

The Cold Chain Solution

Refrigeration Unit Model and Controller Identification Guide

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Introduction

This document is a reference guide to help you identify the refrigeration unit make and model, and its controller type based on the type of installation.

Once the unit and its controller is identified, refer to the [Geotab - Cold Chain Harness Compatibility Lookup](#) to check the compatibility between the unit and the Geotab Truck Solution.

Abbreviations

HMI	Human Machine Interface
LCV	Light Commercial Vehicle

GEOTAB®

SR	Abbreviation for Smart Reefer, Thermo King controller
APX	Abbreviation for Apex, Carrier Transicold controller
DSR	Abbreviation for Direct Smart Reefer, Thermo King controller
TSR	Abbreviation for Truck Smart Reefer, Thermo King controller

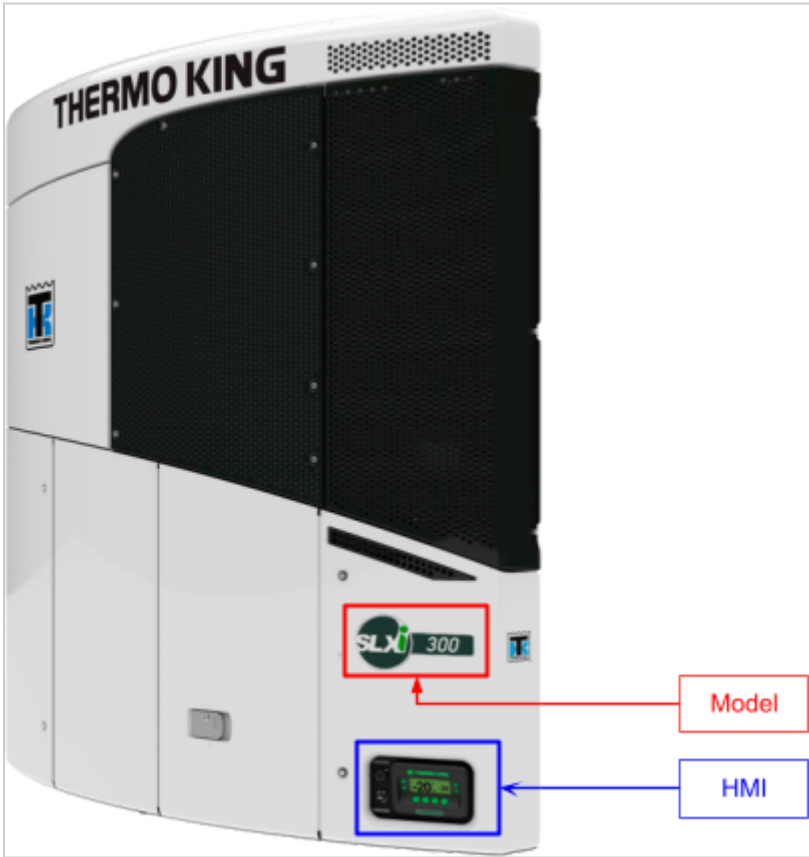
Trailer Installation



In this referenced photo, the Cold Chain unit is attached and fixed to the trailer's body.

- Model name – Typically located on the right and/or left compartment above the HMI. In this example, it is located in the right compartment.
- Controller type – Can be identified by looking at the HMI.

