AHRI Standard 840 (I-P)

2015 Standard for

Performance Rating of Unit Ventilators

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IMPORTANT

SAFETY DISCLAIMER

AHRI does not set safety standards and does not certify or guarantee the safety of any products, components or systems designed, tested, rated, installed or operated in accordance with this standard/guideline. It is strongly recommended that products be designed, constructed, assembled, installed and operated in accordance with nationally recognized safety standards and code requirements appropriate for products covered by this standard/guideline.

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.

Note:
This standard supersedes AHRI Standard 840-98.
See AHRI Standard 841 for SI ratings.

AHRI CERTIFICATION PROGRAM PROVISIONS

Scope of the Certification Program

The certification program includes Unit Ventilators, as defined in Section 3, with outside air ventilation and return air dampers capable of providing ventilation air of at least 80% of rated standard airflow with the capability of providing any combination of these functions: humidity control, circulation, heating, cooling and filtering of air.

Certified Ratings

Refer to the Unit Ventilators Operations Manual for the certified ratings.

Price $10.00 (M) $20.00 (NM)
Printed in U.S.A.

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PERFORMANCE RATING OF UNIT VENTILATORS

Section 1. Purpose

1.1 *Purpose.* The purpose of this standard is to establish, for Unit Ventilators: definitions; classifications; test requirements; rating requirements; minimum data requirements for Published Ratings; operating requirements; marking and nameplate data; and conformance conditions.

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

1.1.2 *Review and Amendment.* This standard is subject to review and amendment as technology advances.

Section 2. Scope

2.1 *Scope.* This standard applies to Unit Ventilators, defined in Section 3.6.

2.2 *Exclusions.* This standard does not apply to equipment as defined in the following standards:

2.2.1 This standard does not apply to room air-conditioners, which are covered in AHAM Standard RAC-1 and/or ANSI Standard Z234.1.

2.2.2 This standard does not apply to central-station air-handling units, which are covered in ANSI/AHRI Standard 430 (I-P).

2.2.3 This standard does not apply to variable refrigerant flow multi-split air conditioners and multi-split heat pumps, which are covered in ANSI/AHRI Standard 1230.

Section 3. Definitions

All terms in this document will follow the standard industry definitions in the ASHRAE Terminology website (https://www.ashrae.org/resources--publications/free-resources/ashrae-terminology) and in ANSI/AHRI Standard 210/240, ANSI/AHRI Standard 440, ANSI/AHRI/CSA Standard 310/380, ANSI/AHRI Standard 390, and ANSI/AHRI/ASHRAE/ISO Standard 13256-1.

3.1 *Published Rating.* A statement of the assigned values of those performance characteristics, under stated rating conditions, by which a unit may be chosen to fit its application. These values apply to all units of like nominal size and type (identification) produced by the same manufacturer. As used herein, the term Published Rating includes the rating of all performance characteristics shown on the unit or published in specifications, advertising or other literature controlled by the manufacturer, at stated rating conditions.

3.1.1 *Application Rating.* A rating based on tests performed at application rating conditions (other than Standard Rating Conditions.)

3.1.2 *Standard Rating.* A rating based on tests performed at Standard Rating Conditions.

3.2 *Rating Conditions.* Any set of operating conditions under which a single level of performance results and which causes only that level of performance to occur.

3.2.1 *Standard Rating Conditions.* Rating Conditions used as the basis of comparison for performance characteristics.

3.2.2 *Application Rating Conditions.* Rating conditions that are not the standard rating conditions.

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