



New for  
2025

# AquiTron MSR range of fixed gas alarm systems for HVAC-R plant

Refrigerant gas leak detection



**aquilar**  
leak detection solutions

# Gas alarm systems developed for sustainable protection

AquiTron AT-MSR sensors are designed for detecting refrigerant leaks in refrigeration and air conditioning systems across commercial and industrial environments. Since refrigerants are often highly toxic and environmentally harmful, preventing unintended leaks is essential for both safety and environmental protection.

The AquiTron range of sensors and alarm panels is designed to help users comply with the European Standard BS EN 378. These gas detection systems provide reliable monitoring for gas leaks, offering protection for both individuals and refrigeration systems.

## AT-MSR product range



### Features: AT-MSC-230

- 1 to 3 sensors
- Digital display
- Audible and visual alarm
- Volt free and modbus interface



### Features: AT-MC/SC

- Sensor for all refrigerant gases
- IP65 enclosure
- Duct mount kit available



### Features: AT-DGC

- 1 to 96 sensors
- Digital display
- Audible and visual alarm
- Volt free and modbus interface
- BacNet option

## The threat

Large buildings with varying heating and cooling requirements need large plant equipment. This is typically located within chiller, HVAC or plant rooms. Failure or faults of this equipment can cause significant loss of refrigerant charge which may go unnoticed. Small leaks can make the whole system inefficient and more expensive to operate but also pose a health risk to occupants as refrigerant gas depletes oxygen and, in some cases, can cause suffocation.

## The solution

Installing a fixed point refrigerant gas leak detection system will monitor for potential leaks and can give audible/visual

alarm as well as the ability to connect to a BMS if available.

Sensors are positioned close to primary sources of potential leaks – for example near fan coil units, pipework joints, compressor compartments of chillers or the base of pipework risers.

## Safety first

The AquiTron MSR range provides extended safety and complies with more than the global standards.

The AT-MSR sensor for refrigerant gas targets a range of commonly used refrigerants such as A1 gas (R410A), A2L gas (R32) or A3 hydrocarbons (like propane R290).

# AquiTron AT-MSR applications

Key locations and applications where monitoring of refrigerant gas leaks is essential.

Refrigerant gas used in all refrigeration, air conditioning and heat pump equipment can be found in virtually all types of commercial buildings (including hospitals, office buildings, data centres, schools, universities and residential buildings) to regulate temperatures and keep mechanical and electrical equipment running properly.

Single or multiple sensor systems, depending on the room size, can be installed in the areas shown below to provide protection for occupants.

Monitoring of gas leaks is essential to provide protection for occupants

**Refrigeration and air conditioning plant rooms**



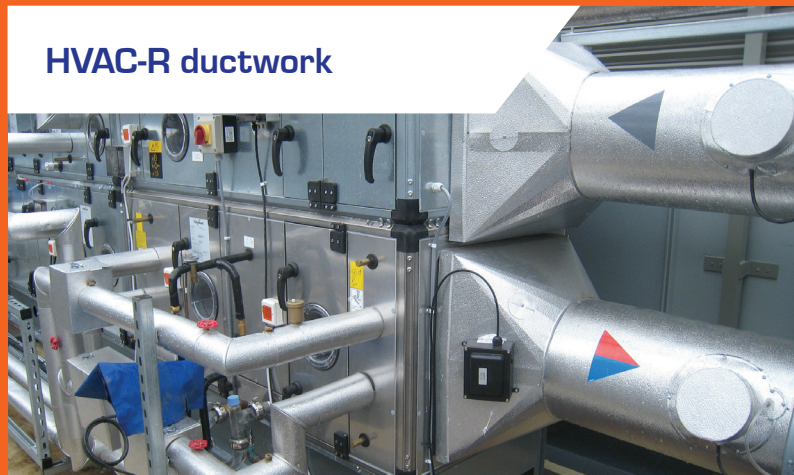
**Chiller plant rooms**



**Air handling unit plant rooms and voids**



**HVAC-R ductwork**



**Heat pump equipment and plant rooms**



**Cold rooms, walk-in freezers, cold storage**



# It's all about compliance – achieve the standards

## Install a fixed leak detection sensor

Leak Detection sensors and systems are required by many standards and regulations to protect both people and the environment from the harmful effects of leaking refrigerant gas.

As well as ensuring safe and reliable operation of your HVAC-R system, Aquitrón AT-MSR sensors can contribute towards compliance of the following standards:

### bsi.

#### **BS EN 378: 2016 Refrigerant Safety Compliance**

This is a standard that sets out the safety and environmental requirements of refrigerating systems and heat pumps with an aim to minimise the risk of hazards to people and the environment, minimise product failures and enhance overall operational efficiency of the system.

A critical part of this is refrigerant leak detection and the installation of a system to protect people in occupied spaces.

### BREEAM®

#### **BREEAM Pol 01: Impact of Refrigerants**

This is the leading and most widely used environmental assessment method for buildings.

When a refrigerant gas leak detection system is installed, one credit is available when using Aquitrón AT-MSR sensors.

### f-gas

Under **F-Gas** rules, refrigeration, air conditioning and heat pump systems require mandatory leak test checks.

The frequency of these checks can be reduced based on system/charge size and whether a fixed leak detection system is installed.

Larger systems containing more than 500 tonnes of CO2 equivalent of HFC refrigerant must be fitted with a fixed leak detection system.

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## Can We Help You?

If you have a project that Aquilar can assist with,  
please call us on 01403 216100