



GUCHEN THERMO Presentation

Transport Refrigeration System

GUCHEN THERMO



GUCHEN at a glance

Who is GUCHEN

- A leading Supplier of Transport Refrigeration Items and Bus Air conditioner system
- A private company established in 1997
- A company with +50 dealers in oversea market



Employees

- **500+** employees worldwide
- **40+** engaged in R&D



Market Progress

- Leading market share in China in the past five years
- Sales of over 2000 refrigeration units annually at home
- Sell to over 50 countries all over the world
- Sales of over 1000 units per year to the Middle-east, Africa and South-American counties.



Business Lines

- Transport Refrigeration Units
- Bus Air Conditioners
- Customs Built Refrigerated Truck Bodies
- Refrigeration and HVAC Spare Parts



Development History



Development History



- 1997 Company established , In the same year, introduce the Zexel (Now called Valeo) DKS-32 compressors and Bock FK 40 series compressors to China market.



- 2000 , As the OEM supplier of bus air conditioning system for Yutong Bus, King-Long Bus and Yaxing Bus, which are active in the bus industry of China.



- 2003 Exported bus air conditioners to India, South Africa, Egypt and Turkey



- 2005 Exported bus air conditioners to Colombia.



- 2006 Successfully developed one new project- transport refrigeration systems.



- 2010 As the standard supplier of bus air conditioning system for FIFA World Cup 2010, service the sports master in South Africa



- 2011 GUCHEN's transport air conditioning / refrigeration unit Exported to Mexico market by our partners of bus air conditioner products.



- 2012 Enter into key market of Latin America, i.e. Brazil, Peru, Ecuador, Chile, Argentina.



- 2014 The perfect solution of full electric air conditioning system for Hong Kong Trams

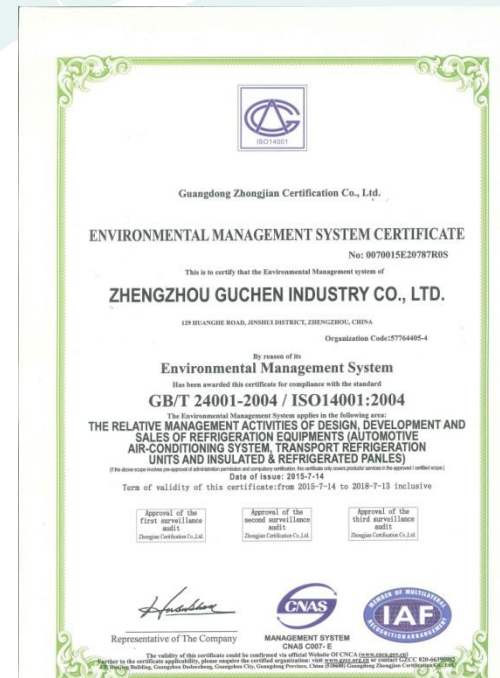
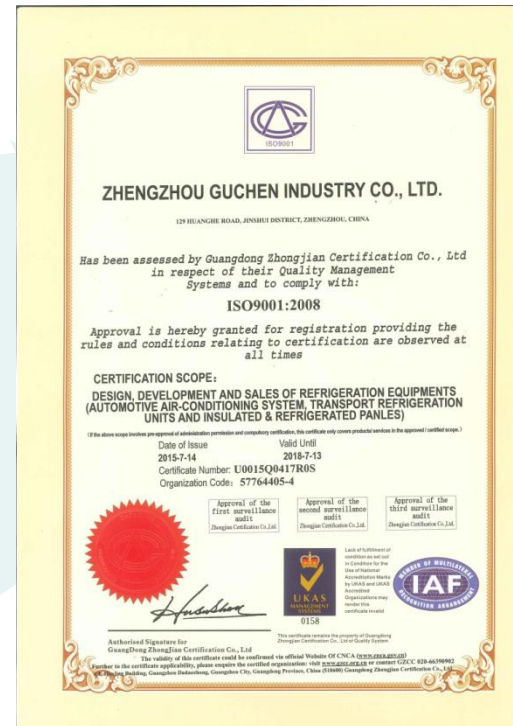


- 2015 Supply the innovative product solution of all-electric bus air conditioners for Tesma, Solris and projects companies in Malaysia, Colombia as well as Yutong company (E7, E10, E12)...



