

EU F-Gas Regulation Guidance

Information Sheet 22: Training and Certification Requirements for Mobile Air-Conditioning Systems

Target audience for this Information Sheet

This Information Sheet is aimed at individuals and organisations that carry out F-Gas handling operations related to mobile air-conditioning (MAC).

1. Background

This guidance is for organisations affected by the 2014 EU F-Gas Regulation (517/2014). The F-Gas Regulation creates controls on the use and emissions of fluorinated greenhouse gases (F-Gases) including HFCs, PFCs and SF₆. The 2014 EU F-Gas Regulation replaces the 2006 Regulation, strengthening all of the 2006 requirements and introducing a number of important new measures.

Training and certification is an important feature of the F-Gas Regulation as it ensures that technicians understand how to minimise emissions during installation, maintenance and at end-of-life of equipment containing F-Gases.

This Information Sheet describes the requirements that apply to training and certification related to:

- Mobile air-conditioning (MAC) using HFC refrigerants

Please note that the requirements for MAC systems are not the same as those that apply to stationary refrigeration, air-conditioning and heat pump systems and to refrigerated trucks and trailers). See Information Sheet 21 for the relevant training requirements.

Further guidance is available – see Information Sheet 30 for a full list and a glossary of terms.

Training and Certification Requirements for EU F-Gas Regulation

Personnel training and attestation for F-Gas handlers is required for:

- ✓ Mobile air-conditioning systems in cars and light vans

Important note: training and attestation requirements in the 2014 F-Gas Regulation are based largely on the existing requirements in the 2006 Regulation. Existing qualifications remain valid.

2. Types of MAC System

Mobile air-conditioning systems fall into 2 groups:

- a) Vehicles covered by the EU MAC Directive 40/2006. This includes to motor vehicles of categories M1 and N1 as defined in Annex II of Directive 70/156/EEC. These categories include cars and light vans.
- b) MAC in all other vehicles including lorries, buses and trains.

3. Personnel Training – General Requirements for MAC

Activities covered by personnel training requirements

Personnel involved in recovery of F-Gases from MAC equipment require appropriate training. Recovery of refrigerant may be required during maintenance of MAC systems (e.g. prior to replacing a component such as the compressor) or at end-of-life of the MAC system.

Types of training required

For MACs in vehicles covered by the MAC Directive there are detailed requirements of the required training and attestation – see Section 4 below.

For MACs in other vehicles, the Regulation states “*F-Gas recovery shall be carried out by appropriately qualified natural persons*”. Currently no further details are provided. Until the European Commission define further requirements it is reasonable to assume that appropriate training is either that required for vehicles covered by the MAC Directive or the more comprehensive requirements for stationary refrigeration and air-conditioning systems (see Information Sheet 21).

Validity of existing personnel certificates

Existing certificates issued in accordance with the 2006 EU F-Gas Regulation remain valid, in accordance with the conditions under which they were originally issued.

4. Personnel Training and Certification – Specific Requirements for MAC

For MACs in vehicles covered by the MAC Directive, the detailed scope of training is defined in a European Commission Regulation published to support the 2006 F-Gas Regulation. This Regulation is still valid. The relevant training Regulation is:

- Regulation EC/307/2008 Mobile air-conditioning

Scope of personnel training

The MAC qualifications under EC/307/2008 must cover the following areas:

- Operation of MAC systems containing F gas refrigerants,
- Environmental impact of F gas refrigerants,
- Environmental regulations,
- Refrigerant recovery.

Who should hold a personnel training certificate?

All technicians that carry out F-Gas recovery in vehicles within the scope of the MAC Directive must hold an F-Gas handling attestation based on EC/307/2008. This requirement applies both to in-house staff and to personnel employed by external contractors and service companies.

An appropriate qualification for personnel working on these systems can only be awarded by an approved certification and evaluation body. These are bodies that have been approved by the UK Government, as detailed in GB Statutory Instrument 261/2009¹.

UK Personnel Attestation Bodies for MAC

Qualifications that meet the minimum requirements defined by the EC F gas Regulation have been developed and are available from the following three awarding bodies:

- City and Guilds of London Institute,
- Institute of the Motor Industry (IMI),
- The Institute of Road Transport Engineers (Irtec) – no qualifications available.

