



# SLOVENSKI STANDARD

## SIST EN 50043:1998

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### Low-voltage switchgear and controlgear for industrial use - Size numbers and gauges for flat connections

Low-voltage switchgear and controlgear for industrial use - Size numbers and gauges for flat connections

Industrielle Niederspannungs-Schaltgeräte - Flachanschlussgrößen und Lehren

Appareillage industriel à basse tension - Tailles et gabarits pour raccordement à plat

Ta slovenski standard je istoveten z: **EN 50043:1986**

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#### **ICS:**

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear
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**SIST EN 50043:1998**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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EN 50 043

November 1985

UDC 621.316.54:621.3.027.2:621.315.684—418:621.753:3

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English version

## Low-voltage switchgear and controlgear for industrial use Size numbers and gauges for flat connections

Appareillage industriel à basse  
tension. Tailles et gabarits pour  
raccordement à plat

Industrielle Niederspannung-  
Schaltgeräte. Flachanschluss-  
größen und Lehren

### iTeh STANDARD PREVIEW (standards.iteh.ai)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CENELEC General Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CENELEC General Secretariat has the same status as the official versions.

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## CENELEC

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

General Secretariat: rue Bréderode 2, B-1000 Brussels

This European Standard has been prepared by the CENELEC Technical Committee 17B.

### 1. Scope

This standard applies to flat connections of low-voltage switchgear and controlgear by means of flat terminals with one clearance hole, or one threaded hole, or one screw or stud, which are designed for the connection of rectangular bars or of lugs for round conductors.

The extension of this standard to terminals with 2, 3 or 4 clearance or threaded holes, screws or studs is under consideration.

### 2. Object

This standard lists eleven sizes of flat terminals, each with a corresponding reference number (see table 1). The standard also specifies gauges for the verification of the minimum required space, the correct location of the clearance or the threaded holes and, where appropriate, the screw size to ensure that a given flat terminal of an equipment will accept a specific bar and/or a specific lug for a round conductor.

NOTE. These gauges are based on the bars and lugs according to existing national standards of the CENELEC members.

This standard does not deal with the dimensions of the terminals of the device nor with the dimensions of the bars or lugs to be connected, nor with the quality of the connection, nor does it deal with clearances and creepage distances.

### 3. Flat connection size number and gauges

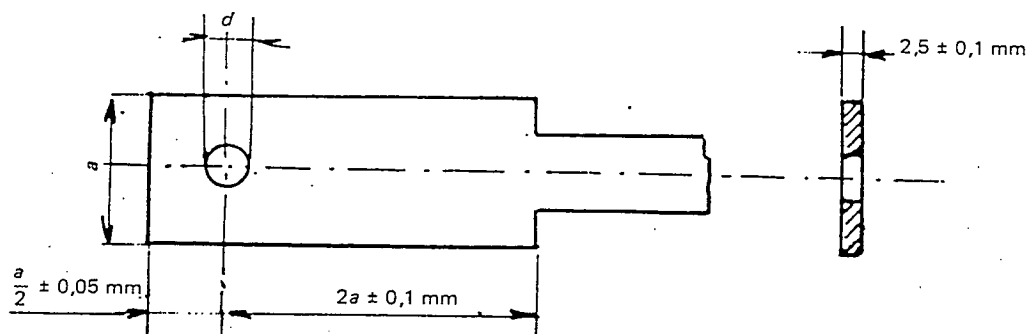
Table 1 gives the screw or stud sizes, together with the dimensions of the corresponding gauges.

1	2	3	4	5
Size numbers of flat terminals	Screw or stud sizes	Gauges form C* (figure 1)		
		Sizes	$\pm 0,05$ mm	$\pm 0,1$ mm
1	M5	C1	12,5	5,5
2	M6	C2	14,5	6,6
3	M6	C3	16,5	6,6
4	M6	C4	18,5	6,6
5	M8	C5	20,5	9
6	M8	C6	23,5	9
7	M10	C7	25,5	11
8	M10	C8	32,5	11
9	M12	C9	37,5	14
10	M12	C10	40,5	14
11	M12	C11	43,5	14

\*Gauges forms A and B are specified in EN 50 027.

### 3.1 Construction of gauges

The construction of gauges is shown in figure 1. Dimensions  $a$  and  $d$  and permissible tolerances are given in table 1.



All edges slightly rounded

Materials: Gauge steel  
Measuring surfaces are hardened and polished.  
Handle at discretion of the manufacturer.