- 2016 Enlarging our sub-engine (Independent) bus air conditioning systems market share in Middle East and Southeast Asia market.

Certificates

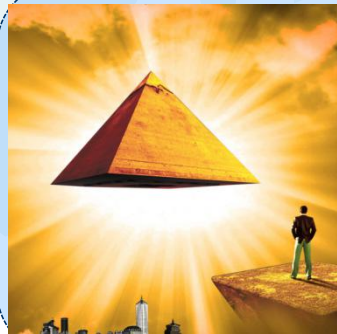


Our Vision



Company vision

Being the No. 1 in China and leading one in the world as a cold chain enterprise



Company philosophy

Innovating in technology, creating environment friendly space

GUCHEN Culture

“High quality ,artisan care ,passion ,selected suppliers , respect and customer-oriented. ” those are the “ key words ” that makes the company to become a market leader both in China and in international markets, in which we operate either directly or through representatives.

“Positioning ,strategy ,endeavor ,persistence ”, those ideas are the winning weapons of GUCHEN in the very competitive markets. Thinking every day for solutions that will win also in next years.

“Virtue, synergy, innovation” those are the values and philosophy that makes GUCHEN group a warm, energetic and innovative group.

The two vocational activities (project manufacturing and sales of Bus AC Systems, Refrigeration systems and spare parts sales) have developed themselves in the time, being able to coordinate the company reaction with the customer satisfaction shortly. “success, commitment and improvement”, those are the tag line of GUCHEN industry.

Everybody must be the actor to achieve above mentioned values: staff, suppliers and external advisors. The key figures of a leader in its field should have twenty years of history, 40,000 square meters of premises, more than 350 subordinates and a wide range of products.

GUCHEN Distributor at +50 Areas



GUCHEN distributorship statement

GUCHEN's distributors will meet:

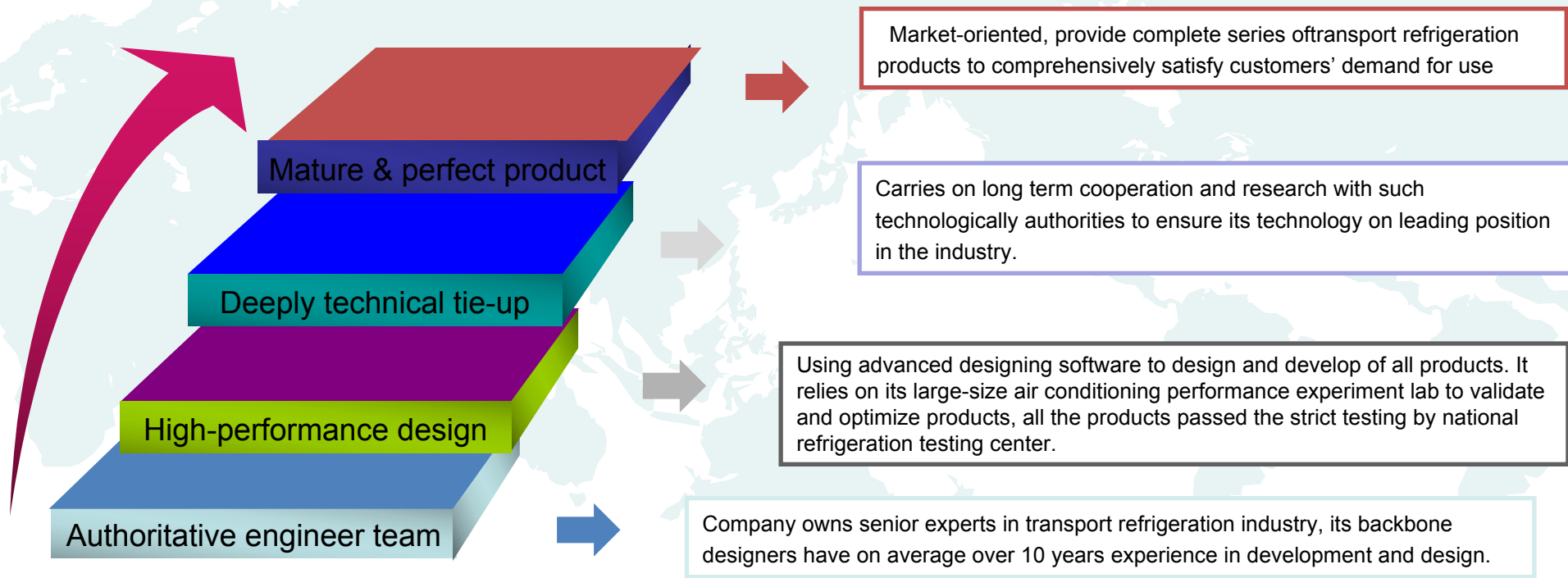
- 1) Legally registered company
- 2) Own engineers, technicians, and technical workers, and facilities for installation, after-sales service and daily maintenance.
- 3) Be active in the specified sector of bus air conditioner products, transport refrigeration , or refrigerated box
- 4) With units and spare parts in warehouse.
- 5) Ability to make after-service action within 12 hours.

