

**SPECIFICATION FOR DEGREES OF PROTECTION PROVIDED
BY ENCLOSURES (IP CODE)**

AMENDMENT NO. 1

May 2000

1. In 1997, IEC introduced a new numbering system. IEC 529 : 1989 is now referred to as IEC 60529 : 1989. Hence, SS IEC 529 : 1989 has been renumbered as SS IEC 60529 : 1989.

2. **Page 4, National Foreword**

In the 1st paragraph, *replace* 'It is identical with IEC 529 : 1989-11 (Second Edition)' by 'It is identical to the Second Edition of International Standard IEC 60529 : 1989-11 and Amendment 1, 1999-11.'

3. *Add* the attached IEC 60529 : 1989, Amendment 1 : 1999-11. In the IEC Amendment, the page numbers refer to that of IEC 60529. The following table shows the corresponding pages in this Singapore Standard:

IEC Page Number	SS Page Number
7	5
9	6
11	7
19	11
21	12
41	22
59	32
73	44

FOREWORD

This amendment has been prepared by IEC technical committee 70: Degrees of protection provided by enclosures.

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

FDIS	Report on voting
70/91/FDIS	70/92/RVD

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

Page 7

Modify the title of clause 1 as follows:

1 Scope and object

Delete the title of clause 2 "Object"

Add, on page 9, at the end of the fifth paragraph of item d), the following:

"... to be protected".

Page 9

Add the following new clause 2:

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60050-195:1998, *International Electrotechnical Vocabulary (IEV): Part 195: Earthing and protection against electric shock*

IEC 60050(826):1982, *International Electrotechnical Vocabulary (IEV): Chapter 826: Electrical installations of buildings*

IEC 60068-1:1988, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-68:1994, *Environmental testing – Part 2: Tests – Test L: Dust and sand*

IEC 60071-2:1996, *Insulation co-ordination – Part 2: Application guide*

Page 11

3.5.1 Hazardous live part

Replace the text in brackets "(see IEC 536, at present Document 64(CO)196)" by "(see IEC 60050-195, 195-06-05)".

Page 19

Table I

Replace the note by the following:

NOTE In the case of the first characteristic numerals 3, 4, 5 and 6, protection against access to hazardous parts is satisfied if adequate clearance is kept. The adequate clearance should be specified by the relevant product committee in accordance with 12.3.

Due to the simultaneous requirement specified in Table II, the definition "shall not penetrate" is given in Table I.

Page 21

Table II, First characteristic numeral 6, under Test conditions

Change the test conditions to read:

13.4 and 13.6

Page 41

13.3 Acceptance conditions for the first characteristic numerals 1, 2, 3, 4

Replace the first paragraph and the first sentence of the note by the following:

The protection is satisfactory if the full diameter of the probe specified in Table VII does not pass through any opening.

NOTE For the first characteristic numerals 3 and 4 the probes specified in Table VII are intended to simulate foreign objects which may be spherical.

13.4 Dust test for first characteristic numerals 5 and 6

In the second sentence, change "width" to "width of a gap".

Page 59

Figure 2 – Test device to verify protection against dust (dust chamber).

Add the following note:

NOTE See IEC 60068-2-68, Figure 2 valid for La2 only.

Add the following new bibliography:

Bibliography

IEC 61032, *Protection of persons and equipment by enclosures – Probes for verification*

IEC 61140, *Protection against electric shock – Common aspects for Installation and equipment*