Thermo King



HMI for SR-2 Controller



HMI for SR-4 Controller

HMI for SR-3 Controller



HMI for Thermoguard Controllers



For all Thermoguard units, the controller name is located on the HMI

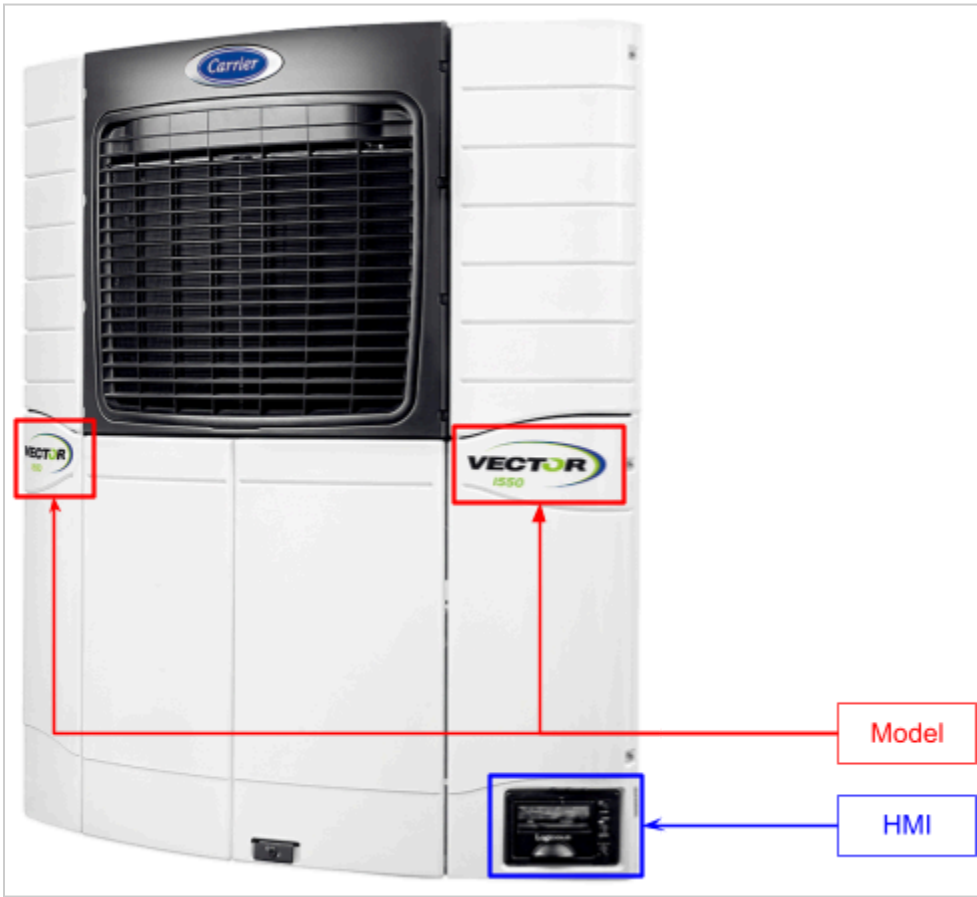
Example for the Thermoguard uP IV:



