

***How to comply with
energy labelling and ecodesign regulations
for
professional refrigerated storage cabinets***

An EEPLIANT2 webinar
In association with EFCEM

5 September 2019

Franz Zach - Austrian Energy Agency

Jeremy Tait - EEPLIANT2 facilitator

About EEPLIANT2

- Aim: *to increase rates of compliance*
- Delivered by Market Surveillance Authorities from 14 EU states
- Coordinates monitoring, verification, and enforcement actions for:
 - Professional refrigerated storage cabinets
 - Household refrigerating appliances
 - Network standby of equipment
- Runs September 2017 to April 2020
- Managed by PROSAFE (the EU association for market surveillance professionals)
- Funded by the EU under the Horizon 2020 framework

Web: <http://eepliant.eu> **Twitter:** @EEPLIANT

LinkedIn: <https://www.linkedin.com/company/eepliant>

EEPLIANT2 achievements so far

- Tools that help authorities check technical documentation, completed on 59 appliances
- Lab testing well underway on 28 appliances
- Enforcement actions secured or underway for non-compliances
- Capacity building for inspectors - sharing best practice
- Helping suppliers to understand requirements

*All to improve rates of compliance and
protect the interests of reputable suppliers*

<http://eepliant.eu>



Agenda

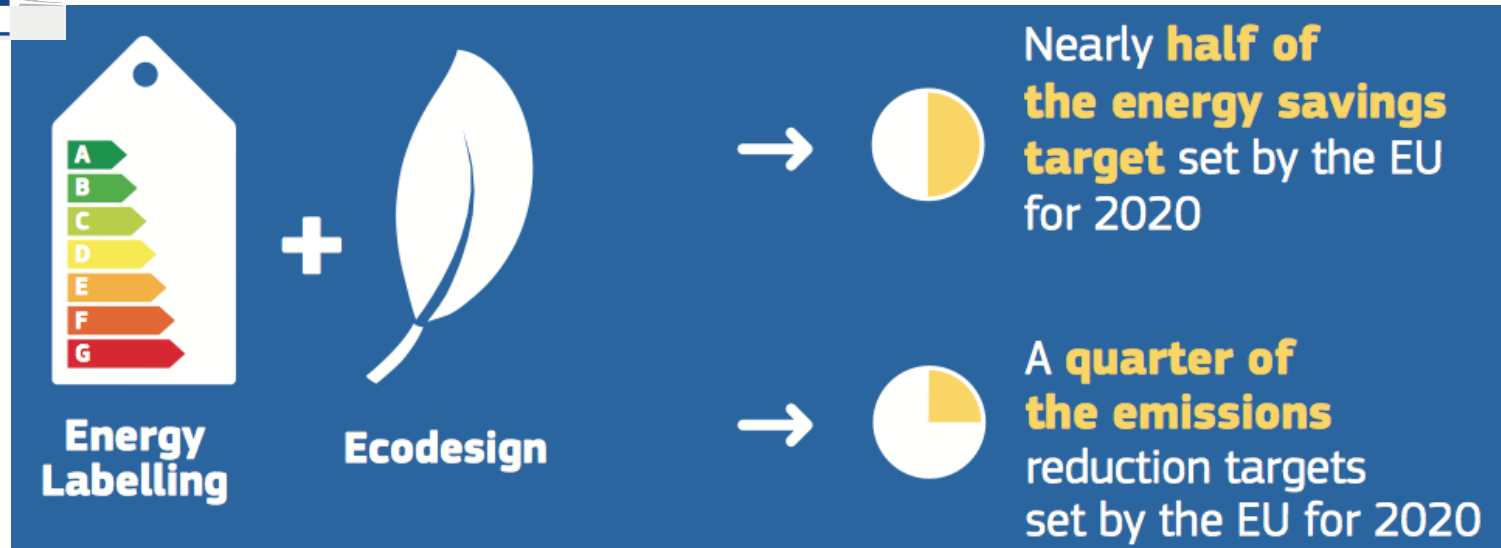
1. Why the requirements are important
2. Which regulations exactly?
3. Scope of appliances
4. Overview of obligations
5. Common non-compliances
6. What a market surveillance inspector will ask you
7. Energy label requirements in more detail
8. Ecodesign requirements in more detail
9. FAQs and Q&A

This is only guidance to help alert you to
the existence of legal obligations.

