

ANSI/AHRI Standard 1320 (I-P)

2011 Standard for Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets for Use With Secondary Refrigerants



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IMPORTANT

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Note:

This standard is a new standard.
For SI ratings, see ANSI/AHRI Standard 1321 (SI) – 2011.

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PERFORMANCE RATING OF COMMERCIAL REFRIGERATED DISPLAY MERCHANDISERS AND STORAGE CABINETS FOR USE WITH SECONDARY REFRIGERANTS

Section 1. Purpose

1.1 Purpose. The purpose of this standard is to establish for Commercial Refrigerated Display Merchandisers and Storage Cabinets that use secondary refrigerants: definitions; test requirements; rating requirements; symbols and subscripts; 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. The values reported using this standard allow comparison of energy consumption within each of the following product categories: Remote Commercial Refrigerated Display Merchandisers, Remote Commercial Refrigerated Storage Cabinets and Self-contained Commercial Refrigerated Display Merchandisers.

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 the following Commercial Refrigerated Display Merchandisers and Storage Cabinets, provided that the cases are equipped and designed to work with electrically driven, medium-temperature, single-phase secondary coolant systems:

2.1.1 Remote Commercial Refrigerated Display Merchandisers and Storage Cabinets

2.1.2 Open and Closed Commercial Refrigerated Display Merchandisers

2.2 Exclusions. This standard does not apply to the following:

2.2.1 Refrigerated vending machines

2.2.2 Ice makers

2.2.3 Soft serve extruders

2.2.4 Low-temperature applications

2.2.5 Secondary coolants involving a change of phase (e.g. ice slurries, CO₂)

2.2.6 Self-contained Commercial Refrigerated Display Merchandisers and storage cabinets

Section 3. Definitions

All terms in this document shall follow the standard industry definitions in the current edition of *ASHRAE Terminology of Heating, Ventilation, Air Conditioning and Refrigeration* unless otherwise defined in this section.

3.1 Anti-condensate Energy Consumption (AEC). The Total Daily Energy Consumption used in condensate removal on the outside of the Commercial Refrigerated Display Merchandiser or Storage Cabinet, which typically includes fan and condensate heater energy expressed in kW·h per day.

3.2 Calculated Daily Energy Consumption (CDEC). This is a value for Remote Commercial Refrigerated Display Merchandisers or Storage Cabinets based upon the requirements of this standard expressed in kW·h per day.

3.3 Circulation Pump Energy Consumption (CPEC). The energy consumed by the pump used to circulate secondary coolant expressed in kW·h per day.