM.

泵尽量靠近水源，使吸入管短、直、直，以减少摩擦损失。泵的安装位置与水位的几何高度不得超过10英尺（3米）。在2900 RPM下，3m（10ft）的泵充油时间应至少为7分钟

3. Before installing the pump, make sure that the surface is solid, elevated, rigid and vibration free.

安装泵前，确保表面坚实、抬高、坚硬、无振动

4. Secure the pump to the base with screws or bolts to limit the vibration and the stress on the pipe or the joints.

用螺钉或螺栓将泵固定在底座上，以限制管道或接头上的振动和应力

5. Leave enough space for gate valves in suction and discharge piping, if required.

如果需要，在吸入和排放管道中为闸阀留出足够的空间

6. Connect the suction and discharge pipe to the outlet and inlet of the swimming pool.

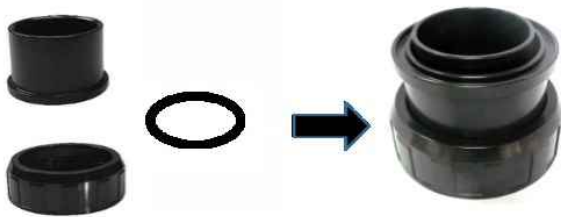
将吸入和排出管连接到游泳池的进出口

7. Make sure that floor drainage is adequate to prevent flooding.

确保地板排水充足，以防止洪水泛滥

8. Make sure that the pump and piping are accessible for servicing.

确保泵和管道便于维修



Note: The pump suction and discharge connections have thread stops, DO NOT try to screw the pipe beyond these stops.

The two sets of 3" union adaptors with 3" nut are universally designed for both metric and imperial PVC pipe connection.

注意：泵的吸入和排出连接件有螺纹止动块，请勿将管道拧到这些止动块之外。这两套3" 活接头适配器带有3" 螺母，通用于公制和英制PVC管道连接。

### 4.2 ELECTRICAL WIRING 接线



WARNING: This power pump requires a certified electrician or qualified pool installer to ensure there is adequate protection between the pump motor and mains power supply according to individual country's safety code.

警告：根据各国的安全规范，该水泵需要一名合格的电工或合格的安装人员，以确保泵电机和主电源之间有足够的保护。

1. The pump has to connect to circuit breaker to isolate the motor from the mains power for overload protection. The circuit breaker rating should comply with the electrical specification of the pump's working voltage and power.

泵必须连接到断路器，以将电机与主电源隔离，以进行过载保护。断路器额定值应符合泵工作电压和功率的电气规范

2. 3-phase motor require external three-phase motor starter or magnetic motor starter to control the motor on/ off.

三相电机需要外部三相电机起动器或磁力电机起动器来控制电机的开/关

3. To ensure the rotation of the pump, power up the motor for a second then off to check the rotation of the motor fan or shaft. The fan or shaft will match the rotation arrow noted on the pump if wired correctly. Swap either two connection (wired to U1, V1 or W1) if direction is revised.

为确保泵的旋转，先给电机通电一秒钟，然后关闭，检查电机风扇或轴的旋转情况。如果接线正确，风扇或轴将与泵上标注的旋转箭头相匹配。

如果方向改变，则交换两个连接（连接至U1、V1或W1）

4. The power supply must be equipment with a Residual Current Device (RCD) or Ground Fault Circuit Interrupt

电源必须是带有剩余电流装置（RCD）或接地故障电路中断的设备



#### WARNING:

If the RCD/GFCI device trips, it means there is fault on the power line or motor. Do not use this pump. Disconnect the pump and have the problem corrected by a qualified service representative before using. Press the reset button to reset the RCD/GFCI devices after fixing. If the power line problem is not fixed it will keep the circuit shut off and will not reset.

It is recommended to test the RCD/GFCI at least once a month.

如果RCD/GFCI设备跳闸，则表示电源线或电机存在故障。请勿使用此泵。使用前，断开泵并由合格的服务代表纠正问题。固定后，按重置按钮重置RCD/GFCI设备。如果电源线问题没有解决，它将保持电路关闭，并且不会重置。建议至少每月测试一次RCD/GFCI

RCD



NEMA GFCI Receptacle



NEMA GFCI Breaker



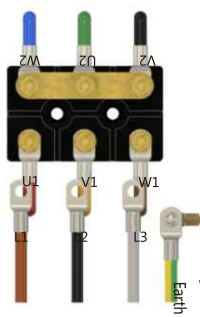
This is a 380Vac (+10% - 6%) 50/60Hz three-phase pump and a 230 / 460 Vac 60Hz three-phase pump.

