



LIVSLD.NB

06.2022

**Sanipump® SLD 390(490) SA**  
**Sanipump® SLD 635 SA**  
**Sanirain 390(490) S**  
**Sanirain 635 S**



 Operating/installation manual

 安装和使用说明

CE





## EN WARNING

This device can be used by children who are at least 8 years old and by people with reduced physical, sensory or mental capacities or those without knowledge or experience, if they are properly supervised or if they have been given instructions on safely using the device and the associated risks have been understood. Children should not play with the device. Children should not clean or perform maintenance on the device without supervision.

## ELECTRICAL CONNECTIONS

The electrical installation must be done by a qualified electrical engineer.

Devices without plug must be connected to a main switch on the power supply which disconnects all poles (contact separation distance of at least 3 mm). The connection must be used exclusively to provide the power of the product.

Connect the device to the mains according to the country's standards.

If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly qualified individual.

**Disconnect electrical power before working on the unit !**

## ZH 警告

警告至少八岁以上儿童，身体、精神或感官有缺失者，及不具备操作该设备经验者必需在专人指导下，且了解该设备的使用方式前提下方可操作该设备。儿童不得随意玩耍。用户设备清洁和维护保养不得由未监管儿童完成。

## 电路连接

电气安装必须由具有合格资质的电气工程师执行完成。

无插座设备应连接在电源主开关上，该电源能确保断开所有电极(触点分离距离至少3毫米)。该连接必须专门用于提供产品的电源。

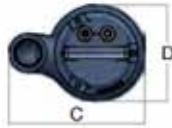
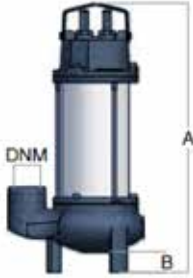
请遵守使用国的有关现行规定。

如设备电源线损坏，须由产品制造商或其售后服务部门更换以避免伤及用户。

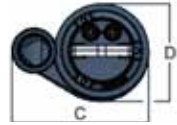
**操作本机前，请断开电源！**

① 升利泵® SLD 390 (490) SA | Sanipump® SLD 390 (490) SA

升利泵® SLD 635 SA | Sanipump® SLD 635 SA



**390 SA**  
A:502 B:65 C:235 D:162  
**490 SA**  
A:527 B:65 C:235 D:162

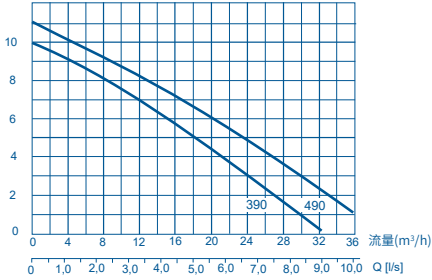


**635 SA**  
A:484 B:60 C:250 D:172

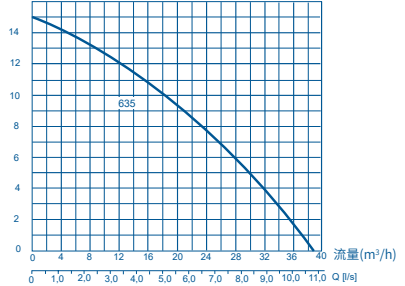
② 升利泵® SLD 390 (490) SA | Sanipump® SLD 390 (490) SA

升利泵® SLD 635 SA | Sanipump® SLD 635 SA

性能曲线  
扬程(m)



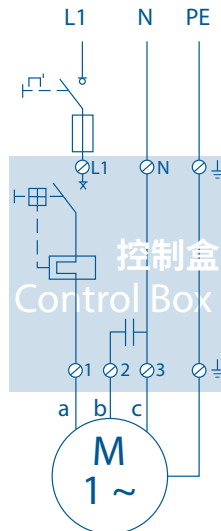
性能曲线  
扬程(m)



