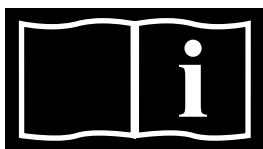


# STP Counter Flow System



## INSTALLATION AND USER GUIDE



Read the instructions

# 1. Installation mounting

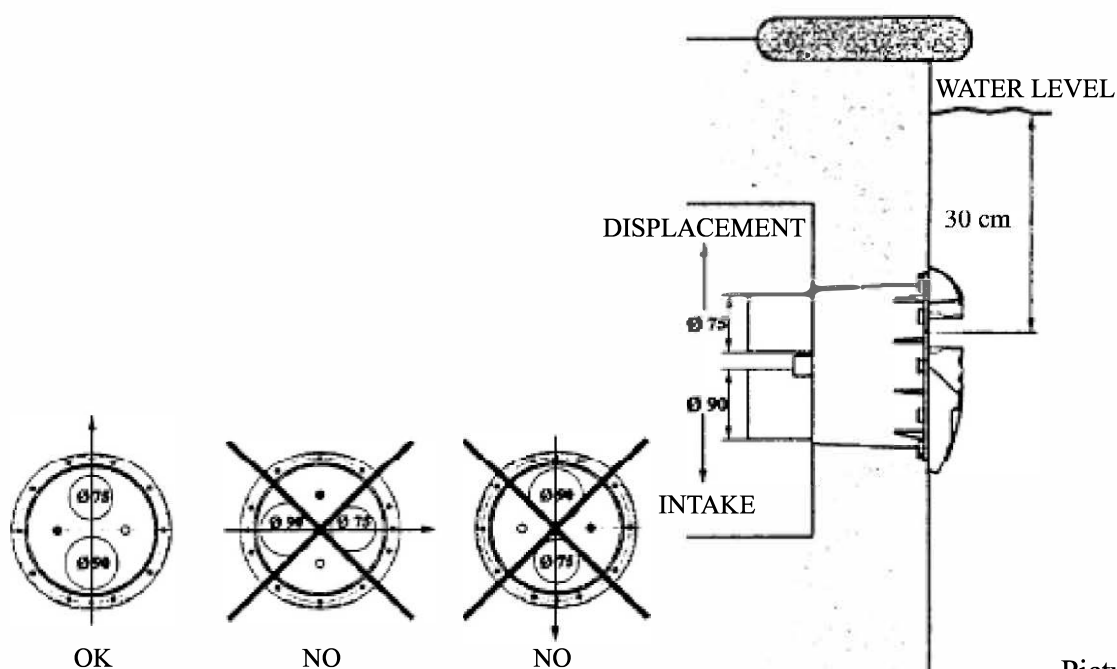
By purchasing the counterflow system pump, you obtained a high-quality product that will help you to enjoy the time spent in your pool.

The electric pump

should be installed as close as possible to the pool in order to reach the maximum input and to reduce loss caused by the friction. The original diameters of the accessories from the PVC materials delivered with the installation should always be respected. We do not recommend to place the pump further than 15 m from the pool. Pumps being the part of this device don't have a self-suction function. It is necessary to install them under the water level. The technology device area must be aired sufficiently, use a fan if needed, to prevent water condensation. You can ensure the correct functioning of the device by respecting these rules.

## 2. Mounting the jet stream device

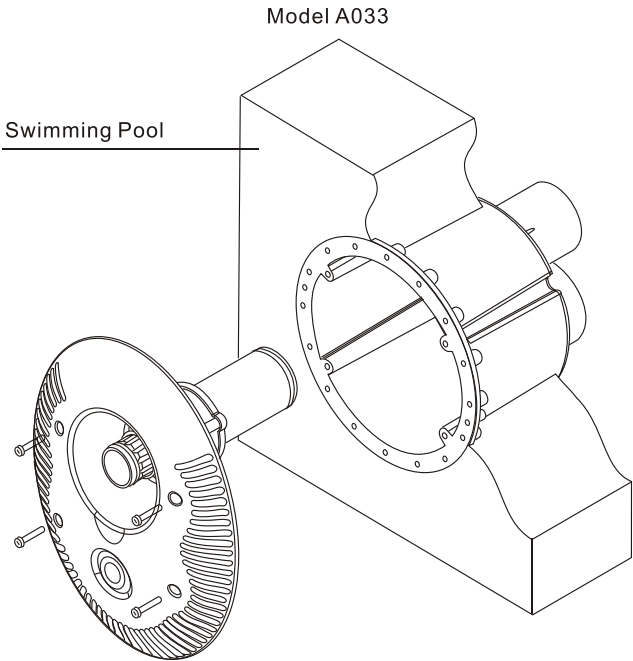
During the installation of the jet stream device, please bear in mind that it must be placed in the position indicated in the picture 1. Displacement of a 75mm diameter and a suction of a 90mm diameter must be installed in the vertical position that the side of the displacement is higher than the side of the suction (90 mm diameter) see picture 1. The jet stream device must be placed in a way that the centre of the jet will be approximately 30cm under the water level. (see picture 1). You must follow and keep these instructions and mount correctly the device to ensure the right operating of the jet stream.



