

FLOOR CONVECTORS INSTALLATION AND MAINTENANCE

Instructions for Proper Installation of floor convectors TK/08, TKV/08, TKV/08-S, TK/08-S and TKH

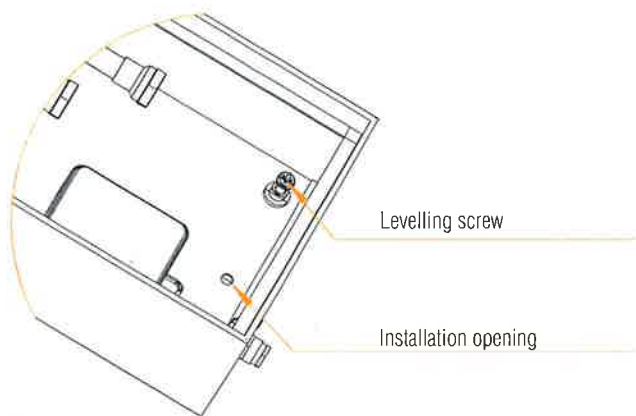


Figure 1

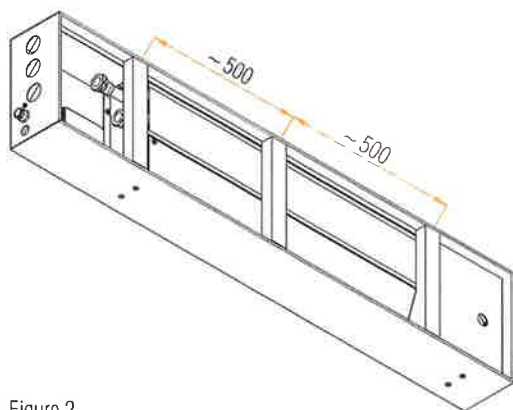


Figure 2

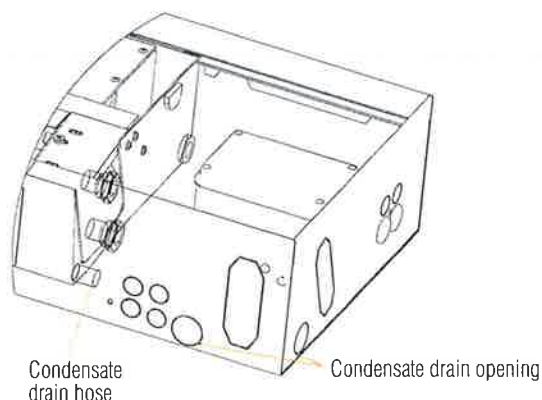


Figure 3

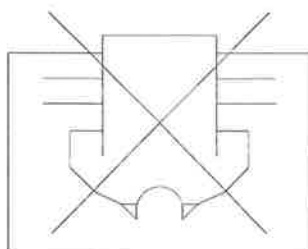


Figure 4

- Place the floor convector to prepared flat surface.
- The distance between convector and wall can be as low as possible, however, it should not exceed 400 mm. Condensation elimination on cold surfaces efficiency decreases with the distance between convector and wall. Convector should be installed in such way, that air discharge should be oriented into the room (TKH convector), or into the window (other convector types).
- In case of non flat surfaces, application of leveling screws is recommended (accessory 019). When the convector is adjusted to the correct position and lined to desired height, fix it with the screw (figure 1). Installation of thermal and noise insulation layer is recommended between the convector and concrete. Convector can be supplied with housing thermal insulation (accessory 017 - elastalon $s = 5$ mm). When the housing of the floor convector is placed directly to the concrete surface, make sure that contact is distributed along complete surface of the convector, otherwise increased noise level can apply (forced convection only). When installing in concrete, make sure to insert spacers, which serve to prevent housing deformations (figure 2). In order to prevent the grille from deformation and dirt, remove it before the installation and place protection cover (accessory 018) to its place (figure 5). Retainers are not attached to the convector. During the installation, the protective cover does not features as a retainer, but only protects the convector against impurities and damages of the internal ScanCom. Remove the cover and spacers, when convector is ready for operation. Condensate elimination is performed with $\phi 16$ mm socket on the lower side of the tray within the housing, hose can be leaded from the convector on the traverse or cross side (figure 3).
