

DMMS ISO 5151:2017 Non-ducted air conditioners and heat pumps — Testing and rating for performance

Scope

This document specifies performance testing, the standard conditions and the test methods for determining the capacity and efficiency ratings of air-cooled air conditioners and air-to-air heat pumps.

This document is applicable to the following equipment:

- — non-ducted air-cooled air conditioners and non-ducted air-to-air heat pumps; or
- — ducted air conditioners and/or ducted heat pumps rated at less than 8 kW and intended to operate at an external static pressure of less than 25 Pa.

This document is limited to:

- — residential, commercial and industrial single-package and split-system air conditioners and heat pumps;
- — factory-made, electrically driven and use mechanical compression;
- — utilizing single, multiple and variable capacity components;
- — multiple split-system utilizing one or more refrigeration systems, one outdoor unit and one or more indoor units, controlled by a single thermostat/controller.

The requirements of testing and rating contained in this document are based on the use of matched assemblies.

This document is not applicable to the rating and testing of the following:

- a) water-source heat pumps or water cooled air conditioners;
- b) multi-split-system air conditioners and air-to-air heat pumps (follow ISO 15042 for the testing of such equipment);
- c) mobile (windowless) units having a condenser exhaust duct;
- d) individual assemblies not constituting a complete refrigeration system;
- e) equipment using the absorption refrigeration cycle;
- f) ducted equipment except for those specified in this clause (follow ISO 13253 for the testing of such equipment).

This document does not cover the determination of seasonal efficiencies, which can be required in some countries because they provide a better indication of efficiency under

actual operating conditions. NOTE Throughout this document, the terms “equipment” and “systems” mean “air conditioners” and/or “heat pumps”.

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