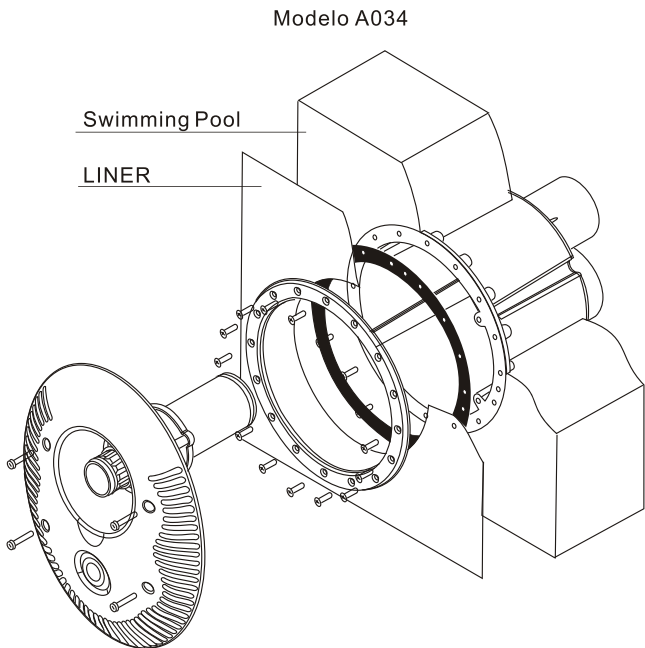
Picture 1

STP COUNTERGLOW JET

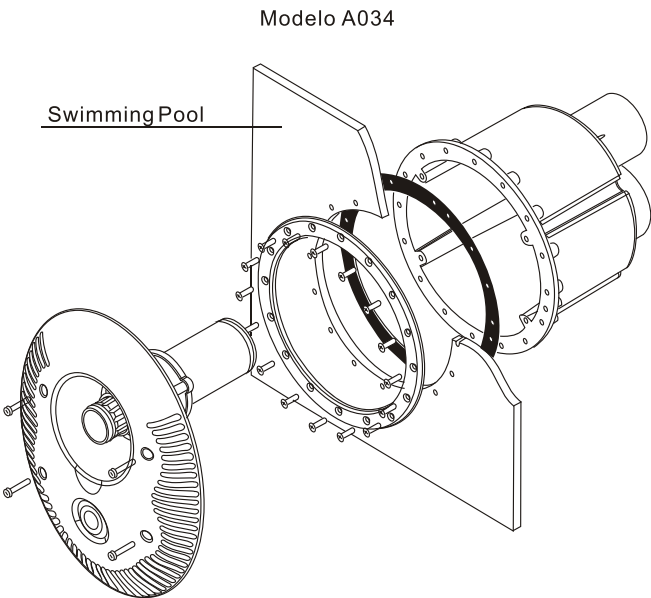
INSTALLATION IN CONCRETE SWIMMING POOLS



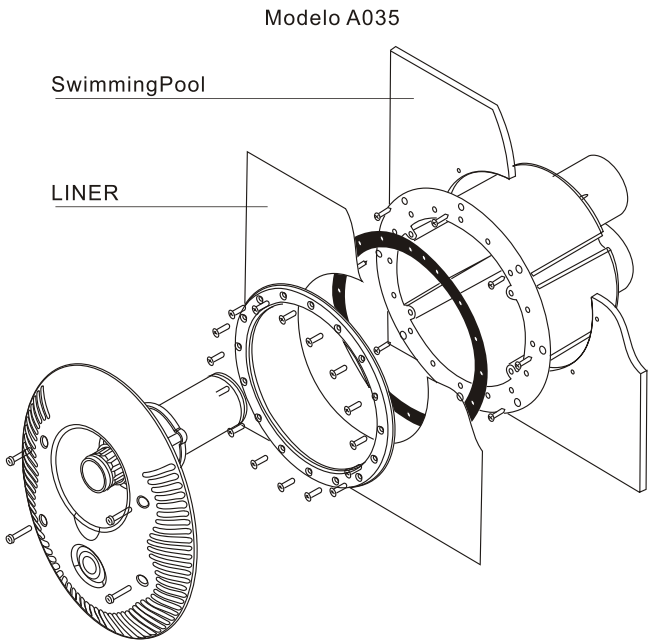
INSTALLATION IN CONCRETE SWIMMING POOLS WITH LINER



INSTALLATION IN PREFABRICATED SWIMMING POOLS



INSTALLATION IN PANELLED SWIMMING POOLS WITH LINER



## **3.Tornado front panel installation**

### **3.1 Installation of jet stream device body in concrete ground**

Stick hoses (no. 21 picture 3) on the jet stream body (no. 41 picture 7) and connect them into the technologic device area (basin). Protect the hose endings against the concrete. Carry out the jet stream body installation no. 41 picture 7 as indicated in the picture 2a into the hole made in a concrete wall or into the boarding for concreting without flange or adhesive seal. If the body is fixed to the wall, follow the instructions in the article 4 and install the pneumatic and air connection.

### **3.2 Installation of jet stream device body in concrete pools with foil**

While mounting the jet stream body into the walls of a concrete pool with foil, please follow the instruction written in the chapter no. 2 and 3. You can start to mount the wide adhesive seal and the jet stream flange pic. 2b into the pool while fixing the jet stream body into the wall of a pool. 2b.

Tighten the wide adhesive seal (no. 40 in the picture 7) into the jet stream body (no. 41 in the picture 7) by 2 screws (no. 38 in the picture 7) and bear in mind that the pool foil can be situated between two seal (picture 2b).

