

# GUCHEN THERMO TRANSPORT

## REFRIGERATION UNITS INTRODUCTION

Guchen Thermo gives you the best service and always be here for your needs. Thank you for your reading; we are devoted to the most useful information and best service for you.

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### *Truck Refrigeration Units Series*

- C-200
- C-300
- TR-200
- TR-300
- TR-350
- TR-450
- TR-550
- TR-650
- TS-700
- TS-1000
- TS-1200

## Introduction

### Description of Guchen Thermo Truck Refrigeration Units

In the modern days, peoples' living standard is improved a lot compared with the old days, and more and more people have a high requirement to the fresh and far away foods. So the cold chain logistics become a more important role. The cold chain logistics is a kind of transportation way that to keep cargoes in a certain temperature to ensure the foods have a high quality to customers' hands. Usually, vegetables, fruits, meat, dairy products, seafood, flowers, and processed foods, such as frozen meat, chicken and fish, ice cream and chocolates...

Many of business fields cannot run normally without cold chain logistics, especially for those foods delivery companies. And Guchen Thermo as the leading manufacturer and supplier of transport refrigeration units in China always care about customers' requirement to cold chain transportation.



Guchen Thermo can supply refrigeration units for from small refrigerated truck bodies to big refrigerated truck bodies with 2-65 m<sup>3</sup> size, which can meet all of customers' demands. In the following parts, I will introduce our truck refrigeration units according to units' application, also customers can choose the suitable units referring to the following recommend.

Tips: When you choose the truck refrigeration units, please also take ambient temperature, loading and unloading frequency, cargoes types, and required temperature... details please see our articles for help:

- ▲ [How to Choose Your Truck Refrigeration Unit?](#)
- ▲ [Guchen Thermo Selection Guide](#)
- ▲ [Contact our professional person to get help](#)

## Application Models

### Suggested Models and Installation Examples of Truck Refrigeration Units

As for the small to medium refrigerated trucks for short distance transportation, we suggest our TR series or C series truck freezer units, as for the big refrigerated trucks for long-distance transportation, we strongly recommend our TS diesel engine driven units for a better and safe cargo transportation.

Our TR series and C series truck refrigeration units are vehicle engine driven units, can be divided into two parts:

- ▲ Truck Freezer Units (TR series, TS series)
- ▲ Truck Chiller Units (C series)

For truck freezer units, its refrigerant is R404a, temperature can be range from  $-30^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$  for delivering frozen or deep frozen cargoes, such as ice cream or frozen meat; for truck chiller units, its refrigerant is R134a, temperature range is from  $-5^{\circ}\text{C}$  to  $25^{\circ}\text{C}$  for delivering fresh chilled cargoes, such as dairy product, fruits or vegetables.

Our TS series units are diesel engine driven units, also called as independent truck refrigeration units (because its cooling system not rely on truck engine, so it called as independent truck refrigeration units) apply on  $25\sim 65\text{ m}^3$  truck box, especially popular with the long-distance transportation.

#### Suggested models:

- ▲ For small refrigerated trucks (truck body size is  $2\text{m}^3 - 20\text{m}^3$  or length is  $< 3$  meter)

#### [C-200 Truck Chiller Units for \$2\sim 10\text{m}^3\$ truck body](#)



C-200 model is truck chiller units, front split mounted, adopt R134a refrigerant, temperature range from  $-5^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ , apply for  $2\sim 10\text{m}^3$  truck body. Its condenser has one fan, and evaporator also has one fan.

#### [C-300 Truck Chiller Units for \$10\sim 15\text{m}^3\$ truck body](#)



C-300 model is truck chiller units, front split mounted, adopt R134a refrigerant, temperature range from  $-5^{\circ}\text{C}$  to  $+30^{\circ}\text{C}$ , apply for  $10\sim 15\text{m}^3$  truck body. Its condenser has one fan, same as C-200 but evaporator has two fans.



#### [TR-200 Truck Refrigeration Units for 6~15m<sup>3</sup> truck body](#)

TR-200 model is front split mounted freezer unit, designed for small refrigerated trucks, especially popular with small pickup truck owners. It adopts R404a refrigerant, temperature range is from -25°C to +30°C to deliver chilled or deep frozen cargoes. Its condenser and evaporator both have one fan.



#### [TR-300 Truck Refrigeration Units for 10~20m<sup>3</sup> truck body](#)

TR-300 model is front split mounted freezer unit, designed for small refrigerated trucks with 10~20m<sup>3</sup> body size. It adopts R404a refrigerant, temperature range is from -25°C to +30°C to deliver chilled or deep frozen cargoes. Its condenser has the same outlook as TR-200, but evaporator has two fans.

### ▲For medium refrigerated truck (truck body size is 15m<sup>3</sup> - 35m<sup>3</sup> or length is <6 meter)



#### [TR-350 Truck Refrigeration Units for 15~25m<sup>3</sup> truck body](#)

TR-350 model is front split mounted freezer unit, adopts R404a refrigerant, temperature range is from -25°C to +30°C to deliver chilled or deep frozen cargoes. It can meet most of truck models to deliver refrigerated cargoes.



