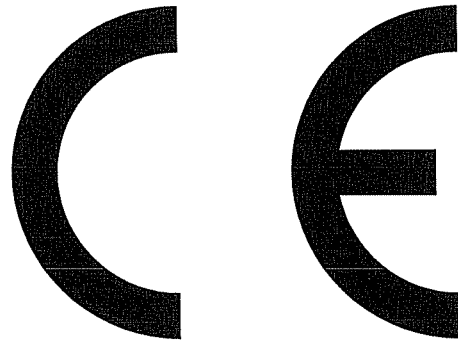


# TECHNICAL INSTRUCTIONS

## FILTERING PANEL 98

Jean DESJOYAUX

March 2000



\* Nota: The « CE » declaration of conformity is issued in compliance with the 89/336/EEC rule of electromagnetic compatibility and with 73/23/EEC rule of safety requirements for electric equipment.

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# FILTERING PANEL

## Standard versions

This filtration system is available in several versions:

### *a).*– *F15:*

- Single speed pump, 0.55kW (60Hz) or 0.37kW motor (50Hz);
- Total assigned power with spotlight: 830W.

### *b).*– *F25:*

- Single speed pump, 1.1kW (50/60Hz) motor;
- Total assigned power with spotlight: 1610W.

### *c).*– *F25/50:*

- Dual speed pump, 0.3/1.6kW (50/60Hz) motor;
- Total assigned power with spotlight: 2600W.

## Options

Each standard version may be equipped with an optional pipe allowing it to be fitted:

- Either with a laser-type electric heater,
- Or with any by-pass heating system.

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## IMPORTANT INFORMATION

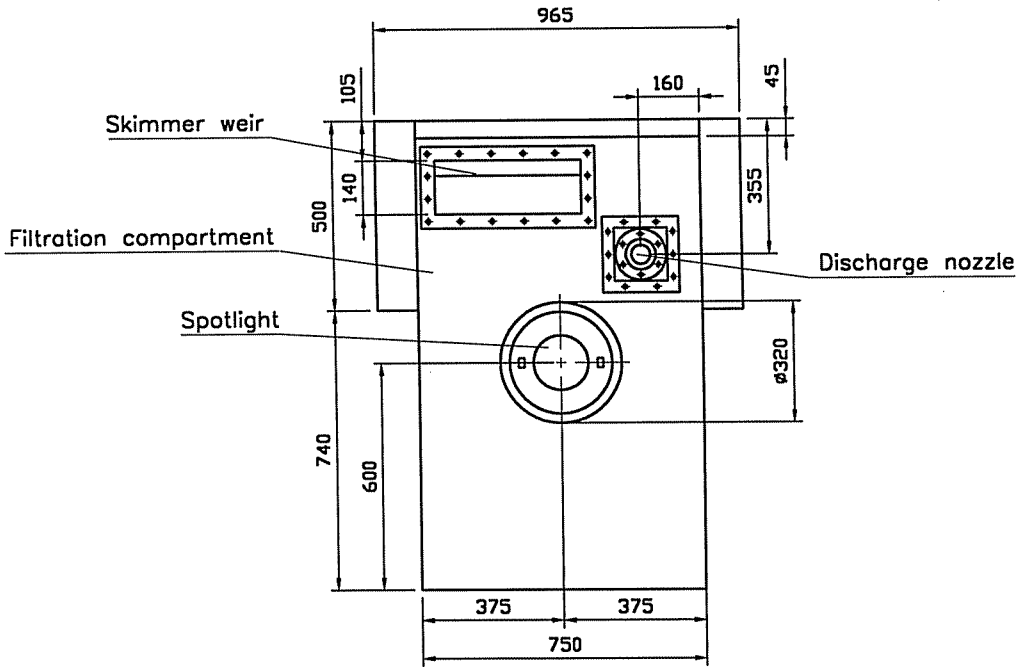
The filtering panel 98 has features designed to optimize its installation as well as its use.

1. Cooling of the electrical components (pump and transformer) is achieved via holes in the rear part of the cover of the technical compartment. This cover must imperatively be firmly screwed down using the 2 M8x25 screws.

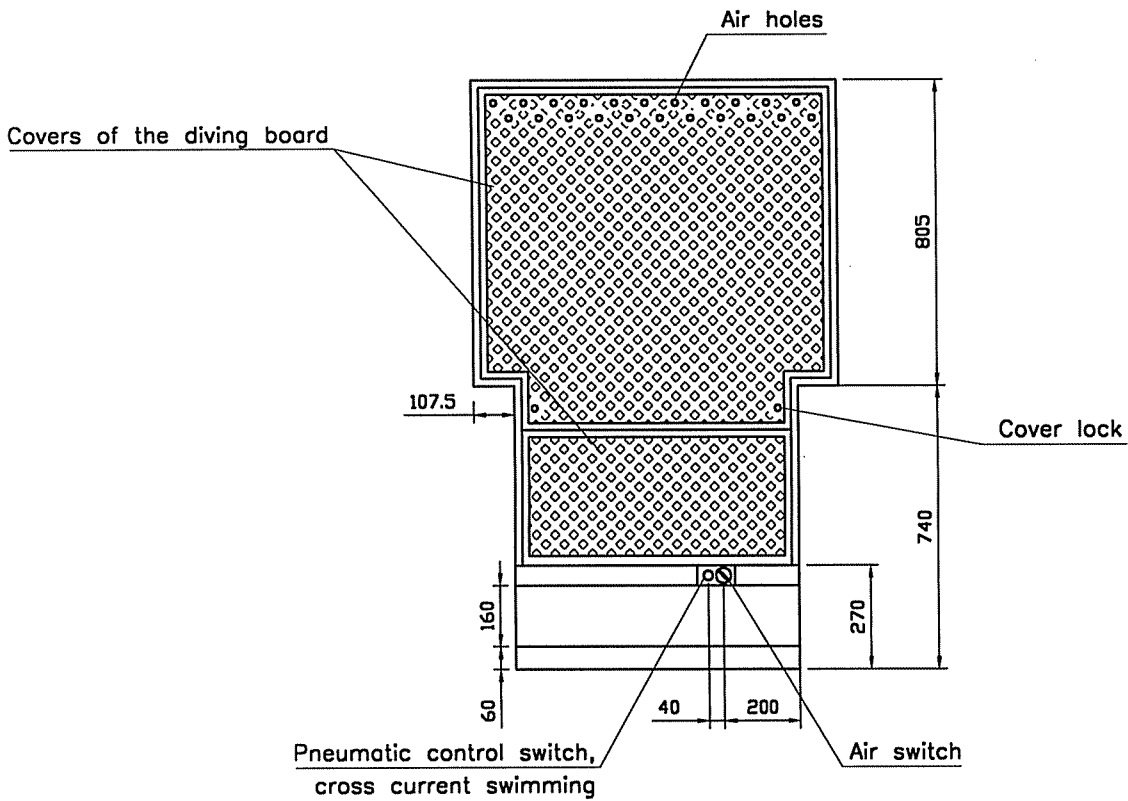
*It is vital to properly connect the air tank to the waste line. The air tank is located under the perforations of the cover and is designed to collect and evacuate rain water via its connection to the waste line (using the pipe provided to this end).*

2. For those installations requiring a bypass, you should order the bypass pipe designed for the filtering panel 98. It should be remembered that any piercing of the technical compartment should be done in a watertight manner, using water tight wall grommets provided for this purpose in order to avoid water getting in from the outside.
3. The technical compartment must absolutely be leaned back towards the rear in order to be flush with the slope formed by the decks to drain rainwater (1 to 2 cm/m).
4. The wooden wedging blocks are placed in the technical compartment housing the filtration panel. These temporary wedging blocks must be removed when the building work is finished, but only once the deck around the pool is completed.
5. During the fitting of the filtering panel to the Des'co panels, its alignment with the profile of the liner lock should be ensured. If necessary, give an oval shape to the oblong holes in the Des'co panels.
6. When filling the pool with water, make sure to progressively fill the filtering panel, taking care doing so that the water inside the panel is level with the water in the pool up to the spotlight hole.