Unscrew the terminal box at the top of the pump. There are four terminals labelled as U1, V1, W1 and T (EARTH). Connect the power wires to these terminals according to the electrical code.

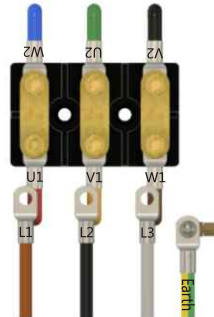
这是一台380Vac (+10%-6%) 50/60Hz三相泵和一台230 / 460 Vac 60Hz三相泵。

拧下泵顶部的接线盒。有四个端子标记为U1、V1、W1和T（接地）。

根据电气规范，将电源线连接到这些接口上。



UPH400  
WYE/STAR Connection  
Y形/星形连接



UPH550/UPH700  
Delta Connection  
三角形连接

LOW VOLTAGE (230V)



HIGH VOLTAGE (460V)



## 5. START UP 启动



**WARNING:**

1. Verify the pump shaft turn freely.  
检查泵轴是否能自由转动
2. Check that the mains voltage, current and frequency correspond with the name plate.  
检查电源电压、电流和频率是否与铭牌相符
3. Never let the pump run dry! Running a pump dry may cause damage the mechanical seal causing leakage and flooding.  
切勿让泵无水运转！无水运行泵可能会损坏机械密封，导致泄漏和溢流

4. Fill the pre-filter with water before starting the motor.  
启动电机前，向预过滤器加水
5. Before removing the pre-filter lid, STOP PUMP, CLOSE GATE VALVES in suction and discharge pipes.  
拆卸预过滤器盖之前，关闭泵，关闭吸入和排放管中的闸阀
6. Always STOP THE PUMP before when RELEASING ALL PRESSURE from the pump and the piping system.  
在释放泵和管道系统的所有压力之前，始终停止泵
7. Never tighten or loosen screw while the pump is in operation.  
泵运行时，切勿拧紧或松开螺钉
8. The suction pipe and the suction inlet in the pool must be free from obstruction.  
水池中的吸入管和吸入口必须无障碍物

**Tighten/untighten the pump Lid by hand only. 请用手拧紧/松开泵盖**





Before start-up, check the alignment of the pump. The pipes should be inspected to ensure that they are properly fitted and tightened and that they do not exert pressure or tension on the pump's suction or discharge connection.

**WARNING:** 启动前，检查泵的对准情况。应检查管道，以确保其正确安装和拧紧，并且不会对泵的吸入或排放连接施加压力或张力。

1. Clear all piping of construction debris and verify that the piping has passed a proper pressure test.  
清除所有管道中的建筑碎片，并验证管道是否通过了适当的压力测试
2. Check the filter and other equipment for proper installation, verifying all clamps and connections are properly installed as per the manufacturer's instructions.  
检查过滤器和其他设备是否正确安装，验证所有夹具和连接是否按照制造商的说明正确安装
3. Open any shut off valves on the suction and discharge lines.  
打开吸入和排放管线上所有切断阀
4. Open the filter pressure relief valve and release all pressure from the system.  
打开过滤器减压阀，释放系统中的所有压力
5. If the pump is located below the water level of the pool, opening the pressure relief valve will fill the pump with water.  
如果泵位于水池水位以下，打开泄压阀将向泵注水
6. If the pump is located above the pool water level, remove the Lid from the pre-filter and fill with water before starting the pump.  
如果泵位于水池水位以上，则在启动泵之前，从预过滤器上取下盖子并加水
7. Check to see that the Lid O-ring and seat areas are clean and lubricated. Debris in the sealing area can cause air to leak into the system and make it difficult to prime the pump.  
检查盖O形圈和阀座区域是否清洁和润滑。密封区域中的碎屑会导致空气泄漏到系统中，并使泵难以充注
8. Close/tighten the Lid to make an airtight seal.  
关闭/拧紧盖子以形成气密封
9. Turn on power wait for pump to prime. Pump priming time for 3m (10ft) should be at least 7 minutes. Priming will depend on vertical length of suction lift and horizontal length of suction pipe. If the pump does not prime within priming time, stop the motor and determine cause.  
打开电源，等待泵充注。3m (10ft) 的泵充注时间应至少为7分钟。注油取决于吸入扬程的垂直长度和吸入管的水平长度。如果泵未在充注时间内充注，请停止电机并确定原因
10. If the pump does not prime within 10 minutes. Ensure all instructions to this point have been followed. Stop the pump! Check for suction leaks and repeat steps (I) through (VIII).  
如果泵在10分钟内未充注。确保遵守了这一点的所有说明。关掉水泵，检查入口是否泄漏，并重复步骤 (I) 至 (VIII)

## 6. ROUTINE MAINTENANCE 日常维护保养

The pump mechanical seal requires no lubrication and service.

