

HEAT PUMPS

DECARBONISED HEATING ON SOLID GROUNDS

Bitzer



BITZER EXPERTISE AND INNOVATION



AIR CONDITIONING



HEAT PUMPS



REFRIGERATION



PROCESS COOLING



TRANSPORT



We are always striving for the highest possible energy efficiency and quality at BITZER. As an independent global leader in refrigeration, air conditioning and heat pump technology for comfort air conditioning, process technology and mobile applications, we use our extensive experience to provide innovative products and intelligent solutions which create additional value for our partners and the environment all over the world. Learn more at bitzer.de



INNOVATION
DRIVER SINCE
1934

EMPLOYEES
4,500

SITES
74

COUNTRIES
40

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In heat pumps, BITZER compressors demonstrate their strengths reliably. Whether in floor heating, sanitary facilities and swimming pools, or in industrial processes, customers will find suitable products for every application.

SETTING THE RIGHT TEMPERATURE: EFFICIENT SOLUTIONS FOR BUILDINGS AND INDUSTRY.



Be it in a low-temperature range (around 25°C to 45°C), medium-temperature application (around 45°C to 80°C) or high-temperature system (over 80°C), heat pumps with BITZER components always deliver outstanding efficiency and capacity.

LOW TEMPERATURE

Low-temperature heat pumps operate with flow temperatures of 30°C to 35°C and ensure comfort and a pleasant atmosphere, especially in under-floor heating and concrete core activation. They are distinguished by their high energy efficiency and low operating costs.

MEDIUM TEMPERATURE

Medium-temperature heat pumps deliver flow temperatures of around 45°C to 65°C and the highest possible energy efficiency. They provide a reliable supply of hot water for a variety of applications, including showers, cleaning and bathrooms. They are also increasingly used in radiator-based heating systems, making them a suitable choice for renovation and retrofit projects.

HIGH TEMPERATURE

High-temperature heat pumps (over 80°C) are used in industrial processes, such as the pulp and paper, food, chemical and textile industries. The maximum temperature range (over 100°C) involves other industrial applications such as drying processes and the generation of steam for a number of processes including boiling, sterilisation and pasteurisation.

TECHNICAL HEAT PUMP DESIGNS

- // Air-to-air heat pump
- // Air-to-water heat pump
- // Water-to-water heat pump
- // Brine/water heat pump
- // Refrigeration system with heat recovery
- // Reversible liquid chiller (cooling or heating)
- // Heat pump with cooling function (4-pipe system)



**WHATEVER THE DESIGN, BITZER
CAN SUPPLY THE RIGHT
COMPRESSORS AND FURTHER
COMPONENTS FOR YOUR HEAT PUMP.**

READY FOR FUTURE REFRIGERANTS

The accelerated phase down or final phase out of fluorinated refrigerants requires a new way of thinking about the refrigeration, air conditioning and heat pump industry worldwide. In Europe, the F-Gas Regulation 2024/573 is a key factor in this process.

In order to ensure long-term availability, particular attention must be paid to minimising the environmental impact when selecting the refrigerant. The importance of natural refrigerants in particular is increasing.

Future-proof refrigerants include, among others:

- // Carbon dioxide (R744)
- // Hydrocarbons such as propane (R290) and isobutane (R600a)
- // Ammonia (R717)



