Renewable energies

Cool down for *Charging Stations.*

Sustainable energy supply includes using renewable sources as well as securing long-term function and high durability of charging infrastructure. Our ebm-papst fans provide the cooling that is essential to maintain reliable operation.

ebmpapst

engineering a better life

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What we offer

What we offer:

ebm-papst fans are used for cooling in charging stations: In several areas of all-in-one systems as well as in split systems where they primarily operate within the central power cube. By preventing overheating of cables, power modules and several other components the ebm-papst fans ensure perfect function and maintain maximum efficiency.

1. *Air cooled cabinet*
2. *Liquid cooling*
3. *Power module cooling*
4. *Electronic hotspot cooling*
5. *Cable cooling*

How it works

1. Air cooled cabinet:
Regulating temperature

- *Hot air is expelled*
- *Cool ambient air is drawn in trough filter or pass trough heat exchanger*
- *Circulation is created*
- *Suitable temperature is maintained*
- *Risk of damage to essential components such as power modules is reduced*

How

How it works

2. Liquid cooling:
Cooled circulation

For higher power ranges in charging stations, a liquid-cooling solution is best suited, as it provides the necessary cooling capacity.

- *High power density*
- *Highest power ranges possible*
- *Precise cooling of power modules*
- *Suitable temperature is maintained*
- *Risk of damage to essential components is reduced*

How it works

3. Power module cooling:
Dissipating heat

In air cooled charging stations the power module is the core of the EV charger. Fans circulate air within the module. This airflow helps dissipate heat generated in the power modules, ensuring their optimal performance.

How it works

4. Electronic hotspot cooling:
Stabilizing conditions

- *Controlling high temperatures*
- *Creating an ideal environment for essential electronic equipment*
- *Ensuring reliable operation and efficiency of electronic components*
- *Hotspot cooling of critical electronic components*

5. Cable cooling:
Providing coolness

Dispenser cables with high currents require special liquid cooling. The liquid is circulating through the cable. An optimized air flow over the heat exchanger creates a maximum cooling effect.

ebm-papst solutions

Read article now.

Intelligent fan solutions:

The intelligent ebm-papst fans in charging stations allow demand-based operation at partial load. This optimizes the energy consumption, reduces noise and ensures optimum performance of the charging station.