

**Water Heating Electric Heater (ECH) as a Heat Source  
for Electric Vehicles  
Mass production of high voltage 800V specification started**

Tianjin Sanden Automotive Air Conditioning Co., Ltd (TSA), a Group company, has started mass production of a high-voltage 800 V water heater (ECH: Electric Coolant Heater) for use in quick-charging vehicles. TSA has started mass production of ECH: Electric Coolant Heater.

Conventional car air-conditioning systems use engine exhaust heat to heat the interior of the car. However, new energy vehicles, especially electric vehicles, require a different source of heating heat since the engine is no longer present.

ECH also provides the heat needed to keep the batteries of electric vehicles at the proper temperature, contributing to extended driving range.

The ECH with a high voltage of 800 V that we have started mass production of this time is compatible with fast-charging vehicles by supporting high voltages, is smaller and lighter, and can provide more rapid heating to the interior space than ever before due to its increased output, thereby improving energy efficiency.



ECH



Automated production line

As indicated in our medium-term management plan SHIFT2028 announced on February 14, we are aiming to expand our heat management products for electric vehicles. We will begin supplying products to the China area, where the expansion of new energy vehicles, including electric vehicles, is leading the way, and will expand our business to other regions in the future.

The ECH market is expected to grow five-fold over the next five years in the global market in line with the expansion and diversification of new energy vehicles. We will continue our efforts to improve the performance of ECH, not only to enhance driver comfort, but also to increase driving range and minimize environmental impact

\*\*\*\*\*  
 Inquiry about this  
 Sanden corporation  
 Administration Division  
 Global administration Section (PR)  
 sdhd.pcrsr.jp@g-sanden.com  
 \*\*\*\*\*