



ORIGINAL
MANUFACTURED EQUIPMENT

SEMI HERMETIC & OPEN DRIVE

PRODUCT RANGE

SINGLE & MULTIPLE COMPRESSOR UNITS

ORIGINAL MANUFACTURED EQUIPMENT



Watch BITZER video



THE COMPANIES



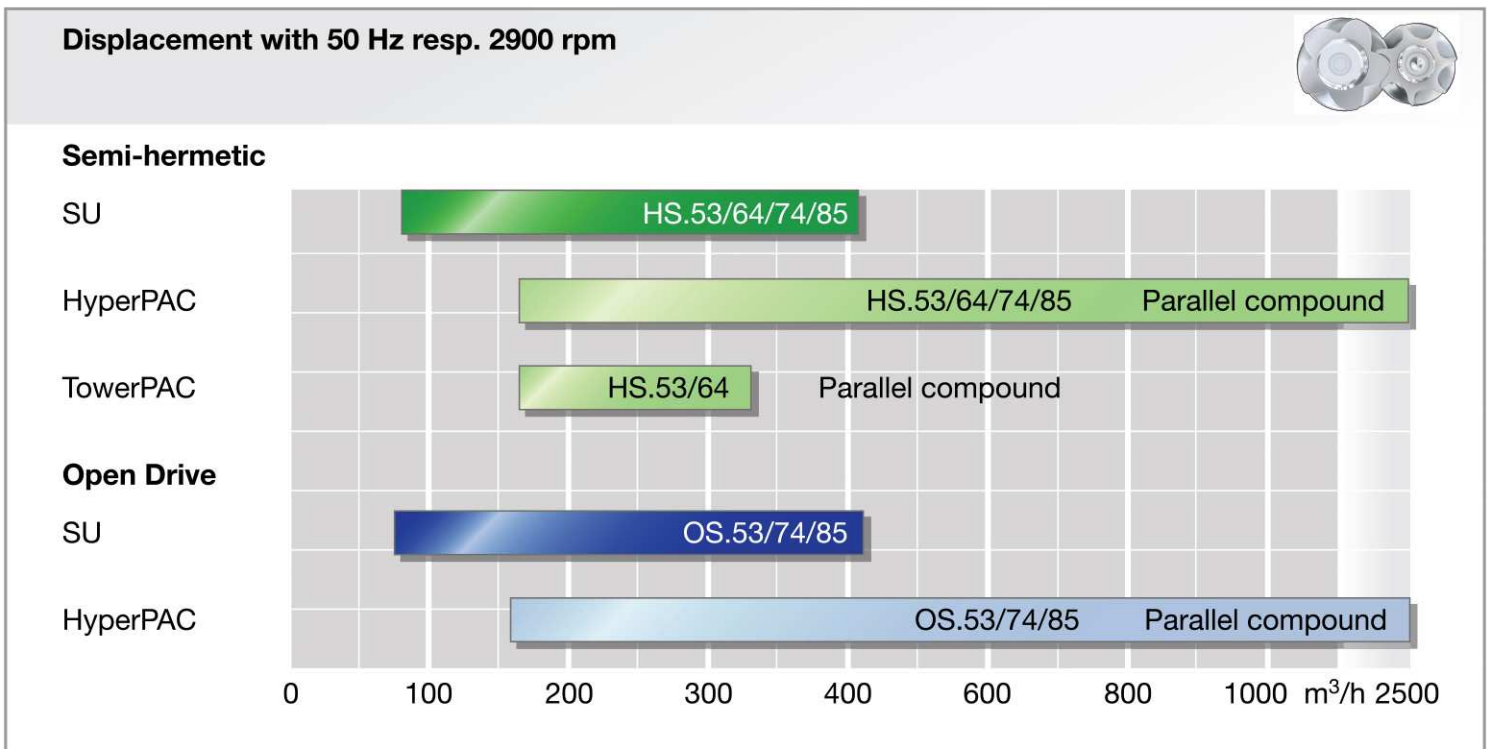
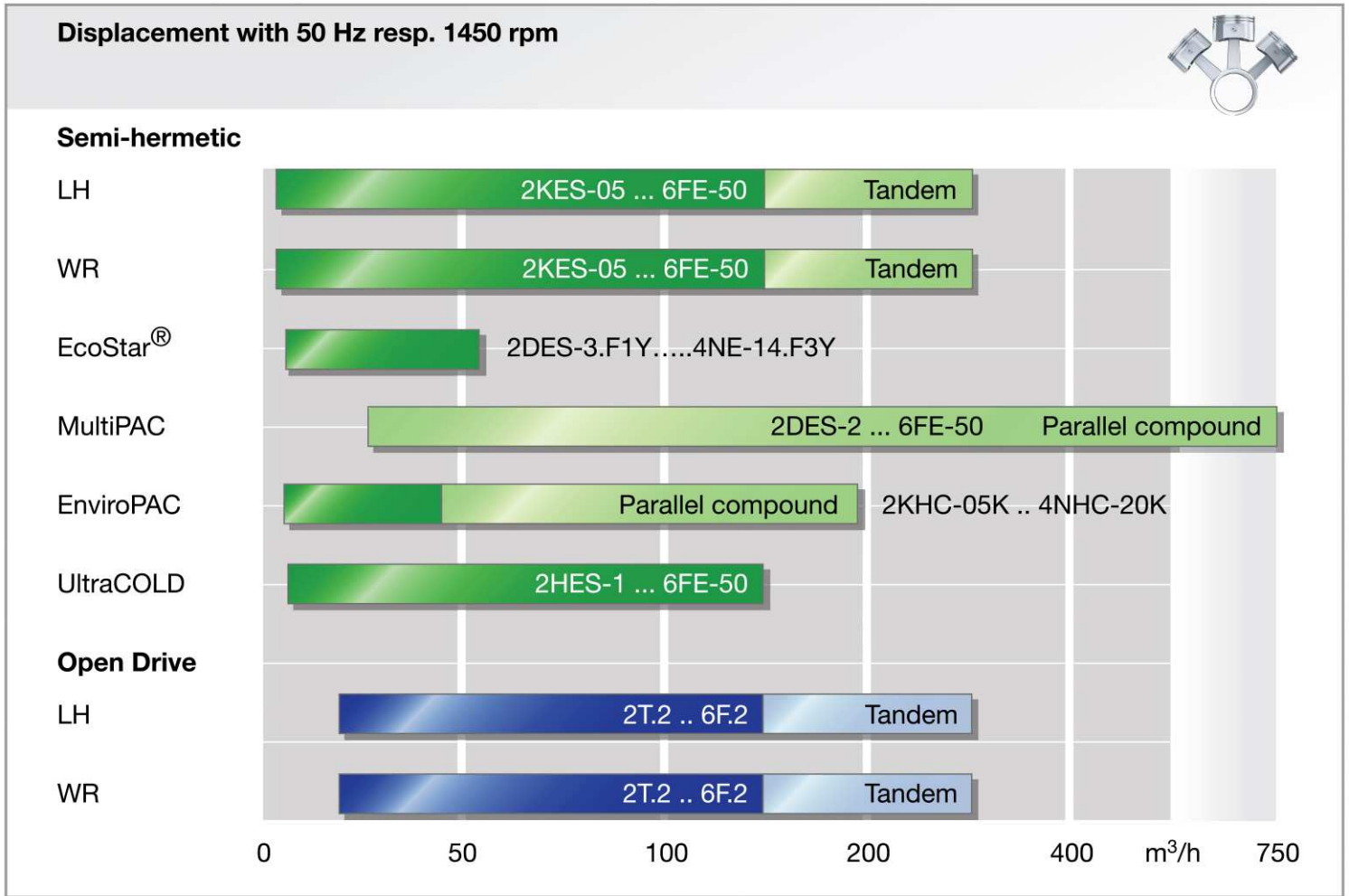
BITZER AVP Factories are manufacturing facilities, fully owned and operated by BITZER Group, for the engineering and production of BITZER Original Manufactured Equipments. Administration, Sales, Purchasing, Engineering and Production and Quality Control, all are managed in accordance with ISO9001 by well trained and professional people. BITZER AVP factories are the professional hub for refrigeration solution to any business.



