Electrolux PROFESSIONAL

Refrigeration

EcoGuide

how to choose a class A professional refrigerator



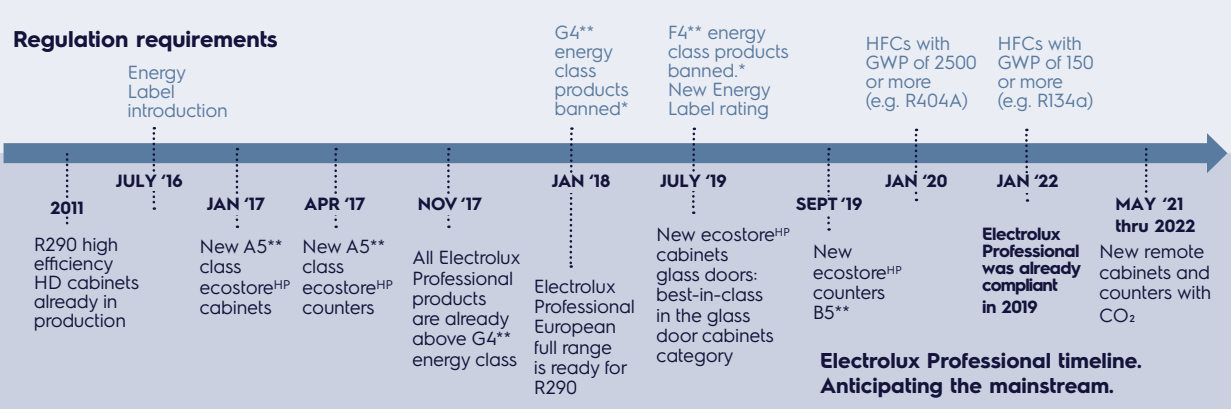
Why an ecoguide?

The choices we make each day are the ones that **build the future of our planet** and improve our work. Respect for the environment is also the best way to ensure your business more efficient.

A sustainable future

The letter A on the cover is the **Green Spirit**, the symbol for a **more sustainable future**.
Electrolux Professional believes in the social responsibility and in the ethic based on the principles of transparency and awareness. Electrolux Professional manufactures its products thinking of the generations to come.
In line with this spirit, the Ecoguide was born to help you through how to **choose, use and maintain professional refrigerators**.





Electrolux Professional timeline. Anticipating the mainstream.

* with the exception of heavy-duty cabinets and refrigerator-freezers.

** A5, B5, G4, F4: the letters stand for the European energy efficiency class and the numbers stand for the climatic class of Energy Label.

Responsible refrigeration

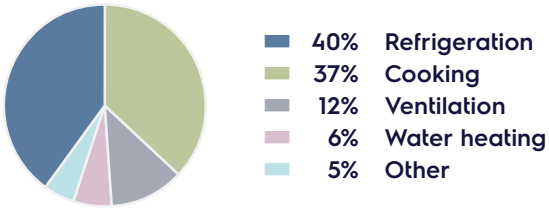
Professional refrigerators preserve a core asset: food. At the same time, its operation accounts for approximately 40 percent of consumption (see chart) of a professional kitchen. They are on day and night and require a lot of energy.

The relevance of quality

So, the importance of assessing the qualities of a good professional refrigerator to **rationalize consumption and improve the efficiency** of its operation.
Choose refrigerators that ensure maximum reliability - while maintaining a constant and uniform temperature - and **minimize energy use and environmental impact.**

Professional refrigerators are the only appliances that run 24 hours a day, 365 days a year.

Incidence of consumption in professional kitchens



With the ecostore cabinet in class A you can cut your electricity bill by 80%* replacing a class G appliance with a class A.

