

BUREAU OF INDIAN STANDARDS

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Preliminary Draft Indian Standard

WARNING SYMBOL FOR DANGEROUS VOLTAGES

(ICS 91.140.50)

Electrical installation Sectional Committee
ETD 20

Last Date for
Comments-
17th October 2024

FOREWORD

(Formal clause will be added later)

This standard was first published in 1978. This revision has been brought out to bring the standard in the latest style and format of the Indian Standards.

This standard has been prepared with a view to standardize the graphical symbol for indication on electrical equipment's of the electrical shock hazard arising out of dangerous voltages.

The symbol proposed in this standard is in addition to the sign of 'human skull and cross –bones', already recommended in IS 2551. While the lightning symbol of this standard can be used on the enclosures of equipments which are normally handled by persons, such as operators, wiremen or engineers; 'the human skull and cross –bones', are to be utilized for warning the general public against electrical hazards on supports of electrical transmission and distribution pillars, pole mounted sub –stations, etc.

In the preparation of this standard, assistance has been derived from IEC 60417:2024 DB 'Graphical symbols for use on equipment', published by the International Electrotechnical Commission.

It does not include any significant technical changes with respect to the previous edition.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the results of a test, shall be rounded off in accordance with IS 2:1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Preliminary Draft Indian Standard
WARNING SYMBOL FOR DANGEROUS VOLTAGES

(First Revision)

1 SCOPE

1.1 This standard covers the symbol to be applied to the electrical equipment to indicate hazards arising out from dangerous voltages.

2 REFERENCES

The standards listed below contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards.

<i>IS Number</i>	<i>Title</i>
IS 5:2007	Colours for ready mixed paints and enamels (Sixth Revision)
IS 16449 (Part 1): 2018/ISO 3864- 1:2011	Graphical symbols - Safety colours and safety signs: Part 1 design principles for safety signs and safety markings
IEC 60417 DB:2024	Graphical symbols for use on equipment

3 SYMBOL

3.1 The shape and dimensions of the symbol shall conform to Fig. 1.

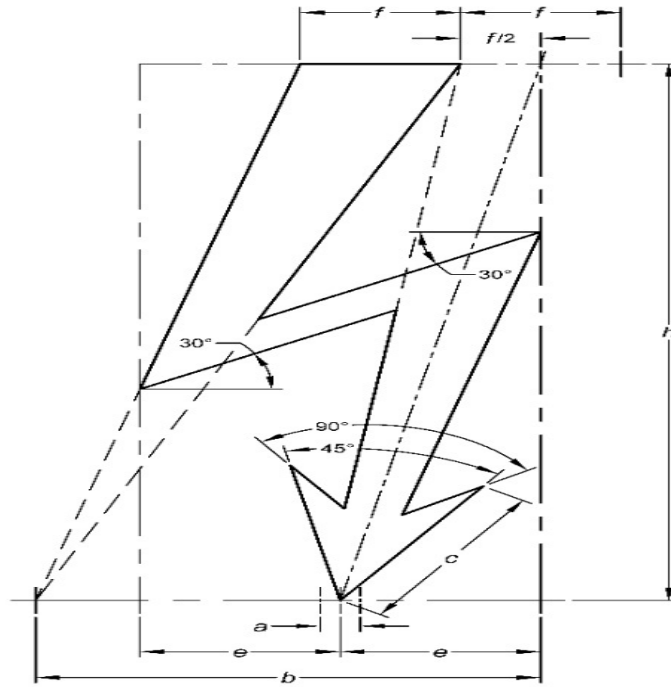
4 APPLICATION

4.1 This symbol may be applied to indicate hazards arising from dangerous voltages on any kind of electrical equipment

4.2 All enclosures and all compartments which do not clearly show that they contain electrical apparatus shall be marked with this symbol.

4.3 Location – It shall be located in a conspicuous place and if necessary at more than one place.

4.4 The symbol shall be in signal red colour conforming to IS 5.



All dimensions in millimetres.

FIG.1 WARNING SYMBOL

NOMINAL SIZE

Table 1 Dimensions of WARNING SYMBOL

h	a	b	c	e	f
16	0.6	8	4	3.2	2.5
20	0.8	10	5	4	3.2
25	1.0	12.5	6.3	5	4
32	1.2	16	8	6.3	5
40	1.6	20	10	8	6.3
50	2.0	25	12.5	10	8
63	2.5	32	16	12.5	10
80	3.2	40	20	16	12.5
100	4.0	50	25	20	16
125	5.0	63	32	25	20
160	6.0	80	40	32	25

Note— In case of application in a warning sign the rules according to IS 16449 (Part 1): 2018/ISO 3864-1:2011 shall be adhered to. See also IEC 60417-6042.