

The heater should not be installed close to a fan outlet or a duct elbow, as there is an associated risk of an uneven air flow over the heating coil resulting in impaired efficiency.

The heater must be installed so that the finned coil is accessible for cleaning (see also Cleaning below).

The duct heater can be installed in a horizontal or vertical duct with an optional air direction.

If a frost protection sensor is to be used, the heater must be installed so that the connection with the “arrow to the finned coil” (Fig. 1) is in the lowest position.

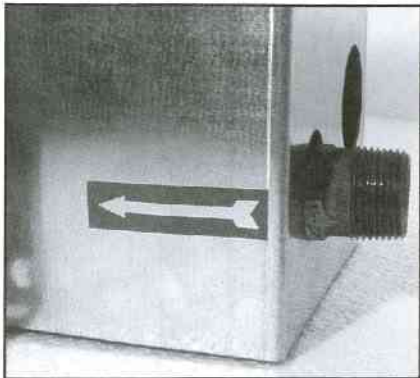


Fig. 1

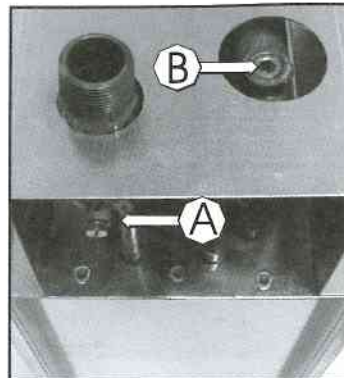


Fig. 2



Fig. 3

In the case of installation in a horizontal duct, the heating coil can be drained of water via the drain nipple (marked A in Fig. 2) if the copper pipe of the fins is installed horizontally. Horizontal installation also facilitates bleeding of the heating coil.

The heater is fixed to the duct system with screws or guide connections.

The fitment of an efficient filter in the system is recommended to reduce contamination with dirt and thus the need for maintenance (see also Cleaning below).

The duct heater should be installed after the fan unit, although it may be installed ahead of the fan unit if you first check to make sure that fan motor and other components are approved for the higher temperature after the heater.

Water connection

Attention must be paid to the following when connecting the heater to the pipe system:

1. The connecting pipes on the heater must not be exposed to torsional or bending stresses in conjunction with connection. Use a holding tool when tightening.
2. Make sure that any expansion forces in the system or the pipework's own weight do not impose a load on the heater connections.
3. The heater is provided with an outlet for a frost protection sensor, size Rp1/4, marked B in Fig. 2.
4. The water inlet must always be connected to the pipe marked “arrow to the finned coil” (Fig. 1) and the outlet to the pipe marked “arrow from the coil” (Fig. 3) if a frost protection sensor is to be used. If no frost protection sensor is to be used, the water inlet must be connected to the lowest connection pipe. The inlet is provided with a drain nipple, and the outlet has a bleed nipple, as shown in Figs. 2 and 4.
5. Immediately after filling the system with water, the duct heater and its connection must be checked for the absence of water leaks.
Any leaks may result in water damage.

Operating data:

Max. operating temperature/operating pressure 100°C/1.6 MPa or 150°C/1.0 MPa.

⚠ WARNING! The coil may burst if the water in the heating coil freezes. This will cause water to leak from the system, possibly resulting in water damage. If the risk of freezing is present, the heater must be protected by a frost protection sensor which will switch off the fans in the system, close any outdoor air dampers, open the water valve to increase the water circulation through the heating coil and, if necessary, trigger an alarm.

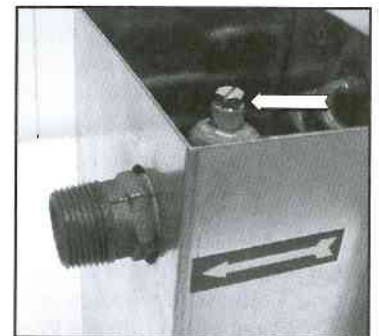


Fig. 4

CLEANING

In order to achieve the full output from the heater, the fins on the heating coil must be cleaned at regular intervals. The period between cleaning will depend entirely on the cleanliness of the air and the level of maintenance of the filter and the rest of the system.

The inlet side of the heating coil is first cleaned with a brush, after which the entire heating coil can be cleaned with compressed air, water or steam. Any dirt must be blown or washed away in a direction away from the air outlet side towards the inlet side. Cleaning will be facilitated by the use of a mild solvent (test the solvent first to ensure that it does not affect copper and aluminium).

Take care to avoid damaging the thin edges of the fins.