# BODY ITEMS

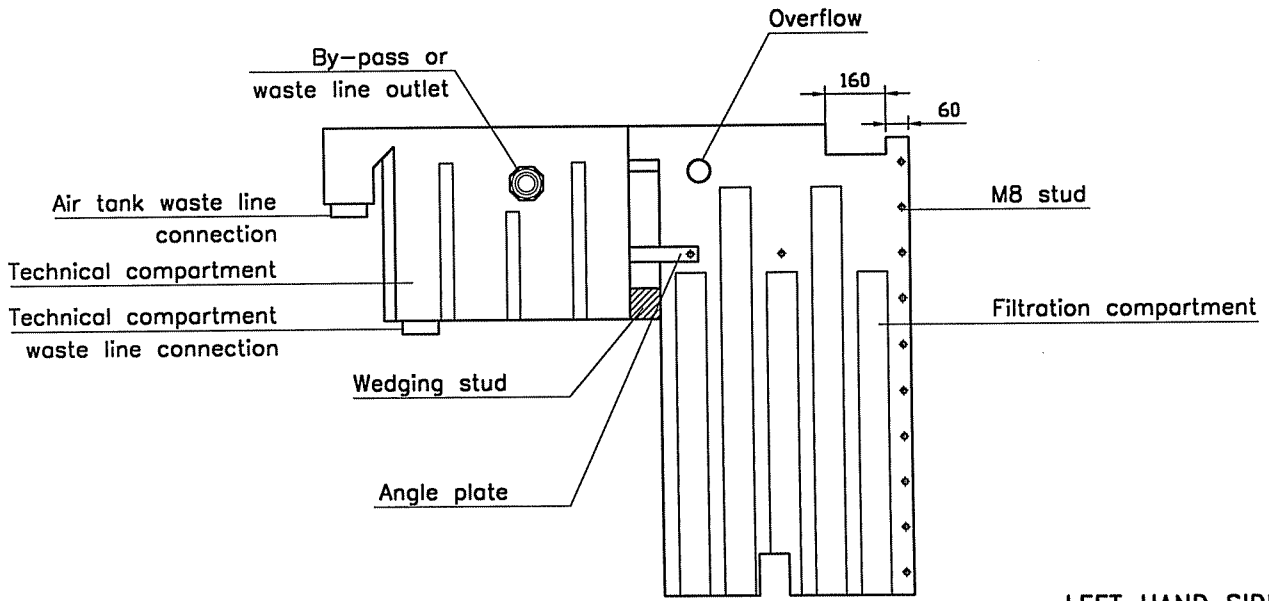


FRONT VIEW

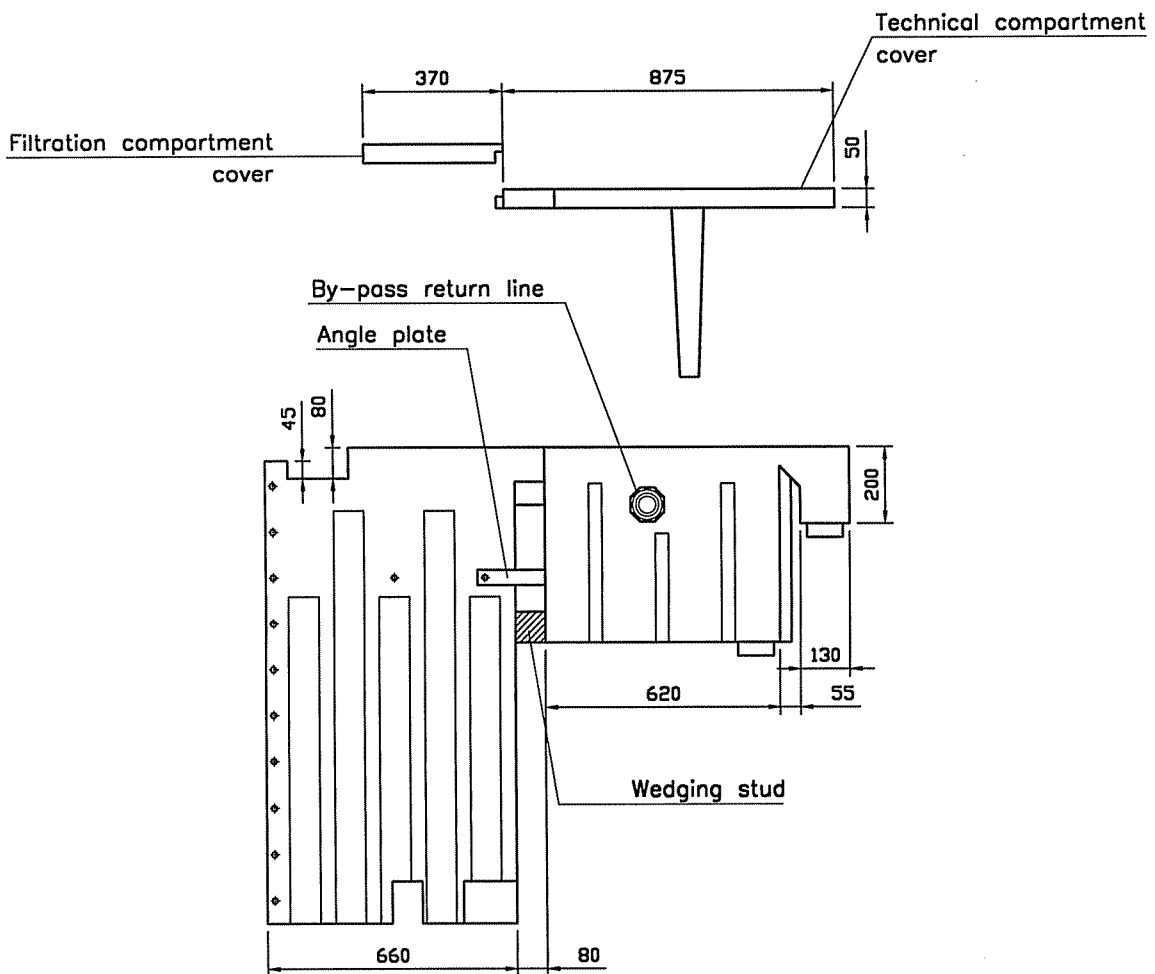


TOP VIEW

# BODY ITEMS



LEFT HAND SIDE VIEW



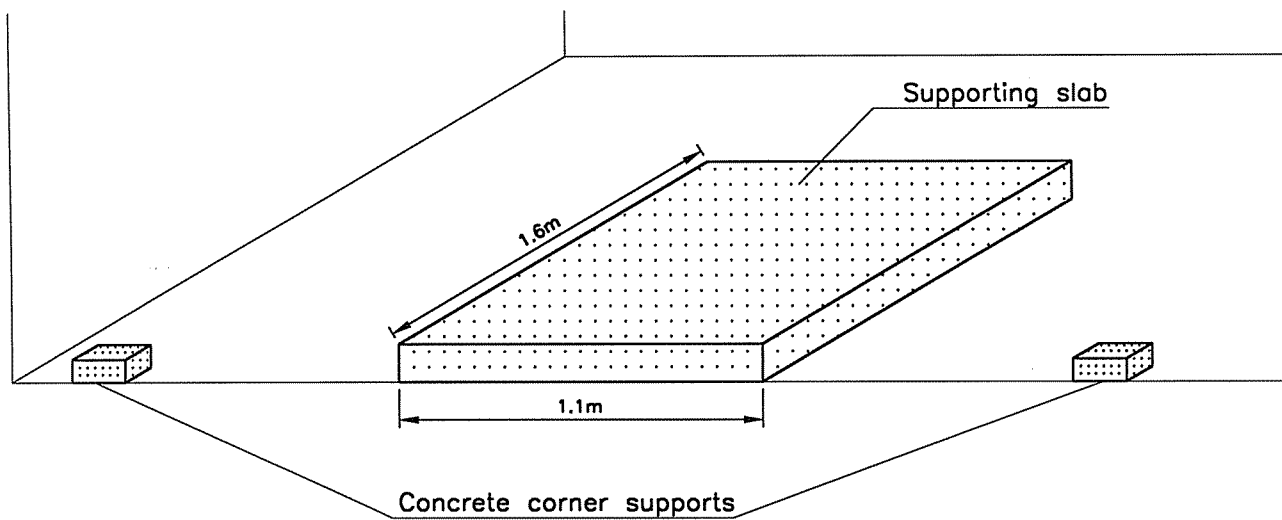
RIGHT HAND SIDE VIEW

# INSTALLATION INSTRUCTIONS

Introduction: The recommended dimensions (sides, blocks etc) should be observed at all costs to ensure correct assembly.

## 1.- Preparation of the foundation for the filtering panel and structure

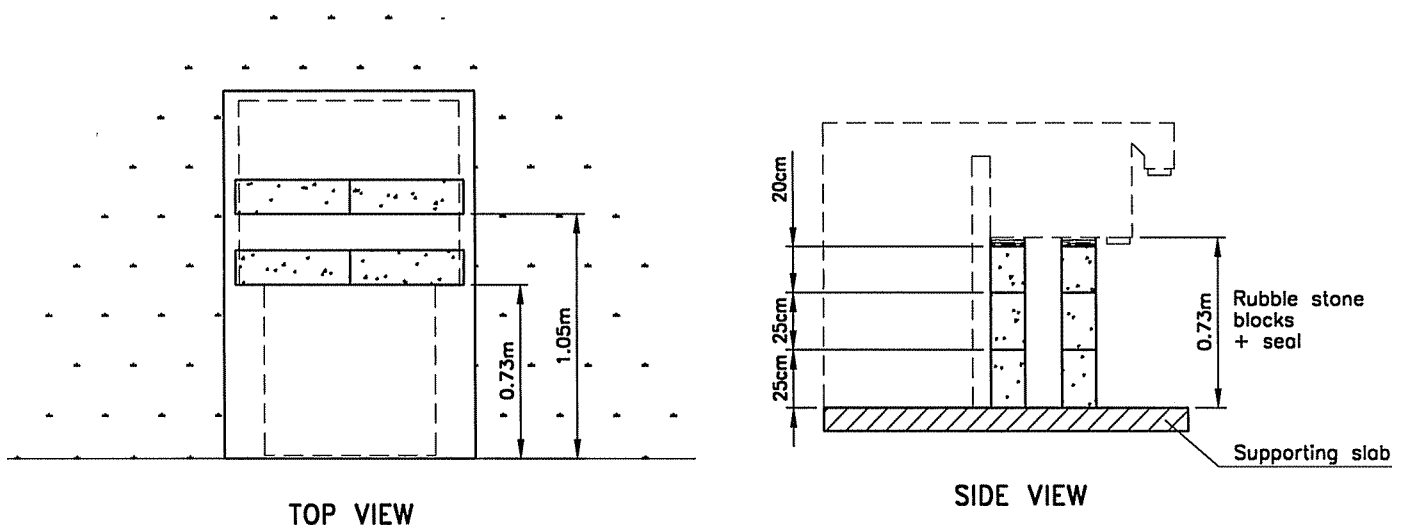
When building the corner supports for the structure panels, lay a slab of 1.6x1.1 linear metres at the spot where the filtering panel will be installed. The thickness of this slab should be such that it guarantees a satisfactory foundation for the filtering panel and the alignment of the liner lock with the profiles of the adjacent Des'co panels.



