# IEC 61822

Edition 2.0 2009-05

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

## Electrical installations for lighting and beaconing of aerodromes – Constant current regulators

## Installations électriques pour l'éclairage et le balisage des aérodromes – Régulateurs de courant constant

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX U

ICS 29.140.50; 93.120

ISBN 978-2-88910-574-8

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

# ELECTRICAL INSTALLATIONS FOR LIGHTING AND BEACONING OF AERODROMES – CONSTANT CURRENT REGULATORS

## FOREWORD

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International Standard IEC 61822 has been prepared by IEC Technical Committee 97: Electrical installations for lighting and beaconing of aerodromes.

This second edition cancels and replaces the first edition published in 2002. It is a technical revision.

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

a) revision and update of terms and definitions;
b) addition of new paragraphs, such as "Nominal output current range and tolerances";
c) modification of some paragraphs, such as those related to "Local control" and "Remote control";
d) deletion of some paragraphs, in particular "Power transformers" and "Output current indicator".

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

| FDIS | Report on voting |
|---|---|
| 97/135/FDIS | 97/139/RVD |

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

# ELECTRICAL INSTALLATIONS FOR LIGHTING AND BEACONING OF AERODROMES – CONSTANT CURRENT REGULATORS

## 1 Scope

This International Standard specifies the requirements for a Constant Current Regulator (CCR) having a nominal output of 6,6 A for use in an aeronautical ground lighting constant current series circuit. However, CCRs may be manufactured which have a different power rating (kVA) and current steps than those specified in this standard in order to be used on existing circuits. This standard should be applied where appropriate for these CCRs.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60038, *IEC standard voltages*

IEC 60439-1:1999, *Low-voltage switchgear and control gear assemblies – Part 1: Type-tested and partially type-tested assemblies*

IEC 60529*, Degrees of protection provided by enclosures (IP Code)*

IEC 61000-6-2*, Electromagnetic compatibility (EMC) – Part 6-2: Generic standards – Immunity for industrial environments*

IEC 61000-6-4, *Electromagnetic compatibility (EMC) – Part 6-4: Generic standards – Emission standard for industrial environments*

IEC/TS 61000-6-5, *Electromagnetic compatibility (EMC) – Part 6-5: Generic standards – Immunity for power station and substation environments*

IEC 61024-1, *Protection of structures against lightning – Part 1: General principles*

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

IEC 61439-1:2009, *Low-voltage switchgear and controlgear assemblies – Part 1: General rules*

IEC 62305-1, *Protection against lightning – Part 1: General principles*

IEC 62305-3, *Protection against lightning – Part 3: Physical damage to structures and life hazard*

CISPR 11, *Industrial, scientific and medical (ISM) radio-frequency equipment – Electromagnetic disturbance characteristics – Limits and methods of measurement*

CISPR 22, *Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement*