



1. TITLE OF THE CERTIFICATE (NL)

Diploma Beroepsonderwijs
Kwalificatie: Airco/warmtepompmonteur
Kwalificatiedossier: Koude- en klimaatsystemen

In the original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Certificate Senior Secondary Vocational Education
Qualification: Air conditioning/heat pump mechanic
Qualification file: Refrigeration and climate control systems

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

Core task 1: Prepares work on cooling and climate control systems and installs parts

- 1.1 Prepares work on cooling and climate control systems
- 1.2 Dismantles components and piping systems of cooling and climate control systems
- 1.3 Places and installs parts in cooling and climate control systems
- 1.4 Installs pipe systems for cooling and climate control systems
- 1.5 Completes work on cooling and climate control systems

Core task 2: Works on cooling systems

- 2.1 Assembles technical cooling systems
- 2.2 Carries out maintenance on and resolves issues within cooling systems
- 2.3 Tests and commissions cooling systems

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE

The Air conditioning/heat pump mechanic works for a company that installs, maintains and repairs systems in the field of professional refrigeration and cooling technology, air treatment, comfort technology and heat pump systems. He carries out work on various types of small refrigeration and/or air conditioning systems such as split systems, VRF/VRV and DX installations. He also carries out work on smaller air conditioning systems with water or water/glycol or other suitable coolant mixtures as a secondary refrigerant. When carrying out work in accordance with Article 2 of the 'Regulation on fluorinated greenhouse gases and regulated substances for refrigeration installations', the recovery of fluorinated greenhouse gases or regulated substances, carrying out leak checks on and installing and maintaining refrigeration and climate systems that contain fluorinated greenhouse gases or regulated substances contain or are intended for this purpose, the air conditioning/heat pump technician must be in possession of a diploma in the context of the 'Regulation on fluorinated greenhouse gases and regulated substances for refrigeration installations'. The training aimed at this diploma is not part of the Air conditioning/heat pump technician qualification.

5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the body awarding the certificate

The certificate issued on completion of the programme is signed by the examination board at the school where the pupil attended the programme.

Name and status of the national/regional authority providing accreditation/recognition of the certificate

Ministry of Education, Culture and Science

*** Explanatory note**

This document is designed to provide additional information about the specified certificate and does not have any legal status in itself. The format of the description is based on the following texts: Council Resolution 93/C 49/01 of 3 December 1992 on the transparency of qualifications, Council Resolution 96/C 224/04 of 15 July 1996 on the transparency of vocational training certificates, and Recommendation 2001/613/EC of the European Parliament and of the Council of 10 July 2001 on mobility within the Community for students, persons undergoing training, volunteers, teachers and trainers.

More information is available at: <http://www.europass.cedefop.europa.eu/>

© European Communities 2002

5. OFFICIAL BASIS OF THE CERTIFICATE

<p>Level of the certificate (national or international) Qualification level 2 of the Dutch VET qualification structure Characteristics: intended as an initial qualification, which everyone should at least obtain. The participant develops skills in order to be able to carry out practical tasks and is responsible for his or her own block of tasks. NLQF-niveau 2 - EQF level 2 - ISCED 3C</p>	<p>Grading scale / Pass requirements</p> <table style="border: none;"> <tr><td>10</td><td>excellent</td></tr> <tr><td>9</td><td>very good</td></tr> <tr><td>8</td><td>good</td></tr> <tr><td>7</td><td>very satisfactory</td></tr> <tr><td>6</td><td>pass</td></tr> <tr><td>5</td><td>fail</td></tr> <tr><td>4</td><td>unsatisfactory</td></tr> <tr><td>3</td><td>very unsatisfactory</td></tr> <tr><td>2</td><td>poor</td></tr> <tr><td>1</td><td>very poor</td></tr> </table>	10	excellent	9	very good	8	good	7	very satisfactory	6	pass	5	fail	4	unsatisfactory	3	very unsatisfactory	2	poor	1	very poor
10	excellent																				
9	very good																				
8	good																				
7	very satisfactory																				
6	pass																				
5	fail																				
4	unsatisfactory																				
3	very unsatisfactory																				
2	poor																				
1	very poor																				
<p>Access to next level of education/professions The Air conditioning/heat pump mechanic can progress on the basis of experience and additional training to the position of technical draftsman or cold and climate system mechanic. He can broaden or deepen his knowledge of cold technology systems or other technical professions, for example electrical engineer. He can specialise in the installation, maintenance and inspection of cold and climate systems. He can (following necessary practical experience and training) focus on larger and/or more complex cold and climate systems.</p>	<p>International agreements</p>																				
<p>Legal basis Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 25280 The education and training for this qualification is offered as of 01-08-2015.</p>																					

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

<p>Senior secondary vocational education features two learning pathways: the school-based pathway (bol) and the training on the job pathway (bbl). In the school-based pathway, the majority of the course consists of theory at school. The extent of the practical component (vocational practice) is between 20% and 60%. In the training on the job pathway, the extent of vocational practice is at least 60% of the course. The participant works four days a week in a training company, and attends school for theory subjects just one day a week. In principle it is possible to follow both learning pathways, but which pathway is offered will depend on the individual educational institution.</p>	
<p>Average duration of the education/ training leading to the certificate</p>	<p>2 years (3200 study hours) (depending on previous education)</p>
<p>Entry requirements The certificate preparatory vocational secondary education (vmbo) basic vocational programme, or a comparable level.</p>	

7. ADDITIONAL INFORMATION

<p>Dutch senior secondary VET is based on qualification files, that each contain one or more qualifications. The information included in part 3 and 4 is derived directly from the qualification file determined by the Minister of Education, Culture and Science. The complete qualification file can be found at kwalificaties.s-bb.nl, only in Dutch.</p> <p>Optional subjects are linked to the qualification. The optional subjects have a total size of 15% of the course duration. The optional subjects completed by the student are listed on the certificate.</p> <p>Additional information, including a description of the Dutch national qualifications system, is available at the Netherlands National Reference Point (NRP): www.s-bb.nl. The NRP is the information centre for vocational qualifications in the Netherlands. SBB has been appointed in this capacity by the Ministry of Education, Culture and Science.</p>
--