DOMETIC'S GUIDE ON THE LATEST MINIBAR LEGISLATIONS

Helping hoteliers navigate energy, safety, and transparency regulations with confidence.



More and more strict regulations are introduced to ensure that minibars and other compact refrigeration units play the role in protecting our environment. Navigating the complex world of these legislations is a daunting task for someone who is not directly involved in the development of minibars. There are many specifics to consider, especially if you'd like to make the right decision for the long-term success of your property both in terms of financial investment and environmental footprint. We have put together this easy-to-understand guide for all those who would like to have a quick reference before committing to their next project.



KEY LEGISLATIONS THAT APPLY TO MINIBARS

When it comes to minibars, there are 3 key European sustainability legislations to consider today:

EU RoHS directive 2011/65/EU

EU F-gas regulation (EU) 2024/573

(EU) 2019/2019 Eco-design and Energy labeling regulation (EU) 2019/2016

The objective of the EU RoHS directive 2011/65/EU is to lay down rules on the restriction of the use of hazardous substances in electrical equipment with a view to contributing to the protection of human health and the environment. For minibars, this means that to be "RoHS compliant" since March 5, 2021, the refrigerant has to be hexavalent chromium-free. Committing to high research and development efforts, we've developed a new chromate-free anti-corrosion substance for our Absorption range, thus extending our sustainability innovations to sell only chromate-free absorption minibars. We have replaced chromate with other user-friendly substances, ensuring the high quality of the well-known Dometic Absorption Minibars.

The objective of the EU F-gas regulation (EU) No. 2024/573 is to protect the environment and reduce the depletion of the Ozone layer by phasing down emissions of fluorinated greenhouse gases. For minibars, this means that the unit cannot contain refrigerants with a global warming potential (GWP) >150. We use the environmentally-friendly refrigerant called R600a with an extremely low GWP of 3 to ensure that you have long-term sustainable solutions and stay ahead of upcoming stricter future regulations.

The objective of the EU's 2019/2019 Eco-design and energy labeling regulation 2019/2016 is to provide clear differentiation for consumers on the range of energy consumption of the unit. Its second phase for energy-related products is applicable from March 1, 2024.

We ensure that we always supply the latest energy labels with our products, providing you with the clear understanding and proper context necessary to make a smart investment decision.

DETAILS THAT WILL SURPRISE YOU

IT'S NOT ABOUT THE COOLING TECHNOLOGY

It's about noise, door type and assumed real-life usage conditions. Let us explain!

The EU's energy labeling regulation covers minibars (including automatic minibars) and wine refrigerators as well; however, the distinction is not made between cooling technologies, but rather noise of the products, the type of door used and the assumed internal temperature the unit will operate with.

There are two distinctions based on noise:

- Low noise appliances with less than 27 dBA (i.e. Dometic NTE and Absorption minibars)
- High noise appliances with more than 27 dBA (i.e. Dometic Compressor minibars)

There are two distinctions based on doors:

- Non-transparent doors (i.e. Dometic C40S with Solid door)
- Transparent doors (i.e. Dometic C40G with Glass door)

There are ten distinctions based on usage (see below table): For the typical use of a minibar, the unit should always be considered in the "Cellar" line due to its assumed internal temperature usage of minimum +2 °C and maximum +14 °C. A minibar labeled in the "Pantry" category would assume reallife usage starting at minimum +14 °C, going up to +20 °C inside.

Group	Compartment type	Storage conditions		Test conditions
		Tmin	Tmax	Tc
Name	Name	°C	°C	°C
Unfrozen compartments	Pantry	+14	+20	+17
	Wine storage	+5	+20	+12
	Cellar	+2	+14	+12
	Fresh food	0	+8	+4
Chill compartment	Chill	-3	+3	+2
Frozen compartments	0-star & ice-making	n.a.	0	0
	1-star	n.a.	-6	-6
	2-star	n.a.	-12	-12
	3-star	n.a.	-18	-18
	Freezer (4-star)	n.a.	-18	-18

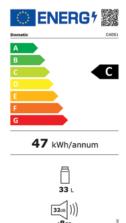
HOW TO RECOGNIZE THE CORRECT LABEL

The new energy label for refrigeration appliances (including minibars) shows seven energy efficiency classes (color bars from A to G). Additionally, it indicates the supplier's name and the QR code as a quick link to the online database (where the EEI of the model can also be found). The lower section shows the annual energy consumption in kWh, the capacity of the freezer compartment, the total storage volume, and the noise emission in dB (plus the noise rating from A to D).

In the past, a rating of A+ or B was already generally seen as "very good". With the current legislation, even more stringent standards are applied to get a C or even a D rating regarding compressor and F or even G rating for low noise (absorption) units. In fact, this means the new F or G rating is similar from a sustainability point of view to the previous A+ rating.

Here you can see an example for the old on the left and the new one on the right:





NOT ALL ENERGY CONSUMPTION IS TESTED THE SAME WAY

Now that we've determined the types of minibars, it's important to understand that the energy consumption shown on the label is a result of testing the units at internal and external target temperatures based on these different categorizations.

Internal target temperatures are determined based on the Compartment type (see above table "Test conditions"):

- "Cellar" type units are tested reaching 12 °C inside
- "Pantry" type units are tested reaching 17 °C inside

Outside temperatures are determined based on the Noise categorization:

- Low noise appliances are tested at 25°C ambient temperature
- High noise appliances are tested at 16°C and 32°C ambient temperature as well (and the average of the results is taken)

In order to make a fair comparison between units and their energy consumption, one must first ensure that the units were tested with the same conditions.

