

Energy Efficiency Certification – NOM Program –

Content:

- Accredited Standards
- Legal Requirement to register the company
- Certification Process
- Certification Schemes, Requirements and Technical Documentation Required by <u>Standard by Scheme</u>

Accredited Standards

- <u>NOM-005-ENER-2016</u>, Energy efficiency of household clothes washers. Limits, test methods and labeling.
- <u>NOM-012-ENER-2019</u>, Energy efficiency of condensing and evaporating units for refrigeration. Limits, test methods and labeling.
- <u>NOM-014-ENER-2004</u>, Energy efficiency for the motor-pump assembly, for pumping clean water for domestic use, in powers from 0.180 kW (1/4 HP) to 0.750 kW (1 HP).- Limits, test methods and labeling.
- <u>NOM-015-ENER-2018</u>, Energy efficiency of household refrigerators and freezers. Limits, test methods and labeling.
- <u>NOM-016-ENER-2016</u>, Energy efficiency of alternating current, three-phase, induction, squirrel cage type motors, in rated power from 0.746 kW to 373 kW. Limits, test method and marking..
- <u>NOM-017-ENER/SCFI-2012</u>, Energy efficiency and safety requirements for self-ballasted compact fluorescent lamps. Limits and test methods.
- <u>NOM-021-ENER/SCFI-2017</u>, Energy efficiency and user safety requirements in room type air conditioners. Limits, test methods and labeling.
- <u>NOM-022-ENER/SCFI-2014</u>, Energy efficiency and user safety requirements for selfcontained commercial refrigeration appliances. Limits, test methods and labeling.
- <u>NOM-023-ENER-2018</u>, Energy efficiency in split type air conditioners, free discharge and without air ducts. Limits, test methods and labeling.
- <u>NOM-025-ENER-2013</u>, Thermal efficiency of household appliances for cooking food using LP gas or natural gas. Limits, test methods and labeling.
- <u>NOM-026-ENER-2015</u>, Energy efficiency in split air conditioners (Inverter) with variable refrigerant flow, free discharge and without air ducts. Limits, test methods and labeling.
- NOM-028-ENER-2010, Energy efficiency of lamps for general use. Limits and test methods
- <u>NOM-029-ENER-2017</u>, Energy efficiency of external power supplies. Limits, test methods, marking and labeling.



- <u>NOM-030-ENER-2016</u>, Luminous efficacy of integrated light-emitting diode (led) lamps for general lighting. Limits and test methods.
- <u>NOM-031-ENER-2019</u>, Energy efficiency for luminaires with led for lighting roads and public outdoor areas. Specifications and test methods.
- <u>NOM-032-ENER-2013</u>, Maximum limits of electrical power for equipment and appliances that demand standby energy. Test and labelling methods

Legales Requirements to register the Company LEGAL DOCUMENTATION (Only if it is the first time the certification service is requested)

- A) For all energy efficiency standards, the following information is required:
 - 1. Copy of the Company Articles of Incorporation that accredits the interested party as a legal entity or as a natural person with business activity, formally established in the United Mexican States
 - 2. Power of attorney of the legal representative (legal entities)
 - 3. Contract for the provision of certification services in original; signed in the corresponding area.
 - 4. Power of Attorney for Processors, when applicable,
- B) Additional requirement by Standard:
 - NOM-017-ENER/SCFI-2012
 - 1. Federal Taxpayer's Registry Card.
 - NOM-028-ENER-2010
 - 1. Registration and Federal Taxpayers' Registration Card.
 - NOM-029-ENER-2017
 - 1. Copy of official identification of the legal representative or natural person
 - 2. Registration and Federal Taxpayers' Registration Card.
 - 3. Letter of commitment to use an official mark signed by the legal representative.

NOM-032-ENER-2013

- 1. Copy of official identification of the legal representative or natural person
- 2. Registration and Federal Taxpayers' Registration Card.
- 3. Letter of commitment to use an official mark signed by the legal representative.
- 4. Original of proof of the fees applied by the product certification body.



> <u>Certification Process</u>





Certification Schemes, Requirements and Technical Documentation by Standard by Scheme.

<u>NOM-005-ENER-2016, Energy Efficiency of household clothes washers. Limits, test methods</u> and labeling.

Applies to household clothes washers marketed in the United Mexican States.

Certification Schemes

I. Certification through periodic product testing and surveillance.

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- The certificate is subject to surveillance, at least once during its validity, which is 1 year from the issuance date.
- The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those tested for certification.

II. Certification through the production line quality assurance system

- Through this modality, a certificate 3 years valid can be granted, as long as the company has a quality management system certified by an accredited systems body.
- **4** The certificate is subject to follow-up at least once during its validity.
- The surveillance must be carried out on a sample taken on the production line, warehouses or in places of commercialization of the product in the national territory.
- The quality assurance system of the production line is also monitored, with the results of the last audit carried out by an accredited quality assurance systems certification body.
- The sample for follow-up should be composed of family members different from those tested for certification

- A) For certification scheme I, certification through periodic product testing and surveillance, submit the following information:
 - 1. Application
 - 2. Original of the test report performed by a test laboratory.



