



Standard Specification for Dehumidifier, Shipboard, Mechanically Refrigerated, Self- Contained¹

This standard is issued under the fixed designation F 1075; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers self-contained dehumidifiers using hermetic refrigerant motor-compressors.

1.2 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.3 The following safety hazards caveat pertains only to the test methods portion, Section 11, of this specification: *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

- B 117 Practice for Operating Salt Spray (Fog) Apparatus
- B 280 Specification for Seamless Copper Tube for Air Conditioning and Refrigeration Field Service
- D 1654 Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
- D 2247 Practice for Testing Water Resistance of Coatings in 100 % Relative Humidity

2.2 ASHRAE Standard:³

ASHRAE—15 Safety Code for Mechanical Refrigeration

2.3 Official Classification Standard:⁴

Uniform Freight Classification Ratings, Rules, and Regulations

2.4 UL Standards:⁵

UL 474 Dehumidifiers

UL 984 Hermetic Refrigerant Motor—Compressors

2.5 Military Documents:⁶

MIL-S-901 Specification Requirements for Shock Tests, High Impact (H.I.); Shipboard Machinery, Equipment, and Systems

MIL-STD-167-1 Mechanical Vibrations of Shipboard Equipment, (Type I—Environmental and Type II—Internally Excited)

MIL-D-19947 Specification for Dehumidifier, Space, Mechanically Refrigerated, Self-Contained, Naval Shipboard

3. Ordering Information

3.1 Orders for products under this specification shall include the following information, as necessary, to describe adequately the desired product:

3.1.1 Title, ASTM designation, and year of issue,

3.1.2 Quantity (number of dehumidifiers),

3.1.3 Certification if required, and

3.1.4 Additions to the specification and supplementary requirements, if required.

4. Materials and Manufacture

4.1 In addition to the requirements cited in this specification, the dehumidifiers covered by this specification shall be designed, constructed, assembled, and tested to comply with UL 474, UL 984, and ASHRAE Standard 15. In the event of differences between any of the requirements of this specification and those of other referenced documents, the requirements of this specification shall govern. The manufacturer shall certify compliance with the above standards for equipment furnished and shall be cited in the UL Electrical Appliance and Utilization Equipment product directories.

4.2 The dehumidifier shall consist of a motor-compressor, condensing unit, dehumidifying coil, air-circulating fan, and accessories, all enclosed within a metal cabinet. The dehumidifier shall be complete, self-contained with the refrigeration

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc. (ASHRAE), 1791 Tullie Circle, NE, Atlanta, GA 30329.

⁴ Available from Uniform Classification Agent, Tariff Publication Officer, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.

⁵ Available from Underwriter's Laboratories Inc., 333 Pfingsten Rd., Northbrook, IL 60062.

⁶ Available from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.