Fix the flange in the end (no. 39 in the picture 7) and tighten the screws (no. 38 in the picture 7), after this step is done, cut the foil from the inside part of the flange.

During the installation of the air and pneumatic lead, take the steps according to the article 4.

### **3.3 Installation of jet stream device body in panel or sheetmetal pool with foil**

Prepare the opening of 270 mm diameter in the wall pool in a way that the centre of a jet is approximately 30cm under the water level as described in the article 2 and picture 1. Place the jet stream body no. 41 picture 7 from the inside part of the pool into the prepared opening. Fix the body by 8 self-drilling screws no. 40 picture 7 into the wall of the pool as described in the picture 2c.

Tighten the seal (no. 40 in the picture 7) to the 'jet stream' body (no. 41 in the picture 7) by 2 screws (no. 38 in the picture 3) After the installation of the foil, fix the flange (no. 39 in the picture 7) and tighten the screws (no. 38 in the picture 7), then cut the foil from the inside part of the flange.

During the installation of the air and pneumatic lead, take the steps according to the article 4.

### **3.4 Installation of jet swim device body in prefabricated (laminated or polypropylene) pool**

Prepare the opening of 230 mm diameter in the wall pool in a way that the centre of a jet is approximately 30cm under the water level as described in the article 2 and picture 1.

Stick the seal (no. 40 in the picture 7) from the inside part of the pool wall and prepare openings for 16 screws of the flange (No. 38 in the picture 7)

Prepare the jet stream body (no. 41 picture 7) from the inside part of the pool and tighten the flange (no. 39 in the picture 7) by screws (no. 38 in the picture 7) from the inside part as described in the picture 2d.

During the installation of the air and pneumatic lead, take the steps according to the article 4.

## 4. Air and pneumatic lead installation

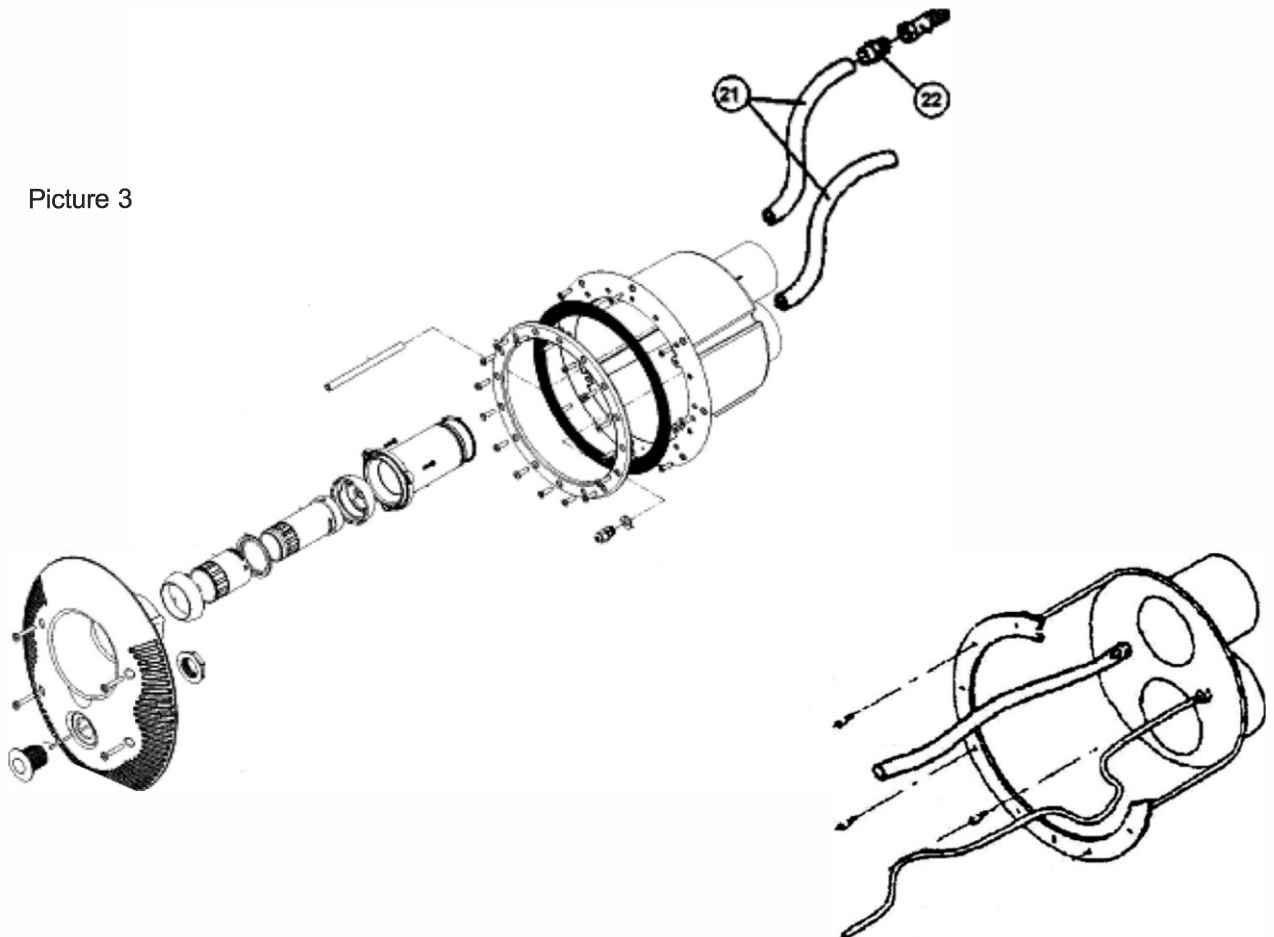
### Air lead installation:

Stick the reducer (no. 22 picture 3) on the hose serving as an air lead and install the back-pressure valve (no. 23 picture 3). It is important to place a pressure-valve on the wall of the technologic housing in order to prevent the dirt suction (see picture no. 6) Finally, fix the elastic tube (no. 13, picture no. 3) by pressing it into a jet placed inside of the jet stream body (see picture no. 4).

