

ENGINEERING
TOMORROW



Danfoss Light Commercial Refrigeration Compressors

Combine Strong **Competitiveness** and **Reliability**

D, U, L, P, X, S Ranges

Made in
Europe



lightcommercialrefrigeration.danfoss.com

Compressor Ranges

D range



Features:

Very compact design, low weight, extra silent

Range:

2.40 to 4.03 cc

Refrigerants:

R134a, R290, R600a

Applications:

Water Coolers, Can Coolers, Bottle Coolers, Small Refrigerators and Freezers

U range



Features:

27% more efficiency than L range, more compact: 12 mm shorter, 2.5 kg lighter, -10dB(A) quieter

Range:

5.5 to 10.6 cc

Refrigerants:

R134a, R404A, R290, R600a

Applications:

Household Refrigerators, Bottle Coolers and Freezers, Can Coolers, Chest Freezers, Vending Machines, Ice Cream Freezers, Beer Dispensers, Ice Makers, Soft Drink Dispensers, Heat Pumps Systems

L range



Features:

Highly efficient range with propane (R290) & isobutane (R600a)

Range:

4.00 to 10.70 cc

Refrigerants:

R134a, R404A, R507, R600a, R290

Applications:

Household Refrigerators, Bottle Coolers and Freezers, Can Coolers, Chest Freezers, Vending Machines, Ice Cream Freezers, Beer Dispensers, Ice Makers, Soft Drink Dispensers, Heat Pump Systems

Features:
High efficiency versions
Highly efficient range with propane (R290) & isobutane (R600a)

Range:
12.00 - 18.00 cc

Refrigerants:
R134a, R404A, R507, R600a, R290

Applications:
Household Refrigerators, Bottle Coolers and Freezers, Can Coolers, Chest Freezers, Vending Machines, Ice Cream Freezers, Beer Dispensers, Ice Makers, Soft Drink Dispensers

P range



X range



Features:
High reliability & efficiency. Optimized design to work under heavy duty operating conditions

Range:
16.00 to 23.00 cc

Refrigerants:
R134a, R404A, R507, R290, R407C

Applications:
Large Freezers (vertical and chest), Blast Freezers, Ice Makers, Vending Machines, Display Cabinets, Display Islands, Soft Drink Dispensers

Features:
Top capacity range, optimized design to reduce vibration

Range:
18.00 to 34.42 cc

Refrigerants:
R134a, R404A, R407C, R507

Applications:
Large Freezers (vertical and chest), Soft Drink Dispensers, Blast Freezers, Air Dryers, Ice Makers, Air Conditioning, Vending Machines, Heat Pumps, Display Cabinets and Islands

S range



The Green Cooling Ranges

The most extended range of compressors for sustainable refrigeration in terms of energy consumption reduction.

The advanced design of the Green Cooling Ranges allows efficiency improvement providing energy consumption reductions up to 45% compared to standard versions; consequently, lower CO₂ emissions to the atmosphere.

The Green Cooling Ranges comprise **High Efficiency, Natural Refrigerants and Variable Speed Compressors**.

The Green Cooling range improves the compressor COP between **20%** and **30%** in comparison with standard ranges.



GREEN COOLING

The major environmental benefits are obtained combining the use of the R290 with the design criteria of high efficiency ranges.

These compressor models, in their more advanced version, can save up to 50% of energy when compared with standard efficiency series of R404A thanks to its high-efficiency mechanics, its advanced motor winding design and the optional running capacitor concept.

High Efficiency Ranges

The High Efficiency models reduce energy consumption of commercial refrigeration appliances between 10% and 30% with respect to standard ranges. Most High-Efficiency models are equipped with electric motors, designed with the "optional run capacitor" concept, that is, the compressor can work with or without a running capacitor (CSR/CSIR), offering different levels of efficiency with the same compressor. The new U range offers the highest level of efficiency with propane in the market today.

Natural Refrigerants

Natural refrigerants like propane (R290) and isobutane (R600a) are being gradually introduced in commercial appliances, not only due to the replacement of H-CFC's and HFC's refrigerants which have high impact on environment, but also because it is more efficient in terms of performance and applications' energy consumption.

Refrigerant propane has no direct contribution to global warming and its energy consumption is between 10% to 15% lower than a similar application with R404A. The R290 compressors offer a higher cooling capacity and COP allowing energy-saving consumption with smaller displacement.



AC Variable Speed Compressors

The Variable speed compressor offers the lowest energy consumption by means of electronically self-adjusting the compressor's speed to the appliance's cooling needs, while improving COP up to 50%. Using Smart Speed® software with communication capabilities, this compressor automatically achieves the best efficiency for the appliance while dynamically adapting the compressor's speed to the needed cooling capacity.



Variable speed compressors - AC

Features:

High Efficiency, Flexible Speed Drive
Drop-in Configuration
External Controlling
200-240 V / 50-60Hz
110-127V / 50-60Hz

Models:

GLT99FSN, NPT12FSC, NLT60FSN

Refrigerant:

R290, R134a

DC Variable Speed Compressors for Mobile Applications

The mobile cooling solutions for transportation vehicles are designed to operate from a 12-42V DC power supply. These compressors are designed for mobile DC applications in boats, trucks, private cars, medical appliances in ambulances, truck cabin air conditioners, among others.

The GD30FDC model is the solution for users requiring comfort and reliability while traveling where a DC powered refrigerator is utilized.

The GLT80TDC is the answer to the needs of users requiring comfort and reliability while traveling, either on holidays, at work or in any other circumstance where a DC powered air conditioner is utilized.

The GD30FDC and GLT80TDC are designed to operate from a low voltage DC power supply to operate silently, efficiently and reliably even when tilted up to 30° / 20° respectively, working with refrigerant R134a.



Variable Speed Compressors - DC

Features:

DC compressors for mobile applications, exceptionally silent
GD30FDC VDE & UL approved
Ready to work under heavy duty operating conditions
12-42V DC / 24-42V DC / 48-56V DC

Models:

GD30FDC, GLT80TDC.

Refrigerant:

R134a, R600a

The electronic driver of all Variable Speed Compressors include the Smart Speed® programming option, which is a plug-in system for automatically self-adapting compressor speed to the current thermal load.

A large portfolio...

of light commercial refrigeration compressors to fit your needs for advanced technology and increased competitiveness.

Compressor size	230V - 50Hz						115V - 60Hz						230V - 60Hz			
	R404A		R134a		R290		R404A		R134a		R290		R404A		R134a	
ccm*	LBP	HMBP	LBP	HMBP	LBP	HMBP	LBP	HMBP	LBP	HMBP	LBP	HMBP	LBP	HMBP	LBP	HMBP
2.4																
3																
3.6																
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*ccm= displacement in cubic centimeters



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