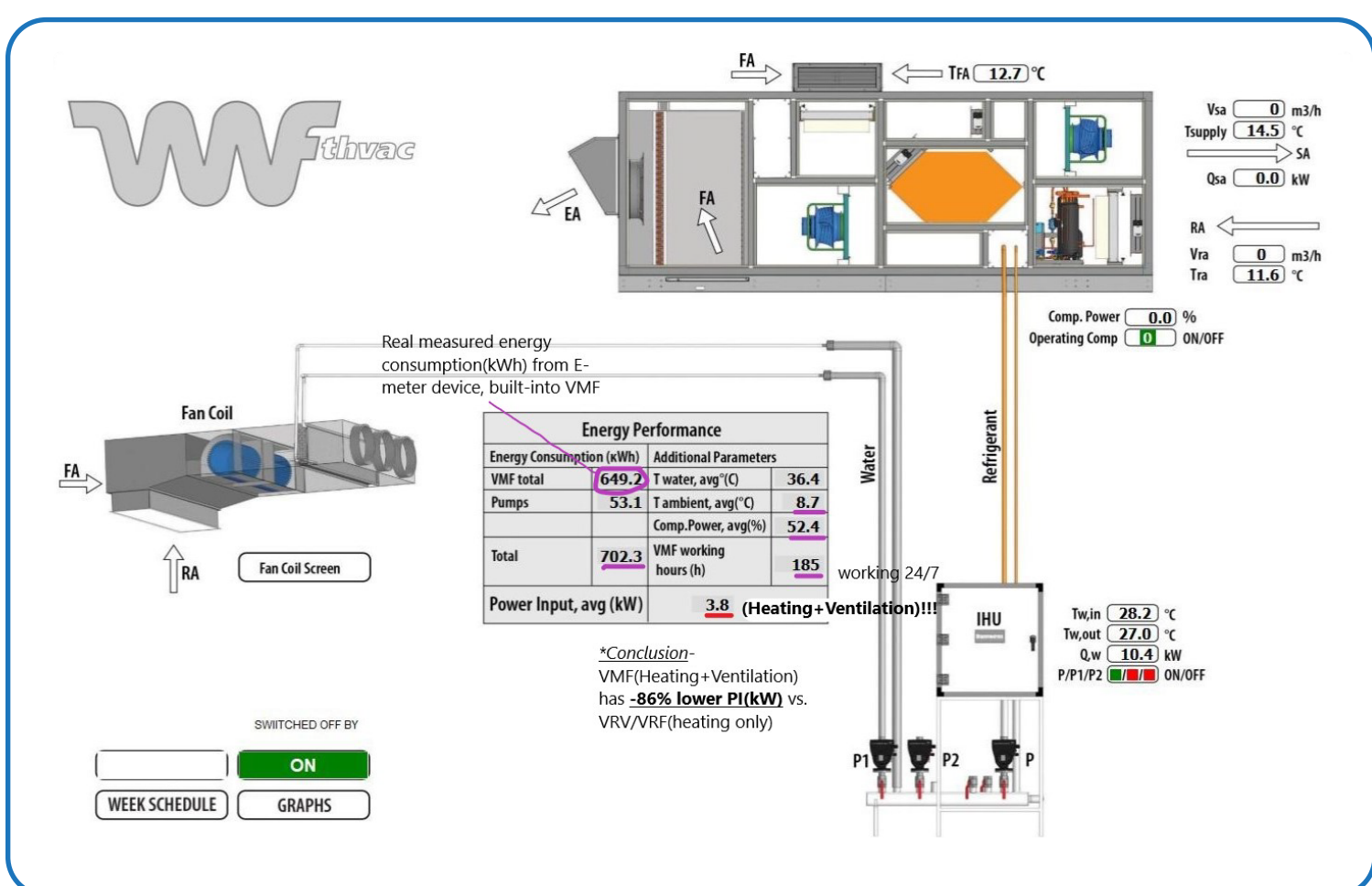




THE DAMVENT VMF SOLUTION PROVES SUBSTANTIAL SAVINGS VERSUS VRF SYSTEMS

THE BUILDING DETAILS FOR COMPARISON:

400M2 with 8 rooms and a cooling load of 120w per sq/m. Room setpoint of 24C with an external average temperature of 34C. In Heating Mode Room setpoint 22C with an external average temperature of 9C.