HMI for Advancer Controller



Carrier Transicold



HMI for Standard or Advanced Controller



HMI for APX Controller



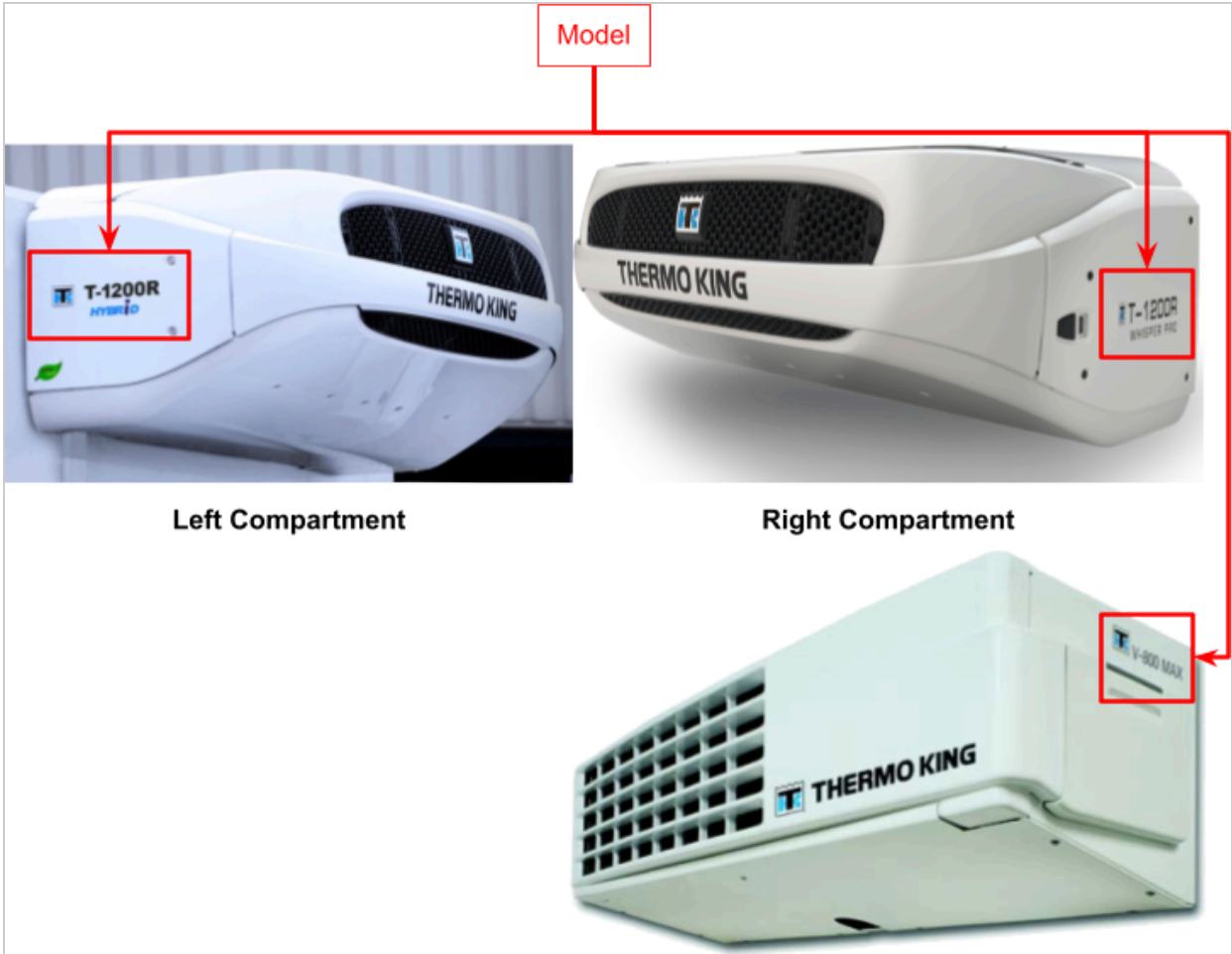
Rigid Trucks Installations



In this referenced photo, the Cold Chain unit is located above the vehicle cabin.

- Model name – Typically located on the right and/or left compartment.
- Controller type – Can be identified by looking at the HMI, which is located inside the cabin.

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HMI for TSR-2 and TSR-3 Controllers

