

INTERNATIONAL STANDARD

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AMENDMENT 1
2006-10

Amendment 1

**Fixed inductors for electromagnetic
interference suppression –**

**Part 2:
Sectional specification**

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Международная Электротехническая Комиссия

PRICE CODE

M

For price, see current catalogue

FOREWORD

This amendment has been prepared by IEC technical committee 40: Capacitors and resistors for electronic equipment.

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

CDV	Report on voting
40/1603/CDV	40/1700A/RVC

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

The committee has decided that the contents of this publication 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- withdrawn;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.

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1.3 Normative references

Add, to the list of references, the following new reference:

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*

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4.2 Voltage proof

Replace the existing Table 3 by the following new Table 3:

Table 3 – Measuring points

Inductors for	Test A between terminations*	Test B – Internal insulation) Test C – External insulation Test D** – Between windings and core
Alternating current	4,3 U_R (d.c.)	2 U_R + 1 500 V (a.c.) with a minimum of 2 000 V (a.c.)
Direct current	3 U_R (d.c.)	2 U_R + 1 500 V (d.c.)
* Applies only to inductors with more than one winding. ** Test not required for insulated or non-insulated and self-supporting mountable inductors.		

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Replace the existing Annex A by the following new Annex A:

Annex A (normative)

Test schedule for safety tests only approval

Subclause number and test (see Note 1)	D or ND (see Note 2)	Conditions of test (see Note 1)	Number of specimens (<i>n</i>) and number of non-conforming items (<i>c</i>)	Performance requirements (see Note 1)
Group 0	ND		See tables 1 or 2	
4.1.1 Dimensions (gauging)			↓	See detail specification
4.1 Visual examination				No visible damage Legible marking
4.5 DC line resistance				See detail specification
4.4 Inductance				Within specified tolerance
4.2 Voltage proof		See Table 3 See detail specification for the method Foil method duration: 1 min		No breakdown or flashover
4.3 Insulation resistance		See detail specification for the method		As in 4.3

Subclause number and test (see Note 1)	D or ND (see Note 2)	Conditions of test (see Note 1)	Number of specimens (<i>n</i>) and number of non-conforming items (<i>c</i>)	Performance requirements (see Note 1)
Group 3A 4.16 Temperature rise (inductors with mass >5 g only) 4.16.1 Test conditions 4.16.2 Final measurements 4.18.1 Endurance, current (inductors with mass ≤5 g only)	D	Duration: until thermal equilibrium has been reached Current: rated current Ambient temperature: rated temperature Internal temperature Duration: 1 000 h Current: 1,1 × rated current Recovery: 1 h to 26 h	See Tables 1 or 2 ↓	As in 4.16.2
Group 3B (inductors with more than one winding only) 4.17 Impulse voltage 4.18.2 Endurance, voltage between line terminations	D	3 impulses, full wave Crest voltage: see 4.17.1 Duration: 1 000 h Voltage and temperature, see 4.18.2	See Tables 1 or 2 ↓	No breakdown or flashover
Group 3 4.18.3 Final measurements	D	Recovery: 1 h to 26 h Visual examination DC line resistance Voltage proof Voltage: 66 % of voltage applied in group 0 Insulation resistance	See Tables 1 or 2 2 ↓	No visible damage Legible marking As for group 0 No breakdown or flashover ≥50 % of values in 4.3
Group 4 4.19 Passive flammability (if required in the detail specification)	D		See Tables 1 or 2 ↓	As in 4.19
NOTE 1 Subclause numbers of test and performance requirements refer to Clause 4 .				
NOTE 2 In this table, D = destructive, ND = non-destructive.				

Replace the existing Annex B by the following new Annex B:

Annex B
(normative)

Test schedule for safety tests and performance tests for qualification approval, assessment level D

Subclause number and test (see Note 1)	D or ND (see Note 2)	Conditions of test (see Note 1)	Number of specimens (n) and number of non-conforming items (c)	Performance requirements (see Note 1)
Group 0 4.1.1 Dimensions (gauging) 4.1 Visual examination 4.5 DC line resistance 4.4 Inductance 4.2 Voltage proof 4.3 Insulation resistance	ND	See table 3 See detail specification for the method Foil method duration: 1 min See detail specification for the method	See Tables 1 or 2 ↓	See detail specification No visible damage Legible marking See detail specification Within specified tolerance No breakdown or flashover As in 4.3
Group 1A 4.1.2 Dimensions (detail) 4.6 Robustness of terminations 4.7 Resistance to soldering heat (if applicable) 4.20 Component solvent resistance (if applicable) 4.7.2 Final measurements	D	For method and severity: see detail specification See detail specification for the method (1A or 1B) For method 1A: Immersion time: 10 s, unless otherwise specified in the detail specification Visual examination DC line resistance	See Tables 1 or 2 ↓	See detail specification and 4.1.2 No visible damage No visible damage As in group 0