

VRF connection with an air handling unit

AHU CONNECTION KIT

Airwell offers a range of connection kits, to connect VRF outdoor units to an air handling units, alone or with indoor units.

SYSTEM APPLICATION

- ▶ Offer a solution for large spaces by combining the advantages of VRF with those of central air handling units.
- ▶ **Meet the standards of European law:** The minimum fresh air renewal is 25 m³/h of air per person. So this means that every office, every store and the majority of commercial buildings must be equipped with an AHU to meet the standard. With our AHU kit solution you will meet this requirement and at the same time guarantee a high energy efficiency for heating and cooling production.

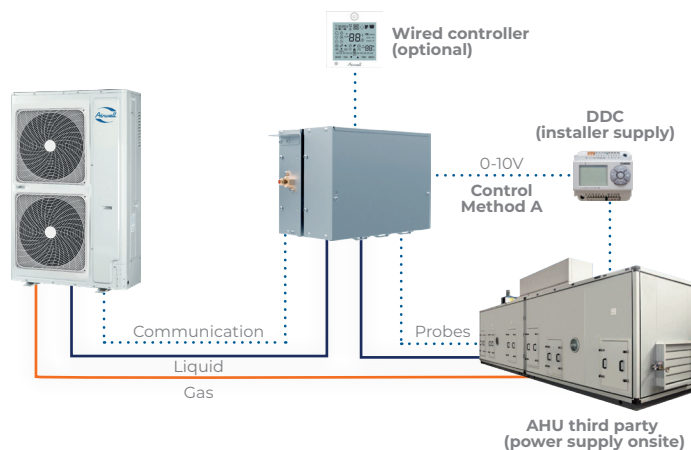
+ PRODUCT

- Allows the combination of air handling units (AHUs) with the VRF system.
- Compatible with VVFA and VVTA systems (from 4 to 104 HP).
- Five sizes available from 3.5 to 73 kW (1-26 HP).
- The kit includes the regulation part and the EEV part (the regulation part can be remote up to 5 m).
- Possibility of regulation by 0-10V signal from the DDC controller (supplied by the installer).
- Connect up to 4 AHU kits per DRV system for higher battery capacity or to power 4 different AHUs.
- Status outputs available for defrost, alarm, mode, On/Off and compressor status.
- Air handling unit fan control possible from the kit (On/Off and 3 speeds) via 230V outputs to be relayed.

4 CONTROL MODES AVAILABLE

CONTROL MODE A

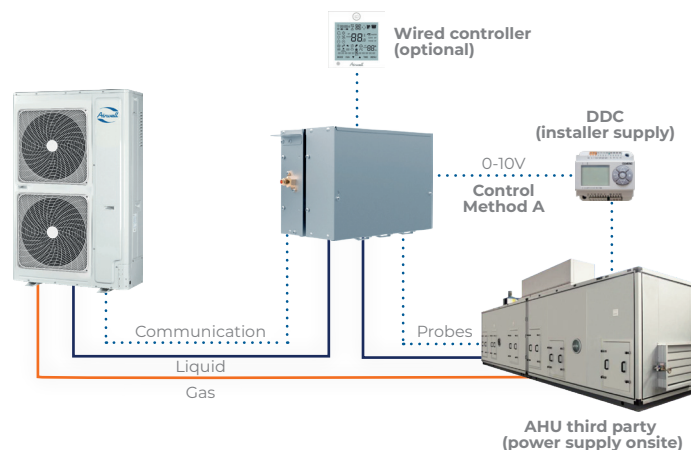
- > DDC 0-10V signal output.
- > The AHU kit receives a 0-10V signal to adjust the capacity of the ODU.



Note: The wired remote control is optional. If the DDC can provide the 0-10V signal, on/off, mode and fan speed via dry contacts to the AHU kit, it is not necessary to connect the wired remote control. Otherwise, the wired remote control is required.

CONTROL MODE B

- > Control temperature via DDC.
- > DDC 0-10V signal output.
- > The AHU kit receives a 0-10V signal to adjust the setpoint temperature.



Note: The wired remote control is optional. If the DDC can provide the 0-10V signal, on/off, mode and fan speed via dry contacts to the AHU kit, it is not necessary to connect the wired remote control. Otherwise, the wired remote control is required.



Buildings



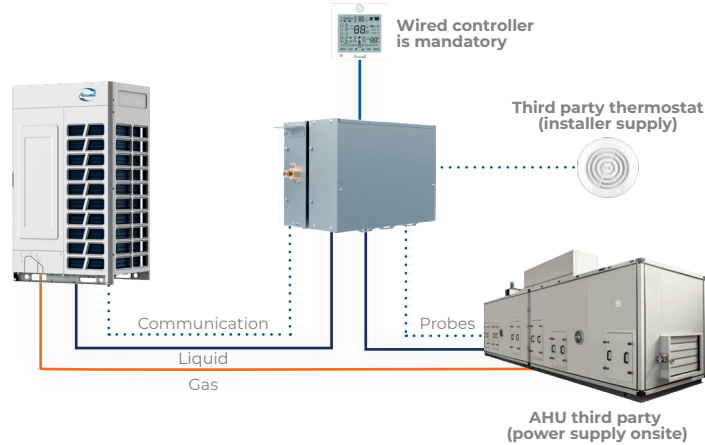
Shopping center



Hospital

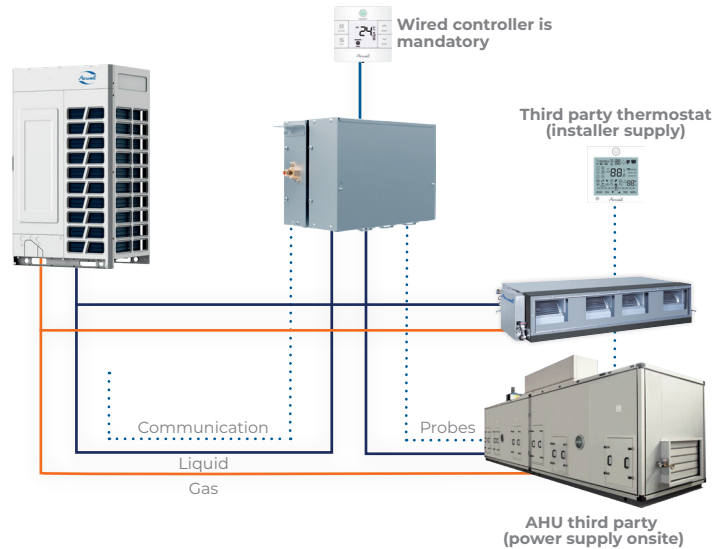
CONTROL MODE C (special application)

- > Without DDC.
- > The wired controller is necessary for the selection of the mode and the speed of ventilation but not necessary for the regulation.
- > The third-party thermostat provides the On/Off signal to the AHU kit when the set temperature is reached.
- > Applicable for some cases with constant cooling or heating demand and low comfort requirements.



CONTROL MODE D

- > Similar to the original AHU V1.0 kit.
- > Control AHU as VRF indoor units with the wired remote control.
- > Return/room temperature control.
- > Wired controller is required.
- > Control method for combination of VRF indoor units and AHU system.



AHU KITS

MODEL	DESIGNATION	PART NUMBER
AHU kit 7	• AHU kit <7 kW	7ACELH033
AHU kit 14	• AHU kit 7 kW to 14 kW	7ACELH034
AHU kit 28	• AHU kit 14 kW to 28 kW	7ACELH035
AHU kit 56	• AHU kit 28 kW to 56 kW	7ACELH036
AHU kit 73	• AHU kit 56 kW to 73 kW	7ACELH037