BITZER's precision manufacturing capability is extended and applied to Added Value Products: order incoming, frame preparation, assembling, testing and packaging are all processes in BITZER AVP factories which are closely monitored and performed according to highest standard to deliver the customers the best products MADE BY BITZER.



APPLICATION RANGES

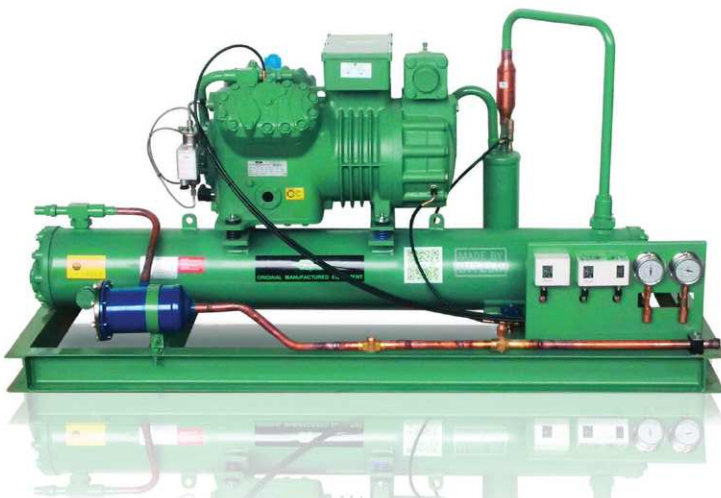


CONDENSING UNITS



LH Series: Air cooled condensing units – standard

The LH Series condensing unit offers the full range of open design air cooled units, including normal and high ambient versions. The robust design and large range of custom features makes this unit suitable for many applications. Condenser, fans and receiver are standard features. The LH units are available in semi hermetic and open drive configurations.



WR: Water cooled reciprocating unit

The WR is a flexible solution for small to medium water cooled applications. It incorporates the full range of BITZER reciprocating compressors including the tandem range. The WRU units are available with single and 2-stage compressors and are available in semi hermetic and open drive configurations. The unit includes the water cooled condenser and compressor as standard. Sea water resistant condensers are available on request.



SU Series: Single screw compressor unit WSU: Water cooled ASU : Air cooled

The SU series incorporates the semi hermetic screw compressor from BITZER. This unit has a huge range of applications including freezer rooms, cold storage, chiller, ship chillers, ice machines, connection to IQF, contact freezers and more. The unit includes the oil return system and water cooled or air cooled condenser as standard with many other options available. SU units are available in semi hermetic and open drive configurations.

MULTIPLE COMPRESSOR UNITS



MultiPAC Series: Multiple Reciprocating compressor unit

The MultiPAC series of parallel compressor systems offer high flexibility and large capacity range on a compact platform. The unit includes oil return system, suction header / accumulator, suction filters, oil filters and pressure controls as standard. This unit has many optional accessories available to suit the demands of most applications. The MultiPAC units are available in semi hermetic and open drive configurations.



HyperPAC Series: Multiple Screw compressor unit

The HyperPAC series of parallel compressor systems offer high flexibility and large capacity range on a compact platform. The unit includes oil return system, suction header / accumulator, suction filters, oil filters and pressure controls as standard. This unit has many optional accessories available to suit the demands of most applications. The HyperPAC units are available in semi hermetic and open drive configurations.

ENVIRONMENTAL UNITS



EnviroCOLD: CO2 cascade (sub-critical) packages

Since 2002 BITZER have been designing and building systems using R744 (CO2) in sub-critical cascade applications. This experience has taken the form of easy to install packaged cascade systems ready for installation. These natural refrigerant packages include compact footprints, energy efficient optimized design and comprehensive support, documentation and training.

IQ INTELLIGENT COMPRESSORS



EcoStar® : Frequency Inverter technology

The EcoStar is a premium refrigeration package. It features inverter technology to perfectly match your cooling demands and system performance. This technology has been proven for years in the air conditioning industry and now BITZER bring a standard range to refrigeration users. It will increase your energy efficiency resulting in smaller energy demands and cost savings. The sleek housing and quality finish will last for years to come. This is an investment in quality, reliability and energy savings.



iPac Series: Multiple reciprocating compressor unit with Varispeed compressor

The iPac unit in 2,3 and 4 compressors configurations, offer a compact, energy saving plug and play solution to be fit into any refrigeration application where otherwise a multiple condensing unit will be required. The iPac range is a further identification of the basic philosophy of the Added Value Products by BITZER. It incorporates all the high quality features of the well known and qualified MultiPacs semi-hermetic reciprocating compressor racks and at the same time it includes additional features characteristics of this new energy saving technology.

ENGINEERED UNITS



Marine units: single or multiple compressor packages for marine application

BITZER marine custom packages units can be engineered for marine applications and oil rigs. Condensing units or multiple compressor packages can be designed and manufactured followings each single project utilizing Bitzer components for this specific application.



UltraCOLD: -70°C Special low temperature applications

The UltraCOLD series cascade packages use R404A/R23 refrigerant. They are a comprehensive and ready to install system package including the electrical control box and control system for easy trouble free operation. Included is an expansion tank for off cycle, inter-stage stage heat exchanger, liquid receiver and other line components as generally required. Available as air cooled or water cooled systems. They can achieve room temperatures of -45°C to -70°C.