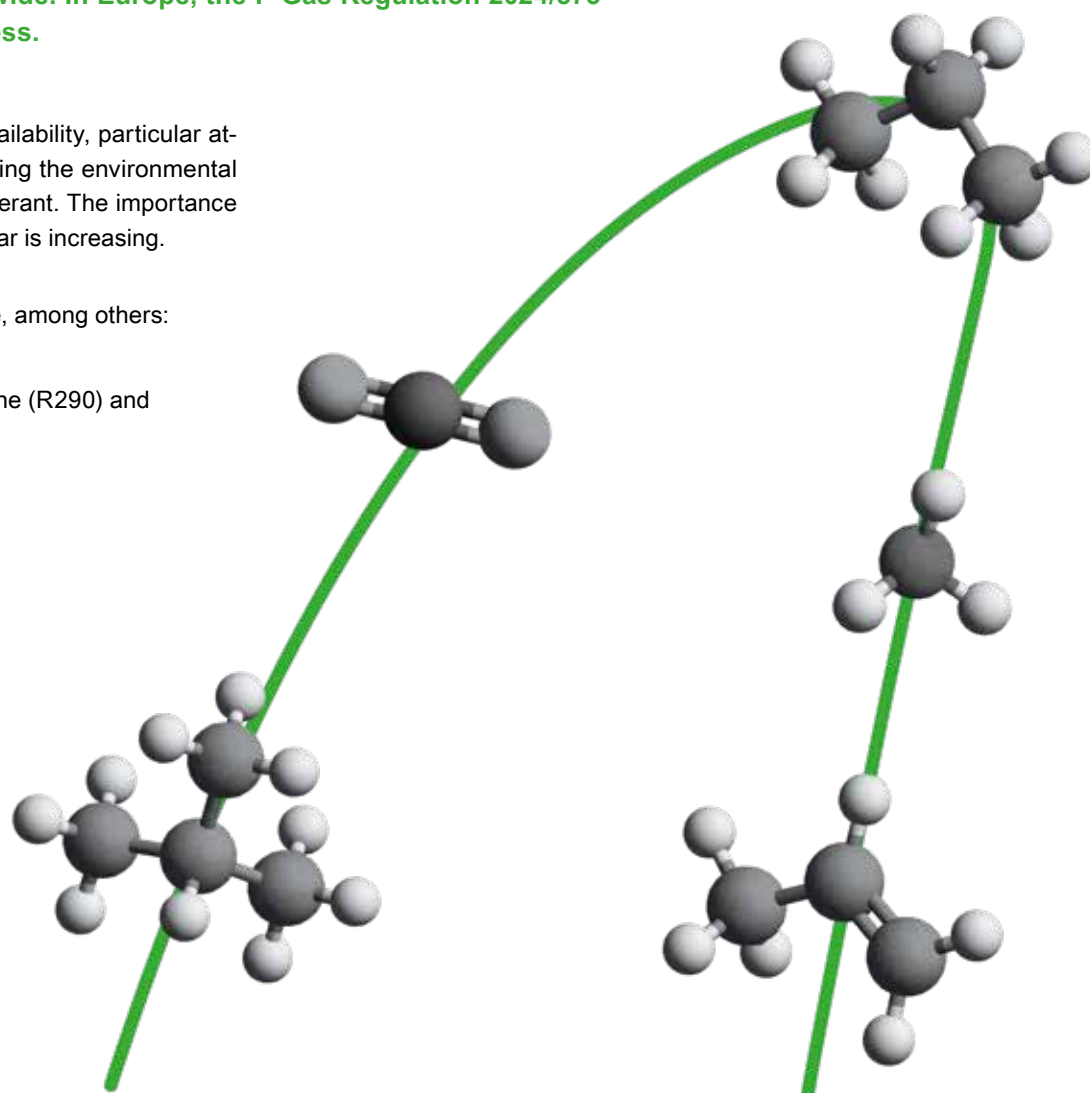
CO₂



HYDROCARBON



NH₃



OPT FOR REFRIGERANTS WITH LONG-TERM AVAILABILITY

For new installations in the EU for all applications, it is strongly recommended to design and construct them in such a way that they can be operated with refrigerants that are available in the long term – preferably natural refrigerants. If the use of natural refrigerants is not possible – for example, for technical reasons – new systems in the EU should ideally resort to a refrigerant with

a GWP of <10. If refrigerants with a higher global warming potential are absolutely necessary, a GWP value below 150 should be the limit, taking into account the phase-down steps after 2030. For existing systems with high maintenance requirements or refrigerant loss, it is advisable from an economic point of view to switch to refrigerants with the lowest possible GWP value.

EXPERTISE FOR PRACTICAL APPLICATIONS

BITZER has many years of experience in the use of natural refrigerants in its products and continues to develop its portfolio in that direction. With practical training courses at the SCHAUFLEER Academy and further sources of information such as the digital Refrigerant Report, BITZER also helps its customers to use natural refrigerants safely.



