CABINET OF MINISTERS OF UKRAINE

RESOLUTION

No. 152 of 27 February 2019
Kyiv

On Approval of the Technical Regulation on Ecodesign Requirements for Small, Medium and Large Power Transformers

In accordance with Article 5 of the Law of Ukraine "On Technical Regulations and Conformity Assessment", the Cabinet of Ministers of Ukraine hereby **resolves**:

1. Approve the Technical Regulation on ecodesign requirements for small, medium and large power transformers as attached hereto.

2. The State Agency on Energy Efficiency and Energy Saving shall ensure the implementation of the Technical Regulation approved by this Resolution.

3. The attached amendment shall be introduced to the list of types of products subject to state market surveillance by state market surveillance authorities, approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1069 of 28 December 2016 (Official Journal of Ukraine, 2017, No. 50, p. 1550).

4. This Resolution shall enter into force after six months following its publication.

Prime Minister of Ukraine **VOLODYMYR GROYSMAN**

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APPROVED
by the Resolution of the Cabinet of Ministers of Ukraine
No. 152 of 27 February 2019

TECHNICAL REGULATION
on Ecodesign Requirements for Small, Medium and Large Power Transformers

General Provisions

1. This Technical Regulation establishes ecodesign requirements for small, medium and large power transformers (hereinafter referred to as transformers) with a minimum power rating of 1 kVA used in 50 Hz electricity transmission and distribution networks or for industrial applications.

This Technical Regulation is based on the Commission Regulation (EU) No. 548/2014 of 21 May 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers.

2. This Technical Regulation shall not apply to transformers specifically designed and used as:

instrument transformers to supply measuring instruments, meters, relays and other similar apparatus,

transformers with low-voltage windings for use with rectifiers to provide a DC supply,

furnace transformers to be directly connected to an electrical furnace,

transformers for offshore applications and floating offshore applications,

transformers for emergency protection installations,

transformers for railway feeding systems,

earthing transformers to provide a neutral point for system grounding purposes,

traction transformers mounted on rolling stock, this is, transformers connected to an AC or DC contact line, directly or through a converter, used in fixed installations of railway applications,

starting transformers for starting induction motors so as to eliminate supply voltage dips,

testing transformers to be used in a circuit to produce a specific voltage or current level for the purpose of testing electrical equipment,

welding transformers for use in arc welding equipment or resistance welding (contact sealing) equipment,

transformers having explosion-proof design for use in explosive environment and underground (mining) applications,

transformers for deep water (submerged) applications,

interface transformers (up to 5 MVA) used for single voltage (medium voltage) transformation,

large power transformers to be used where it is demonstrated that for a particular application, technically feasible alternatives are not available to meet the minimum efficiency requirements set out by this Technical Regulation,

large power transformers which are like for like replacements in the same physical location / installation for existing large power transformers, where this replacement cannot be achieved without entailing disproportionate costs associated to their transportation and/or installation,

except as regards the product information requirements and technical documentation set out in points 3 and 4 of Annex 1.

3. For the purpose of this Technical Regulation the terms shall have the following meaning:

‘Large power transformer’ means a power transformer with a highest voltage for equipment exceeding 36 kV and a rated power equal or higher than 5 kVA, or a rated power equal to or higher than 40 MVA regardless of the highest voltage for equipment,

‘Highest voltage for equipment’ (Um) means the voltage, which is being applied to a transformer winding, being the highest r.m.s phase-to-phase voltage in a three-phase system for which a transformer is designed in respect of its insulation,

‘Short-circuit loss’ (Pk) means the absorbed active power at rated frequency and reference temperature associated with a pair of windings when the rated current (tapping current) is flowing through the line terminals and 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,

‘No load loss’ (Po) means the active power absorbed at rated frequency when the transformer is energised and the secondary circuit is open. The applied voltage is the rated voltage, and if the energized winding is fitted with a tapping, it is connected to its principal tapping,

‘Small power transformer’ means a power transformer with a highest voltage for equipment not exceeding 1,1 kV,

‘Peak Efficiency Index’ (PEI) means the maximum value of the ratio of the transmitted apparent power of a transformer minus the electrical losses to the transmitted apparent power of the transformer,

‘Rated voltage of a winding’ (Ur) means the voltage assigned to be applied, or developed at no-load, between the terminals of an untapped winding, or of a tapped winding connected on the principal tapping,

