

technotrans 

power to transform

charging.cool

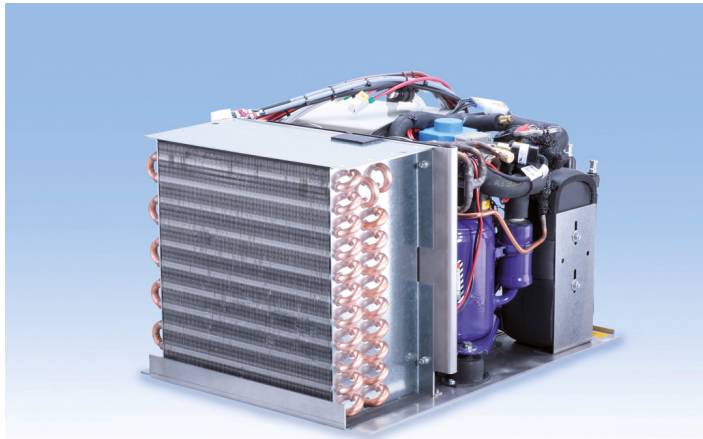
Cooling systems for
high-power-charging



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High-power charging (HPC), which is used in fast-charging systems for electromobility applications, enables the extensive charging of the lithium-ion battery of an electric vehicle within just a few minutes. Once charged, the vehicle has once again a range of several hundred kilometres.

However, the high charging current that is used for high-power charging generates a lot of heat so that the charging station and, in particular, the charging cable require efficient cooling.



- Example of a miniature cooling system for integration in a charging station

Additional services

- product development and manufacturing refer to relevant standards in mobile applications
- full service of required environmental tests
- wide range of international accreditations & certificates e.g. UL

International services

- 7 manufacturing & 10 service sites worldwide
- 24/7 customer support with spare parts dispatch "follow the sun"
- approx. 150 service technicians in the field

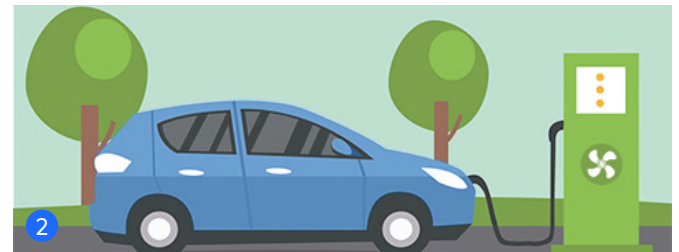
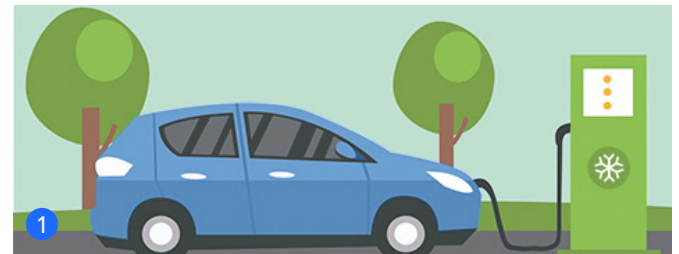
Cooling modules for charging cables and fast-charging stations

Making use of the advantages of high-power charging

The enormous time savings that can be realised with cooled fast-charging systems is a crucial factor for ensuring acceptance among the users of electric vehicles. Another important factor is that, thanks to a reliable cooling system, the safety and handling of the charging system is not compromised compared to other charging systems.

Cooling of charging cables: active and passive concepts for fast-charging stations

technotrans offers a wide range of concepts concerning cable cooling solutions for charging stations for high-power charging. This includes actively as well as passively cooled charging cable cooling modules with a high level of compactness for easy integration into the charging stations. The passive cooling modules cool the cooling medium against the ambient air, while a compressor-based refrigeration unit provides the required refrigerating capacity in the case of the active cooling modules. The desired temperature of the charging cable and connector is realised by the permanent, customisable circulation of the cooling medium.



- 1 active cable cooling via a miniature cooler with refrigeration compressor
- 2 passive cable cooling via free cooling against ambient air

About technotrans

For more than 50 years the technotrans group is a strong and competent partner for cooling, temperature control and filtration and offers high-quality system solutions for a wide range of industries like laser, tooling, graphic and also energy storage. With termotek GmbH and klh Kältetechnik GmbH, technotrans reinforces its competence as system supplier for refrigeration technology. The enhanced portfolio offers not only standard systems from 0.1 to 500 kW, but also includes customized solutions.

technotrans customers use the 17 service and sales companies of the corporation worldwide, comprising more than 1,400 employees, to ensure the satisfaction of their own international clientele.

technotrans refrigeration systems – proven technology

The technotrans Customer Service Support can be reached around the clock. Over 200,000 spare parts are available worldwide and can be on customer site within 24 hours.



Please do not hesitate to get in touch with our experts for further information.

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