

editorial

First Quarter 2010

Dear Customer,

After a difficult year 2009, the beginning of 2010 is being very promising. For Cubigel Compressors the first quarter of 2010 has shown a recovery of the market in terms of volume and turnover with an increase of more than 40% respect to the same period of the last year. This trend is maintained also during this second quarter.

2010 has also shown a clear trend of commercial refrigeration worldwide moving towards greener solutions with an increasing demand of efficiency compressors to reduce the energy consumption of the appliances along with the use of natural refrigerants as propane. Cubigel Compressors has always backed these options as we were the first manufacturer having high efficiency and propane compressors in its catalogue and we will continue doing it in the future by enlarging our ranges and offering more and more efficient compressors like our Variable Speed solution. To reinforce our leading position in the market we launched our Green Cooling Ranges, showing our commitment with the environment and contributing to a more sustainable world.

Pedro Olalla
 Sales Director


mknews

 Cubigel Compressors launches
 the Green Cooling ranges

With the claim of “living in harmony with nature”, we are launching our complete ranges of environmental friendly compressors aimed to satisfy the market trends in terms of energy saving components for sustainable applications.

The advanced design of the Green Cooling ranges allows efficiency improvements for a better appliance performance, which is translated into a considerable reduction of energy consumption.

The green cooling ranges comprises 1) high efficiency ranges, with the most extended series working with R134a, R404A, R290 and R600a for both, HMBP and LBP applications, 2) the use of Natural Refrigerants as R290 and R600a with no direct effect on global warming, and 3) the top efficiency one, the Variable Speed Compressor, which offers the lowest energy consumption by adopting electronically controlled running modes.

All of these ranges get to improve the compressor COP between 20% and 50% depending on the combination of the different technologies, which means an important decrease of operative costs for final clients and for the reduction of CO2 emissions to the atmosphere.



living in harmony with nature

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ORGANIZATIONALnews

We are pleased to announce that Ms. Chiara Baldizzone has joined our company as a new Sales Area Manager, following the East European market (except Russia). She got her degree from the School of Management of the *Università degli studi di Torino*, Italy and she completed her education with a Master in International Business from the IB School of the *Univesidad Pompeu Fabra* in Barcelona. During her ten years career in two medium sized Spanish companies in the Electronics and the Lighting industries, she has been in several management positions and she has dealt with different markets all over the world. She has gathered a wide experience in international sales, negotiation and technical assistance and she is a seeker for excellence when it comes to provide solutions and service to customers. She is committed to bring the same excellence and detail oriented attitude to her new position, in order to establish fruitful relationships with the customers from Cubigel Compressors.



GLT80TDC 24-42V DC & GLT80TDC 12V DC

The solution for high demand of cooling capacity for truck cabin air conditioning and mobile refrigerators



The GLT80TDC is Cubigel Compressors' cooling solution for trucks where both, DC powered air conditioner is used at sleeping cabinets and where a high cooling capacity is needed in mobile refrigerators.

The specific design of this compressor includes internal transport stoppers which enhances the compressor's reliability in front of the specific working conditions which are carried out on mobile applications on the road. Its high efficiency mechanics design and its brush-less motor together with its flexible speed drive feature turn the cabinet which assembles this R134a compressor into a very efficient refrigerator/air conditioner considering the energy consumption.

GLT80TDC is presented in two versions: 12V DC power supply (mainly suitable, for instance, for the application in trucks in the American market) and the version 24 · 42V DC (24V is mainly suitable for trucks in Europe).

GLT80TDC Main Advantages

- Biggest DC reciprocating compressor in the market (8.1cc displacement).
- Two different GLT80TDC versions available: 24-42V DC & 12V DC.
- No remote electronic drivers needed. The already included electronic driver is enough to power and control the compressor.
- Prepare to operate silently, efficiently and reliably even up to angles of tilt of 20°.
- For GLT80TDC 12V version, starting capability is as low as 10V under balanced pressures conditions.
- Speed self-adaptation to the real cooling need by means of the Smart Speed® feature.
- Built-in protections: against battery discharge, fan over-current, starting failure, compressor overload and electronic driver overheat. Protection
- Wide working range: from -25°C to +10°C evaporating temperature range.
- Compatible with the Cubigel Compressor FxC programming software.
- Compressor able to work up to 43°C ambient temperature.

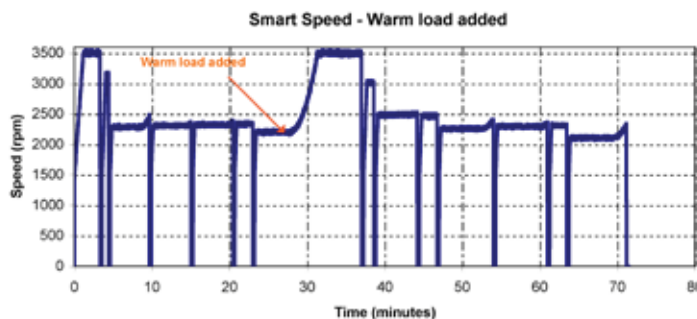


Figure n°1. Smart speed functioning in a refrigerator with GLT80TDC. Evolution of the speed when a warm load is added.

Figure n°1 shows how the speed of the compressor changes when an additional warm load is added inside the refrigerator. As soon as the electronic driver detects that time-on during the current cycle is longer than during the previous cycle, the speed is gradually increased till arriving to the max speed (if needed) in order to cool down the warm load as soon as possible. This behavior can be applied when the ambient temperature has increased, when the door of the cabinet is opened or in any other situation where the cooling need in this specific cycle is higher than in the previous one.

The Smart Speed® feature

Smart Speed® is a programming option, with plug-in system for automatically self-adapting compressor speed to current thermal load in refrigerating appliances.

tips

VDE Compliance

Cubigel Compressors states that its products are designed, produced and VDE approved in compliance with the EN 60335-1 (sub clause 19.14). This sub clause requires a specific demanding test consisting in the start relay in short circuit with the compressor powered with the maximum nominal voltage. Under these conditions, the resulting temperatures have to become stabilized without any component damage (specifically, without any starting capacitor explosion).

New technical notes available at cubigel.com

You can download our Technical Notes from our website in the section Products · Technical Information · Technical Notes.

These technical notes will help you to have further information about our products, the advantage you will obtain and to have references of the results shown in our tests.

This technical documentation will regularly be updated. Now available the following ones:

- Technical Note NPT12FSC · R290 / -Technical Note NLY45LA · R290
- Technical Note GLY80RA · R134a / -Technical Note GLT80TDC · R134a