

# Submersible Pump

XV, XD series



XV series



**XD** series

INSTALLATION AND OPERATING INSTRUCTIONS



# **EC DECLARATION OF CONFORMITY**

according to the following EC Directives

-Machinery Directive: 2006/42/EC -Low Voltage Directive: 2014/35/EU

-Electromagnetic Compatibility Directive: 2014/30/EU



We, STAIRS INDUSTRIAL CO., LTD. as manufacturer declares that the machine described hereafter:

Submer sible Pump s

XD, XV, X1, SV, SVN, HM, SD, GD, CP Series

Provided that it is used and maintained in accordance with the general accepted codes of good practice and the recommendations of the instructions manual, meet the essential safety and health requirements of the Machinery Directive, Low Voltage Directive and Electromagnetic Compatibility Directive.

For the most specific risks of this machine, safety and compliance with the essential requirements of the Directive has been based on elements of:

EN 809, EN 60204-1, EN 60335-1, EN 60335-2-41, EN 61000-6-2, EN 61000-6-4

Signature : Mr. S. C. HUANG

Responsibility : President

Date : June, 2021





#### 1. HANDLING

The product must be lifted and handled the handle or the eyebolt carefully.

# 2. APPLICATIONS

The pump is suitable for the transfer of clean, dirty or turbid liquids. With suspended solids not exceeding the dimensions indicated below. The most common application are drainage of domestic wastewater collection tanks, of rainwater collection tanks, of flooded rooms, of excavations and trenches in the building industry.

#### 3. OPERATION RESTRICTION

! WARNING: Don't allow the use of the pump in tanks or swimming pools while people are in the water. and requires the use of the cable version for external applications.

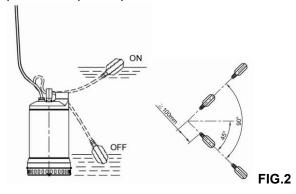
Fluid temperature:  $\leq 35^{\circ}\text{C} \text{ (XV)}; \leq 50^{\circ}\text{C (XD)}$ 

When operating continuously the pumps must be submersed completely, with the exception of the XD models.

Maximum immersion depth: 5m (7M for the XD models)

#### 4. INSTALLATION (FIG.1)

The well dimensions must be such as to prevent an unreasonalle number of starts per hour. (FIG.2)



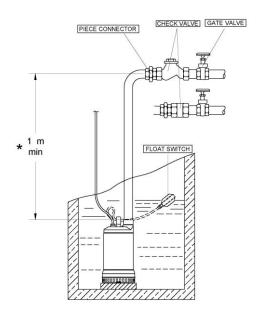
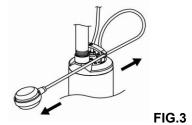


FIG.1

The float is adjusted by increasing or decreasing the free length of the cable. (FIG.3)



! WARNING: Incorrect adjustments may cause malfunctions.

#### 5. ELECTRICAL CONNECTION

SINGLE-PHASE TYPE: insert the plug in a standard power socket.



NOTE: The single –phase electric pumps are fitted with a built-in automatic reset thermal protection.

THREE-PHASE TYPE (FIG.4):

5.1 Direction of rotation (only for three-phase type)

The proper rotation direction is clockwise when looking down the pump from above. Check by observing the pump performance.

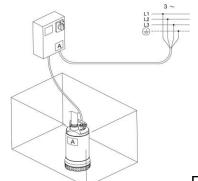


FIG.4

#### 6. MAINTENANCE

! WARNING: The pump should be serviced by qualified technician, and after having been disconnected from the power mains.

The pump does not need any routine maintenance. It may occasionally be necessary to clean the suction screen (XD) or the impeller. To enter the impeller on models equipped with a screen, loosen the screws that fasten the screen

#### 7. SAFETY INSTRUCTIONS

- 1. The pump is not suitable for working with flammable or dangerous liquids.
- 2. Do not allow the power supply cable to lift or move the pump.
- 3. Do not allow the pump to run dry or work out of the water.
- 4. As the pump can start and stop automatically, never insert your hands or other objects in it while it is connected to the power supply.
- 5. The power plug and capacitor bracket must never be submerged.
- 6. Pay attention to the working limits. Incorrect use may damage the pump and other property. and hurt people.
- 7. Make sure that the rated voltage matches the voltage supply.
- 8. If the pump is a three-phase model ,make sure that the mains connection and grounding are performed by qualified electrician.
- 9. As additional protection from lethal electric shock. Install a high sensitivity switch.
- 10. Make sure that unauthorized persons do not allow to access to the pump.
- 11. Disconnect the electric pump, or unplug it before removing it or carrying out any maintenance operations.
- 12. Use the pump only within the specified limits shown on the rating nameplate.
- 13. Evade icing.
- 14. Protect the pump from block.
- 15. Prevent any accidental power failure (for example, use a battery operated back-up power supply).
- 16. Wear gloves during any pump servicing operations.

#### 8. TROUBLESHOOTING

### THE PUMP DOES NOT START:

- Make sure that the plug is correctly inserted in the power socket and that the line is live .Reset the ground fault interrupter or circuit breaker if it has kicked off.
- The thermo protection incorporated in the single-phase versions may have activated; it will reset automatically after a few minutes, once the moter has cooled. If any one of



the three protections mentioned above kicks off again, call a qualified electrician.

#### THE MOTOR STARTS BUT THE PUMP DOES NOT DELIVER:

Make sure that the water level is not too low and that the suction port or delivery pipe are not blocked.

## THE PUMP'S DELIVERY IS REDUCED:

O Check for block and make sure that the rotation on the three-phase pump is correct.

#### THE PUMP'S WORKS INTERMITTENTLY:

- The float is positioned incorrectly
- The well is too small
- O Unreasonable power consumption
- Blocked pump or pipes



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