‘Rated power’ (Sr) is a conventional value of apparent power assigned to a winding which, together with the rated voltage of the winding, determines its rated current,

‘Winding’ refers to the assembly of turns forming an electrical circuit associated with one of the voltages assigned to the transformer,

‘High-voltage winding’ refers to the winding having the highest rated voltage,

‘Liquid-immersed transformer’ means a power transformer in which the magnetic circuit and windings are immersed in liquid,

‘Voltage Regulation Distribution Transformer’ means a medium power transformer equipped with additional components, inside or outside of the transformer tank, to automatically control the input or output voltage of the transformer for on-load voltage regulation purposes,

‘Medium power transformer’ means a power transformer with a highest voltage for equipment higher than 1,1 kV, but not exceeding 36 kV and a rated power equal to or higher than 5 kVA but lower than 40 MVA,

‘Medium power pole mounted transformer’ means a power transformer with a rated power of up to 315 kVA suitable for outdoor service and designed to be mounted on the support structures of overhead power lines,

‘Power 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 for the purpose of transmitting electrical power,

‘Dry-type transformer’ means a power transformer in which the magnetic circuit and windings are not immersed in liquid,

Other terms used herein shall have meanings set out in the Laws of Ukraine “On Technical Regulations and Conformity Assessment”, “On State Market Surveillance and Control of Non-Food Products”, “On Standardization” and in the Technical Regulation establishing a framework for the setting of ecodesign requirements for energy-related products, approved by the Resolution of the Cabinet of Ministers of Ukraine of 3 October 2018 No. 804 (Official Journal of Ukraine, 2018, No. 80, p. 2678).

Ecodesign Requirements

4. Transformers shall meet the ecodesign requirements set out in Annex 1.

5. Compliance with the ecodesign requirements shall be measured and calculated in accordance with methods set out in Annex 2.

Conformity Assessment

6. Conformity of transformers with the requirements of this Technical Regulation shall be assessed applying the internal design control procedure or the management system conformity assessment procedure set out, respectively, in Annexes 3 and 4 to the Technical Regulation establishing a framework for the setting of ecodesign requirements for energy-related products, approved by the Resolution of the Cabinet of Ministers of Ukraine of 3 October 2018 No. 804 (Official Journal of Ukraine, 2018, No. 80, p. 2678).

State Market Surveillance

7. Verification of transformers conformity with the requirements of this Technical Regulation in the course of state market surveillance shall be made in accordance with the requirements set out in Annex 3.

Indicative Benchmarks for the Best-Performing Transformers

8. The indicative benchmarks for the best-performing transformers available on the market are identified in Annex 4.

Correlation Table

9. The correlation table between the provisions of the Commission Regulation (EU) No. 548/2014 of 21 May 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers, and this Technical Regulation is set out in Annex 5.

Annex 1
to the Technical Regulation

ECODESIGN REQUIREMENTS
for transformers

1. Minimum energy performance or efficiency requirements for medium power transformers

Medium power transformers shall comply with the maximum allowed short-circuit and no-load losses or the Peak Efficiency Index (PEI) values set out in Tables 1 to 5, excluding medium power pole-mounted transformers, which shall comply with the maximum allowed values of short-circuit (load) and no-load losses set out in Table 6.

Requirements for medium power transformers with rated power ≤ 3150 kVA

Table 1

Maximum short-circuit and no-load losses (in W) for liquid-immersed medium power transformers with one winding with U_m ≤ 24 kV and the other winding with U_m ≤ 1,1 kV

Rated power (kVA)	Tier 1 (two years after the entry into force of this Technical Regulation)		Tier 2 (four years after the entry into force of this Technical Regulation)	
	maximum short circuit losses* (during operation under load) (P_k), W	maximum no-load losses* (P_o), W	maximum short circuit losses* (during operation under load) (P_k), W	maximum no-load losses* (P_o), W
≤ 25	C_k (900)	A_o (70)	A_k (600)	A_o - 10 % (63)
50	C_k (1100)	A_o (90)	A_k (750)	A_o - 10 % (81)
100	C_k (1750)	A_o (145)	A_k (1250)	A_o - 10 % (130)
160	C_k (2350)	A_o (210)	A_k (1750)	A_o - 10 % (189)
250	C_k (3250)	A_o (300)	A_k (2350)	A_o - 10 % (270)
315	C_k (3900)	A_o (360)	A_k (2800)	A_o - 10 % (324)
400	C_k (4600)	A_o (430)	A_k (3250)	A_o - 10 % (387)
500	C_k (5500)	A_o (510)	A_k (3900)	A_o - 10 % (459)
630	C_k (6500)	A_o (600)	A_k (4600)	A_o - 10 % (540)