- Control accessories on the water side (01, 02, 03, 04, 05, 06) are attached to the convector upon delivery and are not installed to the heat exchanger. When connecting straight valves and shut-off cocks, nut should be counter-tightened (figure 6). When tightening angle valves and shut-off cocks, counter-torque should be applied with threaded rod (1/2" thread) (figure 7). If not, attached unit can be removed from the heat exchanger, causing damage on the teflon protected joint. It can cause water leakage in the joint. Standard valves and shut-off cocks are suitable for use with steel pipes. If copper pipes are to be used, it has to be specified upon ordering. In case of installation of accessory 05 - thermostat head with a remote surface mounted sensor, it has to be installed before applying concrete. Water tightness of the installation shall be verified as well.
- When applying concrete to the space around the convector, consider height difference for the final layer (carpet, laminate floor, ...).
- Remove the cover and spacers and cover the housing with the grille.
- Heater should not be installed directly under the power socket.
- Air flow through convector depends on the ventilation fan rotation speed, which can be controlled by the surface mounted thermostat with three-stage fan speed setting switch (MIN - MED - MAX), ON/OFF switch and HEATING/COOLING switch. Surface mounted thermostat should be mounted in the same room as the convector, on the same height as other switches. Convector should be connected to the thermostat, according to applicable Connection Diagram.

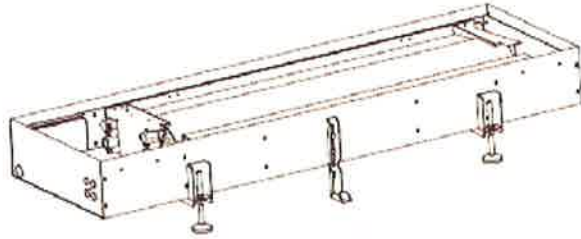


Figure 5

- In case of false floor installation, accessory 028, 029 is available (leveling and support legs). Legs are mounted in special holders, in pop nut M10. The optimal convector height is achieved by regulating the leg with a screw and finally fixing it with a spanner size 15. (Figure 5, 6). Legs can be regulated from 10 mm do 100 mm height.
- When the optimal convector position is achieved, it needs to be fixed with a screw through a fixing profile into the floor. (Figure 6a)

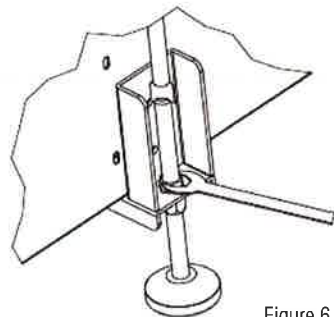
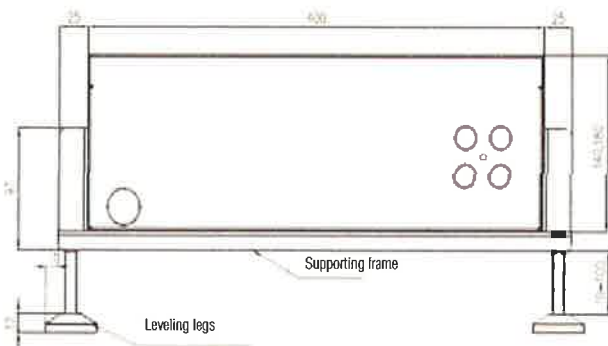


