



SLOVENSKI STANDARD
oSIST prEN IEC 61347-2-11:2023
01-julij-2023

Stikalne naprave za sijalke - Varnost - 2-11. del: Posebne zahteve za različne elektronske sisteme v terminalih

Controlgear for electric light sources - Safety - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

Geräte für Lampen - Teil 2-11: Besondere Anforderungen an elektronische Module für Leuchten

Appareillages de lampes - Partie 2-11: Prescriptions particulières pour circuits électroniques divers utilisés avec les luminaires

Ta slovenski standard je istoveten z: prEN IEC 61347-2-11:2023

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29.140.99	Drugi standardi v zvezi z žarnicami	Other standards related to lamps

oSIST prEN IEC 61347-2-11:2023 **en**



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TITLE:

Controlgear for electric light sources – Safety – Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

PROPOSED STABILITY DATE: 2027

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29 INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY

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Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

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FOREWORD

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41 all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international
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67 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is
68 indispensable for the correct application of this publication.

69 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent
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71 IEC 61347-2-11 has been prepared by subcommittee 34C: Auxiliaries for lamps, of IEC tech-
72 nical committee 34: Lighting.

73 This second edition cancels and replaces the first edition published in 2001 and Amendment 1
74 (2017). This edition constitutes a technical revision.

75

76 This edition includes the following significant technical changes with respect to the previous
77 edition:

- 78 a) changes in IEC 61347-1 (see edition 4 of IEC 61347-1)
 - 79 – alignment with respect to edition 4 of IEC 61347-1:
 - 80 – introduction of dated references as appropriate
- 81 b) deletion of clauses/subclauses which are either no longer relevant or now covered in part 1
- 82 c) scope extension to 1 500 V for DC
- 83 d) revision of information and marking requirements
- 84 e) addition of requirements for the determination of the output working voltage (new Clause 17)

85 This document is intended to be used in conjunction with IEC 61347-1. Where the requirements
86 of any of the clauses of IEC 61347-1 are referred to in this document by the phrase
87 "IEC 61347-1, Clause n applies", this phrase is interpreted as meaning that all requirements of
88 the clause in question of IEC 61347-1 apply, except any which are clearly inapplicable to the
89 specific type of controlgear covered by this document.

90 A list of all parts in the IEC 61347, published under the general title *Controlgear for electric light*
91 *sources* can be found on the IEC website.

92 The text of this International Standard is based on the following documents:

FDIS	Report on voting
34C/____/FDIS	34C/____/RVD

93
94 Full information on the voting for the approval of this standard can be found in the report on
95 voting indicated in the above table.

96 The language used for the development of this International Standard is English.

97 This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in
98 accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available
99 at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are de-
100 scribed in greater detail at www.iec.ch/publications.

101 The committee has decided that the contents of this document will remain unchanged until the
102 stability date indicated on the IEC website under webstore.iec.ch in the data related to the
103 specific document. At this date, the document will be

- 104 • reconfirmed,
- 105 • withdrawn,
- 106 • replaced by a revised edition, or
- 107 • amended.

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109

INTRODUCTION

110 This document specifies safety requirements for miscellaneous electronic circuits used with
111 luminaires. However, only those requirements specific to miscellaneous electronic circuits used
112 with luminaires are contained in this document itself. All general requirements, which apply to
113 controlgear for electric light sources in general, regardless of the specific type of light source
114 in question, are contained in Part 1 of IEC 61347. Corresponding general requirements apply
115 to miscellaneous electronic circuits used with luminaires by clause-wise reference in this doc-
116 ument to any of the clauses of IEC 61347-1 thereby specifying the extent to which such a clause
117 is applicable and the order in which the tests are to be performed.

118 In the same way, further documents exist specifying individual safety requirements for different
119 type of controlgear related to different type of electric light sources which, together with this
120 document, constitute the IEC 61347-2 series.

121 Any such parts 2 are the leading documents for the safety assessment of the corresponding
122 type of controlgear; it is not IEC 61347-1.

123 Also, all parts 2 of the IEC 61347 series do not include references to each other.

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[oSIST prEN IEC 61347-2-11:2023](https://standards.iteh.ai/catalog/standards/sist/9d35a405-21e8-4718-9040-469f08b90fea/osist-pren-iec-61347-2-11-2023)

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CONTROLGEAR FOR ELECTRIC LIGHT SOURCES – SAFETY

Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires

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133 **1 Scope**

134 This document specifies safety requirements for miscellaneous electronic circuits used with
135 luminaires for use on DC supplies up to 1 500 V or on AC supplies up to 1 000 V at 50 Hz or
136 60 Hz.

137 Miscellaneous electronic circuits used with luminaires covered by this document are

- 138 – control circuits of electronic controlgear (e. g. as specified in IEC 62386 series,
139 IEC 63128 or IEC 62756);
- 140 – switching circuits used in association with daylight and/or presence sensors;
- 141 – circuits to assist EMC performance;
- 142 – intermittence and similar devices used with lighting chains;
- 143 – earth leakage or open-circuit protective devices used with neon transformers.