- 3. Copy of the certificate of conformity of the product previously granted, if applicable.
- 4. Declaration under protest of telling the truth by means of which the applicant states that the product presented is representative of the family that is intended to certify.
- 5. Brochures and photographs or graphic representation of each of the models of the products to be certified.
- 6. Manual or instructions of the product containing the models to be certified.
- 7. Product label with electrical characteristics of each model to be certified.
- 8. Diagrams of the power supply or connection of each of the models.
- B) For certification scheme II, certification by the quality assurance system of the production line, submit the following information:
 - 1. As indicated in scheme I above.
 - 2. Copy of the current certificate of the quality assurance system including the production line, issued by a certification body for quality assurance systems.



<u>NOM-012-ENER-2019, Energy efficiency of condensing and evaporating units for refrigeration.</u> <u>Limits, test methods and labeling.</u>

Applies to:

- a) Condensing units for refrigeration, which are manufactured for outdoor or indoor installation with cooling capacity, greater than or equal to 746 W (2 547 BTU/h) and less than 26 000 W (88 716 BTU/h) at medium temperature, and less than 9 500 W (32 415 BTU/h) at low temperature.
- b) Low-profile refrigeration evaporator units intended to operate with a refrigerant and powered by direct expansion in wet and/or dry conditions with rated cooling capacities, greater than or equal to 300 W (1 023 BTU/h) and less than 40 000 W (136 482 BTU/h) at medium temperature, and less than 13 000 W (44 397 BTU/h) at low temperature.



Certification Schemes

- I. Certification through periodic product testing (by model or by family).
 - It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
 - The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
 - + The validity of the certificate is 1 year from the issuance date.
 - The sample for follow-up must be integrated by family members different from those who have been evaluated in the Test Laboratory.

II. Certification through the quality management system of the production line.

- Through this modality, a certificate 3 years valid can be granted, as long as the company has a quality management system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
- Follow-up must be done at the place where the product is manufactured, samples are taken on the production line
- The certification body must verify that the factory has a quality management system for the production process. The results of the last follow-up audit applied by the accredited quality management systems certification body, must be reviewed.
- The sample for follow-up should be composed of family members different from those tested for certification.

- A) For certification scheme I, certification by periodic testing of the product (by model or family), submit the following information:
 - 1. Application
 - 2. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented to laboratory tests is representative of the family that is intended to be certified, in accordance with the provisions of paragraphs 12.3.5 and 12.5.3 of the NOM.
 - 3. Photographs.
 - 4. Energy efficiency label.
 - 5. Electrical characteristics: Voltage (V), frequency (Hz), rated power (W) or rated current (A).
 - 6. Instructions or user manual.
 - 7. Electrical diagram.



- 8. Original of the current test report performed by an accredited and approved testing laboratory.
- 9. List of components.
- B) For certification scheme II, certification by the quality management system of the production line, submit the following information:
 - C) As indicated in scheme I above.
 - 2. Copy of the current certificate of the quality management system including the production line, issued by a certification body for quality management systems.
 - 3. Certification report of the quality system indicating that there is a verification procedure for the production process.



NOM-014-ENER-2004, Energy efficiency for the motor-pump assembly, for pumping clean water for domestic use, in powers from 0.180 kW (1/4 HP) to 0.750 kW (1 HP).- Limits, test methods and labeling.

Applies to electric motors of alternating current, single-phase, induction, squirrel cage type, cooled with air, rated power of 0.180 kW up to 1,500 kW, of a single frequency of rotation, of 2, 4 or 6 poles, of split phase or of starting capacitor, open or closed.

Certification Schemes

- I. Verification through periodic testing of the product
 - It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
 - For the certification process, the motors are grouped by family, according to the power and rated voltage,
 - The certificate is subject to surveillance, at least once during its validity, both in documentary form and by review and sampling of the certified product.
 - The verification must be carried out in a selected sample, in the factory, warehouses or in places of commercialization of the product in the national territory.



- The validity of the certificate is 1 year from the issuance date.
- The sample for surveillance must be composed of family members different from those tested for initial certification.

Technical Documentation Required by Scheme

- A) For the certificate of conformity with verification by periodic testing of the product, the following information must be submitted:
 - 1. Application.
 - 2. Original of the test report(s) performed by an accredited and approved testing laboratory;
 - 3. Copy of the certificate of compliance previously granted, if applicable;
 - 4. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented for laboratory tests is representative of the family to be certified,
 - 5. Photographs or graphic representation of the product.
 - 6. Prototype of the data plate of the samples evaluated and the family of products if applicable, according to clause 10 of the NOM
 - 7. Guarantee
 - 8. Instructions or user manual.
 - 9. Power supply or connection diagrams for each model



<u>NOM-015-ENER-2018, Energy efficiency of household refrigerators and freezers. Limits, test</u> <u>methods and labeling.</u>

Applies to household refrigerators, refrigerator-freezers for domestic use up to 1 104 L and household freezers up to 850 L operated by hermetic motor compressor marketed in the United Mexican States..

Certification Schemes



I. Certification through periodic product testing

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- **4** The validity of the certificate is 1 year from the issuance date.
- The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
- The follow up must be performed on a sample of a model that integrates the family selected, in the factory, warehouses or in places of commercialization of the product in the national territory.
- + The follow up sample must be composed of family members different from those tested for certification.

