



SLOVENSKI STANDARD

SIST IEC 60114:1999

01-november-1999

Recommendation for heat-treated aluminium alloy busbar material of the aluminium-magnesium-silicon type

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iTeh STANDARD PREVIEW

Recommandation concernant les alliages d'aluminium du type aluminium-magnésium-silicium, à traitement thermique, pour barres de connexion

[SIST IEC 60114:1999](https://standards.iteh.ai/catalog/standards/sist/528c41ee-dd8a-4222-95f2-c0bd1c9c802/sist-iec-60114-1999)

Ta slovenski standard je istoveten z: IEC 60114

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ICS:

29.060.10	Žice	Wires
29.240.20	Daljnovodi	Power transmission and distribution lines

SIST IEC 60114:1999

en

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d'aluminium du type aluminium-magnesium-
silicium, à traitement thermique, pour
barres de connexion**

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Commission Electrotechnique Internationale
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CORRIGENDUM 1

Page 4

Article 3.2

Au lieu de :

"Les erreurs de mesure qui, totalisées, ne devrait pas être supérieures à trois pour mille sont comprises dans cette valeur."

Lire :

"Les erreurs de mesure qui, totalisées, ne devront pas être supérieures à trois pour mille sont comprises dans cette valeur."

Page 5, 3ème ligne avant la fin

Lire :

Density ... 2.70 kg/dm³ (0.09754 lb/in³)

I.E.C. PUBLICATION 114
First edition 1959

CORRIGENDUM 1

Page 4

Clause 3.2

Instead of :

"Les erreurs de mesure qui, totalisées, ne devrait pas être supérieures à trois pour mille sont comprises dans cette valeur."

Read :

"Les erreurs de mesure qui, totalisées, ne devront pas être supérieures à trois pour mille sont comprises dans cette valeur."

Page 5, third line from the end

Read :

Density ... 2.70 kg/dm³ (0.09754 lb/in³)

INTERNATIONAL ELECTROTECHNICAL COMMISSION

RECOMMENDATION FOR HEAT-TREATED ALUMINIUM ALLOY BUSBAR MATERIAL
OF THE ALUMINIUM-MAGNESIUM-SILICON TYPE

FOREWORD

- (1) The formal decisions or agreements of the I.E.C. on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- (2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- (3) In order to promote this international unification, the I.E.C. expresses the wish that all National Committees having as yet no national rules, when preparing such rules, should use the I.E.C. recommendations as the fundamental basis for these rules in so far as national conditions will permit.
- (4) The desirability is recognized of extending international agreement on these matters through an endeavour to harmonize national standardization rules with these recommendations in so far as national conditions will permit. The National Committees pledge their influence towards that end.

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PREFACE

At the Munich meeting in June 1956, the Secretariat of Sub-Committee 7-1, Aluminium alloys, was asked to prepare a document concerning heat-treated aluminium alloy busbar material of the Al-Mg-Si type. The first draft recommendation was circulated in November 1956.

The draft was discussed and revised at the Stockholm meeting in July 1958. The final draft was submitted to the National Committees in August 1958 for approval under the Six Months' Rule.

The following countries voted explicitly in favour of publication:

Austria	Italy
Canada	Sweden
Denmark	Switzerland
France	United Kingdom
Germany	United States of America

The recommendation in its present form was drawn up by the Secretariat of Sub-Committee 7-1, taking account of minor editorial amendments which had been recommended.

**RECOMMENDATION FOR HEAT-TREATED ALUMINIUM ALLOY BUSBAR MATERIAL
OF THE ALUMINIUM-MAGNESIUM-SILICON TYPE**

1. Scope

This recommendation applies to heat-treated aluminium alloy busbar material of the Al-Mg-Si type.

2. Object

The object of this recommendation is to prescribe the electrical and mechanical properties of this type of busbar material.

3. Volume resistivity

3.1 The volume resistivity at 20° C shall not exceed 0.0325 ohm.mm²/m (19.550 ohm.cir.mil/ft).

3.2 The errors of measurement, which, taken together, shall not be greater than 3 parts in one thousand are included in this value.

3.3 When determining the resistivity, measurement shall be made at a temperature not less than 10° C nor more than 30° C. The values obtained shall be corrected to 20° C.

4. Tensile strength

The tensile strength shall be not less than 20 kg/mm² (28 445 lb/in²).

5. 0.2 percent proof stress

The 0.2 percent proof stress shall be not less than 17 kg/mm² (24 175 lb/in²).

6. Elongation after fracture

The minimum elongation after fracture, measured on the short proportional sample A5 in accordance with ISO Recommendations * (length $L_0 = 5.65 \sqrt{S_0}$) shall be 8%.

Note — For the purpose of this recommendation and for calculation the following physical properties at 20° C shall be taken:

Density	2.70 kg/mm ³ (0.09754 lb/in ³)
Constant mass temperature coefficient of resistance	0.0035 per degree Centigrade
Coefficient of linear expansion	0.000 023 per degree Centigrade

* ISO Recommendation in preparation.