Only the texts of the EU regulations
themselves have legal force.

You must make your own decisions
regarding compliance.

Why the requirements are important



Source of both quotes: European Commission flyer on Ecodesign and Energy Labels, November 2016
Further figures from: Ecodesign Impacts Accounting, Status September 2016 (VHK for the Commission)

Why the requirements are important

- Label shows cabinet performance (& benefits)
- Comparable consumption on fair basis (kWh/year)
- Save running costs every day; lifetime net savings
- Confirms can hold temperature at rated conditions
- Route to remove cabinets that can't perform
- Regulations are enforced
(ban in one member state = ban in all!)

Which regulations, exactly?

Ecodesign: 2015/1095 and Energy Labels: 2015/1094 (plus their 2016 amendments on verification procedures)

Official Journal of the European Union
L 177/19

EN

COMMISSION REGULATION (EU) 2015/1095
of 5 May 2015
implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to **ecodesign requirements** for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers
(Text with EEA relevance)

EUROPEAN COMMISSION,
in accordance with the Treaty on European Union and in particular Article 17(1) thereof,
after consulting the Consultation Forum for Energy-Related Products,
Having regard to Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 on the ecodesign of energy-related products and in particular Article 10 thereof,

Whereas:

(1) Under Directive 2009/125/EC, ecodesign requirements should be set by the Commission for energy-related products representing significant volumes of sales and trade, having a significant environmental impact and presenting significant potential for improvement through design in terms of their environmental impact without entailing excessive costs.

(i) From 1 July 2016: EEI < 115
(ii) From 1 January 2018: EEI < 95
(iii) From 1 July 2019: EEI < 85

Official Journal of the European Union
L 177/2

EN

REGULATIONS
COMMISSION DELEGATED REGULATION (EU) 2015/1094
of 5 May 2015
supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the **energy labelling** of professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers
(Text with EEA relevance)

Having regard to Directive 2010/30/EU of the European Parliament and of the Council of 18 June 2010 on the energy labelling of professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers, in particular Article 10 thereof,

Whereas:

(1) Directive 2010/30/EU requires the Commission to adopt delegated acts in order to supplement the Directive in order to ensure the uniform application of the Directive and to ensure the consistency of the energy labelling of professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers.

(2) The energy consumed by professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers varies significantly depending on the electricity demand in the Union and on the ambient conditions in which they are used. It is therefore necessary to establish a common methodology for the calculation of the energy consumption of these products in order to ensure the comparability of the energy consumption data and to ensure the consistency of the energy labelling of energy-related products in performance levels with other energy-related products.

ENERG

from 1 July 2016: label 1 or label 2,
from 1 July 2019: label 2.

Which regulations, exactly? *These are also relevant:*

- **Energy labelling framework:**
Regulation 2017/1369 - includes EPREL database
- **Ecodesign framework:**
Directive 2009/125/EC
- **Accreditation and market surveillance:**
Regulation 765/2008
- **Common framework for the marketing of products:**
Decision 768/2008/EC

Tip: See ‘The Blue Guide’ (European Commission)

Scope for professional storage cabinets, energy labels and ecodesign

Integral cabinets for chilled (-1°C to $+5^{\circ}\text{C}$) or frozen ($<-15^{\circ}\text{C}$)
storage of foodstuff in ***non-household*** environments

Not for display of food to, or access by, customers

Out of scope, examples:

- Remote cabinets
- Static air cabinets
- Saladettes
- Bottle coolers above 5°C

In scope, example:

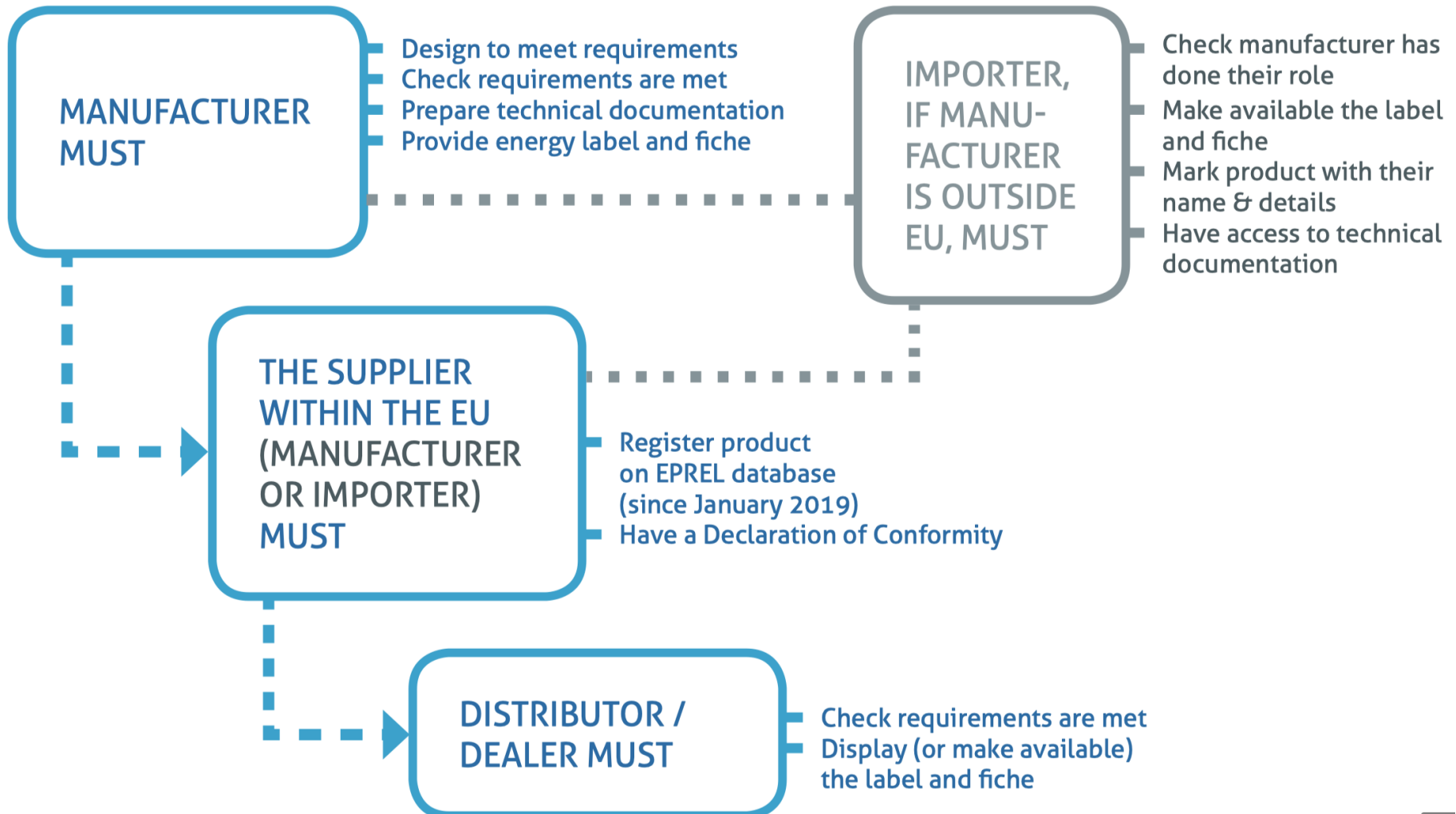
- Cabinets with glass doors

See FAQ document from DG GROW

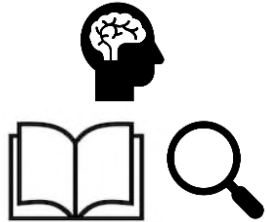
https://ec.europa.eu/energy/sites/ener/files/guidelines_2018_refrigerated_storage.pdf



Overview of obligations (not a complete list!)

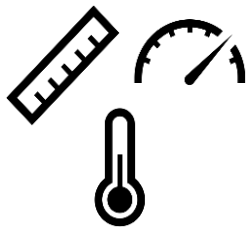


Some common non-compliances (many and varied!)