DIGITAL AND ALWAYS UP TO DATE: BITZER REFRIGERANT REPORT

The BITZER Refrigerant Report has served as a reliable industry reference since 1992 and contains extensive information on various refrigerants, comparisons of their substance property data, and concrete recommendations for new and existing systems. The Refrigerant Report is available exclusively online and therefore always up to date in terms of regulations and requirements.

bitzer-refrigerantreport.com



BITZER
Refrigerant Report



LEARN MORE:
REFRIGERANTS ONLINE

HEAT PUMP COMPONENTS: OVERVIEW BY TEMPERATURE RANGE

Unlocking the heat pump market means partnering with BITZER: we offer serial components for condensing temperatures of up to +125 °C, covering a wide range of fluid temperatures and refrigerants. They enable efficient, reliable heat supply, support the transition to sustainable energy systems and strengthen security of supply. Our matrix shows you the products currently available in our portfolio.

For commercial, industrial and district heating applications.
50 kW to 10 MW (170 to 34000 MBtu/h)

	Low-GWP refrigerants		Natural refrigerants			
Fluid temperature	 HFO  HFC	 R290	 R600a	 R600/R601a	 CO ₂	 NH ₃
< +65 °C < +149 °F	ECOLINE H series SDT up to +95 °C/203 °F CS series SDT up to +93 °C/199 °F ORBIT series SDT up to +65 °C/149 °F SQD EVAPORATOR series Supply up to +65 °C/149 °F KE CONDENSER series Supply up to +90 °C/194 °F	ECOLINE PRO series SDT up to +75 °C/167 °F CS PRO series SDT up to +70 °C/158 °F ORBIT PRO series SDT up to +80 °C/176 °F SQD EVAPORATOR series Supply up to +65 °C/149 °F KE CONDENSER series Supply up to +86 °C/187 °F	ECOLINE PRO series SDT up to +110 °C/230 °F CS PRO series SDT up to +100 °C/212 °F SQD EVAPORATOR series Supply up to +65 °C/149 °F or +90 °C/194 °F KE CONDENSER series Supply up to +90 °C/194 °F	ECOLINE PRO series* SDT up to +125 °C/257 °F CS PRO series* SQD EVAPORATOR series Supply up to +65 °C/149 °F or +90 °C/194 °F KE CONDENSER series Supply up to +90 °C/194 °F	ECOLINE CO₂ series Supply up to +90 °C/194 °F ECOLINE+ series Supply up to +90 °C/194 °F GK GAS COOLER series Supply up to +90 °C/194 °F	W/A SERIES SDT up to +55 °C / 131 °F OS.A series SDT up to +60 °C/140 °F / +65 °C/149 °F KE CONDENSER series Supply up to +75 °C/167 °F
> +65 °C.. < +95 °C > +150 °F.. < +205 °F	ECOLINE H series SDT up to +95 °C/203 °F CS series SDT up to +93 °C/199 °F SQD EVAPORATOR series Supply up to +90 °C/194 °F KE CONDENSER series Supply up to +90 °C/194 °F	ECOLINE PRO series SDT up to +75 °C/167 °F ORBIT PRO series SDT up to +80 °C/176 °F KE CONDENSER series Supply up to +86 °C/187 °F	ECOLINE PRO series SDT up to +110 °C/230 °F CS PRO series SDT up to +100 °C/212 °F SQD EVAPORATOR series Supply up to +90 °C/194 °F KE CONDENSER series Supply up to +90 °C/194 °F	ECOLINE PRO series* SDT up to +125 °C/257 °F CS PRO series* SQD EVAPORATOR series Supply up to +90 °C/194 °F KE CONDENSER series Supply up to +90 °C/194 °F	ECOLINE CO₂ series Supply up to +90 °C/194 °F ECOLINE+ series Supply up to +90 °C/194 °F GK GAS COOLER series Supply up to +90 °C/194 °F	
> +95 °C.. < +120 °C > +205 °F.. < +250 °F	CSH2T series SDT up to +125 °C/257 °F ECOLINE H series* SDT up to +125 °C/257 °F KE CONDENSER series Supply up to +130 °C/266 °F		ECOLINE PRO series SDT up to +110 °C/230 °F KE CONDENSER series Supply up to +105 °C/221 °F	ECOLINE PRO series* SDT up to +125 °C/257 °F KE CONDENSER series Supply up to +115 °C/239 °F		
Our products are designed to be compatible and can be expanded with electronic components.						