③

Sanipump® SLD SA

PE : Yellow/green - 黄色/绿色  
a : Black - 黑色  
b : Brown - 棕色  
c : Grey - 灰色



1

升利瑞 390 (490) S | Sanirain 390 (490) S



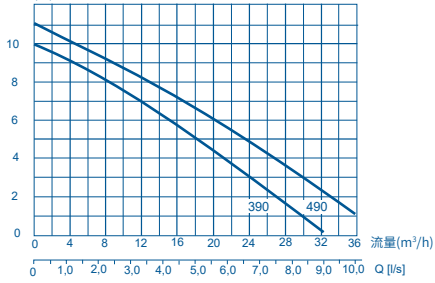
升利瑞 635 S | Sanirain 635 S



2

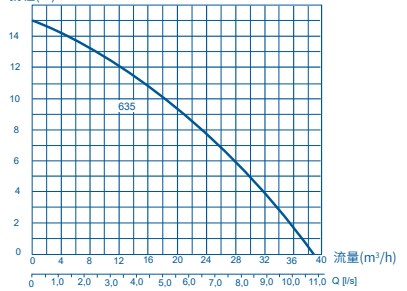
升利瑞 390 (490) S | Sanirain 390 (490) S

性能曲线  
扬程(m)





升利瑞 635 S | Sanirain 635 S

性能曲线  
扬程(m)



# 1. SAFETY

## 1.1 IDENTIFICATION OF WARNING SIGNS

<b>DANGER</b>	This term defines a high-risk hazard that can lead to death or serious injury if not avoided.
<b>NOTICE</b>	This term characterises dangers to the machine and its proper functioning.
	Warning of a general danger. The danger is specified by indications in the table.
	Warning about dangers due to electrical voltage and gives information about protection against electrical voltage.

## 1.2 GENERAL POINTS

This operating manual contains important instructions to follow for the fitting, operation and maintenance of rainwater pumping station. Following these instructions is essential for safe operation and prevents injury and property damage.

## 1.3 INTENDED USE

Only use the pumping station in the applications described in this documentation.

- The pumping station must only be operated in technically perfect condition.
- The pumping station must only pump the fluids described in this documentation.
- The pumping station must never operate without pumped fluid.
- Never exceed the usage limits defined in the documentation.
- The safe use of the pumping station can only be ensured when its use is compliant (as described in this manual).
- Any alteration or modification of the pumping station will render the warranty void.

This operating manual must always be available on the site so it can be accessed by qualified

staff and the operator.

Failure to comply with this operating and installation manual will result in the loss of warranty rights and rights to damages.

## 2. TRANSPORT/DISPOSAL

### 2.1 TRANSPORT

- Transport the pumping station in a vertical position.
- Never hang up the pumping station by the electric cable.

### 2.2 DISPOSAL



The device must not be disposed of as household waste and must be disposed of at a recycling point for electrical equipment. The device's materials and components are reusable. The disposal of electrical and electronic waste, recycling and recovery of any form of used appliances contribute to the preservation of our environment.

## 3. DESCRIPTION

### 3.1 APPLICATION

**Sanipump® SLD & Sanirain** is a rainwater lifting pump for all types of rainwater, specially developed for individual and commercial use.

It can be installed in concrete manholes or pits.

#### **AUTHORISED PUMPED FLUIDS:**

The following liquids are allowed in discharge systems:

- Rain water.

#### **UNAUTHORISED PUMPED FLUIDS:**

The following liquids and substances are banned:

- Solid materials, fibres, tar, sand, cement, ash, coarse paper, hand towels, wipes, cardboard, rubble, rubbish, slaughterhouse waste, oils, hydrocarbons, greases, etc.
- Wastewater containing harmful substances (for example, untreated greasy waste from restaurants). Pumping these liquids and substances requires the fitting of a compliant grease trap.

### 3.2 METHOD OF OPERATION

When the level of effluent in the concrete manhole or pit where **Sanipump® SLD & Sanirain** is installed is sufficient, the float switch starts the lifting pump.

The effluent is automatically lifted and flows into the sewer.

The sewage is discharged in at least DN50 (2").

