



1. TITLE OF THE PROFESSION

07134001 Hűtő-, klíma- és hőszivattyú

2. TRANSLATED TITLE OF THE PROFESSION

Refrigeration, air-conditioning and heat pump technician
(THIS TRANSLATION HAS NO LEGAL STATUS)

3. PROFILE OF SKILLS AND COMPETENCES

- carry out comprehensive air-conditioning and heat pump installation and repair tasks;
- perform the installation, assembly and maintenance of high-performance industrial ventilation, air-conditioning and heat pump systems without restrictions, in addition to providing residential services;
- install, repair, maintain, set up and adjust refrigeration and heat pump systems and equipment, ventilation equipment, air-conditioning systems and their system components;
- master and use correctly the assembly, installation and commissioning instructions;
- document the data measured during commissioning and carry out administrative tasks.

4. CLASSIFICATION OF THE VOCATIONAL TRAINING ACCORDING TO THE ISCED FIELDS OF EDUCATION AND TRAINING (ISCED-F)

0713 Energetics and electricity

(*) Explanatory notes:

¹ In the original language. | ² The translation of the designation is provided for information purposes only. | ³ Fill it out if necessary. The certificate supplement provides additional information on the qualification but have no legal value in itself. The format of the description is in conformity with Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass) and repealing Decision No 2241/2004/EC.

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5. OFFICIAL BASIS OF THE CERTIFICATE

Name and status of the authority issuing the certificate	Name and status of the national/regional authority providing accreditation/recognition of the certificate Ministry for Innovation and Technology															
Level of the certificate (national or international) NQF level: 4 EQF level: 4 Digital Competence Framework level: 5	Grading scale / Pass requirements Five -grade: 5 excellent 4 good 3 satisfactory 2 pass 1 fail															
Certificate number: CXX A Serial number: 123456 Certificate issue date: 2023.12.07	Designation of the theoretical and practical subjects of the vocational qualification examination and their grades according to a five-grade scale <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td colspan="3">written</td> </tr> <tr> <td style="width: 80%;">Refrigeration, air-conditioning and heat pump technician knowledge</td> <td style="width: 10%; text-align: center;">100%</td> <td style="width: 10%; text-align: center;">5</td> </tr> <tr> <td colspan="3">project exercise</td> </tr> <tr> <td>Commissioning, maintenance, set-up and documentation tasks of Refrigeration, air-conditioning and heat pump technicians – practical examination</td> <td style="text-align: center;">100%</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Result of the qualification examination</td> <td style="text-align: center;">100%</td> <td style="text-align: center;">5</td> </tr> </table>	written			Refrigeration, air-conditioning and heat pump technician knowledge	100%	5	project exercise			Commissioning, maintenance, set-up and documentation tasks of Refrigeration, air-conditioning and heat pump technicians – practical examination	100%	5	Result of the qualification examination	100%	5
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project exercise																
Commissioning, maintenance, set-up and documentation tasks of Refrigeration, air-conditioning and heat pump technicians – practical examination	100%	5														
Result of the qualification examination	100%	5														
Access to next level of education/training	International agreements															
Other information concerning the vocational training process																
Legal basis Government Decree 319/2020 (VII. 1.) on the amendment of Government Decree 12/2020 (II. 7.) on the Implementation of the Vocational Education and Training Act, Government Decree 11/2020 (II. 7.) on the Implementation of the Act on Adult Education.																

6. OFFICIALLY RECOGNISED WAYS OF ACQUIRING THE CERTIFICATE

Description of the sectoral basic training and the theoretical and practical vocational training	Distribution of programme elements in percentage
Total duration of the education/training	500 hours

Entry requirements:

- Educational prerequisite: secondary education
- Vocational prerequisite: 4 0732 07 02 Refrigeration and ventilation systems technician (34 582 05 Refrigeration and air-conditioning systems technician)
- Medical fitness requirements: applicable

Further information:

WRITTEN EXAMINATION EXERCISES

Reading and interpreting the technical drawings of refrigeration, air-conditioning, heat pump and ventilation systems

Questions, exercises and calculations related to electrotechnical basics, direct and alternating current

Questions, exercises and calculations related to rotating electrical machines

Questions, exercises and calculations related to electrical measuring instruments

Questions, exercises and calculations related to controllers, regulators and sensors

Questions, exercises and calculations related to refrigerants

Questions, exercises and calculations related to comfort and industrial ventilation equipment

Questions, exercises and calculations related to liquid cooling and fan coil equipment

Questions and exercises related to the technical reports and documentation used in the refrigeration, air-conditioning and heat pump systems technician trade

Labour safety rules and regulations to be observed, knowledge of protective equipment

PROJECT EXERCISES

Carrying out the necessary tasks in a given location following the technical documentation

Performing inspections, measurements, troubleshooting, commissioning, regulatory and documentation tasks

Answering technical questions

You can find more information on the Programme and System Requirements in the following link: <https://ikk.hu>

This certificate supplement was elaborated in accordance with the programme requirements registered by the minister responsible for VET.

National Reference Point: National Office of Vocational Education and Training and Adult Learning: <https://nrk.nive.hu>

Head of Examination Organiser:

Issue date: 2023.12.07

SEAL