II. Certification through the production line quality assurance system

- Through this modality, a certificate 3 years valid can be granted, as long as the company has a quality management system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
- The follow-up must be carried out in a sample, of a model that integrates the family, taken in the production line, warehouses or in places of commercialization of the product in the national territory.
- The quality assurance system of the production line is also monitored, with the results of the last audit carried out by an accredited quality assurance systems certification body.
- The sample for follow-up should be composed of family members different from those tested for certification
- Tracking should be performed on a sample taken from a different model than the one selected in the previous tracking and different from those tested for certification.

- A) For certification through scheme I, certification through periodic testing of the product, the following information must be submitted:
 - 1. Application
 - 2. Original of the test report(s) performed by an accredited and approved Test Laboratory;
 - 3. Copy of the certificate of compliance previously granted, if applicable;
 - 4. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented to laboratory tests is representative of the family that is intended to certify.
 - 5. Photographs or graphic representation of the product.
 - 6. Energy efficiency label.
 - 7. Electrical characteristics: Voltage (V), frequency (Hz), rated power (W) or rated current (A).
 - 8. Instructions or user manual.
 - 9. Diagrams



- B) For certification by scheme II, Certification by the production line quality assurance system, the following information must be submitted:
 - 1. As indicated in scheme I above.
 - 2. Copy of the current certificate of the quality assurance system including the production line, issued by a certification body for quality assurance systems.



NOM-016-ENER-2016, Energy efficiency of alternating current, three-phase, induction, squirrel cage type motors, in rated power from 0.746 kW to 373 kW. Limits, test method and marking <u>-</u>

Applies to three-phase, induction, squirrel cage type alternating current electric motors, rated at rated power from 0,746 kW to 373 kW, with rated electrical voltage up to 600 V, open or closed, of a single frequency (rotational speed on the motor shaft or arrow) of rotation, horizontal or vertical mounting position, air-cooled and continuous system, marketed in national territory.

Certification Schemes

- I. Certification through periodic product testing (per model or per family)
 - It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
 - **4** The validity of the certificate is 1 year from the issuance date.
 - The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
 - The follow up must be carried out in a selected sample, in the factory, warehouses or in places of commercialization of the product in the national territory.
 - The follow up sample must be integrated of family members different from those which have been previously evaluated in the testing laboratory.



- A) For the modality of certification through periodic tests to the product:
 - 1. Application
 - 2. Original of the test report which will be valid, from its date of issue, for a period of 90 calendar days for the certification process.
 - 3. Copy of the certificate of conformity of product previously granted, if applicable;
 - 4. Prototype of the data plate, according to clause 9 of the NOM, of the evaluated samples and of the family of products where appropriate.
 - 5. Product Photos
 - 6. Instructions or user manual
 - 7. Diagrams of the power supply or connection of each of the models.
 - 8. Guarantee.



<u>NOM-017-ENER/SCFI-2012, Energy efficiency and safety requirements for self-ballasted</u> <u>compact fluorescent lamps. Limits and test methods.</u>

Applies to all self-ballasted compact fluorescent lamps without enclosure, with enclosure and integrated reflector, with any type of base, in electrical supply voltages from 100 V to 277 V a.c. and 50 Hz or 60 Hz, which are manufactured, imported or marketed in the national territory.

Certification Schemes

I. Certification through periodic testing of the product.

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- **4** The validity of the certificate is 1 year from the issuance date.
- The certificate is subject to surveillance, at least once during the period of validity, both documentarily and by review and sampling of the certified product.
- The verification must be carried out on a sample selected in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for surveillance must be integrated of family members different from those tested for certification.



II. Certification through the production line quality assurance system

- Through this modality, a certificate 3 years valid can be granted, as long as the factory has a quality management system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once during the period of validity, both documentarily and by review and sampling of the certified product.
- The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- **The quality assurance system of the** production line is also monitored, with the results of the last audit carried out by an accredited quality assurance systems certification body.
- The sample for surveillance must be composed of family members different from those tested for certification

- A) For the certificate of conformity with verification by periodic testing of the product, the following information must be submitted:
 - 1. Application
 - 2. Original of the test report performed by an accredited and approved test laboratory.
 - 3. Copy of the certificate of compliance previously granted, if applicable.
 - 4. Declaration under protest of telling the truth by means of which the applicant will state that the product presented is representative of the family to be certified
 - 5. Letter declaration under protest of telling the truth by means of which the applicant will manifest the thermal class of the material of the outer surface of the ballast.
 - 6. Brochures and photographs or graphic representation of each of the models of the products to be certified.
 - 7. Manual or instructions of the product containing the models to be certified.*
 - 8. Product label with electrical characteristics of each model to be certified
 - 9. Diagrams of the power supply or connection of each of the models.
 - 10. Marking of the packaging and product of each model
 - 11. Guarantee
- B) For the certificate of conformity of the product with verification by the quality assurance system of the production line, the following information must be submitted:
 - 1. As indicated in the previous scheme of verification by means of periodic tests to the product.
 - 2. Copy of the current certificate of the quality assurance system including the production line, issued by a certification body for quality assurance systems.





<u>NOM-021-ENER/SCFI-2017, Energy efficiency and user safety requirements in room type air</u> <u>conditioners. Limits, test methods and labeling.</u>

Applies to new room-type air conditioners, with or without heating, with air-cooled condenser and cooling capacities up to 10,600 Wt, domestic and foreign that are marketed in the United Mexican States. Room-type air conditioners that operate with heating mode and without heating in the same appliance (reverse cycle), only apply the REEC specifications for their cooling mode. Does not apply to split room air conditioners.