- Incomplete documentation provided (!)
- Error in calculation of energy label class
- Instruction manual advice missing
(energy efficiency tips; volume(s); label class; refrigerant info)

- Net volume lower than declared
- Higher energy consumption than declared
- Cannot attain temperature at rated conditions



What a market surveillance inspector will ask for:

- Declaration of Conformity
- The energy label and its product information sheet
- The technical documentation file that confirms all declared parameters
- May obtain an appliance and test it

DoC must identify:

- All relevant legislation
- Manufacturer and product
- The harmonised standards or other technical specifications
- Some other information (see 'The Blue Guide')

Energy label requirements



1 = **Supplier's name or trade mark**

2 = **Supplier's model identifier**

3 = **The declared energy efficiency indicator**

4 = **Must show up to A+++ from 1 July 2019**

5 = **Annual electricity consumption in kWh per year**

6 = **The sum of the net volumes (litres) chilled compartments**

7 = **The sum of the net volumes (litres) frozen compartments
(and multi-use)**

8 = **The rated climate class:**

❖ 4 = **standard duty 30°C-55%**

❖ 5 = **heavy duty 40°C-40%**

❖ 3 = **light duty 25°C-60%**

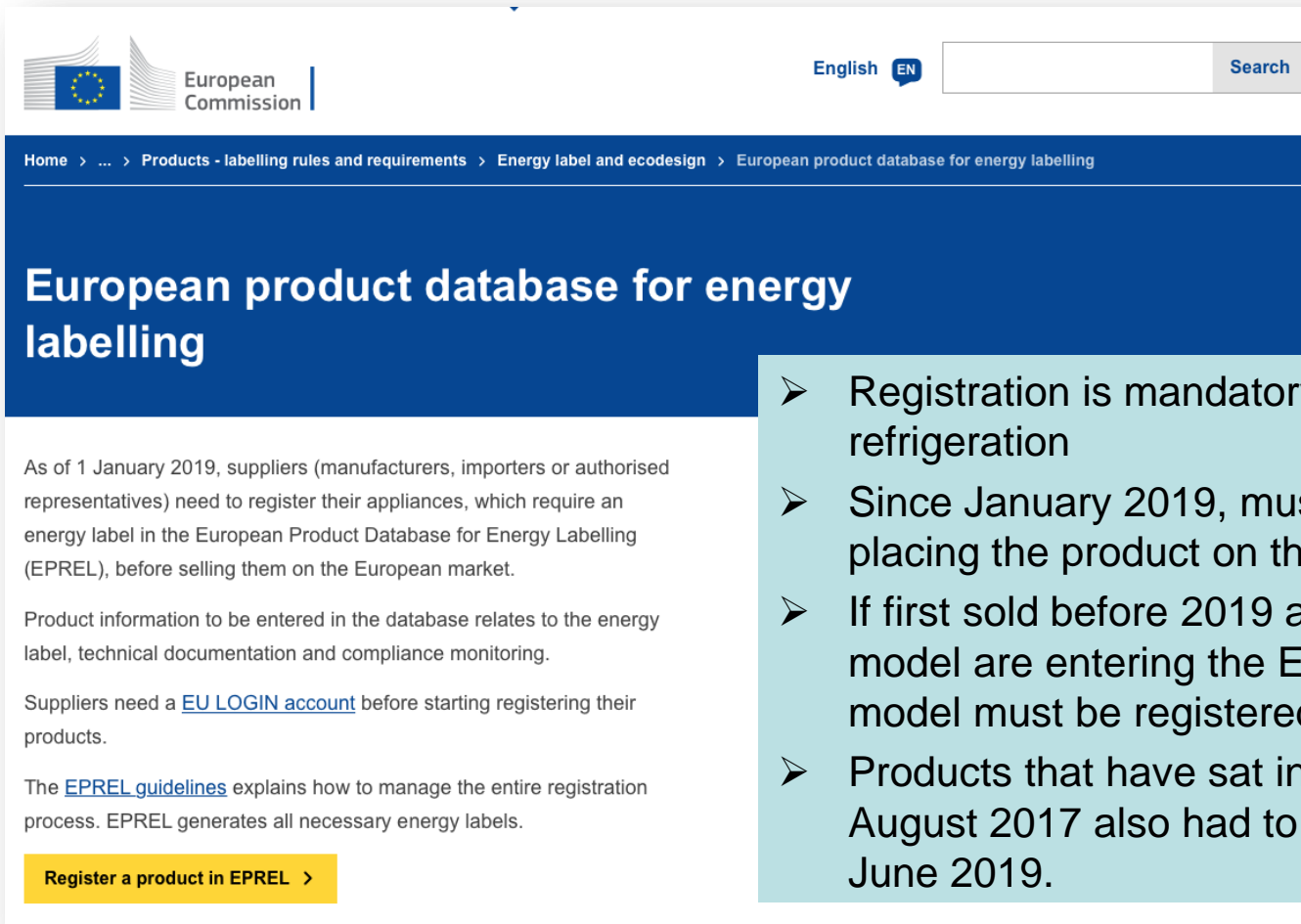
Energy label requirements: *The product specification sheet ('fiche')*

