

COMPACT CHILLER

WITH SEMI-HERMETIC AMMONIA COMPRESSOR

The Compact Chiller is a very compact and reliable unit with bearings designed for a life span of 80,000 operating hours. The application window is optimized for medium to high temperature applications like Data center or comfort cooling.

Our compressors are optimized for the natural and environment-friendly refrigerants such as Ammonia R717. Wide range for ambient temperature design. Guarantees continuous operation at ambient temperatures from -25 °C up to 50 °C. Wider limits are available upon request.

The semi-hermetic construction results in a permanent technical leak-proof solution without a shaft seal. The integrated oil separator reduces size, pipes, refrigerant charge and cost.

The use of frequency inverters, a permanent magnet synchronous motor, automatic ActiFlow oil management system and automatic Vi ensure high efficient operation at varying load and temperature profiles, thus guaranteeing high SEER values.

SPECIFICATIONS

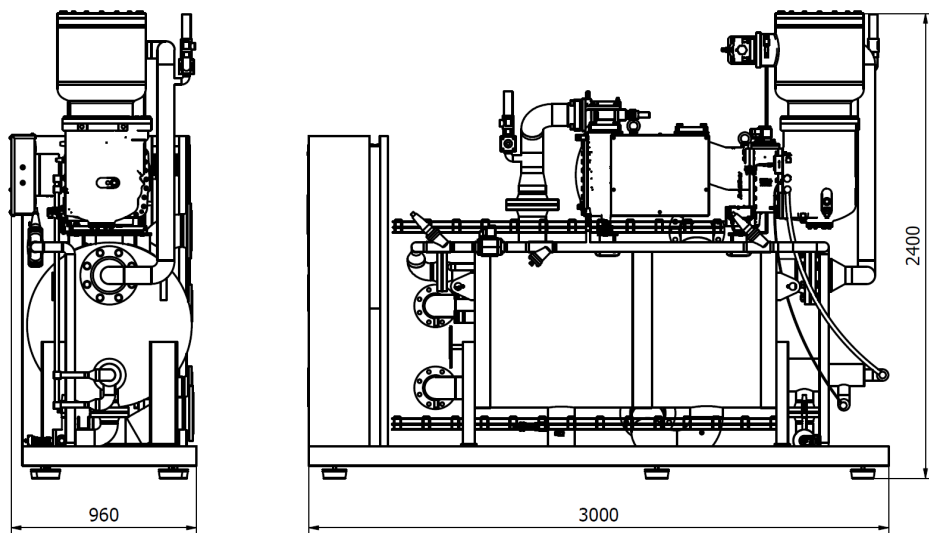
- “I” type patented profile, best lobe ratio of 5+7, high efficiency.
- The aluminium windings of the PM motor are compatible with ammonia and need no extra protection which can get damaged or deteriorate over time.
- Rotor is made of high- quality forged steel with micron- machining accuracy, high strength, high wear resistance, and long durability.
- The housing is made of high- strength ductile iron, design pressure: 2.8 Mpa.
- High- precision and wear- resistant roller bearings designed for a life span of 80.000 operating hours.
- The internal compression ratio Vi is adjusting automatically without any external input for highest efficiency, even under varying conditions.
- Integrated oil channels for secure lubrication of all critical spots within the compressor.



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Model Compact	12	14	17	19
Cooling capacity (28/23°C)	410 kW	750 kW	908 kW	1453 kW
Condenser (37/42°C)	586 kW	1072 kW	1108 kW	2077 kW
EER	8.38	8.38	8.38	8.38
Cooling capacity (23/18°C)	331 kW	529 kW	809 kW	1172 kW
Condenser (37/42°C)	473 kW	756 kW	954 kW	1676 kW
EER	6.80	6.80	6.77	6.77
Cooling capacity (18/13°C)	282 kW	441 kW	756 kW	1487 kW
Condenser (37/42°C)	373 kW	630 kW	902 kW	373 kW
EER	5.22	5.22	5.22	5.22
Cooling capacity (12/7°C)	237 kW	380 kW	614 kW	841 kW
Condenser (37/42°C)	340 kW	543 kW	760 kW	1202 kW
EER	4.20	4.20	4.20	4.20
Cooling capacity (-10/-5°C)	118 kW	190 kW	294 kW	420 kW
Condenser (37/42°C)	169 kW	271 kW	422 kW	597 kW
EER	2.29	2.29	2.29	2.29
Evaporator pressure loss	30 kPa	30 kPa	30 kPa	30 kPa
Condenser in-/outlet	37/42°C	37/42°C	37/42°C	37/42°C
Condenser pressure loss	30 kPa	30 kPa	30 kPa	30 kPa
Total part load	100-25%	100-25%	100-25%	100-25%
Refrigerant charge	20 kg Ammonia/R717	35 kg Ammonia/R717	48 kg Ammonia/R717	50 kg Ammonia/R717
Dimensions (LxWxH)	3000x970x2400 mm	3000x970x2400 mm	3000x970x2400 mm	3000x970x2400 mm
Weight approximately	4600 kg	4800 kg	4800 kg	5200 kg

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