Certification Schemes

I. Certification through periodic product testing and monitoring.

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- **u** The validity of the certificate is 1 year from the date of issue.
- The certificate is subject to surveillance, at least once during its period of validity, both in documentary form and by review and sampling of the certified product.
- The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those tested for certification.

II. Certification through the production line quality assurance system

- Through this modality a 3-year valid certificate could be obtain, as long as the factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once during its validity, both in documentary form and by review and sampling of the certified product.
- The follow up must be carried out on a sample taken in the production line, warehouses, or places of commercialization of the product in the national territory.
- For the monitoring of the Quality Assurance System, the results of the last follow-up audit applied by an accredited quality management systems certification body, must be reviewed.
- The sample for follow-up must be integrated by family members different from those tested for certification.



Technical Documentation Required by Scheme

- A) For certification scheme I, certification through periodic testing of the product, submit the following information:
 - 1. Application
 - 2. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented to laboratory tests is representative of the family that is intended to certify.
 - 3. Copy of the certificate of conformity of the product previously granted, if applicable.
 - 4. Photographs.
 - 5. Energy efficiency label.
 - 6. Electrical characteristics: Voltage (V), frequency (Hz), rated power (W) or rated current (A).
 - 7. Instructions or user manual.
 - 8. Electrical diagram.
 - 9. Original of the current test report performed by an accredited and approved testing laboratory.
 - 10. List of essential components: compressor, evaporator, condenser, and fan. The list must include their characteristics, description and specifications.
- B) For certification scheme II, certification by the quality management system of the production line, submit the following information:
- 1. As is indicated in the previous scheme through periodic tests to the product.
- 2. Copy of the current certificate of the quality assurance system including the production line, issued by a certification body for quality management systems.



<u>NOM-022-ENER/SCFI-2014, Energy efficiency and user safety requirements for self-contained</u> commercial refrigeration appliances. Limits, test methods and labeling.



Applies to the following self-contained, Class I, electrically powered, new, used and rebuilt commercial refrigeration appliances.

With minimum capacities according to the type of device and according to Table 1 of the NOM, which are marketed in the United Mexican States.

Certification Schemes

I. Certification through periodic product testing

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- + The validity of the certificate is 1 year from the date of issue.
- The certificate is subject to follow up, at least once a year, both documentarily and by review and / or sampling of the certified product.
- The follow-up should be carried out on a sample of a model that integrates the family selected, in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those tested for certification.

II. Certification through the production line quality assurance system

- Through this modality a 3-yeatr valid certificate can be obtained, as long as factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year, both documentarily and by review and / or sampling of the certified product.
- Follow up must be done on the production line.
- The quality assurance system of the production line is also monitored, with the results of the last audit carried out by an accredited quality assurance systems certification body.
- The sample for follow-up should be composed of family members different from those tested for certification.
- NOM certificates shall only be valid and cover products manufactured in factory(ies) having a certified quality assurance system.

- A) For the certificate of conformity with verification by periodic testing of the productor, the following information must be provided:
 - 1. Application
 - 2. Original of the test report(s) performed by an accredited and approved testing laboratory;



- 3. Copy of the certificate of compliance previously granted, if applicable;
- 4. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented to laboratory tests is representative of the family that is intended to certify.
- 5. Photographs or graphic representation of the product.
- 6. Energy efficiency label in accordance with point 9.1
- 7. Marking label in accordance with point 9.2
- 8. Instructions or user manual.
- 9. Diagrams of the power supply or connection of each of the models.
- B) For the certificate of conformity of the product with verification by the quality assurance system of the production line:
 - 1. As indicated in the previous scheme of verification through periodic tests.
 - 2. Copy of the current certificate of the quality assurance system including the production line, issued by a certification body for quality assurance systems.
 - 3. Original or certified copy of the systems certification report regarding the verification procedure, which must have a maximum of ninety calendar days from the issuance date at the time of the interested party submits the application for certification.

In the case of companies having more than two production factories, they must present the certificate of the quality assurance system of each factory.



<u>NOM-023-ENER-2018, Energy efficiency in split type air conditioners, free discharge and</u> without air ducts. Limits, test methods and labeling.

Applies to split-type, free-discharge and ductless air conditioners (known as minisplit and multisplit); single cycle (cold only) or reversible cycle (heat pump), using electrically operated, air-cooled condensers in rated cooling capacities from 1 Wt to 19 050 Wt operating by mechanical compression.

It is limited to systems that use one or more simple refrigeration circuits with evaporator and condenser, marketed in the United Mexican States.



Certification Schemes

I. Certification through periodic product testing (by model or by family).

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- + The validity of the certificate is 1 year from the date of issue.
- The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
- The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those assessed at the initial certification or previous follow-up.

II. Certification through the production line quality management system

- Through this modality a 3-year valid certificate can be obtained, as long as the factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
- Follow up must be done at the place where the product is manufactured. The Quality Control System of the production lines must be verified.
- For the monitoring of the Quality Management System, the results of the last follow-up audit applied by an accredited quality management systems certification body, must be reviewed.
- The follow-up sample should be composed of family members different from those assessed at the initial certification or previous follow-up.

