

## **ELECTROMAGNETIC COMPATIBILITY (EMC) –**

### **Part 3-12: Limits – Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current $>16$ A and $\leq 75$ A per phase**

#### **INTERPRETATION SHEET**

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

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

|             |                  |
|-------------|------------------|
| ISH         | Report on voting |
| 77A/792/ISH | 77A/800/RVD      |

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 requirements for equipment with unforeseen low input currents during tests according to IEC 61000-3-12:2011: Electromagnetic compatibility (EMC) – Part 3-12: Limits – Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current  $>16$  A and  $\leq 75$  A per phase.**

When equipment that has a rated current above 16 A draws a reference current that is less than 16 A under the specified test conditions, the manufacturer may proceed in one of the following ways:

- 1) Comply with the proportional limits as calculated, choosing the required  $R_{sce}$ ;
- 2) Comply with the absolute limits given in IEC 61000-3-2:2011, Table 1, using the measurement procedure defined in 4.2.2 in IEC 61000-3-12:2011;  
In that case, the manufacturer shall state in the instruction manual “Equipment complying with IEC 61000-3-12”, without having to declare a minimum short circuit power  $S_{sc}$ .
- 3) Change the test conditions to a representative 2,5 min period, as defined in IEC 61000-3-12:2011, Table 1 for long cyclic equipment, and comply with the proportional limits as calculated, choosing the required  $R_{sce}$ .

The manufacturer is strongly advised to state in the test report which of these ways was used, so that subsequent tests are carried out with the same procedure.