GUCHEN Support Distributors Worldwide :

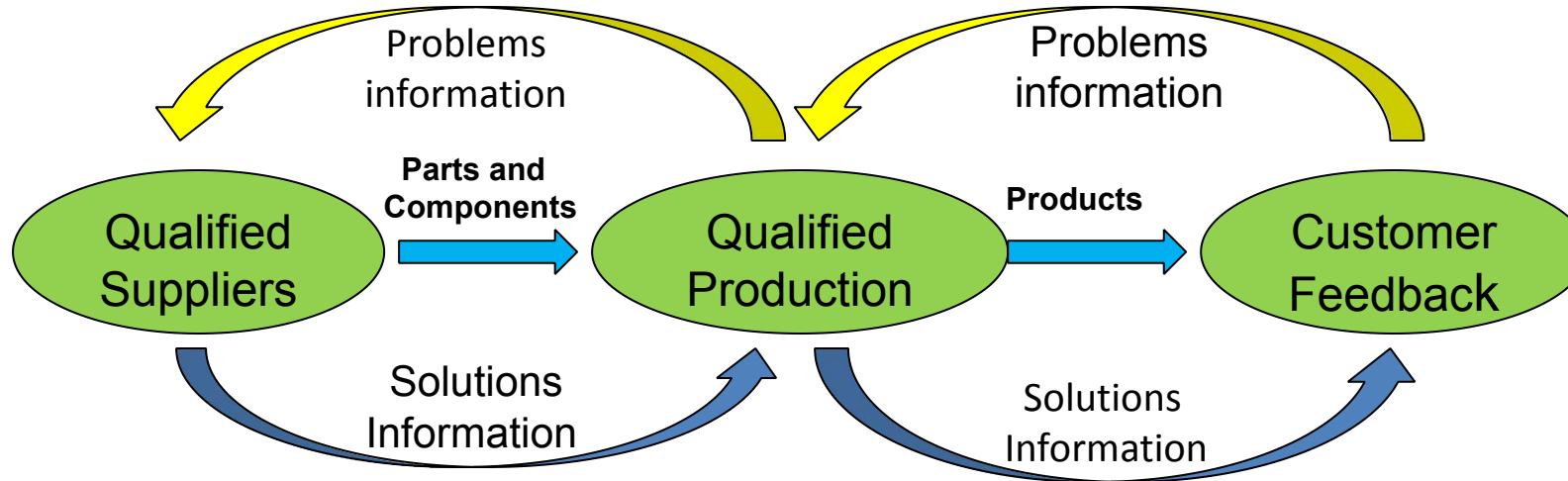
- 1) Attend IAA show (Germany) every two years.
- 2) Train engineers from distributors each year in China.
- 3) Help make the spare parts warehouse.
- 4) Help make the advertise, promotion, sales and service
- 5) Help make the custom-made units.

Advanced R&D Strength

Insist on R&D by our own team to ensure the technical storage, with the advance technologies, improve our technology with our independent path, leading the development of industry continuously.



Quality Assurance (Control) System

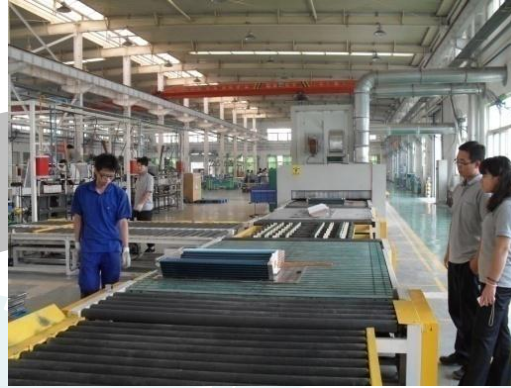


- Supplier qualification
- Verify regularly
- Incoming inspection
- Key parts and components are purchased from the same supplier with world leading brands.