ANNEX IV

Product fiche

1. The information in the product fiche of the professional refrigerated storage cabinet shall be provided in the following order and shall be included in the product brochure or other literature provided with the product:
 - (a) supplier's name or trade mark;
 - (b) supplier's model identifier;
 - (c) type of model in accordance with the definitions in Annex I;
 - (d) the energy efficiency class and energy efficiency index of the model, determined in accordance with Annex II;
 - (e) where the model has been awarded an 'EU eco-label' under Regulation (EC) No 66/2010, that information may be included;
 - (f) the energy consumption of the cabinet over 24 hours (E24h) and the annual energy consumption in kWh, calculated in accordance with Annex IX and rounded to the nearest integer;
 - (g) net volume of each compartment;
 - (h) climate class in accordance with Table 3 in Annex IX;
 - (i) for light-duty cabinets, the following sentence: 'This appliance is intended for use in ambient temperatures up to 25 °C and therefore is not suitable for use in hot professional kitchens';
 - (j) for heavy-duty cabinets, the following sentence: 'This appliance is intended for use in ambient temperatures up to 40 °C'.

Energy label requirements: The EPREL Database



The screenshot shows the EPREL website interface. At the top left is the European Commission logo. In the top right, there is a language selector set to 'English EN' and a search bar with a 'Search' button. Below the header is a breadcrumb trail: 'Home > ... > Products - labelling rules and requirements > Energy label and ecodesign > European product database for energy labelling'. The main heading is 'European product database for energy labelling'. The main content area contains text explaining the registration requirements as of 1 January 2019, and a yellow button labeled 'Register a product in EPREL >'. A light blue callout box on the right side of the screenshot contains a list of key requirements.

English EN Search

Home > ... > Products - labelling rules and requirements > Energy label and ecodesign > European product database for energy labelling

European product database for energy labelling

As of 1 January 2019, suppliers (manufacturers, importers or authorised representatives) need to register their appliances, which require an energy label in the European Product Database for Energy Labelling (EPREL), before selling them on the European market.

Product information to be entered in the database relates to the energy label, technical documentation and compliance monitoring.

Suppliers need a [EU LOGIN account](#) before starting registering their products.

The [EPREL guidelines](#) explains how to manage the entire registration process. EPREL generates all necessary energy labels.

[Register a product in EPREL >](#)

- Registration is mandatory for professional refrigeration
- Since January 2019, must be completed **before** placing the product on the market
- If first sold before 2019 and cabinets of that model are entering the EU supply chain then the model must be registered!
- Products that have sat in supply chain since August 2017 also had to be registered by end of June 2019.

Ecodesign main requirements

- Must meet minimum efficiency (EEI)

Table 1
Information requirements for professional refrigerated storage cabinets

Model(s): [information identifying the model(s) to which the information relates]	storage		
Intended use	chilled/frozen/multi-use		
Operating temperature(s)	Vertical/counter		
Category			
(where applicable) Heavy-duty/light-duty			
Refrigerant (fluid): [information to identify the refrigerant (fluid), including GWP]	Symbol	Value	Unit
Item	AEC	x.xx	kWh
Annual Energy Consumption	EEI	x.xx	litre
Energy Efficiency Index	V_w	x.x	litre
Net volume	V_{net}	x.x	litre
(where applicable)	V_{net}	x.x	litre
Chilled volume		x.xx	kg
Frozen volume			
Refrigerant charge	Name and address of the manufacturer or its authorised representative.		
Contact details			

- (i) From 1 July 2016: EEI < 115
- (ii) From 1 January 2018: EEI < 95
- (iii) From 1 July 2019: EEI < 85

* EEI < 115 for heavy duty (CC5)

- Specified information in instruction booklet

- Specified information on free access website

(b) From 1 July 2016, for professional refrigerated storage cabinets a section of the free access websites of manufacturers for installers and other professionals, their authorised representatives, or importers shall be provided, containing information relevant for:

- (i) installation in order to optimise energy efficiency of the appliances;
- (ii) non-destructive disassembly for maintenance purposes;
- (iii) disassembly and dismantling for disposal at end-of life.

