

**ENERGY COMMISSION (ENERGY EFFICIENCY STANDARDS
AND LABELLING) (DISTRIBUTION TRANSFORMERS)
REGULATIONS, 2022**

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IN exercise of the power conferred on the Minister responsible for Energy by subparagraph (i) of paragraph (a) of subsection (1) of section 56 of the Energy Commission Act, 1997 (Act 541) and on the advice of the Board, these Regulations are made this 28th day of June, 2022.

Preliminary Provisions

Purpose of Regulations

1. The purpose of these Regulations is to promote the efficient use and conservation of energy in the country and mitigate related climate change by

- (a) providing for
 - (i) the enforcement of Standards set out in the First Schedule and the minimum energy performance standards set out in Part One of the Second Schedule;
 - (ii) the labelling of distribution transformers;
 - (iii) supplementary product information on distribution transformers; and
 - (iv) the registration of models of distribution transformers in the Appliance Energy Efficiency Register; and
- (b) prohibiting the manufacture, importation, offer for sale, sale, storage, donation, disposal, installation or use of a distribution transformer that does not meet the minimum energy performance standards set out in Part One of the Second Schedule.

Application of Regulations

2.(1) These Regulations apply to a distribution transformer manufactured in the country or imported into the country for display, sale or use.

- (2) These Regulations do not apply to
 - (a) a naturally cooled or dry-type distribution transformer;
 - (b) a distribution transformer with multiple voltage taps, the highest of which is equivalent to at least twenty per cent more than the lowest; and

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- (c) a distribution transformer that is designed to be used in a special purpose application including a
- (i) drive transformer;
 - (ii) rectifier transformer;
 - (iii) auto-transformer;
 - (iv) Uninterruptible Power System transformer;
 - (v) impedance transformer;
 - (vi) regulating transformer;
 - (vii) sealed and non-ventilating transformer;
 - (viii) machine tool transformer;
 - (ix) welding transformer;
 - (x) grounding transformer; or
 - (xi) testing transformer.

Duties and Requirements

Duty to comply with requirements

3. (1) A person who manufactures, imports, offers for sale, sells, stores, supplies, distributes, donates or otherwise disposes of a distribution transformer for use in the country shall ensure that each model of the distribution transformer

- (a) is registered with the Commission; and
- (b) meets the
 - (i) Standards set out in the First Schedule;
 - (ii) minimum energy performance standards set out in Part One of the Second Schedule;
 - (iii) labelling requirements set out in the Third Schedule; and
 - (iv) information requirements set out in the Fourth Schedule.

(2) A person who advertises a distribution transformer shall comply with the provisions of Part Five of the Fourth Schedule.

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Prohibition of manufacture, importation, offer for sale, sale, storage, donation, disposal, installation or use of distribution transformer

4. (1) A person shall not manufacture, import, offer for sale, sell, store, donate, or otherwise dispose of, install or use a distribution transformer in the country unless the distribution transformer meets the
- (a) minimum energy performance standards set out in Table 1 of the Second Schedule; and
 - (b) requirements of the Standards.
- (2) An enforcement authority shall
- (a) detain, cause to be re-exported or seize and destroy a distribution transformer imported for use in the country contrary to subregulation (1); or
 - (b) seize and destroy a distribution transformer manufactured for use in the country contrary to subregulation (1).

Category of distribution transformer

5. The category of a distribution transformer shall be determined in accordance with the categories set out in Part Two of the Fourth Schedule.

Minimum energy performance standard of distribution transformer

6. The minimum energy performance standard of a distribution transformer shall be determined in accordance with the procedures and standards set out in Part Two of the Second Schedule.

Voltage and capacity of distribution transformer

7. The manufacturer of a distribution transformer shall ensure that the rated voltage and rated capacity of a distribution transformer is printed conspicuously and displayed on the side of the distribution transformer.

Measurement methods

8. The information to be provided pursuant to regulations 10 and 11 shall be obtained by
- (a) a reliable, accurate and reproducible measurement which takes into account recognised state-of-the-art measurements; and

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(b) calculation methods
in accordance with the Standards.

Use of circumvention device

9. (1) A manufacturer, an importer or an authorised representative of the manufacturer shall not use a circumvention device during the conduct of a test of a distribution transformer.

(2) A person shall not manufacture, import, offer for sale, sell, store, donate, or otherwise dispose of, install or use a distribution transformer which is designed to

(a) detect that the distribution transformer is being tested by recognising the test conditions or test cycle; or

(b) react specifically by automatically altering the performance of the distribution transformer during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative of the manufacturer, in the technical documentation or included in any other documentation provided.

(3) The energy consumption of a distribution transformer and any of the other declared parameters shall not deteriorate after a

(a) software; or

(b) firmware

update, when measured with the same test standard originally used for the declaration of conformity, except with the consent of the Commission and the Standards Authority, before the update.

(4) A manufacturer, an importer or an authorised representative of the manufacturer shall inform the Commission and the Standards Authority in writing, with reasons, prior to an update of the software or firmware.

Technical documentation

10. (1) A person shall not manufacture, import, offer for sale, sell, store, distribute, donate or otherwise dispose of a distribution transformer

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for use in the country, unless that person has provided the Commission with sufficient technical documentation to enable the Commission

- (a) ascertain the accuracy of the information contained
 - (i) in the Product Information Sheet; or
 - (ii) on the label; and
 - (b) register each model of the distribution transformer in the Appliance Energy Efficiency Register.
- (2) The technical documentation referred to in subregulation (1) shall
- (a) be in the English language;
 - (b) include the Product Information Sheet set out in Part One of the Fourth Schedule; and
 - (c) contain the information set out in Part Three of the Fourth Schedule marked "Technical Documentation".
- (3) The technical documentation shall
- (a) be prepared for each model of a distribution transformer placed on the market; and
 - (b) include
 - (i) the name and address of the supplier;
 - (ii) the description of the distribution transformer, for purposes of identification;
 - (iii) the model identifier of the manufacturer;
 - (iv) the relevant drawings on the main design features of the model and parameters of the distribution transformer that affect the energy consumption of the distribution transformer;
 - (v) reports of relevant measurement tests carried out in compliance with the Standards;
 - (vi) details of calculations, extrapolations and tests carried out to verify the accuracy of calculations;
 - (vii) the installation, maintenance and operating instructions;
 - (viii) the period within which the model of the distribution transformer was manufactured; and
 - (ix) the life expectancy of the distribution transformer.

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Labelling and information requirements

11. (1) A person shall not manufacture, import, offer for sale, sell, store, supply, distribute, donate or otherwise dispose of a distribution transformer for use in the country unless the distribution transformer and the packaging of the distribution transformer meet the following requirements:

- (a) the distribution transformer shall bear a label
 - (i) in the form set out in the Third Schedule; and
 - (ii) placed on the distribution transformer;
- (b) the information in respect of the distribution transformer indicated on the packaging of the distribution transformer shall be in the English language;
- (c) the information in respect of the distribution transformer shall include the rated capacity and voltage of the distribution transformer measured in kVA and kV respectively in accordance with the Standards;
- (d) the Product Information Sheet in respect of the distribution transformer shall be as set out in Part One of the Fourth Schedule;
- (e) the label on the packaging containing the distribution transformer or the label on the distribution transformer shall
 - (i) contain the information set out in the Third Schedule; and
 - (ii) be printed in colour;
- (f) the labels on the distribution transformer and the packaging of the distribution transformer shall include the following information:
 - (i) the Quick Response Code;
 - (ii) the name or trademark of the manufacturer;
 - (iii) the model identifier of the manufacturer;
 - (iv) the year of manufacture;
 - (v) the type of distribution transformer;

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- (vi) the minimum energy performance standard of the distribution transformer, measured in accordance with the test procedures specified in the Standards;
 - (vii) the measured no-load loss value in watts for the distribution transformer measured in accordance with the procedure specified in the Standards;
 - (viii) the measured load loss value in watts for the distribution transformer measured in accordance with the procedures specified in the Standards; and
 - (ix) the country of origin or manufacture;
- (g) the label on the distribution transformer shall be printed in colour on a waterproof material and pasted conspicuously on the distribution transformer;
 - (h) the background of a label printed or pasted on each packaging containing the distribution transformer or on the distribution transformer shall be gold in colour; and
 - (i) the text on the label of the distribution transformer shall be black in colour.

(2) Despite regulation 21, an update to the Standards shall take precedence over the requirements specified in paragraph (e) of subregulation (1) and Part One of the Second Schedule.

(3) Where

- (a) a side of the packaging is not large enough to contain a label and the blank border; or
- (b) a label would cover more than fifty per cent of the surface area of the largest side of a packaging,

the label and the blank border shall be reduced to not less than forty per cent of the largest side of the packaging and pasted on the largest side of the packaging.

(4) A person shall not remove the label on a distribution transformer or the packaging containing a distribution transformer before the first retail purchase of the distribution transformer.

(5) For the purposes of this regulation, "first retail purchase" means the purchase of a distribution transformer by an end user.

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Registration of Distribution Transformers

Appliance Energy Efficiency Register

12. (1) The Commission shall establish, keep and maintain an Appliance Energy Efficiency Register.

(2) The Appliance Energy Efficiency Register shall contain the information specified in subregulation (5) of regulation 13.

Application for registration

13. (1) A person who

(a) manufactures a distribution transformer in the country; or

(b) imports a distribution transformer into the country

for use in the country shall, prior to the manufacture or importation, ensure that each model of the distribution transformer is registered with the Commission.

(2) A person who

(a) manufactures a distribution transformer in the country; or

(b) imports a distribution transformer into the country

for use in the country shall apply to the Commission for registration of the distribution transformer.

(3) An application for registration under subregulation (2) shall be made in writing or electronically on the website of the Commission and accompanied with the prescribed fee.

(4) An application for registration shall be accompanied with a test report from an accredited test laboratory that demonstrates that

(a) the distribution transformer meets the minimum energy performance standards set out in the Second Schedule; and

(b) the test report corresponds to the energy consumption that is provided on the energy efficiency label of the distribution transformer.

(5) The following information shall be provided for each registration of a model of a distribution transformer:

(a) the brand or trademark, if any, used in connection with a supply of the model;

(b) the model identifier issued by the manufacturer for each model covered by the registration;

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- (c) the Product Information Sheet of the model;
- (d) the date the registration takes effect;
- (e) a unique identifier for the registration issued by the Commission;
- (f) the names and contact details of the applicant and contact person in relation to the registration;
- (g) if the model is to be registered as a replacement model of an earlier registered model, that fact and details to identify the replaced model, including the date the replacement was made;
- (h) if a model to be registered is affected by a replacement, that fact and details to identify the replaced model and replacement model, including the date the replacement was made;
- (i) any information specified in these Regulations in relation to that model of distribution transformer; and
- (j) any other information the Commission may consider appropriate.

Consideration of application

14. (1) The Commission shall, on receipt of an application for registration of a distribution transformer, consider the application.
- (2) The Commission shall, in considering the application have regard to the requirements specified in subregulation (5) of regulation 13.

Grant of application

15. (1) The Commission may, within fourteen days after receipt of an application, grant or refuse an application.
- (2) Where the Commission decides to grant an application, the Commission shall
- (a) within three days after the date of the decision, inform the applicant, in writing or electronically as the case may be, of the decision; and
 - (b) enter the information specified in subregulation (5) of regulation 13 in the Appliance Energy Efficiency Register.

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(3) Where the Commission refuses to grant an application, the Commission shall within three days after the date of the decision communicate to the applicant, in writing or electronically as the case may be,

- (a) the reason for the refusal; and
- (b) the applicable Standards the model of the distribution transformer is required to meet.

Duties of Dealers and Suppliers of Distribution Transformers

Duty of dealer to keep, maintain and provide technical documentation

16. (1) A dealer shall keep and maintain technical documentation in respect of a distribution transformer for a period of not less than two years after the date of manufacture or importation.

(2) A dealer shall, within two days after a request by an enforcement authority, provide the enforcement authority with technical documentation in respect of a distribution transformer for inspection.

(3) Where a dealer fails to provide technical documentation in respect of a distribution transformer within two days after the request, the enforcement authority shall detain the distribution transformer.

(4) A dealer shall ensure that

- (a) each distribution transformer, at the point of sale, including at trade fairs, bears the label provided by a supplier in accordance with regulation 3, with the label being displayed conspicuously;
- (b) in the event of distance selling, the label and Product Information Sheet are provided in accordance with Part Four of the Fourth Schedule;
- (c) an audio advertisement, including radio and local information broadcast network, on a specific model of a distribution transformer where the brand, capacity, size, category or price is mentioned, contains information on the minimum energy performance standards available in accordance with Part Five of the Fourth Schedule;

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- (d) a visual advertisement for a specific model of distribution transformer, including an advertisement on the internet contains the minimum energy performance standards available on the label, in accordance with Part Five of the Fourth Schedule; and
- (e) a technical promotional material concerning a specific model of distribution transformer, including technical promotional material on the internet, which describes the specific technical parameters of the distribution transformer, includes the minimum energy performance standards available on the label, in accordance with Part Five of the Fourth Schedule.

Duty of supplier to keep, maintain and provide technical documentation

17. (1) A supplier shall keep and maintain technical documentation in respect of each model of a distribution transformer for a period of not less than two years after the date of manufacture or importation.

(2) A supplier shall, on request by an enforcement authority, provide the enforcement authority with the technical documentation of the distribution transformer for inspection.

(3) Where a supplier fails to provide technical documentation in respect of a distribution transformer within two days after the request, the enforcement authority shall detain the distribution transformer.

Duty of supplier to keep, maintain and provide Product Information Sheet

18. (1) A supplier shall keep and maintain in the possession of the supplier a Product Information Sheet in respect of each distribution transformer in the form set out in Part One of the Fourth Schedule.

(2) A supplier shall, on request by an enforcement authority, provide the enforcement authority with a Product Information Sheet which shall be in the

- (a) English language; and
- (b) form set out in Part One of the Fourth Schedule.

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Duty of supplier to provide information for statistical purposes

19. (1) A person who manufactures in the country, imports into the country or exports out of the country a distribution transformer or an assembly of components that incorporates a distribution transformer shall provide the Commission with the following information not later than four months after the end of each year:

- (a) the number of distribution transformers of each model that the person manufactured, exported or imported into the country in the relevant year;
- (b) the number of distribution transformers of each model that the person sold in the country in the relevant year;
- (c) the number of distribution transformers of each model that the person exported from the country in the relevant year;
- (d) the name of each model that the person discontinued
 - (i) manufacturing in the relevant year;
 - (ii) exporting in the relevant year; or
 - (iii) importing in the relevant year; and
- (e) a copy of any existing test report, or other energy performance data specified by the Commission, for each model specified under paragraph (d).

(2) Upon a written request by the Commission, a person who manufactures a distribution transformer for use in the country or imports a distribution transformer into the country shall provide the following information to the Commission not later than forty days after receiving the request:

- (a) the number of distribution transformers of each model specified by the Commission that the person sold to a purchaser in the country in each of the preceding three years; and
- (b) the energy performance characteristics of the distribution transformer as specified in the request.

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Duty of supplier to ensure accuracy of information

20. (1) A supplier shall ensure that the information indicated on a
- (a) Product Information Sheet; or
 - (b) label

in respect of a distribution transformer is accurate.

(2) The duty imposed on a supplier under subregulation (1) does not affect any other right of action which a person may have by law against a person with respect to the inaccuracy of information on a Product Information Sheet or on a label.

Access to information on technical documentation and Product Information Sheet

21. (1) The information required under regulations 10, 11, 16, 17 and 18 shall be obtained in accordance with the test procedures required by the Standards.

(2) Information obtained in a manner other than in accordance with subregulation (1) shall, for the purposes of these Regulations, be invalid.

