

STN	Kondenzačné jednotky pre chladiace zariadenia. Menovité podmienky, tolerancie a prezentácia výkonových parametrov výrobcom.	STN EN 13215
		14 0303

Condensing units for refrigeration - Rating conditions, tolerances and presentation of manufacturers performance data

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola označená vo Vestníku ÚNMS SR č. 05/17

Obsahuje: EN 13215:2016

Oznámením tejto normy sa ruší
STN EN 13215 (14 0303) z októbra 2001

124763

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017

Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmniožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 13215

November 2016

ICS 27.200

Supersedes EN 13215:2000

English Version

**Condensing units for refrigeration - Rating conditions,
tolerances and presentation of manufacturer's
performance data**

Unités de condensation pour la réfrigération -
Détermination des caractéristiques, tolérances et
présentation des performances du fabricant

Verflüssigungssätze für die Kälteanwendung -
Nennbedingungen, Toleranzen und Darstellung von
Leistungsdaten des Herstellers

This European Standard was approved by CEN on 24 September 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

	Page
European foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Symbols and abbreviations	6
5 Parameters for the presentation of performance data.....	7
6 General requirements	7
7 Performance data.....	8
7.1 General.....	8
7.2 Part load performance data	8
7.3 Tabular or graphical form	8
7.4 Determination of the power absorbed by the condensing unit	8
7.4.1 Condensing units including the compressor motor	8
7.4.2 Motors with a specific factory assembled or factory specified means for variable speed.....	8
7.4.3 Externally driven compressors without motor.....	8
8 Rating conditions	9
8.1 General.....	9
8.2 Standard reference points	9
8.3 Air cooled condensing units	10
8.3.1 General.....	10
8.3.2 Data for SEPR calculation	10
8.4 Water cooled condensing units.....	10
9 Tolerances	10
10 Correction factors	11
10.1 Superheat.....	11
10.2 Compressors speed	11
Annex A (normative) Calculation of SEPR.....	12
A.1 General.....	12
A.2 Condensing unit without capacity control	12
A.3 Condensing unit with stepwise capacity control	12
A.4 Calculation of SEPR.....	13
Annex ZA (informative) Relationship between this European Standard and the eco-design requirements of Commission Regulation (EU) No 2015/1095 aimed to be covered.....	16
Bibliography.....	18

Tables

Table 1 — Symbols and abbreviations	6
Table 2 — Indices.....	7
Table 3 — Parameters for the presentation of performance data.....	7
Table 4 — Standard reference points.....	9
Table 5 — Actual performance in relation to published data	11
Table A.1 — Required input for <i>SEPR</i> calculation.....	13
Table A.2 — Ambient temperatures and duration for <i>SEPR</i> determination	14
Table ZA.1 — Correspondence between this European Standard and Commission Regulation (EU) No 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers and Commission's standardization request M/495 (Ecodesign).....	16

European foreword

This document (EN 13215:2016) has been prepared by Technical Committee CEN/TC 113 "Heat pumps and air conditioning units", the secretariat of which is held by AENOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

This document supersedes EN 13215:2000.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA which is an integral part of this document.

The main changes with respect to the previous edition are listed below:

- a) part load conditions according to M/495 "Standardisation mandate to CEN, CENELEC and ETSI under Directive 2009/125/EC relating to harmonised standards in the field of Ecodesign" are taken into account;
- b) inclusion of the calculation of seasonal energy performance ratio (*SEPR*).

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the rating conditions, tolerances and presentation of manufacturer's performance data for condensing units for refrigeration with compressors of the positive-displacement type. These include single stage compressors and single and two stage compressors having an integrated means of fluid sub cooling. This is required so that a comparison of different condensing units can be made. The data relate to the refrigerating capacity and power absorbed and include requirements for part-load performance where applicable.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 378-1:2008+A2:2012, *Refrigerating systems and heat pumps - Safety and environmental requirements - Part 1: Basic requirements, definitions, classification and selection criteria*

EN 13771-2, *Compressors and condensing units for refrigeration - Performance testing and test methods - Part 2: Condensing units*

ISO 817, *Refrigerants — Designation and safety classification*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN