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AMENDMENT 2

AMENDEMENT 2

Electromagnetic compatibility (EMC) -

Part 4-27: Testing and measurement techniques - Unbalance, immunity test for equipment with input current not exceeding 16 A per phase

Compatibilité électromagnétique (CEM) -

Partie 4-27: Techniques d'essai et de mesure - Essai d'immunité aux déséquilibres pour des matériels avec un courant appelé n'excédant pas 16 A par phase



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Electromagnetic compatibility (EMC) -
Part 4-27: Testing and measurement techniques - Unbalance, immunity
test for equipment with input current not exceeding 16 A per phase**

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Amendment 2 to IEC 61000-4-27:2000 has been prepared by subcommittee 77A: EMC – Low frequency phenomena, of IEC technical committee 77: Electromagnetic compatibility.

The text of this Amendment is based on the following documents:

Draft	Report on voting
77A/1236/CDV	77A/1249/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

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INTRODUCTION

This amendment contains the following main changes in comparison with IEC 61000-4-27:2000/AMD1:2009:

The angles in Table 1 (test levels) suggest a three-phase system with a negative phase sequence while the intention is to have a positive phase sequence and thus the signs and values of all angles in Table 1 should be corrected. In addition, the value of k_{u2} of class 2, test 3 is 28 % instead of 25 %. The Table 1 is modified accordingly

Class X is defined as special and levels 2 and 3 refers to Annex D instead of 61000-2-4.

U_N is deleted from Table 1, and it is moved to the new Clause 3 (Terms, definitions, and abbreviations). The definition 3.5 U_N nominal phase to neutral voltage is added.

In addition, the definition of rise and fall time is added (as in 61000-4-11:2020).

The text in Note 1 in Table 1 is deleted and replaced by “ U_b is lagging against U_a , and U_c is leading against U_a ”.

In Table 1 Add NOTE 2: The product committee may specify any test level; however, for equipment connected to public supply systems, it is recommended that the levels should not be lower than those defined for class 2.

The sentence under Table 1 becomes NOTE 2 in the Table 1.

Some changes are introduced also in Table 2 (Characteristics of the generator). Main changes:

- Modified output current capability which must be able to provide a crest factor of at least 3 when U_N applied to calibration load.
- Modified voltage rise time adding (from 10 % to 90 %)
- Modified phase shifting
- Modified phase accuracy (put 50 Hz or 60 Hz).