At the time of writing the MAC qualifications in GB that meet the minimum requirements of EC/307/2008 are shown in Table 1. Holders of any of the air conditioning qualifications detailed in Table 1 are deemed holders of a valid certificate for the purposes of the EC F gas Regulation and Commission Regulation 307/2008.

Personnel can also have a European qualification recognised under the mutual recognition provisions.

5. Other Related Information

NEW Purchase of F-Gases

The F-Gas Regulation states that:

“Bulk supplies of F-Gases shall only be sold to and purchased by undertakings that hold the relevant certificates or attestations”

Companies selling F-Gases will need to screen their customers to ensure compliance with this requirement. In most cases the required proof is a Company Certificate, however this requirement does not apply to those working on MAC equipment, see Information Sheet 19 for further details about customer screening.

Exemption from Personnel Certification

Trainee personnel are exempt for up to 1 year, but they must work under the supervision of certificated personnel and must be enrolled on a relevant training course.

What is the status of a non-UK personnel qualification?

The EC F-Gas Regulation requires that Member States give mutual recognition to certification of suitable qualifications from other EU countries. This will apply to certificates that meet the minimum requirements specified in Commission Regulation EC/307/2008. The European Commission has published a list of qualifications that meet the minimum requirements.

¹ Note, this Statutory Instrument is being replaced, although it is still in force in the first quarter of 2015. A new SI will replace it during 2015; it is not expected that the list of approved bodies will change.

Table 1: Details of Certification and Evaluation Bodies and Valid Qualifications

Certification and Evaluation Body	Contact Details	Qualification
City and Guilds of London Institute 1 Giltspur Street, London, EC1A 9DD	Graham Goodwin T: 0207 294 2800 E: automotive@cityandguilds.com W: www.cityandguilds.com	<ul style="list-style-type: none"> ◆ 7543-01 Level 3 Award in Basic Mobile Air Conditioning Systems (QCF) (Qual Ref: 500/3336/0) ◆ 7543-001 Handle Refrigerants (Unit Ref: R/501/2950). This unit can be taken separately or as part of the 7543-01 Award above ◆ 5101-04 Level 3 Certificate in Mobile Air Conditioning Systems (NQF) (Qual Ref: 500/1445/6) – <i>no longer offered</i> ◆ 5101-301 Refrigerant Handling for Servicing Mobile A/C Systems (Qual Ref: 500/1445/6) – <i>no longer offered</i>
Institute of the Motor Industry (IMI) Fanshaws, Brickendon, Hertford, SG13 8PQ	T: 01992 511521 E: awardingenquiries@theimi.org.uk W: www.theimi.org.uk	<ul style="list-style-type: none"> ◆ IMI Accreditation Air Conditioning Refrigerant Handler (Qual Ref: IMIA-AC08-1) ◆ IMI Accreditation Air Conditioning - Service Technician (Qual Ref: IMIA-AC08-2) ◆ IMI Accreditation Air Conditioning - Diagnostic Technician (Qual Ref: IMIA-AC08-3) ◆ IMI Level 3 Award in Automotive Refrigerant Handling (EC842-2006) (QCF) (Qual Ref: 500/6771/0) ◆ IMI Level 3 Diploma in Vehicle Accident Repair Mechanical, Electrical and Trim (MET) Competence (QCF) (Qual Ref: 500/9679/5) ◆ IMI Level 3 Diploma in Vehicle Accident Repair - Mechanical, Electrical and Trim (MET) Principles (QCF) (Qual Ref: 500/9681/3) ◆ IMI Level 3 Award In Cargo Refrigerant Handling (EC842-2006) (QCF) (Qual Ref: 600/1954/2) ◆ IMI Level 3 Award in Automotive Air Conditioning Servicing and Maintenance (EC842-2006) (QCF) (Qual Ref: 600/4331/3) ◆ IMI Level 3 Award in Automotive Air Conditioning and Climate Control Diagnosis and Repair (EC842-2006) (QCF) (Qual Ref: 600/4336/2) ◆ IMI Level 3 Award in Automotive Refrigerant Handling (EC842-2006) (Qual Ref: 500/4225/7) – <i>no longer offered</i> ◆ IMI Level 3 Certificate in Automotive Air Conditioning and Climate Control. (EC842-2006) (Qual Ref: 500/4229/4) – <i>no longer offered</i>

Gluckman Consulting
specialists in refrigeration and climate change

This Information Sheet has been prepared by Gluckman Consulting

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