

PRESS RELEASE

17 April 2024



ALPINE MASTERFLUX AND EBTVMS: NEW PRODUCTS SHOWCASED AT BATTERY SHOW EUROPE 2024,

Masterflux, Tecumseh's daughter brand dedicated to variable-speed DC-powered mobile refrigeration and cooling applications, will be exhibiting its new ALPINE compressor at BATTERY SHOW, June 18-20, 2024, at Messe Stuttgart (Germany).

The ALPINE compressor is designed to meet the needs of vehicle electrification and is tailored to the battery thermal management required for optimal battery operation.



Alpine Compressor Hall 6 booth C20

Alpine can deliver up to 10kW of cooling capacity with R134a/R1234yf refrigerants and has the highest efficiency in the market in his class. It is available in 400, 650 and 850Vdc (nominal), matching the high voltage ranges used in electrical Vans, small/medium trucks and big trailers.

Projected to withstand rush environments, and high temperatures, the Alpine has the electronic controller integrated in the compressor shell and cooled by the refrigerant, sparing the use of external fans.



ALPINE FEATURES AT A GLANCE

- Vehicle air conditioning
- Battery cooling
- Refrigerated vehicles
- Heat pumps
- Electronic systems
- Mobile containers
- Food trucks
- Vertical Farming

- High-capacity horizontal design with low profile
- High-efficiency motors with variable speed control
- Allows hot defrost and heat pump operation
- Wide voltage range: 400V, 650V and 850V
- Refrigerants R-513A, R-1234yf, R-134a

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In June 2022, at a previous edition of the show, Masterflux presented for the first time its prototype Alpine compressor, the first 850V EV heat pump and air-conditioning compressor available on the market.

Now in internal approval phase, Alpine is going through extensive performance and reliability tests, targeting institute approvals by the end of 2024. Engineering samples are available now for performance evaluation and limited quantities production is expected by Q1/2025.

Robert Terry, Managing Director of Masterflux, commented: "Since the early 2000s, we've been supplying our market-leading SIERRA DC compressor to the interesting segment of air-conditioning applications for heavy-duty trucks and other commercial vehicles. Now, backed by our proven technology and years of experience in these applications, we're delighted to present our latest 850VDC air conditioning heat pump compressor, designed specifically for the commercial electric vehicle market."

A MORE COMPLETE RANGE OF PRODUCTS ON DISPLAY

BATTERY SHOW is also an opportunity for Masterflux to present its new eBTMS (Electric Battery Thermal Management System) dedicated to battery cooling.

In a fast-growing electric vehicle market, Masterflux is expanding its range of systems, designed **to maintain the electric vehicle battery in its most efficient and safest temperature range.**

Masterflux has been present in the automotive market for 20 years, and the addition of the BTMS range to our portfolio enables us to offer a more complete and adapted range.

All systems are designed and manufactured by Tecumseh. They are available in a wide range of voltages, from 12 to 850 Vdc.



Under Development

Three circular icons representing refrigerants: a grey circle with 'R-1234yf', a blue circle with 'R-134A', and a green circle with 'R-290'.A square QR code located to the right of the refrigerant icons.Four purple square icons representing different applications: 'Electronic' (circuit board), 'Vertical Farming' (plant growth), 'Refrigerated container' (shipping container), and 'Battery Cooling' (battery pack).

Masterflux brought 3 models of the eBTMS platform to the BATTERY SHOW 2024:

- The eBTMS-B features a SIERRA compressor and is optimally sized for applications requiring cooling capacity of up to 2.5kW.
- The eBTMS-C and D models are powered by the ALPINE compressor, with cooling capacities of up to 6kW and 10kW respectively. These models can have heating and an option.

All models are designed to be plug & play with easy installation and maintenance. CAN interface is standard, including diagnostics.

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ABOUT TECUMSEH

Founded in 1934, Tecumseh Products Company LLC is one of the world's leading manufacturers of hermetic reciprocating, rotary and scroll compressors, ranging from 1/15th to 30 horsepower, and offers a complete range of condensing units and systems for residential and commercial refrigeration and air conditioning applications. Tecumseh products are manufactured on four continents and sold worldwide through a network of sales professionals, authorized wholesalers and licensed distributors offering brands such as: AE®, AE2®, AW®, Celseon®, L'Unité Hermetique®, Masterflux®, Silensys®, and Wintsys®. Tecumseh Products Company LLC is headquartered in Ann Arbor, Michigan.

Find our products and information on our website : www.tecumseh.com et www.masterflux.com

FIND US AT BATTERY SHOW

We look forward to welcoming you to **HALL 6 STAND C-20** at Messe Stuttgart, Messeplazza 1, 70629 Stuttgart, Germany.

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