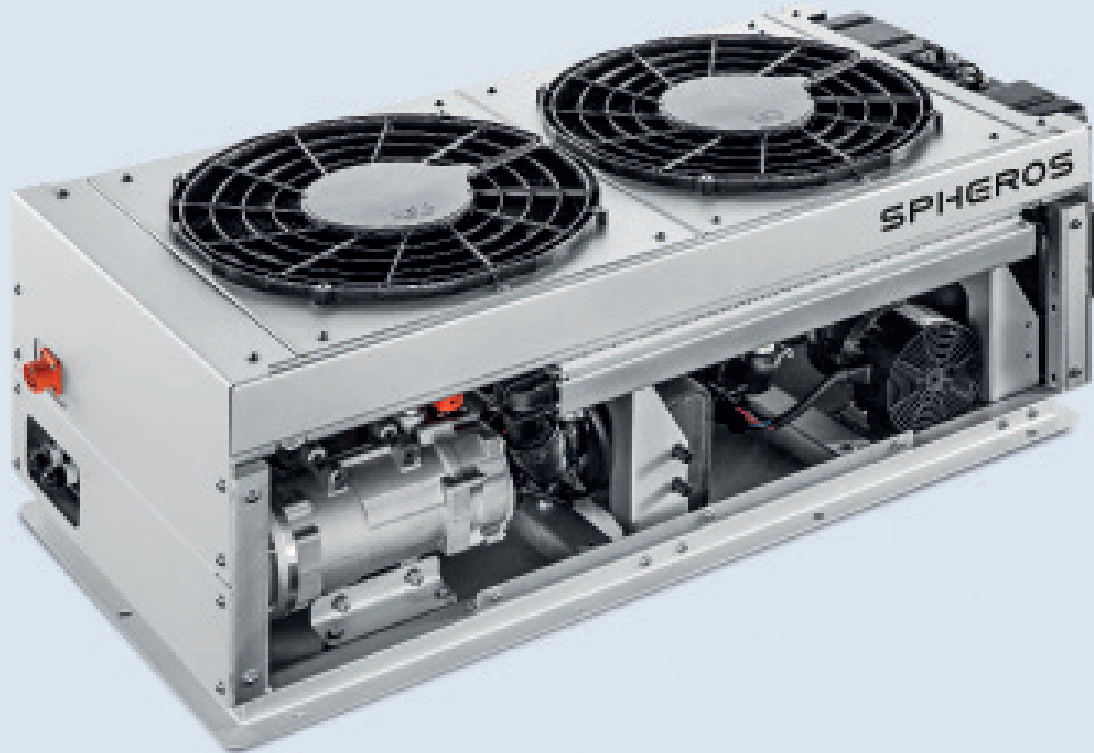


New 10 kW battery cooler

E-COOLER BTM / BCS



For the battery comfort zone

The fast growing electrification of mobility – particularly in public transport – requires high-performance mobile energy storage systems that enhance travel comfort.

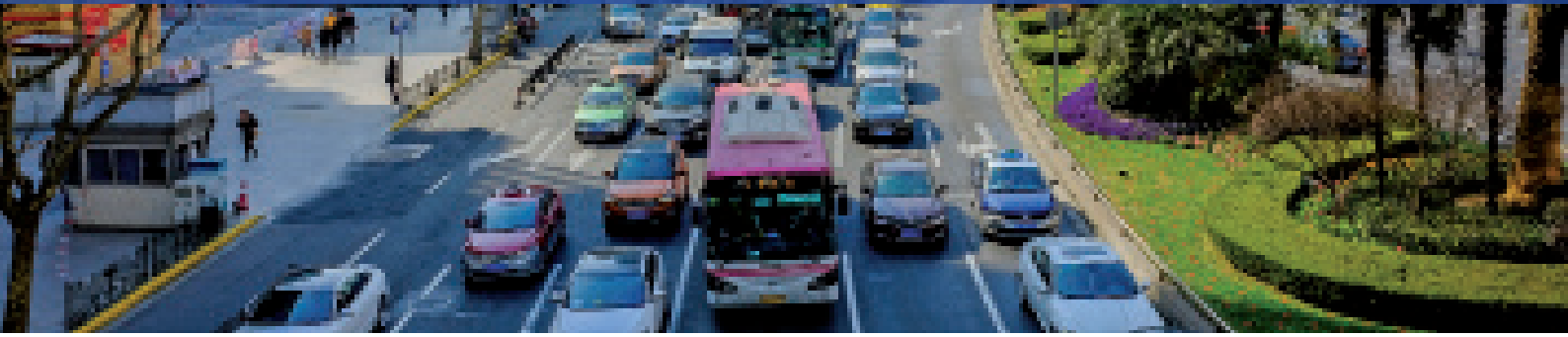
With E-Cooler Valeo has introduced a range of battery temperature management models with a maximum cooling capacity of 10 kW, offering an optimal solution for a wide range of applications. Depending on the requirement, the E-Cooler protects the battery from overheating during charging and discharging, cools it while driving at higher outside temperatures and heavy loads.

An additional heating function even warms up the sensitive batteries if necessary to restore the optimum temperature range.

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E-COOLER 5KW / 10KW



HIGHLIGHTS

BCS: Standalone solution with active (optional passive) cooling circuit in the basic version.

BTM: Active / Passive cooling circuit, water circuit, electrical heater and expansion tank.

- Modular deployment, high flexibility depending on vehicle geometry
- Integrated controls
- CAN-bus connection to the vehicle



Low life-cycle costs

- Energy-optimised operation
 - demand-based control of compressor and fan
 - automatic switching between passive cooling and active coolant circuit
- Pure 24 V technology at 5 kW version: easy service



Safety

- Safe operation of the battery is only guaranteed within a narrow temperature frame
—> battery cooling thus has an impact on the range of the vehicle



TECHNICAL DATA

	E-Cooler 100 BTM	E-Cooler 100T BTM	E-Cooler 50 BCS	E-Cooler 100 BCS
Maximum cooling capacity (kW) at: outside temperature (°C) of coolant outlet (°C) of coolant flow (l/h)	10 (8) 44 (approx. 50) 35 approx. 2,000	10 (12) 55 (44) 35 approx. 2,000	5 (approx. 6 kW) 44 25 (35 °C) 1,000	10 44 35 2,000
Maximum power consumption (compressor / fan)	compressor 5 A at 800 V fan 21 A at 28.5 V	compressor 5 A at 800 V fan 31 A at 28.5 V	75 A	5 A / 18 A
Maximum weight depending on design (kg) w/o coolant-carrying components	85	115	60	55
Voltage (V) (compressor / fan)	650 / 24	650 / 24	24 / 24	650 / 24
Dimensions L x W x H (mm)	appr. 1.200 x 511 x 350*	appr. 1.700 x 511 x 350*	980 x 670 x 310	780 x 400 x 375
Coolant Filling capacity (kg)	approx. 1.5	R134a approx. 1.7	R134a	R134a R134a
			active and passive cooling substation	cooling only expansion tank, water pump, substation
	SOP Q1/2024	on demand		SOP Q3/2023

Contains fluorinated greenhouse gases. Dimensions depend on the final power requirement and the outside temperature. Weight depend on design