In my previous article, I explained about the standard IEC 62271-1 and its updates, which you can see [here](https://switchgearcontent.com).

**General about IEC:**
The International **Electrotechnical Commission (IEC)** is an international standards organization that prepares and publishes international standards for all electrical, electronic and related technologies – collectively known as “electrotechnology”. IEC standards cover a vast range of technologies from power generation, transmission and distribution to home appliances and office equipment, semiconductors, fiber optics, batteries, solar energy, nanotechnology and marine energy as well as many others. The IEC also manages four global conformity assessment systems that certify whether equipment, system or components conform to its international standards.

**Switchgear IEC standards:**
IEC Standards play a very important role in familiarizing and testing different switchgears. Standards are an important source for understanding, testing, and educating a variety
About IEC 62271-102:

This standard is part 102 from IEC 62271 that published about switchgears.

This standard applies to alternating current disconnectors and earthing switches, designed for indoor and outdoor installations for nominal voltages above 1000 V and for service frequencies up to and including 60 Hz. It also applies to the operating devices of these disconnectors and earthing switches and their auxiliary equipment.

Additional requirements for disconnectors and earthing switches in enclosed switchgear and controlgear are given in IEC 62271-200, IEC 62271-201 and IEC 62271-203. Note that Disconnectors in which the fuse forms an integral part are not covered by this standard.

This standard is also applicable to switching devices having disconnecting and/or earthing functionalities apart from other functions, such as high-speed earthing switch, circuit-breaker and switch-disconnector.

International Standard IEC 62271-102 has been prepared by technical committee 17(High voltage switchgear and controlgear).
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The main parts of IEC62271-102 standard are:

1-Disconnector & earthing switches rating & classification.

2-Disconnector & earthing switches design and construction.

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IEC 62271-102 Disconnector & Earthing switch Standard Definitions And Its Update Process

3-Disconnector & earthing switches type tests.

4-Disconnector & earthing switches routine tests

5-Guide to the selection of disconnectors and earthing switches for disconnector & earthing switches (informative).

6-Information to be given with enquiries, tenders and orders for disconnector & earthing switches (informative).

7-Disconnector & earthing switches transport, storage, installation, operating instructions, and maintenance.

8-Safety.

In most of above parts we can see reference has been made to the standard IEC 62271-1 (common switchgear standard)

Also this standard has 5 annex about disconnector & earthing switches topics.

**IEC 622271-102 standard update process:**

On date 2001-12-19:

**IEC 62271-102:2001 Withdrawn**

On date 2002-04-30:

**IEC 62271-102:2001/COR1: 2002 Withdrawn**

On date 2003-05-27:


On date 2005-02-23:


On date 2011-08-19:

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On date 2012-01-27:


On date 2012-02-15:


On date 2013-02-14:


On date 2013-02-14:


On date 2014-06-05:


Last version of this standard is:


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

1. new numbering according to IEC 17/1025/RQ to harmonize with ISO/IEC Directives, Part 2, and IEEE Std. C37.100.1;
2. clause numbering has been aligned with IEC 62271-1:2017;
3. the Scope has been extended to cover all indoor and outdoor installations. Consideration of switching devices having disconnecting and/or earthing switch functionalities, apart from other functions, are also covered by this document;
4. ratings have been moved from Annexes B, C and E to Clause 5; the order of the subclauses now corresponds to the order of subclauses in Clause 7;
5. new rating values for bus-transfer current and bus-transfer voltage have been assigned;
6. new class of mechanical endurance for earthing switches has been added (M1);
7. subclause “Rated values of electrical endurance for earthing switches” is now called “Classification of earthing switches for short-circuit making capability”;
8. new subclause with ratings for ice-coating has been added;
9. new subclause with classification of bus-charging switching capability has been added;
10. new withstand requirements for interlocking devices have been added;
11. the way to comply with the requirements of the isolating distance of disconnectors has been modified;
12. design and construction requirements for position-indicating devices have been modified, aligning the requirements for position indication and signalling;
13. the value of the operating force has been changed;
14. the test procedures and validation criteria have been revised and modified where necessary;
15. requirements for applied voltage during single-phase test on non-simultaneous closing earthing switches have been changed;
16. non-verifiable requirements have been deleted;
17. a new subclause has been added for testing mechanical interlocking devices;
18. the high- and low-temperature test is mandatory if the temperature limits for the service conditions of the apparatus (defined by the manufacturer) are above +40 °C or below −5 °C, and a more detailed testing procedure is given;
19. the testing procedure to verify the proper functioning of the position-indicating device allows a more practicable testing for every technology used;
20. a new Annex B has been added with title: “Current-switching capability required of disconnectors and earthing switches”;
21. a new Annex C has been added with title: “Tolerances on test quantities for type tests”;
22. a new Annex E has been added with title: “Extension of validity of type tests”.

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