### 3.3 TECHNICAL SPECIFICATIONS

	Sanipump <sup>®</sup> SLD 390(490) SA	Sanipump <sup>®</sup> SLD 635 SA	Sanirain 390(490) S	Sanirain 635 S
Voltage	230 V	230 V	230 V	230 V
Frequency	50Hz	50Hz	50Hz	50Hz
Power P1	1Kw(1.3Kw)	1.1Kw	1Kw(1.3Kw)	1.1Kw
Maximum current consumption	6.3A(7.3A)	7.3A	6.3A(7.3A)	7.3A
Speed rotation	2800U/min	2800U/min	2800U/min	2800U/min
Power cable length	5m	5m	5m	5m
Max Height	9m	15m	9m	15m
Max. Flow rate	22m <sup>3</sup> /h (27m <sup>3</sup> /h)	29m <sup>3</sup> /h	22m <sup>3</sup> /h (27m <sup>3</sup> /h)	29m <sup>3</sup> /h
Discharge line connection	2"	2"	2"	2"
Activation system	float	float	Without float	Without float
Control box	Not included	Not included	included	included
Maximum immersion height	20m	20m	20m	20m
Maximum particle size	50mm	32mm	50mm	32mm
Max. water temperature	50°C	50°C	50°C	50°C
Operating mode	S1	S1	S1	S1
Gross weight	SLD 390 SA: 17.7kg SLD 490 SA: 19.5kg	21.3kg	390 S: 17.7*2kg 490 S: 19.5*2kg	21.3*2kg

### 3.4 PUMP CURVE

See ②

## 4. INSTALLATION

#### ⚠ DANGER



#### Dangerous electrical voltage.

Risk of death by electric shock.  
→ Disconnect the power supply and switch off the pump before working on it.

- Installation exclusively by professionals.
- Never carry the pump by the cable, to put it in or take it out of the water.
- Avoid dry running without pumped fluid.
- Install the necessary equipment to prevent the pump from running dry.
- **Model with float:** If the pump shall be inserted into a pit or a duct, its dimensions must allow the float switch to move freely.

When the water level rises with the float floating to the top, so the pump will turn on and pump off the water until such a low water level has been achieved that the float turns off the pump again.

- **Model without float:** The operation of the pump(s) requires the installation of a control box sold separately. For the installation of the control box, please refer to the instruction manual supplied with it.

#### 4.1 HYDRAULIC CONNECTION

- Stop valves must be fitted on the effluent inlet as well as on the discharge line, as close as possible to the pumping station.
- Install a non-return valve on the pumping station outlet to prevent unintended start-up.
- **NOTE:** Optional accessories (drainage kits, installation kit on seat base) are available: contact us at [www.sfachina.cn](http://www.sfachina.cn) and national free service hotline 4006 219 808.
- The drainage pipe must be fitted to prevent any backflow from the sewers.
- Connect the pipe to the 2" (Ø50/63) discharge flange of the pump.
- If using a drain kit sold separately, follow the instructions provided in the drain kit manual.

#### 4.2 OFF LEVEL SETTING

#### NOTICE



#### Pump base not immersed.

Risk of oxidation.  
→ The pump must always be immersed in a minimum of 14 cm of water.  
→ Set the Off level to a minimum of 14 cm.

- **Model with float:** adjust the float so that pumping stops with a minimum of 14 cm of water in the tank.
- **Model without float:** set the Off level at the control box. Confirm a setting that allows the pump to remain constantly immersed in at least 14 cm of water.

#### 4.3 ELECTRICAL CONNECTION

#### ⚠ DANGER



#### Electrical connection work performed by an unqualified individual.

Risk of death by electric shock!  
→ The electrical connection must be carried out by a qualified and licensed electrician.  
→ The electrical installation must meet the current standards in the country.

#### ⚠ DANGER



Risk of death by electric shock!  
→ Only carry out the electrical connections after the final hydraulic connections have been completed.

