

EOV

ELECTRIC AIR HEATER

Instructions for installation and operation of the EOV VV 1.5 kW electric air heater

Before beginning installation:

Carefully read all the installation instructions and make sure that you have understood them all, check the content of the packaging and get the required tools ready.

The package that you receive should include:

- This installation brochure
- An EOV VV air heater
- Plastic brackets for wall mounting – 2 pieces
- Connection diagram

Essential tools for installation:

- Pencil or chalk for marking
- Tape measure for measuring correctly
- Hammer drill
- Screwdrivers: Medium flat, medium Philips

Brief introduction:

The EOV VV air heater is specially designed and constructed to heat air flowing from the aerator of outdoor or indoor swimming pools, baths and whirlpools. It operates by heating the air flowing through the heating element. The required air temperature is set using an adjustable capillary thermostat with a range from 0 – 70 °C, which is located on the heating system case. An electric thermostat can also be added at the customer's request. The heating element is switched by contactor, which is not part of the EOV type heater. The contactor switch is supplied separately as part of the automatic control system, including additional required control elements. The contactor switch is controlled using the above thermostat.

The heating system is also protected by thermal fuse, which is set to a cut-off value of 75°C. The thermal fuse is tripped if the heater malfunctions and an expert must be called to check the entire system and find out the cause of overheating.

Preparation for installation:

1. Check the content of the packaging immediately after delivery and make sure that the supplied air heater was not damaged during transport.
2. Prepare an adequate area for easy and safe installation according to these instructions.
3. Attach the plastic brackets to the wall so that the heating can be easily and correctly connected to the air circuit and electric circuit.

! THE EQUIPMENT MUST BE INSTALLED BY A QUALIFIED OR TRAINED WORKER !

Choose a suitable installation site:

The electric EOV air heater is located in an underground or other utility space, where the swimming pool technology is installed, if possible below water surface level. If this option is not possible, install the heater in a specially prepared shaft near the swimming pool. This alternative is not ideal, because the installed equipment suffers considerably due to the water condensate generated as a result of the temperature differences and this shortens its service life. This environment must be frost-free so that the heater doesn't freeze. Otherwise the entire system must be protected against freezing. The heater installation site must be chosen so that a fire does not occur if the system overheats (Fig. 1).

Actual installation and connection to the system:

We always recommend that the electric air heater be separated by a non-return valve so that no water from the swimming pool can get into the heater. This non-return valve also serves as protection against possible flooding of the utility room /if it is below the level of the water surface/. The system must always be installed horizontally, or in a vertical position (Fig. 3). When installing in a horizontal position, the aerator must always be installed with the outlet perpendicular and facing upwards and the head always facing downwards to avoid shortening the system's service life.

The device's inlet and outlet are designed as universal, for attaching a 50 or 63 mm thread. We therefore recommend that the system be connected using 50/50 joints or 63/63 joints. Both these methods create a disconnecting joint, which you will appreciate when replacing the heating element or handling the equipment otherwise.

Actual installation and connection to the electric circuit:

The electrical part of the system should be connected by a qualified electrical expert with the relevant qualifications. The heater must be connected through a residual-current circuit breaker with a cut-off current of $I_r = 30 \text{ mA}$, which protects persons against electric shock (Fig. 5).

Recommended connection, protection and el- wire cross-sections for the electrical air heater (Fig. 2 and 4).

The EO VV electric air heater is connected to an electric current using a contactor and protective el. elements, which are part of the respective electric control system. We recommend automatic control systems produced by us, because these create a comfortable and safe system with our heater. We recommend that a flexible CYSY or CGSG cable with wire cross-sections depending on the heating element output be used for the power supply to the heater.

Warranty terms and conditions:

Claims are only recognised if the electrical part of the heater is connected through an automatic switching system by the VÁGNER POOL Company. The automatic switching system is designed as part of the entire system.

A photograph of connection of the EO VV heater is essential for acknowledgement of a claim.

The product warranty is 24 months from the date of installation of the product /must be confirmed in the warranty certificate, including the series number.

The warranty does not apply to defects originating as a result of incorrect manipulation, incorrect installation or failure to adhere to the prescribed operating conditions. The warranty also does not apply if an on-site chlorine generation system is installed additionally.

This product is approved by the Electrotechnical Testing Institute.