This graphic from the integrated Energy Management System highlights the unique features and benefits of the Damvent VMF in comparison to VRF systems, showcasing how it can save money and improve air quality.

In Cooling Mode

In operation the Damvent VMF with radiant heating/cooling panels have been operating for 72h non-stop, providing **simultaneous cooling and ventilation** to the building with a **Power Consumption of 7,9kW** for the period of testing

In comparison a Daikin RYYQ20T outdoor unit (56/63kW) operating at similar operating conditions: with a room setpoint of 24oC, external average temperature of 29C at a Capacity of 65% in cooling only mode with Power Consumption of **13,2kW**. That's without the additional consumption of an Air Handling unit

That's a 67% saving vs the VRF unit

In Heating Mode

Savings of **86%** vs the same equivalent Daikin VRF model with an outdoor average temperature of 9C, indoor setpoint of 22C at a **Capacity of 50%**

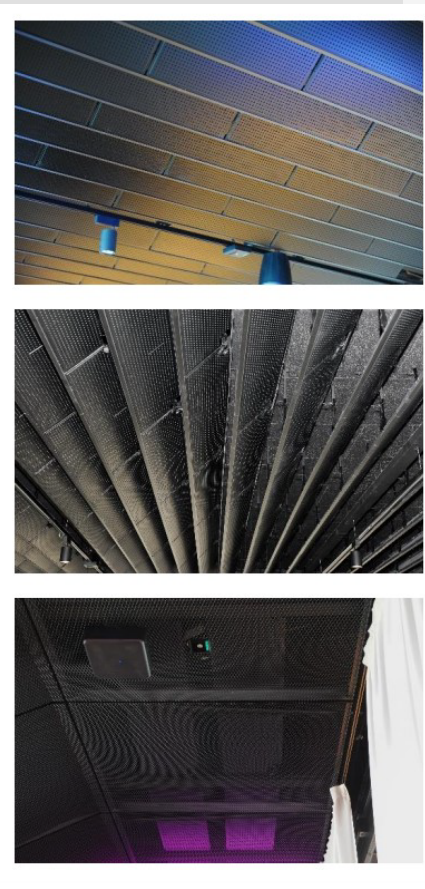
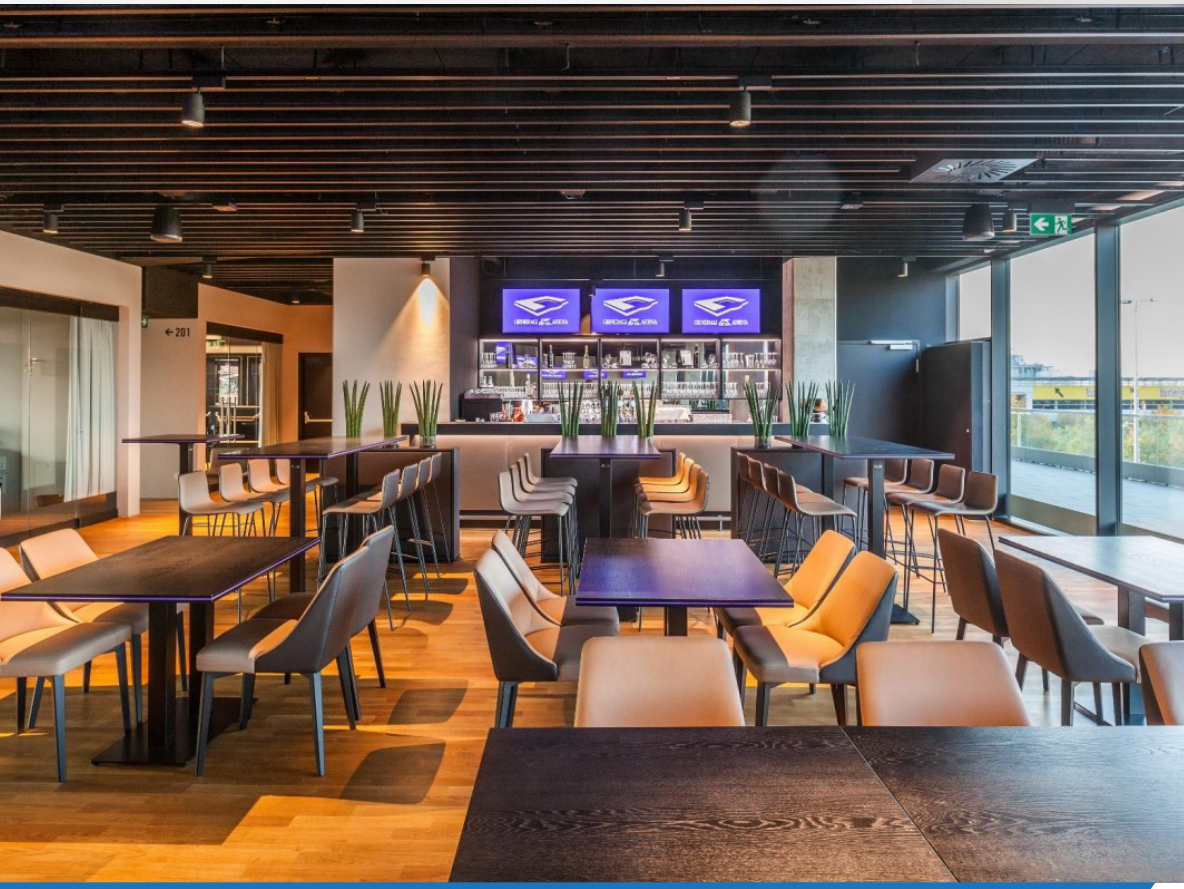
ENERGY CONSUMPTION

