

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Electrical installations for lighting and beaconing of aerodromes – AGL series transformers

**Installations électriques pour l'éclairage et le balisage des aérodromes –
Transformateurs série utilisés pour l'éclairage et le balisage aéronautique au sol**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICAL INSTALLATIONS FOR LIGHTING
AND BEACONING OF AERODROMES –
AGL SERIES TRANSFORMERS**

FOREWORD

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International Standard IEC 61823 has been prepared by IEC technical committee 97: Electrical installations for lighting and beaconing of aerodromes.

This bilingual version (2016-11) corresponds to the English version, published in 2002-12.

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

FDIS	Report on voting
97/94/FDIS	97/95/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.

The French version of this standard has not been voted upon.

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 2006. At this date, the publication will be

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- withdrawn;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

ELECTRICAL INSTALLATIONS FOR LIGHTING AND BEACONING OF AERODROMES – AGL SERIES TRANSFORMERS

1 Scope

This standard specifies the characteristics of aeronautical ground lighting series transformers (AGLST) used in aeronautical ground lighting for 6,6 A series circuits, at a service voltage of up to 5 kV, supplied by constant current regulators up to 30 kVA in rating.

AGL series transformers provide power to airport lighting luminaires or other loads (resistive) from their secondary circuits. The AGL series transformers provide continuity of the series circuit in the event of a loss of the load on the transformer, and electrical isolation between the primary circuit supplied by a constant current regulator, and the secondary circuit connected to the load under conditions defined in this standard.

An AGL series transformer is to be able to withstand a permanent short or open-circuit secondary series circuit.

Specifications for similar series transformers intended for any primary or secondary currents other than 6,6 A, or to supply alternative voltages, constant power, reactive loads, etc., are not included in this standard.

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 60085, *Thermal evaluation and classification of electrical insulation*

IEC 61822, *Electrical installations for lighting and beaconing of aerodromes – Constant current regulators*

ISO 48, *Rubber, vulcanised or thermoplastic – Determination of hardness (hardness between 10 IRHD and 100 IRHD)*

3 Definitions and abbreviated terms

3.1 Definitions

For the purposes of this standard the following definitions apply.

Where the terms voltage and current are used, they shall be r.m.s. values unless otherwise stated.

3.1.1

AGL series transformer

aeronautical ground lighting series transformer, as specified in this standard

3.1.2

ambient temperature

the temperature of the air or other medium surrounding the AGL series transformer; for testing purposes, a temperature of $(20 \pm 5) ^\circ\text{C}$