泵机械密封无需润滑和服务

The only routine maintenance needed is the inspection and cleaning of the pre-filter basket. Debris or trash collected in the basket will choke off the water flow through the pump. Follow the instructions below in order to clean the pre-filter basket:

唯一需要的日常维护是检查和清洁预滤篮。篮子中收集的碎屑或垃圾将阻塞通过泵的水流。按照以下说明清洁预滤篮

1. Turn off the pump, close the gate valve in suction and discharge, and release all pressure from the system before proceeding.

关闭泵，关闭吸入和排出的闸阀，并释放系统中的所有压力，然后再继续

2. Lose the suction inlet hose or piping. 失去吸入口软管或管道

3. Turn the ring-lock by hand to open it and release the transparent Lid.

用手转动环锁，将其打开并松开透明盖

4. Remove the pre-filter basket and clean. Make sure all the holes in the basket are clear, flush the basket with water. Put back the basket with the guideline on the edge of the basket. If the basket is not placed correctly, the transparent lid and its ring-lock will not fit well and will cause air leakage.

拆下预滤篮并清洁。确保篮子中的所有孔都干净，用水冲洗篮子。把篮子放回原处，把指导方针放在篮子的边缘。如果篮子放置不正确，透明盖及其环形锁将不合适，并会导致空气泄漏

5. Clean and inspect the lid O-ring ring and replace it if it is damaged. Reinstall it on the transparent lid.

清洁并检查盖O形圈，如果损坏，则更换。将其重新安装到透明盖上

6. Clean the ring groove on the pre-filter body and replace the Lid. To help keep the Lid from sticking, tighten it by hand only.

清洁预滤器体上的环槽，更换盖子。为了防止盖子粘住，只能用手拧紧

7. Connect back the suction hose or pipe. Water should flood the pump body and restart the pump. 连接回吸入软管或管道。水应淹没泵体并重新启动泵

8. Restart the pump and check that it is priming correctly.

重新启动泵，并检查其是否正确充注

## 7. WINTERIZING 防冻处理

If the air temperature drops below 0°C (35°F), the water in the system can freeze and cause damage. Damage due to freezing is not covered by warranty.

如果空气温度降至0°C (35°F) 以下，系统中的水可能冻结并造成损坏。由于冻结造成的损坏不在保修范围内

Prevention of damage from freezing:

防止冻结损坏

1. Shut off electrical power for the pump at the house circuit breaker. 在室内断路器处切断泵电源

2. Drain the water out of the pump case by removing the two drain plugs from the case. 从泵壳上拆下两个放油塞，将水排出泵壳

3. Store the plugs in the pump basket. 将塞子存放在泵篮中

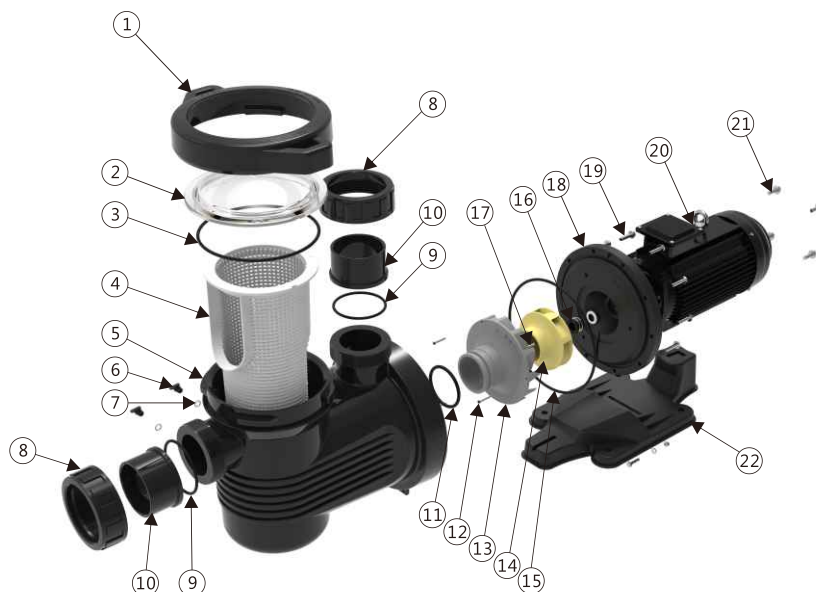
4. Cover the motor to protect it from severe rain, snow and ice. 盖好电机，以防大雨、雪和冰

