

AIRWELL New Mini- VRF System



AIRWELL presents new Mini-VRF System High energy savings over a broad range of capacities

Paris, 15.10.2009

The brand new MVi mini VRF range belongs to the Airwell Flow Logic family. Versatile and user-friendly, featuring intelligent energy saving devices it is particularly suited for light commercial applications.

Intelligent energy saving features

Intelligent energy saving features make the MVi range one of the most energy efficient solutions in the market with a top class COP of up to 4.31 and an EER of up to 4.0.

Power shedding is only one of the MVi properties leading to the high energy efficiency. It means that the application of power from an uninterruptible power supply is controlled and reduced to a preset shedding profile. Typically, different shedding profiles can be set according to individual power outlets and applications.

The Airwell MVi power shedding device includes a dry contact in the outdoor unit control. Once this contact is shorted, the outdoor unit power level will be controlled according to a predetermined level and the system capacity will be limited. All indoor units will be affected in the same way.

Moreover, the MVi range adapts its operation to the room occupancy.

Via its "unoccupied mode", the system automatically changes the indoor set point to reduce energy consumption while keeping reasonable room temperatures. In the same line, a window dry contact shuts the unit off when the window is opened.

The MVi range is running on the non ozone depleting refrigerant R-410A known for its high volumetric efficiency and thus contributing to the energy savings of the system.

Broad capacity control

The MVi range comes with a full DC system including indoor and outdoor fan motors as well as inverter controlled compressors. The powerful variable speed compressors provide a flexible capacity range from 5.6 to 18.2 kW in heating and cooling modes and allow capacity control from 50% to 130%, according to the temperature requirements.

Flexibility and comfort

The MVi range provides great flexibility and comfort for its users.

Suitable for a broad range of operating conditions, the systems offer stable operation even at ambient temperatures down to -15°C in heating mode. Users will be able to choose from a large product range from 2.2 kW to 11.0 kW cooling/heating capacities and a great variety of 34 different indoor unit models (6 product types including cassettes, floor / ceiling units, ducted units, wall mounted units) featuring the latest state of the art design. Furthermore, different indoor unit types can be combined for even more flexibility. As up to 8 indoor units can be connected to one MVi system, the number of outdoor units and thus the space required will be greatly reduced.

Besides flexibility, users will appreciate the comfort provided by the MVi range. Different filters and ionizers but also the extremely silent operation of the units (including a night operation mode) offer increased personal comfort. The innovative “I FEEL” function further improves the user comfort as it switches the temperature sensing point from behind the intake grill of the indoor unit, where it is generally located, to the place where the user (the remote control) is physically located. The communication between the remote control and the unit is then done by infra-red signal.

All desired room air conditions can be reached quickly and efficiently due to three fan levels and an auto louver function.

Easy installation and control

Installers will appreciate the piping length of up to 175m and the possible difference in height of up to 50m between the outdoor and the indoor units providing great versatility. But not only the installation of the MVi units is easy. Airwell took also great care to simplify set up and control conditions. For example, a fully automatic addressing technology of the indoor units allows saving time and money for installers and users.

Furthermore, four different start-up modes allow setting the system according to specific customer requirements and may also contribute to energy savings. Customers who do not want to spend time adjusting their MVi system are advised to select the default start-up mode where the first indoor unit which starts operating will define the system mode. Through manual settings, the system can be forced to cool or heat via an outdoor unit user interface (a switch connected to a dry contact). The automatic start-up selection according to the outdoor temperature may contribute to energy savings. And last but not least a master indoor unit can be defined which will determine the operating mode of the full system.

MVi features are completed by its user friendly and time saving monitoring options. Via a communication bus as well as online monitoring, the complete system can be controlled permanently. Parameters can be changed if required and faults can be diagnosed and analysed without any loss of time via a PC, the outdoor unit display panel and the LWC & LWCS controller. Operational parameters can be recorded as files and visualised by means of customised graphs.

Variable Refrigerant Flow (VRF)

Airwell's FlowLogic family is based on VRF technology (Variable refrigerant Flow) which means that the refrigerant flow is adapted to the load. This leads to numerous advantages regarding installation, comfort

and energy efficiency. For example, compared to chillers, VRF systems have a modular design with reduced weight and footprint as well as smaller pipe diameters. The energy efficiency of VRF technology results among others from the use of capacity controlled compressors, where the speed is adapted to the actual load requirements. Both the environment and the end user benefit from this advantage as emissions and the electricity bill are reduced.

**About
Airwell Group**

The Airwell Group has 5 production sites world wide, some 2,000 employees and is represented in over 100 countries through more than 180 sales agencies. In 2008, the company achieved a turnover of more than 519 million US\$, more than half of it in Europe. The Airwell Group is one of the leading companies in the field of air conditioning, with headquarters in Guyancourt, close to Paris. The most important brands in the company portfolio are AIRWELL, ELECTRA, FEDDERS and WESPER.

Further information

Airwell Group
Bernd Oehlerking
Vice President Marketing & Communication
Tel.: +33 (0) 1 3944 7849
eMail: boehlerking@airwell.com

Press contact:

Press contact:
AMV Communication
Tel: +33 386 41 19 46
eMail : secretariat@amv-communication.com