

Instrument transformers - Part 11: Additional  
requirements for low-power passive voltage  
transformers

## EESTI STANDARDI EESSÕNA

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English Version

**Instrument transformers - Part 11: Additional requirements for  
low-power passive voltage transformers  
(IEC 61869-11:2017)**

Transformateurs de mesure - Partie 11: Exigences  
supplémentaires pour les transformateurs de tension  
passifs de faible puissance  
(IEC 61869-11:2017)

Messwandler - Teil 11: Zusätzliche Anforderungen an  
passive Kleinsignal-Spannungswandler  
(IEC 61869-11:2017)

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## European foreword

The text of document 38/549/FDIS, future edition 1 of IEC 61869-11, prepared by IEC/TC 38 "Instrument transformers" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61869-11:2018.

The following dates are fixed:

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- latest date by which the national (dow) 2021-01-17  
standards conflicting with the  
document have to be withdrawn

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In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60038	NOTE	Harmonized as EN 60038.
IEC 60358-1	NOTE	Harmonized as EN 60358-1.
IEC 60358-4 <sup>1</sup>	NOTE	Harmonized as EN 60358-4 <sup>2</sup> .
IEC 61869-3	NOTE	Harmonized as EN 61869-3.
IEC 61869-5	NOTE	Harmonized as EN 61869-5.

<sup>1</sup> To be published. Stage at the time of publication: IEC ADIS-4:2017.

<sup>2</sup> To be published. Stage at the time of publication: prEN 60358-3.

## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 61869-6	2016	Instruments transformers -- Part 6: Additional general requirements for Low Power Instrument Transformers	EN 61869-6	2016

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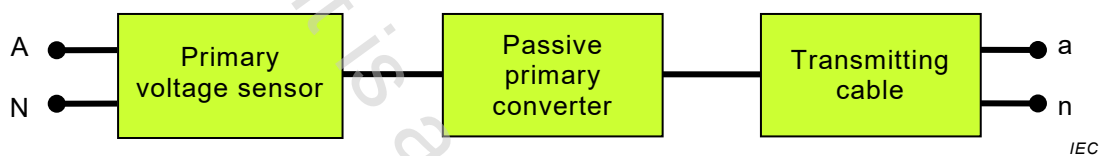
## INTRODUCTION

Low-power passive voltage transformers are based on the voltage divider principle. They can be built for example as resistive dividers, capacitive dividers or resistive-capacitive dividers. Annex 11C shows the schematic diagram of the different dividers.

According to a general block diagram given in Figure 601 of IEC 61869-6:2016, the low-power passive voltage transformers do not use an active primary converter (i.e. without any active electronic component); therefore, there is no need for primary power supply. Additionally, neither the secondary converter nor the secondary power supply is used.

The general block diagram of a low-power passive voltage transformer is given in Figure 1101.

The applied technology decides which part is necessary for the realization of a low-power passive voltage transformer, i.e. it is not necessary that the transmitting cable or primary converter described in Figure 1101 be included in the low-power passive voltage transformer.



**Figure 1101 – General block diagram of a single-phase low-power passive voltage transformer**