## 2.- Preparation of the two supporting stacks for the technical compartment

(8 blocks of 15x50x25 and 4 blocks of 15x50x20)

The two supporting stacks of the technical compartment must be built parallel to the rear side of the filtration compartment in accordance with the following diagrams:



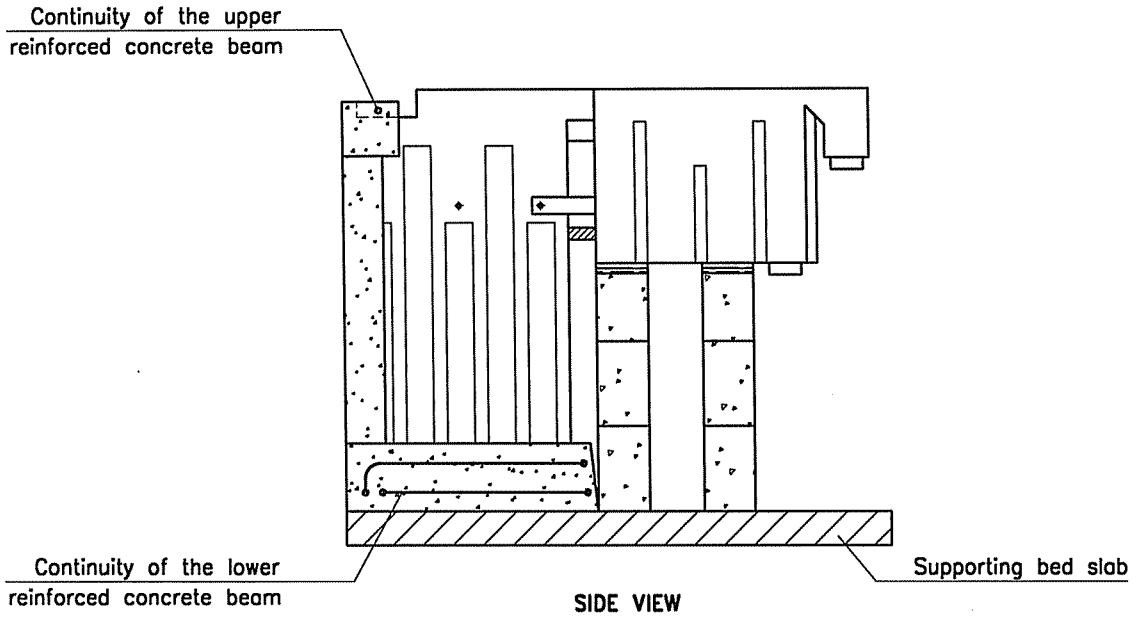
During the installation of the filtering panel (and in order to ensure that the deck slopes correctly), it is vital to weigh down the technical compartment (for example using two rubble stone blocks) so as to ensure that the latter is properly seated on the two stacks of rubble stone blocks.

**CAREFUL:** maximum height 0.73 linear meters.



### 3.- Installation of the filtering panel and concreting of the pool

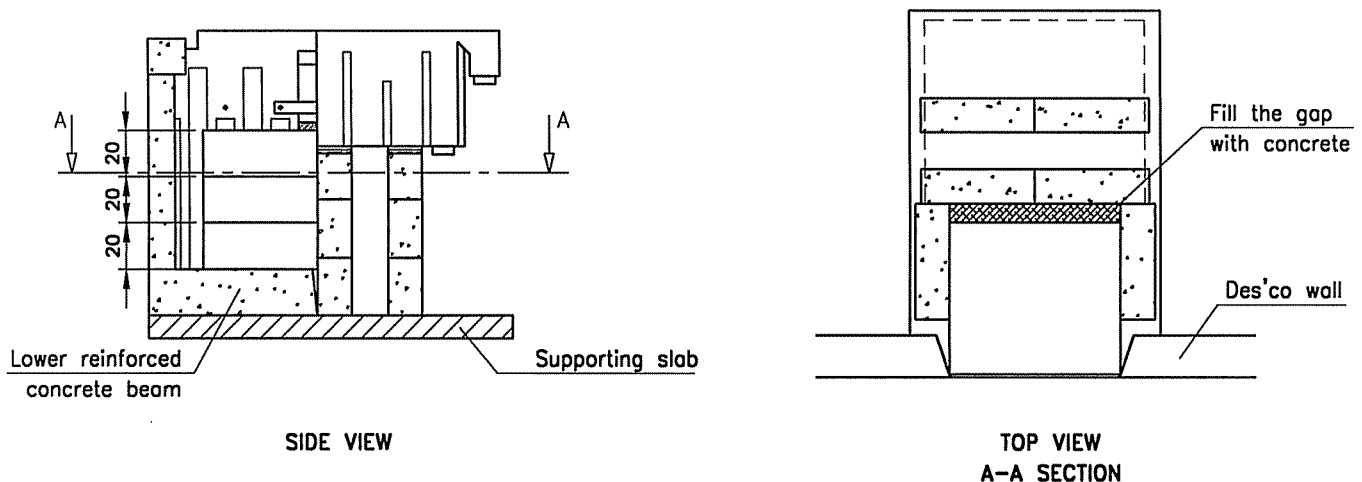
- The filtering panel will be bolted to the structure panels without using struts. The correct alignment of the liner lock of the filtering panel with the panel lock of the adjacent panels should be ensured.
- Concrete the pool normally (chimney base, bed slab, chimney) without forgetting to continue the lower reinforced concrete beam around the filtration compartment of the filtering panel.
- Pour concrete over the upper reinforced concrete beam, without forgetting to continue the upper reinforced concrete beam over the filtration compartment of the filtering panel.
- **CAUTION:** It is important not to remove the wooden wedging blocks located in the technical compartment housing the filtration panel before the masonry of the swimming pool is finished.



### 4.- Additional brickwork

(2x3 blocks of 15x50x20)

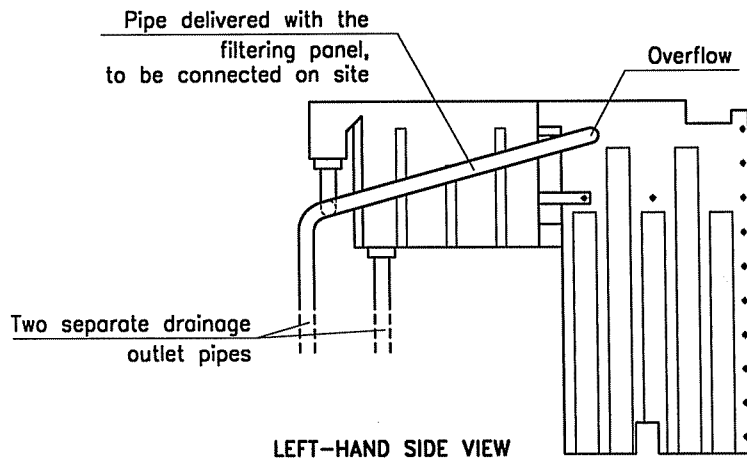
Build a stack of blocks against the side walls of the filtration compartment. These stacks should stand back-to-back against the supporting stacks of the technical compartment.



*It is vital to fill the gap between the back of the filtration compartment and the first supporting stack of the technical compartment with concrete, while at the same time leaving the blocking piece of the technical compartment (a wooden beam) in place.*

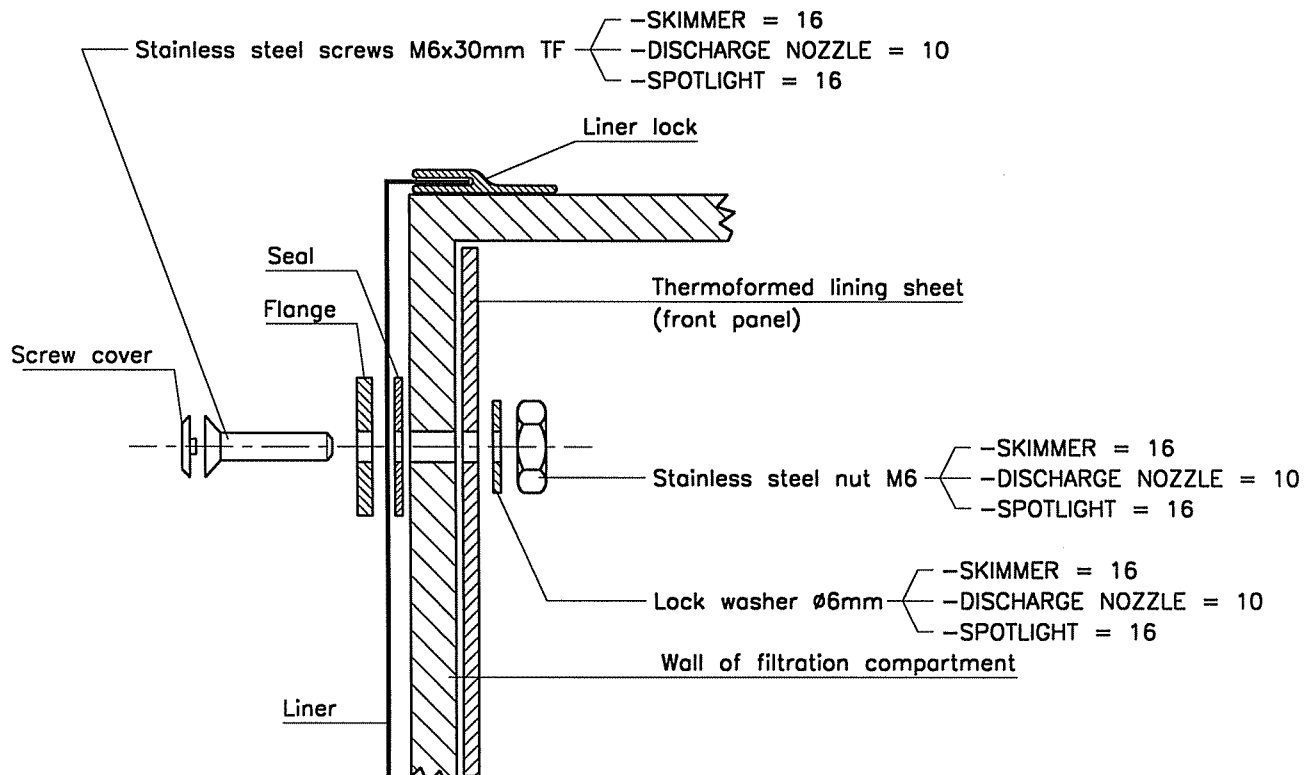
## 5.- Hydraulic connections

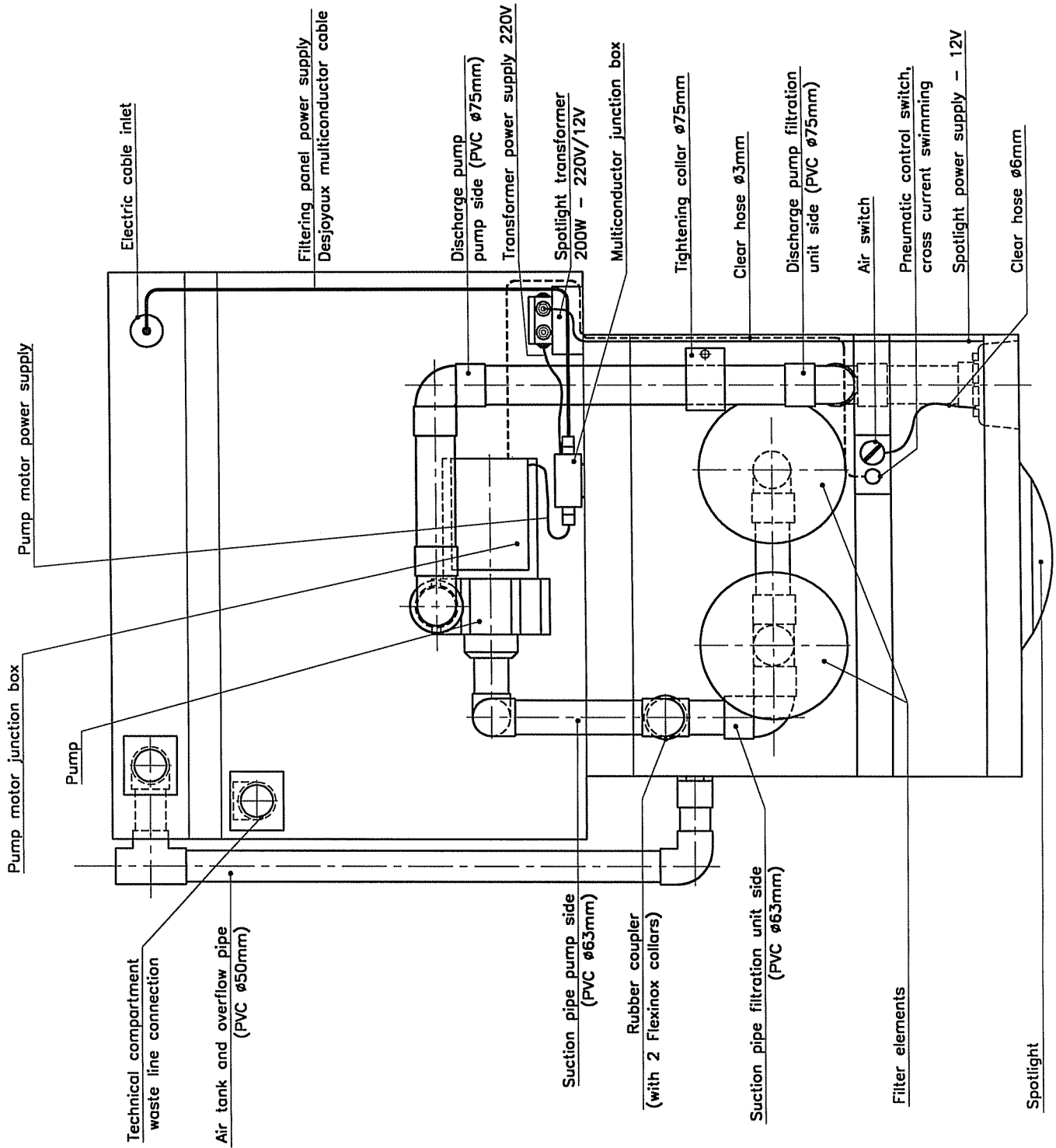
– Using the pipe provided, link the overflow and the waste line outlet on the air tank. Connect this outlet to the drain, as well as the outlet of the technical compartment, taking care to create two independent pipe systems without high points (in order to avoid the water level rising inside the technical compartment).



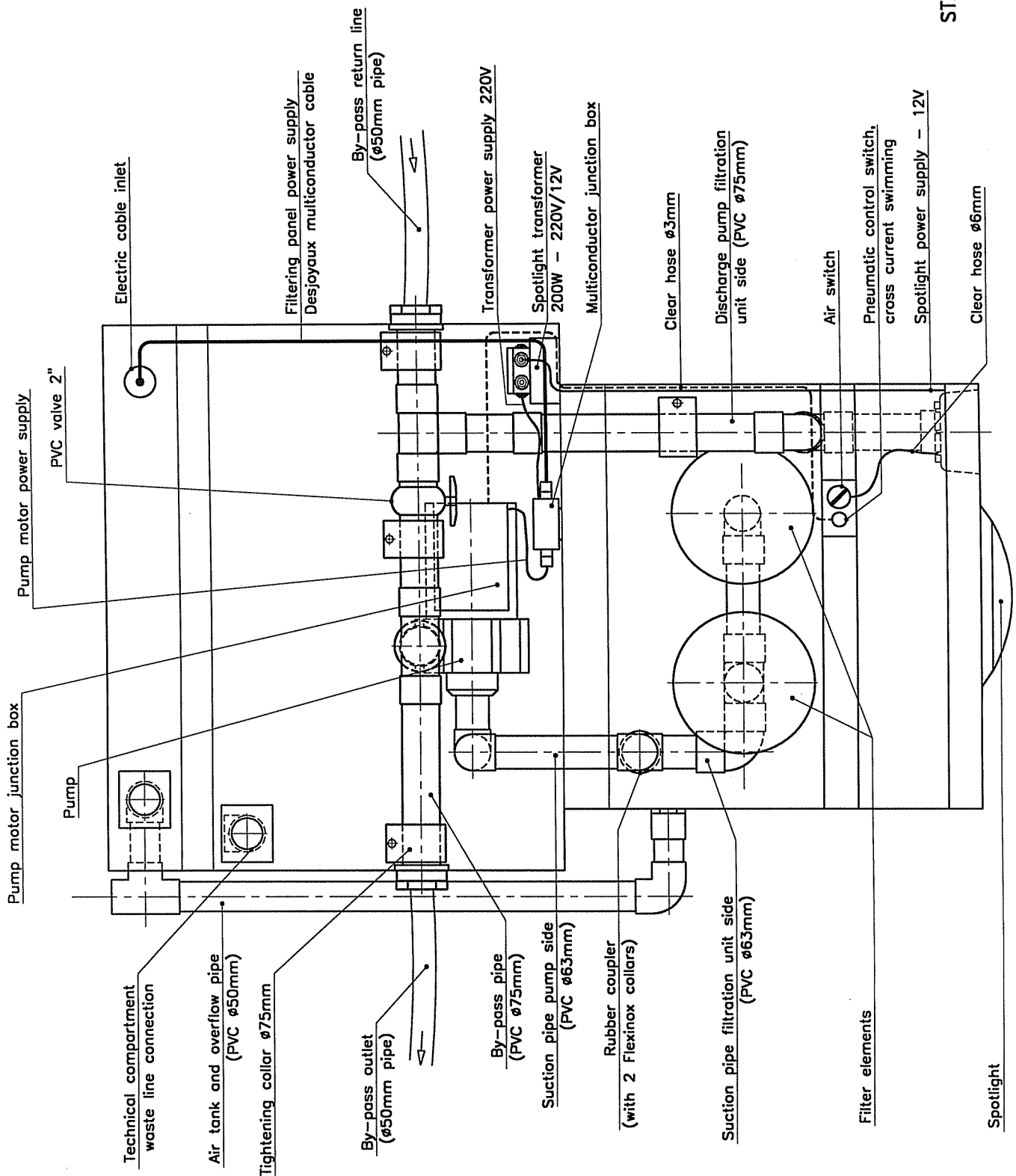
## 6.- Laying the liner

- Remove the left hand (1 piece) and right hand (2 pieces) filter-holder spacers by undoing the 4 fastening screws.
- Remove the 2 filter-holders.
- Plug the holes of the overflow and the drainage outlet with tape.
- Fit the covers and tape them on (air inlet).
- Clip the liner. Turn on the pool vacuum cleaner so that the liner is drawn against the walls.
- Fill up to 10 cm below the spotlight hole.
- Remove the cover of the filtration compartment and block the skimmer. The seal fits between the liner and the filtration panel. Tighten all the screws. Once all the screws are tightened, cut the liner.
- From the skimmer hole, proceed in the same way for the square flange of the nozzle and for the spotlight flange.
- Fit the covers.



