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Battery Temperature Management System for EV

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Abstract: The Heating-Cooling Unit consists of three branches to switch operating modes to cool and heat the battery. The Heater represents an electrical heater for fast heating of the batteries under low-temperature conditions. The Radiator uses air-cooling and/or heating when the batteries are operated stably. The Refrigerant system is used for cooling the overheated batteries. The refrigeration cycle is represented by the amount of heat flow extracted from the cooling liquid.

Keywords: Refrigerant system

