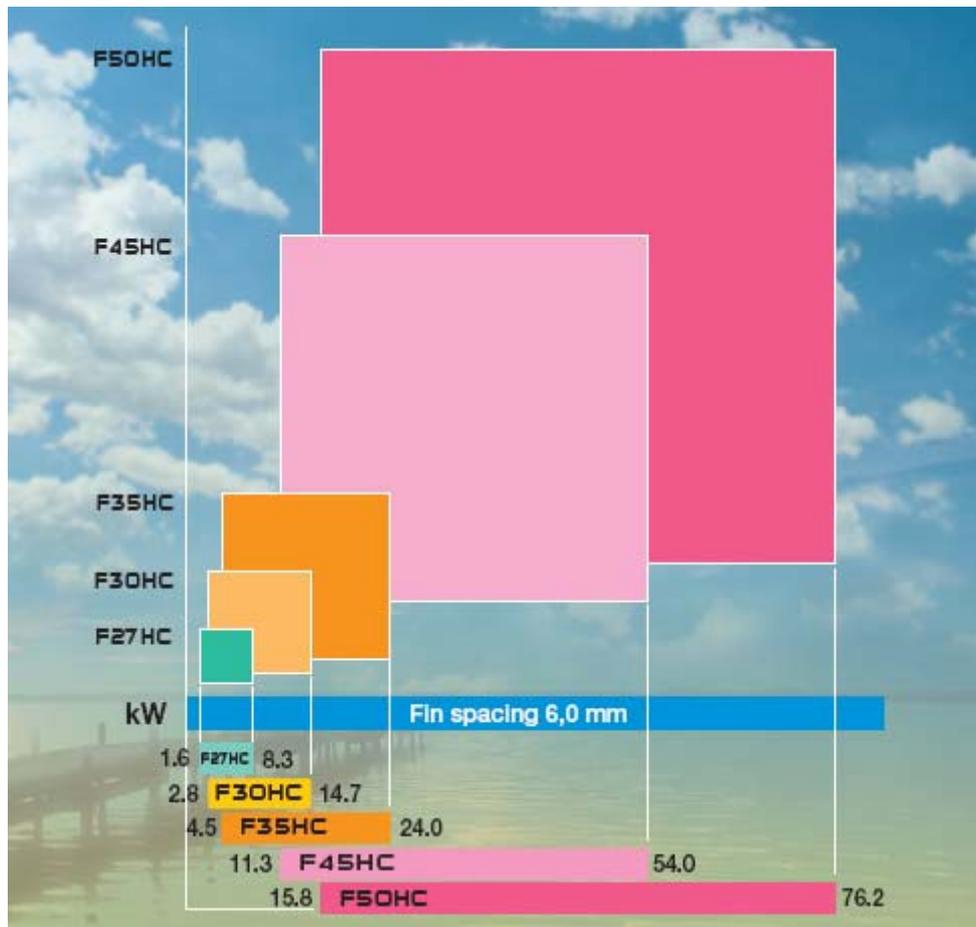


Presenting the new range of **FHC** unit coolers

The new FHC range of cubic commercial unit coolers reflects the continual improvements introduced by the company in recent years. The achieved objective is the production of equipment of first-class technical quality and with high-efficiency heat exchange capability. The units have also been designed with great attention to detail and they keep energy consumption to a minimum.

Most importantly, this range is significantly wide, featuring capacities (at catalogue specifications for 6 mm fin spacing) from 1.6 to 76.2 kW. This has been made possible thanks to the use of no less than 5 fan groups (ø 275, 300, 350, 450, 500 mm), which are the origin of the family groups F27HC, F30HC, F35HC, F45HC and F50HC.



Such a comprehensive range means that all the various application requirements are covered, from small to medium cold rooms for the conservation of fresh and frozen products, or for the freezing of them.

F27HC – F30HC – F35HC Series

The middle-lower end of the FHC series includes 3 fan groups: \varnothing 275, 300 and 350 mm. While the first and the last constitute a natural evolution of the well-established S2HC and S3HC series, **the F30HC models represent important news** : they cover the area between the two preceding series, offering simultaneously the advantages of very limited height combined with high capacity and low energy consumption. The table below shows the average relationship between refrigerating capacity (at catalogue specifications) and capacity absorbed by the fans for the three product ranges, referring to 6 mm fin spacings. The great amount of energy savings with the new range are clearly shown.

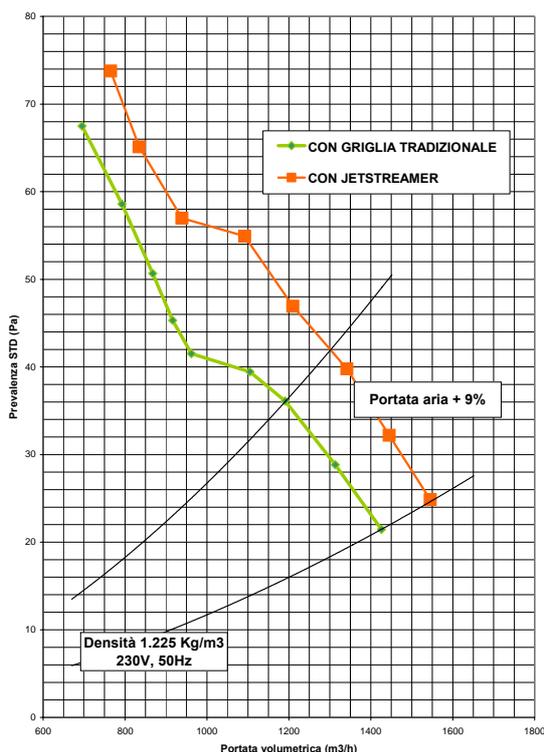
Range	Refrigerating capacity / capacity absorbed by the fans
F27HC	21,5
F30HC	40,0
F35HC	29,7

The FHC design activity focused on research into new operating efficiency limits, using detailed fluid dynamic studies. It concentrated above all on the combination of fans with heat exchangers, the shape of which is derived from the experience gained on the current SHC series. Long experimentation in the wind tunnel of the LU-VE laboratories led to the new directional **JETSTREAMER** grill which ensures uniform distribution of the air on the exchanger, greater air quantity, greatly extended use of the fan during the defrost stage and a particularly long air throw.

