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Fixed inductors for electromagnetic interference suppression –

Part 2: Sectional specification

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FOREWORD

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International Standard IEC 60938-2 has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

This consolidated version of IEC 60938-2 consists of the second edition (1999) [documents 40/1111/FDIS and 40/1137/RVD] and its amendment 1 (2006) [documents 40/1603/CDV and 40/1700A/RVC].

The technical content is therefore identical to the base edition and its amendment and has been prepared for user convenience.

It bears the edition number 2.1.

A vertical line in the margin shows where the base publication has been modified by amendment 1.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

Annexes A, B, C, D and E form an integral part of this standard.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

FIXED INDUCTORS FOR ELECTROMAGNETIC INTERFERENCE SUPPRESSION – Part 2: Sectional specification

1 General

1.1 Scope

This International Standard applies to fixed inductors designed for electromagnetic interference suppression and which fall within the scope of the generic specification, IEC 60938-1. It is restricted to fixed inductors for which safety tests are appropriate. This implies that inductors specified according to this specification will either be connected to mains supplies, when compliance with the mandatory tests of table 1 is necessary, or used in other circuit positions where the equipment specification prescribes that some or all of these safety tests are required.

This standard applies to fixed inductors which will be connected to an a.c. mains or other supply with a nominal voltage not exceeding 1 000 V a.c. (r.m.s.) or d.c. between conductors and with a nominal frequency not exceeding 400 Hz.

1.2 Object

The object of this standard is to prescribe standard requirements for safety tests and standard ratings and characteristics, to select from IEC 60938-1 the appropriate methods of test and to give general performance requirements for suppression inductors. Test severities and performance requirements prescribed in detail specifications referring to this sectional specification shall be of equal or higher performance level. In addition, the minimum requirements for safety tests specified herein always apply.

1.3 Normative references

Les documents de référence suivants sont indispensables pour l'application du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60063:1963, *Preferred number series for resistors and capacitors*
Amendment 1 (1967)
Amendment 2 (1977)

IEC 60085:1984, *Thermal evaluation and classification of electrical insulation*

IEC 60279:1969, *Measurement of the winding resistance of an a.c. machine during operation at alternative voltage*

IEC 60938-1:1999, *Fixed inductors for electromagnetic interference suppression – Part 1: Generic specification*

ISO 3:1973, *Preferred numbers – Series of preferred numbers*

CISPR 16-1-1:2003, *Specification for radio disturbance and immunity measuring apparatus and methods – Part 1-1: Radio disturbance and immunity measuring apparatus – Measuring apparatus*