Figure 6

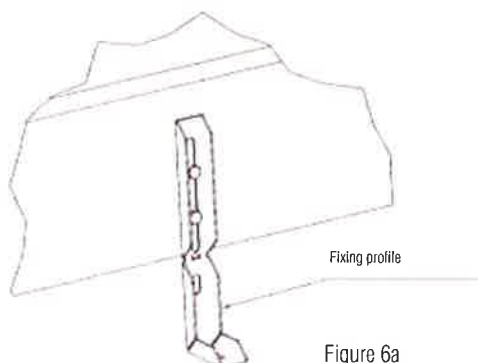


Figure 6a

Instructions for Startup and Operation:

- Make sure the convector interior is clean and dry.
- De-aerate the connected heat exchanger and inspect the piping connections for any leakage.
- Connection to electric mains shall be carried out by a qualified person.
- Check the operation of ventilation fan at all speeds.
- In case of a convector controlled by a room thermostat, set the desired temperature.
- The grille is dimensioned for normal loading, i.e. human weight. If higher loads are anticipated, the convector shall be fitted with an additional "bridge".
- During the operation, upper part of the convector (grille) shall not be covered due to possible overheating. Make sure that air flow is not disturbed (figure 4).
- Check the condensate elimination piping for any leakage (TKV/08-S, TK/08-S and TKH).

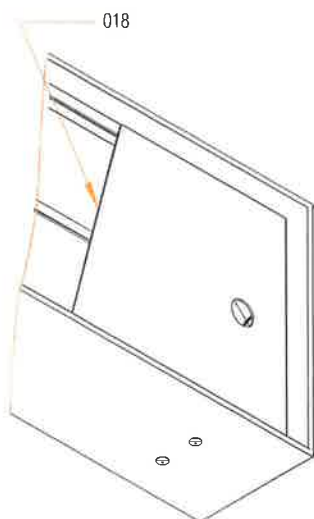


Figure 7

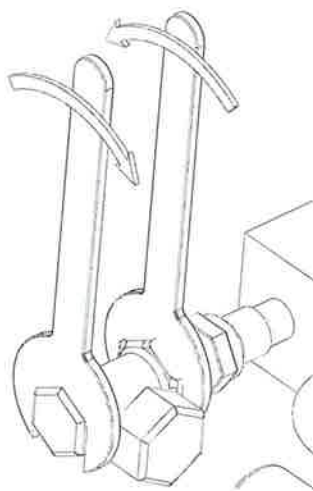


Figure 8

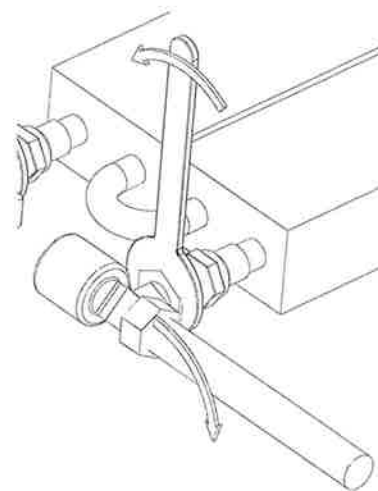


Figure 9

Warning:

- When connecting the piping, make sure not to damage soldered joints on the water heat exchanger connections.
- When connecting floor convectors in permanent installation, a device to separate all phases from the mains shall be provided, with the open contact clearance of 3 mm.
- Any intervention beyond the standard connection is considered an intervention into the device and shall only be attempted with prior approval by the manufacturer.
- In case that water, not caused by condensation enters into forced ventilation floor convector, power supply shall be switched off.
- Floor convectors (except TKV/08-S version) with the fan shall not be installed into very humid areas such as bathrooms, WC, swimming pools.

Maintenance:

- Clean the grille by means of a damp cloth and the detergent, vapor, ...
- Periodically clean the internals of the floor convector with a vacuum cleaner (length of the cleaning interval depends on dust density, - amount of dirt in the room).
- In case of very dirty internals, heat exchanger must be removed, internals cleaned, and clean the heat exchanger with the vapor (to be performed by authorized personnel only).
- Make sure, that condensate elimination hose is clean, otherwise it can cause flowing of water over the collection tray.