

# **SLOVENSKI STANDARD**

## **SIST EN 62053-31:2001**

**01-februar-2001**

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### **Electricity metering equipment (a.c.) - Particular requirements - Part 31: Pulse output devices for electromechanical and electronic meters (two wires only)**

Electricity metering equipment (a.c.) -- Particular requirements -- Part 31: Pulse output devices for electromechanical and electronic meters (two wires only)

Einrichtungen zur Messung der elektrischen Energie (AC) -- Besondere Anforderungen -- Teil 31: Impulseinrichtungen für Induktionszähler und elektronische Zähler (nur Zweidrahtsysteme)

Equipement de comptage de l'électricité (c.a.) -- Prescriptions particulières -- Partie 31: Dispositifs de sortie d'impulsions pour compteurs électromécaniques et électroniques (seulement deux fils)

**Ta slovenski standard je istoveten z: EN 62053-31:1998**

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#### **ICS:**

91.140.50      Sistemi za oskrbo z elektriko    Electricity supply systems

**SIST EN 62053-31:2001**

**en**

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English version

**Electricity metering equipment (a.c.)  
Particular requirements  
Part 31: Pulse output devices for electromechanical  
and electronic meters (two wires only)  
(IEC 62053-31:1998)**

Équipement de comptage de l'électricité  
(c.a.) - Prescriptions particulières  
Partie 31: Dispositifs de sortie  
d'impulsions pour compteurs  
électromécaniques et électroniques  
(seulement deux fils)  
(CEI 62053-31:1998)

Einrichtungen zur Messung der  
elektrischen Energie (AC)  
Besondere Anforderungen  
Teil 31: Impulseinrichtungen für  
Induktionszähler und elektronische  
Zähler (nur Zweidrahtsysteme)  
(IEC 62053-31:1998)

This European Standard was approved by CENELEC on 1998-04-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## CENELEC

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

## Foreword

The text of document 13/1134/FDIS, future edition 1 of IEC 61393, prepared by IEC TC 13, Equipment for electrical energy measurement and load control, was submitted to the IEC-CENELEC parallel vote. The document was published by IEC as IEC 62053-31 and was approved by CENELEC as EN 62053-31 on 1998-04-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1999-01-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2001-01-01

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given for information only.

In this standard, annexes A, B, C and ZA are normative and annexes D, E and F are informative.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 62053-31:1998 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

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

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

NOTE: When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60145	1963	Var-hour (reactive energy) meters	-	-
IEC 60381-1	1982	Analogue signals for process control systems Part 1: Direct current signals	HD 452.1 S1	1984
IEC 60521	1988	Class 0,5, 1 and 2 alternating-current watt-hour meters	EN 60521 + corr. December	1995 1997
IEC 60687	1992	Alternating current static watt-hour meters for active energy (classes 0,2 S and 0,5 S)	EN 60687 + corr. March	1992 1993
IEC 61036	1996	Alternating current static watt-hour meters for active energy (classes 1 and 2)	EN 61036	1996
IEC 61268	1995	Alternating current static var-hour meters for reactive energy (classes 2 and 3)	EN 61268	1996
IEC 62053-61 <sup>1)</sup>	1998	Electricity metering equipment (a.c.) Particular requirements Part 61: Power consumption and voltage requirements	EN 62053-61	1998

1) This document was voted as prEN 61899.

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**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**62053-31**

Première édition  
First edition  
1998-01

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**Equipement de comptage de l'électricité (c.a.) –  
Prescriptions particulières –**

**Partie 31:  
Dispositifs de sortie d'impulsions  
pour compteurs électromécaniques  
et électroniques (seulement deux fils)**

**Electricity metering equipment (a.c.) –  
Particular requirements –**

**Part 31:  
Pulse output devices for electromechanical  
and electronic meters (two wires only)**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRICITY METERING EQUIPMENT (AC) –  
PARTICULAR REQUIREMENTS –****Part 31: Pulse output devices for electromechanical  
and electronic meters (two wires only)**

## FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 62053-31 has been prepared by IEC technical committee 13: Equipment for electrical energy measurement and load control.

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

FDIS	Report on voting
13/1134/FDIS	13/1142/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.

Annexes A, B and C form an integral part of this standard.

Annexes D, E and F are for information only.

## INTRODUCTION

This International Standard has been prepared to complete the existing standards on electric energy meters with a standard for integrated pulse output devices.

This standard specifies a class A and class B pulse output device. For special applications see annex E.

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## ELECTRICITY METERING EQUIPMENT (AC) – PARTICULAR REQUIREMENTS –

### Part 31: Pulse output devices for electromechanical and electronic meters (two wires only)

#### 1 Scope

This part of IEC 62053 is applicable to passive, two-wire, externally powered pulse output devices to be used in electricity meters as defined by the relevant standards of technical committee 13 (see normative references) as well as future standards for static VA-hour meters.

Such pulse output devices are used to transmit pulses, representing a finite energy quantity, to a receiver (e.g. a tariff device).

#### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 62053. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 62053 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60145:1963, *Var-hour (reactive energy) meters*

IEC 60381-1:1982, *Analogue signals for process control systems – Part 1: Direct current signals*

IEC 60521:1988, *Classes 0,5, 1 and 2 alternating-current watt-hour meters*

IEC 60687:1992, *Alternating current static watt-hour meters for active energy (classes 0,2 S and 0,5 S)*

IEC 61036:1996, *Alternating current static watt-hour meters for active energy (classes 1 and 2)*

IEC 61268:1995, *Alternating current static var-hour meters for reactive energy (classes 2 and 3)*

IEC 61899:1997, *Static electric energy meters – Power consumption and voltage requirements – Multi-energy and multi-function meters*