Tips and tricks for installing the iVector S2 fan convector

The iVector S2 fan convector is being increasingly installed in both new build and renovation projects. Its compatibility with modern condensing boilers as well as heat pumps and its many installation options turn the iVector S2 into a popular solution for future-proofing HVAC systems.

To help you work smarter and make sure that the installation of the iVector S2 fan convector goes as smoothly as possible, we are happy to share some quick tips and tricks based on frequently asked questions by our customers.

1. iVector S2 fan convector radiator & pipework

The system should be designed and installed following best practice by a qualified installer. The choice and sizing of the pipework should take into account the number and size of the units installed, and the performance characteristics of each unit. Undersized pipes can cause malfunction of the units.

2. iVector S2 fan convector connections

It should be noted that all electrical connections can be found on the right side of the fan convector and all hydronic connections on the left side, as standard.

The 230v electrical connection must be made by a qualified electrician in accordance with local and national wiring regulations. The iVector S2 fan convector must also be earthed during installation.

3. iVector S2 fan convector radiator for low flow temperatures

The iVector S2 fan convector radiator can be operated with flow temperatures ranging from 30 to maximum 80°C. However, it works most favourably in combination with a heat pump or condensing boiler at flow temperatures between 30 and 45°C. When the temperature drops below 40°C, the fan coil radiator is significantly more efficient than standard panel radiators or even fan-assisted radiators. This is due to the combination of low water content and its specially designed axial fan, which allows the fan convector to respond quickly to fluctuations in room temperature.

In heating mode we recommend a minimum supply temperature of 30°C. In cooling mode the fan coil radiator allows for a temperature range between 5°C and about 20°C, depending on the user's needs.

4. iVector S2 fan convector in heating and/or cooling mode

The iVector S2 fan convector has been designed to provide both pleasant warmth during winter and also a cool breeze in the middle of the summer. Of course users are free to choose whether to use the cooling function. In case both heating and active cooling are required, it's important to also install a condensate drain. In this case, do not forget to fit the drain with a siphon as an odour trap. If condensate-free or dry cooling is implemented, external dew point monitoring is recommended. The cooling capacity is lower in this case.

5. iVector S2 fan convector accessories

The iVector S2 fan convector is supplied including the control unit, flow and return valve. Accessories such as a remote control panel, stand consoles, covers, etc. are optionally available.

Other installation accessories such as power cables and control cables for remote control need to be provided by the installer. For the iVector S2 Auto, for example, we recommend a 230v power cord with 3 cores for Live, Neutral and Earth connection and a control cable to the fan convector. This allows for the implementation of all options (heating contact/cooling contact/release contact). It's also possible to loop both power and control

from one iVector S2 to another iVector S2. A 0-10v version is available for building management systems.

6. iVector S2 fan convector radiator in-wall or in-ceiling installation

The iVector S2 fan convector offers many installation options, including wall-recessed or ceiling-recessed installation. To easily build in the unit we recommend using the corresponding metal casing and casing cover, which are available as separate accessories. If the fan coil unit is placed against the wall, removing the front plate will make for an easier installation.

7. iVector S2 fan convector radiator controls

The iVector S2 is fitted with a control unit as standard. However, if the fan convector unit is mounted on the ceiling or recessed in the wall or ceiling, a remote control unit can be installed on the wall to ensure easy control access at all times. A 4-core serial RS485 power cable with a minimum cross-section of 0.35mm^2 must be used in this case.

For more information on the iVector S2 click here