*on request. For more information, please visit www.bitzer.de

SDT: saturated discharge temperature



Further details can be found in the BITZER SOFTWARE.



LOW TEMPERATURE

50 kW to 10 MW (170 bis 34.000 MBtu/h)

Fluid temperature	Low-GWP refrigerants		Natural refrigerants			
	HFO HFC	R290	R600a	R600/R601a	CO ₂	NH ₃
	ECOLINE H series SDT up to +95 °C/203 °F 	ECOLINE PRO series SDT up to +75 °C/167 °F 	ECOLINE PRO series SDT up to +110 °C/230 °F 	ECOLINE PRO series* SDT up to +125 °C/257 °F 	ECOLINE CO₂ series Supply up to +90 °C/194 °F 	W/A SERIES SDT up to +55 °C/131 °F
	CS series SDT up to +93 °C/199 °F 	CS PRO series SDT up to +70 °C/158 °F 	CS PRO series SDT up to +100 °C/212 °F 	CS PRO series* 	ECOLINE+ series Supply up to +90 °C/194 °F 	OS.A series SDT up to +60 °C/ 140 °F / +65 °C/149 °F
	ORBIT series SDT up to +65 °C/149 °F 	ORBIT PRO series SDT up to +80 °C/176 °F 			GK GAS COOLER series Supply up to +90 °C/194 °F 	
	SQD EVAPORATOR series Supply up to +65 °C/149 °F 	SQD EVAPORATOR series Supply up to +65 °C/149 °F 	SQD EVAPORATOR series Supply up to +65 °C/149 °F or +90 °C/194 °F 	SQD EVAPORATOR series Supply up to +65 °C/149 °F or +90 °C/194 °F 		
	KE CONDENSER series Supply up to +90 °C/194 °F 	KE CONDENSER series Supply up to +86 °C/187 °F 	KE CONDENSER series Supply up to +90 °C/194 °F 	KE CONDENSER series Supply up to +90 °C/194 °F 		KE CONDENSER series Supply up to +75 °C/167 °F

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SDT: saturated discharge temperature



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BITZER SOFTWARE

MEDIUM TEMPERATURE

50 kW to 10 MW (170 bis 34.000 MBtu/h)

Fluid temperature	Low-GWP refrigerants		Natural refrigerants			
	HFO HFC	R290	R600a	R600/R601a	CO ₂	NH ₃
	ECOLINE H series SDT up to +95 °C/203 °F 	ECOLINE PRO series SDT up to +75 °C/167 °F 	ECOLINE PRO series SDT up to +110 °C/230 °F 	ECOLINE PRO series* SDT up to +125 °C/257 °F 	ECOLINE CO₂ series Supply up to +90 °C/194 °F 	
	CS series SDT up to +93 °C/199 °F 		CS PRO series SDT up to +100 °C/212 °F 	CS PRO series* 	ECOLINE+ series Supply up to +90 °C/194 °F 	
		ORBIT PRO series SDT up to +80 °C/176 °F 			GK GAS COOLER series Supply up to +90 °C/194 °F 	
	SQD EVAPORATOR series Supply up to +90 °C/194 °F 		SQD EVAPORATOR series Supply up to +90 °C/194 °F 	SQD EVAPORATOR series Supply up to +65 °C/149 °F or +90 °C/194 °F 		
	KE CONDENSER series Supply up to +90 °C/194 °F 	KE CONDENSER series Supply up to +86 °C/187 °F 	KE CONDENSER series Supply up to +90 °C/194 °F 	KE CONDENSER series Supply up to +90 °C/194 °F 		

Our products are designed to be compatible and can be expanded with electronic components.