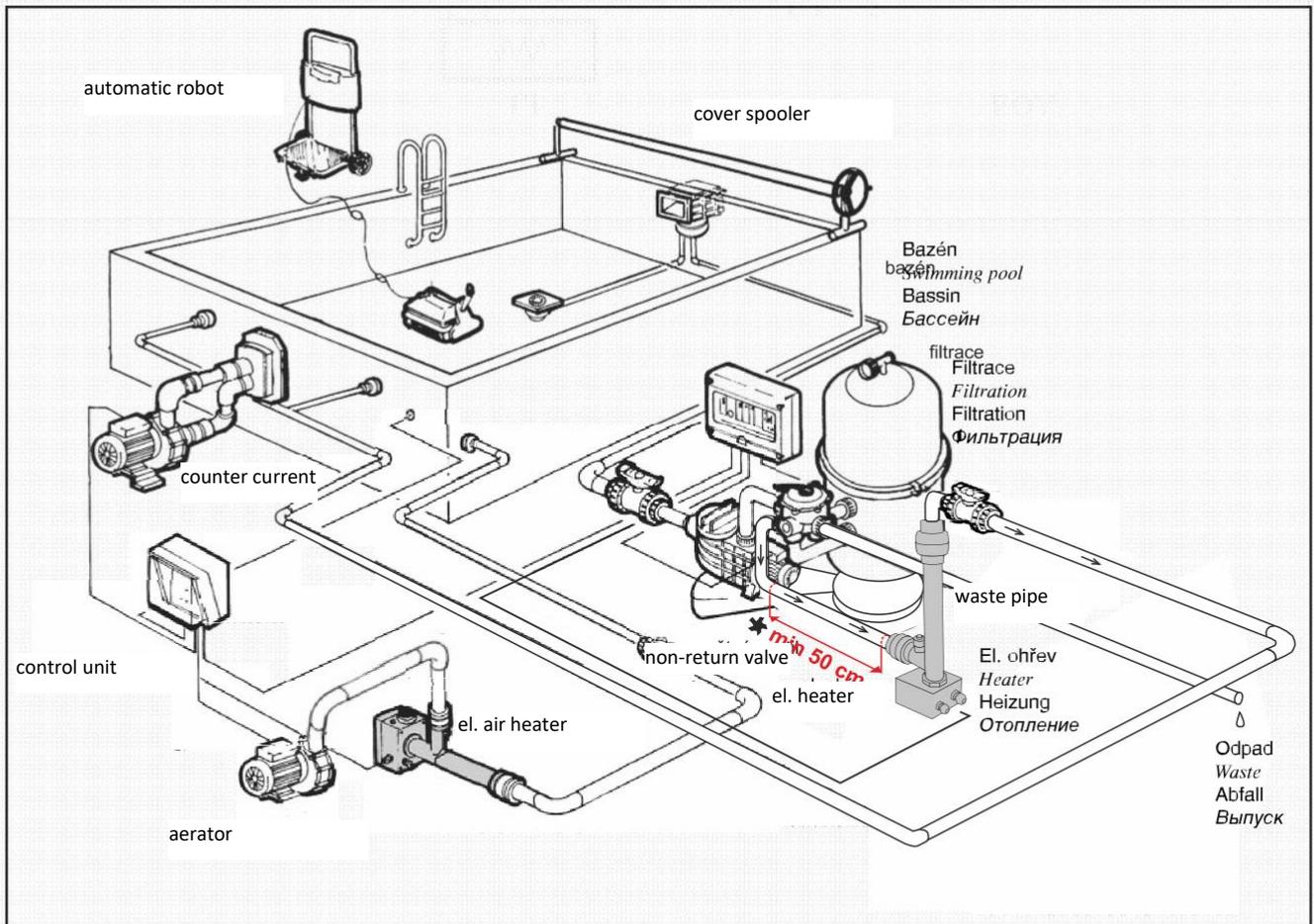


Fig. 1 – connection diagram

Fuse and power supply table for the EO VV electric air heater

Heating element output	Fuse	Power cable (CYSY, CGSG)
1.5 kW 1x230V	10A	3c x 1.5 mm ²