Product brochure in respect of distribution transformer

22. Where a supplier provides a product brochure in respect of a distribution transformer, the brochure shall contain a Product Information Sheet which shall be in the

- (a) English language; and
- (b) form set out in Part One of the Fourth Schedule.

Information

Public information

23. (1) The information provided by a supplier on the Product Information Sheet or on a label of a distribution transformer is deemed public information.

(2) A supplier is deemed to have consented to the publication of the information indicated on a Product Information Sheet or on a label in respect of a distribution transformer.

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Information in respect of mail order and other distance selling

24. (1) Where a person offers a distribution transformer for sale to another person in the country through a medium of communication including a mail order or any other distance selling medium, that person shall provide information in respect of the distribution transformer.

(2) The information referred to in subregulation (1) shall

- (a) be in the English language;
- (b) include the product registration number assigned by the Commission upon registration in the Appliance Energy Efficiency Register;
- (c) include the information set out in Part Four of the Fourth Schedule; and
- (d) be written in a manner that is legible.

Obligations of audio or audio-visual broadcasting service provider

25. Where an audio or audio-visual broadcasting service provider advertises a distribution transformer, and the information in the advertisement includes the brand, model, size, price and any other information that is specific to a particular model, that service provider shall ensure that

- (a) the advertisement has been vetted and approved by the Commission; and
- (b) the advertisement includes
 - (i) information on the minimum energy performance standard of the distribution transformer;
 - (ii) a statement that the advertisement has been vetted and approved by the Commission; and
 - (iii) any other information required under Part Five of the Fourth Schedule.

Obligations of e-commerce platform

26. (1) A person shall not offer for sale, sell, supply, distribute or otherwise dispose of a distribution transformer through a promotion on the internet unless

- (a) the minimum energy performance of the distribution transformer is posted next to the price of the distribution transformer; and

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- (b) the label of the distribution transformer is made available to consumers in the same medium of communication.
- (2) Where an e-commerce service provider allows the direct sale of a distribution transformer through the website of the service provider, the service provider shall
- (a) enable the display of the
- (i) electronic label; and
- (ii) electronic Product Information Sheet provided by the dealer on the display mechanism in accordance with Part Six of the Fourth Schedule; and
- (b) inform the dealer of the obligation to display the electronic label and electronic Product Information Sheet.

Misleading information

27. (1) A person shall not display a label, mark, symbol or inscription which relates to the energy consumption of a distribution transformer, if the display is likely to be

- (a) deceptive;
- (b) misleading; or
- (c) false.

(2) A person shall not broadcast an advertisement relating to the energy performance of a distribution transformer if the information in the advertisement is likely to be

- (a) deceptive;
- (b) misleading; or
- (c) false.

(3) Subregulations (1) and (2) do not apply to

- (a) a label;
- (b) a mark;
- (c) a symbol; or
- (d) an inscription

displayed under an environmental labelling scheme or endorsement labelling scheme.

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Restriction on disclosure of information

28. (1) An enforcement authority shall not disclose information which consists of a

- (a) secret manufacturing process; or
- (b) trade secret

that was obtained by that enforcement authority in the course of the exercise of a power or duty conferred on the enforcement authority by these Regulations.

(2) Despite subregulation (1), an enforcement authority may disclose information if

- (a) the information is public information; or
- (b) the disclosure is made
 - (i) for the purpose of facilitating the exercise of power by an enforcement authority under these Regulations or any other enactment;
 - (ii) in connection with the investigation of an offence; or
 - (iii) for the purpose of a civil or criminal proceeding.

Powers of Enforcement

Power of enforcement authority to require technical documentation

29. Where an enforcement authority suspects that the information given

- (a) in a Product Information Sheet; or
- (b) on a label

in respect of a distribution transformer is incorrect, that enforcement authority may, by notice served on the supplier or importer of the distribution transformer, require the supplier or importer to furnish the enforcement authority with the technical documentation referred to in regulation 10 within the period stipulated in the notice.

Power of enforcement authority to inspect distribution transformer

30. An enforcement authority may, at any reasonable time, enter any premises to inspect a distribution transformer if the enforcement authority has reason to believe that the premises are being used for a purpose in contravention of these Regulations.

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Power of enforcement authority to detain or seize record or distribution transformer

31. (1) Subject to these Regulations, where an enforcement authority has reasonable cause to suspect that an offence has been committed or is being committed, that enforcement authority may

- (a) at any reasonable time enter premises other than a dwelling place, and conduct an inspection in accordance with subsection (3) of section 52 of the Act;
- (b) require a person engaged in a business or employed in connection with a business to produce a record in respect of a distribution transformer;
- (c) detain or seize a distribution transformer that is
 - (i) not labelled;
 - (ii) not properly labelled; or
 - (iii) labelled in a deceptive or misleading manner;
- (d) detain or seize a distribution transformer that is imported without technical documentation which justifies the label affixed on the distribution transformer;
- (e) detain or seize a distribution transformer to enable tests to be carried out;
- (f) detain or seize a record to be used as evidence in proceedings in respect of an offence under these Regulations;
- (g) cause a container to be opened for the purpose of inspection;
- (h) break open a container where implementation of paragraph (g) is not practicable; or
- (i) detain or seize a distribution transformer if the model is not registered in the Appliance Energy Efficiency Register.

(2) For the purposes of paragraphs (b) and (f) of subregulation (1), the enforcement authority may request for information stored electronically to be made available to the enforcement authority in printed form.

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Power of enforcement authority to test distribution transformer

32. (1) An enforcement authority may

- (a) obtain, remove and test a distribution transformer; or
- (b) order the testing of a distribution transformer

to ascertain whether a provision of these Regulations has been contravened.

(2) A person who suspects that a distribution transformer offered for sale does not comply with the provisions of these Regulations may lodge a complaint with an enforcement authority.

(3) The enforcement authority may, upon receipt of a complaint under subregulation (2), detain and test the distribution transformer.

(4) The test to be conducted in respect of a distribution transformer purchased, obtained or detained under regulation 31 shall be carried out in accordance with the test procedures required by the Standards.

Detention, Re-Exportation and Seizure

Procedure for market surveillance and verification

33. (1) Despite regulation 32, the Commission and the Standards Authority shall conduct market surveillance to ascertain whether a distribution transformer on the market conforms to these Regulations.

(2) The Commission and the Standards Authority shall apply the verification procedure specified in the Fifth Schedule to conduct the market surveillance.

Order to access premises to inspect, detain or seize distribution transformer or record

34. Where

- (a) an enforcement authority is refused entry to premises;
- (b) a notification to enter premises would defeat the purpose of the entry;
- (c) the premises to be entered are unoccupied; or
- (d) the occupier of premises to be entered is temporarily absent,

the enforcement authority may apply to a court for an order to enter the premises to inspect, detain or seize a distribution transformer or record, if the enforcement authority has reasonable grounds to believe that a

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distribution transformer or record on the premises may assist in the disclosure of evidence of the commission of an offence under these Regulations.

Procedure for detention of distribution transformer

35. (1) An enforcement authority that exercises a power of detention under these Regulations shall, immediately give a written notice to the person against whom the power has been exercised.

(2) The written notice shall state

- (a) the distribution transformer that has been detained; and
- (b) the reason for the detention.

(3) Where an enforcement authority detains a distribution transformer, that distribution transformer may be kept in a warehouse or other secure location reserved for the purpose.

Procedure for re-labelling of detained distribution transformer

36. (1) Subject to these Regulations, where an enforcement authority detains a distribution transformer under paragraph (e) of subregulation (1) of regulation 31, the enforcement authority shall

- (a) within two days after the detention, submit a sample of the distribution transformer for testing; and
- (b) within two days after receipt of the test results, give a notice in writing to the supplier of the distribution transformer to properly label the distribution transformer if the minimum energy performance standards have been complied with.

(2) The notice under paragraph (b) of subregulation (1) shall require a distribution transformer to be re-labelled in the required manner or exported out of the country within twenty-eight days.

