

## **CERTIFICATE SUPPLEMENT** (\*)



## 1. TITLE OF THE CERTIFICATE (NL) Diploma Beroepsonderwijs Kwalificatie: Eerste monteur service en onderhoud elektrotechniek en instrumentatie Kwalificatiedossier: Service- en onderhoudstechniek In the original language

2. TRANSLATED TITLE OF THE CERTIFICATE (EN)

Certificate Senior Secondary Vocational Education Qualification: Skilled mechanic service and maintenance electrotechnology and instrumentation Qualification file: Service and maintenance technology

This translation has no legal status

3. PROFILE OF SKILLS AND COMPETENCES

The most important duties of a Skilled mechanic service and maintenance electro technology and instrumentation are:

Core task 1: Inspects equipment, installations and systems

1.1 Prepares inspection of equipment, installations and systems

1.2 Takes precautions for inspection working duties

1.3 Performs sensory inspection of equipment, installations and systems

- 1.4 Performs measurements and tests on equipment, installations and systems
- 1.5 Makes an initial diagnosis and report results
- 1.6 Rounds off inspection work on equipment, installations and systems

Core task 2: Optimises equipment, installations, and systems and corrects malfunctions

- 2.1 Does preparatory work for troubleshooting and optimisation of equipment, installations and system
- 2.2 Take precautionary measures for troubleshooting and optimisation of equipment, installations and systems
- 2.3 Disassembles, modifies, repairs and assembles components of equipment, installations and systems
- 2.4 Delivers equipment, installations and systems

2.5 Checks and tests work performed on equipment, installations and systems

2.6 Rounds off maintenance and modification work

Core task 3: Locates malfunctions which could be just simple in the electro installations, and the technical components which measure and control the installations and systems

3.1 Does preparatory work for locating malfunctions in the electrical, measurement and control techno

3.2 Locates and analyses (simple) malfunctions in the electrical, measurement and control technology

3.3 Adjusts the mechanical component of equipment, installations, and systems and fine tunes it

3.4 Supervises colleagues

## 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: <u>http://www.europass.cedefop.europa.eu/</u>

© European Communities 2002 - Version 2010

4. RANGE OF OCCUPATIONS ACCESSIBLE TO THE HOLDER OF THE CERTIFICATE
A Skilled mechanic service and maintenance electro technology and instrumentation can be employed in the back office, in departments such as installation, service and maintenance of a company or in the field service of a company that carries out installation works, service works, or maintenance works on an outside location commissioned by third parties. He works primarily on the measure technology, and control technology and secondary on the electro technology parts of the equipment, installations, and systems for the process industry, food industry, manufacturing, installations for water treatment, general electro technical company installations, data transport, bus systems, etc. He maintains the electro technical and measure technology and control technology of equipment, installations and systems, locates mal functions which may be simple and very local and corrects them and carries out repairs and modifications if necessary.