- The electrical installation must be done by a qualified electrical engineer. All wiring must conform to local standards for electrical installations.
- The device's power supply must be connected

ted to ground (class I) and protected by a high sensitivity differential circuit breaker (30 mA).

- Devices without plugs must be connected to a main switch on the power supply which disconnects all poles (contact separation distance of at least 3 mm).
- The connection must be used exclusively to provide the power to the product. If the power cord is damaged, to prevent possible danger, it must be replaced by the manufacturer, customer service team or a similarly qualified individual.
- Provide fuses on each individual phase.
- Observe the colour matching shown in the diagram ③.
- **S and SA Models:** in case of low flow rate and/or pressure, check if the connections made correspond to those indicated in the control box manual.
- Regularly check the correct operation of all electrical protections.

## 5. COMMISSIONING

### DANGER



#### Damaged pump.

Risk of death by electric shock.  
→ Before commissioning, check the pump for external damage.

### DANGER



#### Moving parts.

Risk of pinching, cutting or amputating fingers or other body parts.  
→ The pump installation must not allow access to moving parts.  
→ Keep away from moving parts.

- Carry out a test run.
- Check the freedom of movement of the float.

## 6. MAINTENANCE

### DANGER



#### Damaged pump.

Risk of death by electric shock.  
→ Before commissioning, check the pump for external damage.

### NOTICE



Maintenance of the lifting pump must be carried out by qualified personnel.

No particular maintenance is required when the pump is used in normal conditions.

## 7. INCIDENTS/CAUSES/REMEDIES

Incidents	Possible causes	Action to be taken
<b>The motor doesn't start up</b>	No voltage or wrong voltage	Switch on the pump, check the power supply
	Float blocked in low position	Unblock the float
	Float out of service	Consult SFA after-sales service
	Pump out of service	Consult SFA after-sales service
	Defective power cable	Exchange/replace-ment (after-sales service)
<b>Motor rotates, but does not convey + buzzing</b>	Activated motor protection (overheating,...)	Check, inform after-sales service
	Defective capacitor	Consult SFA after-sales service
<b>Motor rotates, but does not convey</b>	Impeller blocked	Clean the pump housing
	Closed discharge valve	Check that the valve is open
	Discharge pipe clogged	Clean
<b>The motor runs, evacuates but the flow is insufficient</b>	Non-return valve defective	Consult SFA after-sales service
	The manhole/tank is not properly ventilated	1st commissioning: Ventilate the delivery pipe so that the water flows into the pump casing
	Pump incorrectly ventilated (air in the pump housing)	Clean the bleed hole at the outlet of the pump housing
	Discharge pipe dimensioned too small	Min. diameter of 50 mm
<b>The pump stops too quickly</b>	Pump blocked	Unplug and clean
	Thermal protection on	Check the water temperature (see 3.3 Technical specifications)

## 8. STANDARDS

The submersible pumps of the type series **Sanipump® SLD & Sanirain** conform to European Low Voltage, EMC and Machinery direc-




## 9. GUARANTEE

**Sanipump® SLD & Sanirain** are guaranteed for 2 years for parts and labour, subject to correct installation and use of the unit.



## 1. 安全

### 1.1 警告标志的识别

	该术语定义了如不能避免则可能导致死亡或严重伤害的危险的高风险。
	该术语定义了如不予以考虑则可能导致机器及其操作风险的危害。
	一般危险的警告。危险性由表中所列的适应症具体说明。
	触电危险警告，并提供防止触电的相关保护信息。

### 1.2 综述

本操作安装手册包含了雨水泵的调试、操作与维护的重要说明。严格按照操作说明可确保安全运行、防止伤害和财产损失。请遵循每一章节的安全说明。安装和调试雨水泵之前，合格的工作人员/操作人员需认真阅读并理解全部指令内容。

### 1.3 使用场合

仅可在本手册所述应用中使用泵。

- 仅可在完美技术条件下操作。
- 仅可提升站送本文所述流体。
- 不可无流体空载。
- 不得超出本文所述操作适用范围。
- 泵的使用安全性仅在本手册所述的合规使用方式下才可得以确保。
- 任何修改或变更雨水泵可致保修失效。