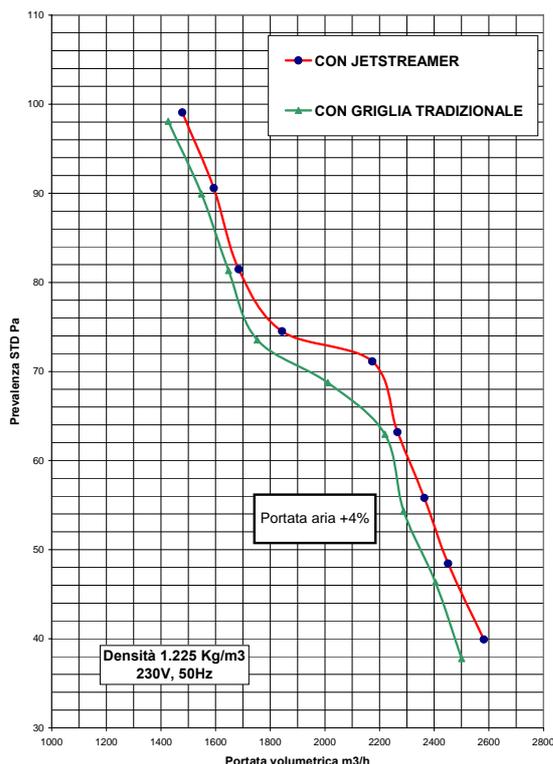


The graphs below show the typical **curves of the fans of the F30C and F35HC** ranges which use this sophisticated device. The illustrations are eloquent, demonstrating how careful research can be the best response to real application requirements. The air quantity increases compared to a traditional grill by respectively 4% (F35HC) and 9% (F30HC). The new **JETSTREAMER** also enables elevated heat exchange efficiency to be maintained during the defrost stage, as the air quantity remains close to the nominal value even with a significant load of frost on the fins (the curve is decidedly more vertical). Such favourable behaviour has allowed a **slight reduction of the fin spacing** compared to the current SHC series, thus improving the overall efficiency of the product.

CURVE CARATTERISTICHE "F30HC"



CURVE CARATTERISTICHE "F35HC"



The air throw is also very elevated, with an increase of **+28%** for the F35HC series (compared to the previous S3HC) and **+22%** for the F30HC, due once again to the new JETSTREAMER.

Returning to the new fin spacings, the table below shows the variations between the new FHC range and the old SHC range:

S2HC	F27HC	Δ Capacity	Δ Air quantity
Fin spacing 4.7mm	Fin spacing 4.5mm	+ 0,7 %	- 5,3 %
Fin spacing 6.3mm	Fin spacing 6.0mm	+ 0,0 %	- 5,0 %
Fin spacing 7.7mm	Fin spacing 7.0mm	+ 3,0 %	- 4,8 %
S3HC	F35HC	Δ Capacity	Δ Air quantity
Fin spacing 4.7mm	Fin spacing 4.5mm	+ 1,1 %	+ 0,0 %
Fin spacing 6.3mm	Fin spacing 6.0mm	+ 0,1 %	+ 0,0 %
Fin spacing 7.7mm	Fin spacing 7.0mm	+ 3,2 %	+ 0,0 %

The S3HC models with one fan, lengthened-module (S3HC 133-50, 108-65, 86-80).have been eliminated in the new F35HC range.

In terms of terminology, the model name has been maintained to make the identification of the product easier, while the denomination of the fin spacing has been changed, e.g: the new F35HC 174 E 6 corresponds to the S3HC 174 E 65 model.

All products in the F27HC, F30HC and F35HC series are available with traditional Venturi distributors or with ***jet-o-matic***, which guarantees optimum distribution of the refrigerant in the circuit under all operating conditions.

A final word must be said about the ***new casing*** of the products which signals a new goal of great importance. All the shapes are appealingly **rounded**, rendering the product pleasing and at the same time functional. This has been made possible thanks to important investments which have allowed us in particular to make **the drain tray** of the F30HC and F35HC as an integral pressing, guaranteeing perfect, smoothly-fitting angles. (this means that plastic corners have been eliminated on F30HC and F35HC)



F45HC – F50HC Series

These two new ranges represent an important extension of the capacity covered by the commercial unit coolers, allowing performance levels to be reached that were previously only available with the industrial range. They **derive from the much-appreciated CS45 and CS50 series**, from which they take the high performance heat exchanger. The **casing** has been **revised** and **simplified**, making the product even more competitive.

The range includes **models from 1 to 4 fans** with coils of 6 and 8 rows only and fin spacings of 4.5, 6.0, 7.5 and 10.0 mm

450 mm diameter fan is provided in single-phase versions (230V-1PH-50Hz), while the 500mm is three-phase (400V-3PH-50Hz).

As a result this new “light” version of the former industrial CS range allows us to reduce the existing cost gap between S3HC and CS by cutting the average pricelist in comparison to CS 45 and C50 form 8 to 10%.

PRODUCTS AVAILABILITY

F35HC – F45HC – F50HC : 1ST APRIL 2008

F27HC – F30HC : BEGINNING JUNE 2008 (final die for the fan guard not available before)