

HVAC Environment (Heating & Cooling)

545 is equipped with the latest Daikin VRV IV Heat Recovery climate management equipment that maximises comfort and control whilst delivering significant energy efficiencies.

VRV IV Heat Recovery Technology

The VRV IV Heat Recovery system is Daikin's answer to the next generation of HVAC technology providing:

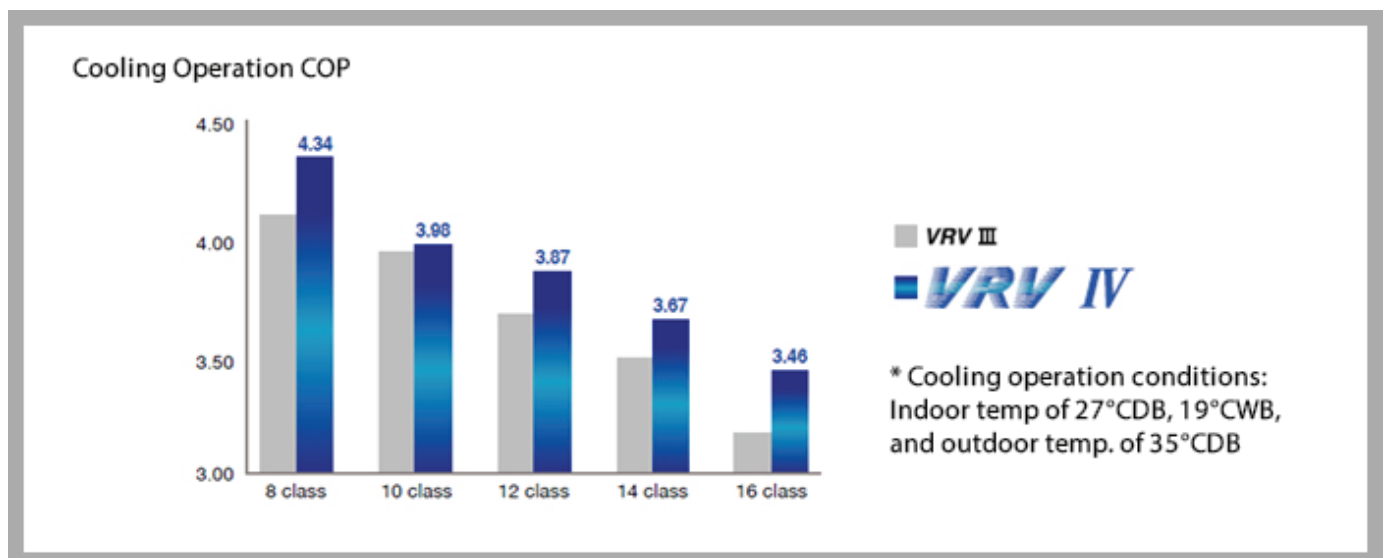
- One unit is able to **simultaneously heat and cool** different parts of the office
- A **Heat Recovery Link (HRL)** allows for precise and integrated capacity management between each control element providing lower power input and, improved heat recovery performance
- **Heat Recovery Technology with Branch Selectors** allows waste heat from one area to be redirected to another that requires heating
- An **Advanced Variable Refrigerant Volume** system automatically adjusts refrigerant temperatures to meet the changing building load, which provides even greater energy savings, comfort and ease of installation.



The VRV IV has made significant improvements from its predecessors in the area's of energy efficiency, responsive climate control and monitoring systems, thereby enabling property managers to better administer the operations of the air-conditioning systems. Daikin's VRV IV delivers high COP thanks to innovative features such as VRT, advanced J series compact inverter compressor and improved streamline airflow design.

Variable Refrigerant Technology

Daikin's VRV IV now features Variable Refrigerant Temperature technology (VRT), a state of the art energy saving technology that automatically adjusts the refrigerant temperature as the building load varies to maintain optimum comfort conditions whilst keeping operational costs low.



HVAC Environment (Heating & Cooling) Cont'

VRV IV Heat Recovery Features - Roof

- VRV IV Heat Recovery units allow **simultaneous cooling and heating** from one system
- **Refrigerant Cooled PCB** to ensure reliability, stability and longevity under the harsh summer heat
- Integrated with the **ATOM BMS software** from Inno-tech allowing centralised Touch Control of the buildings Heating & Cooling needs
- Each VRV IV HR unit at 545 has been configured to work with only 6 indoor units (Although 64 are allowed)
- Continuous operation -5 to 43°C Dry Bulb in cooling mode and -20 to 15.5°C Wet Bulb in heating mode
- High External Static Pressure (ESP) of 78.4Pa on condenser fans
- Daikin's optimized large capacity inverter scroll compressor designed specifically for R-410A is compact, quiet and highly efficient
- Daikin's new compressor utilizes a 6 pole motor instead of a 4 pole motor with 50% more neodymium magnets to improve efficiency and reliability
- Daikin's system management and oil-equalizing technology ensures maximum reliability and design flexibility of the system, with piping runs of a total networked length of up to 1,000m.
- Low operation noise, a result of efficient heat exchanger design, streamlined air grille and re-designed scroll condenser fans
- Anticorrosion treatment applied on exterior metal casing and heat exchanger
- Compatible with a wide variety of Daikin Indoor In Ceiling distribution Units

Indoor VRV Fan Coil Units - Ceiling

- Up to **18 individual ceiling mounted fan coil units** are installed on each large floor plate
- **Branch Selector Units** are configured to allow simultaneous heating & cooling from the same VRV IV unit
- **High Static Pressure** ceiling units provide generous and flexible ducting configurations
- New **HI-X Heat exchanger coil technology** provides additional energy savings
- Each unit has a powered plumbed drain pump
- Low operation noise with reduced DBA output
- Connection to the BMS for automatic fault reporting and energy measurement

<http://commercial.daikin.com.au/product-solutions/vrv/vrv-iv-heat-recovery>

<http://commercial.daikin.com.au/product-solutions/indoor-units>