HMI for DSR Controller



Carrier Transicold



HMI for Standard Controller



HMI for Carrier Pulsor/Xarios

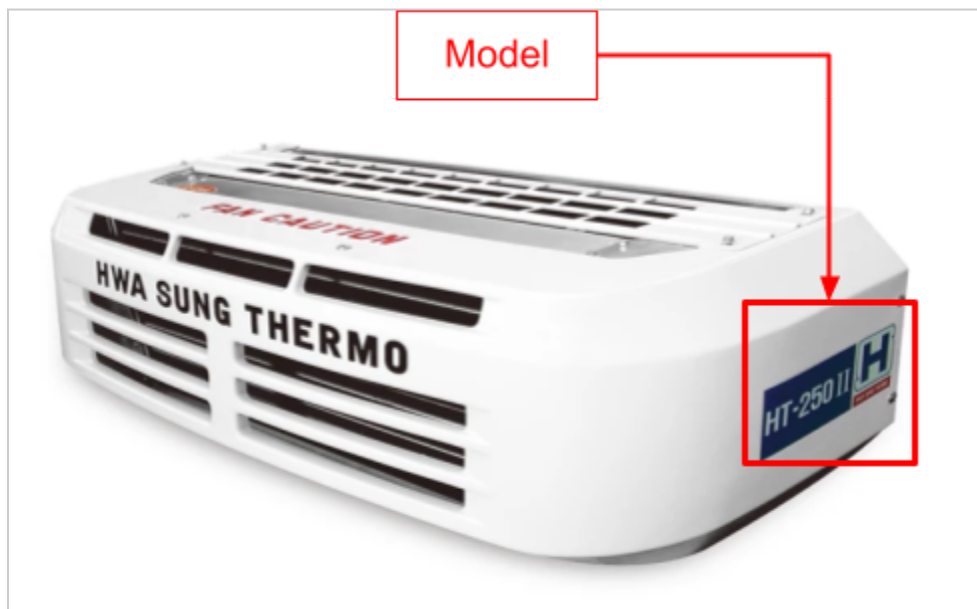
Single temp in-cabin controller



Multi temp in-cabin controller



Hwasung



Controller



Vans and LCVs Installations



Split concept

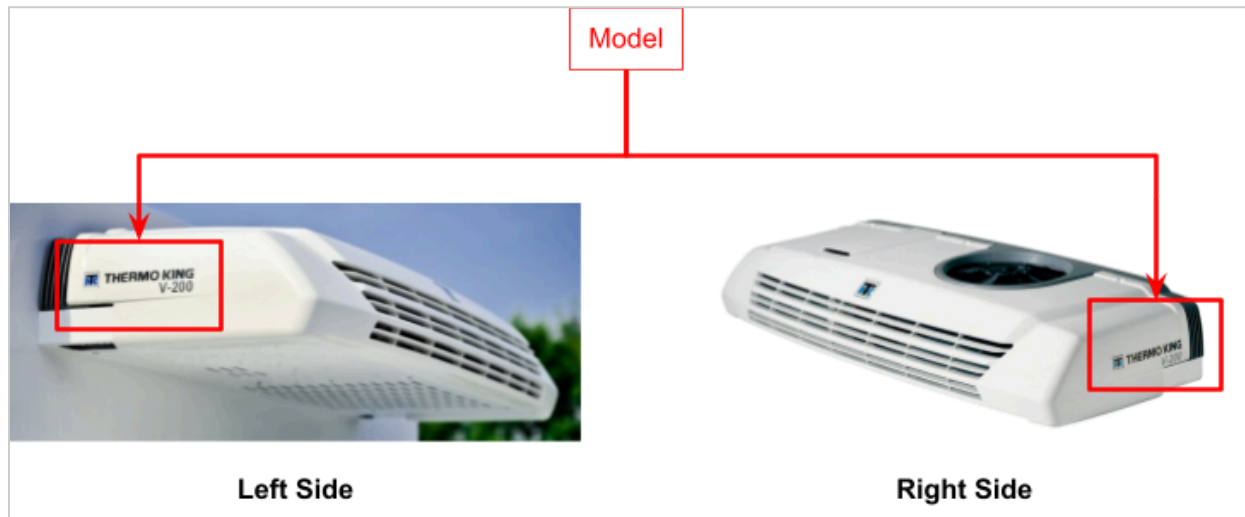


Slim concept

In the referenced photos, the Cold Chain unit is located above the vehicle's roof. There are two designs for the Cold Chain unit: Split concept and Slim concept.

- Model name – Typically located on the right and/or left compartment. If the unit is a slim concept, the model name is not always displayed.
- Controller type – Can be identified by looking at the HMI, which is located inside the cabin.

