



## Refrigeration air conditioning and heat pump engineering technician

### Key information

**Reference:** ST0322

**Version:** 1.3

**Level:** 3

**Typical duration to gateway:** 36 months

**Typical EPA period:** 6 months

**Route:** Construction and the built environment

**Integration:** None

**Maximum funding:** £20000

**Date updated:** 08/12/2025

**Approved for delivery:** 10 September 2015

**Lars code:** 49

**EQA provider:** Ofqual

**Review:** this apprenticeship will be reviewed in accordance with our change request policy.

### Apprenticeship summary

### Occupational standard

### EPA plan

## Apprenticeship summary

### Overview of the role

Planning, preparing and safely carrying out work in process, product and space cooling.

### Occupation summary

This occupation is found in the industrial and commercial contracting sector, providing installation, service and maintenance activities.

The broad purpose of this occupation is the installation of components, routine maintenance, reactive service, commissioning and decommissioning of vapour compression systems, as found in refrigeration, air conditioning and heat pump systems. This is a specialist role involving planning, preparing and safely carrying out activities in process, product and space cooling. Work is carried out in a variety of applications essential for key UK business activities such as food production, product distribution, retail storage and display, transport and office climate control, manufacturing processes (e.g. petrochemical, pharmaceutical), IT/data centres and medical/healthcare services temperature and environmental control. Knowledge must be transferrable between any of the core activities of refrigeration, air conditioning or heat pumps.

In their daily work, an employee in this occupation interacts with clients and end users, as well as liaising directly with other trades. Technicians will be required to travel to various locations to

carry out their work at a wide variety of commercial and industrial premises depending on their client base.

An employee in this occupation will be responsible for working autonomously without immediate supervision, typically reporting to a service or project manager who is not usually on the site premises. They usually work as part of a team liaising with other technical trades.

### Typical job titles include:

Air conditioning engineer

Commissioning engineer

Heat pump engineer

Maintenance engineer

Refrigeration technician

Service engineer

## End-point assessment summary

### ST0322, Refrigeration air conditioning and heat pump engineering technician level 3

This is a summary of the key things that you – the apprentice and your employer need to know about your end-point assessment (EPA). You and your employer should read the EPA plan for the full details. It has information on assessment method requirements, roles and responsibilities, and re-sits and re-takes.

### What is an end-point assessment and why it happens

An EPA is an assessment at the end of your apprenticeship. It will assess you against the knowledge, skills, and behaviours (KSBs) in the occupational standard. Your training will cover the KSBs. The EPA is your opportunity to show an independent assessor how well you can carry out the occupation you have been trained for.

Your employer will choose an end-point assessment organisation (EPAO) to deliver the EPA. Your employer and training provider should tell you what to expect and how to prepare for your EPA.

The length of the training for this apprenticeship is typically 36 months. The EPA period is typically 6 months.

The overall grades available for this apprenticeship are:

- fail
- pass
- distinction

When you pass the EPA, you will be awarded your apprenticeship certificate.

### EPA gateway

The EPA gateway is when the EPAO checks and confirms that you have met any requirements required before you start the EPA. You will only enter the gateway when your employer says you are ready.

The gateway requirements for your EPA are:

- achieved English and mathematics qualifications in line with the apprenticeship funding rules
- for the interview underpinned by an apprenticeship development journal synopsis, you must submit a apprenticeship development journal synopsis
- passed any other qualifications listed in the occupational standard

For the refrigeration air conditioning and heat pump engineering technician, the qualification required is:

Award in F Gas and ODS Regulations Category 1

Level 2 Diploma in Refrigeration, Air Conditioning and Heat Pump Systems

Level 3 Certificate or Diploma in Refrigeration, Air Conditioning and Heat Pump Systems

## Assessment methods

### Practical assessment with questions

You will be observed by an independent assessor completing a set of tasks. It will last 14 hours. They will ask you at least 3 questions.

### Interview underpinned by a portfolio of evidence

You will have an interview with an independent assessor. It will last at least 50 minutes. They will ask you at least 6 questions. The questions will be about certain aspects of your occupation. You need to compile a apprenticeship development journal synopsis before the EPA gateway. You can use it to help answer the questions.

### Multiple-choice test

You will complete a multiple-choice test. It will be closed book, meaning you will not have access to any books or reference materials.

The test will have 50 multiple-choice questions. You will have 100 minutes to complete it.

## Who to contact for help or more information

You should speak to your employer if you have a query that relates to your job.

You should speak to your training provider if you have any questions about your training or EPA before it starts.

You should receive detailed information and support from the EPAO before the EPA starts. You should speak to them if you have any questions about your EPA once it has started.

### Reasonable adjustments

If you have a disability, a physical or mental health condition or other special considerations, you may be able to have a reasonable adjustment that takes this into account. You should speak to your employer, training provider and EPAO and ask them what support you can get. The EPAO will decide if an adjustment is appropriate.

## Professional recognition

This apprenticeship aligns with Engineering Council (EngTech) for level 3

Please contact the professional body for more details.

## Version log

Version	Change detail	Earliest start date	Latest start date
1.3	Updated SSA	08/12/2025	Not set
1.2	Occupational standard, end-point assessment plan and funding band revised.	01/10/2024	07/12/2025
1.1	End-point assessment plan revised	22/05/2018	30/09/2024
1.0	Retired	10/09/2015	21/05/2018

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