800	C_k (8400)	A_o (650)	A_k (6000)	A_o - 10 % (585)
1 000	C_k (10500)	A_o (770)	A_k (7600)	A_o - 10 % (693)
1 250	B_k (11000)	A_o (950)	A_k (9500)	A_o - 10 % (855)
1 600	B_k (14000)	A_o (1200)	A_k (12000)	A_o - 10 % (1080)
2 000	B_k (18000)	A_o (1450)	A_k (15000)	A_o - 10 % (1305)
2 500	B_k (22000)	A_o (1750)	A_k (18500)	A_o - 10 % (1575)
3 150	B_k (27500)	A_o (2200)	A_k (23000)	A_o - 10 % (1980)

* Maximum losses for nominal power ratings (kVA) that fall in between the ratings given in Table 1 shall be obtained by linear interpolation.

Table 2

Maximum short-circuit and no-load losses (in W) for dry-type medium power transformers with one winding with Um ≤ 24 kV and the other winding with Um ≤ 1,1 kV

Rated power (kVA)	Tier 1 (two years after the entry into force of this Technical Regulation)		Tier 2 (four years after the entry into force of this Technical Regulation)	
	maximum short circuit losses* (during operation under load) (P_k), W	maximum no-load losses* (P_o), W	maximum short circuit losses* (during operation under load) (P_k), W	maximum no-load losses* (P_o), W
≤ 50	B_k (1700)	A_o (200)	A_k (1500)	A_o - 10 % (180)
100	B_k (2050)	A_o (280)	A_k (1800)	A_o - 10 % (252)
160	B_k (2900)	A_o (400)	A_k (2600)	A_o - 10 % (360)
250	B_k (3800)	A_o (520)	A_k (3400)	A_o - 10 % (468)
400	B_k (5500)	A_o (750)	A_k (4500)	A_o - 10 % (675)
630	B_k (7600)	A_o (1100)	A_k (7100)	A_o - 10 % (990)

800	A_k (8000)	A_o (1300)	A_k (8000)	A_o - 10 % (1170)
1 000	A_k (9000)	A_o (1550)	A_k (9000)	A_o - 10 % (1395)
1 250	A_k (11000)	A_o (1800)	A_k (11000)	A_o - 10 % (1620)
1 600	A_k (13000)	A_o (2200)	A_k (13000)	A_o - 10 % (1980)
2 000	A_k (16000)	A_o (2600)	A_k (16000)	A_o - 10 % (2340)
2 500	A_k (19000)	A_o (3100)	A_k (19000)	A_o - 10 % (2790)
3 150	A_k (22000)	A_o (3800)	A_k (22000)	A_o - 10 % (3420)

* Maximum losses for nominal power ratings (kVA) that fall in between the ratings given in Table 2 shall be obtained by linear interpolation.

Table 3

Correction of short-circuit and no load losses in case of other combinations of winding voltages or dual voltage in one or both windings (rated power ≤ 3 150 kVA)

One winding with U_m ≤ 24 kV and the other with U_m > 1,1 kV	The maximum allowable losses in Tables 1 and 2 shall be increased by 10 % for no load losses and by 10 % for load losses
One winding with U_m = 36 kV and the other with U_m ≤ 1,1 kV	The maximum allowable losses in Tables 1 and 2 shall be increased by 15 % for no load losses and by 10 % for load losses
One winding with U_m = 36 kV and the other with U_m > 1,1 kV	The maximum allowable losses indicated in Tables 1 and 2 shall be increased by 20 % for no load losses and by 15 % for load losses
Case of dual voltage on one winding	In case of transformers with one high-voltage winding and two voltages available from low-voltage winding terminals, losses shall be calculated based on the higher voltage of the low-voltage winding and shall be in compliance with the maximum allowable losses in Tables 1 and 2. The maximum available power on the low-voltage winding on such transformers shall be limited to 0,85 of the rated power assigned to the low-voltage winding at its higher voltage. In case of transformers with one low-voltage winding with two voltages available from high-voltage winding terminals, losses shall be calculated based on the high-voltage winding and shall be in compliance with the