THIS METRIC IS MORE IMPORTANT THAN THE ENERGY CLASS ON THE LABEL

Energy efficiency classes are updated, but from A to G class they are still quite vague. If you are serious about making a well-thought-out decision, you must be aware of the energy efficiency index, or the EEI.

You can check the EEI of each unit on the product information sheet. Knowing this number is a crucial yet not so well-known detail which can mean the difference between purchasing a sustainable minibar and an outdated appliance. Notice how any minibar with an EEI of higher than 125 can be considered G class, even if one of them is twice the EEI than the other... which "G class" would you choose?

Energy efficiency class	Energy efficiency index (EEI)
А	EEI ≤ 41
В	42 < EEI ≤ 51
С	51 < EEI ≤ 64
D	64 < EEI ≤ 80
E	80 < EEI ≤ 100
F	100 < EEI ≤ 125
G	EEI ≤ 125

THE BURDEN OF PROOF IS NOT ON YOU

The new eco-design and energy labeling regulations require concerted action of product manufacturers and dealers. All products that do not comply with the 2nd phase of the legislation by the deadline on March 1, 2024 will no longer be allowed to be sold in the European Union (except devices with production and importing before the above mentioned date - these can still be sold without any restrictions). The information you should get clarity on from manufacturers and dealers you are in contact with is extremely straight forward and well-defined.

DEMAND CLARITY AND TRANSPARENCY

We've compiled a list of simple 'yes' or 'no' questions that you can ask to make sure the minibar(s) you are about to purchase are in line with the latest regulations and worthy of your attention.

ASK THE MANUFACTURER THESE QUESTIONS:

- Is the appliance supplied with the new energy label?
- Are all required parameters in the EPREL database?
- Did you provide dealers with an electronic label for the model?
- Can you provide the product information sheet in printed form upon request?
- Do your advertising and technical promotion materials contain the energy efficiency class and the range of energy efficiency classes available on the label?
- Do you provide 7 years availability of spare parts for thermostats, temperature sensors, printed circuit boards, lights, door handles and hinges, trays, and baskets?
- Do you provide 10 years availability of spare parts for door gaskets?
- Do you have a global network of professional technicians?

ASK THESE QUESTIONS TO THE DEALER:

- Are all appliances presented at the point of sale or at trade fairs with the new energy label?
- Do you provide the new energy label and the product information sheet in case of distance selling?
- Do your advertising and technical promotion materials contain the energy efficiency class and the range of energy efficiency classes available on the label?

If the answer to any of these questions is 'no', be cautious about following through with your purchase.



WE'RE SERIOUS ABOUT SUSTAINABILITY

OUR COMMON GOAL IS TO SAVE ENERGY AND PROTECT OUR CLIMATE

The eco-design directive 2009/125/EC builds the umbrella for several new regulations for various appliances, such as TVs, washing machines, and refrigerators. The goal is to reduce the environmental impact without incurring excessive costs.

Eco-design measures have an enormous potential. Experts estimate that they will deliver an impressive 260 terawatt-hours (TWh) of annual final energy savings in 2030. This is equivalent to reducing greenhouse gas emissions by about 100 million tonnes per year in 2030.

Refrigeration appliances are one of the 40 product groups listed in the eco-design agenda, with an estimated 10 TWh of annual final energy savings in 2030. To reach these targets, the EU commission launched two further regulations for refrigerators, the eco-design EU regulation no. 2019/2019 and energy labeling regulation no. 2019/2016.

YOU SHOULDN'T BE SOLD THESE...

Previously, we've established the importance of EEI, but it's not only about comparing units more accurately. This metric in combination with the noise and door type determines WHEN the unit should be offered to you to purchase:

- Since March 1, 2021 compression minibars with an energy rating of G are banned from sales.
- Since March 1, 2024 compression minibars with a rating of F and G are banned from sales.
- Since March 1, 2024 the limit to sell low noise minibars (i.e. absorption minibars) is reduced and differentiated per door type available:
 - Units with transparent doors from this date can only be sold if they are under 300 EEI (from a previous limit of 380).
 - Units with non-transparent doors from this date can only be sold if they are under 250 EEI (from a previous limit of

Devices produced and imported into the EU and with a purchase order before the above mentioned dates can still be sold without any restrictions.

Meeting these ambitious targets requires continuous innovation and rigorous testing, but it's all for our common benefit. We only offer minibars that reach the latest limits thanks to the proprietary knowledge of our engineers. Their expertise is the foundation behind our robust, noiseless absorption models, which now include a triple-layered glass door design. This design not only ensures the necessary EEI but also provides a well-known premium aesthetic for your guests.

OUR CONTRIBUTION TO SUSTAINABILITY



Sustainability is a part of our corporate culture and a major driving force in our research and development.

Living up to our reputation as a responsible industry leader, whilst enhancing our sustainability agenda, we are ensuring that our customers benefit from our dedication and ingenuity:

- All our cooling technologies (absorption, thermoelectric, and compressor) meet the most stringent regulatory criteria, this means environmental and health protection for production workers, customers and users.
- Resource efficiency during the entire life cycle including support to replace and recycle old units, and providing spare parts.

Dometic Benefits:

- Compliant with all latest rules and regulations (including REACH and RoHS).
- Quality made in Europe 100% tested and approved.
- More than 6 million units installed worldwide.
- Over 35 years supplying hotels all around the world.
- Production facilities certified according to ISO 9001 and ISO 14001.
- Worldwide service network.