* calculated on a 503lt (net volume) full door refrigerated cabinet

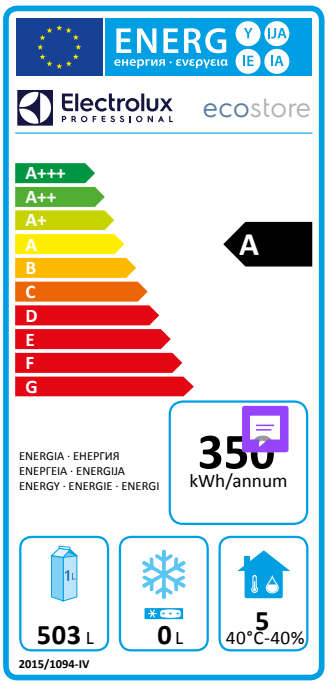
Energy saving

In 2016 for the first time ever in the professional world there is an **European energy classification in classes for any refrigerated appliances**. An easy readable label to evaluate the cabinets consumptions based on the energy efficiency.

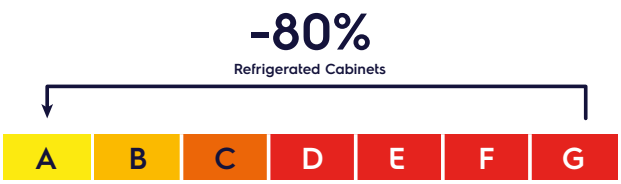
From July 1st 2019 there is an evolution of the Energy Label. The energy classes are from A+++ to G. The classification of the climate class instead remains the same from 3 to 5.

Most of the ecostore^{HP} family are in energy class A. Scan the Eprel QR code, in the next page, to know the energy and climatic classes of all the Electrolux Professional refrigerating appliances.





The label complies with Commission delegated Regulation (UE) 2015/1094 of 5th May 2015.



Mandatory for every manufacturer to insert data in the database of Eprel.

√ Easier for the customer to compare

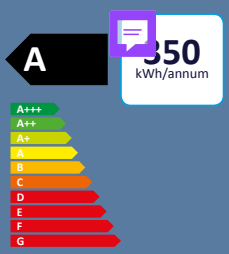
√ Easier for the authorities to check the consistency of the data declared.

2019 - EPREL European Product registry For Energy Labelling

You can enter in the website to verify the Energy Label - the mandatory registration of appliances of any Professional refrigerated storage cabinet placed in the European Market.

EPREL

Scan to visit the Eprel website



Energy efficiency class

It shows you how much electricity the product uses during the year, helping you to budget for your energy bills.

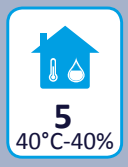


Refrigeration Freezer

The highest capacity

The **NET volume** allows you to better choose the number and type of appliances to purchase.

The **data on the label** is now calculated according to a standard methodology and it provides the real usable space for food storage.



Climatic class, the safest working condition

The label indicates the capability of the product to correctly preserve food in different working conditions. The label will display:

- **5**: **"heavy duty"** performs at **40°C** ambient temperature and **40%** humidity
- **4**: **"normal duty"** performs at **30°C** ambient temperature and **55%** humidity
- **3**: **"light duty"** performs at **25°C** ambient temperature and **60%** humidity.

Be sure to choose the best solution

Discover some tips to make a conscious choice.

Did you know that ...



The glass door cabinets and counters for professional use must be labelled by the manufacturer.
Electrolux Professional follows the rule.



The glass door cabinets used for food storage and preservation are not display cabinets.



The Energy Label with energy class G, climate class 4, cannot be sold in Europe from January 2018.
Moreover the energy class F, climate class 4, cannot be sold in Europe from June 2019.



From January 2020 cannot be sold products with gas HFCs with GWP of 2500 or more (e.g. R404A) and from January 2022 with gas HFCs with GWP of 150 or more (e.g. R134A) according to the European Norms F-Gas.

Search for ...



European Energy Label in energy efficiency class A and climatic class 5
The climate class (5) is as important as the energy efficiency class (A) in order to preserve the food correctly.



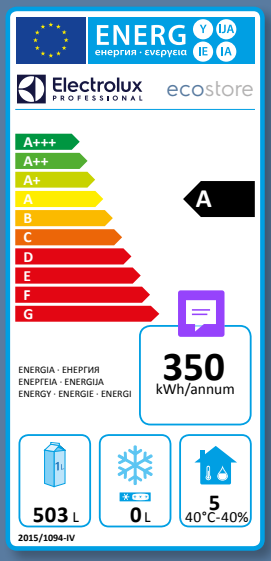
Home products are not for professional kitchens

Notice the difference: when the label shows the **sound level** of the equipment and not the **climate class**, it is referring to appliances for household use.

