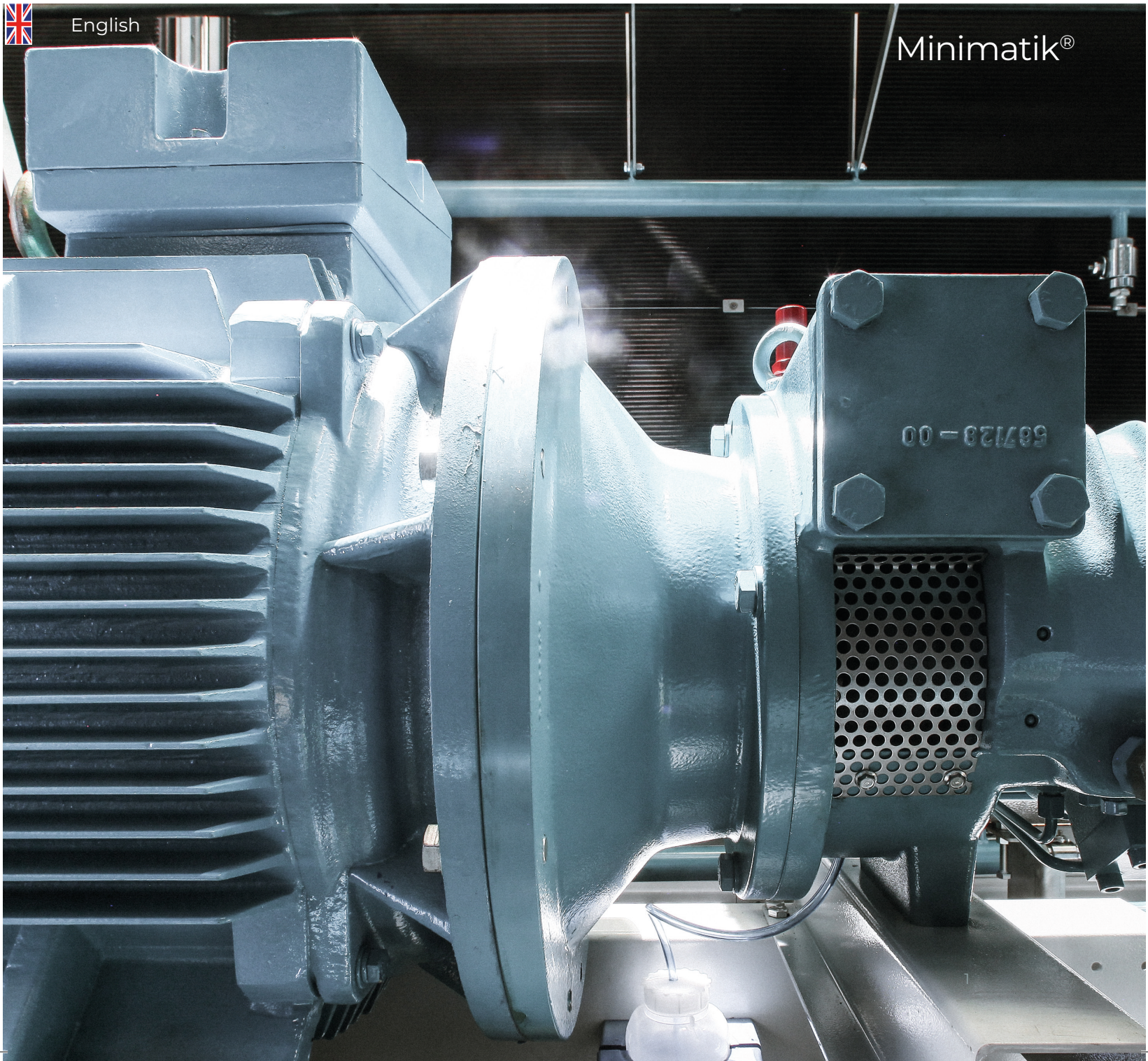


zudek



English

Minimatik®

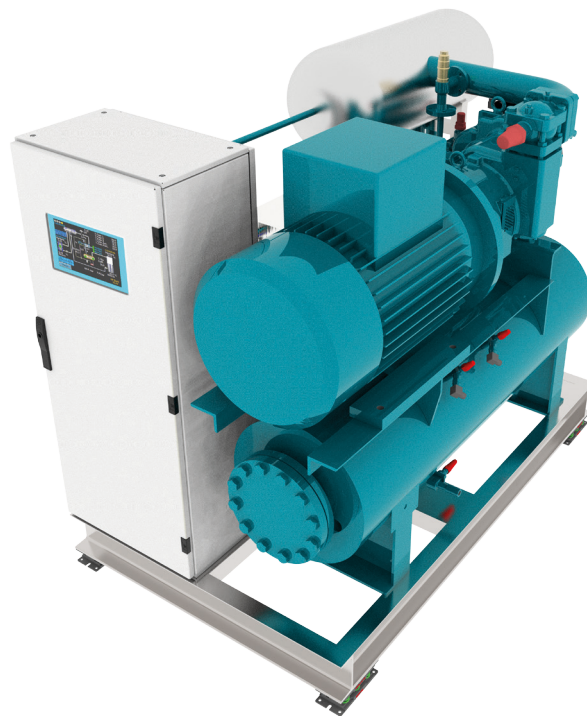


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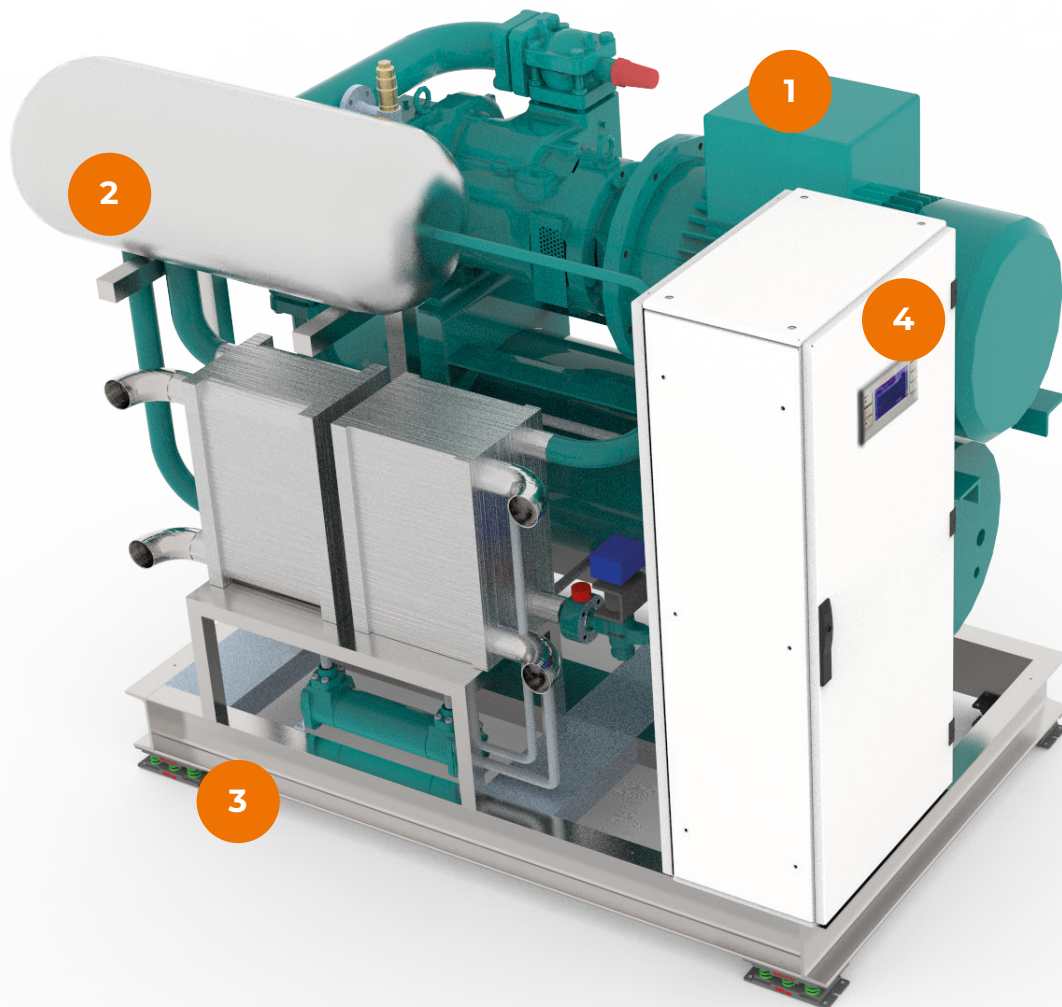
Minimatik®: from 30 to 500 kW of cooling capacity

We've made compact, efficient ammonia chillers since 1993:

- Ammonia is now the most efficient and safest natural refrigerant on the market.
- Our **Minimatik®** chillers contain extremely low loads of ammonia.
- Thanks to our experience and technological progress, we have added to our products range a new line of low-power ammonia chillers that achieve performance in energy, safety and reliability comparable to industrial machines.
- Management and maintenance of these chillers is economical and risk-free, but most of all simple, easy and self-diagnosing.