Figure 1. Gauge form C

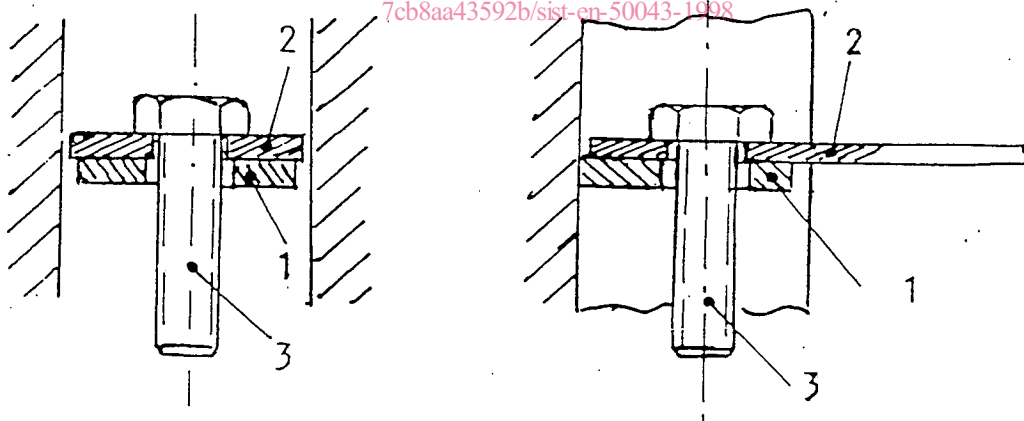
## 4. Application of gauges

Before the verification of flat terminals, any existing removable threaded elements shall be removed. Where a flat terminal can be used on both sides (above and below), the gauge shall be used accordingly.

### 4.1 Terminal with clearance hole

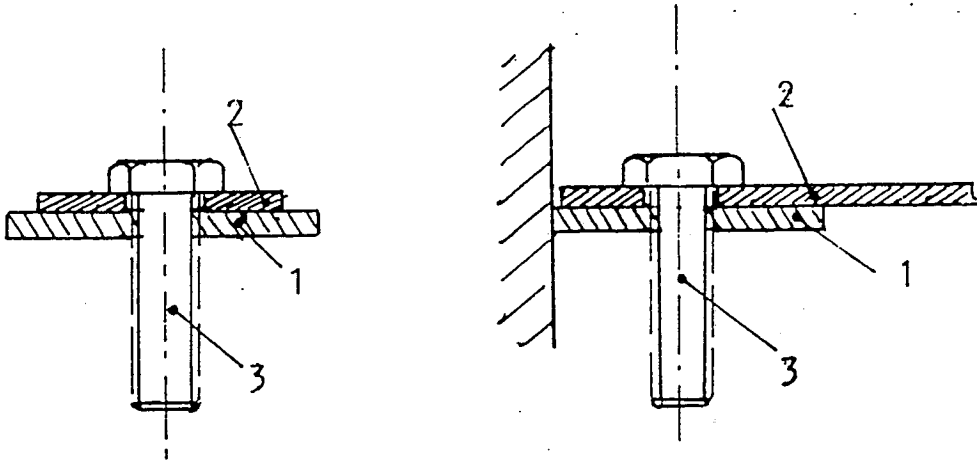
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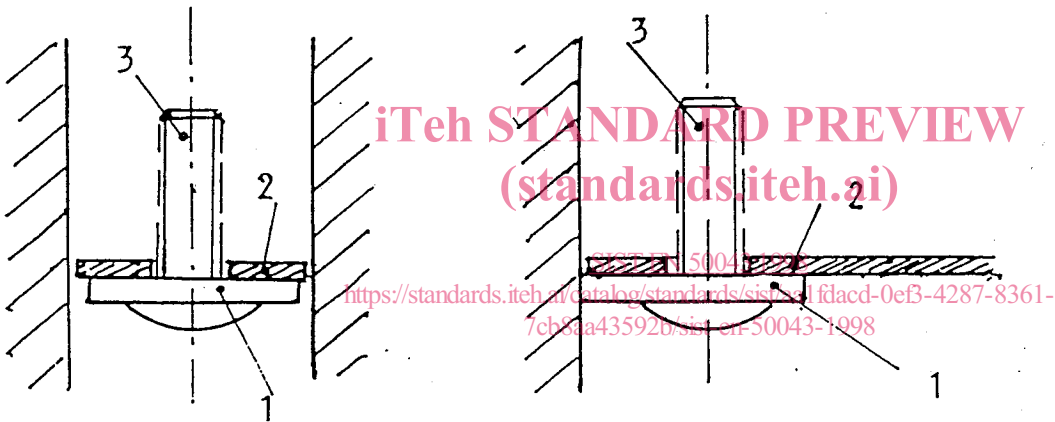
It shall be possible to place the gauge (2) flat on to the equipment terminal (1), and the corresponding screw (3) of the terminal size in accordance with table 1 shall easily fit into the clearance hole of the terminal (1).

## 4.2 Terminal with threaded hole



It shall be possible to place the gauge (2) flat on to the equipment terminal (1), and the corresponding screw (3) of the terminal size in accordance with table 1 shall easily screw into the threaded hole of the terminal (1).

## 4.3 Terminal with screw or stud



The gauge (2) shall drop down on to the equipment terminal (1) around the terminal screw (3) or stud (3).