Similar labels but different test conditions

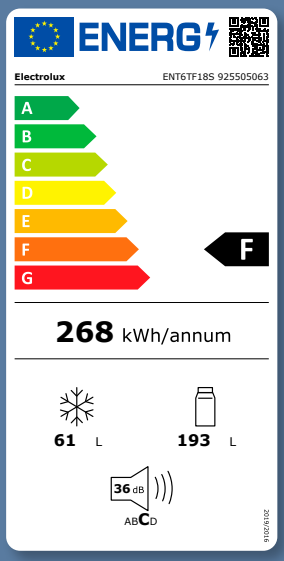
The use of refrigerated equipment in a professional workplace is much more stressful than the use in the home environment.
Home products used in a professional environment are dangerous because their preservation performances do not guarantee the Food Safety!

Choosing a certified professional refrigerator is a guarantee



Professional equipment

Refrigerator loaded with test material;
Doors opened 72 times for 7 seconds during the first half of test (12h on 24); Test performed at different ambient conditions up to 40°C



Household equipment

Empty refrigerator*
Door closed
Test performed at one ambient condition at 25°C

*except freezers

2 sustainable recognitions

The Electrolux Professional products follow the strictest international standards for **protecting the environment** and **managing costs**.



Electrolux Professional Group have received a silver rating certification from EcoVadis, a global provider of business sustainability ratings.

Being EcoVadis certified allows the company to be considered a preferred supplier to high profile customers as sustainability disclosures are increasingly becoming a requirement in their procurement processes.

Electrolux Professional Group´s sustainability policies, initiatives, targets, and data, were processed and analysed by EcoVadis international experts, and compared with international sustainable development standards, ensuring a reliable and independent third-party assessment.

Energy Technology List

We are proud to have our products listed on The Energy Technology List (ETL), a government list of energy-saving products used by businesses. The certification assures you to have purchased energy-efficient equipment which meets the ETL criteria.

etl.beis.gov.uk

Natural gases are a responsible alternative

The cooling unit and foams that insulate the walls of the refrigerator contain gas. It is important to choose a sustainable refrigerator, that respects norms and the environment.

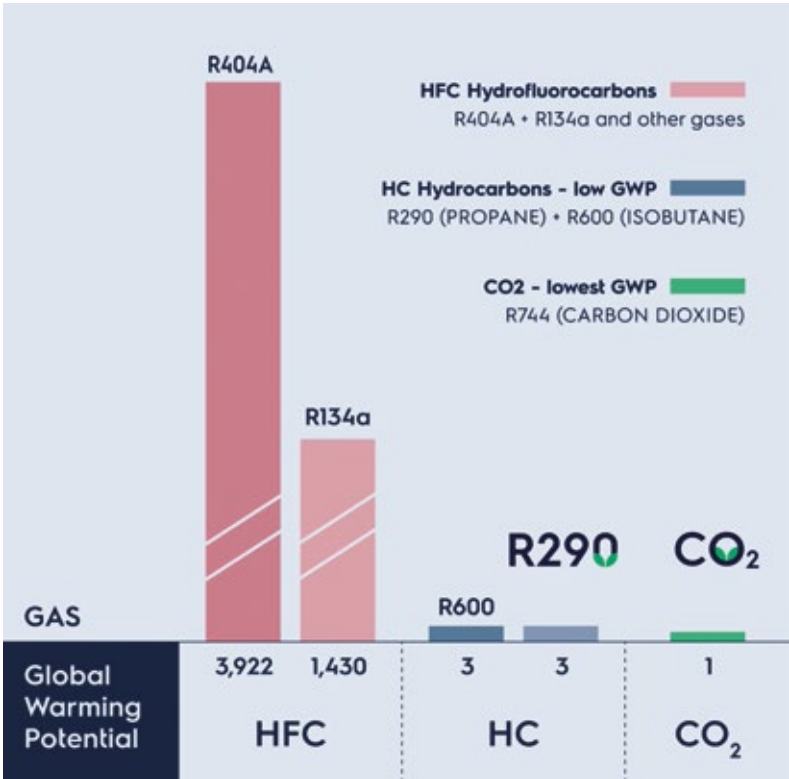
Make a sustainable choice when it comes to your commercial kitchen

The latest generation of professional refrigerators uses natural gases such as **cyclopentane** (in the insulation), **Hydrocarbons (HC)**, such as the R290 and Co_2 which very low Global Warming Potential and reduce the greenhouse effect.

