(Reaffirmation of ANSI/ASHRAE Standard 37-2009)

Methods of Testing for Rating Electrically Driven Unitary Air-Conditioning and Heat-Pump Equipment


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NOTE

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FOREWORD

This is a reaffirmation of Standard 37-2009. This standard was prepared under the auspices of the ASHRAE. It may be used, in whole or in part, by an association or government agency with due credit to ASHRAE. Adherence is strictly on a voluntary basis and merely in the interests of obtaining uniform guidelines throughout the industry. This 2019 reaffirmation includes no substantive changes to the standard.

1. PURPOSE

1.1 The purpose of this standard is to provide test methods for determining the cooling capacity of unitary air conditioning equipment and the cooling or heating capacities, or both, of unitary heat-pump equipment.

1.2 These test methods do not specify methods of establishing ratings that involve factors such as manufacturing tolerances and quality control procedures.

2. SCOPE

2.1 This standard applies to electrically driven mechanical-compression unitary air conditioners and heat pumps consisting of one or more assemblies that include an indoor air coil(s), a compressor(s), and an outdoor coil(s). Where such equipment is provided in more than one assembly, the separated assemblies are designed to be used together.

2.2 This standard does not include methods of testing the following:

a. Cooling coils for separate use
b. Condensing units for separate use
c. Room air conditioners
d. Heat-operated unitary equipment
e. Liquid chilling packages
f. Multiple indoor air coils operating simultaneously in heating and cooling modes

3. DEFINITIONS

**air, standard:** dry air having a mass density of 1.204 kg/m³ (0.075 lb/ft³).

**apparatus:** as used in this standard, this term refers exclusively to test room facilities and instrumentation.

**capacity, heating:** the rate, expressed in watts (Btu/h), at which the equipment adds heat to the air passing through it under specified conditions of operation.

**capacity, latent cooling:** the rate, expressed in watts (Btu/h), at which the equipment removes latent heat from the air passing through it under specified conditions of operation.