



# Unicomm Saves Energy and Costs with the New Solstice<sup>®</sup> ze Refrigeration Units of Frigoveneta

## WHO

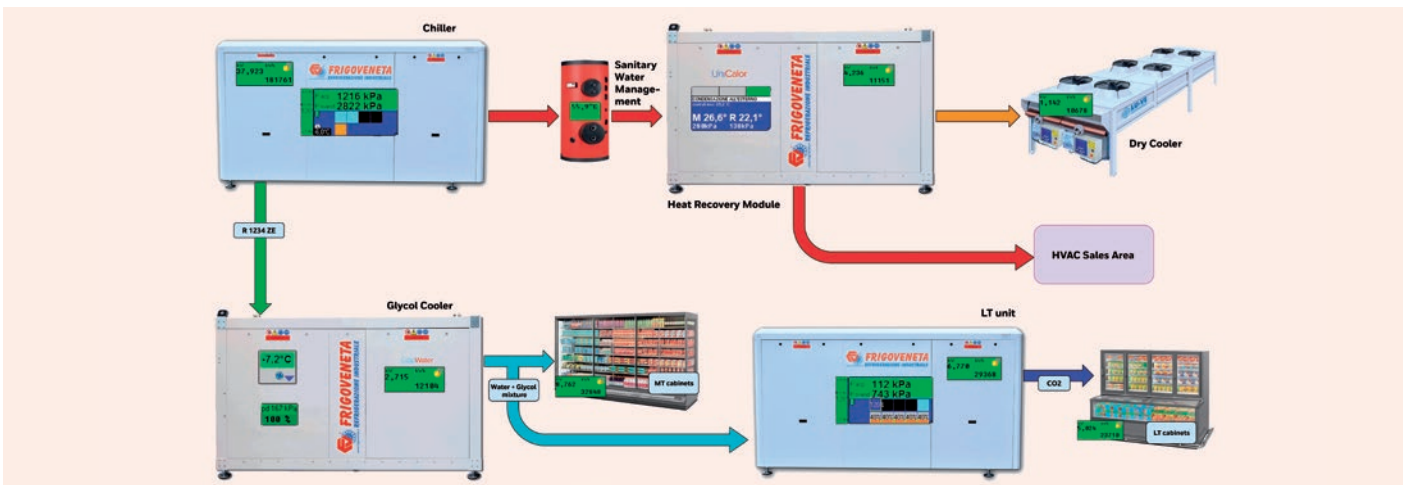
In collaboration with the consultancy company Alfa Projekt, Frigoveneta SPA installed new HFO-based refrigeration units at four new Famila and Mega brand stores owned by the Unicomm srl group.

## WHAT

The new, long-term solution is based on the use of ultra-low-GWP refrigerant Solstice<sup>®</sup> ze (R-1234ze) and is a competitive alternative to transcritical CO<sub>2</sub> systems.

## HOW

The system consists of a R-1234ze chiller that supplies the necessary refrigeration power to cool down a glycol-water mixture circulated to the medium-temperature cabinets. The charge of R-1234ze used for the stores is around 80 kg. The low-temperature unit uses CO<sub>2</sub> and cascades from the medium-temperature system, and is therefore in a subcritical cycle.



The average sales area of the Famila/Mega stores is approximately 3000 m<sup>2</sup> with an installed food refrigeration capacity as follows:

**Refrigeration capacity in medium-temperature = 180 kW**

**Refrigeration capacity in low-temperature = 40 kW**



### REGULATORY COMPLIANT

- Compliant with the long-term requirements of the F-Gas regulation: the refrigerant Solstice ze has a GWP of less than 1 and is not considered a greenhouse gas.



### SAFE

- Extremely low probability of leakage because the refrigerant is contained in the medium-temperature chiller.
- No high pressures in the store: the pressure in the medium-temperature system is around 2 bar, unlike in a CO<sub>2</sub> system where it is around 40 to 50 bar.



### ENERGY EFFICIENT

- Low energy consumption: the energy consumption for this type of system installed at this latitude is less than for a CO<sub>2</sub> system.
- Heat recovery: The costs for heating the store are reduced thanks to the total heat recovery system installed by Frigoveneta SPA, which recovers heat from the food refrigeration. The recovered heat is used for heating and sanitary hot water production for the store.
- Reduced energy costs: Frigoveneta SPA adjusted all the heating/air conditioning systems (e.g. heat pump, air handler, fan coil units, air heaters etc.) to provide optimal energy efficiency, and placed all lighting and power under the control of a single management system.



## Start Saving Energy With Solstice ze Today:

To learn more about the performance and the environmental benefits of Solstice ze refrigerant, contact your Honeywell representative or visit [www.honeywell-refrigerants.com/europe](http://www.honeywell-refrigerants.com/europe)



Solstice is a registered trademark of Honeywell International Inc.

#### For more information

[www.honeywell-refrigerants.com/europe](http://www.honeywell-refrigerants.com/europe)

#### Honeywell Belgium N.V.

Gaston Geenslaan 14  
3001 Heverlee, Belgium  
Phone: +32 16 391 212  
Fax: +32 16 391 371  
E-mail: [fluorines.europe@honeywell.com](mailto:fluorines.europe@honeywell.com)

Although Honeywell International Inc. believes that the information contained herein is accurate and reliable, it is presented without guarantee or responsibility of any kind and does not constitute any representation or warranty of Honeywell International Inc., either expressed or implied. A number of factors may affect the performance of any products used in conjunction with user's materials, such as other raw materials, application, formulation, environmental factors and manufacturing conditions among others, all of which must be taken into account by the user in producing or using the products. The user should not assume that all necessary data for the proper evaluation of these products are contained herein. Information provided herein does not relieve the user from the responsibility of carrying out its own tests and experiments, and the user assumes all risks and liabilities (including, but not limited to, risks relating to results, patent infringement, regulatory compliance and health, safety and environment) related to the use of the products and/or information contained herein.

FPR-037-2018-10-EN  
© 2018 Honeywell International Inc. All rights reserved.

**Honeywell**