



airmatik®
Monobloc air chiller with aluminium micro channels



windmatik®
Modular condenser with aluminium micro channels

Some years ago, Carrefour opened a new structure near Paris. It was a big supermarket with at least 40 cash registers. They decided to use, for this new store, the best cold technologies for food preservation.

After an accurate research on the industrial refrigeration market all over Europe, they chose Zudek.

Why? Because we use ammonia and we are ecologically compatible with their needs. Because our machines use little electric power and are highly performing.

Because our machines maintenance is easy and remote-manageable. But, primarily, because we built a “customised” solution for their specific needs.

1 Micro channels condensers

The best technology with aluminium micro channels today available, to ensure the highest thermal exchange and the lowest ammonia charge. Every condenser is individually selectable.

2 1600 mm diameter fans

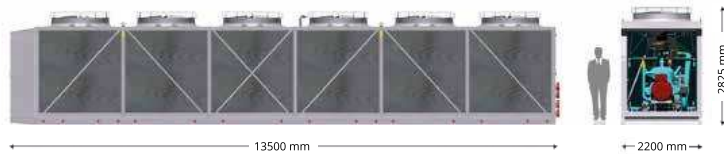
The large fans diameter ensures a very low consumption for ventilation and a high noise reduction

3 Low Sound Emission

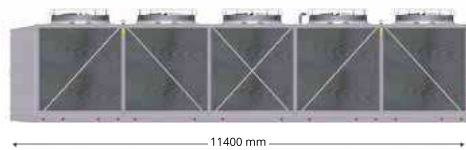
Axial fans with aerofoil blades ensure a net cut in sound emissions

Product line

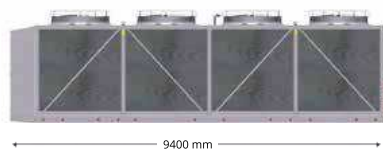
airmatik® 6 12500 kg



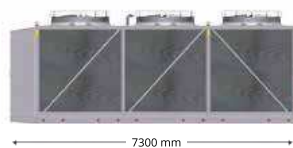
airmatik® 5 10000 kg



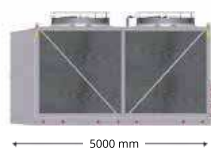
airmatik® 4 8500 kg



airmatik® 3 7000 kg



airmatik® 2 6000 kg



Characteristics

- Powers up to 1200 kW
- All electric engines are driven by inverters
- The chiller is totally PLC controlled with an adaptive working logic
- Very low refrigerant charge
- Power efficiency is higher than in all chillers using synthetic refrigerants
- PED 97/23/CE certification and test according to ISO 9001:2008
- Axial fans with large diameter air foil blades with very high efficiency
- 2,75 kW electric power of ventilation for every 100kW thermal power of condensation
- cold parts insulation
- **termomatik®** oil cooling system with natural circulation of ammonia

Options and accessories

- Engines and inverters available with IE4 efficiency
- Stainless steel or titanium evaporators with flooding or dry expansion power
- Evaporators or separators for pump installations
- Continuous management, supervision and teleservice with **telematik®**
- Cooling and electrical energy metering system with "certified" COP
- Partial or total heat recovery
- Available with pumping units mounted on board
- Adiabatic condensation variant for high external temperatures
- Available with hail grids
- Anticorrosive treatment condenser coils
- Anticorrosive versions totally in stainless steel
- Super silenced versions
- ATEX versions

Air chiller

airmatik®



We have 40 airmatik® working in different countries, all over the world, since 2009

Technical data

Screw compressor

Environment air temperature 35°C

	water +7°C/+12°C					water/glycol -10°C/-5°C				
	air2	air3	air4	air5	air6	air2	air3	air4	air5	air6
Cooling power	300 kW	440 kW	640 kW	800 kW	1000 kW	290 kW	430 kW	590 kW	750 kW	900 kW
EER	3,82	3,76	4,14	4,11	4,08	2,86	2,77	2,85	2,88	2,81

	water/glycol -20°C/-25°C					pumped ammonia -35°C				
	air2	air3	air4	air5	air6	air2	air3	air4	air5	air6
Cooling power	250 kW	360 kW	505 kW	650 kW	760 kW	225 kW	345 kW	445 kW	560 kW	680 kW
EER	1,63	1,58	1,70	1,70	1,68	1,20	1,26	1,21	1,18	1,23

Piston compressor

Environment air temperature 35°C

	water +7°C/+12°C					water/glycol -10°C/-5°C				
	air2	air3	air4	air5	air6	air2	air3	air4	air5	air6
Cooling power	315 kW	480 kW	630 kW	830 kW	990 kW	295 kW	450 kW	590 kW	700 kW	910 kW
EER	4,07	4,05	4,17	4,15	4,20	2,86	2,77	2,85	2,88	2,81