- A) For the Certificate of conformity of the product with certification modality through periodic tests to the product, the following information must be presented:
 - 1. Application duly completed and signed
 - 2. In the case of Family: Declaration under protest of telling the truth, by means of which the interested party will state that the product presented to laboratory tests is representative of the Family that is intended to be certified, in accordance with paragraphs 11.3.5 and 11.5.3 of the NOM.
 - 3. Photographs.
 - 4. Energy efficiency label.
 - 5. Electrical characteristics: Voltage (V), frequency (Hz), rated power (W) or rated current (A).



- 6. Instructions or user manual.
- 7. Electrical diagram.
- 8. Original of the current test report performed by a test laboratory.
- 9. List of components indicating the electrical specifications (in accordance with paragraph 11.5.3 of the NOM) of the compressor, fan motor of the indoor unit and fan motor of the outdoor unit; as well as the material of the evaporator and the condenser coil.
- B) For the Certificate of conformity of the product with certification modality through the quality management system of the production line, the following information must be submitted:
 - 1. As indicated in the previous scheme of certification through periodic tests to the product.
 - 2. Copy of the current certificate of the quality management system that includes the production line, issued by a Certification Body for quality management systems.
 - **3.** Certification report of the quality system indicating that there is a verification procedure for the production process.



<u>NOM-025-ENER-2013, Thermal efficiency of household appliances for cooking food using LP</u> gas or natural gas. Limits, test methods and labeling

This Standard establishes the minimum acceptable values of thermal efficiency of the upper burners, as well as the maintenance consumption of the oven of the household appliances for cooking food that use LP Gas or Natural Gas with electrical elements for cooking food.

Certification Schemes

I. Certification through periodic product testing

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- **u** The validity of the certificate is 1 year from the date of issue.



- The certificate is subject to follow-up at least once during its validity.
- The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those evaluated in the initial certification.

II. Certification through the production line quality assurance system

- Through this modality a 3-year valid certificate can be obtained, as long as the factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to follow-up at least once during its validity.
- The follow-up must be carried out on a sample taken on the production line, wineries or in places of commercialization in the national territory.
- For the monitoring of the Quality Management System, the results of the last follow-up audit applied by the accredited Quality Management Systems certification body must be reviewed.
- The sample for follow-up should be composed of family members different from those evaluated in the initial certification.

- A) For the certificate of conformity with verification by periodic testing of the product on Applicant shall submit the following:
 - 1. Service request completed and signed
 - 2. Original of the test report performed by an accredited and approved testing laboratory.
 - 3. Copy of the certificate of compliance previously granted, if applicable.
 - 4. Declaration under oath of truth, by which the applicant states that the Product presented is representative of the family to be certified.
 - 5. Photographs of each model
 - 6. Labeling of each model, according to the family grouping.
 - 7. Product manual or instruction
 - 8. Diagrams
 - 9. Energy efficiency label
- B) For the certificate of conformity of the product with verification by the quality assurance system of the production line:
 - 1. As indicated in the previous certification scheme through periodic tests to the product .
 - 2. Copy of the current certificate of the quality assurance system including the production line, issued by a certification body for quality assurance systems.





NOM-026-ENER-2015, Energy efficiency in split air conditioners (Inverter) with variable refrigerant flow, free discharge and without air ducts. Limits, test methods and labeling.

Applies to electrically operated, variable-refrigerant flow inverter air conditioners in rated cooling capacities from 1 W t to 19 050 W_t operating by mechanical compression and including an air cooler evaporator coil, a variable refrigerant flow and/or frequency compressor and an air-cooled condenser coil, marketed in the United Mexican States. This Standard does not include test methods for evaluating the efficiency of individual equipment components.

Certification Schemes

- I. Certification through periodic product testing (by model or by family).
 - It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
 - The validity of the certificate is 1 year from the date of issue.
 - The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
 - The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
 - The sample for follow-up must be integrated by family members different from those that have been evaluated in the Testing Laboratory.

II. Certification through the quality management system of the production line.

- Through this modality a 3-year valid certificate can be obtained, as long as the factory has a quality management system in the production process, certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year, both by documentary form and by review and sampling of the certified product.
- Follow-up should be performed on a sample taken on the production line.



- For the monitoring of the Quality Management System, the results of the last follow-up audit applied by the accredited Quality Management Systems certification body must be reviewed.
- The sample for follow-up must be integrated by family members different from those that have been evaluated in the testing laboratory.

- A) For the certificate of conformity with verification by periodic testing of the productor, the following information must be submitted:
 - 1. Completed and signed application
 - 2. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented to laboratory tests is representative of the family that is intended to be certified, in accordance with 12.3.5 and 12.5.3 of the NOM.
 - 3. Photographs.
 - 4. Energy efficiency label.
 - 5. Electrical characteristics: Voltage (V), frequency (Hz), rated power (W) or rated current (A).
 - 6. Instructions or user manual.
 - 7. Electrical diagram.
 - 8. Original of the current test report performed by an accredited and approved testing laboratory.
 - 9. List of components (compressor, evaporator, condenser and fan).
- B) For the certificate of conformity of the product with verification by the quality management system of the production line, the following information must be provided:
 - 1. As indicated in the previous verification scheme through periodic tests to the product
 - 2. Copy of the current certificate of the quality management system including the production line, issued by a certification body for quality management systems.
 - **3.** Certification report of the quality system indicating that there is a verification procedure for the production process





NOM-028-ENER-2010, Energy efficiency of lamps for general use. Limits and test methods

Applies to lamps for general use intended for lighting in the residential, commercial, services, industrial and public lighting sectors (all those discharge lamps in high intensity; self-ballasted compact fluorescents; linear fluorescents; incandescent; incandescent with halogens, and mixed light) that are marketed in the national territory.

