System Diagnostics vs Full VRF Health Check

A standard diagnostic call-out is typically arranged when a fault or performance concern has been reported. During this visit, the engineer will investigate the system using practical checks and basic testing procedures, running the unit and assessing its operation to identify the likely cause of the issue. This includes reviewing controls, checking key components and carrying out visual and functional inspections to all accessible parts of the system. Diagnostic visits are suitable for most single and multi-split systems and are intended to locate faults efficiently so that appropriate repairs can be recommended.

A full VRF/VRV health check is a more comprehensive assessment designed for larger, complex systems and ongoing preventative maintenance. This process uses specialist manufacturer-approved service checker equipment and requires engineers with advanced training in both operating the diagnostic tools and interpreting the performance data they provide. The equipment connects directly to the system and examines all operational functions in real time, allowing a detailed review of performance, efficiency and overall system condition.

Our VRF health check includes:

- Full assessment of system performance in heating and cooling modes
- Inspection of indoor and outdoor units for correct operation
- Review of system controls, communications and fault history
- Refrigerant pressure checks and leak assessment
- Electrical safety inspection of wiring and components
- Airflow, filtration and condensate drainage checks *where accessible
- Inspection of pipework, insulation and mechanical condition *where accessible
- Efficiency and operational review to identify energy-saving opportunities
- Verification of compliance with current regulations where applicable

Using manufacturer diagnostic software, we are also able to monitor real-time operational data such as thermistor temperatures, pressure readings, compressor inverter frequency, actuator and valve status, indoor unit operation and system control modes. The system can detect active and historical fault codes, analyse refrigerant flow through measurements such as superheat and subcooling, map connected indoor and outdoor units, and record performance data for trend analysis over time. This level of testing helps identify developing issues that may not be visible during a standard diagnostic inspection.

Following the visit, you will receive a detailed condition report outlining any faults or concerns identified, recommended repairs or improvements, preventative maintenance advice, and guidance on system efficiency and reliability. A full VRF health check helps to minimise unexpected breakdowns, improve system performance, extend equipment lifespan and support more efficient day-to-day operation. This is exclusively on the air-conditioning systems and does NOT include BMS.

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