本操作手册始终在线可用，具备资质的员工和操作人员可随时查阅。

未能遵守本操作及安装手册将导致保修权力和损害赔偿权力的损失。

## 2. 运输/废弃

### 2.1 运输

- 泵的运输必须保持垂直。
- 切勿用电缆吊挂(提拉)泵。

### 2.2 废弃处理



本设备不得作为生活垃圾处理，应放至电子设备专用回收点处理。设备材料和组件可重复使用。电子电气产品废弃处理，任何形式的旧家电循环再利用和回收，有利于保护环境。

## 3. 产品描述

### 3.1 应用

升利泵® SLD和升利瑞是雨水提升泵，专为家用及商用而设计开发，可适用于所有类型雨水排放。

可安装于混凝土检修孔或凹槽内(基坑)。

#### 泵内适用流体：

排放系统中允许以下液态流体：

- 雨水

#### 不适用流体：

排放系统中禁止以下液体及物质：

- 固体材料、纤维、沥青、沙子、水泥、灰烬、粗纸、手巾、抹布、纸板、瓦砾、垃圾、屠宰废弃物、油、碳氢化合物、油脂等。
- 含有害物质的废水(例如，未经处理的餐馆油脂废物)。使用泵排放此类液体和物质需要安装合规的油脂分离器。

### 3.2 操作方法

当安装雨水泵的混凝土检修孔或凹槽内(基坑)的出水液位足够时，浮球开关将启动提升泵。

出水自动提升并排入下水道。

下水道排水至少应符合DN50(2")。

### 3.3 技术参数

	Sanipump® SLD 390(490) SA	Sanipump® SLD 635 SA	Sanirain 390(490) S	Sanirain 635 S
电压	230 V	230 V	230 V	230 V
频率	50Hz	50Hz	50Hz	50Hz
功率 P1	1Kw(1.3Kw)	1.1Kw	1Kw(1.3Kw)	1.1Kw
最大消耗电流	6.3A(7.3A)	7.3A	6.3A(7.3A)	7.3A
转速	2800U/min	2800U/min	2800U/min	2800U/min
电源线长度	5m	5m	5m	5m
最大高度	9m	15m	9m	15m
最大流量	22m <sup>3</sup> /h (27m <sup>3</sup> /h)	29m <sup>3</sup> /h	22m <sup>3</sup> /h (27m <sup>3</sup> /h)	29m <sup>3</sup> /h
排放管道连接	2"	2"	2"	2"
启动系统	浮球	浮球	无浮球	无浮球
控制盒	不包含	不包含	包含	包含
最大淹没高度	20m	20m	20m	20m
最大颗粒尺寸	50mm	32mm	50mm	32mm
最高水温	50°C	50°C	50°C	50°C
操作(运行)模式	S1	S1	S1	S1
总重	SLD 390 SA: 17.7kg SLD 490 SA: 19.5kg	21.3kg	390 S: 17.7*2kg 490 S: 19.5*2kg	21.3*2kg

### 3.4 泵性能曲线

见②

## 4. 安装

#### 危险



#### 危险电压

触电致死风险。

→ 进行操作之前，必须断开电源并关闭泵。

- 必须由专业人员进行安装。
- 切勿通过电缆吊挂搬运泵，将其放入水中或从水中取出。
- 避免泵内无液体时空转。
- 安装必要的辅助设备以防止泵空转。
- **配备浮球的型号：**如将泵安装入凹槽或管道(基坑或井道)，必须保证其尺寸足够浮球开关的自由移动。