	maximum allowable losses in Tables 1 and 2. The maximum available power on the lower voltage winding of the high-voltage winding on such transformer shall be limited to 0,85 of the rated power assigned to the high-voltage winding at its higher voltage. If the full nominal power is available regardless of the combination of voltages, the levels of losses indicated in Tables 1 and 2 can be increased by 15 % for no load losses and by 10 % for load losses
Case of dual voltage on both windings	The maximum allowable losses indicated in Tables 1 and 2 can be increased by 20 % for no load losses and by 20 % for load losses for transformers with dual voltage on both windings. The level of losses is given for the highest possible rated power and on the basis that the rated power is the same regardless of the combination of voltages

Requirements for medium power transformers with rated power > 3 150 kVA

Table 4

Minimum Peak Efficiency Index (PEI) values for liquid immersed medium power transformers

Rated power (kVA)	Tier 1 (two years after the entry into force of this Technical Regulation)	Tier 2 (four years after the entry into force of this Technical Regulation)
	minimum peak efficiency index*, percent	
$3\,150 < S_r \leq 4\,000$	99,465	99,532
5 000	99,483	99,548
6 300	99,51	99,571
8 000	99,535	99,593
10 000	99,56	99,615
12 500	99,588	99,64
16 000	99,615	99,663
20 000	99,639	99,684
25 000	99,657	99,7
31 500	99,671	99,712

40 000	99,684	99,724

* Minimum Peak Efficiency Index (PEI) values for nominal kVA ratings that fall in between the ratings given in Table 4 shall be obtained by linear interpolation.

Table 5

Minimum Peak Efficiency Index (PEI) value for dry-type medium power transformers

Rated power (kVA)	Tier 1 (two years after the entry into force of this Technical Regulation)	Tier 2 (four years after the entry into force of this Technical Regulation)
	minimum peak efficiency index*, percent	
$3\ 150 < S_r \leq 4\ 000$	99,348	99,382
5 000	99,354	99,387
6 300	99,356	99,389
8 000	99,357	99,39
≥ 10 000	99,357	99,39

* Minimum Peak Efficiency Index values for nominal kVA ratings that fall in between the ratings given in Table 5 shall be obtained by linear interpolation.

Requirements for medium power transformers with rated power ≤ 3 150 kVA equipped with tapping connections suitable for switching while being on-load (for voltage regulation distribution transformers in particular)

The maximum allowable levels of short-circuit and no load losses set out in Tables 1 and 2 shall be increased by 20 % for no load losses and by 5 % for load losses in Tier 1 and by 10 % for no load losses in Tier 2.

Requirements for medium power pole-mounted transformers

The levels of short-circuit and no load losses indicated in Tables 1 and 2 are not applicable to liquid immersed pole-mounted transformers with power ratings between 25 kVA and 315 kVA. For these specific models of medium power pole-mounted transformers, the maximum levels of allowable losses are set out in Table 6.

Table 6

Maximum short-circuit and no-load losses (in W) for medium power liquid immersed pole-mounted transformers

Rated	Tier 1 (two years after the entry into	Tier 2 (four years after the entry into force of

power (kVA)	force of this Technical Regulation)		this Technical Regulation)	
	maximum short circuit losses* (during operation under load), W	maximum no-load losses*, W	maximum short circuit losses* (during operation under load), W	maximum no-load losses*, W
25	C_k (900)	A_o (70)	B_k (725)	A_o (70)
50	C_k (1100)	A_o (90)	B_k (875)	A_o (90)
100	C_k (1750)	A_o (145)	B_k (1475)	A_o (145)
160	C_k + 32 % (3 102)	C_o (300)	C_k + 32 % (3 102)	C_o - 10 % (270)
200	C_k (2 750)	C_o (356)	B_k (2 333)	B_o (310)
250	C_k (3 250)	C_o (425)	B_k (2 750)	B_o (360)
315	C_k (3 900)	C_o (520)	B_k (3 250)	B_o (440)

* Maximum allowable losses for kVA ratings that fall in between the ratings given in Table 6 shall be obtained by linear interpolation.

