

European Committee for Electrotechnical Standardization (CENELEC)
Cenelec Electronic Components Committee

CECC



Système Harmonisé d'Assurance de la Qualité
des Composants Electroniques

SPECIFICATION PARTICULIERE CADRE:

TUBES CONVERTISSEURS D'IMAGE ET TUBES INTENSIFICATEURS D'IMAGE

Harmonized System of Quality Assessment for
Electronic Components

BLANK DETAIL SPECIFICATION:

IMAGE CONVERTER AND IMAGE INTENSIFIER TUBES

1

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CECC 12001

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Documents

Document Sharing Hub

Information about the System can be obtained from:



CECC General Secretariat
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or from the National Authorized Institutions
of the Member Countries listed
who can supply copies of:

1 The Basic Rules and Rules of
Procedure of the CECC

2 CECC and National Specifications
for the System

3 CECC 00 200: Qualified Products List (QPL)
(biannual issues January and July,
with three-monthly amendments)

4 CECC 00 300: CECC Publications and their
related national documents (biannual)

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FOREWORD

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized system for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognised Mark, or Certificate, of Conformity. The components produced under the System are thereby accepted by all member countries without further testing.

This document has been formally approved by the CECC, and has been prepared for those member countries taking part in the System who wish to issue national harmonized specifications for IMAGE CONVERTER AND IMAGE INTENSIFIER TUBES. It should be read in conjunction with document CECC 00 100: Basic Rules (1974).

At the date of printing of this document the member countries of the CECC are Belgium, Denmark, France, Germany, Ireland, Italy, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom, and copies of it can be obtained from the addresses shown on the inside cover.

PREFACE

This blank detail specification was proposed by CECC Working Group 11: "ELECTRO-OPTICAL DEVICES".

It is a blank detail specification for image converter and image intensifier tubes relating to the generic specification printed as CECC 12 000.

The text of this specification was circulated to the CECC, for voting, in document CECC(Secretariat)381 in July 1975, and following ratification of the Report on the Voting in CECC(Secretariat)555 in December 1976 was approved by the CECC Management Committee for printing as a CECC Specification.

It is recognised that the layout proposed cannot be applied to all detail specifications based on this document.

The CECC Management Committee at its meeting in Copenhagen in March 1979 decided that as the German National Authorized Institution would not be implementing the requirements of this CECC generic specification, the text should be published in the English and French versions only.

Key for page 3

The numbers between square brackets on page 3 correspond to the following indications which should be given:

Identification of the detail specification

- [1] The name of the National Standards Organization under whose authority the detail specification is drafted
- [2] The CECC Symbol and the number allotted to the national detail specification by the CECC General Secretariat
- [3] The number and issue number of the national generic and sectional specifications
- [4] The national number of the detail specification, date of issue and any further information required by the national system, together with any amendment numbers if issued.

Identification of the component

- [5] A short description of the type of component
- [6] Information on typical construction (where applicable)
- [7] Outline drawing and/or reference to the relevant document outlines
- [8] Application or group of applications covered (see note below)
- [9] Reference data on the most important properties, to allow comparison between the various component types.

NOTE

When a device is so designed that it can satisfy several applications, this should be stated in the detail specification, in which case the characteristics and inspection requirements relevant to these applications should be met simultaneously (these may appear in different columns of a detail specification or in different detail specifications, as the case may be).

[1]	page : of :	[2] CECC 12 001 - XXX	
ELECTRONIC COMPONENT OF ASSESSED QUALITY IN ACCORDANCE WITH:		[4]	
[3]		[5]	
DETAIL SPECIFICATION FOR: IMAGE CONVERTER TUBE or IMAGE INTENSIFIER TUBE			
DESCRIPTION and CONSTRUCTION		Number of stages Type of stages (state if channel multiplier) Integral or non-integral power supply Windows (fibre optic or plain) Overall gain Phosphor colour and persistence Photocathode type Useful photocathode diameter Useful screen diameter Magnification	
		[6]	
OUTLINE DRAWING SHOWING: [7] (not for inspection purposes) Overall length Diameter Terminal identification Positions of photocathode and screen Optical axes		APPLICATION(S) [8] LEVEL OF QUALITY ASSESSMENT	
[9]			
DATA (not for inspection purposes) <u>Mechanical</u> Mounting position and accessories Mass (weight) * <u>Environmental</u> (where appropriate) <u>Limiting values</u> (absolute maximum rating system — IEC 134)			
	Min.	Max.	Unit
Instantaneous input supply voltage(s)		*	V
Continuous input supply voltage(s)		*	V
Supply frequency(ies) for tubes with a.c. input	*	*	Hz
Photocathode illuminance/irradiance*		*	*
Storage temperature	*	*	°C
Storage temperature of specified duration (short term)	*	*	°C
Operating temperature of specified duration (ambient, short term)	*	*	°C
DATA CONTINUED ON NEXT PAGE			
See the relevant Qualified Products List for availability of components qualified under this detail specification.			

* denotes that a value or unit shall be inserted in the detail specification unless precluded by the design of the tube.

Operating conditions and characteristics

When the tube is operated under the conditions given below, the characteristic values which follow them are attainable:

- Operating supply voltage(s) *
- Supply frequency(ies) for tubes with a.c. input *
- Ambient temperature * °C

	Min.	Max.	Unit
— Gain	*		*
— Photocathode luminous sensitivity or absolute spectral sensitivity at specified wavelengths	*		*
— Resolution	*		lp/mm
— Equivalent background input (EBI)		*	*
— Magnification	*	*	

* denotes that a value or unit shall be inserted in the detail specification unless precluded by the design of the tube.

Marking See 2.4 of CECC 12 000.

Ordering InformationRelated documentsStructural similarityX—radiation (if applicable)Additional information

- Tube discharge procedure (if applicable)

TEST CONDITIONS AND INSPECTION REQUIREMENTS

These are given in the following tables. The test conditions to be used shall be specified in the detail specification as required for a given type, in line with the requirements given in CECC 12 000 for the relevant test.

All references to clause numbers are made with respect to CECC 12 000 , unless otherwise stated.