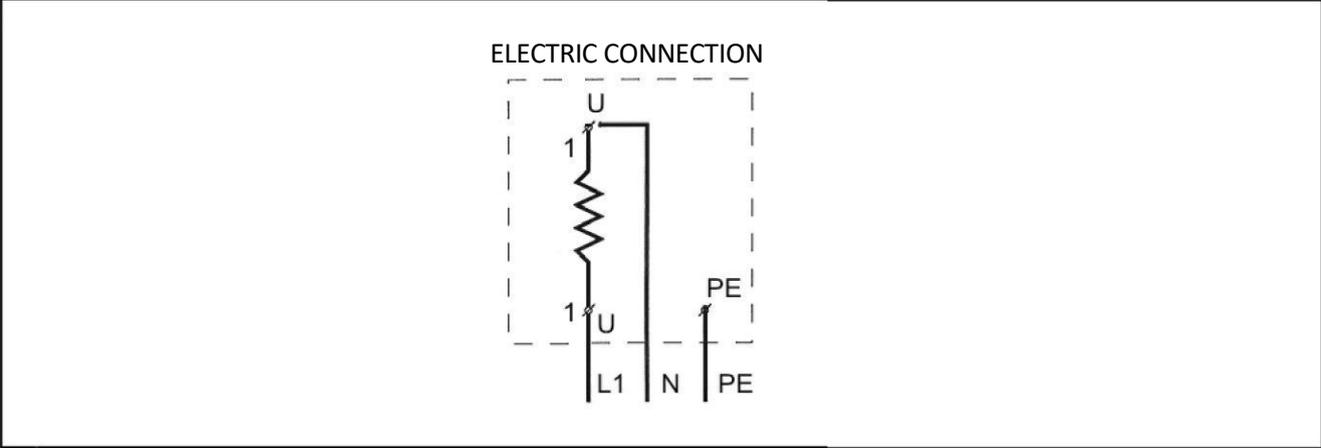


Fig. 2

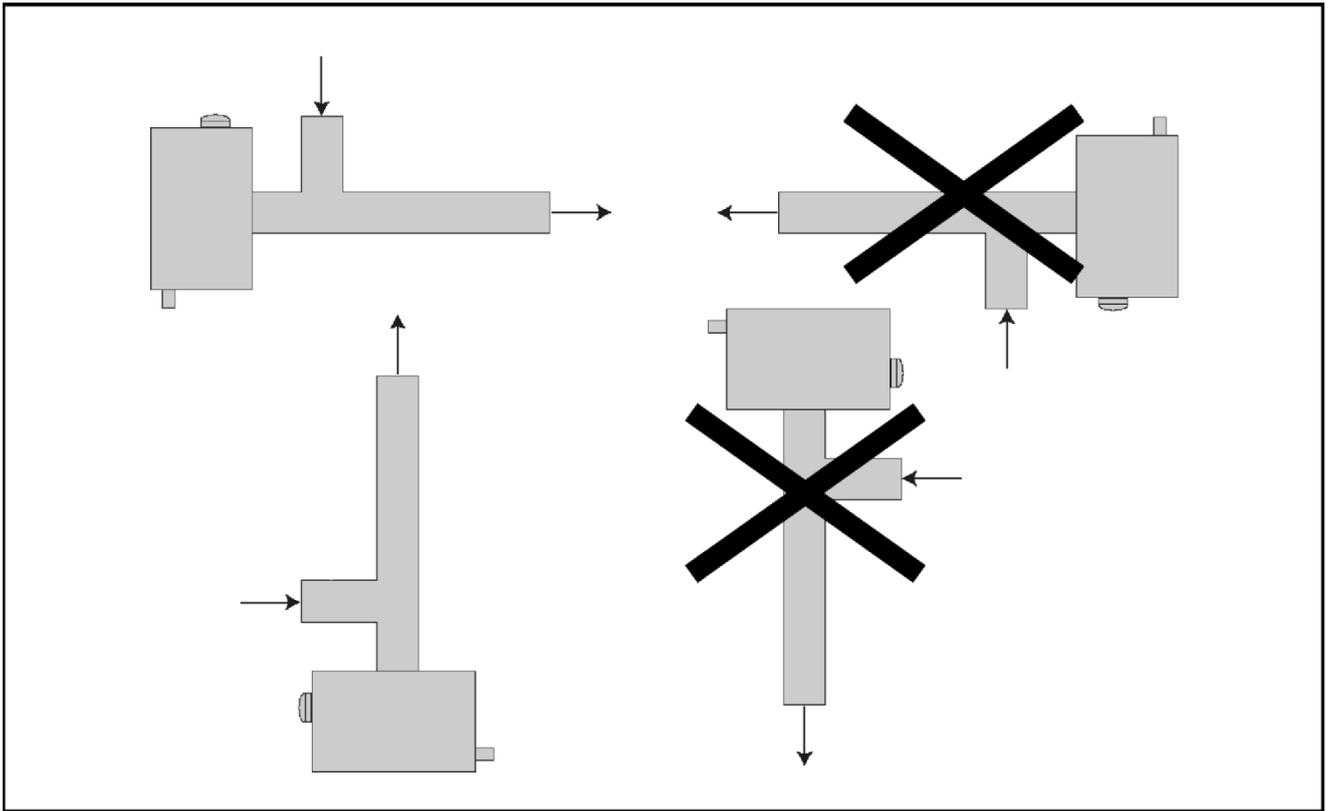


Fig. 3 – correct connection facing downwards

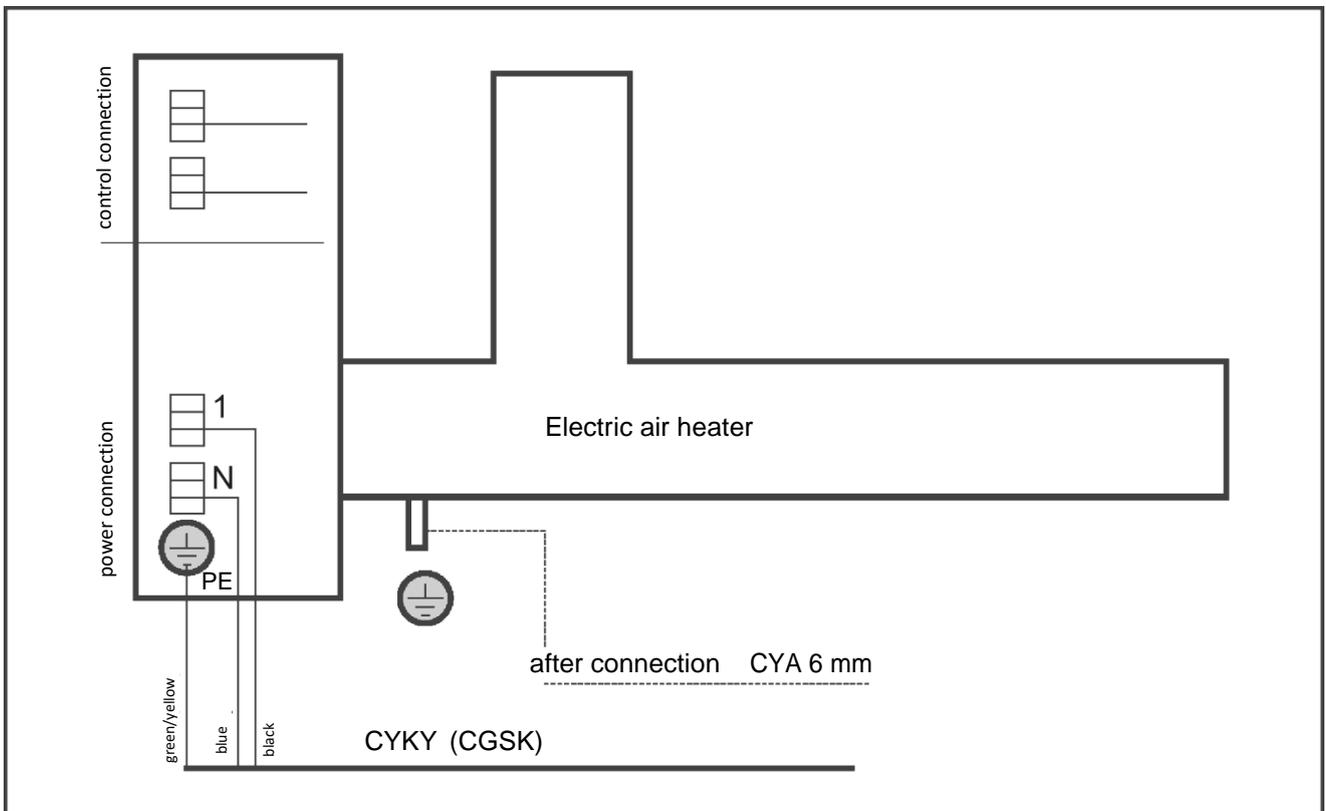


Fig. 4

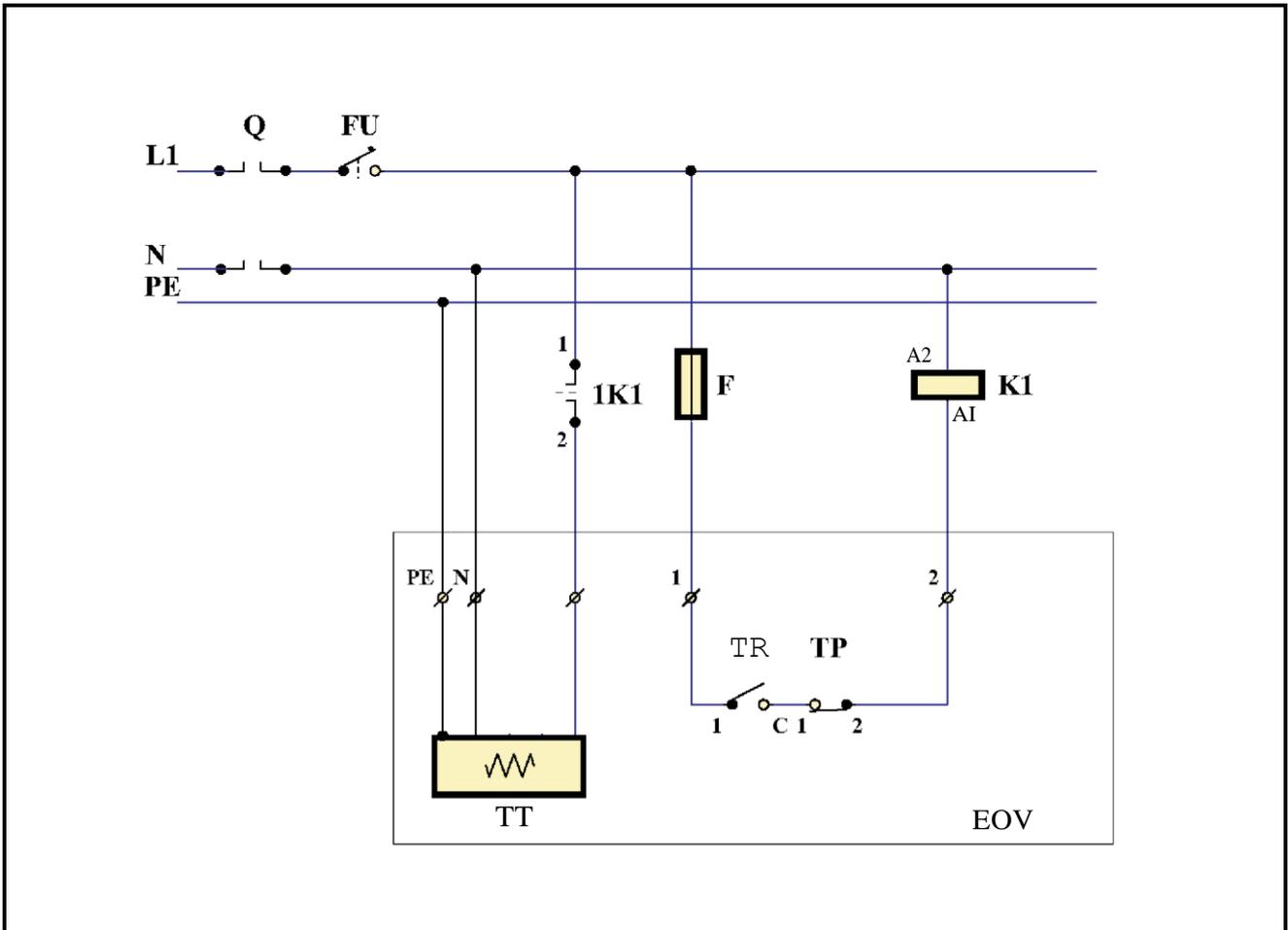
