

# TECHNICAL SPECIFICATION



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**Calibration of space charge measuring equipment based on the pulsed electro-acoustic (PEA) measurement principle**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

PRICE CODE



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 62758, which is a technical specification, has been prepared by technical committee 112: Evaluation and qualification of electrical insulating materials and systems.

The text of this technical specification is based on the following documents:

Enquiry draft	Report on voting
112/206/DTS	112/219/RVC

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

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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

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## INTRODUCTION

The pulsed electro-acoustic (PEA) method has been used to measure space charge distribution in dielectric materials by many researchers, and it has been accepted, in general, as a useful method to understand the electrical properties of dielectric materials. However, since PEA measurement equipments have been developed/used independently by different researchers over the world, there has not yet been any standard way to evaluate whether a system works properly. The IEC has therefore established a project team to create a standard procedure to evaluate PEA measurement equipment. This technical specification is the result.

## **CALIBRATION OF SPACE CHARGE MEASURING EQUIPMENT BASED ON THE PULSED ELECTRO-ACOUSTIC (PEA) MEASUREMENT PRINCIPLE**

### **1 Scope**

IEC 62758, which is a technical specification, presents a standard method to estimate the performance of a pulsed electro-acoustic (PEA) measurement system. For this purpose, a systematic procedure is recommended for the calibration of the measurement system. Using the procedure, users can estimate whether the system works properly or not.

### **2 Normative references**

None.