

**BITZER SE**

Peter-Schaufler-Platz 1  
71065 Sindelfingen // Germany  
Tel +49 7031 932-0  
Fax +49 7031 932-147  
bitzer@bitzer.de // www.bitzer.de

Unser Zeichen // Our Ref.

Abs. // Sender  
Abt. // Dept.  
Tel Dw. // Ext.  
Fax Dw. // Ext.  
E-Mail

Stefanie Holst  
Public Relations  
+49 7031 932-4327  
+49 7031 932-54327  
stefanie.holst@bitzer.de

## **EuroShop 2023: Improve the efficiency and reliability of refrigeration systems with BITZER**

*Düsseldorf/Sindelfingen, 22 February 2023. The refrigeration, air conditioning and heat pump specialist BITZER will be at EuroShop 2023 in Düsseldorf from 26 February to 2 March, showcasing products and solutions relating to energy efficiency and low-GWP refrigerants at Stand D59 in Hall 17. There will be a focus on capacity control systems and intelligent components that can be used to fulfil efficiency and environmental requirements in refrigeration and air conditioning applications.*

Solutions for maximum efficiency in refrigeration and air conditioning systems are in high demand. Skyrocketing energy prices, a growing number of regulations worldwide and greater environmental awareness are forcing companies to change how they think about refrigeration systems. When it comes to refrigerant, the F-Gas Regulation is currently one of the most important sets of rules across the EU. The revision of the regulation could mean that the next far-reaching measures could come into force as soon as 2024. Shortly after, HFCs with a global warming potential (GWP) of more than ten could be unavailable for practically anything other than the maintenance of systems that are already installed – which is earlier than originally expected on the basis of the current regulation.

Demand for increasingly efficient components and solutions will continue to surge in the field of refrigeration and air conditioning. The interplay between components often holds potential here. With modified designs, new technologies, larger capacity ranges and even better capacity control for components, refrigeration and air conditioning systems will in future be more effectively equipped for various requirements worldwide and also operate more efficiently in part load conditions. BITZER – the refrigeration, air conditioning and heat pump specialist – offers innovative products which allow its



customers to meet the demand for greater sustainability. At EuroShop 2023, BITZER will also be showing how it supports its customers and partners with digital services for planning, monitoring and maintenance of components and systems – thus meeting the demand for more efficiency.

## **Energy-efficient and versatile: ECOLINE+ reciprocating compressor with VARISTEP capacity control**

The 4-cylinder ECOLINE+ reciprocating compressor for transcritical CO<sub>2</sub> applications. The compressors were developed with permanent magnet motors and therefore achieve a seasonal energy performance ratio (SEPR) of up to 14% higher (annual performance figure). Optimised for CO<sub>2</sub> (R744) as a natural refrigerant, they offer high refrigerating capacity with minimal energy requirements. The equipment with the OLM-IQ electronic oil level switch helps to maintain a stable oil level in the compressor and avoid a lack of oil. The optional VARISTEP mechanical capacity control increases the system's part load efficiency, for example with low outside temperatures. Alternatively, equipment with VARIPACK frequency inverters enables precise adjustment of the system to the particular cooling demand. The capacity range between 6 A and 480 A is closely graduated, and the frequency inverters are suitable for indoor and outdoor installation. The frequency inverters ensure a high degree of user-friendliness, reliability and energy efficiency. A VARIPACK retrofit or conversion to an ECOLINE+ compressor with VARISTEP can also prove beneficial to the system's total cooling capacity, even for smaller expansions or store conversions.

## **For wide capacity ranges – the 8-cylinder CO<sub>2</sub> reciprocating compressor**

The new ECOLINE 8-cylinder CO<sub>2</sub> reciprocating compressors provide high refrigerating capacity in large systems and heat pump applications, such as in food production. These will also be showcased at the BITZER stand (see the accompanying product profile for more information). The compressors are up to 10% more energy-efficient than smaller compressors currently available on the market. The new 8-cylinder CO<sub>2</sub> reciprocating compressors are also designed for operation with frequency inverters and are equipped as standard with VARISTEP mechanical capacity control for part load operation and start unloading. The integrated IQ module enables particularly simple system integration, operation and maintenance.

