

INTERNATIONAL STANDARD

NORME INTERNATIONALE

High-pressure sodium vapour lamps – Performance specifications

Lampes à vapeur de sodium à haute pression – Spécifications de performance



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

XJ

ICS 29.140.30

ISBN 978-2-88912-385-8

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	7
4 General lamp requirements	8
5 Marking	9
6 Dimensions	9
7 Caps	9
8 Test requirements for lamp starting, warm-up, electrical and photometric characteristics	9
9 Information for ballast and ignitor design	10
10 Information for luminaire design	12
11 Maximum lamp outlines	13
12 Numbering system for lamp data sheets	13
Annex A (normative) Waveshape of voltage pulses for lamp starting test (schematic drawings).....	14
Annex B (informative) Diagrammatic data sheets for location of lamp dimensions	16
Annex C (normative) Guidance for determining quadrilateral diagrams	17
Annex D (normative) Measurement of voltage increase at lamp terminals for luminaire design.....	22
Annex E (informative) HPS lamp drop-out voltage measurement procedure	25
Annex F (normative) Fixed settings of the ignition device (see 8.2.1) and requirements for ignition	31
Annex G (normative) Method of measuring electrical and photometrical characteristics	32
Annex H (normative) Method of test for lumen maintenance and life	34
Annex I (informative) Maximum lamp outlines	35
Annex J (normative) Lamp data sheets	47
Bibliography.....	183
Figure A.1 – Waveshape: positive pulse during positive half cycle	14
Figure A.2 – Waveshape: positive pulse during negative half cycle	14
Figure A.3 – Shape and parameters of the pulse used in North America	15
Figure C.1 – Relationship of wattage and voltage of an HPS lamp	18
Figure C.2 – Lamp characteristic curves for several HPS lamps.....	18
Figure C.3 – Typical ballast characteristic curves	18
Figure C.4 – Typical lag or reactor ballast characteristic curves at different supply voltages	18
Figure C.5 – Minimum and maximum wattage lines	20
Figure C.6 – Finished quadrilateral relative to the reference ballast curves and drop-out locus	21
Figure E.1 – Example of test circuit	27
Figure E.2 – Typical quadrilateral diagram showing drop-out points	28

Figure E.3 – Example plot of 400 W HPS lamp ballast curves showing drop-out points	29
Figure E.4 – Incorrect drop-out point measurement due to raising lamp voltage at too high a rate	30
Figure E.5 – Test for lamp-ballast equilibrium	30
Figure G.1 – Circuit diagram for measurement of lamp characteristics	33
Table F.1 – Fixed settings of the ignition device (see 8.2.1)	31
Table I.1 – List of data sheets for maximum lamp outlines	35

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HIGH-PRESSURE SODIUM VAPOUR LAMPS –
PERFORMANCE SPECIFICATIONS**

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International Standard IEC 60662 has been prepared by subcommittee 34A: Lamps, of IEC technical committee 34: Lamps and related equipment.

This second edition cancels and replaces the first edition published in 1980 and its amendments. It constitutes a technical revision.

Main items that required development of the 2nd edition of IEC 60662 are:

- restriction to performance requirements. Safety requirements are given in IEC 62035: *Discharge lamps (excluding fluorescent lamps) – Safety specifications*;
- introduction of a test device for ignition;
- split of the lamp data sheets which make use of the test device and those which do not;
- provisions for measurement during starting, measurement of electrical and photometrical characteristics and tests for lumen maintenance and life;
- general review e.g. of maximum lamp outlines and alignment of data;
- new order of data sheets by wattage.

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

FDIS	Report on voting
34A/1432/FDIS	34A/1452/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 stability 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.

INTRODUCTION

The relation between data sheet numbers of the first and the second edition is given below.

Lamp data sheets							
1 st edition	2 nd edition		1 st edition	2 nd edition		1 st edition	2 nd edition
1010	3250		1090	1105		2120	3300
1010	3255		1100	9000		2120	3305
1010	3260		1110	0770		2130	3310
1020	3265		1120	0775		2130	3315
1020	3270		1130	0780		2140	4500
1030	4400		1140	0785		2140	4505
1030	4405		1150	9005		2150	4510
1030	4410		1160	9010		2150	4515
1040	4415		1170	0550		3010	2300
1040	4420		1180	0555		3020	3400
1050	2150		1190	0560		3030	4600
1050	2155		-	6000		4010	3500
1060	2160		2100	2200		4020	3505
1060	2165		2110	2210		4030	4700
1070	1119		2110	2215		4040	4705
1080	1100						
Lamp outline sheets							
1 st edition	2 nd edition		1 st edition	2 nd edition		1 st edition	2 nd edition
-	150 01		9030 mod.	400 01			
9010	250 01		9031	400 02			
9011	250 02		9032	400 03			
9012 mod.	250 03		9040 mod.	400 04			
9020	250 04						

HIGH-PRESSURE SODIUM VAPOUR LAMPS – PERFORMANCE SPECIFICATIONS

1 Scope

This International Standard specifies performance requirements for high-pressure sodium vapour lamps for general lighting purposes which comply with the safety requirements of IEC 62035.

For some of the requirements given in this standard, reference is made to “the relevant lamp data sheet”. For some lamps these data sheets are contained in this standard. For other lamps, falling under the scope of this standard, the relevant data are supplied by the lamp manufacturer or responsible vendor.

The requirements of this standard relate only to type testing.

The requirements dealing with the lamp starting test and associated information for ballast/ignitor design are different depending on the practice of the country in which the lamp type was originally developed.

NOTE The requirements and tolerances permitted by this standard correspond to testing of a type test sample submitted by the manufacturer for that purpose. In principle, this type test sample should consist of units having characteristics typical of the manufacturer's production and being as close to the production centre point values as possible.

It may be expected with the tolerances given in the standard that product manufactured in accordance with the type test sample will comply with the standard for the majority of production. Due to the production spread however, it is inevitable that there will sometimes be products outside the specified tolerances. For guidance on sampling plans and procedures for inspection by attributes, see IEC 60410.

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 60050-845:1987, *International Electrotechnical Vocabulary – Chapter 845: Lighting*

IEC 60061-1, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 1: Lamp caps*

IEC 60061-3, *Lamp caps and holders together with gauges for the control of interchangeability and safety – Part 3: Gauges*

IEC 60923:2005, *Auxiliaries for lamps – Ballasts for discharge lamps (excluding tubular fluorescent lamps) – Performance requirements*¹
Amendment 1 (2006)

IEC 61347-2-1, *Lamp controlgear – Part 2-1: Particular requirements for starting devices (other than glow starters)*

IEC 62035, *Discharge lamps (excluding fluorescent lamps) – Safety specifications*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-845 and the following apply.

¹⁾ There exists a consolidated edition 3.1 that comprises edition 3 and its Amendment 1.