



A comfortable climate with a green conscience: the AMONUM provides a pleasant atmosphere all year round

Use of modern ammonium chillers in air-conditioning for buildings

Cool in summer, pleasantly warm in winter: The temperature in office buildings is subject to strict requirements all year round. At the same time, every modern building must also be energy-efficient and should have as small a carbon footprint as possible. ENGIE Refrigeration's AMONUM completely fulfils these criteria.

This compact chiller unit with a variable speed piston compressor can adapt the refrigeration performance to meet current requirements at any time and is also suitable for use in heat recovery systems for heating buildings and for heating water – e.g. in a low-temperature heating system such as underfloor heating. Thanks to intelligent technology and the high performance refrigerant ammonia, the AMONUM operates efficiently and in a climate neutral manner: No direct emissions that could have a negative impact on the CO₂ balance are created.

If the aim is to combine energy efficiency, a pleasant indoor climate and a responsibility for the environment, then AMONUM from ENGIE Refrigeration is a solution for the future.

Intelligent technology for modern buildings

With AMONUM, the new intelligent generation of NH₃ chillers, ENGIE Refrigeration harnesses all of the benefits of the natural refrigerant, ammonia, and utilises them in air-conditioning systems. The range of application covers evaporation temperatures from -15°C to +15°C. Heat recovery of waste heat is possible at condensation temperatures up to 50°C.

The AMONUM operates with a variable speed piston compressor and is the only ammonia chiller that combines the advantages of dry expansion and flooded evaporation with an innovative evaporation concept. The SIMATIC S7 control system ensures optimal energy efficiency. All AMONUM chillers are, of course, Smart Grid compatible.



Natural and environmentally friendly cooling using ammonia

The natural refrigerant ammonia (R-717, chemical symbol NH_3) has many benefits: it does not contribute to global warming or cause any damage to the ozone layer. It has an exceptional volumetric cooling capacity as well as a high evaporation heat. Conclusion: Refrigeration with ammonia is efficient and environmentally friendly.

AMONUM chillers are a future-proof technology as whilst the use of halogenated refrigerants is most likely going to be phased out due to environmental protection reasons in the medium-term, there is nothing against the long-term use of the natural refrigerant ammonia.

AMONUM chillers: compact, installed, filled

The AMONUM from ENGIE Refrigeration is the first NH_3 chiller for a power range of 50 to 200 kW and available in four models. AMONUM chillers have an extremely compact design and are delivered from the factory filled up with refrigerant and pre-assembled – they only require connection on site and are ready for use. This means low set up costs and simple installation. And remember: As the AMONUM can be used with less than 10 kg of refrigerant, it can also be used in any machine room provided that it is not accessible to the public.

AMONUM'S benefits

- Sustainable refrigeration with use of the natural and environmentally friendly refrigerant ammonia (NH_3)
- No CO_2 equivalent from direct emission, no contribution to global warming
- High energy efficiency using an innovative evaporator system, intelligent SIMATIC S7 control system and variable speed piston compressor – continuous adaptation to the actual cooling demands
- Smart Grid compatible
- Pre-assembled and compactly designed chiller for simple installation and straightforward setup in every machine room that it is not accessible to the public
- Low refrigerant filling quantity, few detachable connections ensuring minimal leakage and a safe operation
- Four models cover a power range from 50 to 200 kW
- Quality made by ENGIE Refrigeration
- Comprehensive consultation and competent, friendly service on site



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