

# Europass certificate supplement (\*)



1. Title of the certificate (1)
Kulde- og varmepumpemontørfaget
<sup>(1)</sup> In the original language

2. Translated title of the certificate (1)

## Cooling and Heat Pump Installation and Maintentance

(1) If applicable. This translation has no legal status.

## 3. Profile of skills and competences

The skilled cooling and heat pump worker has shown competence in installation, maintenance and error rectification for refrigeration and heat pump systems for transport and storage of edibles, for comfort systems and for cooling computer hardware. This competence includes assembly, start-up, service and maintenance for commercial and industrial refrigeration and heat pump plants and system. This also includes functions testing, troubleshooting, error rectification, maintenance, keeping logbooks and optimising control and regulating systems. The refrigeration and heat pump fitter is able to plan, carry out and document the installation and intervention into refrigeration and heat pump systems based on current rules, regulations and standards. Furthermore he or she has shown competence in assessing risks and measures for the emission of cooling media. The refrigeration and heat pump fitter has an understanding of systems, equipment and safety, and insight into the use of energy gases for heat production. He or she has knowledge of electrical power and safety, mechanical and electrotechnical work, and joining different parts and components. Service is a part of the refrigeration and heat pump fitter's work, and the skilled worker is able to advise customers and communicate with users, support personnel and colleagues. The refrigeration and heat pump fitter is able to carry out work in accordance with current rules for Environment, Health and Safety.

4. Range of occupations accessible to the holder of the certificate <sup>(1)</sup>
Trade certificate as a skilled refrigeration and heat pump technician
<sup>(1)</sup> If applicable

#### <sup>(\*)</sup> 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 available at: http://europass.cedefop.eu.int

© European Communities 2002

5. Official basis	of the certificate
Name and status of the body awarding the certificate Trade certificate issued by the county administration	Name and status of the national/regional authority providing accreditation/recognition of the certificate The Royal Norwegian Ministry of Education and Research
Level of the certificate (national or international) EU classification level 4 in the European qualification framework Correspond with upper secondary level, ISCED 3	Grading scale / Pass requirements Passed with distinction, Passed, Failed
Access to next level of education/training The training/education together with further instruction in common core subjects qualify the candidate for admission to higher education	International agreements xxx

### Legal basis

Act of 17 July 1998 no 61 relating to Primary and Secondary Education (The Education Act), Regulation of 23 June 2006 no 724 relating to the Education Act. Regulation of 25 June 1999 no 708 relating to the Principles, Core Curriculum and Quality Framework of Primary and Secondary Education and Training

6. Officially recognised ways of acquiring the certificate				
Description of vocational education and training received	Percentage of total programme (%)	Duration (hours/ weeks/months/years)		
School-based	50%	2 years		
Workplace-based	50%	2 years		
Accredited prior learning				

## **Entry requirements**

Completed Primary school

#### Additional information

The training period consists of four years, and can take place as two years at school followed by two years of company based training, or one year at school followed by three years of company based training, or all four years in a company combined with school based training. Two years of the training consists of a total of 588 hours in Common core subjects, 954 hours in Common programme subjects and 421 hours vocational specialization. Adult students with documented five years of work and a passed theoretical exam relevant to the subject, are qualified for a craft certificate examination according to §3-5 in the Education Act. Adult students are exempted from the requirement of common core subjects.

More information (including a description of the national qualifications system) available at:

http://www.europass.no/fagbeskrivelser

National reference point