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STN	**Vlastnosti prenosných detektorov netesností a stacionárnych detektorov plynu pre všetky chladivá**	**STN EN 14624** 14 8103

Performance of portable locating leak detectors and of fixed gas detectors for all refrigerants

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/20

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EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN 14624

March 2020

ICS 23.040.99; 71.100.45 Supersedes EN 14624:2012

English Version

Performance of portable locating leak detectors and of fixed gas detectors for all refrigerants

Performances des détecteurs de fuites portables et des détecteurs de gaz fixes pour tous les fluides frigorigènes

Leistung von mobilen Leckdetektoren und stationären Gasmeldern für alle Kältemittel

This European Standard was approved by CEN on 3 February 2020.

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.

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

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European foreword

This document (EN 14624:2020) has been prepared by Technical Committee CEN/TC 182 "Refrigerating systems, safety and environmental requirements", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by September 2020, and conflicting national standards shall be withdrawn at the latest by September 2020.

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 supersedes EN 14624:2012.

The following changes have been made during revision:

a) the document has been restructured and divided into two parts: Portable locating leak detectors and fixed gas detectors;

b) the document covers all types of refrigerants;

c) Annex C "Guidelines for application of Fixed Gas Detectors" has been modified;

d) Annex D "Calculation of gas concentration from kg/m^3 to ppm" has been added;

e) Annex E "Selectivity, cross interference and potential contaminants" has been added.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document recognizes the unique nature of leak detection and gas detection for refrigerating systems, air condition systems and heat pumps and is intended to address the specific needs of the refrigeration and heat pump industry. This document should be read in conjunction with the EN 378 series.

1 Scope

1.1 General

This document specifies the requirements for portable locating leak detectors and fixed gas detectors for all refrigerants.

Locating detectors used in factories for manufacturing processes are not included in the Scope of EN 14624.

1.2 Product application

This document applies to different applications and environments such as plant and machine rooms, production rooms, cold rooms, supermarkets, occupied spaces like offices and hotels.

1.3 Product performance

This document specifies minimum requirements for sensitivity, operating range, response time, environmental conditions and cross sensitivity from interference gases.

1.4 Product installation

This document gives guidance of suitable technology, location of detection points, interconnection with secondary equipment (e.g. initiation of mechanical ventilation, personnel warning, and equipment shutdown).

1.5 Service and maintenance

This document gives guidance for service and maintenance: Sensors and mechanical equipment have a limited operating life and require regular performance verification to ensure conformity.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 378-1:2016, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 1: Basic requirements, definitions, classification and selection criteria*

EN 378-2:2016, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 2: Design, construction, testing, marking and documentation*

EN 378-3:2016, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 3: Installation site and personal protection*

EN 378-4:2016+A1:2019, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 4: Operation, maintenance, repair and recovery*

EN 45544-1:2015, *Workplace atmospheres — Electrical apparatus used for the direct detection and direct concentration measurement of toxic gases and vapours — Part 1: General requirements and test methods*

EN 45544-3, *Workplace atmospheres — Electrical apparatus used for the direct detection and direct concentration measurement of toxic gases and vapours — Part 3: Performance requirements for apparatus used for general gas detection*

EN 60079-29-1, *Explosive atmospheres — Part 29-1: Gas detectors — Performance requirements of detectors for flammable gases (IEC 60079-29-1)*