(3) Where a supplier is required under subregulation (2), to re-label a distribution transformer, the supplier shall re-label the distribution transformer under the supervision of an officer authorised for the purpose by the Commission or the Standards Authority.

(4) Where a supplier fails to

- (a) re-label the distribution transformer; or
- (b) export the distribution transformer

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within twenty-eight days after the notice given under paragraph (b) of subregulation (1), the Commission shall, in consultation with the Standards Authority, destroy the distribution transformer in a manner that the Commission may determine.

Procedure for re-exportation of imported distribution transformer

37. (1) An enforcement authority that exercises a power of detention or seizure under these Regulations shall, within seven days after the detention or seizure, give an order in writing to the person against whom the power has been exercised to re-export the distribution transformer.

(2) The order referred to in subregulation (1) shall state

- (a) the distribution transformer to be re-exported;
- (b) the reason for the order;
- (c) the period within which the distribution transformer is to be re-exported; and
- (d) the fact that the supplier shall be responsible for the cost associated with the re-export.

(3) Where a distribution transformer is kept within premises that are under the control of the owner of the distribution transformer, the owner shall pay a security deposit against any breach of the re-exportation order.

(4) A security deposit under subregulation (3) shall be forfeited in the event of a breach of the re-exportation order, including the sale or destruction of a distribution transformer which has been ordered to be re-exported.

(5) Where a person fails to pay a security deposit imposed under subregulation (3), the Commission may recover the amount imposed as a civil debt.

Procedure for seizure of distribution transformer

38. (1) An enforcement authority that exercises a power of seizure under these Regulations shall, within seven days after the seizure, give a written notice to the person against whom the power has been exercised.

(2) The written notice under subregulation (1) shall state

- (a) the distribution transformer that has been seized;
- (b) the reason for the seizure; and

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(c) the venue and the period within which a petition against the seizure may be brought under regulation 39.

(3) Where an enforcement authority seizes a distribution transformer, that distribution transformer may be kept in a warehouse or other secure location reserved for the purpose.

(4) The owner of the distribution transformer may be required to pay a deposit to cover the cost of destruction, if the distribution transformer does not meet the minimum energy performance standards.

(5) Where a distribution transformer is kept within premises that are under the control of the owner of the distribution transformer, the owner shall pay a security deposit against any breach of the seizure order.

(6) A security deposit under subregulation (5) shall be forfeited in the event of a breach of the seizure order, including the sale or destruction of a distribution transformer which has been seized.

(7) Where a person fails to pay a security deposit imposed under subregulation (5), the Commission may recover the amount imposed as a civil debt.

Petition and Compensation

Petition against seizure

39. (1) Subject to these Regulations, a person whose distribution transformer is seized may, within seven days after receipt of the written notice specified in subregulation (1) of regulation 38, petition the Executive Secretary for the release of the seized distribution transformer.

(2) The Executive Secretary shall, within seven days after the receipt of a petition under subregulation (1),

(a) confirm the seizure; or

(b) order the release of the seized distribution transformer to the petitioner on a specific day.

(3) A person who is dissatisfied with a decision of the Executive Secretary under subregulation (2) may appeal to the Board within seven days after the receipt of the decision.

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(4) The Board shall within thirty days after the receipt of an appeal under subregulation (3)

- (a) consult the Standards Authority; and
- (b) take a decision on the appeal.

(5) The Board may release the seized distribution transformer to the petitioner only if the Commission and the Standards Authority fail to prove that an offence under these Regulations has been committed.

(6) A person who is dissatisfied with

- (a) a decision of the Board under subregulation (4) may, within fourteen days after the decision; or
- (b) the failure of the Board to make a decision within thirty days after receipt of the appeal may, within fourteen days after the failure

apply to the court.

Forfeiture and destruction of seized distribution transformer

40. (1) Where an appeal to the Board under subregulation (3) of regulation 39 is not successful, the enforcement authority shall, within twenty-eight days after the decision of the Board, notify the owner of the distribution transformer of the forfeiture and date of destruction of the seized distribution transformer.

(2) The Commission may, in consultation with the Standards Authority, destroy a forfeited distribution transformer in a manner that the Commission may determine.

(3) Where under subregulation (6) of regulation 39, the court upholds or affirms the decision of the Board to forfeit and destroy the distribution transformer, the Commission shall destroy the distribution transformer within the period given by the court.

Compensation for loss of distribution transformer or record seized

41. (1) Where an enforcement authority exercises power under these Regulations to seize a distribution transformer or record, that enforcement authority is liable to pay compensation to the owner of the distribution transformer or record for any loss or damage caused by the exercise of the power, if

- (a) these Regulations have not been contravened in relation to the distribution transformer or record; and

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(b) the loss or damage is not attributable to the neglect or the fault of the owner but an official of the Commission.

(2) Paragraph (b) of subregulation (1) does not apply in a case of *force majeure*.

(3) The compensation payable under subregulation (1) for a loss or damage shall not exceed the value of the distribution transformer or record.

(4) A dispute as to the

(a) right to compensation; or

(b) amount of compensation payable to a person under subregulation (1)

shall be determined in the first instance by arbitration in accordance with the Alternative Dispute Resolution Act, 2010 (Act 798).

Recovery of expenses by enforcement authority

42. (1) Where an enforcement authority

(a) seizes,

(b) tests, or

(c) supervises the re-labelling or destruction of

a distribution transformer, that enforcement authority may surcharge the dealer or supplier of the distribution transformer for the expenses incurred for the seizure, testing or supervision.

(2) Despite subregulation (1), where a court convicts a person of an offence in respect of the contravention of a provision of these Regulations, the court may, in addition to any order that the court may make as to costs and expenses, order the person convicted to reimburse the enforcement authority for the expenditure incurred by the enforcement authority in connection with the seizure.

Miscellaneous Provisions

Offences and penalties

43. (1) A person who

(a) manufactures, imports, offers for sale, sells, stores, advertises, distributes or otherwise disposes of a distribution transformer that

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- (i) does not meet a requirement in respect of the minimum energy performance standards contrary to regulation 3;
- (ii) is not accompanied by the required technical documentation contrary to regulation 10;
- (iii) is not labelled or properly labelled contrary to regulation 11;
- (iv) is labelled in a deceptive or misleading manner contrary to regulation 27;
- (b) uses a circumvention device contrary to regulation 9;
- (c) fails to comply with a labelling requirement contrary to regulation 11;
- (d) fails to provide technical documentation contrary to regulation 10, 16 or 17;
- (e) fails to register a model of a distribution transformer contrary to regulation 13;
- (f) fails to provide a Product Information Sheet contrary to regulation 18;
- (g) fails to provide information on a distribution transformer contrary to regulation 19;
- (h) provides inaccurate information contrary to regulation 20;
- (i) advertises a distribution transformer without providing accurate information on the minimum energy performance of the distribution transformer contrary to regulation 25;
- (j) offers for sale or sells a distribution transformer over the internet or other distance selling medium without providing the information required contrary to regulation 24 or 26;
- (k) provides misleading information contrary to regulation 27;
- (l) obstructs or interferes with an enforcement authority in the exercise of the powers of that enforcement authority contrary to regulation 31;
- (m) fails to comply with the requirements for re-labelling contrary to regulation 36; or
- (n) violates a seizure order or notice contrary to regulation 38

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commits an offence and is liable on summary conviction to a fine of not less than one hundred and twenty-five penalty units and not more than two hundred and fifty penalty units or to a term of imprisonment of not less than six months and not more than twelve months or to both.

(2) A person who commits a second or subsequent offence under subregulation (1) after an earlier conviction under subregulation (1) is liable on summary conviction to a fine of not less than two hundred and fifty penalty units and not more than five hundred penalty units or to a term of imprisonment of not less than twelve months and not more than twenty-four months or to both.

(3) Where an offence is committed under these Regulations by a body corporate or by a member of a partnership or other firm, every director or officer of that body corporate or any member of the partnership or any other person concerned with the management of the firm shall be deemed to have committed that offence and is liable, on summary conviction, to a fine of not less than five hundred penalty units and not more than one thousand penalty units, and is in addition liable to the payment of compensation for the damage resulting from the breach.