Minimatik[®]: advantages



Designed for various refrigerated fluid temperatures:

- water 15°C / 10°C
- water 12°C / 7°C
- water 5°C / 0,5°C
- water/glycol -5°C / -10°C
- water/glycol -15°C / -20°C
- water/glycol -25°C / -30°C
- These are available with plate condensers cooled by well water, tower condensers, or a closed-circuit type for dry coolers containing glycol, and we can also provide air cooling with remote-controlled or integrated **Windmatik®**
- All our chillers are completely built and tested at full load in our factory in Trieste with guaranteed certificates of performance testing
- **Telematik®** technology for remote control. Operating diagnosis and telemetry are included with all our chillers
- Inverters are used to drive the compressor, the pump fans for the chilled fluid and the condensation pumps
- The evaporator is flooded
- Automatic oil return system from the evaporator to the separator
- Chiller self-diagnostics for all states and operating parameters

- 1** small and compact
- 2** low refrigerant load
- 3** simple maintenance
- 4** remote assistance

Minimatik®: power levels

screw compressor

water 15°C/10°C						
	S1	S2	S3	S4	S5	S6
cooling power	110kW	135kW	160kW	290kW	325kW	345kW
EER	4,05	4,05	4,05	4,56	4,31	4,26

water 12°C/7°C								
	S1	S2	S3	S4	S5	S6	S7	S8
cooling power	110kW	120kW	140kW	245kW	285kW	310kW	430kW	520kW
EER	3,77	3,76	3,77	3,79	3,86	3,90	3,92	4,21

chilled water 5°C/0,5°C						
	S1	S2	S3	S4	S5	S6
cooling power	85kW	100kW	120kW	220kW	245kW	270kW
EER	3,39	3,40	3,40	3,50	3,40	3,46

water/glycol -5°C/-10°C								
	S1	S2	S3	S4	S5	S6	S7	S8
cooling power	45kW	60kW	70kW	120kW	140kW	155kW	195kW	260kW
EER	2,32	2,29	2,28	2,26	2,34	2,38	2,05	2,42

water/glycol -15°C/-20°C					
	S1	S2	S3	S4	S5
cooling power	35kW	45kW	75kW	85kW	95kW
EER	1,73	1,73	1,56	1,68	1,75

water/glycol -25°C/-30°C					
	S1	S2	S3	S4	S5
cooling power	20kW	25kW	40kW	45kW	50kW
EER	1,21	1,21	0,96	1,05	1,10

piston compressor

water 15°C/10°C								
	R1	R2	R3	R4	R5	R6	R7	R8
cooling power	45kW	55 kW	65kW	90kW	105kW	135kW	155kW	190kW
EER	4,05	4,05	4,05	4,56	4,31	4,26	4,82	4,82

water 12°C/7°C								
	R1	R2	R3	R4	R5	R6	R7	R8
cooling power	40kW	55kW	65kW	90kW	90kW	120kW	135kW	165kW
EER	4,24	4,27	4,28	4,35	4,34	4,35	4,34	4,34

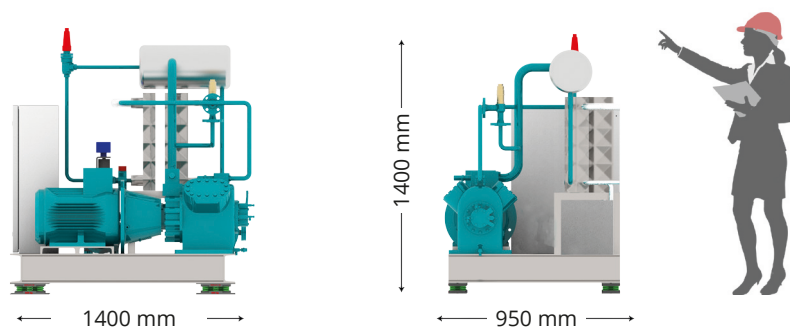
chilled water 5°C/0,5°C								
	R1	R2	R3	R4	R5	R6	R7	R8
cooling power	30kW	40kW	50kW	65kW	75kW	100kW	110kW	135kW
EER	3,70	3,73	3,73	3,79	3,78	3,79	3,79	3,79

