

ANSI/AHRI Standard 730 (I-P)

2013 Standard for Flow Capacity Rating of Suction Line Filters and Suction Line Filter Driers



Approved by ANSI on April 15, 2014



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IMPORTANT

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Note:

This standard supersedes AHRI Standard 730-2005.

For SI ratings, see ANSI/AHRI Standard 731 (SI)-2013.

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FLOW CAPACITY RATING OF SUCTION LINE FILTERS AND SUCTION LINE FILTER DRIERS

Section 1. Purpose

1.1 *Purpose.* The purpose of this standard is to establish, for refrigerant Suction Line Filters and Suction Line Filter Driers (which may be referred to herein as "filters"): definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; 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 Suction Line Filters and Suction Line Filter Driers, as defined in Section 3.

2.2 *Refrigerant.* This standard applies to Suction Line Filters and Suction Line Filter Driers for use in systems employing refrigerants, R-22, R-134a, R-290, R-404A, R-407A, R-407C, R-410A, R-507A, R-600a, and R-744 as defined in ANSI/ASHRAE 34 with Addenda.

Section 3. Definitions

All terms in this document will follow the standard industry definitions in the ASHRAE Wikipedia website (<http://wiki.ashrae.org/index.php/ASHRAEwiki>) unless otherwise defined in this section.

3.1 *Permanent Installation.* An installation intended to remain in the system for an indefinite period.

3.2 *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. 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.

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

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

3.3 *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.

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

3.4 *Refrigerant Flow Capacity.* The maximum capacity of a filter drier attained at specified conditions as mentioned in ANSI/AHRI Standard 710, and 1 psi change in pressure, expressed in tons.

3.4.1 *Pressure Drop.* The pressure difference between the inlet and outlet of a filter, including its connections expressed in psi.

3.5 *"Shall" or "Should".* "Shall" or "should" shall be interpreted as follows: