



2111 Wilson Boulevard Suite 500 Arlington VA 22201-3001 USA
Phone 703 524 8800 | Fax 703 562 1942
www.ahrinet.org

AHRI White Paper: A Look into Flow & Contaminant Control Products Section Standards

In an effort to increase awareness and information sharing among relevant members of the HVACR industry, the Flow & Contaminant Control Products Section has created a brief white paper outlining major elements of its related standards.

1. AHRI Standard 710 – *Performance Rating of Liquid-Line Driers*

The purpose of this standard is to establish for liquid-line driers: definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; marking and nameplate data; and conformance conditions.

This standard applies to liquid-line driers utilizing solid desiccants designed for use in the liquid line of all types of refrigeration and air conditioning systems. Halocarbon refrigerants employed in this standard include R-12, R-22, R-134a, R-245fa, R-404A, R-407C, R-410A, R-502, and R-507A.

2. AHRI Standards 715 & 716 – *Performance Rating of Liquid-Line Filters*

The purpose of this standard is to establish for liquid-line filters: definitions; tubing connections; test requirements; rating requirements; minimum data requirements for Published Ratings; marking and nameplate data; and conformance conditions.

This standard applies to hermetic liquid-line filters designed for use in the liquid line of all types of refrigeration and air conditioning systems employing refrigerants. This standard provides a means of determining the Overall Filter Efficiency and Contaminant Capacity of a liquid-line filter at specified conditions.

3. AHRI Standards 730 & 731 – *Flow Capacity Rating of Suction-Line Filters and Suction-Line Filter-Driers*

The purpose of this standard is to establish for refrigerant suction-line filters and suction-line filter-driers: definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; marking and nameplate data; and conformance conditions.

- *Suction-Line Filters* are defined as manufactured devices used in the suction line of a system, for the purpose of removing and retaining solid contaminants from the refrigerant.

- *Suction-Line Filter-Driers* are defined as manufactured devices used in the suction line of a system, whose element is partly or wholly composed of a desiccant. It is intended to remove solid contaminants, and to remove and retain moisture from the refrigerant.

4. AHRI Standards 750 & 751 – Performance Rating of Thermostatic Refrigerant Valves

The purpose of this standard is to establish for Thermostatic Refrigerant Expansion Valves: definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; marking and nameplate data; and conformance conditions.

This standard applies to Thermostatic Refrigerant Expansion Valves for use with the refrigerants listed below at evaporator temperatures between 50°F [10°C] and -40°F [-40°C]:

R-22, R-134a, R-290, R-404A, R-407A, R-407C, R-410A, R-507A, R-600a.

5. AHRI Standards 760 & 761 – Performance Rating of Solenoid Valves for Use with Volatile Refrigerants

The purpose of this standard is to establish for solenoid valves: definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; marking and nameplate data; and conformance conditions.

This standard applies to solenoid valves for use with volatile refrigerants as defined below:

A valve that is actuated by the magnetic action of an electrically energized coil. The opposite action is accomplished by gravity, pressure, or spring action.

6. AHRI Standards 770 & 771 – Performance Rating of Refrigerant Pressure Regulating Valves

The purpose of this standard is to establish for refrigerant pressure regulating valves: definitions; test requirements; rating requirements; minimum data requirements for Published Ratings; marking and nameplate data; and conformance conditions.

This standard applies to Refrigerant Pressure Regulating Valves controlling volatile refrigerant flow that primarily respond to pressure. The types of Refrigerant Pressure Regulating Valves are those that are responsive to inlet, to outlet, or to differential pressures sensed locally or remotely.