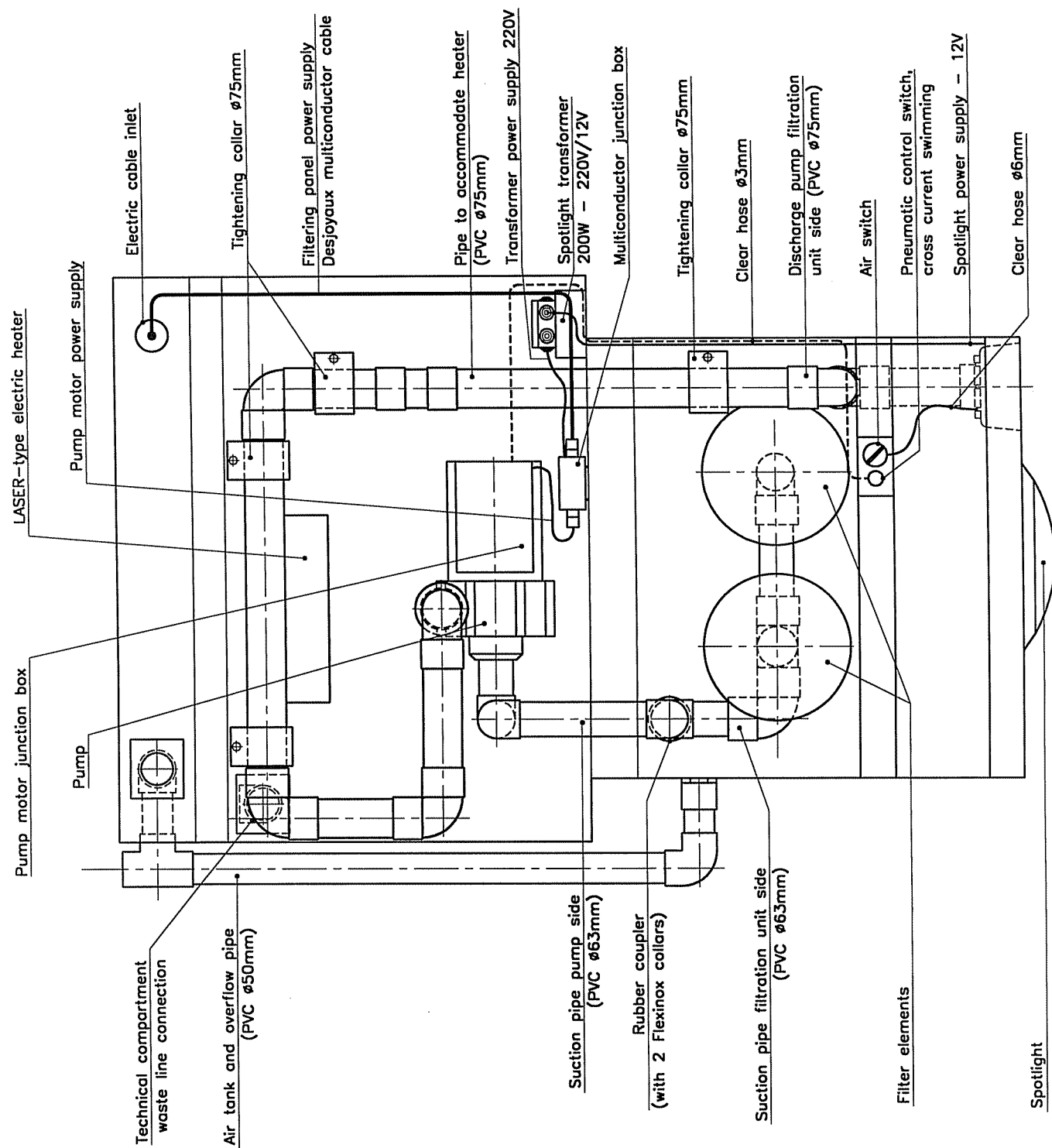


STANDARD FILTERING PANEL  
STANDARD VERSION



**STANDARD FILTERING PANEL  
BY-PASS OPTION**

STANDARD FILTERING PANEL  
LASER-TYPE ELECTRIC  
HEATER OPTION



# GENERAL ELECTRICAL INSTRUCTIONS

## 1.- ELECTRICAL CONNECTIONS:

**ALL ELECTRICAL CONNECTIONS MUST BE MADE BY A QUALIFIED ELECTRICIAN**

- They should comply with C 15.100 standard (1991 edition).
- The watertight electrical control panels should be installed beyond the legal safety zone, i.e. more than 3.5m from any point of the pool.
- All connections in the control panels should be well tightened.
- A unit comprising a 16A fuse circuit must be fitted in series at the top of the supply line to the electrical control panel (upline from the GFCI device).

## 2.- BURYING ELECTRICAL CABLES:

- If under a path or road, at a minimum depth of 1 metre.
- In all other cases: 0.6 metre minimum depth.
- If cables are not sheathed, a red warning grating should be installed.

## 3.- NOTE:

- The cover (lids, etc.) of the technical compartment providing access to the electrical receivers (pumps, transformer), should be locked with the screws provided for this purpose.
  - Before starting any work in the technical compartment, the mains supply must be disconnected at the top of the supply line.
  - The power supply to the pump is single-phase; only certain heaters can be run on three-phase current.
  - If the F15 motor is in single speed mode, the black wire No.6 (please see filtration electrical box) serves no purpose. This should be left connected to the 4-pin female connector located in the multiconductor connection box.
- In the case of an F25 motor in single speed mode, it is the red banded black wire which serves no purpose. This should be left as it is in the multiconductor connection box.
- The installation must be grounded:
    - In France: to the acceptable value and therefore the ground connection should be periodically measured.
    - In Belgium: to a value of 30 ohms (for residential installations).

## IMPORTANT NOTE:

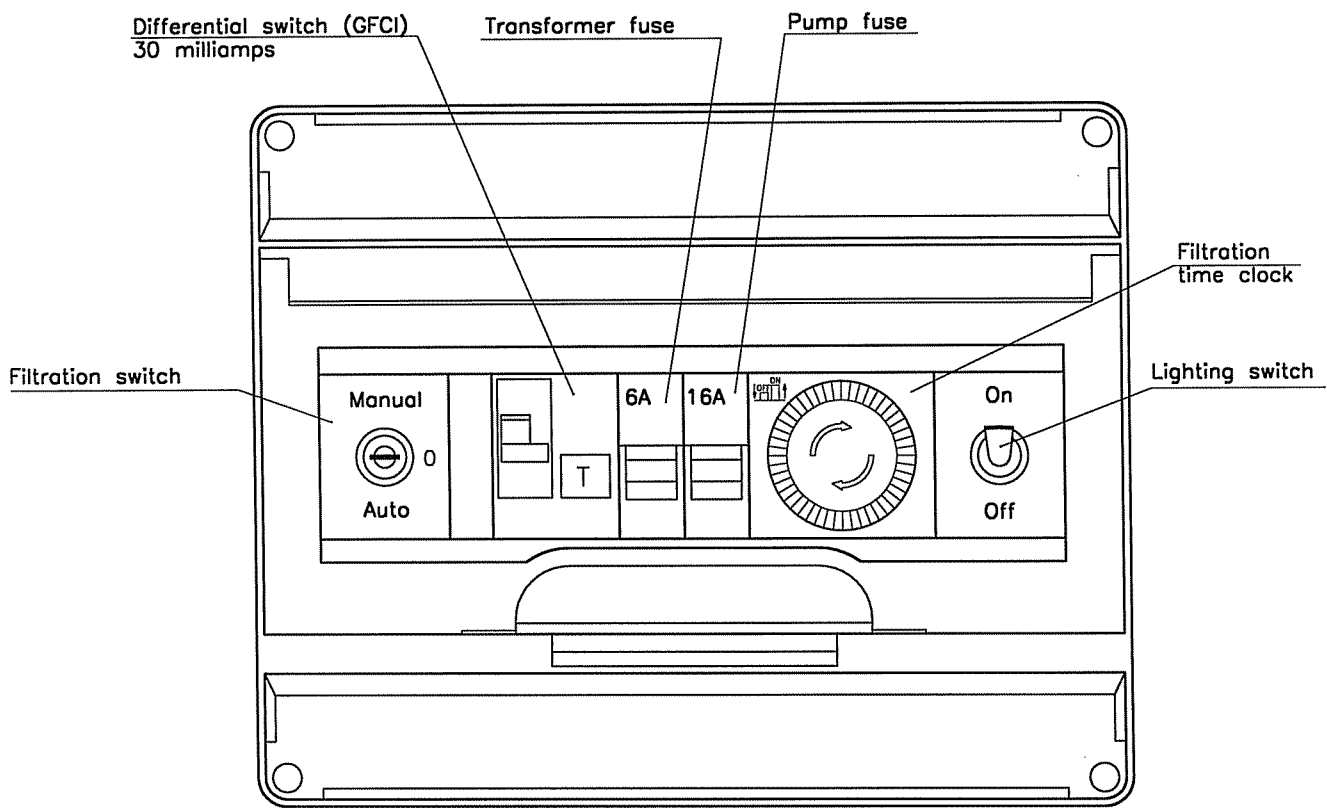
*The 30 milliamp. ground-fault circuit-interrupters located:*