Thermo King



Carrier Transicold

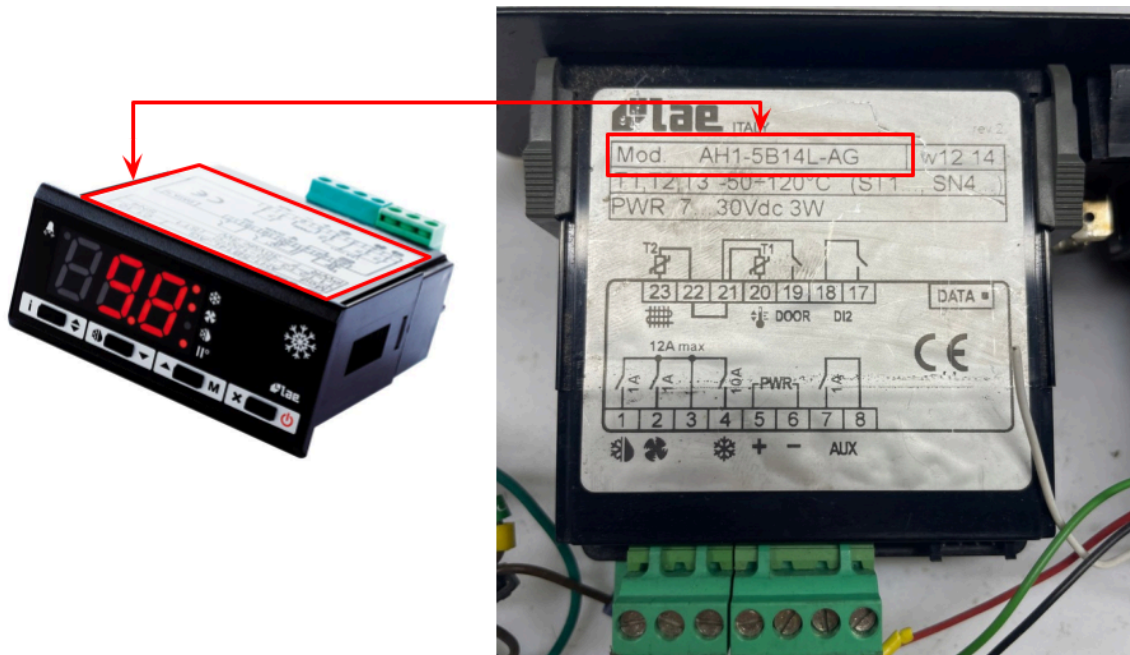


HMI for Carrier Neos/Zephyr/Viento units	HMI for Carrier Pulsor/Xarios units
	Single Temp in-cabin controller 
	Multi temp in-cabin controller



GAH (Containing LAE Electronics controllers)

In cabin Controller



Some LAE Electronics controllers look similar but are sometimes different (logic, communication protocol etc..). An example is the AH1-5 controller which is divided into three different products. Within the LAE Electronics product line, some controllers may share a similar appearance, but they can vary significantly in terms of their internal logic and communication protocols. A prime example is the AH1-5 controller, which is actually divided into three distinct products, each with its unique features and specifications.

AH1-5 series				
Functions		B14L-AG	B14W-AG	C24W-BL
Temperature Inputs	Thermostat	•	•	•
	Evaporator	•	•	•
	Auxiliary			•
Door switch input	Voltage free contact	•	•	•
Digital inputs	Voltage free contact	•	•	
	T2-24Vac voltage			•
Outputs	Thermostat	•	•	•
	Evaporator fans	•	•	•
	Defrost	•	•	•
	Auxiliary	•	•	•
Power supply	115-230Vac		•	•
	7-30Vdc	•		
Serial port	TTL serial port	•	•	
	RS-485 serial port			•
Keypad	Generic	•	•	
	With light button			•

To obtain more information about the functionalities of the identified controller, refer to the LAE Electronics website : as an example for the AH1-5 controller. For more details regarding the functionalities of the identified controller, you can visit the LAE Electronics website. The [AH1-5 controller](#) serves as an illustrative example.

Special Case - Undermount Refrigeration Units



In the referenced photos, the Cold Chain unit is attached and fixed under the trailer's body.

- Model name – Typically located on the front panel. You may find this type of unit on rigid trucks or trailers.
- Controller type – Can be identified by looking at the HMI. For rigid trucks, the HMI will be located inside the vehicle cabin, and for trailers, the HMI will be located outside the vehicle cabin.

Thermo King



Carrier Transicold



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