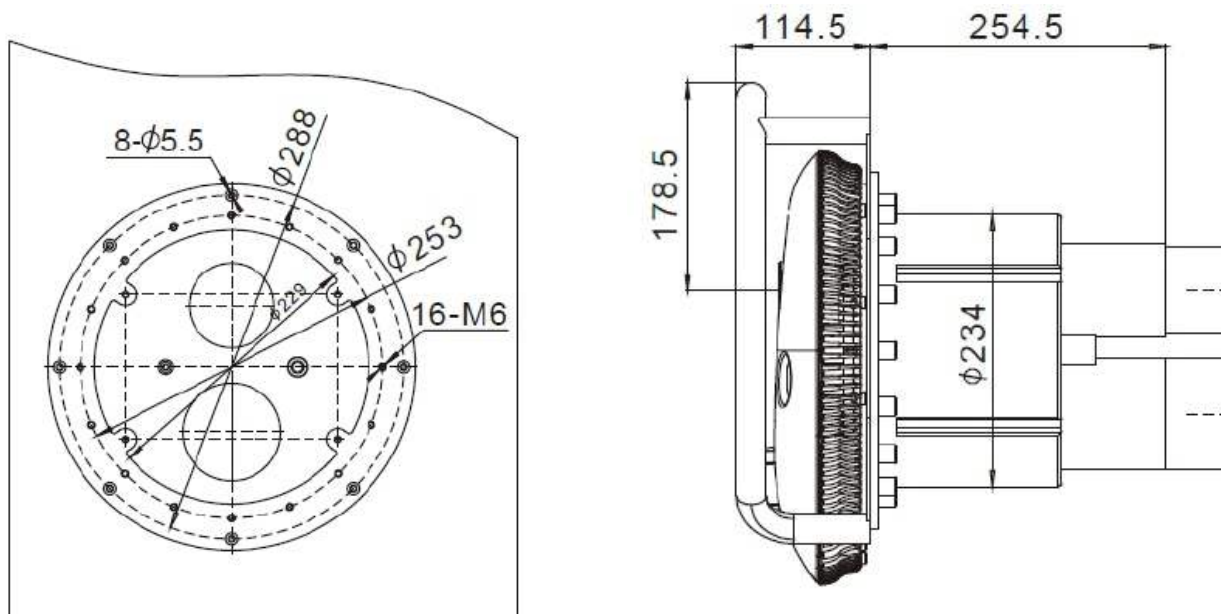
### Pneumatic lead installation:

This lead is containing the hose (no. 21 picture 3) serving as a protective lead for the pneumatic switch hose. Place the pneumatic switch hose into the pneumatic lead (hose no. 21 picture 3) and put its end through the opening place in the jet stream body (no. 41 picture 7) and tightened it through the brushing (no. 37 in the picture 7). The end of the hose (no. 2 in 13, picture no. 3) will be connected to the pneumatic switch (no. 27/25 in the picture 7) placed in the front of the jet stream device.

Picture 3



Picture 4



## 9. Electric installation - WARNING

Electric installation should be carried out by an authorized engineer in conformity with general valid standards.

The tension of the electric supply must correspond to the data on the tag installed on every device. All metal parts of the device must be connected (earthed). Electric characteristic of circuit breakers and their rules must be in accordance with those, valid with the engine that should be protected with supposed operating conditions. All instructions implemented by the producer must be respected (see indication on the tag).

In case of the installation with a three-phase engine, connecting parts in the terminal board must be installed correctly (i.e. Y connection) while switching off the engine. Input and output conductors from the distribution box must be led through bushings preventing humidity and dirt intrusion into the distribution box. Conductors will have appropriate terminals for connection.

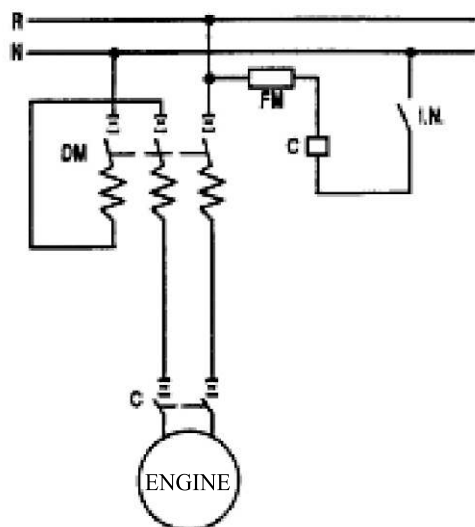
Electro-pneumatic switch must be installed on the dry place, above the water level in the distance not exceeding further than 7m from the pneumatic switch installed on the 'jet swim' front. The pneumatic hose (no. 24 in the picture 7) is designated for connecting to the electro-pneumatic switch (switchgear). It is very important to check if the hose is not bended anywhere.