Another ecodesign requirement: The Technical Documentation File

- Must be made available to authorities on request
- Must contain sufficient details for accuracy of product information (label, fiche) to be assessed
- Must contain specific items as per ecodesign regulation, plus:
 - A general description of the product
 - Results of design calculations
 - Any test reports
 - Any environmental assessment studies
 - List of technical standards (e.g. EN16825)
 - The CE Declaration of Conformity
 - A list of ‘equivalent models’

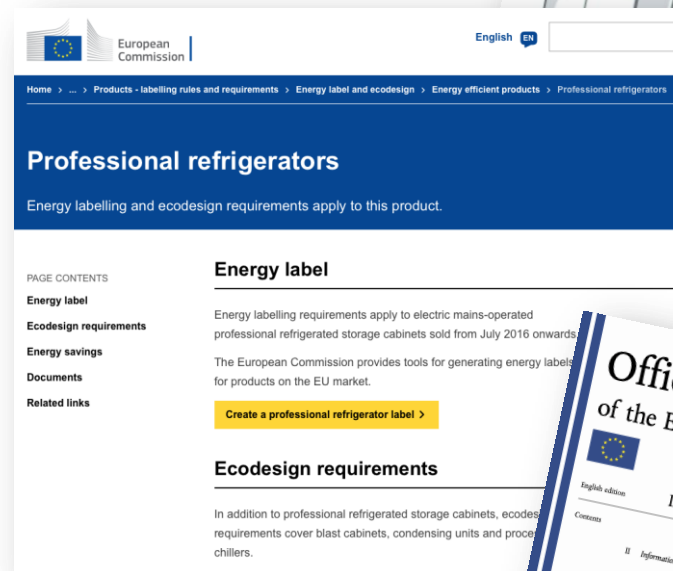
Some FAQs about regulations and compliance

- Which test method?
- Must every cabinet model be tested?
- Won't energy labels be only A to G classes soon?
- Must labels be displayed at HOST 2019?

Any other questions or comments?

Further information sources

- Commission web pages
- DG GROW FAQ document
- The Blue Guide
- Recording of the webinar



European Commission | English EN

Home > ... > Products - labelling rules and requirements > Energy label and ecodesign > Energy efficient products > Professional refrigerators

Professional refrigerators

Energy labelling and ecodesign requirements apply to this product.

Energy label

Energy labelling requirements apply to electric mains-operated professional refrigerated storage cabinets sold from July 2016 onwards.

The European Commission provides tools for generating energy labels for products on the EU market.

[Create a professional refrigerator label >](#)

Ecodesign requirements

In addition to professional refrigerated storage cabinets, ecodesign requirements cover blast cabinets, condensing units and process chillers.



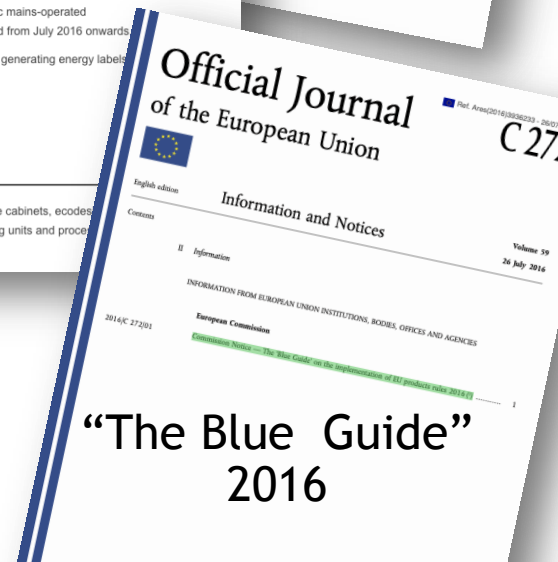
FAQ related to

Regulation (EU) No 2015/1094 with regard to the energy labelling of professional refrigerated storage cabinets

and

Regulation (EU) No 2015/1095 with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers

April 2018



Official Journal
of the European Union

English edition

Information and Notices

Volume 59
26 July 2016

2014/C 272/01

Commission Notice — The Blue Guide on the implementation of EU product rules 2016

“The Blue Guide”
2016

Further information sources

- EEPLIANT2 / EFCEM brochure (soon!)