2. Minimum energy efficiency requirements for large power transformers

The minimum energy efficiency requirements for large power transformers are set out in Tables 7 and 8.

Table 7

Minimum Peak Efficiency Index requirements for liquid immersed large power transformers

Rated power (MVA)	Tier 1 (two years after the entry into force of this Technical Regulation)	Tier 2 (four years after the entry into force of this Technical Regulation)
	minimum peak efficiency index*, percent	
≤ 4	99,465	99,532
5	99,483	99,548
6,3	99,51	99,571

8	99,535	99,593
10	99,56	99,615
12,5	99,588	99,64
16	99,615	99,663
20	99,639	99,684
25	99,657	99,7
31,5	99,671	99,712
40	99,684	99,724
50	99,696	99,734
63	99,709	99,745
80	99,723	99,758
≥ 100	99,737	99,77

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* Minimum Peak Efficiency Index (PEI) values for nominal MVA ratings that fall in between the ratings given in Table 7 shall be obtained by linear interpolation.

Table 8

Minimum Peak Efficiency Index requirements for dry-type large power transformers

Rated power (MVA)	Tier 1 (two years after the entry into force of this Technical Regulation)	Tier 2 (four years after the entry into force of this Technical Regulation)
	minimum peak efficiency index*, percent	
≤ 4	99,158	99,225
5	99,2	99,265
6,3	99,242	99,303
8	99,298	99,356

10	99,33	99,385
12,5	99,37	99,422
16	99,416	99,464
20	99,468	99,513
25	99,521	99,564
31,5	99,551	99,592
40	99,567	99,607
50	99,585	99,623
≥ 63	99,59	99,626

* Minimum Peak Efficiency Index values for nominal MVA ratings that fall in between the ratings given in Table 8 shall be obtained by linear interpolation.

3. Product information requirements

After two years following the date the Technical Regulation on Ecodesign Requirements for Small, Medium and Large Power Transformers enters into force, the required information regarding transformers included in the scope of this Technical Regulation shall be included in any related product documentation, including free access websites of manufacturers.

The required information regarding transformers shall include the following:

rated power, short-circuit loss and no-load loss and the electrical power of any cooling system required at no load;

the value of the Peak Efficiency Index and the power value (for medium and large power transformers);

the maximum rated power at the lower voltage (for dual voltage transformers, according to Table 3);

the weight of all the main components of a power transformer (including the conductor, the nature of the conductor and the core material);

a visible display ‘For pole-mounted operation only’ for medium power pole mounted transformers.

The information according to the third, fifth and sixth indent of this section shall also be included on the rating plate of the power transformers.

4. Technical documentation

The following information shall be included in the technical documentation of power transformers:

manufacturer's name and address;

model identifier, the alphanumeric code to distinguish one model from other models of the same manufacturer;

the information required under section 3 of this Annex.

If (parts of) the technical documentation is based upon (parts of) the technical documentation of another model, the model identifier of that model shall be provided. The technical documentation shall provide the details of how the information is derived from the technical documentation of the other model, e.g. on calculations or extrapolations, including the tests undertaken by the manufacturer to verify the calculations or extrapolations undertaken.

Annex 2
to the Technical Regulation

Measurement and calculation METHODS

1. Measurement method

For the purpose of compliance with the requirements of the Technical Regulation on Ecodesign Requirements for Small, Medium and Large Power Transformers, 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, set out in national standards, compliance to which grants transformers presumption of conformity with the Technical Regulation on Ecodesign Requirements for Small, Medium and Large Power Transformers.

2. Calculation method

The Peak Efficiency Index (PEI) value for medium and large power transformers is based on the ratio of the transmitted apparent power of a transformer minus the electrical losses to the transmitted apparent power of the transformer, obtained using the following calculation method:

$$PEI = 1 - \frac{2\,(P_0 + P_{c0})}{S_r \sqrt{\frac{P_0 - P_{c0}}{P_k}}},$$

where P_0 is the no load losses measure at rated voltage and rated frequency, on the rated tap,

P_{c0} is the electrical power required by the cooling system for no load operation,

P_k is the measured load loss at rated current and rated frequency on the rated tap corrected to the reference temperature,

S_r is the rated power of the transformer on which P_k is based.

