
**Heat recovery ventilators and energy
recovery ventilators — Testing and
calculating methods for seasonal
performance factor —**

Part 1:

**Sensible heating recovery seasonal
performance factors of heat recovery
ventilators (HRV)**

*Ventilateurs récupérateurs de chaleur et ventilateurs récupérateurs
d'énergie — Méthodes d'essai et de calcul des facteurs de
performances saisonnières —*

*Partie 1: Facteurs de performances saisonnières de la récupération de
chaleur sensible des ventilateurs récupérateurs de chaleur (HRV)*



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Foreword

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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).

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A list of all parts in the ISO 5222 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.

Heat recovery ventilators and energy recovery ventilators — Testing and calculating methods for seasonal performance factor —

Part 1: Sensible heating recovery seasonal performance factors of heat recovery ventilators (HRV)

1 Scope

This document specifies the testing and calculating methods for sensible heating recovery seasonal performance factor of heat recovery ventilators (HRV) covered by ISO 16494-1.

This document also specifies the test conditions and the corresponding test procedures for determining the sensible heating recovery seasonal performance factor of HRV and is intended for use only in marking, comparison, and certification purposes. For the purposes of this document, the rating conditions are those specified in ISO 16494-1 and in [Annex B](#). The procedures of this document may be used for other temperature conditions.

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.

ISO 16494-1:2022, *Heat recovery ventilators and energy recovery ventilators — Method of test for performance — Part 1: Development of metrics for evaluation of energy related performance*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 16494-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

heat recovery

<sensible heating> transfer of sensible energy from exhaust air to supply air in the HRV while heating

3.2

bypass ventilation function

function for reducing power input of the fans while the heat energy recovered is less than the additional energy input due to overcoming the resistance of recovery heat exchanger during its operation time

Note 1 to entry: The bypass function makes the supply air and exhaust air go through the heat recovery exchanger bypass with energy saving control.