Electro-pneumatic panel is composed of:

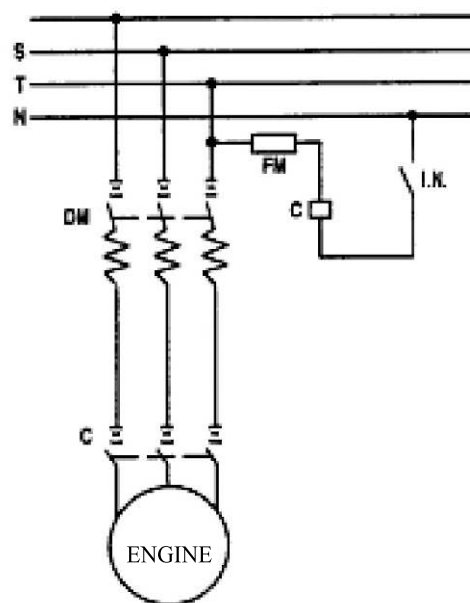
- 1 motor protection
- 1 electro-pneumatic switch
- 1 operating fuse

All these components should be installed in the waterproof plastic box with the rate of protection of IP55.

**Note:** You will receive more information about the installation, protection and maintenance from the electro-pneumatic board manual.



Picture 8

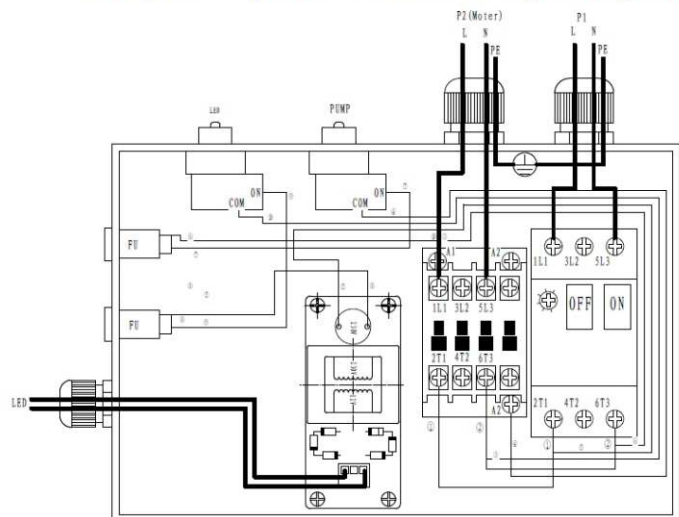


Picture 9

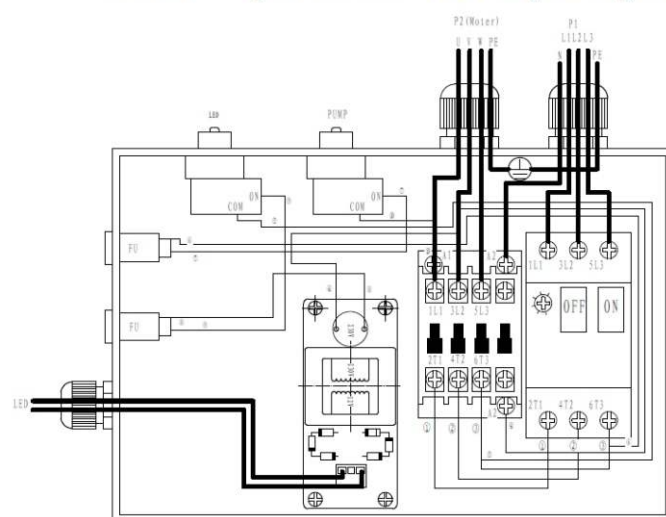
FM - control fuse, DM - heat engine protectione, I.N. - electropneumatic switch unit, C - clamber

