May 15, 2024 Yazaki Corporation

Automotive News PACE Award 2024 for the "FPC Type Busbar Module" Developed by the Company

Yazaki Corporation (Head Office: Minato-ku, Tokyo; President: Riku Yazaki) has won the Automotive News PACE Award 2024 sponsored by Automotive News (America) for the flexible printed circuit (hereinafter, FPC) type busbar module the company developed.

The Automotive News PACE Award is given to suppliers who develop innovative technologies and manufacturing processes in the automotive industry and contribute to the development of the automotive industry in a game-changing way. After receiving a double award last fiscal year, Yazaki Corporation has now won an award two years running.

We will continue to strive for the development of products that put our customers first and work on the improvement of the safety and comfort of mobility society.

FPC-type busbar modules

The spread of hybrid EVs and battery EVs is advancing rapidly in the midst of the transformation surrounding the automotive industry. As the need for extended range increases with these vehicles, it is expected that battery capacity will become increasingly large.

In association with greater battery capacity, components need to be smaller to improve mounting efficiency and have a lower profile to secure cabin space. In addition, it is also necessary to ensure the safety of high-voltage batteries.

Yazaki therefore developed a product that can contribute to the reduction of battery size and weight and securing safety by replacing the normal electric wires of a voltage detection circuit with an FPC on busbar modules with functions that detect cell voltage and temperature while simultaneously connecting multiple cells in series in the high voltage battery of an electric vehicle.

Product features

1) Smaller and lighter

- The adoption of FPC eliminates the excess space required by wire-type modules and also reduces height.
- The busbar module on its own is about 50% lighter than a wire-type product.

2) Securing safety

- Mounting chip fuses on the FPC near to a cell protects the circuit as a whole.
- Unique tolerance and a vibration-absorbing structure improves assembly characteristics and reliability.
- FPC enables complete automation of production, which is difficult with electric wire-type products.





