IEC 62626-1

Edition 2.0 2023-11
REDLINE VERSION

INTERNATIONAL STANDARD

colour inside

Low-voltage switchgear and controlgear enclosed equipment – Part 1: ~~Enclosed switch-disconnectors outside the scope of IEC 60947-3 to provide isolation during repair and maintenance work~~ Additional requirements for enclosed switch-disconnectors in accordance with IEC 60947-3 – Isolation of electrical equipment during repair and maintenance work in specific applications

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.120.40, 29.130.20

ISBN 978-2-8322-7829-1

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ENCLOSED EQUIPMENT –

Part 1: ~~Enclosed switch-disconnectors outside the scope of IEC 60947-3 to provide isolation during repair and maintenance work~~ Additional requirements for enclosed switch-disconnectors in accordance with IEC 60947-3 – Isolation of electrical equipment during repair and maintenance work in specific applications

FOREWORD

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IEC 62626-1 has been prepared by subcommittee SC121A: Low-voltage switchgear and controlgear, of IEC technical committee 121: Switchgear and controlgear and their assemblies for low voltage. It is an International Standard.

This second edition cancels and replaces the first edition published in 2014. This edition constitutes a technical revision.

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

a) update of this document based on IEC 60947-1:2020.

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

Draft	Report on voting
121A/569/FDIS	121A/581/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 parts in the IEC 62626 series, published under the general title *Low-voltage switchgear and controlgear enclosed 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, or
- revised.

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INTRODUCTION

Enclosed switch-disconnectors covered by this part of IEC 62626 are intended for use in various applications, to provide isolation of electrical equipment, especially motor circuits, during repair, cleaning and maintenance works.

Such enclosed switch-disconnectors are sometimes known as “maintenance switches”, or “safety switches”. The name “safety switch” is also used for safety related position switches, inspection switches and switches for other applications, which are not covered by this document.

This part of IEC 62626 specifies additional requirements for enclosed switch-disconnectors in accordance with IEC 60947-3 to provide isolation of electrical equipment during repair and maintenance work.

Enclosed switch-disconnectors in accordance with this document are mounted close to the equipment ~~which has to be~~ being isolated ~~and are usually operated by instructed persons~~.

NOTE 1 The term “safety switch” is not recognized in some countries as having the same meaning as given in this document.

NOTE 2 Switch-disconnectors do not necessarily meet the requirements for prevention of unexpected start, especially if there are energy sources other than electrical.

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ENCLOSED EQUIPMENT –

Part 1: ~~Enclosed switch-disconnectors outside the scope of IEC 60947-3 to provide isolation during repair and maintenance work~~ Additional requirements for enclosed switch-disconnectors in accordance with IEC 60947-3 – Isolation of electrical equipment during repair and maintenance work in specific applications

1 Scope

This part of IEC 62626 applies to enclosed switches-disconnectors with rated voltages up to 1 000 V AC for repair and maintenance work or cleaning work in load circuits. Devices within the scope of this document are ~~derived from~~ switch-disconnectors in accordance with IEC 60947-3 with specific additional requirements. Enclosed switch-disconnectors in this document are suitable for isolation in accordance with the IEC 60947 series and are not ~~supposed to be~~ equipped with means for remote control or automatic switching to avoid unexpected or accidental start. These devices are not ~~intended to be~~ used for operational switching, for example quick start and stop ~~or~~, jogging.

NOTE 1 However, this kind of devices can provide the possibility to switch off electrical equipment (even in a critical situation or not).

Devices within the scope of this document provide isolation of electrical equipment, especially in motor circuits, during repair and maintenance or cleaning works.

Enclosed switch-disconnectors for various applications to provide isolation of electrical equipment during repair and maintenance work, named “maintenance switches”, are designated hereafter as devices with:

a) different classes;

b) characteristics of each class;

c) minimum test requirements;

d) information to be marked on the equipment or made available by the manufacturer, for example in the catalogue.

NOTE 2 This document does not specify additional requirements that are necessary for the application of these switches, for example, in explosive atmospheres (e.g. ATEX in Europe).

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. For undated references, the latest edition of the referenced document (including any amendments) applies.

~~*IEC 60050 (all parts), International electrotechnical vocabulary. Available from: <http://www.electropedia.org/>*~~

IEC 60050-441, *International Electrotechnical Vocabulary (IEV) – Part 441: Switchgear, controlgear and fuses* (available at www.electropedia.org)

IEC 60947-1:~~2007~~2020, *Low-voltage switchgear and controlgear – Part 1: General rules* ~~Amendment 1:2010~~

IEC 60947-3:~~2008~~2020, *Low-voltage switchgear and controlgear – Part 3: Switches, disconnectors, switch-disconnectors and fuse-combination units*
~~Amendment 1:2012~~

IEC 62262:2002, *Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)*
IEC 62262:2002/AMD1:2021

IEC 62626-1

Edition 2.0 2023-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Low-voltage switchgear and controlgear enclosed equipment – Part 1: Additional requirements for enclosed switch-disconnectors in accordance with IEC 60947-3 – Isolation of electrical equipment during repair and maintenance work in specific applications

Appareillage à basse tension sous enveloppe – Partie 1: Exigences supplémentaires relatives aux interrupteurs-sectionneurs sous enveloppe conformes à l'IEC 60947-3 – Isolation du matériel électrique lors des travaux de réparation et de maintenance dans des applications spécifiques



IEC 62626-1:2023-11 (en-fr)

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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APPAREILLAGE À BASSE TENSION SOUS ENVELOPPE –

Partie 1: Exigences supplémentaires relatives aux interrupteurs sectionneurs sous enveloppe conformes à l'IEC 60947-3 – Isolation du matériel électrique lors des travaux de réparation et de maintenance dans des applications spécifiques

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L'IEC 62626-1 a été établie par le sous-comité SC121A: Appareillage à basse tension, du comité d'études 121 de l'IEC: Appareillages et ensembles d'appareillages basse tension. Il s'agit d'une Norme internationale.