#### STP-SS/SP SCHEMI DI COLLEGAMENTO / CONNECTION DIAGRAMS

##### Single - phase connecting diagram

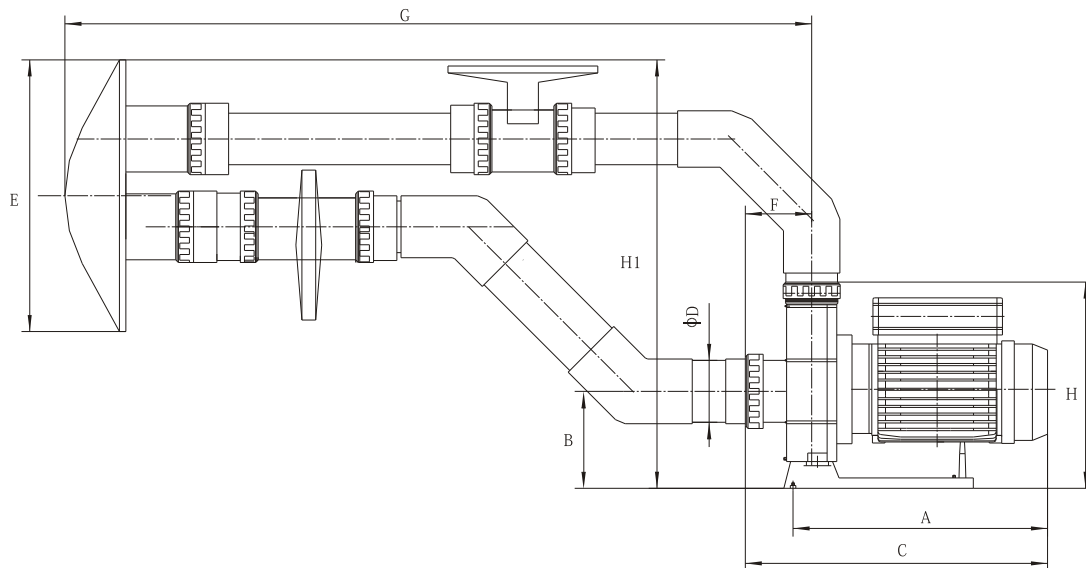
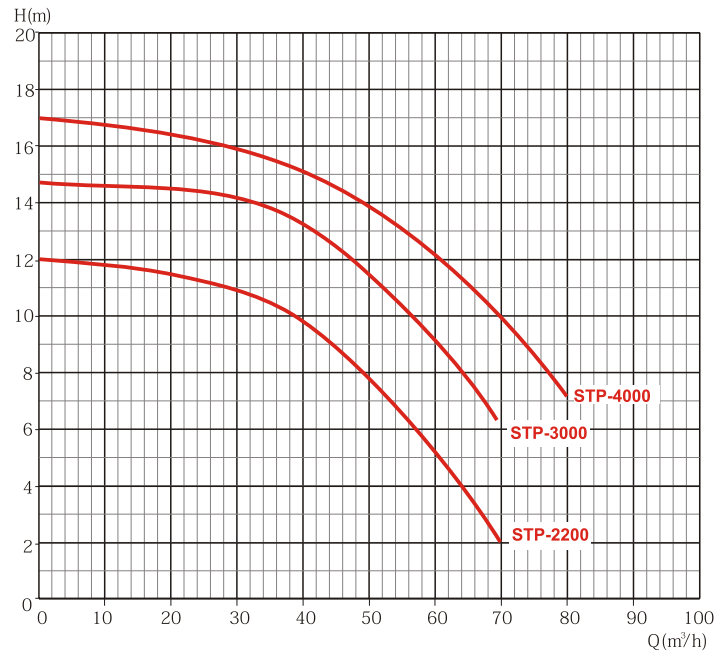


##### Three - phase connecting diagram



# 10. TORNADO Performance

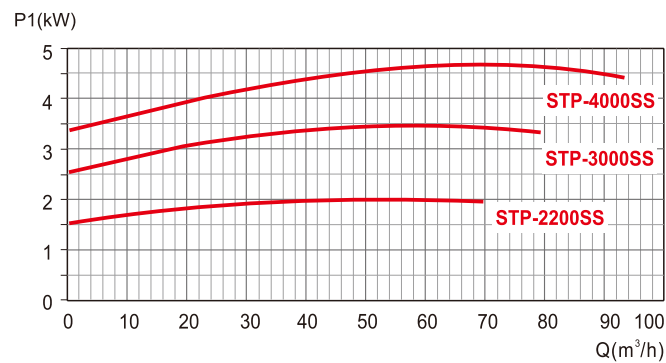
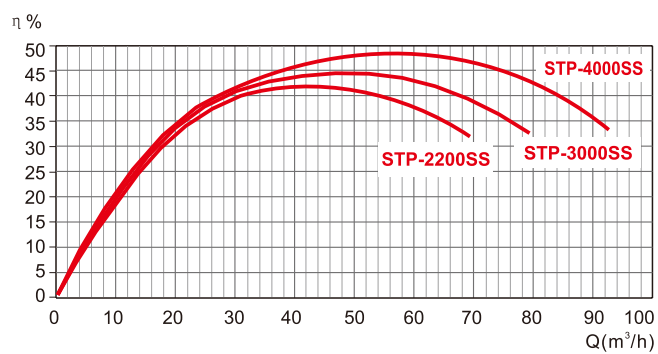
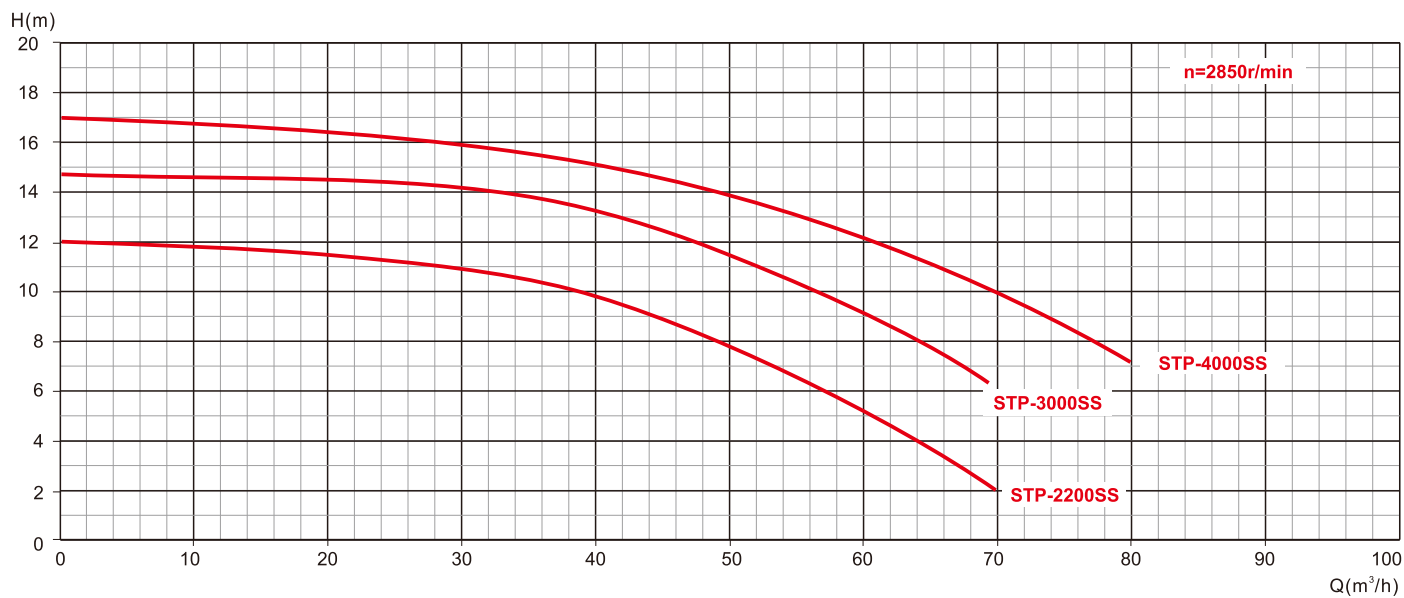
The ELEGANCE jet stream is using the STP pump of the three-phase type adjusted on 230/400V with the electric input of 2. 2/3/4Kw