- *on the filtration electrical control panel;*
  - *on the heater / blower electrical control panel,*
- should be tested periodically (once a month at least).*

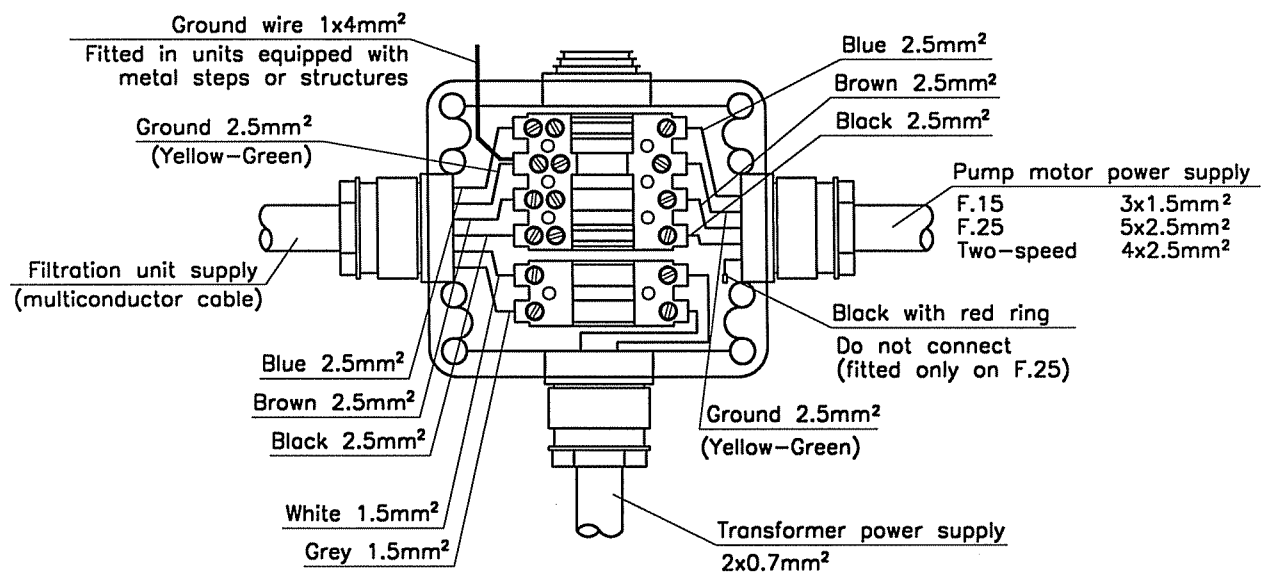
*Pressing on the test button trips the GFCI.*

- *This test should be carried out with the mains power turned on;*
- *In the event the switch does not trip, turn off the current and call on a qualified electrician.*

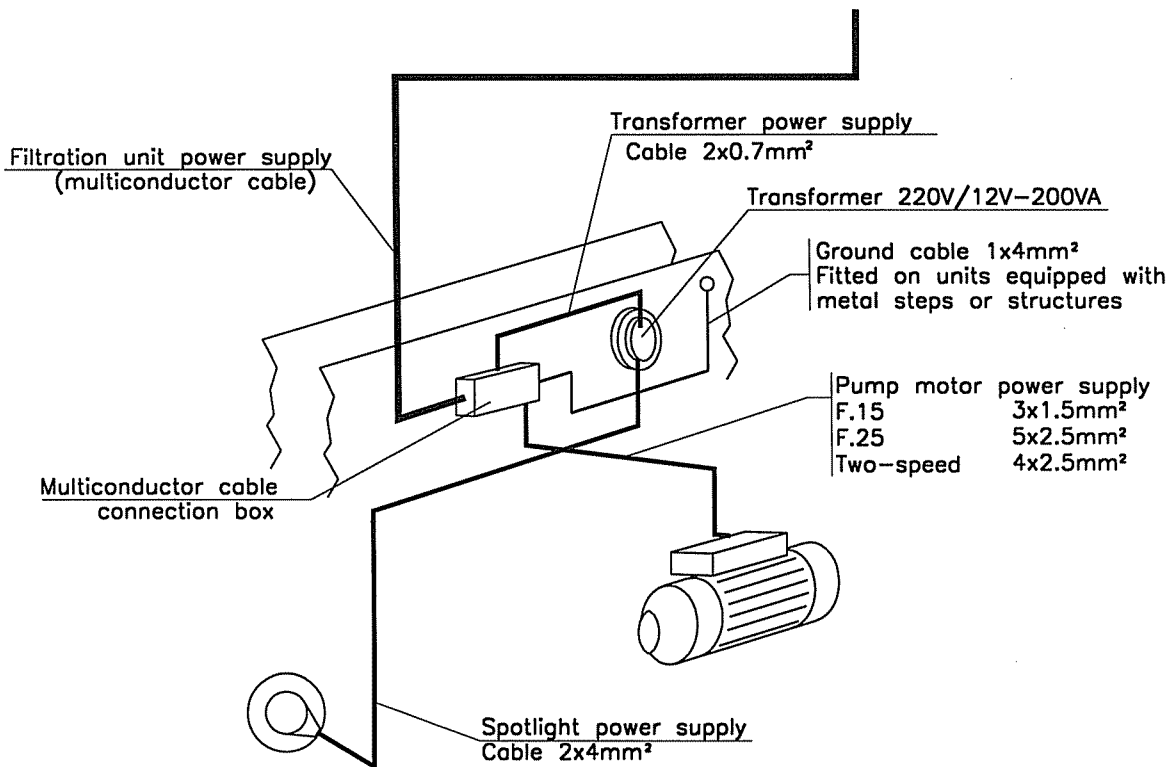
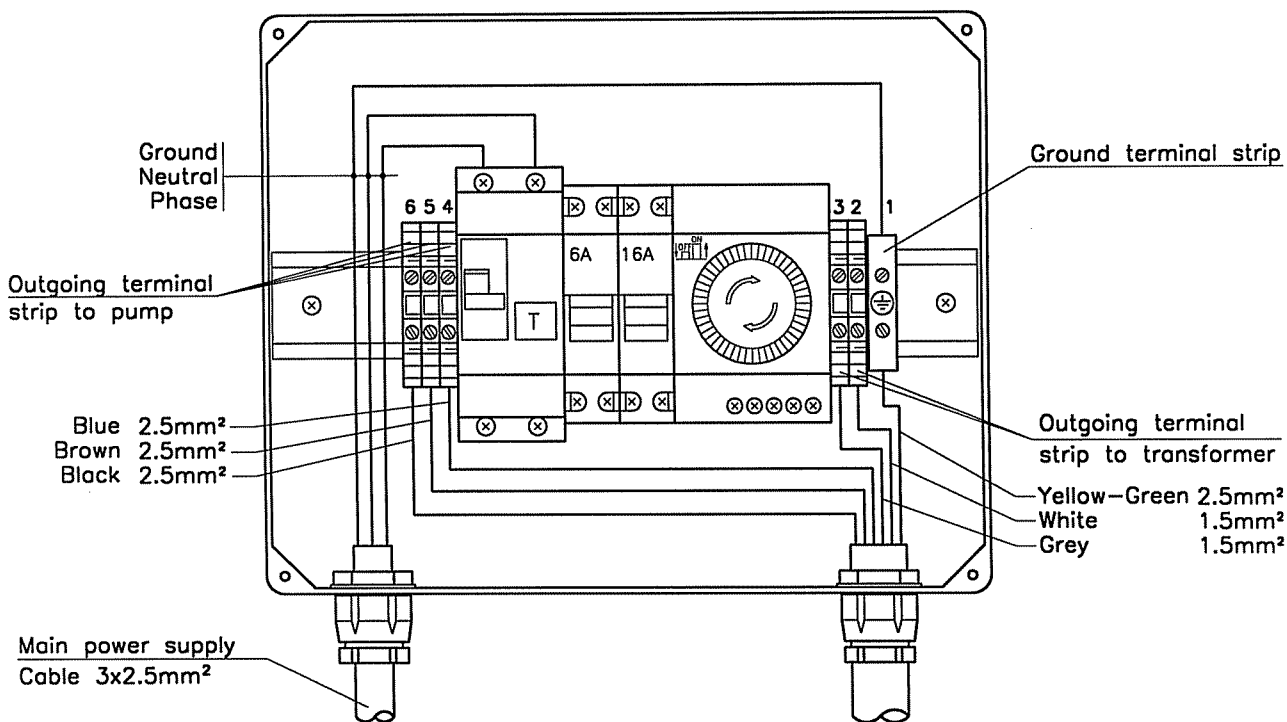
## FILTRATION ELECTRICAL CONTROL PANEL F.15-F.15/50-F.25-F.25/50



