



HIGH-VOLTAGE COOLANT HEATER / TITRONIC CHHV 50 G3

THE COOLANT HEATER FOR ELECTRIC AND HYBRID VEHICLES

Users of electric vehicles don't want to go without the comfort of heating that they are used to in combustion engine vehicles. That's why a suitable heating system is just as important as the battery conditioning which helps to extend service life, reduce charging time and increase range.

This is where the third generation of Eberspächer's high-voltage PTC heater comes in, providing the benefits of battery conditioning and heating comfort for special series from body manufacturers and OEMs.

PRODUCT BENEFITS:

- Reliable and powerful PTC technology
- Plastic water jacket reduces heat losses to surroundings
- Self-regulating effect inherent in the system ensures safe PTC technology
- Powerful heating performance: from 0% to 100% in a few seconds
- Control electronics developed in-house
- Compact and robust design
- Flexible installation position
- Simple system integration

OTHER FEATURES :

- The interior heating and battery conditioning are carried out via the vehicle's convector
- Control via LIN communication
- Passive interlock for increased safety; the vehicle manufacturer is responsible for connecting the interlock HV safety system

SEGMENTS:



TECHNICAL DATA:

Operating voltage range	HV V	250-450
Control voltage range	LV V	9-16
Heating performance*	W	5,000
Heat stages		6
Burst pressure	bar	5
Weight	kg	2.0
Interface		LIN 2.1
IP type of protection		IP6K9K, IP67
Dimensions	mm	160 x 141 x 105
ISO 26262		ASIL A
Operating temperature range	°C	-40 to 120

* $U_n = 350\text{ V}$, $T_{co} = 60\text{ °C}$, $Q_{co} = 10\text{ l/min}$, Coolant = 50:50

RANGE OF FEATURES:

- Voltage measurement
- Current measurement
- Temperature measurement
- LIN communication
- Diagnostics
- Ramp-up feature

SAFETY FEATURES:

- Short-circuit detection
- Overheating detection
- Undervoltage and overvoltage detection
- Open-load detection
- Self-diagnostics