Annex 3
to the Technical Regulation

REQUIREMENTS
to verification during state market surveillance

1. Verification of compliance with the requirements set out in Annex 1 of Technical Regulation on Ecodesign Requirements for Small, Medium and Large Power Transformers (hereinafter referred to as Technical Requirements) shall be carried out in the following way:

1) one single transformer per model is selected;

2) verification of compliance with the mentioned requirements is carried out on the selected transformer.

The model shall be considered to comply with the applicable requirements set out in Annex 1 of this Technical Regulation if the values in the technical documentation comply with the requirements set out in Annex 1 thereto, and if the measured parameters meet the requirements set out in Annex 1 within the allowable tolerances indicated in the Table of this Annex.

If the results compliance with the mentioned requirements is not achieved, the model shall be considered not to comply with this Technical Regulation.

2. In order to verify the compliance of transformer with the Technical Regulation the measurement methods and calculation methods set out in Annex 2 thereto shall be used.

Given the weight and size limitations in the transportation of medium and large power transformers, the verification procedure may be undertaken at the premises of manufacturers, before they are put into service by their final customer.

The verification tolerances set out in this Annex relate only to the verification of the measured parameters by state market surveillance authorities and shall not be used by the manufacturer or importer as allowed tolerances to establish the values in the technical documentation.

Measured parameter	Verification tolerances
Short circuit (load) losses	the measured value shall not be greater than the declared value by more than 5 %
No load losses	the measured value shall not be greater than the declared value by more than 5 %
The electrical power required by the cooling system for no load operation	the measured value shall not be greater than the declared value by more than 5 %

Annex 4
to the Technical Regulation

INDICATIVE BENCHMARKS

The indicative benchmarks for the best-performing medium power transformers available on the market are identified as follows:

liquid-immersed medium power transformers: A_o - 20 %, A_k - 20 %;

dry-type medium power transformers: A_o - 20 %, A_k - 20 %;

medium power transformers with amorphous steel core: A_o - 50 %, A_k - 50 %;

The availability of material to manufacture transformers with amorphous steel core needs further development, before such values of losses can be considered to become minimum requirements in the future.

Annex 5
to the Technical Regulation

CORRELATION TABLE
between the provisions of the Commission Regulation (EU) No. 548/2014 of 21 May 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to small, medium and large power transformers, and the Technical Regulation on Ecodesign Requirements for Small, Medium and Large Power Transformers

Provision of the Commission Regulation (EU)	Provisions of the Technical Regulation
Article 1, Part One	point 1
Article 1, Part Two	point 2
First indent of Article 2	first indent of point 3
Point 1 of Article 2	sixteenth indent of point 3
Point 2 of Article 2	sixth indent of point 3
Point 3 of Article 2	fourteenth indent of point 3
Point 4 of Article 2	second indent of point 3
Point 5 of Article 2	twelfth indent of point 3
Point 6 of Article 2	seventeenth indent of point 3
Point 7 of Article 2	fifteenth indentof point 3
Point 8 of Article 2	thirteenth indent of point 3
Point 9 of Article 2	tenth indent of point 3
Point 10 of Article 2	eighth indent of point 3
Point 11 of Article 2	eleventh indent of point 3
Point 12 of Article 2	third indent of point 3

Point 13 of Article 2	ninth indent of point 3
Point 14 of Article 2	fourth indent of point 3
Point 15 of Article 2	fifth indent of point 3
Point 16 of Article 2	seventh indent of point 3
Article 3	point 4
Article 4	point 6
Article 5	point 7
Article 6	point 8
Article 7	
Article 8	
Annex I	Annex 1 to the Technical Regulation
Annex II	Annex 2 to the Technical Regulation
Annex III	Annex 3 to the Technical Regulation
Annex IV	Annex 4 to the Technical Regulation

APPROVED
by the Resolution of the Cabinet of Ministers of Ukraine
No. 152 of 27 February 2019

AMENDMENT
to be introduced to the list of types of products subject to state market surveillance by state market surveillance authorities

The list shall be supplemented with point 49 to read as follows:

“49. Small, medium and large power transformers	Resolution by the Cabinet of Ministers of Ukraine of 27 February 2019 No. 152 “On Approval of the Technical Regulation on ecodesign requirements for small, medium and large power Transformers”	State Service of Ukraine on Food Safety and Consumer Protection”.