ENERGY LABELLING AND ECODSIGN OF PROFESSIONAL REFRIGERATED CABINETS: AS A SUPPLIER

Why the energy label and other requirements are important

- EU ecodesign and energy label regulations are high priorities for the EU to achieve its energy savings targets. The regulations help businesses operators reduce their energy costs and ensure that appliances can do the required job. Proper enforcement of the regulations is better for users and better for reputable suppliers.
- Energy efficient suppliers can proudly use the energy label and other requirements to differentiate their products.
- Energy efficient cabinets save running costs for users every day.
- The energy label confirms if cabinet can hold temperature under rated conditions and keep food safety.
- Only appliances meeting important performance levels are allowed to be sold in the EU market.

About the regulations

- Energy labels provide mandatory, clear information to help buyers compare energy performance and make well-informed purchase decisions.
- Ecodesign regulations set mandatory minimum levels of energy efficiency and other requirements which appliances must meet to be legally placed on the market.
- Other requirements also apply to suppliers but relevant regulations for professional refrigerated storage cabinets (with amendments) on verification procedure for authorities!
- Regulation (EU) 2015/1096 with regard to the energy labelling of professional refrigerated storage cabinets, chest cabinets, condensing units and process chillers (with third amendment).
- Regulation (EU) 2015/1095 with regard to ecodesign requirements for professional refrigerated storage cabinets, chest cabinets, condensing units and process chillers (with third amendment).

Common reasons for non-compliance

Failure to provide mandatory information in the instruction manual (especially tips for good energy with energy component volume), label class and refrigerant information).

Incorrect calculation of energy label class.

Higher energy consumption than claimed.

Supplier cannot obtain the required temperature at rated conditions.

Market surveillance authorities may ask of suppliers

Requests from market surveillance authority inspectors include:

- The Declaration of Conformity.
- The energy label and its product specification sheet (as specified in the regulation annex).
- The technical documentation file.
- The authority may obtain an appliance and test it.

Market surveillance authorities may ask of suppliers

The energy label regulation requires that cabinets are supplied and advertised with energy label and a product information sheet (placed from July 2016). From 1 July 2019 the label must show label classes up to A+++.

When on the energy label are explained in the figure below:

- Supplier's name or trade mark.
- The supplier's model identifier.
- The declared energy efficiency indicator for that model.
- The annual electricity consumption for that model in kWh.
- The sum of the net volumes in litres of all cooled compartments.
- The sum of the net volumes in litres of all frozen compartments (and combined compartments).
- The rated volume class (based on A, J or S).
- Non-compliance of the rating, all energy consuming systems are declared as 'Other'.
- Class A+ cabinets (or cabinets to be sold in Class A+ for high energy cabinets, as indicated in the regulation).

See Commission guidance on how to generate an energy label for a professional refrigerated storage cabinet at http://ec.europa.eu/energy/energy_label/

PROSAFE Office, Avenue des Arts/Kunstlaan 4-8, B-1200 Brussels, Belgium
Tel: +32 2 8099 996; E-mail: info@prosafe.org

Contact:

Franz Zach

Franz.Zach@energyagency.at

Jeremy Tait

Jeremy@taitconsulting.co.uk

Website:

<http://eepliant.eu>

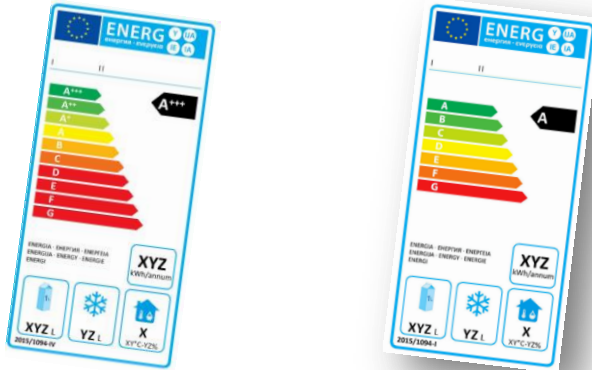
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