ANSI/AHRI Standard 911-2014 (R2023) (SI)

2014 (Reaffirmed 2023) Standard for

Performance Rating of Indoor Pool Dehumidifiers

Approved by ANSI on 12 June 2023

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ICS Code: 27.200

Note:

This standard supersedes AHRI Standard 910-2011.

The test requirements were deleted from Appendix C and replaced with a reference to ASHRAE Standard 190.

For I-P ratings, see ANSI/AHRI Standard 910-2014 (R2023) (I-P).

This standard was reaffirmed March 2023.

This standard was approved as an American National Standard (ANS) on 12 June 2023.

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PERFORMANCE RATING OF INDOOR POOL DEHUMIDIFIERS

Section 1. Purpose

1.1 *Purpose.* The purpose of this standard is to establish for Indoor Pool Dehumidifiers: 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 factory-made residential, commercial and industrial Indoor Pool Dehumidifiers, as defined in Section 3.

2.1.1 *Energy Source.* This standard applies to electrically operated, vapor-compression refrigeration systems.

2.2 *Exclusions.* This standard does not apply to the rating and testing of individual assemblies for separate use.

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) unless otherwise defined in this section.

3.1 *Economizer*. Factory-made assembly installed in an electrically operated, vapor compression refrigeration system that takes advantage of favorable weather conditions to reduce cooling and thereby improve a building's energy performance by introducing up to 100% outside air into a building.

3.2 *Indoor Pool Dehumidifier*. A type of air-cooled or water-cooled electrically operated, vapor compression refrigeration system; factory assembled as a single package or split system, which includes an indoor cooling/dehumidifying coil, an air reheat coil, compressor(s) and an air moving device. It may also include a Refrigerant Heat Recovery Unit, an auxiliary refrigerant condenser, Economizer, and an air-to-air heat recovery device. It shall provide the function of dehumidifying, air circulation, air reheating and may include the function of air-cooling, air-cleaning, pool water heating and air-to-air heat recovery.

3.3 *Moisture Removal Capacity (MRC)*. The amount of condensate produced by the unit which includes the effects of reheat coils, circulating fans and other components in the air stream; excluding supplementary heating, cooling or outdoor air; and expressed in kg of moisture/h.

3.4 *Moisture Removal Efficiency (MRE).* A ratio of the MRC in kg of moisture/h to the power input values in kW at any given set of Rating Conditions expressed in kg of moisture/kWh.

3.5 *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.

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

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