(4) A person shall not be convicted of an offence under subregulation (3), if it is proved that

- (a) the person exercised due diligence to secure compliance with the provisions of these Regulations, and
- (b) the offence was committed without the knowledge, consent or connivance of that person.

Interpretation

44. In these Regulations, unless the context otherwise requires,

“accredited test laboratory” means a test laboratory that is recognised by the Standards Authority for laboratory testing and product certification;

“appliance” means a device or machine for performing a specific task;

“Appliance Energy Efficiency Register” means an official record, kept and maintained by the Commission on energy

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efficiency information in respect of models of electrical appliances that have been certified by the Commission and Standards Authority for use in Ghana;

“audio or audio-visual broadcasting service provider” means a person who provides a service which delivers radio programmes or programmes with hearing and sight components to persons with equipment appropriate for receiving that service, whether the delivery is effected by means of or uses the radio frequency spectrum, cable, optical fibre, satellite, internet radio via streaming media on the internet, or any other means or a combination of those means intended to reach a wide audience;

“capacity” means the rated power output of the distribution transformer measured in kilovolt-amperes under the test conditions specified in the Standards;

“circumvention device” means any control, control device, software, component or part that alters the operating characteristics of a distribution transformer during any test procedure, resulting in measurements that are unrepresentative of the true characteristics of the distribution transformer that may occur during normal use under comparable conditions;

“container” means a receptacle or enclosure for holding a product for storage, packaging and shipping;

“court” means a court of competent jurisdiction;

“dealer” means a retailer or other person who displays, offers for sale or sells a distribution transformer to an end user;

“distance selling” means the sale of goods or services without the buyer and seller being physically present simultaneously;

“distribution transformer” means a static piece of apparatus with two or more windings which, by electromagnetic induction, transforms a system of alternating voltage and current into another system of alternating voltage and current usually of different values and at the same frequency

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for the purpose of transmitting electrical power including a transformer that

- (a) has an input voltage of thirty-six kilovolts or less;
- (b) has an output voltage of six hundred volts or less; and
- (c) is rated for operation at a frequency of fifty Hertz;

“dwelling place” means place of residence;

“electronic Product Information Sheet” means a document containing the following information in electronic format:

- (a) basic product information;
- (b) energy label information; and
- (c) special features and characteristics;

“end user” means the first user of a distribution transformer;

“endorsement labelling scheme” includes a voluntary labelling scheme that guarantees the performance standards of the distribution transformer, that are equal to or exceed the minimum threshold established by a recognised advisory body;

“enforcement authority” means

- (a) an authorised officer of the Commission;
- (b) an authorised officer of the Standards Authority;
- (c) an authorised officer of the Customs Division of the Ghana Revenue Authority;
- (d) an authorised officer of the Police Service; or
- (e) any other authorised person designated by the Customs Division of the Ghana Revenue Authority, the Commission or the Standards Authority to carry out inspections for the purposes of these Regulations;

“environmental labelling scheme” means a voluntary labelling scheme that provides detailed information on the environment in respect of the performance characteristics of a distribution transformer;

“GS” means Ghana Standards;

“importer” means a person who places a distribution transformer from a foreign country on the Ghanaian market and supplies that distribution transformer for use;

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- “label” means a material attached to a distribution transformer the inscription of which contains information on the energy consumption of the distribution transformer;
- “liquid-immersed transformer” means a distribution transformer in which the magnetic circuit and windings are immersed in liquid;
- “load loss” (P_k) means the absorbed active power at rated frequency and reference temperature associated with a pair of windings when
- (a) the rated current or the tapping current is flowing through the line terminal of one of the windings; and
 - (b) the terminals of the other windings are in short-circuit with any winding fitted with tappings connected to its principal tapping, while further windings, if existing, are open-circuited;
- “minimum energy performance standards” mean a set of procedures and regulations that prescribe the minimum allowable values of energy efficiency or energy performance of manufactured products;
- “model identifier” means the code, usually alphanumeric, which distinguishes a specific product model from other models with the same trademark or the same name of the manufacturer, importer or authorised representative of the manufacturer;
- “no-load loss” (P_o) means the active power absorbed at rated frequency when the transformer is energised and the secondary circuit is open;
- “Pole mounted distribution transformer” means a distribution transformer
- (a) with a rated power of up to three hundred and fifteen kVA suitable for outdoor service; and
 - (b) designed to be mounted on the support structures of overhead power lines;

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- “point of sale” means the place at which a retail transaction is carried out;
- “premises” means land and any building, store, shop, apartment, or other structure on the land used for the storage of a distribution transformer;
- “product brochure” includes a pamphlet or booklet that contains introductory information about a product;
- “Product Information Sheet” means a standard table of information related to a distribution transformer;
- “Quick Response Code” means a matrix barcode included on the energy label of a product model that links to the information of the model in the public part of the product database;
- “rated power (S_r)” means a conventional value of apparent power assigned to a winding which, together with the rated voltage of the winding, determines the rated current of the winding;
- “rated voltage” means the voltage marked on a distribution transformer in volts;
- “rated voltage of a winding (U_r)” means the voltage assigned to be applied, or developed at no-load, between the terminals of
- (a) an untapped winding; or
 - (b) a tapped winding connected on the principal tapping;
- “record” includes a book, document, label, mark, symbol, inscription or information in electronic form;
- “sale” means the exchange of a product for consideration including hire purchase, credit sale and purchase by instalment;
- “Standards” means quality specifications for distribution transformers as stipulated in the First Schedule;
- “Standards Authority” means the Standards Authority established under the Standards Authority Act, 1973 (N.R.C.D. 173);

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“supplier” means a person or organisation that provides a product including,

(a) a manufacturer or the authorised representative of a manufacturer resident in the country; and

(b) an importer or the person who introduces a distribution transformer on the Ghanaian market;

“supply” includes an offer to supply, contract to supply and an advertisement for supply of a distribution transformer but excludes the exhibition at a trade fair of a distribution transformer that is prohibited by these Regulations;

“trade secret” means a secret device or technique used by a company in manufacturing a product of the company;

“Voltage Regulation Distribution Transformer” means a distribution transformer equipped with additional components, inside or outside of the transformer tank, to automatically control the input or output voltage of the distribution transformer for on-load voltage regulation purposes;

“Winding” means the assembly of turns forming an electrical circuit associated with one of the voltages assigned to the distribution transformer; and

“year” means the period from 1st January to 31st December.

Transitional provision

45. A person who, before the coming into force of these Regulations, has

(a) manufactured in the country; or

(b) imported into the country

a distribution transformer that does not comply with these Regulations, shall, within one year after the coming into force of these Regulations, sell, distribute, donate or otherwise dispose of that distribution transformer.

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SCHEDULES

FIRST SCHEDULE

STANDARDS

(regulations 1(a)(i), 3(1)(b)(i) and 44)

1. GS IEC 60076-20: 2017 Power transformers – Part 20: Energy efficiency.
2. GS IEC 60076-1: Power transformers – Part 1: General.
3. GS IEC 60076-2: Power transformers – Part 2: Temperature rise for liquid-immersed transformers.
4. GS IEC 61558-1:2017: Safety of transformers, reactors, power supply units and combinations thereof Part 1: General requirements and tests.

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SECOND SCHEDULE

MINIMUM ENERGY PERFORMANCE STANDARDS
(regulations 1(a)(i), 1(b), 3(1)(b)(ii), 4(1)(a), 6, 11(2) and 13(4)(a))

PART ONE

(regulations 1(a)(i), 1(b), 3(1)(b)(ii), 4(1)(a), 6 and 11(2))

1. Efficiency Specifications

The energy efficiency of a distribution transformer under these Regulations is determined by the minimum energy performance standards (MEPS) metric based on specification of maximum allowable no-load losses and load losses measured in accordance with the test methods and standard test conditions specified in Part Two of this Schedule and in accordance with the Standards provided in the First Schedule.

2. Minimum Efficiency Performance Standards (MEPS) Of Distribution Transformers

A single phase and a three phase liquid immersed distribution transformer shall meet the minimum energy performance standard (MEPS) requirements specified in this Part and provided for in the categories of distribution transformers provided under Part Two of the Fourth Schedule.

2.1. Requirements for three-phase Distribution Transformers with rated power $\leq 3\ 150$ kVA

Tables 1 specifies the maximum allowable no-load and load losses (in W) for three-phase liquid-immersed distribution transformers that have

- (a) primary voltage $U_m \leq 24$ kV and secondary winding voltage $U_m \leq 3.6$ Kv; and
- (b) primary voltage $24\text{kV} < U_m \leq 36$ kV and secondary winding voltage $U_m \leq 3.6$ kV

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2.2. Requirements for Voltage Regulation distribution transformers with rated power ≤ 3150 kVA

Distribution transformers equipped with tapping connections suitable for operation while being energised or on-load for voltage adaptation purposes are referred to as Voltage Regulation Distribution Transformers. This category of distribution transformers shall have the same maximum no-load loss allowances as specified in Table 1 but shall have their corresponding maximum load loss (P_k) allowances increased by ten per cent compared to the values in Table 1.

2.3. Requirements for distribution transformer with Primary winding voltage, U_m between 24kV and 36kV ($24\text{kV} < U_m \leq 36\text{kV}$) and Secondary winding voltage, $U_m > 3.6\text{kV}$

The maximum allowable load and no-load losses indicated in Table 1(b) shall also apply for this category of distribution transformer.

Table 1: Maximum Load losses and No-load losses (in W) for 3-phase Liquid-immersed distribution transformers with

| Transformer Size Rated Power (kVA) | (a) | | (b) | |
|--|---|-----------------------------------|--|-----------------------------------|
| | Primary winding voltage, $U_m \leq 24\text{kV}$ Secondary winding voltage, $U_m \leq 3.6\text{kV}$ | | 24kV < Primary winding voltage, $U_m \leq 36\text{kV}$ Secondary winding voltage, $U_m \leq 3.6\text{kV}$ | |
| | Maximum No-Load losses, P_o (W) | Maximum Load Losses, P_k (W) | Maximum No-Load losses, P_o (W) | Maximum Load Losses, P_k (W) |
| ≤ 25 | 63 | 600 | 72 | 660 |
| 50 | 81 | 750 | 93 | 825 |
| 100 | 130 | 1250 | 150 | 1375 |
| 160 | 189 | 1750 | 217 | 1925 |
| 250 | 270 | 2350 | 311 | 2585 |
| 315 | 324 | 2800 | 373 | 3080 |
| 400 | 387 | 3250 | 445 | 3575 |
| 500 | 459 | 3900 | 528 | 4290 |
| 630 | 540 | 4600 | 621 | 5060 |
| 800 | 585 | 6000 | 673 | 6600 |
| 1000 | 693 | 7600 | 797 | 8360 |
| 1250 | 855 | 9500 | 983 | 10450 |
| 1600 | 1080 | 12000 | 1242 | 13200 |
| 2000 | 1305 | 15000 | 1501 | 16500 |
| 2500 | 1575 | 18500 | 1811 | 20350 |
| 3150 | 1980 | 23000 | 2277 | 25300 |

*Maximum allowable losses for kVA ratings that fall in between the ratings listed in Table 1 shall be obtained by linear interpolation

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2.4. Requirements for pole-mounted distribution transformers

The maximum levels of load and no-load losses for liquid immersed pole-mounted distribution transformers with power ratings between 25 kVA and 315 kVA are set out in Table 2.

| Table 2: Maximum load losses and no-load losses (in W) for Liquid-filled pole-mounted distribution transformers | | | | |
|--|---|---|--|---|
| Transformer Size | (a) Primary winding voltage, $U_m \leq 24\text{kV}$ Secondary winding voltage, $U_m \leq 3.6\text{kV}$ | | (b) $24\text{kV} < \text{Primary winding voltage, } U_m \leq 36\text{kV}$ Secondary winding voltage, $U_m \leq 3.6\text{kV}$ | |
| | Rated Power (kVA) | Maximum No-Load losses, P_o (W) | Maximum Load Losses, P_k (W) | Maximum No-Load losses, P_o (W) |
| 25 | 70 | 725 | 81 | 798 |
| 50 | 90 | 875 | 104 | 963 |
| 100 | 145 | 1475 | 167 | 1623 |
| 160 | 270 | 1990 | 311 | 2189 |
| 200 | 310 | 2333 | 357 | 2566 |
| 250 | 360 | 2750 | 414 | 3025 |
| 315 | 440 | 3250 | 506 | 3575 |
| *Maximum allowable losses for kVA ratings that fall in between the ratings listed in Table 2 shall be obtained by linear interpolation | | | | |

2.5. Requirements for single phase distribution transformers

The maximum levels of load and no-load losses for liquid immersed single-phase distribution transformers with power ratings between 5 kVA and 100 kVA are set out in Table 3.

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| Table 3: Maximum Load losses and No-load losses (in W) for Liquid-filled single-phase distribution transformers | | |
|--|--|--|
| Transformer Size Rated Power (kVA) | Maximum No- Load losses, P_o (W) | Maximum Load Losses, P_k (W) |
| 5 | 35 | 145 |
| 10 | 55 | 260 |
| 15 | 63 | 347 |
| 25 | 90 | 527 |
| 37.5 | 119 | 737 |
| 50 | 150 | 950 |
| 75 | 194 | 1322 |
| 100 | 240 | 1650 |
| *Maximum allowable losses for kVA ratings that fall in between the ratings listed in Table 3 shall be obtained by linear interpolation | | |

PART TWO

(regulation 6)

1. Measurements

For the purpose of compliance with the requirements of these Regulations, measurements shall be made using a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state-of-the-art measurement methods, including methods set out in the Standards set out in the First Schedule.

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The no-load loss (NLL) and load loss (LL) shall be measured at rated voltage, rated frequency and at full load on the rated tap (if applicable) corrected to the reference temperature in accordance with test methods and procedures in the Standards provided in the First Schedule.

2. Tolerances


No positive tolerance shall be allowed on the measured maximum no-load loss and load loss values declared and displayed on the label.

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THIRD SCHEDULE



THE LABEL

(regulations 3(1)(b)(iii), 11(1)(a)(i) and 11(1)(e)(i))



| MINIMUM ENERGY PERFORMANCE STANDARD (MEPS) (Distribution Transformer) | |
|--|--|
| No-Load Loss (P_0) XX (W) | Load Loss (P_k) YY (W) |
| Energy Performance of this Transformer Model is: | |
| Max. No-Load Loss (P_0) $\leq = X_1 X_1$ (W) | Max. Load Loss (P_k) $\leq = Y_1 Y_1$ (W) |

Transformer Type: xxxxxx
Model / Year: xxxx/yyyy
Supplier's name or Trademark: xxxxx
Country of Origin: xxxxx
Rated Power: xxx kVA
Rated Voltage (Prim/Sec): xxx/yyyy, kV
Rated Frequency: xx, Hz
No. of Phases: x - Phase(s)

When tested in accordance with GS IEC 60076-20, GS IEC 60076-1, 60076-2 and 61558 efficiency will depend on how the appliance is used. Further information is contained in the Product Information Sheet. Removal of the label before First Purchase is an offence under the Law.

Figure 1: Label of Distribution Transformer

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2. Notes to label of Distribution Transformers

The following notes define the information to be included:

- (a) Quick Response Code;
- (b) transformer type: (Oil immersed natural cooling, etc);
- (c) model or date of manufacture;
- (d) voltage or range (marked “kV” or “kilo-volt”) and frequency (marked “Hz”);
- (e) the number of Phases: _____ - Phase;
- (f) the name or trade mark of the supplier;
- (g) the country of origin;
- (h) the rated power in kVA (marked “kVA” or “kilo-Volt Amperes”);
- (i) the maximum no-load loss (NLL) of distribution transformer (marked “W” or “Watt”); and
- (j) the maximum load loss (LL) rating of distribution transformer (marked “W” or “Watt”).