These greener, more natural refrigerant gas alternatives offer an improved operational performance, as well as increased energy efficiency.

Redesigned for lower carbon footprint, with increased efficiency and cost savings. Our refrigerators with natural gases offer an improvement in efficiency and can lower your energy bills.

Scan
to visit ec.europa.eu website





CO_2

CO_2 is a natural refrigerant, safe for the environment. It is non-flammable, non-toxic and 20% more energy efficient*, with a heat exchange 5 times higher* than a standard HFC system. CO_2 is climate friendly, has no Ozone Depletion Potential and its Global Warming Potential is one.

* comparison based on a cooling circuit using HFC R404A, among the best refrigerants used in refrigeration.
Specific remote models available on request.

R290

"R290 gas reduces environmental impact and has a less aggressive effect on the refrigerator's components than older traditional gas."

Good insulation reduces power consumption

The insulation system is essential to limit consumption and to ensure high performance.



ExtrA insulation

Greener and more cost-effective. **90mm-thick stainless steel** and **cyclopentane** gas keep the internal temperature consistent, **cutting heat loss and compressor activity**.

90 mm

Cyclopentane gas increases the insulation efficiency and keeps foam insulating characteristic longer than traditional gases. Traditional insulation becomes 18% less efficient after 2 months*.
This has **3 very positive effects:**

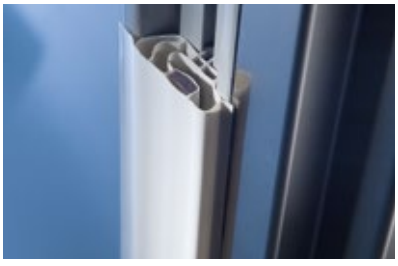
- reduced electricity consumption,
- less wear and tear of the compressor,
- ease of disposal for the use of cyclopentane, as it is a natural gas.

Choosing a refrigerator in climatic class 5, i.e. able to keep the internal temperature stable, even if it reaches 40° on the outside, is synonymous with greater efficiency and reliability.

*Estimates of Electrolux Professional R&D Lab Test



Removable door seal for easy cleaning and for maintaining the insulating properties.



Composition of the three rooms seal to minimize energy loss.

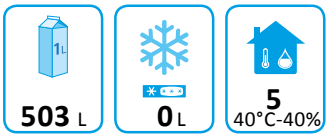
More capacity, more convenience

When choosing a refrigerator, you should consider carefully the (net) professional **capacity of food storage** which is equivalent to the volume between the base of the grid at the bottom and the line that marks the max load at the top.

Extra capacity

The ideal device is one that allows the same size to have more space, ensuring a **more rational use**.

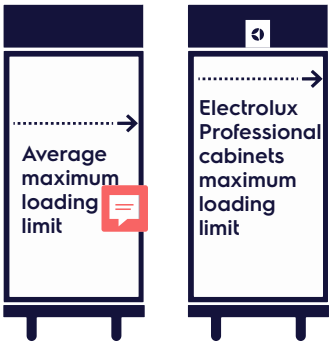
Another factor not to overlook is the location of the **refrigeration unit** which must be placed **over the cell** not to occupy the area reserved for food.



Commission delegated Regulation (EU) 2015/1095 of 5th May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council.

Choose same size refrigerators that provide more space for the food





Each food item in its place

To preserve food better and longer, it should be positioned inside refrigerators. First, do not cross the different type of food that could cause infections and possible alterations in food.

First In First Out

Storing food in closed containers to prevent mixing of odors, makes the **cleaning easier and facilitates an orderly arrangement**. It is also advisable to remove the food from the original containers - which transfer a strong bacterial load - as well as to rotate the food using the FIFO method (First In First Out - the first food items that get in must be the first to come out), so as to maximize the storage time of the food within the refrigerator.

