

<b>STN</b>	<b>Ventilátory</b> <b>Klasifikácia účinnosti ventilátorov</b> <b>Časť 5: Prúdové ventilátory (ISO 12759-5: 2021)</b>	<b>STN</b> <b>EN ISO 12759-5</b>  12 2020
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Fans - Efficiency classification for fans - Part 5: Jet fans (ISO 12759-5:2021)

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. 09/21

Obsahuje: EN ISO 12759-5:2021, ISO 12759-5:2021

**133598**

EUROPEAN STANDARD

**EN ISO 12759-5**

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2021

ICS 23.120

English Version

**Fans - Efficiency classification for fans - Part 5: Jet fans  
(ISO 12759-5:2021)**

Ventilateurs - Classification du rendement des ventilateurs - Partie 5 : Ventilateurs accélérateurs (ISO 12759-5:2021)

Ventilatoren - Effizienzklassifizierung für Ventilatoren - Teil 5: Strahlventilatoren (ISO 12759-5:2021)

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## **European foreword**

This document (EN ISO 12759-5:2021) has been prepared by Technical Committee ISO/TC 117 "Fans" in collaboration with Technical Committee CEN/TC 156 "Ventilation for buildings" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by January 2022, and conflicting national standards shall be withdrawn at the latest by January 2022.

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.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN websites.

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## **Endorsement notice**

The text of ISO 12759-5:2021 has been approved by CEN as EN ISO 12759-5:2021 without any modification.

**INTERNATIONAL  
STANDARD**

**ISO  
12759-5**

First edition  
2021-06

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**Fans — Efficiency classification for  
fans —**

**Part 5:  
Jet fans**

*Ventilateurs — Classification du rendement des ventilateurs —  
Partie 5: Ventilateurs accélérateurs*



Reference number  
ISO 12759-5:2021(E)

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Published in Switzerland

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# ISO 12759-5:2021(E)

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 117, *Fans*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 156, *Ventilation for buildings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 12759 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).



## Introduction

The last decade has seen both an escalation in the price and an increasing recognition of the finite life of many of the fossil fuels currently used. There is also a belief by many that climatic change is due to increasing levels of carbon dioxide in the atmosphere. This has led to many nations reviewing methods of energy generation and usage.

To maintain economic growth there is therefore a need to promote energy efficiency. This requires better selection of equipment by users and thus better design of this equipment by its manufacturers.

Fans of all types are used for ventilation and air conditioning, for process engineering (drying, pneumatic conveying and combustion air supply) and agriculture. Indeed, the energy use of fans has been calculated as nearly 20 % of total worldwide energy usage.

The fan industry is of a global nature, with a considerable degree of exporting and licensing. To ensure that the defining fan performance characteristics are common throughout the world, a series of International Standards has been developed. It is the belief of the industry that there is now a need for minimum efficiency standards to be recognized. To encourage their implementation, a classification system is proposed which incorporates a series of efficiency bands. With improvements in technology and manufacturing processes, the minimum efficiency levels can be reviewed and increased over time.

This document is specific to jet fans whose efficiency ratings are based on thrust.

The ISO 12759 series describes a number of different procedures to classify the efficiency of a fan or to apply a minimum efficiency limit (MEL). These procedures are described in:

- ISO 12759-3;
- ISO 12759-4;
- this document (ISO 12759-5);
- ISO 12759-6.

There is no method described to compare these classifications and MELs.

NOTE In this document “air” is the abbreviated term for “air and other gases”.

# Fans — Efficiency classification for fans —

## Part 5: Jet fans

### 1 Scope

This document establishes a classification of fan efficiency for all jet fan types driven by motors with an electrical input power range from 5,5 kW to 155 kW (and this is likely to be in the size range 500 mm to 1600 mm diameter with motors rated between 5,5 kW and 150 kW from IEC 60034-30-1).

This document is not applicable to jet fans for use in enclosed car parks.

This document can be used by legislators or regulatory bodies for defining future energy saving targets.

### 2 Normative references

There are no normative references in this document.

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**