144 This document does not apply to other circuits or devices for which specific IEC standards are
145 published, such as the IEC 60669 series.

146 Note: Such miscellaneous electronic circuits can also be used in luminaires producing optical radiation other than
147 visible spectrum.

148 **2 Normative references**

149 The following documents are referred to in the text in such a way that some or all of their content
150 constitutes requirements of this document. For dated references, only the edition cited applies.
151 For undated references, the latest edition of the referenced document (including any amend-
152 ments) applies.

153 IEC 61347-1:202X¹, *Controlgear for electric light sources – Safety – Part 1: General require-*
154 *ments*

155 **3 Definitions**

156 For the purpose of this document, the terms and definitions given in IEC 61347-1:20XX¹ apply
157 together with the following.

158 ISO and IEC maintain terminological databases for use in standardization at the following ad-
159 dresses:

¹ Edition 4 (under preparation).

- 160 • IEC Electropedia: available at <https://www.electropedia.org/>
- 161 • ISO Online browsing platform: available at <https://www.iso.org/obp>

162 3.1

163 miscellaneous electronic circuits

164 <used with luminaires> electronic circuits to assist the functioning of the controlgear or pro-
165 vide additional functions to the luminaire

166 4 General requirements

167 IEC 61347-1:202X¹, Clause 4 applies with the following addition:

168 Miscellaneous electronic circuits shall be designed to meet the requirements of the declared
169 overvoltage category (OVC) taking into account the intended applications.

170 EXAMPLE: Miscellaneous electronic circuits designed to be installed in distribution boards are classified as OVC III
171 equipment.

172 5 General notes on tests

173 IEC 61347-1:202X¹, Clause 5, applies.

174 For information on requalification of products compliant with the previous edition of this docu-
175 ment, i.e. IEC 61347-2-11:2001+AMD1:2017, refer to Annex A.

176 6 Marking

177 6.1 Information and marking items

178 6.1.1 Mandatory marking

179 Miscellaneous electronic circuits, other than integral miscellaneous electronic circuits, shall be
180 marked with the following items of IEC 61347-1:202X¹, 6.1, as applicable: a1), a2), b1), c2),
181 c3), c4), e1), e2), f1), f3), g2), g3), j2), j4), j5), k1), l1) and n1);

182 For independent miscellaneous circuits, the marking of t_a rating is considered an acceptable
183 alternative to the marking of t_c rating.

184 6.1.2 Information to be provided

185 The following information, if applicable, shall be given either on the miscellaneous electronic
186 circuit, or be made available in the manufacturer's catalogue or the like:

- 187 – items b2), b3), c1), c5), c6), c7), c8), c9), e3), f2), g1), h), i), j1), j3), k2), l2), m), n2) and
188 n3) of IEC 61347-1: 202X¹, 6.1;
- 189 – symbols according to item o) of IEC 61347-1: 202X¹, 6.1, shall be used, if the corresponding
190 elements are marked;
- 191 – the overvoltage category (OVC) of the miscellaneous electronic circuit if other than OVC II.

192 6.2 Durability and legibility of marking

193 IEC 61347-1: 202X¹, 6.2 applies.

194 6.3 Built-in and integral miscellaneous circuits

195 IEC 61347-1: 202X¹, 6.3 applies.

196 **7 Terminals**

197 IEC 61347-1:202X¹, Clause 7 applies.

198 **8 Earthing**

199 IEC 61347-1:202X¹, Clause 8 applies.

200 **9 Protection against accidental contact with hazardous live parts**

201 IEC 61347-1:202X¹, Clause 9 applies.

202 **10 Insulation resistance and electric strength**

203 IEC 61347-1:202X¹, Clause 10 applies.

204 **11 Fault conditions**

205 IEC 61347-1:202X¹, Clause 11 applies.

206 **12 Construction**

207 IEC 61347-1:202X¹, Clause 12 applies.

208 **13 Creepage distances, clearances and distances through insulation**

209 IEC 61347-1:202X¹, Clause 13 applies.

210 **14 Screws, current-carrying parts and connections**

211 IEC 61347-1:202X¹, Clause 14 applies.

212 **15 Resistance to heat, fire and tracking**

213 IEC 61347-1:202X¹, Clause 15 applies.

214 **16 Thermal requirements for miscellaneous circuits**

215 IEC 61347-1:202X¹, Clause 16 applies.

216 **17 Output working voltage (U_{out})**

217 Under normal operating conditions and any other load conditions, which means including the
218 abnormal condition, the voltage at the output terminals shall not exceed the output working
219 voltage U_{out} according to 6.1.1.

220 The test shall be carried out with the miscellaneous circuit supplied at rated supply voltage and
221 loaded in maximum load condition. The load shall be modified in order to find the load condition
222 resulting in a maximum voltage between terminals and between terminals and earth.