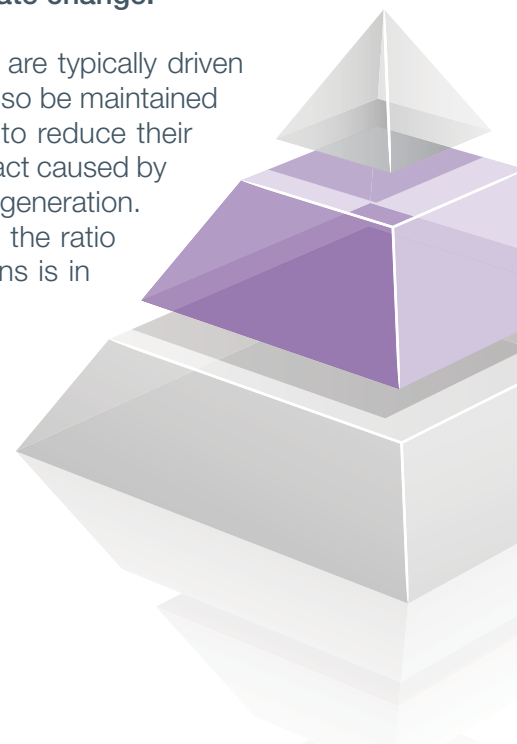




Containing, Preventing and Reducing F gas Emissions

Air conditioning systems such as VRF/VRV and DX split type units all use fluorinated refrigerant gases as a medium to heat and cool. Fluorinated gases have a high global warming effect if released into the atmosphere. The principal objective of the EC Regulation on F gas therefore is to contain, prevent and thereby reduce emissions of F gases covered by the Kyoto Protocol, so as to help combat their direct contribution to climate change.

As air conditioning systems are typically driven using electricity they must also be maintained to run with peak efficiency to reduce their indirect global warming impact caused by CO₂ emissions from power generation. For our industry as a whole the ratio of direct to indirect emissions is in the order of 15%:85%.





Air Conditioning Inspections

Any air conditioning systems with an effective rated output of more than 12kW must be regularly inspected by an approved Energy Assessor as part of the F gas Regulations. It is the owner's responsibility to organise this inspection within the first 5 years after installation and then a maximum of 5 years between inspections.

The approved Energy Assessor will examine the refrigeration (heat pump systems) and air movement, (ventilation and fans) that are installed as part of the air conditioning system. This will also include any controls associated with these systems.

All documentation and schematics of a system may be inspected to help understand how the system has been designed

The inspector may also look at any maintenance logs associated with the equipment

Access to all equipment must be available and arranged safely by the Building Manager

For further information on the F gas and Ozone Regulations visit www.defra.gov.uk/fgas

There are obligations in the F gas Regulation and the Ozone Regulation that affect many industry sectors. In some cases the obligations lie with the owner/operator of the equipment. In other situations the obligations lie with third parties, such as equipment suppliers, maintenance contractors and waste handling companies, particularly relating to the use of appropriately qualified personnel and certification of companies.

Users of air conditioning systems have numerous obligations to prevent leakage of F gas refrigerants for any system containing 3kg or more of refrigerant. This would typically refer to any split system of 12kW or above.

Air conditioning systems using Hydro-chlorofluorocarbons (HCFC) refrigerants such as R22 are already restricted by an imminent ban, although recycled R22 can currently be used today. By the end of 2014 this practice will be illegal, making all R22 equipment unserviceable.

It is now a criminal offence to install, maintain or service stationary refrigeration, air conditioning or heat pump equipment containing, or designed to contain, F gas refrigerants without a Company F gas certificate. To obtain a full company certificate, businesses must:

- Employ sufficient numbers of personnel holding a full qualification to cover expected volume of in-scope activities
- Have the necessary tools and procedures for the personnel to carry out the in-scope activities that require certification

Since 4 July 2011 any installing contractor or maintenance company that does not hold a full F gas Certificate or holds an interim F gas Certificate must apply (or in the case of an interim certificate, upgrade) for a Stationary Equipment Qualification Company Certificate (Full Certificate) without delay.

In the United Kingdom, the person having control of the equipment containing the F gas refrigerant (the operator), typically a company, is likely to have responsibility for the compliance. Also, any business employing personnel involved in refrigerant handling must ensure that they have the appropriate qualifications.

It's important to check that all contractors and maintenance companies that your company employs do carry this certificate. If not, YOU are liable as the user, should you be faced with a check from the Environment Agency or your Local Authority.



Telephone: 0870 3000 070
email: mitsubishicorporatesolutions@meuk.mee.com
web: www.mitsubishielectric.co.uk

UNITED KINGDOM Mitsubishi Electric Europe Living Environmental Systems Division
Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, England General Enquiries Telephone: 01707 282880



www.greengateway.mitsubishielectric.co.uk
Mitsubishi Electric's commitment to the environment