5. If it is possible, store the pump in a dry location during this time. 如果可能，在此期间将泵存放在干燥位置

6. Do not wrap the motor in plastic. It will cause condensation and rust on the inside of the motor.

不要用塑料包裹电机。这将导致电机内部冷凝和生锈

## 8. REPLACEMENT PARTS 零部件清单



Key No.	Part No.	Chinese	Description	QTY
序号	编号	中文描述	英文描述	数量
1	420408561	透明盖螺母UPH	Nut For Lid	1
2	420386559	透明盖(APS5.5HP-7.5HP)	Transparent Lid	1
3	111010040	三元乙丙圆形胶圈	O-Ring For Lid	1
4	420236559	过滤篮(APS5.5HP-7.5HP)	Basket	1
5	420058561	泵体UPH	Pump body	1
6	01111017	扭制	Drain Plug	2
7	02020014	扭制胶圈	O-Ring	2
8	420228563	管接头螺母UPH	Nut for Connector	2
9	111002561	丁晴胶O形胶圈d91X6	O-Ring for Union	2
10	430301835	3" 管接头 (英制)	3" Union Adaptor	2
10	430301845	GB90管接头 (公制)	GB90mm Union Adaptor	2
11	111010055	分水轮胶圈UPH	O-Ring for Diffuser	1
12	112010165	316十字B头自攻螺丝M4.2X45	M4.2X45 Screw	3
13	420218561	分水轮UPH	Diffuser	1
14	420369026	水叶UPH4HP 50Hz	Impeller For 4HP(380V 50HZ)	1
14	420369027	水叶UPH5.5HP 50Hz	Impeller For 5.5HP(380V 50HZ)	1
14	420368562	水叶7HP 50Hz	Impeller For 7HP(380V 50HZ)	1
14	420369889	水叶UPH4HP 60Hz	Impeller For 4HP 60Hz	1
14	420369890	水叶UPH5.5HP 60Hz	Impeller For 5.5HP 60Hz	1
14	420369026	水叶UPH7HP 60Hz	Impeller For 7HP 60Hz	1
15	111010053	UPH法兰胶圈	O-Ring for Flange	1
16	113005935	机械密封	3/4" Mechanical Seal	1
17	112010163	水叶螺丝	Screw for Impeller	1
18	420208561	法兰UPH	Flange	1
19	112000069	外六角带介机丝M8X35	M8X35 Screw	10
20	42059099028	电机YYD-100S	Motor for UPH400 380V	1
20	42059099029	电机YYD-100M	Motor for UPH550 380V	1
20	42059099030	电机YYD-100L	Motor for UPH700 380V	1
20	42059099863	电机YYD-100S-2D	Motor for UPH400 230/460V	1
20	42059099864	电机YYD-100M-2D	Motor for UPH550 230/460V	1
20	42059099865	电机YYD-100L-2D	Motor for UPH700 230/460V	1
21	112192716	外六角机丝M10X30	M10X30 Screw	4
22	420128561	底座UPH	Base	1