## **User-friendly and compact – expansion of ECOLITE condensing units**

BITZER is presenting a new addition to its range of condensing units with the ECOLITE LHL7E (see the accompanying product profile for more information). The design provides a wider capacity range of up to 24 kW in medium temperature application and up to 6 kW in low temperature application. Whether for kiosks, convenience stores or supermarkets – the low-sound and compact models from



the ECOLITE family offer flexibility for a variety of applications. The plug-and-play concept means that they are easy to install.

Semi-hermetic ECOLINE reciprocating compressors with VARISTEP mechanical capacity control provide efficient and reliable full and part load operation. The design of the condensing units focuses on aspects such as outdoor installation, low sound emissions and ensuring that all components are easy to access during maintenance. The LHL3E, LHL5E and LHL7E condensing units are approved for use with A1 refrigerants and for low-GWP refrigerants of the A2L safety group. They can therefore be used in a variety of both low and medium temperature applications across all climate zones – for example for cold stores at petrol station shops and fast-food restaurants. The option to easily integrate heat recovery also means that the system efficiency can be further increased and operating costs reduced.

## **Optimal support thanks to extensive BITZER digital service portfolio**

As well as supplying components for energy-efficient refrigeration and air conditioning systems, BITZER supports its customers and users with digital services, which will also be highlighted at this year's EuroShop. The BITZER Digital Network (BDN), for instance, is based on the compressor expertise at BITZER and creates a service infrastructure for efficient operation and high component availability. The myBITZER online platform enables users to view and analyse their compressors' operating data via the IQ modules. This makes it easy to find or prepare solutions remotely in the event of maintenance or a fault.

User-friendliness is also at the heart of the BITZER SOFTWARE when it comes to designing systems and selecting the right product from the BITZER portfolio. For example, it enables users to select technical data or performance tables with just a few clicks. The BEST SOFTWARE can also be used to operate the BITZER IQ products digitally. The software gives users an overview of the products' operating status. There is also the option to save data logs, which is useful when producing a history of commissioning, for troubleshooting and maintenance. The ePARTS spare parts software, the smarTube selection software for dry expansion evaporators, and other free services, tools and apps round off the digital service portfolio from the refrigeration, air conditioning and heat pump specialist.



BITZER is active all over the world as an independent specialist in refrigeration and air conditioning technology: with products and services for refrigeration, air conditioning, heat pumps, process cooling and transport, BITZER ensures optimum temperature conditions in goods trading, industrial processes and air conditioning – always in the context of maximum energy efficiency and quality. The BITZER Group is represented across the globe with distribution companies and production facilities at 72 locations in 38 countries. The BITZER production, development and sales association, including trading and service partners, operates in nearly every country around the world. In 2021, more than 3,900 employees generated sales of €928 million, with €47 million invested in research and development.

[www.bitzer.de](http://www.bitzer.de)

## Overview of images

Images may only be used for editorial purposes. This usage is free of charge if 'Photo: BITZER' is provided as the source and a free copy of the publication is sent to us. Images may not be modified or altered, except to crop out the background surrounding the main subject.



Image 1: Efficiency for supermarkets, discounters and more: the BITZER ECOLINE+ 4-cylinder CO<sub>2</sub> reciprocating compressor with IQ module, VARISTEP mechanical capacity control and OLM-IQ electronic oil level switch for a stable oil level in the compressor



Image 2: BITZER ECOLITE LHL7E condensing units: accessing all of the components is just as easy as commissioning the system with its plug-and-play concept



Image 3: Digital expertise: the BITZER Digital Network (BDN) makes it easy to analyse operating data and thus saves operating and maintenance costs