3. Printing

The dimensions of the label and aspects are shown in Figure 2.

- (1) The label shall be placed on the container or packaging.
- (2) Colours are to be used on the label in accordance with the following:
 - (a) all text shall be in black or gold as illustrated;
 - (b) the background shall be gold; and
 - (c) the border line shall be in black.

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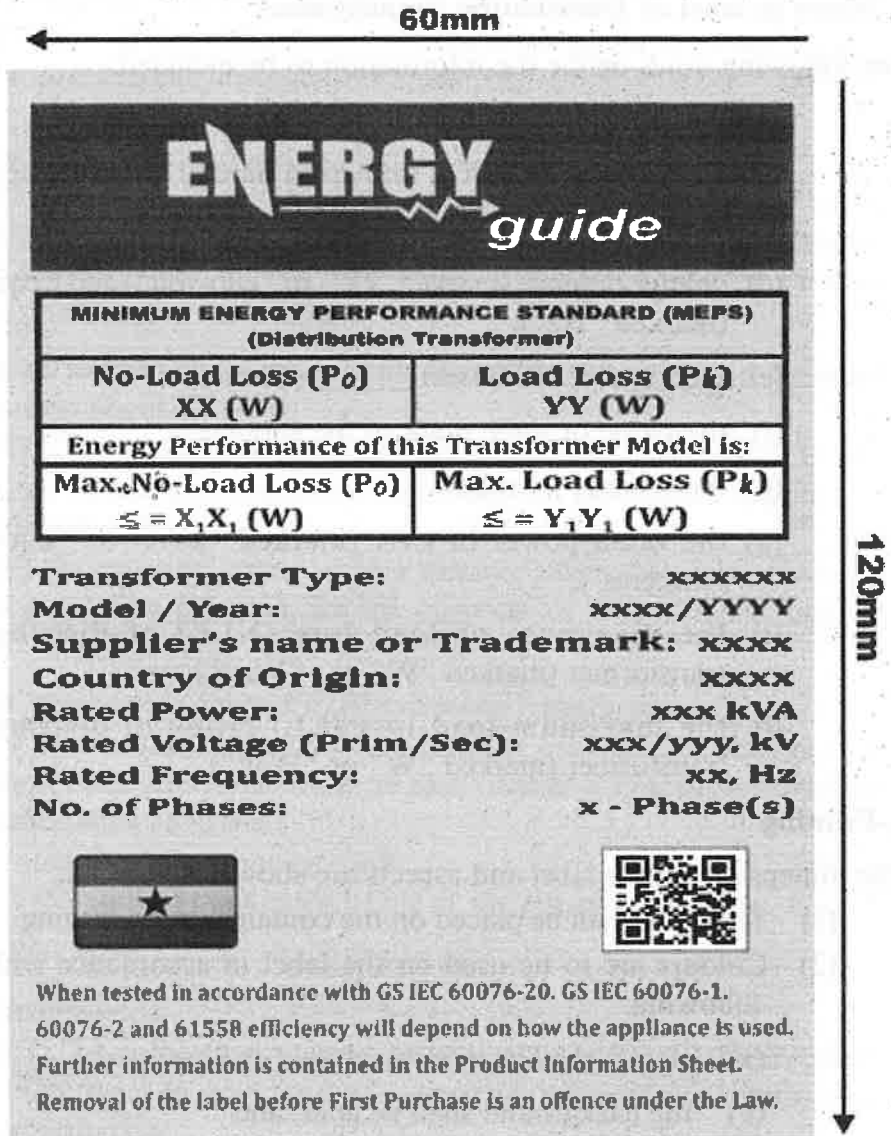


Figure 2. Label dimensions of a distribution transformer

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FOURTH SCHEDULE

PRODUCT INFORMATION SHEET

(regulations 3(1)(b)(iv), 3(2), 5, 10(2)(b), 10(2)(c), 11(1) (d), 16(4)(b), 16(4)(c), 16(4)(d), 16(4)(e), 18(1), 18(2)(b), 22(b), 24(2)(c), 25(b) (iii) and 26(2)(a))

PART ONE

(regulations 10(2)(b), 11(1) (d), 18(1), 18(2)(b) and 22(b))

The Product Information Sheet shall contain the technical and other information specified below. The information may be given in the form of a table covering a number and type of distribution transformer supplied by a supplier, in which case the information shall be given in the following order as specified or given in the description of the distribution transformer:

- (a) name or trademark of supplier;
- (b) model identifier of supplier;
- (c) description of the type of distribution transformer as specified in Part Two of this Schedule;
- (d) the references to the harmonised standards and other technical specifications applied, where appropriate;
- (e) the technical parameters, standards and test methods used for determining the various no-load loss and load loss of the distribution transformer; and
- (f) user instructions including disposal instructions.

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PART TWO
(regulation 5)

Types or Categories of Distribution Transformers

| Category | Description in information sheet | |
|-------------------------------|---|----------|
| Cooling medium | Type of cooling material and technique | |
| Phase | 1-phase: | 3-phase: |
| Rated voltage | Primary/Secondary: xxx/yyy kV | |
| Type of core and winding | Core and winding material | |
| Primary Winding Connection | Delta: | Star: |
| Secondary Winding Connection | Delta: | Star: |
| Voltage Regulation capability | Yes/No | |
| Installation mode | Ground mounted: | Yes/No |
| | Pole-mounted: | Yes/No |
| Technology | Innovative technology application (if any) | |

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PART THREE

(regulation 10(2)(c))

Technical Documentation

The technical documentation referred to in regulation 10 shall include at least all the information required under Parts One and Two of this Schedule in addition to the following:

- (a) a general description of the distribution transformer model, sufficient for the distribution transformer to be unequivocally and easily identified;
- (b) the references to the Standards applied;
- (c) calculation methods and measurement standards and specifications used;
- (d) identification and signature of the person empowered to bind the supplier;
- (e) the technical parameters for measurements, established in accordance with the Second Schedule;
- (f) overall dimensions; and
- (g) Sound power levels expressed in dB(A) re 1 pW, rounded to the nearest integer.

A supplier may include additional information at the end of the above list.

Where the information included in the technical documentation file for a particular distribution transformer model has been obtained by calculation on the basis of design, or extrapolation from other equivalent appliances, or both, the documentation shall include details of such calculations or extrapolations, or both, and of tests undertaken by suppliers to verify the accuracy of the calculations undertaken. The information shall also include a list of all other equivalent distribution transformer models where the information was obtained on the same basis.

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PART FOUR

(regulations 16(4)(b) and 24(2)(c))

Mail Order and other Distance Selling

The information to be provided where the end user cannot be expected to see the product displayed shall be provided in the following order:

- (a) the rated capacity in kVA;
- (b) the rated voltage;
- (c) the no-load loss (NLL) of the model at full load as required in the Second Schedule;
- (d) the load loss (LL) of the model at full load as required in the Second Schedule; and
- (e) Sound power levels expressed in dB(A) re 1 pW, rounded to the nearest integer.

Where other information contained in the Product Information Sheet is also provided, the information shall be in the form and order specified in Part One of this Schedule.

The size and font in which all the information referred in this Schedule is printed or shown shall be legible.