#### [TR-450 Truck Refrigeration Units for 15~25m<sup>3</sup> truck body](#)

TR-450 model is front split mounted freezer unit, adopts R404a refrigerant, temperature is from -18°C to +30°C to deliver chilled or deep frozen cargoes. Its condenser and evaporator both have 2 fans respectively. It can apply for the medium refrigerated trucks or big pickup trucks.



#### [TR-550 Truck Refrigeration Units for 25~35m<sup>3</sup> truck body](#)

TR-550 model is split front or under mounted freezer units, adopts R404a refrigerant, temperature is from -18°C to +30°C to deliver chilled or deep frozen cargoes. When the truck head is too high, customers can choose the under mounted types.

▲ For big refrigerated truck (truck body size is 35m<sup>3</sup> - 65m<sup>3</sup> or length is <9 meter)

[TR-650 Truck Refrigeration Units for 35~45m<sup>3</sup> truck body](#)



TR-650 model is front split mounted freezer units for big refrigerated trucks. It adopts R404a refrigerant, and temperature range is from -25°C to +30°C. It is especially designed for ambient temp. is up to 50°C+ place, because its evaporator has 3 Italy Spal Fans, more than other types.

[TS Series Truck Refrigeration Units for 25~65m<sup>3</sup> truck body](#)



TS model is our super snow diesel engine driven units, applies for medium to big refrigerated trucks. It adopts R404a refrigerant, and with independent refrigerating system, it not relies on the truck engine, so it is very suitable for long-distance transportation.

**Application and installation:**

Here are some of the installation examples about Guchen Thermo truck refrigeration units, if you want to see every detailed installation examples, please forward to every model pages. In this part, I will take TR-550 and TS series as examples.



Here is an installation example about TR-550 truck refrigeration units; it applies on the medium trucks and big pickup trucks.

## Features

### Features of Guchen Thermo Transport Refrigeration Units

1. Adopts hydrophilic aluminum foil with internal ridge copper tube in evaporator

We all know that copper has the high quality of anti-corrosion, better heat transmission, so adopts copper tube as the refrigerant line in HVAC systems can be prolonged the product service life a lot. Besides that, the hydrophilic aluminum foil materials will not make the water gather together and block tube, and it can improve heat exchange rate by 30%, which improve the refrigerating effect a lot.

2. Adopts aluminum micro-channel parallel flow coils in condenser

In the condenser, we adopt micro-channel parallel flow coils; it has the advantages of smaller in size, lighter in weight and compact in structure, so it is commonly used for HVAC systems. Employ parallel flow structure, the refrigerant can flow evenly, if refrigerant cannot flow evenly, it will compact evaporator's heat exchange, which can lead to the refrigerating effect bad. So adopts aluminum micro-channel parallel flow coils in condenser also can improve the evaporator heat exchange rate and give a better cooling performance.

3. Add another heat exchange device in Evaporator

In order to increase the heat exchange and improve cooling effect, we add a heat exchange device in evaporator, so the heat exchange rate can be increased by 20%.

4. Adopts worldwide famous brands spare parts

The spare parts take a very important role in the whole refrigeration units, so Guchen Thermo always pay more attention on the spare parts, even the mini parts, we also choose the best quality for customers. The main spare parts include in:



- ◆ QP compressor from TCCI: High quality and easy to maintain
- ◆ Spal Fans: 10000-20000 hours service life, high quality.
- ◆ Danfoss filter drier, expansion valve, receiver and visual liquid length: Famous brands, easy to maintain, stable performance.
- ◆ Castel solenoid valve: Imported from Italy, has a high quality.
- ◆ Codan Pipeline: High quality and easy to maintain

5. Adding 2 valves: CPR valve and liquid injection valve

In the very hot areas, if compressors work some time, its ambient temperature will be high, so adding CPR valve and liquid injection valve can help to switch the compressor temperature, and protect compressor from broken, prolong the units' service life.

6. Equip with standby system according to demands

All of Guchen Thermo refrigeration units can equip with standby system according to customers' demands. Standby system is very helpful if transporters need to deliver cargoes from day to night, when at night, transporters only need to turn on standby system to refrigerate cargoes continuously. So it really help to save a lot of fuel and transportation cost.



7. Equip with heating system according to demands

For some very cold places, if the ambient temperature is below to  $-5^{\circ}\text{C}$  in winter, it is very necessary to install heating system, For example, when transport fresh cargoes, such as flowers, dairy products, fruits and vegetables etc. at very low temperature, increase the temperature above  $0^{\circ}\text{C}$  can keep cargoes safe and fresh.

## Guarantee

- ◆ All the products had passed the quality system certification of ISO9001:2008. CE certification.
- ◆ 12 months or 60,000KM spare parts free change in the time of expiration date.
- ◆ 24 HOURS SERVICE for solving customers' product problems.
- ◆ Guchen Thermo Distributors all over the world to serve customers timely.