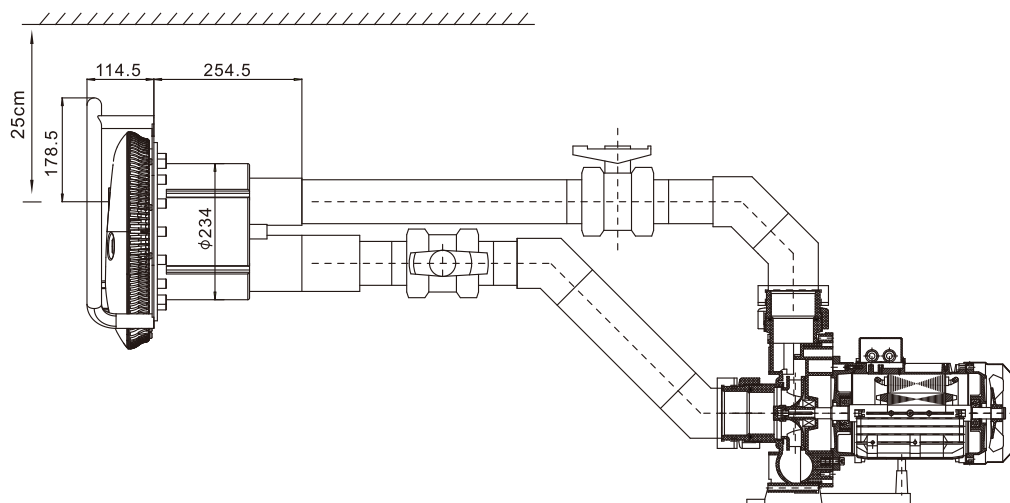
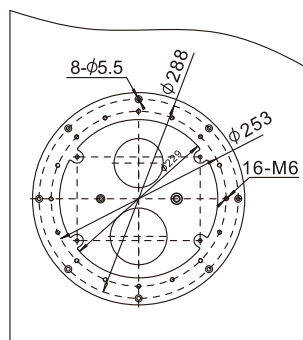
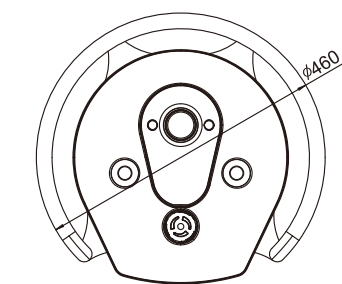
## DIMENSIONS

| Model    | A   | B   | C   | D    | E   | F  | G    | H   | H1  |
|----------|-----|-----|-----|------|-----|----|------|-----|-----|
| STP-2200 | 370 | 156 | 440 | Φ 75 | 395 | 77 | 1110 | 340 | 635 |
| STP-3000 | 410 | 156 | 470 | Φ 75 | 395 | 77 | 1110 | 340 | 635 |
| STP-4000 | 440 | 156 | 500 | Φ 75 | 395 | 77 | 1110 | 340 | 635 |