## MULTICONDUCTOR CONNECTION BOX



# FILTRATION ELECTRICAL CONTROL PANEL

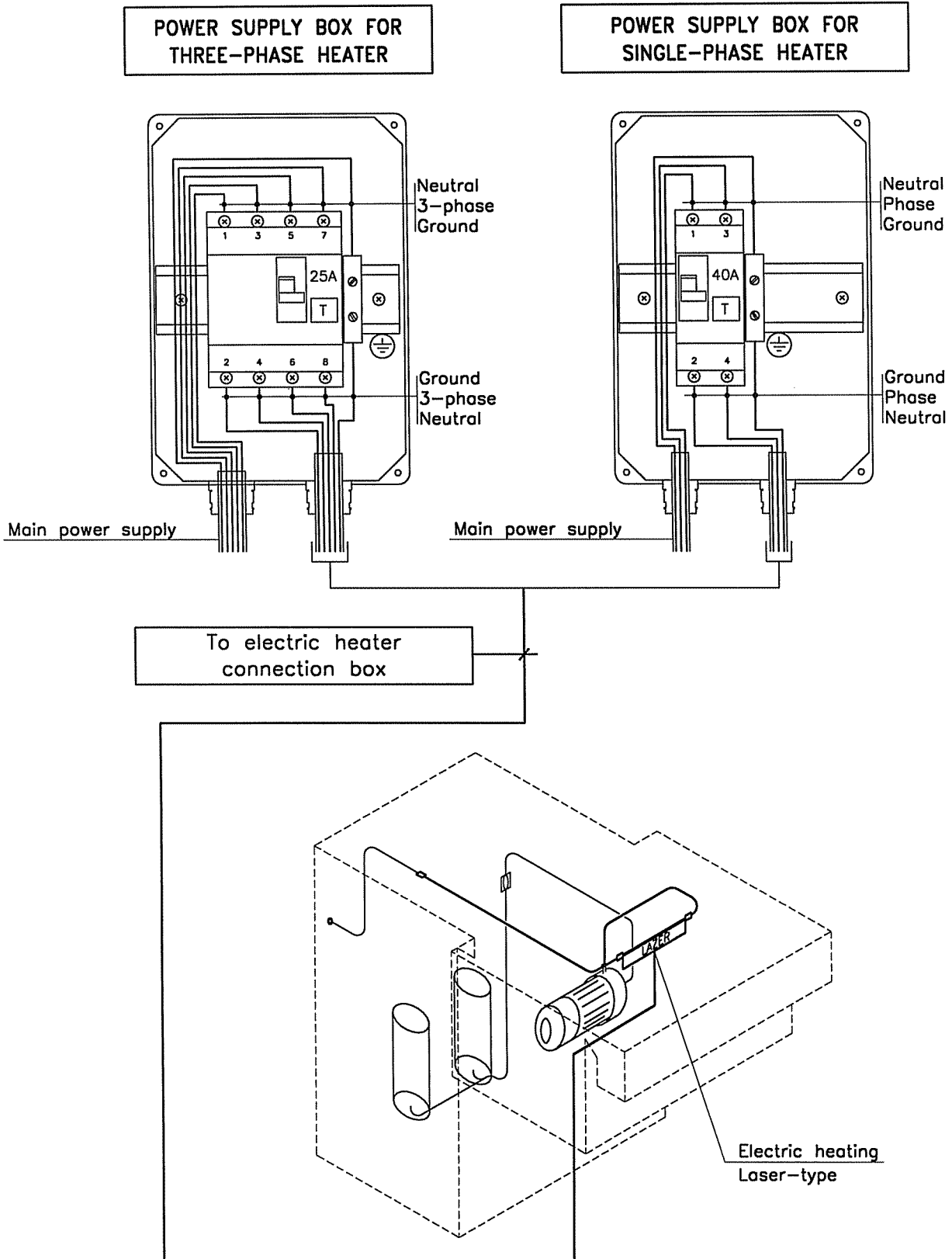


NOTE: If the F15 motor is in single speed mode, the black wire No.6 (please see filtration electrical box) serves no purpose. This should be left connected to the 4-pin female connector located in the multiconductor connection box.  
 In the case of an F25 motor in single speed mode, it is the red banded black wire which serves no purpose. This should be left as it is in the multiconductor connection box.

# FILTRATION ELECTRICAL CONTROL PANEL WIRING SCHEME



## Connection diagram Laser-type electric heater



THREE-PHASE	FUSES	Cable gauge
LASER 6	10A	5x2.5mm <sup>2</sup>
LASER 9	16A	5x4mm <sup>2</sup>
LASER 12	20A	5x6mm <sup>2</sup>

SINGLE PHASE	FUSES	Cable gauge
LASER 6	32A	3x6mm <sup>2</sup>
LASER 9	50A	3x10mm <sup>2</sup>

# INSTRUCTIONS FOR CHANGING BULBS ON DESJOYAUX 200 W HALOGEN SPOTLIGHT

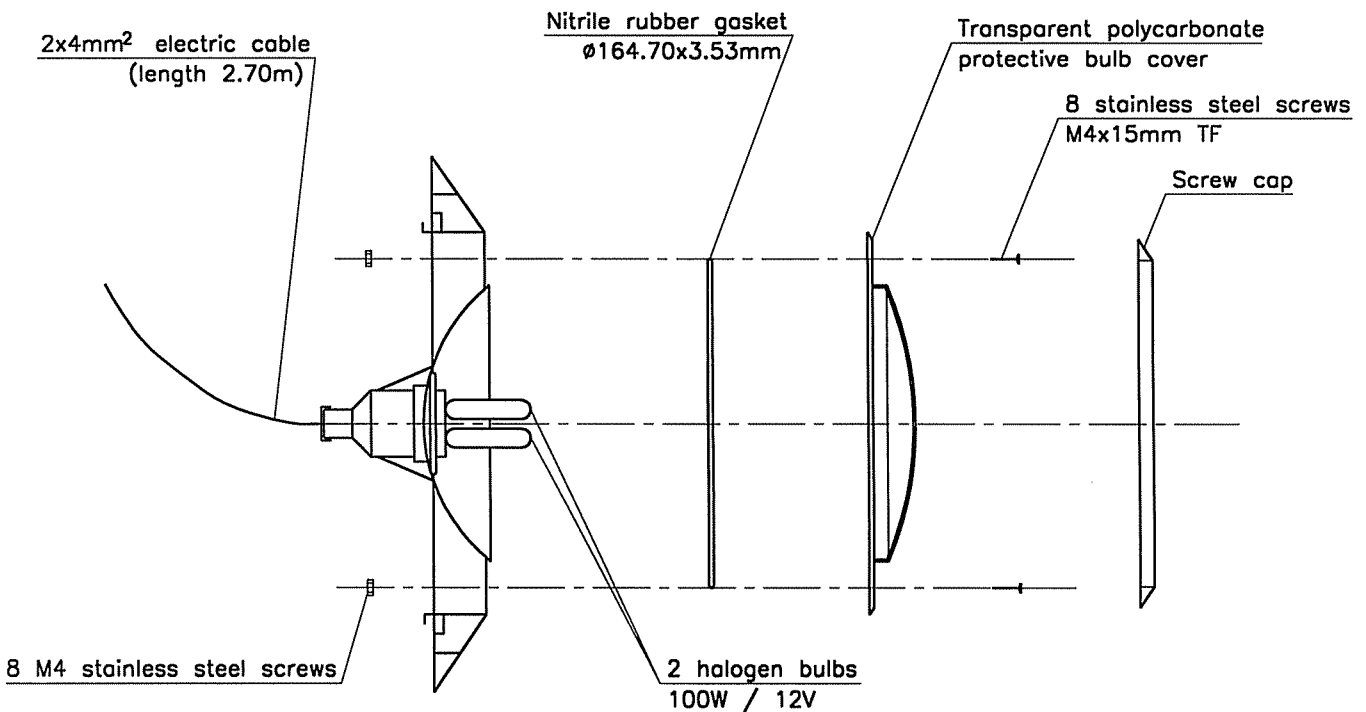
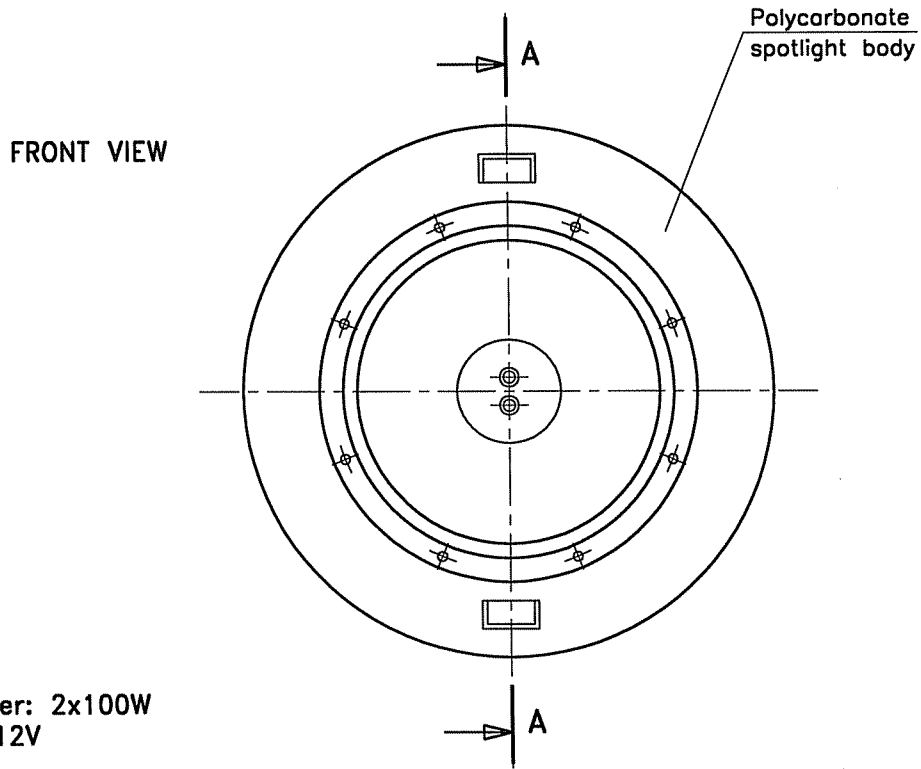
## IMPORTANT NOTE:

Only 100 watt 12 volt G35 type halogen bulbs can be used.