Conclusion

The Damvent VMF providing simultaneous cooling and ventilation to the building has **67%** lower power consumption vs a VRF (Daikin RYYQ20T

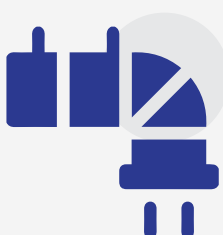
86% (56/63kW) in cooling only mode and **86%** Saving in Heating Mode.

The single Damvent VMF packaged unit is available in 2 sizes, with a maximum capacity of 60Kw at reference conditions (+7/+35oC)



THE EQUIPMENT COST SAVINGS

The Damvent VMF equipment cost savings vs an equivalent Daikin 56-63Kw unit is around **15%** less, and there is no need to buy a separate Air Handling unit as its part of the VMF package



With only one unit to install, all that's needed is power and ductwork to connect the unit up a, there will be substantial installation savings of approximately 15% .

Any make of equivalent VRF will require more installation labour, materials and refrigerant pipework as well as separate Air Handling unit.



INSTALLATION SAVINGS



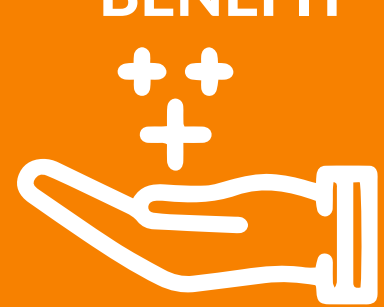
BMS/CONTROL SYSTEM SAVINGS



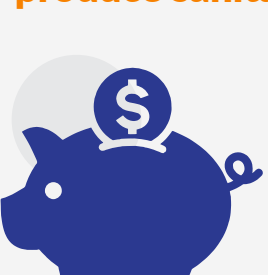
The VMF also removes the need for a BMS or separate control system, due to the integrated Energy Management/Monitoring system when compared to all current well known VRV/VRF systems + removes the AHU's needed for fresh air.

As standard VMF is equipped with Energy Meter for measuring and recording the Total Energy Consumption (kWh) gateway for remote access and monitoring from every point of the world.

ADDITIONAL BENEFIT



One huge benefit that **cannot be achieved with a VRF** is the Damvent VMF's ability to also **produce sanitary hot water**.



With Hot Water production from the VMF unit, means that a boiler or hot water heater will no longer be needed. This makes additional financial savings.