*on request. For more information, please visit www.bitzer.de

SDT: Saturated discharge temperature



Further details can be found in the BITZER SOFTWARE.

BITZER SOFTWARE

HIGH TEMPERATURE

50 kW to 10 MW (170 bis 34.000 MBtu/h)

Fluid temperature

>+95 °C..
<+120 °C
>+203 °F.. <+248 °F

HIGH TEMPERATURE

Low-GWP refrigerants	Natural refrigerants				
HFO HFC	R290	R600a	R600/R601a	CO ₂	NH ₃
ECOLINE H series* SDT up to +125 °C/257 °F		ECOLINE PRO series SDT up to +110 °C/230 °F	ECOLINE PRO series* SDT up to +125 °C/257 °F		
CSH2T series SDT up to +125 °C/257 °F					
KE CONDENSER series Supply up to +130 °C/266 °F		KE CONDENSER series Supply up to +105 °C/221 °F	KE CONDENSER series Supply up to +115 °C/239 °F		
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SDT: Saturated Discharge Temperature



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GREEN COMPETENCE

BITZER expertise goes beyond just the products: we focus on our customers and their challenges. We aim to pass on our knowledge and provide guidance and instruction – to secure investments and equip our customers and partners in industry for the future. In addition to various digital solutions, we also offer in-person consultations and training.

LOCAL ROOTS – GLOBAL PRESENCE



Find your nearest BITZER location and get in touch.

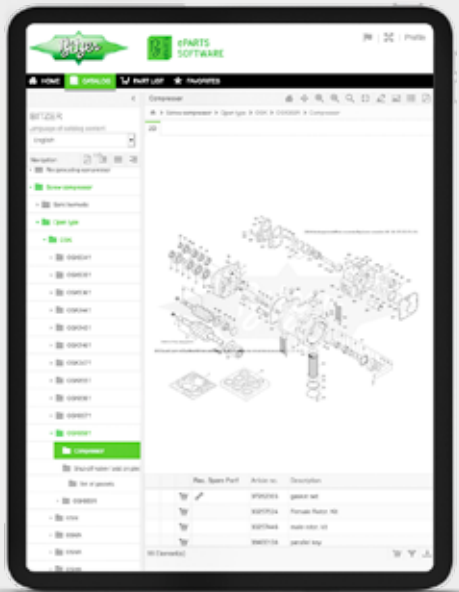
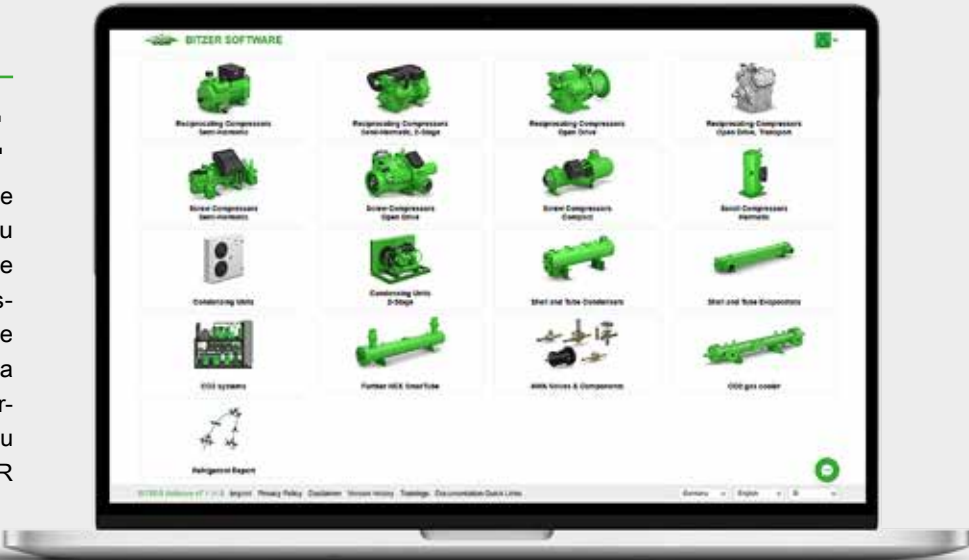


The BITZER Group is represented across the globe with distribution companies and production facilities at 74 locations in 40 countries. Find your dedicated contact partner and nearest BITZER location by clicking on the map or using the search feature on our website. You can reach out to your contact partner at any time.