Certification Schemes

I. Certification through periodic product testing

- It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
- + The validity of the certificate is 1 year from the date of issue.
- The certificate is subject to surveillance, at least once during its validity, both in documentary form and by review and sampling of the certified product.
- The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those evaluated in the initial certification.

II. Certification through the production line quality assurance system

- Through this modality a 3-year valid certificate can be obtained, as long as the factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once during its validity, both in documentary form and by review and sampling of the certified product.
- The follow-up must be carried out on a sample taken on the production line, wineries or in places of commercialization in the national territory.
- For the monitoring of the Quality Management System, the results of the last follow-up audit applied by the accredited Quality Management Systems certification body must be reviewed.
- The sample for follow-up should be composed of family members different from those evaluated in the initial certification and in the previous follow up.

- A) For the certificate of conformity with verification by periodic testing of the product, the following information must be provided:
 - 1. Application completed and signed.
 - 2. Original of the test report carried out by an accredited and approved test laboratory, for each model in the family.



- 3. Copy of the certificate of compliance previously granted, if applicable.
- 4. Declaration under oath of truth by which the applicant will state that the submitted product is representative of the family to be certified, in accordance with clause 10.3.5 and 10.5.3.2.
- B) For the certificate of conformity of the product with verification by the quality assurance system of the production line, the following information must be submitted:
 - As indicated in the previous scheme of verification through periodic tests to the product. Copy of the current certificate of the quality assurance system including the line of production, issued by an accredited certification body for assurance systems of quality.



NOM-029-ENER-2017, Energy efficiency of external power supplies. Limits, test methods, marking and labeling.

Applies to external power supplies (FAE) that are intended to convert the alternating current line (AC) electrical voltage to a single fixed output electrical voltage level in direct current (DC) at a time and with a maximum output power less than or equal to 250.0 W, as well as those with a switch that allows the user to manually choose between different levels of output electrical voltage; being physically determined by design and independent of the product; which are imported, manufactured, marketed, as well as those distributed or supplied for promotional purposes; either individually or as part of an end-use product, within the territory of the United Mexican States.

Certification Schemes

- I. Certification through periodic product testing (by model or by family).
 - It consists mainly of submitting the application and the current product test result report, together with the corresponding technical and legal documentation.
 - + The validity of the certificate is 1 year from the date of issue.
 - The certificate is subject to surveillance, at least once during its validity, both in documentary form and by review and sampling of the certified product.
 - The follow-up must be carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.



4 The sample for follow-up must be different from the one taken in the previous certification.

II. Certification through the quality management system of the production line.

- Through this modality a 3-year valid certificate can be obtained, as long as the factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year during its validity, both documentarily and by review and sampling of the certified product.
- Follow-up should be performed on a sample taken on the production line.
- For the monitoring of the Quality Management System, the results of the last follow-up audit applied by the accredited Quality Management Systems certification body must be reviewed.
- **4** The sample for follow-up must be different from the one taken in the previous certification.

Technical Documentation Required by Scheme

The procedures, documentation and requirements that are presented must be in Spanish, without prejudice to the fact that they are also expressed in other languages.

- A) In order to obtain the certificate of conformity by means of periodic product tests (by model or by family), interested parties must submit the following requirements:
 - 1. Declaration under protest of telling the truth, by means of which the interested party will state that the product presented for laboratory tests is representative of the family of products that is intended to be certified.
 - 2. Application for product certification, duly requested and signed by the representative of the interested party.
 - 3. Original of the test report carried out by an accredited and approved test laboratory, in the terms established by the LFMN.
 - 4. Technical specifications of the product or family of products that make up the certificate and of which the Item under testing is representative.
 - 5. Markings with the information required in paragraph 10.1 of the NOM;
 - 6. Energy efficiency label; in accordance with paragraph 10.2 of the NOM; only if external power supplies are marketed directly to the public on an individual basis, i.e. not as a part or accessory to an end-use product;
 - 7. Instructions or user manual, for external power supply; only if this is marketed directly to the public individually, i.e. not as a part or accessory to an end-use product.
 - 8. Photograph of the product to be certified.
 - 9. Energy efficiency information in accordance with the provisions of section 10.2 or, where appropriate, a letter under protest of telling the truth indicating that the product models to be certified will be marketed as part of a set intended to be used with an end-use product.
 - 10. Power Supply Diagrams



- B) For certification by the modality through the quality management system, interested parties must meet the following requirements:
 - 1. As indicated in the previous certification scheme through periodic tests on the product
 - 2. Copy of the current certificate of the quality management system issued by a certification body of quality management systems accredited in terms of the LFMN and its Regulations; the certificate must have the following elements: quality assurance system, process control, control of non-conforming product, Control of quality records, internal quality audits, procurement, inspection and testing, control of inspection and test equipment and training. The certificate must show compliance of the production lines with the specifications established in the NOM.