Minimatik®: sizes

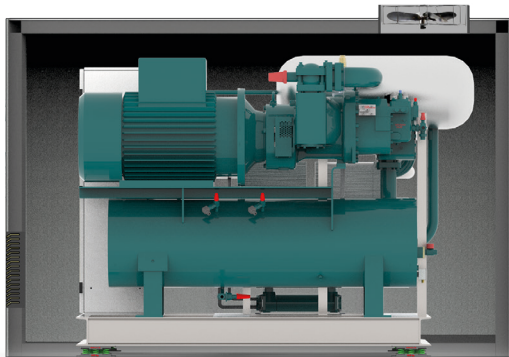
screw compressor



piston compressor

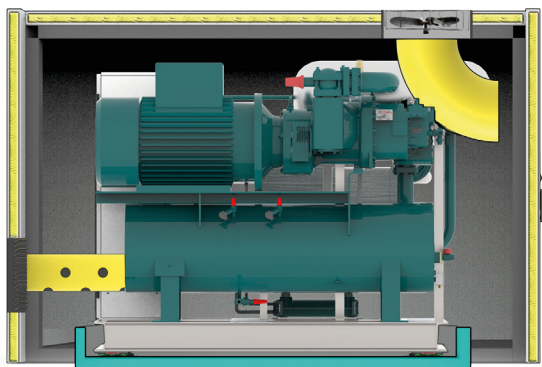


Minimatik® is a plug-and-play chiller that is small, easy to install in tight spaces, and equipped with a sturdily built metal frame for simple, safe transport.



**Minimatik®
Enclosed Steel cover**

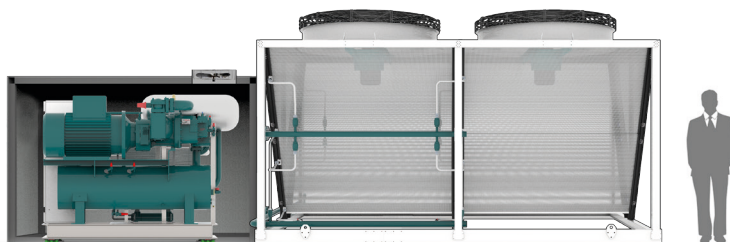
Chiller with a outdoor covering, minimal footprint and high performance, with ammonia detector and exhaust ventilation.