For each type of food (fish, vegetables, poultry, red meat) there is a specific refrigerator.



Reduce food waste

Reduce food waste with Electrolux Professional **OptiFlow** system and **climate class 5** for keeping power consumption at a minimum even in the hottest and busiest kitchens.

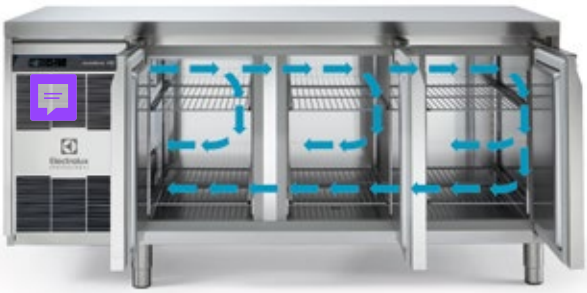
Food safety

Choosing devices with systems that allow for proper air flow in the whole cell ensures an even distribution of temperature and humidity. **OptiFlow system*** is the **intelligent air circulation system** that promotes a uniform temperature distribution within the cell in any loading condition. An invaluable aid for proper food storage and for keeping power consumption at a minimum.



Optimal food preservation with OptiFlow system





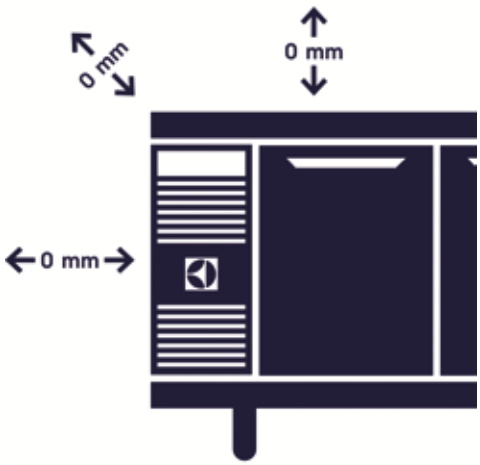
*Air circulation system of the new ecostore^{HP} refrigerators by Electrolux Professional

Where to put the refrigerator

Refrigerators should be placed **away from heat sources** (ovens, cookers, stoves, chimneys, as well as windows and walls exposed to the sun) because otherwise they have to work harder to maintain a consistent internal temperature by consuming more energy.

Simple, space-saving installation

The ecostore^{HP} family, both cabinet than counter refrigerators, help you to **save space** because there is no need to leave clearance space* around them. They need frontal ventilation only thanks to the Tower Configuration of the cooling unit.



* The ecostore^{HP} cabinets need a minimum distance from the roof.

Relying on the advice of professional technicians to place your refrigerator.





extrA high performance, extrA efficiency, extrA peace of mind for your professional kitchen

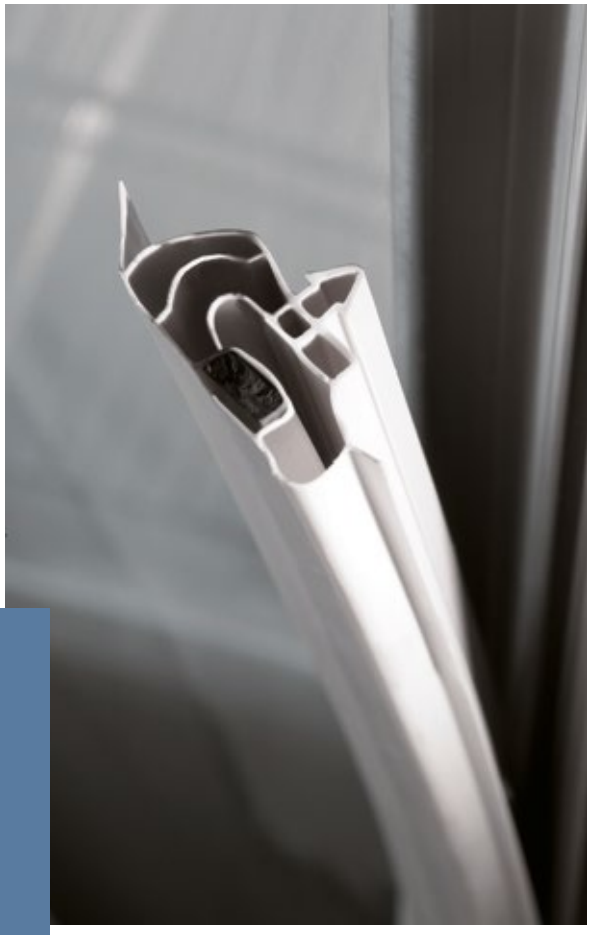
ecostore^{HP} Premium Refrigerated Counters and Cabinets reduce running costs and food waste.