- 1.- Unclip the spotlight from the front side of the filtration system, giving it a 1/4 turn to disengage the fastening lugs.
- 2.- Place the spotlight on the pool deck, uncoiling the excess wire inside the filtration compartment.
- 3.- Gently lever out the white screw cap with a small screwdriver.
- 4.- Unscrew the eight M4 screws, taking care not to lose the nuts.
- 5.- Remove the polycarbonate protective glass cover, making sure not to lose the O-ring seal.
- 6.- Remove the 2 bulbs.
- 7.- Put in 2 new bulbs taking care not to touch them with your bare hands, by holding them in their original paper bag.
- 8.- Replace the protective glass after checking that the O-ring seal is in good condition and not pinched. Check that no nut has been misplaced, then tighten the 8 screws.
  - Tighten following a star pattern;
  - Tighten until the seal appears slightly crushed.
- 9.- Replace the screw cap.
- 10.- Refasten the spotlight to the front side of the filtration system.
- 11.- After switching on the spotlight once, make sure there is no air bubble produced, indicating a leak. If this is the case, disassemble and check the condition of the seal and protective glass.

**CAUTION:** To clean the spotlight, do not use an alcohol or solvent based product; use only soapy water.

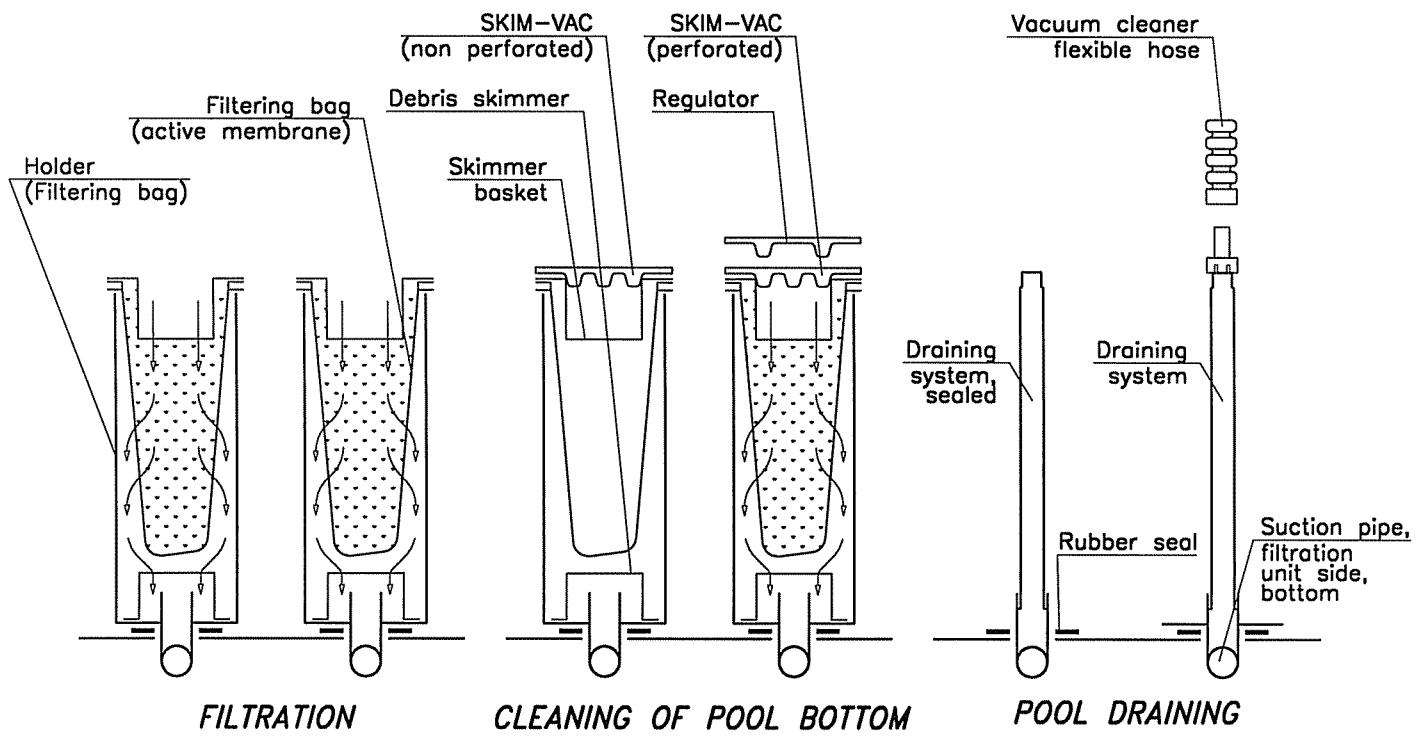
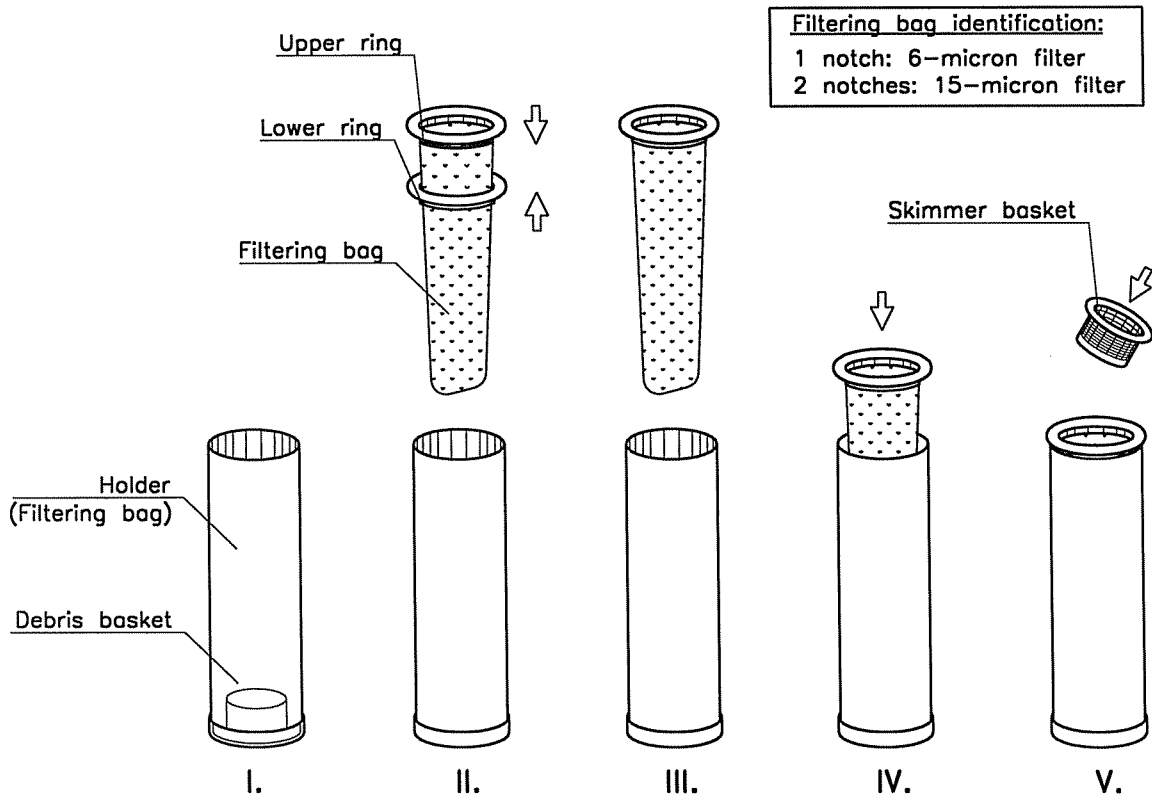
MUST ONLY BE USED IF SUBMERGED IN WATER  
 OPERATES ONLY WITH A 200 VA SAFETY TRANSFORMER



A-A SECTION

IN COMPLIANCE WITH SWIMMING POOL LIGHTING STANDARD: NF-EN-60598/2/18

# INSTALLATION OF ACCESSORIES



## OPERATION