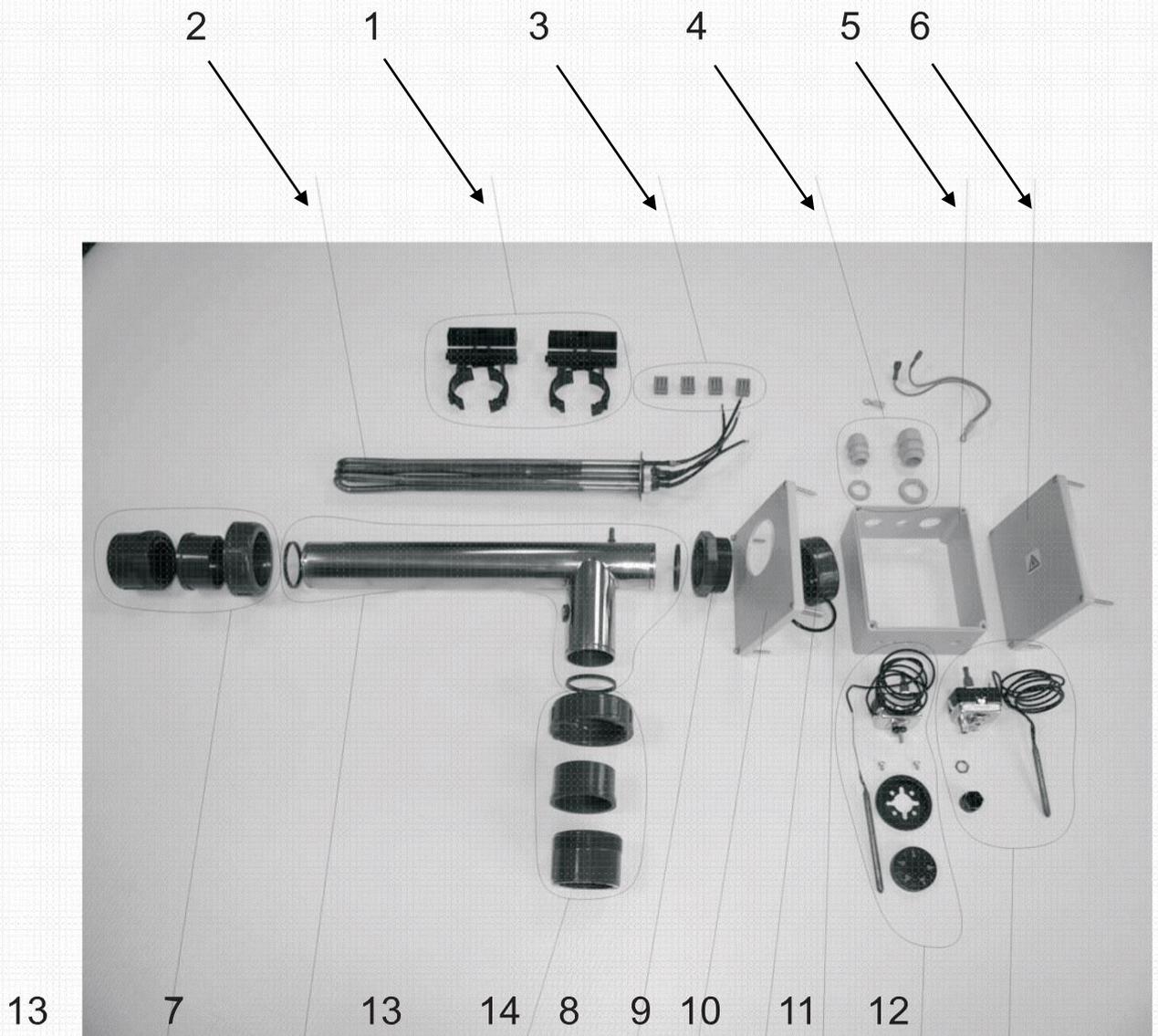


Fig. 5 – Diagram of connection and attachment of the EOV electric air heater

- EOV - electric air heater
- TT - heating element
- Q - residual-current circuit breaker
- FU - fuse
- TR - regulation thermostat
- TP - thermal fuse
- K1 - contactor



Detail	Identification	Description
1	0606940	Pipe bracket 47-50 mm
2	58090....	Cartridge heater
3	520/222413	WAGO three-pole terminal 32 A
4		PG16 and PG 11 grommet
5	580100006	Heating case – middle part
6	580100009	Heating case – solid lid
7		Stainless steel body
8	580100008	Heating case - lid D60 mm
9	0336110042	Swivel-nut
10		O – ring for swivel-nut
11		Thermostat 0-70°C complete assembly
12		Thermal fuse 75°C
13		Joint 50 mm spiral
14		Cuff with thread 2" ex