How to prevent problems

Refrigerators, as mentioned, run 24 hours a day, 365 days a year. You can prevent the risk of malfunction and expensive waste of energy through **constant maintenance**. Here are some operations which should be performed periodically.

Control of seals

The door seals of the refrigerator and freezer compartments are easy to remove and clean, they also ensure proper closure and prevent leakages. The cleaning and checking for wear, at least once a month, contribute to the limitation of energy consumption. on our ecostore is it really easy to remove the gasket and clean,



Seals in good condition prevent harmful and costly leakages. We recommend that you clean them once a month.

Cleaning the condenser

The capacitor must be kept free from dust that may obstruct the operation. It should be noted that some of the latest generation refrigerators mount devices that prevent the accumulation of dust*.

Evaporator defrost

The layer of ice, caused by moisture and steam of the food, hinders the proper functioning and increases fuel consumption. Removing the frost is easier if the fridge is equipped with an automatic defrosting system.
The new generation of refrigerators defrost when necessary only, so they reduce energy costs**.

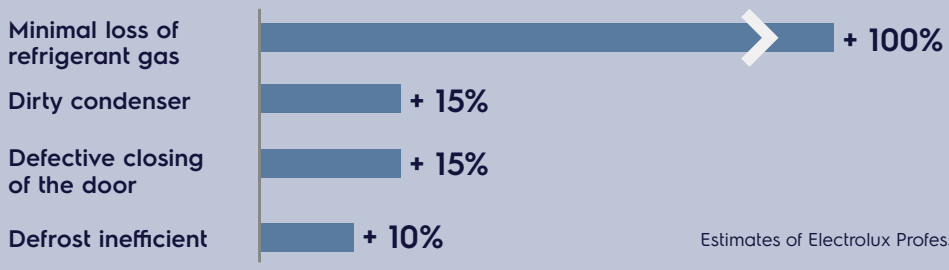
*The structure of the wire frame condenser used from us prevents dust and grease accumulation thus avoiding periodical cleaning operations and reducing energy consumption
** Device of the new ecostore refrigerators by Electrolux Professional.

Regular maintenance helps you save

To ensure maximum efficiency of the refrigerator, and therefore maximum savings on consumption (see table), and for unforeseen expenses, it is better to rely on a periodic maintenance service. The frequency depends on where the refrigerator is located. It is important to make use of technical assistance centers authorized by the manufacturer and ask for original spare parts only. In environments such as bakeries, confectioneries and pizzerias (for the presence of flour) or in fast food restaurants, delis and food stalls (where the air is saturated with fat) it is necessary to repeat this operation more often. We recommend servicing professional refrigerators every 4-6 months.

Purchase accessories and consumable at your nearest local dealer.
To find go to electroluxprofessional.com

Relationship between technical problems and increase in consumption



Estimates of Electrolux Professional

Excellence is central to everything we do.
By anticipating our customers' needs, we strive for
Excellence with our people, innovations, solutions and services.
To be the OnE making our customers' work-life easier,
more profitable – and truly sustainable every day.

Follow us on

www.electroluxprofessional.com

Excellence
with the environment in mind

- All our factories are ISO 14001-certified
- All our solutions are designed for low consumption of water, energy, detergents and harmful emissions
- In recent years over 70% of our product features have been updated with the environmental needs of our customers in mind
- Our technology is RoHS and REACH compliant and over 95% recyclable
- Our products are 100% quality tested by experts

The Company reserves the right to change specifications without notice. Pictures are not contractual.