## 9. TROUBLE SHOOTING 故障排除

Problem description 问题描述	Possible causes 可能的原因
Motor does not start 电机无法启动	1. Disconnect switch or circuit breaker in off position 开关或断路器处于断开位置 2. Fuses blow nor thermal over load open 保险丝熔断或热过载打开 3. Defective starting switch inside single phase motor 单相电机内启动开关故障 4. Disconnected or defective wiring 接线断开或有缺陷 5. Locked motor shaft 电机轴锁定 6. Low voltage 低压 7. Motor windings burned out 电机绕组烧坏
Pump does not reach full speed 泵未达到全速	1. Low voltage 低电压 2. Pump connected to the wrong voltage 泵接错电压
Motor over heats (protect or trips) 电机过热 (保护或跳闸)	1. Low voltage 低电压 2. Motor windings connected to the wrong voltage on dual voltage model 双电压模式下, 电机绕组接错电压
Pump delivers no water 泵不出水	1. Pump is not primed 泵未充注 2. Closed valve in suction or discharge line 吸入或排出管线中的阀门关闭 3. Leakage or air into suction system 吸入系统泄漏或空气进入 4. Impeller clogged 叶轮堵塞
Leakage of water at the shaft 轴漏水	Shaft seal requires replacement 轴封需要更换
Low pump capacity 泵容量低	1. Valve in the suction or discharge line partly closed 吸入或排出管线中的阀门部分关闭 2. Suction or discharge line partly plugged 吸入或排出管线部分堵塞 3. Suction or discharge line too small 吸入或排出管线太小 4. Plugged basket in skimmer or hair and lint strainer 过滤篮有毛发或棉绒堵塞 5. Dirty filter 过滤器脏污 6. Impeller clogged 叶轮堵塞
High pump pressure 泵压力高	1. Discharge vale or inlet fittings closed too much 排放阀或入口配件关闭过多 2. Return lines too small 回流管太小 3. Dirty filters 过滤器脏污
Noisy pump and motor 泵和电机噪音大	1. Plugged basket in skimmer or hair in lint strainer 过滤篮有毛发或棉绒堵塞 2. Worn motor bearings 电机轴承磨损 3. Valve in suction line partly closed 吸入管路中的阀门部分关闭 4. Suction line partly plugged 吸入管路部分堵塞 5. Vacuum hose plugged or too small 真空软管堵塞或太小 6. Pump not supported properly 泵支撑不当
Air bubbles at inlet fittings 入口配件处有气泡	1. Leakage of air into the suction line in connections or valve stem 连接件或阀杆中的吸入管线漏气 2. Cover gasket of hair and lint strainer needs cleaning 滤毛器盖垫需要清洗 3. Low water level in the pool 水池水位低

Note: If the above recommendations of this manual do not solve your particular problem(s), please contact your local service agent for further assistance.

注意：如果本手册的上述建议不能解决您的特定问题，请联系您当地的服务代理以获得进一步帮助。

## 10. TERMS OF THE WARRANTY 保修条款

As original purchaser of this equipment have purchased from Emaux Water Technology Co Ltd, through Authorized International Distributor or Dealer, warrants its products free from defects in materials and workmanship under normal use during warranty period. The warranty period begins on the day of purchase and extends only to the original purchaser. It is not transferable to anyone who subsequently purchases the product from you. It excludes all expendable parts.

During the warranty period, Emaux authorized reseller will repair or replace defective parts with new parts or, at the option of Emaux, serviceable used parts that are equivalent or superior to new parts in performance.

由于本设备的原买方已通过授权的国际经销商或经销商从Emaux Water Technology Co Ltd购买，因此，保证其产品在保修期内正常使用时无材料和工艺缺陷。保修期自购买之日起开始，仅适用于原买方。它不可转让给随后从您处购买产品的任何人。它不包括所有消耗性零件。

在保修期内，Emaux授权经销商将使用新零件维修或更换有缺陷的零件，或根据Emaux的选择，使用性能等同于或优于新零件的可维修旧零件。

This Limited Warranty extends only to products purchased from Emaux authorized reseller.

此有限保修仅适用于从Emaux授权经销商处购买的产品

This Limited Warranty does not extend to any product that has been damaged or rendered defective.

本有限保修不适用于任何已损坏或出现缺陷的产品

(1) as a result of accident, misuse or abuse; 由于事故、误用或滥用

(2) as a result of an act of God; 由于天灾

(3) by operation outside the usage parameters stated herein; 在本文规定的使用参数之外进行操作

(4) by the use of parts not manufactured or sold by Emaux; 使用并非由Emaux制造或销售的部件

(5) by modification of the product; 通过修改产品

(6) as a result of war or terrorist attack; or 由于战争或恐怖袭击；或

(7) as a result of service by anyone other than Emaux authorized reseller or authorized agent.

由于Emaux 授权经销商或授权代理人以外的任何人的服务

EXCEPT AS EXPRESSLY SET FORTH IN THIS WARRANTY, EMAUX MAKES NO OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. EMAUX EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED IN THIS LIMITED WARRANTY. ANY IMPLIED WARRANTIES THAT MAY BE IMPOSED BY LAW ARE LIMITED TO THE TERMS OF THIS EXPRESS LIMITED WARRANTY.

除非本保证中明确规定，否则EMAUX不作任何其他明示或暗示的保证，包括任何暗示的保证或适销性和特定用途的适用性。EMAUX明确否认本有限保修中未规定的所有保修。法律可能规定的任何默示保证仅限于本明示有限保证的条款。

**EMAUX WATER TECHNOLOGY CO., LTD**

ADDRESS FLAT A-D, 20/F., KAI BO 22, 22 WING KIN ROAD,  
KWAI CHUNG, HONG KONG

PHONE +852 2832 9880

 **YOUR PREMIER SUPPLIER**

[www.emauxgroup.com](http://www.emauxgroup.com)