

Condensing units | EcoDesign

EcoDesign and energy efficiency

The EU EcoDesign directive aims to improve the overall performance of products and thereby protect the environment by reducing indirect CO_2 emissions. Manufacturers must comply to get the CE marking on their products. **ENTR Lot 1:** Regulation 2015/1095, 2015/1094 for Professional Refrigeration impacts the condensing units.



High SEPR/COP cuts energy costs

See how much you can save by choosing Danfoss. E.g. in a cold room with 9 kW cooling capacity.

SEPR: Seasonal Energy Performance

Optyma[™] **Plus INVERTER** vs mechanically modulated technology*

9 KW R407F	Tanks	?
UNIT	DANFOSS	MARKET
SEPR	3.84	2.5
USAGE	~ 14 000 kWh	21 600 kWh
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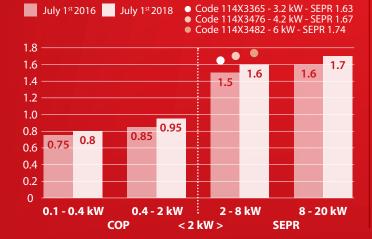
YEARLY ENERGY CONSUMPTION SAVED: 7,600 KWH

SAVINGS BASED ON COST OF ENERGY: FRANCE: 0.11€ / 1 KWH = 7 600 × 0.11 = 836€ UK: 0.15€ / 1 KWH = 7 600 × 0.15 = 1 140€ GERMANY: 0.20€ / 1 KWH = 7 600 × 0.20 = 1 520€ 1 520€

annual electricity savings made by your customer in Germany

Optyma™ Plus units comply with EcoDesign 2018

E.g. units with R452A refrigerant, low temperature



Benefits for everyone



Electricity consumption savings with higher SEPR/COP condensing units



Future-proof units complying with regulation



Transparent way to compare the performance of condensing units



Coolselector®2 software provides EcoDesign report



Eco-friendly products

EcoDesign in 3 steps



2 DATES: JULY 1ST 2016 AND 2018

From July 1st 2016, all units placed for the first time on the market in the European Union have to comply with the Minimum Efficiency Performance Standards (MEPS). From July 1st 2018, these MEPS are more stringent.



SEASONAL ENERGY PERFORMANCE RATIO (SEPR)

SEPR is the value to measure the energy performance of the condensing units:

- For low temperatures: above 2 kW
 For medium temperatures: above 5 kW
- Below these limits, COP is the value

Find out more at coldroom.danfoss.com



AFFECTED
APPLICATIONS WITHIN
REFRIGERATION

- Condensing units
- Professional refrigerated storage cabinets
- Blast cabinets
- Process chillers