

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Measuring relays and protection equipment –
Part 26: Electromagnetic compatibility requirements**

**Relais de mesure et dispositifs de protection –
Partie 26: Exigences de compatibilité électromagnétique**



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IEC Secretariat
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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MEASURING RELAYS AND PROTECTION EQUIPMENT –**Part 26: Electromagnetic compatibility requirements**

FOREWORD

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IEC 60255-26 has been prepared by IEC technical committee 95: Measuring relays and protection equipment. This is an International Standard.

This fourth edition cancels and replaces the third edition published in 2013. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) update of normative references
- b) introduction of a wired network port and signal/control port in accordance with CISPR 32;
- c) introduction of low-power instrument transformer (LPIT) and battery monitor port;
- d) expansion of the frequency range on radiated radio-frequency immunity test up to 6 GHz;
- e) updated requirements on electrostatic discharge tests;
- f) introduction of fast damped oscillatory wave test for Zone A applications;
- g) specification of higher immunity requirements on power frequency magnetic field tests;

- h) update of the spot frequency test and addition of a new annex with background information;
- i) addition of details and further guidance on the relay settings;
- j) additional test condition for AC voltage dips and interruptions;
- k) addition of an annex about EMC risk assessments;
- l) addition of an annex on radio interfaces.

The text of this International Standard is based on the following documents:

Draft	Report on voting
95/515/FDIS	95/525/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all the parts in the IEC 60255 series, published under the general title *Measuring relays and protection equipment*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition of,
- amended.

MEASURING RELAYS AND PROTECTION EQUIPMENT –

Part 26: Electromagnetic compatibility requirements

1 Scope

1.1 General

This part of IEC 60255 specifies the requirements for electromagnetic compatibility for measuring relays and protection equipment. It is applicable to measuring relays and protection equipment and combinations of devices to form schemes for power system protection including the control, monitoring, communication and process interface equipment used with those systems.

Tests specified in this document are not required for equipment not incorporating electronic circuits, for example electromechanical relays.

The requirements specified in this document are applicable to measuring relays and protection equipment in a condition representative of how new equipment is provided by the manufacturer. All tests specified are type tests only.

1.2 Emission

This document specifies limits and test methods, for measuring relays and protection equipment in relation to electromagnetic emissions which might cause interference in other equipment.

These emission limits represent electromagnetic compatibility requirements and have been selected to ensure that the disturbance generated by measuring relays and protection equipment, operated normally in substations and power plants, do not exceed a specified level which could prevent other equipment from operating as intended.

Test requirements are specified for the enclosure, auxiliary power supply ports, input/output ports, signal/control ports and wired network ports.

1.3 Immunity

This document specifies the immunity test requirements for measuring relays and protection equipment in relation to continuous and transient, conducted and radiated disturbances, including electrostatic discharges.

These test requirements represent the electromagnetic compatibility immunity requirements and have been selected so as to ensure an adequate level of immunity for measuring relays and protection equipment, operated normally in substations and power plants.

NOTE 1 Product safety considerations are not covered in this document.

NOTE 2 In special cases, situations will arise where the levels of disturbance could exceed the levels specified in this document, for example where a hand-held transmitter or a mobile telephone is used close to measuring relays and protection equipment. In these instances, special precautions and procedures could be needed.

2 Normative references

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.