

Install the electric heater as illustrated in a horizontal position, so that it is flooded at all times. If the heater is mounted against inflammable material the installer must place a gypsam wallboard between the heater and the inflammable wall. The board must protrude a minimum of 10 cm outside the body of the heater.

The heater must not be covered, enclosed in or placed near inflammable material.

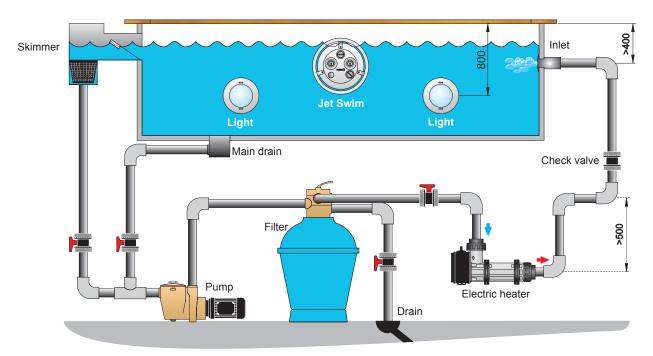
The heater shall be connected over two contactors, see wiring diagram.

The heater shall be installed in such way that it can not be activated if the filter pump is not working (sufficient flow), i.e. the power supply to the contactor must be guided over the motor protection of the pump.

The electric heater must be installed on the return pipe to the pool after the filter. Do not install a gate valve between heater and pool. If a valve is required, install a check valve.

Dosage of chlorine, acid or similar, must be done after the heater to avoid corrosion.

1. When the pipe installation is made, connect the heater electrically according to wiring diagram.



2. Start the pump to the pool water circulation. Check that the water circulation is normal before the heater is turned on. Test the heater by turning the thermostat knob back and forth and check that the contactor of the thermostat turns on and off. Set desired pool temperature. Check the flow switch by turning off the flow through the heater with a gate valve and control that the contactor is beeing de-energized. The heater will now heat the pool water to desired temperature.

If the heater does not start:

- a) Check the fuses.
- b) The overheating limit control is released: Press the reset button in the connection box.
- c) Check the flow switch which is pre-set at a minimum flow of 90 l/min.
- d) Reset the thermostat to a higher temperature.

In case of climates with sub-zero temperatures the heater must be installed so that it can be emptied.

## The electric installation must be done by a licenced electrician.

When back-washing and cleaning the filter, the power to the heater **must** be turned off.

## Important!

The water must not be aggressive.

The heater must not be used in salt water or in pools where an electrochlorinator is used.

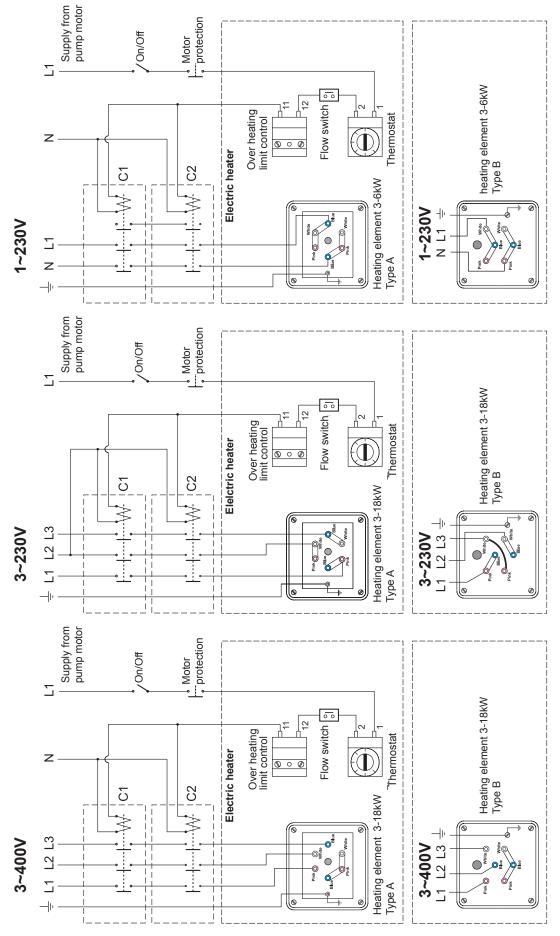
Follow the instructions stated below

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Chlorine content:	max 3 mg/l (ppm)
Chloride (salt) content:	max 250 mg /l
pH-value:	7,2 - 7,8
Alkalinity:	60-120 mg/l (ppm)
Calcium hardness:	200-1000 mg/l (ppm)
Max temperature:	45°C
Max pressure:	2,5 bar
Minimum flow:	90 l/min.

Installation instruction MA45-25E 2011

## Electric heater plastic Item no. 141600(-02) - 141605(-02)





**ENGLISH** 

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