Cette deuxième édition annule et remplace la première édition parue en 2014. Cette édition constitue une révision technique.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

a) mise à jour du présent document fondée sur l'IEC 60947-1:2020.

Le texte de cette Norme internationale est issu des documents suivants:

Projet	Rapport de vote
121A/569/FDIS	121A/581/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à son approbation.

La langue employée pour l'élaboration de cette Norme internationale est l'anglais.

Le présent document a été rédigé selon les Directives ISO/IEC, Partie 2, il a été développé selon les Directives ISO/IEC, Partie 1 et les Directives ISO/IEC, Supplément IEC, disponibles sous www.iec.ch/members_experts/refdocs. Les principaux types de documents développés par l'IEC sont décrits plus en détail sous www.iec.ch/standardsdev/publications.

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INTRODUCTION

Les interrupteurs-sectionneurs sous enveloppe couverts par la présente partie de l'IEC 62626 sont destinés à être utilisés dans plusieurs applications, permettant l'isolation d'un matériel électrique, notamment des circuits de moteurs, durant les travaux de réparation, de nettoyage et de maintenance.

Ces interrupteurs-sectionneurs sous enveloppe sont parfois désignés "interrupteurs de maintenance" ou "interrupteurs de sécurité". Le terme "interrupteur de sécurité" est également employé pour les interrupteurs de position relatifs à la sécurité, les interrupteurs d'inspection et des interrupteurs pour d'autres applications qui ne relèvent pas du présent document.

La présente partie de l'IEC 62626 spécifie les exigences supplémentaires relatives aux interrupteurs-sectionneurs conformes à l'IEC 60947-3, en vue d'isoler le matériel électrique lors des travaux de réparation et de maintenance.

Les interrupteurs-sectionneurs sous enveloppe conformes au présent document sont montés à proximité du matériel qui est isolé.

NOTE 1 Le terme "interrupteur de sécurité" n'est pas reconnu dans certains pays comme ayant le même sens que celui donné dans le présent document.

NOTE 2 Les interrupteurs-sectionneurs ne répondent pas nécessairement aux exigences en matière de prévention de démarrage intempestif, en particulier en présence de sources d'énergie autres qu'électriques.

APPAREILLAGE À BASSE TENSION SOUS ENVELOPPE –

Partie 1: Exigences supplémentaires relatives aux interrupteurs sectionneurs sous enveloppe conformes à l'IEC 60947-3 – Isolation du matériel électrique lors des travaux de réparation et de maintenance dans des applications spécifiques

1 Domaine d'application

La présente partie de l'IEC 62626 s'applique aux interrupteurs-sectionneurs sous enveloppe ayant une tension assignée inférieure ou égale à 1 000 V en courant alternatif, pour les travaux de réparation et de maintenance ou pour les opérations de nettoyage de circuits de charge. Les appareils relevant du domaine d'application du présent document sont les interrupteurs-sectionneurs conformes à l'IEC 60947-3 avec des exigences supplémentaires. Les interrupteurs-sectionneurs sous enveloppe conformes au présent document conviennent à une isolation conforme à la série IEC 60947 et ne sont pas équipés de dispositif de commande à distance ou de commutation automatique, en vue d'éviter des démarrages intempestifs ou accidentels. Ces appareils ne sont pas utilisés pour une commande fonctionnelle, par exemple un démarrage et un arrêt rapides ou un fonctionnement par à-coups.

NOTE 1 Cependant, ce type d'appareils permet de mettre hors tension le matériel électrique (en situation critique ou non).

Les appareils qui relèvent du domaine d'application du présent document permettent l'isolation du matériel électrique, notamment des circuits de moteurs, durant les travaux de réparation et de maintenance ou de nettoyage.

Les interrupteurs-sectionneurs sous enveloppe destinés à plusieurs applications, apportant une isolation du matériel électrique durant les travaux de réparation et de maintenance, nommés "interrupteurs de maintenance", sont désignés ci-après comme étant des appareils:

a) de différentes classes;

b) avec les caractéristiques de chaque classe;

c) remplissant les exigences minimales relatives aux essais;

d) accompagnés d'informations devant figurer par un marquage sur le matériel ou mises à disposition par le fabricant, par exemple dans un catalogue.

NOTE 2 Le présent document ne spécifie pas d'exigences supplémentaires nécessaires à l'application de ces interrupteurs, par exemple en cas d'atmosphères explosives (ex. ATEX en Europe).

2 Références normatives

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60050-441, *Vocabulaire Électrotechnique International (IEV) – Partie 441: Appareillage et* fusibles (disponible sous www.electropedia.org)

IEC 60947-1:2020, *Appareillage à basse tension – Partie 1: Règles générales*

IEC 60947-3:2020, *Appareillage à basse tension – Partie 3: Interrupteurs, sectionneurs, interrupteurs-sectionneurs et combinés-fusibles*

IEC 62262:2002, *Degrés de protection procurés par les enveloppes de matériels électriques contre les impacts mécaniques externes (Code IK)*
IEC 62262:2002/AMD1:2021