BITZER TOOLS

BITZER SOFTWARE

Wherever you are and no matter what device you use, BITZER SOFTWARE helps you make the right selection from our extensive and flexible range of products and accessories. You can also find technical data here and quickly calculate the performance data for compressors and components. Furthermore, the AI agent HERMANN supports you with all questions about the BITZER portfolio.



ePARTS SOFTWARE

Our free tool makes finding the appropriate spare parts for our products fast and easy. They are listed by series and displayed as simple, enlargeable exploded drawings.

BEST APP AND BEST SOFTWARE

BEST provides complete access to all operating data and parameters. Its intuitive user interface shows a complete overview of the operating status, including a data log for easy commissioning and maintenance.



FIND ADDED VALUE:



DIGITAL TOOLS IN ONE PLACE



The central customer platform for product and technical information

- // Access to all BITZER software tools via single sign-on (SSO)
- // Delivery times and spare parts data at a glance
- // Advanced system management and real-time monitoring
- // Secure and flexible user management



Easy access to valuable digital services

- // Complete product information
- // Maintenance tracking
- // Operation report
- // Real-time data
- // Notifications
- // Flexible access rights

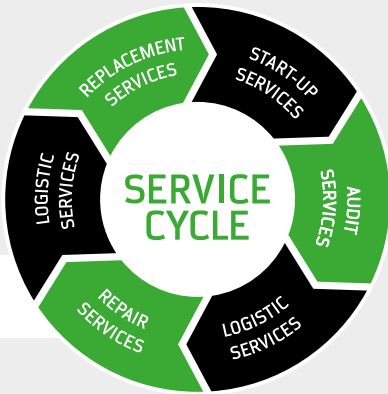


BITZER GLOBAL SERVICE NETWORK

Local support to global standards: GREEN POINT offers services at 54 locations, covering the entire life cycle of our components.

In addition, 40 AUTHORISED SERVICE CENTRES ensure that you receive qualified support worldwide.

With eight sites, the MARINE SERVICE NETWORK guarantees fast and reliable support near major ports, whilst authorised spare parts and oil dealers supply you with original spare parts and oils quickly all over the world.



Green Point®
A SERVICE BY BITZER GROUP



ORIGINAL IS KEY



BITZER ORIGINAL SPARE PARTS

- // Ensure that the compressor remains operational and, above all, runs as intended – stably, reliably, efficiently and with minimal wear
- // Guarantee precise fits, high-quality materials and correct tolerances
- // Maintain energy efficiency
- // Prevent premature wear and consequential damage

BITZER ORIGINAL OILS

- // Are precisely tailored to the compressor, refrigerant and operating conditions
- // Contain specially developed additives for optimum lubrication
- // Provide reliable protection against wear – even under varying loads
- // Ensure long-term performance with minimal energy consumption

SCHAUFLEER ACADEMY

The SCHAUFLEER Academy, the international seminar and training centre of BITZER, provides seminars and training on topics such as heat pumps, refrigeration, air conditioning and natural refrigerants. Our training courses are intended for project engineers and specialist planners as well as maintenance and installation specialists.



At the SCHAUFLEER Academy, small groups study theoretical scenarios and carry out practical exercises on realistic systems. Through it all, experienced trainers from our Application Engineering team are on hand to answer any questions you might have. We look forward to seeing you there!



Training and knowledge exchange take centre stage here, and it is our mission to supply you with information about the applications and our products, as well as provide useful tools and basic knowledge. In situations where we cannot offer in-person training, we bring some of our content to your home or office in the form of webinars.



**VISIT US ONLINE
AND BOOK YOUR TRAINING.**

CLOSER TO YOU. BITZER WORLDWIDE SALES
AND SERVICE EXCELLENCE.



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