AHRI Standard 1060-2023 (I-P)

2023 Standard for

Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment

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AHRI uses its best efforts to develop standards/guidelines employing state-of-the-art and accepted industry practices. AHRI does not certify or guarantee that any tests conducted under its standards/guidelines will be non-hazardous or free from risk.

ICS Code: 23.120

Note:

This standard supersedes AHRI Standard 1060-2018 (I-P).

For SI ratings, see AHRI Standard 1061-2023 (SI).

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Intent

This standard is intended for the guidance of the industry, including manufacturers, engineers, installers, contractors, and users.

Review and Amendment

This standard is subject to review and amendment as technology advances.

2023 Edition

This edition of AHRI Standard 1060 (I-P), *Performance Rating of Air-to-Air Exchangers for Energy Recovery Ventilation Equipment*, was prepared by the Air-to-Air Energy Recovery Ventilation (ERV) Standards Technical Committee. The standard was approved by the Applied Standards Subcommittee on 8 November 2023.

Origin and Development of AHRI Standard 1060 (I-P)

The initial publication was ARI Standard 1060-1997, *Rating Air-to-Air Energy Recover Ventilation Equipment*. Subsequent revisions were:

ARI Standard 1060-2001, *Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment*

AHRI Standard 1060-2005, *Performance Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment*

AHRI Standard 1060 (I-P)-2011, *Performance Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment*

AHRI Standard 1060 (I-P)-2013, *Performance Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment*

ANSI/AHRI Standard 1060 (I-P)-2014, *Performance Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment*

AHRI Standard 1060-2018 (I-P), *Performance Rating of Air-to-Air Heat Exchangers for Energy Recovery Ventilation Equipment*

Summary of Changes

AHRI Standard 1060-2023 (I-P) contains the following updates to the previous edition:

- Revised range of standard *rating conditions* for supply flow ratio and pressure differential.
- Updated requirements for *published ratings*.
- Pressure drop correction moved to Section 4 and clarified method to determine density and viscosity.
- Increased allowances for sensible *effectiveness* and latent *effectiveness*.
- Testing tolerances moved to Table 2 and revised.
- Added calculation of standard airflow.
- Added *sensible energy recovery ratio*.
- Corrected units in Appendix C.
- Increased maximum temperature for laboratory ambient conditions.

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Committee Personnel

Standards Working Group (SWG) – AHRI 1060 & 1061

Participant	Interest Category Classification	Voting Member Role	State or Province / Country
Matthew Friedlander RenewAire, LLC	Product Manufacturer	Chair	WI, USA
Aaron Bentley SEMCO LLC	Product Manufacturer	Primary	MO, USA
John Cummings LG Electronics, Inc.	Product Manufacturer	Primary	GA, USA
Richard Lord Carrier Corporation	Product Manufacturer	Primary	TN, USA
Alois Malik Multistack LLC	Product Manufacturer	Primary	SC, USA
Tyler Mancl Greenheck Fan Company	Product Manufacturer	Primary	WI, USA
Ronnie Moffitt Trane U.S. Inc.	Product Manufacturer	Primary	KY, USA
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Marc Tardif Innergy Tech, Inc.	Product Manufacturer	Primary	QC, Canada
Kevin Teakell Aaon, Inc.	Product Manufacturer	Primary	OK, USA
Jeremy Tidd Mitsubishi Electric Cooling & Heating	Product Manufacturer	Primary	GA, USA
Jaime Yeh	AHRI Staff Liaison		

Standards Working Group (SWG) – AHRI 1060 & 1061 Scope:

The purpose of the SWG – AHRI 1060 & 1061 is to complete the project to revise AHRI Standard 1060-2018 (I-P) and AHRI Standard 1061-2018 (SI).

Standards Working Groups (SWGs) are temporary and are formed by and report to the Standards Technical Committee (STC). The work of the SWG shall be within the scope of the STC as defined by the Standards Subcommittee (SSC).

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Air-to-Air Energy Recovery Ventilation (ERV) Standards Technical Committee

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Jaime Yeh	AHRI Staff Liaison		

Air-to-Air Energy Recovery Ventilation (ERV) Standards Technical Committee Scope:

The Air-to-Air Energy Recovery Ventilation (ERV) Standards Technical Committee is responsible for the development and maintenance of AHRI standards and guidelines pertaining to Performance Rating of *Air-to-Air Exchangers* for Energy Recovery Ventilation Equipment, Calculating the Efficiency of Energy Recovery Ventilation and its Effects on Efficiency and Size of Building HVAC Systems, and Selecting, Sizing and Specifying Packaged *air-to-air energy recovery ventilation equipment*.

Out of scope for this STC include Chillers, Variable Frequency Drives (VFD), Humidifiers, Air Distribution, Chilled Beams, Unit Ventilators, Room Fan Coils, Heat Exchange, Air Handling, Air Filters, Dehumidifiers, Air Cooling and Air Heating Coils (ACAH), Thermal Storage Equipment (TSE) and Datacom equipment (DCOM).

Product definitions are as defined within AHRI 1060 and 1061, Guideline V, and Guideline W.

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Applied Standards Subcommittee

Participant	Interest Category Classification	Voting Member Role	State or Province / Country
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Applied Standards Subcommittee Scope:

The scope of the Applied Standards Subcommittee is standards and guidelines related to the end products that are part of the AHRI Applied Industry Sector. (The definition of and list of products associated with each sector are found on the AHRI website, www.ahrinet.org.)

These lists represent the membership at the time the Standards Working Group, Standards Technical Committee, and Standards Subcommittee were balloted on the final text of this edition. Since that time, changes in the membership may have occurred. Membership on these committees shall not in and of itself constitute an endorsement by the committee members or their employers of any document developed by the committee on which the member serves.

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TABLE OF CONTENTS

Page

SECTIONS

Section 1. Purpose 1
Section 2. Scope 1
2.1 Scope 1
2.2 Exclusions 1
Section 3. Definitions 1
3.1 Expression of Provisions 1
3.2 Standard Specific Definitions 1
Section 4. Test Requirements 5
4.1 Test Requirements 5
4.2 Test Set-up 6
4.3 Testing Tolerances 7
4.4 Tracer Gas Test 8
4.5 Pressure Drop Test 8
4.6 Test Uncertainty 9
4.7 Calculation of Net Supply Airflow 9
4.8 Calculation of the Supply Flow Ratio 9
4.9 Calculation of Standard Airflow 10
Section 5. Rating Requirements 10
5.1 Allowances 10
Section 6. Minimum Data Requirements for Published Ratings 11
6.1 Minimum Data Requirements for Published Ratings 11
6.2 Additional information 12
6.3 Claim to Ratings 13
Section 7. Marking and Nameplate Data 13
Section 8. Conformance Conditions 13

FIGURES

Figure 1 Scheme of Airflows for Exchangers 2
Figure 2 Illustration of Range of Standard Rating Conditions 6

TABLES

Table 1 Range of Standard Rating Conditions 5
Table 2 Testing Tolerances 7

APPENDICES

Appendix A. References – Normative 14
Appendix B. References – Informative 15

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Appendix C. Calculations – Normative 16

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