

INTERNATIONAL ELECTROTECHNICAL COMMISSION

IEC 61000-3-3 Edition 3.0 2013-05 Amendment 2 2021-03

ELECTROMAGNETIC COMPATIBILITY (EMC) –

Part 3-3: Limits – Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

INTERPRETATION SHEET 1

This interpretation sheet has been prepared by subcommittee 77A: EMC – Low frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

The text of this interpretation sheet is based on the following documents:

DISH	Report on voting
77A/1238/DISH	77A/1244A/RVDISH

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

Interpretation of the term “rated input current” for the applicability of the standards IEC 61000-3-3 and IEC 61000-3-11.

Introduction:

An incorrect use case of the standard was reported in SC77A/WG2, that was caused by a misunderstanding of the words “rated current” used in the Scope clauses of IEC 61000-3-3 and IEC 61000-3-11.

The standard IEC 61000-3-11 is considered to be applicable to a product that can operate continuously with an input current over 16 A, whatever term is applied to this current. The words “rated current for xxx” in this case are used for the input current when the products (heat pump systems) are tested and measured according to ISO 5151. For example, the current measured under the test of ISO 5151 for cooling is mentioned as “rated current for cooling: 13,89 A” on the name plate. Another value according to ISO 5151 has been specified as “rated current for heating: 10,34 A”. Also, the maximum input current where the product can operate continuously is mentioned as “Max. input current: 19 A” on the same nameplate.