NOM-030-ENER-2016, Luminous efficacy of integrated light-emitting diode (led) lamps for general lighting. Limits and test methods

Applicable to all omnidirectional and directional integrated LED lamps, which are intended for general lighting, in electrical supply voltages from 100 V to 277 V a.c. and 50 Hz or 60 Hz frequency, which are manufactured or imported to be marketed within the national territory

Certification Schemes

- I. Certification through periodic testing of the product.
 - It consists mainly of submitting the application and the current product test result report, according to the life of the lamp, together with the corresponding technical and legal documentation.
 - The initial certificate of conformity of the product, issued after 1 000 hours of testing, for lamps with a declared rated service life less than or equal to 30 000 h, shall be valid for 7 months from the date of issue.



- If the certificate of final conformity of the product is replaced after 3 000 hours of testing, it will be valid for 21 months from the date of its ratification; If this certificate is replaced after 6 000 hours of testing, the certificate shall be valid for 17 months from the date of ratification.
- The initial certificate of conformity of the product for lamps with a declared rated service life greater than 30 000 h, issued after 4 000 hours of testing, will be valid for 3 months from the date of issue.
- The certificate of final conformity of the product is replaced after 6,000 hours of testing and will be valid for 21 months from the date of ratification.
- The certificate is subject to surveillance, at least once during its validity, both in documentary form and by review and sampling of the certified product.
- A follow-up visit is carried out during the first 2 months of the second year of validity. In this visit, one model is sampled for every 5 models that hold the certificate, not counting the models already tested during certification.
- The follow up is carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- The sample for follow-up should be composed of family members different from those tested for certification.

II. Certification through the quality management system of the production line.

- Through this modality a 3-year valid certificate can be obtained, as long as the factory has a quality assurance system certified by an accredited systems body.
- The certificate is subject to surveillance, at least once a year during its validity, both documentarily and by review and sampling of the certified product.
- The follow up is carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- For the monitoring of the Quality Management System, the results of the last follow-up audit applied by the accredited Quality Management Systems certification body must be reviewed.
- 2 follow-ups are carried out; the first, at the beginning of the second year of validity for review of the production line and the second follow-up, at the beginning of the third year of validity for the sampling of the corresponding product of one model for every 5 models that hold the certificate without counting the models already tested during the certification.
- The sample for follow-up should be composed of family members different from those tested for certification

- A) For the certificate of conformity with follow-up by periodic testing of the product, the following information must be submitted:
 - 1. Application duly completed and signed
 - 2. Report of tests performed by a laboratory. Which must be valid for 30 calendar days for initial certification purposes, applicable to initial reports issued at 1,000 h or 4,000 h and subsequent reports at 3,000 h or 6,000 h of testing depending on the useful life of the lamp, as well as the reports derived from



the corresponding follow-ups. The laboratory must report in a single report the results of all applicable tests.

- 3. Photograph of each of the models included in the product family.
- 4. Product marking and packaging marking for each model that integrates the product family.
- 5. Product Warranty
- 6. Technical sheet of each model, which must include:
 - Type of spatial light distribution, type of lamp base and bulb shape
 - Rated luminous flux value
 - Diameter (in case of directional lamps)
 - Rated service life
- 7. Manual or instructions of the product;
- 8. Diagrams;
- 9. Product label
- B) For the certificate of conformity of the product with monitoring through the quality management system of the production line, the following is required:
 - 1. As requested in the previous follow-up scheme through periodic tests of the product.
 - 2. Copy of the current certificate of the quality management system issued by a certification body of quality management systems accredited in terms of the LFMN and its Regulations; the certificate must include the manufacturing process of the products to be certified in this NOM, the name of the issuing body, effective date, the scope of the certificate.
 - **3.** Certification report of the quality management system granted by a certification body which will be valid for 90 calendar days after issued.





<u>NOM-031-ENER-2019, Energy efficiency for luminaires with led for lighting roads and public</u> <u>outdoor areas. Specifications and test methods.</u>

It applies to luminaires with light-emitting diodes (LEDs), intended for lighting roads and public outdoor areas, which use electricity from the public service to power them, as well as other energy sources, such as batteries, accumulators, and self-generation, in alternating current and / or direct current, with a nominal voltage up to 480 V in alternating current and up to 100 V in direct current.

Certification Schemes

- I. Certification through periodic testing of the product.
 - It consists mainly of submitting the application and the current product test result report, either initial or final, together with the corresponding technical and legal documentation.
 - The certificate of conformity is valid for a total of three years from the date of its issuance of the initial certificate.
 - The certificate is subject to surveillance during its validity, both in documentary form and by review and sampling of the certified product.
 - Two follow-ups are carried out, the first during the first two months of the second year of validity and the second follow-up, during the first two months of the third year of validity.
 - The follow up is carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
 - To carry out the sampling, it is necessary to have a minimum of models that allow the tests to be carried out according to what is indicated in Table 7 of the NOM, taking into account that the models already tested should not be repeated, otherwise, the certification body must modify the scope of the certificate, reducing the models not available at the time of sampling.