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PART FIVE

(regulations 3(2), 16(4)(c), 16(4)(d), 16(4)(e) and 25(b)(iii))

Information to be provided in audio advertisements, visual advertisements, in technical promotional material, in distance selling, except distance selling on the internet

1. In audio advertisements, for the purposes of ensuring conformity with the requirements laid down in subregulation (2) of regulation 3, the no-load loss (NLL) and load loss (LL) measured at rated full load of the model of the appliance being advertised shall be compared with the specified minimum energy performance standards (MEPS), listed in Part One of the Second Schedule and stated in the advertisement.
2. In visual advertisements, for the purposes of ensuring conformity with the requirements laid down in subregulation (2) of regulation 3, the no-load loss (NLL) and load loss (LL) measured in watts at rated full load of the model and the minimum energy performance standards (MEPS) values listed in Part One of the Second Schedule shall be made available on the label and be shown as set out in paragraph 5 of this Part.
3. In technical promotional material, for the purposes of ensuring conformity with the requirements laid down in subregulation (2) of regulation 3 the no-load loss (NLL) and load loss (LL) measured in watts at rated full load of the model of distribution transformer and minimum energy performance standard (MEPS) values of the distribution transformer listed in Part One of the Second Schedule shall be made available on the label and be shown as set out in paragraph 5 of this Part.
4. Any paper-based distance selling shall show the energy performance characteristics of the model and the ranges of energy performance characteristics available on the label as set out in paragraph 5 of this Part.

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5. The no-load loss (NLL) and load loss (LL) measured in watts at rated full load of the model of distribution transformer and the minimum energy performance standards (MEPS) of the distribution transformer shall be shown, as indicated in Figure 1, with
 - (a) an arrow, containing the no-load loss (NLL) and load loss (LL) measured at rated full load in white, Calibri Bold and in a font size at least equivalent to that of the price, when the price is shown;
 - (b) the colour of the box shall be gold;
 - (c) the minimum energy performance standards (MEPS) in hundred per cent black; and
 - (d) the size shall be such that the box is clearly visible and legible.

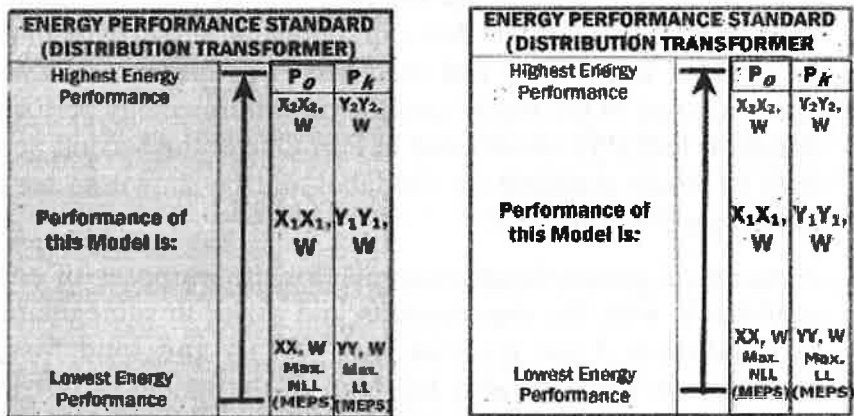


Figure 1: Coloured or Monochrome MEPS indicated for Distribution Transformer

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6. By way of derogation, if the visual advertisement, technical promotional material or paper-based distance selling is printed in monochrome, the box can be in monochrome in that visual advertisement, technical promotional material or paper-based distance selling.
7. Telemarketing-based distance selling shall specifically inform the customer of the no-load loss (NLL) and load loss (LL) measured in watts at rated full load of the model of distribution transformer and the minimum energy performance standards (MEPS) of the distribution transformer listed in Part One of the Second Schedule on the label, and that the customer can access the full label and the Product Information Sheet through a free access website, public part of the Appliance Energy Efficiency Register of the Commission or by requesting a printed copy.
8. For all the situations mentioned in paragraphs 2 to 4 and paragraph 7, it shall be possible for the customer to obtain, on request, a printed copy of the label and the Product Information Sheet.

PART SIX

(regulation 26(2)(a))

Information to be provided in the case of distance selling through the Internet

1. The appropriate label made available by a supplier in accordance with the Third Schedule shall be shown on the display mechanism in proximity to the price of the product.
2. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in the Third Schedule.

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3. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in paragraph 5 of this Part.
4. If nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.
5. The image used for accessing the label in the case of nested display, as indicated in Figure 2, shall
 - (a) indicate the no-load loss (NLL) in watt measured at full load in black, Calibri Bold and in a font size equivalent to that of the price; and
 - (b) indicate the load loss (LL) in watt measured at full load in black, Calibri Bold and in font size equivalent to that of the price.

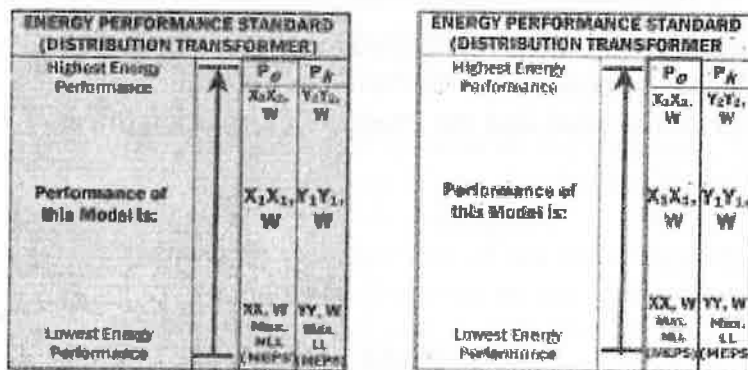


Figure 2: Coloured/Monochrome MEPS indicated for Distribution Transformer

6. In the case of a nested display, the sequence of display of the label shall be as follows:
 - (a) the image referred to in paragraph 5 of this Part shall be shown on the display mechanism in proximity to the price of the product;
 - (b) the image shall link to the label set out in the Third Schedule;

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- (c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;
 - (d) the label shall be displayed by pop up, new tab, new page or inset screen display;
 - (e) for magnification of the label on tactile screens, the device conventions for tactile magnification shall apply;
 - (f) the label shall cease to be displayed by means of a close option or other standard closing mechanism; and
 - (g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the No-Load loss and Load-Loss of the distribution transformer model measured at full load in a font size equivalent to that of the price.
7. The electronic Product Information Sheet made available by a supplier in accordance with subregulation (2) of regulation 26 shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the Product Information Sheet is clearly visible and legible. The Product Information Sheet may be displayed using a nested display or by referring to the product database, in which case the link used for accessing the Product Information Sheet shall clearly and legibly indicate 'Product Information Sheet'. If a nested display is used, the Product Information Sheet shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the link.

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FIFTH SCHEDULE

VERIFICATION PROCEDURE FOR MARKET SURVEILLANCE

(regulation 33(2))

1. The verification tolerances set out in this Schedule relate only to the verification of the declared parameters by the Commission and the Standards Authority and shall not be used by the supplier as an allowed tolerance to establish the values in the technical documentation.
2. The values on the label or in the Product Information Sheet shall not be more favourable for the supplier than the values reported in the technical documentation.
3. Where a model has been designed to be able to detect that the model is being tested by recognising the test conditions or test cycle and reacting specifically by automatically altering the performance of the model during the test with the objective of reaching a more favourable level for any of the parameters specified in these Regulations or included in the technical documentation or included in any of the documentation provided, the model and all equivalent models shall be considered not compliant.
4. When verifying the compliance of a product model with the requirements laid down in these Regulations, the Commission and the Standards Authority shall apply the following procedure:
 - (a) the Commission and the Standards Authority shall verify one single unit of the model;
 - (b) the model of the distribution transformer shall be considered to comply with the minimum energy performance standard provisions set out in Part One of the Second Schedule as applicable, with zero positive tolerance as provided under Part Two of the Second Schedule;

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- (c) the model of the distribution transformer shall be considered to comply with the provisions set out in these Regulations, as applicable, if the maximum sound power level does not exceed more than 2 dB(A) of the declared value;
- (d) if the result referred to in paragraph (b) is not achieved, the Commission and the Standards Authority shall randomly select three additional units of the same model for testing;
- (e) the minimum energy performance standard values shall be established in accordance with the Second Schedule; and
- (f) if the result referred to in paragraph (b) is not achieved, the model shall be considered not to comply with these Regulations.

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HON. DR. MATTHEW OPOKU PREMPEH
Minister responsible for Energy

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