## DIMENSIONAL DATA

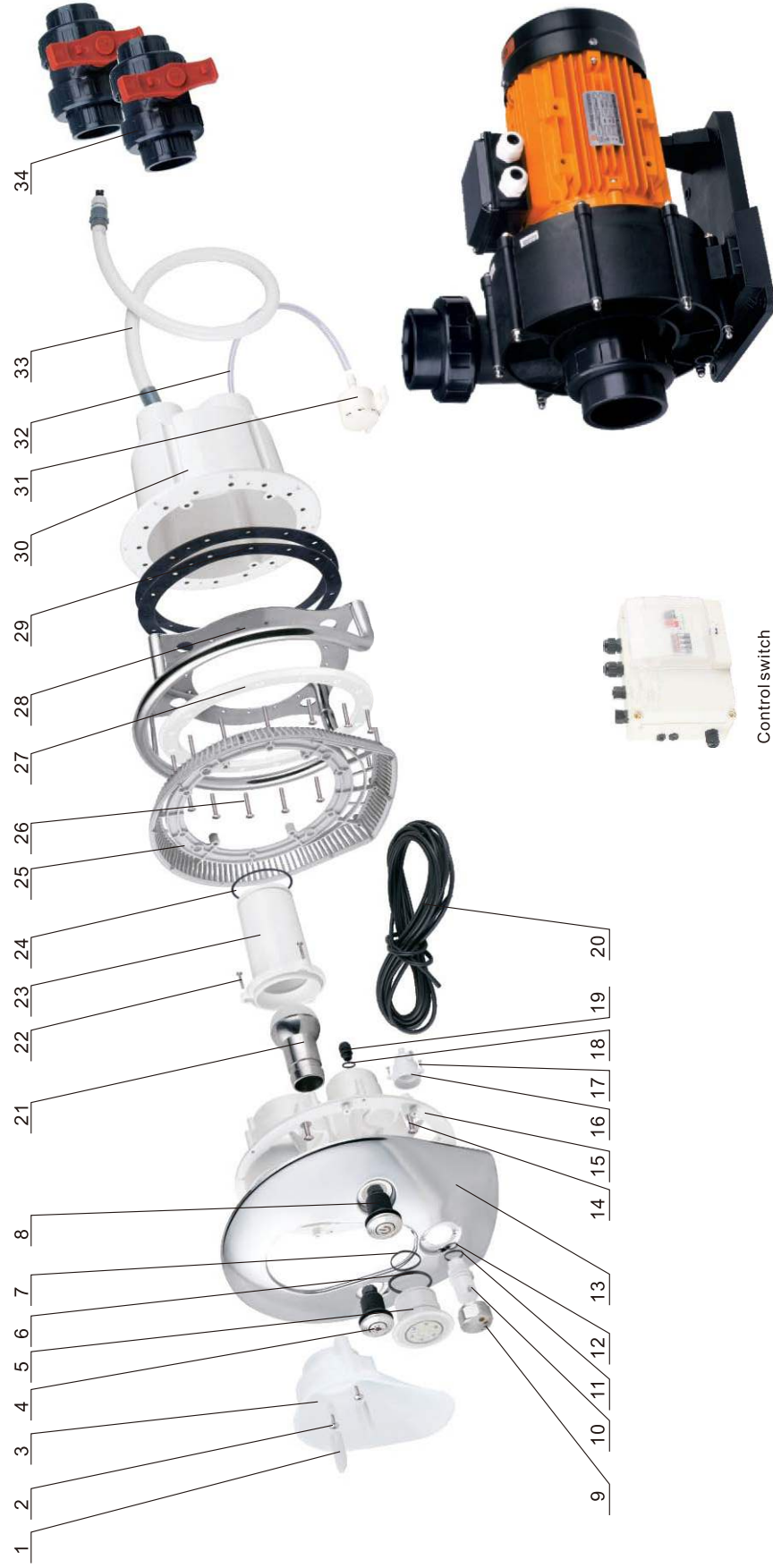






### DIAGRAM

| N o. | Description   | N o. | Description         | N o. | Description            | N o. | Description            | N o. | Description        |
|------|---------------|------|---------------------|------|------------------------|------|------------------------|------|--------------------|
| 1    | Screw cover   | 7    | Screw               | 13   | Pneumatic button light | 19   | Tapping screw          | 25   | Main housing       |
| 2    | Tapping screw | 8    | Plastic panel       | 14   | Pneumatic button pump  | 20   | Nozzle base            | 26   | Suction valve      |
| 3    | Light cover   | 9    | Air regulator cover | 15   | Air regulator base     | 21   | screw                  | 27   | Air suction hose   |
| 4    | Light         | 10   | Air regulator       | 16   | Tapping screw          | 22   | Support flange         | 28   | Protective conduit |
| 5    | O ring        | 11   | O ring              | 17   | Pneumatic hose         | 23   | Stainless steel handle | 29   | Ball valve         |
| 6    | O ring        | 12   | O ring              | 18   | nozzle                 | 24   | Housing seal           |      |                    |



## DIAGRAM

| N o. | Description            | N o. | Description           | N o. | Description        | N o. | Description            |
|------|------------------------|------|-----------------------|------|--------------------|------|------------------------|
| 1    | Screw cover            | 8    | Pneumatic button pump | 15   | Nozzle housing     | 22   | Tapping screw          |
| 2    | Tapping screw          | 9    | Air regulator cover   | 16   | Air regulator base | 23   | Nozzle base            |
| 3    | Light cover            | 10   | Air regulator         | 17   | Tapping screw      | 24   | O ring                 |
| 4    | Pneumatic button light | 11   | O ring                | 18   | O ring             | 25   | Back plate             |
| 5    | Led light              | 12   | O ring                | 19   | Cable gland M16    | 26   | screw                  |
| 6    | O ring                 | 13   | Stainless steel panel | 20   | Pneumatic hose     | 27   | Support flange         |
| 7    | O ring                 | 14   | screw                 | 21   | nozzle             | 28   | Stainless steel handle |

**Conditions of guarantee**

Conditions of guarantee abide by the trading and guarantee conditions of your supplier.

**Secure disposal of the product after the lifetime expiry**

After the lifetime expiry, ensure its ecologic disposal made by a skilled company

**Complaints and customer service**

Complaints abide by the appropriate consumer protection rights. In the event of unrecoverable effect address the written complaint to your supplier.

Date.....

Supplier

|  |
|--|
|  |
|--|