II. Certification through the quality management system of the production line.

- Through this modality you can obtain a certificate valid for 3 years, as long as the factory has a quality management system certified by an accredited systems body.
- The certificate is subject to surveillance during its validity, both in documentary form and by review and sampling of the certified product.
- Two follow-ups are carried out, the first during the first two months of the second year of validity for review of the production line and the second follow-up, during the first two months of the third year of validity for the sampling of the corresponding product with complete tests.
- The follow up is carried out on a sample taken in the factory, warehouses or in places of commercialization of the product in the national territory.
- To carry out the sampling, it is necessary to have a minimum of models that allow the tests to be carried out according to what is indicated in Table 7 of the NOM, considering that the models already tested should not be repeated, otherwise, the certification body must modify the scope of the certificate, reducing the models not available at the time of sampling.



- A) For the certificate of conformity with follow-up by periodic testing of the productor, the following information is required:
 - 1. Application duly completed and signed
 - 2. Initial or final test report, as appropriate;
 - 3. Photograph of each of the models of the product family;
 - 4. Product marking and packaging marking for each model of the product family;
 - 5. Warranty of the product or family of products;
 - 6. Instructions for the product or family of products;
 - 7. Technical sheet of each model, describing the characteristics must be integrated into the code and / or nomenclature which must include:
 - Rated luminous flux;
 - Correlated color temperature;
 - Color performance index;
 - Rated service life;
 - Type of distribution curve;
 - Luminary application;
 - Rated power.
 - 8. Manual or instructions of the product;
 - 9. Diagrams;
 - 10. Product label
- B) For the certificate by monitoring the quality management system of the production line, the following documentation must be submitted:
 - 1. As indicated in the previous scheme of monitoring the product by means of periodic testing, except for the initial test report;
 - 2. Final test report;
 - 3. Copy of the current quality management system certificate issued by an accredited quality management system certification body; the certificate must include the manufacturing process of the products to be certified in this NOM, the name of the issuing body effective date, the scope of the certificate;
 - 4. Report of the quality management system granted by a product certification body or quality management systems, which is valid for 90 calendar days after being issued;





<u>NOM-032-ENER-2013, Maximum limits of electrical power for equipment and appliances that</u> <u>demand standby energy. Test and labeling methods.</u>

On application to the following electronic apparatus and equipment: digital television adapters, set-top boxes with reception of cable, satellite or Internet Protocol (IP) television signals, equipment for the reproduction of images such as printers, scanners, copiers and multifunctional, microwave ovens, equipment for the reproduction of audio-independent, separable or non-separable, for one or more sound functions, equipment for the reproduction of video or home theater in Digital Versatile Disc (DVD) or High Definition Digital Disc (Blu-Ray Disc) format and televisions with Light Emitting Diode (LED), Liquid Crystal (LCD), Plasma Panel (PDP) and Organic Light Emitting Diodes (OLED) displays, in single-phase supply voltages from 100 V to 277 V a.c. and 50 Hz or 60 Hz, that are manufactured or imported, to be marketed in the national territory.

Certification Schemes

I. Certification by product family and tracking.

- This certification scheme is based on the grouping and classification of a family of products, according to the criteria established in the standard.
- Subject to surveillance, during the validity of the certificate, it must be carried out in a sample composed of models of the certified family, different from those that were tested for the initial certification.
- The follow up is carried out in the factory, warehouses or in the places indicated by the holder of the certificate of conformity of the product in the United Mexican States once a year.
- **4** The Certificate issued through this scheme is valid for one year from the date of issue.

II. Certification through the quality management system.

- It covers the production phase and is based on the evaluation and approval of the measures taken by the manufacturer for the quality control of the production lines.
- Subject to surveillance, during the validity of the certificate, it must be done on a sample taken as specified in Table 7 of the NOM.
- The follow up is carried out in the factory, warehouses or in the places indicated by the holder of the certificate of conformity of the product in the United Mexican States and the monitoring of the management system with the results of the last audit carried out by a systems certification body.
- 4 The Certificate issued through this scheme is valid for three years from the date of issue.



Technical Documentation Required by Scheme

The procedures, documentation and requirements that are submitted must be in Spanish, without prejudice to the fact that they are also expressed in other languages.

- A) For Certification Scheme I by Product Family and surveillance, submit the following information:
 - 1. Application for product certification, duly requested and signed by the representative of the interested party.
 - 2. Original of the test report carried out by an accredited and approved test laboratory, in the terms established by the LFMN.
 - 3. Technical information of the product to be certified.
 - 4. Photograph of each of the products to be certified.
 - 5. Manual or instructions of the product containing the models to be certified.
 - 6. Product label with electrical characteristics of each model to be certified
 - 7. Diagrams of the power supply or connection of each of the models.
 - 8. Copy of the energy efficiency label in compliance with the applicable standard
- B) For scheme II of Certification through the quality management system, submit the following information:
 - 1. As indicated in scheme I above.
 - 2. Original proof of fees applied by the product certification body.
 - 3. Copy of the current certificate of the quality management system issued by a certification body of quality management systems accredited in terms of the LFMN and its Regulations; The certificate must have the following elements: quality assurance system, process control, non-conforming product control, quality record control, internal quality audits, procurement, inspection and testing, inspection and testing equipment control, and training. The certificate must show compliance with the specifications established in the NOM.



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