IQ PRODUCTS



CM-RC-01 Control Module

The CM-RC-01 compressor control module integrates the entire electronic periphery of the compressor. The CM-RC-01 monitors the essential operating parameters of the reciprocating compressors, motor and discharge gas temperature, oil supply and application limits. It protects the compressor from operation under critical conditions. The module provides virtually stepless control of the compressor depending on the capacity requirements of a superior system controller. It controls the capacity regulators, the compressor cooling, the oil heater and, if necessary, the start unloading and provides the voltage supply of the associated components. Moreover, it controls the activation and deactivation of the motor contactors during the start. Additional time relays are not required. The CM-RC-01 can be installed in BITZER reciprocating compressor in AVP units. Please contact our sales office for more information.



Varipack External Frequency Inverter

For easy and safe capacity control, BITZER VARIPACK series offers a new generation of intelligent frequency inverters that can be used with all BITZER reciprocating compressors. The new VARIPACK frequency inverter series were specially developed for refrigeration and operation of BITZER refrigeration compressors. The focus of the development was the easy use, the reliability and the high performance of the frequency inverters. They can be, for example, put into operation intuitively and perform control functions of the refrigeration system. The optimised adaptation to the current cooling demand of a system reduces energy consumption effectively and thus costs. The Screw Varipack can be intergrated into BITZER AVP units with semi hermetic reciprocating and HS screw compressors.



SE-i1 Protection Module

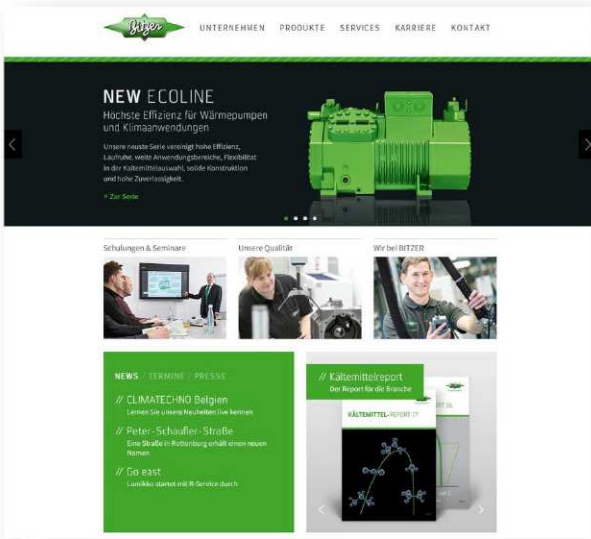
The protection device SE-i1 monitors the essential operating parameters of the semi-hermetic compact screw compressors (CS compressors) and semi-hermetic screw compressors (HS compressors) and protects the compressors from operation under critical conditions. It is able to log operating data and evaluate them via the integrated interface using the BEST software. The data are recorded and allow specific diagnosis and optimization of the compressor and system operation. In addition, the device can be fully integrated into the superior control via a Modbus RTU interface. Multistage warning and alarm system can be used to react to critical conditions to prevent compressor shut off.



CR11 Intelligent Capacity Regulator

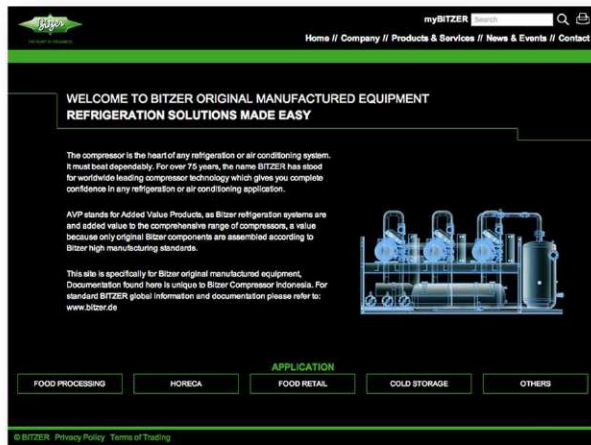
The CR11 system is designed for the special requirements of intelligent system controls. This enables higher cycling frequency of capacity control. The CR11 system is optionally available as an accessory for the new generation of ECOLINE compressors. This is the advanced version of the well-proven BITZER capacity control (CR) based on blocked suction has been optimised for a high cycling frequency and extended on a broad part load range in order to increase the efficiency and control quality of the system in this way.