当水位上升而浮球浮到顶部时，泵将会启动并开始抽水，直至达到低水位，根据浮球位置关闭泵。

• **不配备浮球的型号：**需安装单独购买的控制盒进行泵的操作。控制盒的安装请参考随附的使用说明书。

### 4.1 液压(水力组件)连接

- 排水入口和排放管道必须安装截止阀，安装位置尽可能靠近泵。
- 在泵的出水口安装止回阀，以防止意外启动。

**注意：**提供可选配件(排水套件、底座安装套件)：请访问[www.sfachina.cn](http://www.sfachina.cn)，全国免费服务电话：4006 219 808。

- 必须安装水件以防止回流。
- 将管道连接至尺寸为2" (Ø50/63) 泵排放法兰。
- 如使用单独购买的排水套件，请仔细阅读并根据排水套件说明书进行操作。

### 4.2 关闭水位设置

#### 注意



泵底座未浸没。

氧化风险。

→ 泵必须始终浸没于至少14厘米深的水中。

→ 关闭水位的设置至少为14厘米。

- **配备浮球的型号：**调整浮球，以保证水箱中水位至少为14厘米时停止泵的运行。
- **不配备浮球的型号：**在控制盒上设置关闭水位。确认设置为泵始终浸没于至少14厘米的水中。

### 4.3 电气连接

#### 危险



严禁无专业资质的人员进行电气连接操作。

触电致死风险！

→ 电气连接必须由具有合格资质的专业电工进行操作。

→ 电气安装必须符合所在国的现行法规标准。

## 危险



触电致死风险!

→ 电气连接必须在完成最终的液压连接后方可进行操作。

- 电气安装必须由具有合格资质的电气工程师执行完成。所有线路连接必须符合所在国的电气安装法规标准。
- 设备电源必须接地(I级)并采用高敏差动断路器(30mA)进行保护。
- 无插头设备必须连接至断开所有电极的电源主开关(触点间距至少为3mm)。
- 产品供电必须为单独的专用线路。如果电源线损坏,必须由制造商、客服团队或具相关资质的专业人员进行更换,以避免可能发生的危险。
- 每个单独相位都必须配备保险丝。
- 仔细查阅图表③中的颜色匹配。
- 型号S和SA: 在流量和/或压力较低的情况下,检查连接是否符合控制盒的使用说明书。
- 定期检查所有电气保护装置是否正确操作。

## 5. 调试

### 危险



泵损坏。

触电致死风险。

→ 调试前,仔细检查泵是否有外部损坏。

### 危险



活动部件。

手指或其他身体部位夹伤、割伤或截断的风险。

→ 泵安装时严禁使用活动部件。

→ 远离活动部件。

- 试运行。
- 检查浮球活动自由度。

## 6. 维护

### 危险



泵损坏。

触电致死风险。

→ 调试前,仔细检查泵是否有外部损坏。

### 注意



提升泵的维护必须由具有合格资质的专业人员进行操作。

正常条件使用下,泵无需特别维护。

## 7. 故障/原因/解决方法

故障	可能的原因	解决方法
电机不启动	未通电或电压错误	启动泵,并检查电源
	浮球被卡在低位	松开被卡浮球
	浮球无法工作	咨询SFA售后服务
	泵无法工作	咨询SFA售后服务
	电源线故障	更换电源线(联系售后服务)
电机保护被启动(过热等原因)	检查并联系售后服务	
电机转动,但不排放+蜂鸣器响起	电容器故障	咨询SFA售后服务
	泵轮堵塞	清理泵壳
电机转动,但不排放	排放阀关闭	检查阀门是否打开
	排放管道堵塞	清理管道
	止回阀故障	咨询SFA售后服务
电机运行并排水,但流量不足	检修孔/水箱通风不良	首次调试: 输送管道通风,使水流入泵壳
	泵通风不正确(泵壳内有空气)	清理泵壳出口处的排气孔
	排放管道尺寸过小	排放管道最小直径为50mm
泵过快停止运行	泵堵塞(卡壳)	断开电源并清理
	热保护开启	检查水温(见3.3技术参数)

## 8. 标准

符合欧洲低电压、EMC和机械指令标准。

## 9. 保修

在安装及使用符合本说明书的条件下,设备自购买日起,保修两年。



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