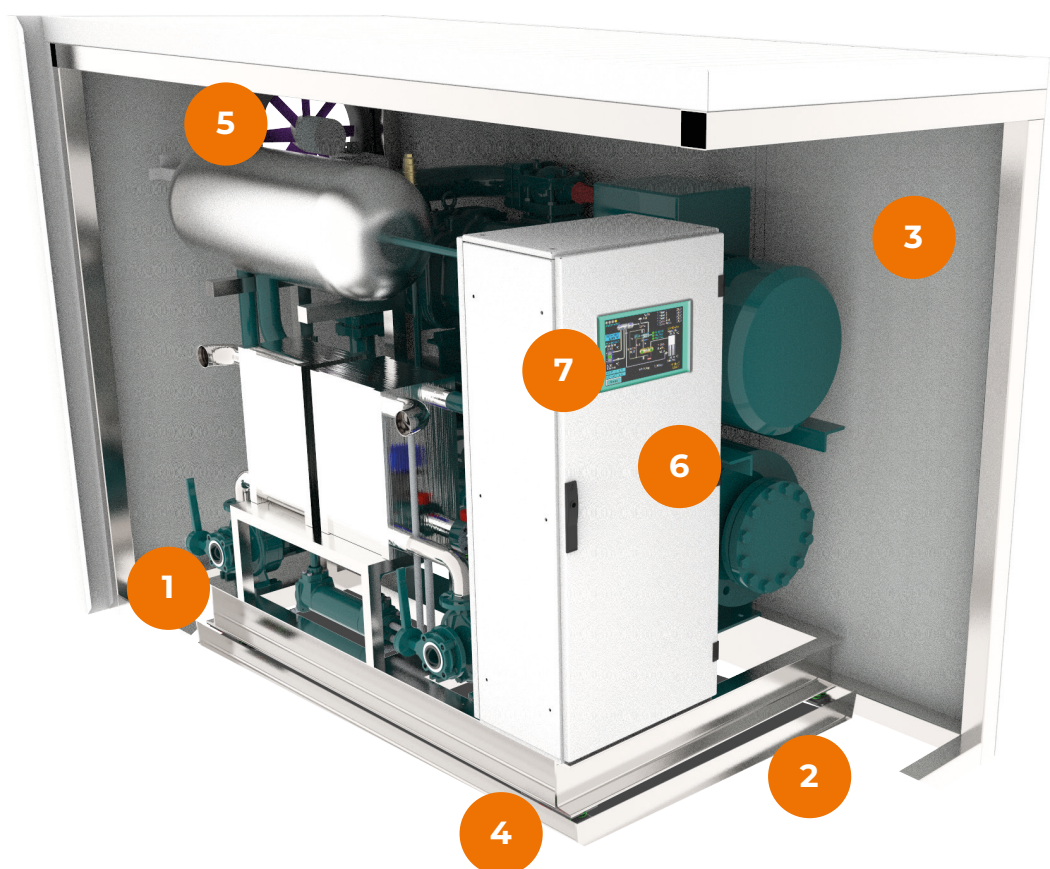
**Minimatik®
Sound-proof cover**

Chiller with a outdoor covering sound-proof enclosure, vibration damping covering, minimal footprint and high performance, with ammonia detector, liquid storage tank with detection sensor and exhaust ventilation.

Minimatik® with combination air condensation system



Minimatik®: optionals



1

Pumping units

We provided the pumping units in the evaporator and the condenser, and both are controlled by inverters, complete with filters, shut-off valves, vibration damping, pressure gauges, and best of all, constant flow rate gauges so you always know the situation with the system's functioning.

2

Leak containment plate

Specially built for control and containment of any losses of water or oil, with liquid detectors on the plate and remote alerts.

3

Basic and sound-proofed outdoor cover

Available in painted steel or stainless steel without sound-proofing or with sound-absorbing acoustic panels to protect and insulate the machine. Suitable for outdoor installation or in rooms that need to be free of noise and vibrations.

4

Vibration damping

In combination with the sound-proof cover, we supply vibration damping to reduce all the vibrations under the machine.

5

Ventilation

All cases have an installed ATEX fan, an ammonia detector and an air temperature probe, so this integrated system keeps the chiller and its installation room safe.

6

Telematik

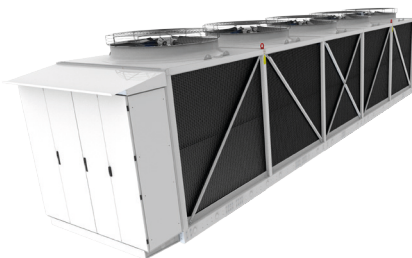
All chillers are supplied with PLCs for remote control and remote assistance, all the parameter changes can also be made directly using a smart phone.

7

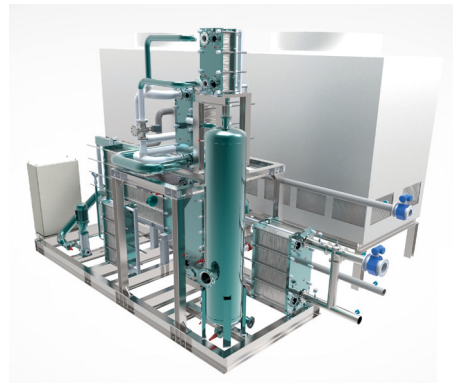
9" touch-screen graphic panel

Direct control through an on-board integrated touch screen, with instant adjustment of any parameter.

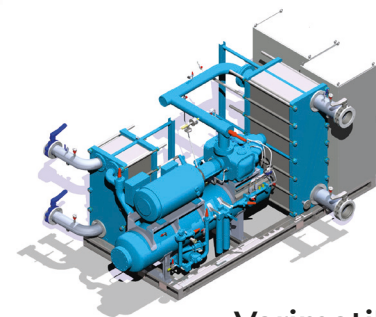
Zudek[®] line industry 4.0



Airmatik[®]

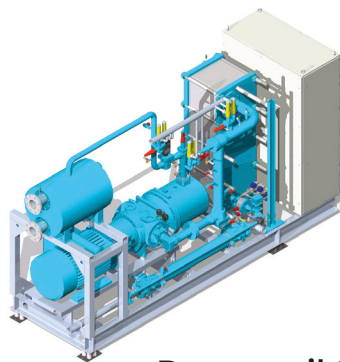


Enermatik[®]

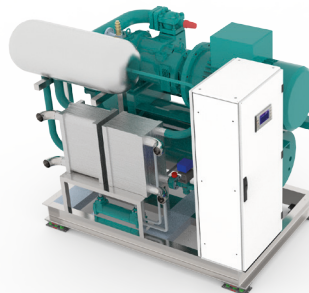


Varimatik[®]

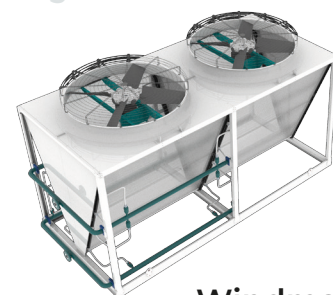
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NH₃



Recumatik[®]



Minimatik[®]



Windmatik[®]