WEB SUPPORT



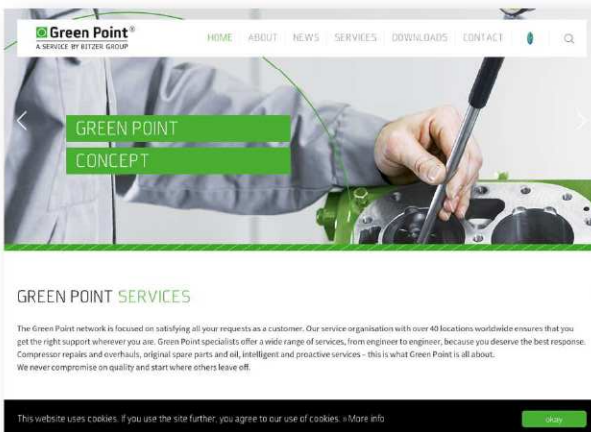
BITZER Website

The BITZER website (www.bitzer.de) is more than just another internet site. The philosophy at BITZER which is to share freely the information on its production and applications to support its consumers faster and better. The site provides direct access to the most used documents and information. The site also features links to regional home pages to keep customers close and updated on important events.



AVP Website

The all new BITZER AVP website (www.bitzeravp.com) is reflecting corporate philosophy at BITZER which is to share freely the information on its production of BITZER ORIGINAL MANUFACTURED EQUIPMENT and applications to support its consumers faster and better. The site provides direct access to the most used documents and information. The site also features a news area to keep customers close and updated on important events.



Green Point Website

Green Point Services are an added value to BITZER ORIGINAL MANUFACTURED EQUIPMENTS. The Green Point growing Network in Asia is covering every market where BITZER AVPs are in service, assuring the customer a peace of mind solution in case of compressor breakdown. Green Point will provide a report and quotation through an inspection and then repair the compressor or overhaul using only BITZER original spare parts. Top of the quality service by BITZER for global BITZER quality.

BITZER SOFTWARE SUPPORT



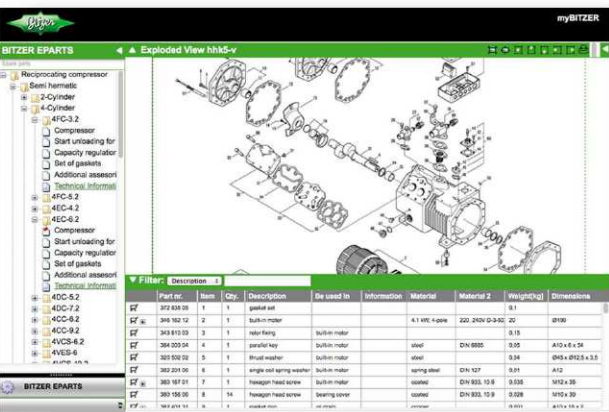
BITZER Software

Fast, simple and accurate selection of BITZER products is possible with the BITZER software. It includes current and former model for both new selections and service requirements. Besides the performance data for individual operating conditions of all common refrigerants, performance tables, polynomial data according to ARI510 and EN12900 and technical data are available as well.



BITZER Web Software

Convenient and smart – it is now even easier to choose the right compressor: BITZER has recently launched a complementary, web-based version of its established layout software. The advantages: cross- system operation on any browser and always adapted to the latest state of technology, thus making tedious updates superfluous. Moreover, the program runs on all popular smartphones and tablets.



eP@rts Software

This interactive spare parts identification and selection tool is a milestone in the refrigeration business. Its clear interface and content are a tribute to BITZER'S continued dedication to customer service tools.



CERTIFICATIONS AND QUALITY



Consistent BITZER Quality Worldwide

Maximum reliability is called for in every application of refrigeration. BITZER complies with ISO9001 for consistent quality in all steps of product life. In addition the factories in Rottenburg and Schkeuditz (both Germany) and Castelo Branco (Portugal) fulfil the environmental certifications according to EN ISO 14001 and EMAS. That means the same production and quality control methods are incorporated world wide including helium leak test and running test of all produced compressors. ASERCOM certification gives customer confidence in documented performance data of real market compressors.



BITZER AVP Factories Quality Standards

BITZER Original Manufactured Equipment Factories follow BITZER standards and quality control procedures, complies with ISO9001 for consistent quality in all stages of production. For all manufacturing facilities worldwide the quality standard “made by BITZER” is valid. BITZER quality has no compromise.



BITZER ORIGINAL MANUFACTURED EQUIPMENT Guarantee

All AVP units produced by BITZER AVP Factories will have a QR Code which can be scanned by any mobile device and will connect to a world of services online but most importantly will give the guarantee to the customer that they have purchased ORIGINAL MANUFACTURED EQUIPMENT made by BITZER.

The compressor integrated the AVP product also has its own QR Code for verification of the compressor authentication through model and serial number comparison.