Name and status of the body awarding the certificateName and status of the national/regional authority providing accreditation/recognition of the certificateThe 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 certificateLevel of the certificate (national or international) Qualification level 3 of the Dutch VET qualification structureGrading scale / Pass requirements 9 very goodCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.6 pass 5 failNLQF level 3 - EQF level 3 - ISCED 3C2 poor 1 very poorAccess to next level of education/professions The Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements	5. OFFICIAL BASIS OF 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.Ministry of Education, Culture and ScienceLevel of the certificate (national or international) Qualification level 3 of the Dutch VET qualification structureGrading scale / Pass requirementsQualification level 3 of the Dutch VET qualification structure10excellent0very good8goodCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.6passNLQF level 3 - EQF level 3 - ISCED 3C2poor 1very poorAccess to next level of education/professions The Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements The profession of Skilled mechanic service and maintenance electro technology and instrumentation is	Name and status of the body awarding the	Name and status of the national/regional authority
programme is signed by the examination board at the school where the pupil attended the programme.Grading scale / Pass requirementsLevel of the certificate (national or international) Qualification level 3 of the Dutch VET qualification structureGrading scale / Pass requirementsQualification level 3 of the Dutch VET qualification structure10excellent9very good8goodCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.6passNLQF level 3 - EQF level 3 - ISCED 3C2poor1Very poorInternational agreementsThe profession of Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements	certificate	
school where the pupil attended the programme.Level of the certificate (national or international) Qualification level 3 of the Dutch VET qualification structureGrading scale / Pass requirements 10 excellentQualification level 3 of the Dutch VET qualification structure9 very goodCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.6 pass failNLQF level 3 - EQF level 3 - ISCED 3C2 very poorAccess to next level of education/professions The Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements The profession of Skilled mechanic service and maintenance electro technology and instrumentation is	The certificate issued on completion of the	Ministry of Education, Culture and Science
Level of the certificate (national or international)Grading scale / Pass requirementsQualification level 3 of the Dutch VET qualification10excellentstructure9very goodCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.6passNLQF level 3 - EQF level 3 - ISCED 3C2poor1Access to next level of education/professions The Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements The profession of Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements The profession of Skilled mechanic service and maintenance electro technology and instrumentation is	programme is signed by the examination board at the	
Qualification level 3 of the Dutch VET qualification structure10excellentQualification level 3 of the Dutch VET qualification structure10excellentCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.10excellent 9NLQF level 3 - EQF level 3 - ISCED 3C10excellent 9very satisfactory 6Access to next level of education/professions The Skilled mechanic service and maintenance electro technology and instrumentation can be10excellent 9Number 19very goodexcellent 99Number 29900110Number 3991010Number 4991010Number 4991010Number 4991010Number 4991010Number 4991010Number 49910101991010199101019910101991010199101019910101991010199101019	school where the pupil attended the programme.	
structure9very goodCharacteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.9very good8good7very satisfactory6pass5fail7unsatisfactory3very unsatisfactory8very unsatisfactory3very unsatisfactory9very poor1very poorAccess to next level of education/professionsInternational agreementsThe Skilled mechanic service and maintenance electro technology and instrumentation can beInternational agreements	Level of the certificate (national or international)	Grading scale / Pass requirements
Characteristics: implementation of more than just the own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.8good 7very satisfactory8good7very satisfactory6pass6pass7very unsatisfactory8very unsatisfactory9very unsatisfactory9very poor1very poor1very poor1very poor1very poor1the professions1The profession of Skilled mechanic service and maintenance electro technology and instrumentation can be	Qualification level 3 of the Dutch VET qualification	10 excellent
own block of tasks. The professional is able to account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.7very satisfactory pass86pass95fail94unsatisfactory93very unsatisfactory93very unsatisfactory92poor1very poor1very poor1very poor1Nernational agreements1The professions1The profession of Skilled mechanic service and maintenance electro technology and instrumentation can be	structure	
account for his or her actions towards colleagues, and monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.6 passMLQF level 3 - EQF level 3 - ISCED 3C0Access to next level of education/professions The Skilled mechanic service and maintenance electro technology and instrumentation can be6Dass pass9Access to next level of education/professions access to next level of education can be1Dass procedures.1Dass1	Characteristics: implementation of more than just the	
monitors and supervises the work of others. The range of tasks also includes drafting work preparation procedures.5fail4unsatisfactory3very unsatisfactory3very unsatisfactory3very poor1very poorAccess to next level of education/professions electro technology and instrumentation can be5fail4unsatisfactory3very unsatisfactory2poor1very poor1very poor1ternational agreements1The profession of Skilled mechanic service and maintenance electro technology and instrumentation can be	own block of tasks. The professional is able to	- , ,
range of tasks also includes drafting work preparation procedures.       4       unsatisfactory         NLQF level 3 - EQF level 3 - ISCED 3C       2       poor         Access to next level of education/professions       1       very poor         Access to next level of education/professions       International agreements         The Skilled mechanic service and maintenance       The profession of Skilled mechanic service and maintenance         electro technology and instrumentation can be       maintenance electro technology and instrumentation is	account for his or her actions towards colleagues, and	
procedures.       3       very unsatisfactory         NLQF level 3 - EQF level 3 - ISCED 3C       2       poor         1       very poor         Access to next level of education/professions       International agreements         The Skilled mechanic service and maintenance       The profession of Skilled mechanic service and maintenance         electro technology and instrumentation can be       The profession of Skilled mechanic service and maintenance	monitors and supervises the work of others. The	
NLQF level 3 - EQF level 3 - ISCED 3C       2       poor         Access to next level of education/professions       1       very poor         Access to next level of education/professions       International agreements         The Skilled mechanic service and maintenance       The profession of Skilled mechanic service and         electro technology and instrumentation can be       maintenance electro technology and instrumentation is	range of tasks also includes drafting work preparation	5
Access to next level of education/professions       International agreements         The Skilled mechanic service and maintenance       The profession of Skilled mechanic service and maintenance         electro technology and instrumentation can be       maintenance electro technology and instrumentation is	procedures.	
Access to next level of education/professionsInternational agreementsThe Skilled mechanic service and maintenanceThe profession of Skilled mechanic service and maintenance electro technology and instrumentation can be	NLQF level 3 - EQF level 3 - ISCED 3C	2 poor
The Skilled mechanic service and maintenance electro technology and instrumentation can be The profession of Skilled mechanic service and maintenance electro technology and instrumentation is		
electro technology and instrumentation can be maintenance electro technology and instrumentation is	•	
transferred to Technician service and maintenance not regulated in the Netherlands. However the education		
electro technology and instrumentation or technician and training for this profession on qualification level 3 is		
data technology, electro technology (infra technology), regulated under the European directive 2005/36/EC,		
managerial position inside a department dealing with amended by directive 2013/55/EU. The regulated		
service and maintenance of one's own company education and training gives access to regulated		
assets (not a training) or to a project coordinator. He professions at the level of a diploma according to article		
can expand his knowledge in order to become a 11 of this directive. Skilled mechanic service and maintenance mechanic		
installations, skilled mechanic service and		
maintenance mechanical engineering or be		
transferred to professions in refrigeration technology.		
Legal basis		
Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 25304		

Act on Vocational Education and Training (WEB), registered number of qualification (crebo): 29 The education and training for this qualification is offered as of August 1, 2015.

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

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

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE		
individual educational institution.		
Average duration of the education/ training leading to the certificate	3 years (4800 study hours) (depending on previous education)	
Entry requirements		

Entry requirements

The certificate preparatory vocational secondary education (vmbo) advanced vocational programme, combined programme, or theoretical programme, or a comparable level.

## 7. ADDITIONAL INFORMATION

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 <a href="http://kwalificaties.s-bb.nl/">http://kwalificaties.s-bb.nl/</a>, only in Dutch.

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.

Additional information, including a description of the Dutch national qualifications system, is available at the Netherlands National Reference Point (NRP): <u>www.s-bb.nl</u>. 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.