- Top-quality metal sheet frame
- Auto. assembly lines;
- On-site electric and leakage test;
- Homothermal test room
- ISO9001, ISO14001;
- TS16949; CE certificates

- Regular client callback plan
- After-sales service network;
- “3 guarantees” data analysis;
- Customer satisfaction investment
- Never stop the improvement

Advanced Manufacturing Capacity



The full automatic production lines with our own proprietary intellectual property rights and use the world brand equipments to ensure the complete production is controlled and managed by SAP system.



GUCHEN THERMO PRODUCTS

GUCHEN



Bus AC



Direct
Engine Units



Diesel engine
Refrigeration unit



Related Parts
Services



Refrigerated
Truck Bodies

GUCHEN THERMO PRODUCTS



Guchen Transport Refrigeration Units					
Model	Temp. Range	Refrigerant	Voltage	Compressor	Box Application
C-200	-5°C ~ 30°C	R134a	DC12V/24V	5H11/108cc	6~12m ³
C-280	-5°C ~ 30°C	R134a	DC12V/24V	5H14/138cc	6~15m ³
Chiller units, without defrost					
TR-200(T)	-20°C~30°C	R404a	DC12V/24V	5H11/108 cc	8~12m ³
TR-300(T)	-20°C~30°C	R404a	DC12V/24V	QP16/163 cc	10~15m ³
TR-350(T)	-20°C~30°C	R404a	DC12V/24V	QP16/163 cc	15~25m ³
TR-450	-20°C~30°C	R404a	DC12V/24V	QP16/163cc	18~25m ³
TR-550	-20°C~30°C	R404a	DC12V/24V	QP16/163cc	25~35m ³
TR-650	-20°C~30°C	R404a	DC12V/24V	QP16/163cc	35~45m ³
Alternative front/roof mounted condensers ("T" refers to "top"), with hot gas defrost					
TS-700	-30°C~30°C	R404a	DC12V	FK200TK	25~35m ³
TS-1000	-30°C~30°C	R404a	DC12V	FK390TK	35~55m ³
Diesel driven units; Perkins engine, Bock compressor, Remy generator.					



Customer Case



- *TR-200T Installed on Jinbei Cargo Van 6m³ (-18°C)*
- *Ambient temp +38*



- *TR-200 Installed on Benz Pick-Up 5m³ (-18°C)*
- *Ambient temp +38*



- *TR-300 Installed on TATA Small truck 10m³ (-18°C)*
- *Ambient temp +38*
-



- *TR-350 Installed on Mitsubishi Fuso truck 15m³ (0°C)*
- *Ambient temp +50*

Customer Case



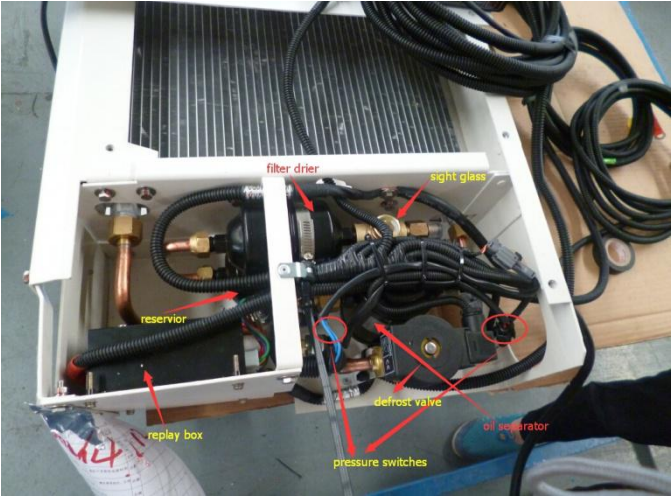
- *TR-550 Installed on ISUZU Truck 22m³ (-18 °C)*
- *Ambient temp +38*



- *TS-1000 Installed on HOWO Truck 45m³ (-18 °C)*
- *Ambient temp +38*



Key Parts of Transport Refrigeration System



Condenser fan



Danfoss filter drier



Castel magnetic valve



Reservoir



Danfoss inspiratory pressure regulating valve



Danfoss expansion valve



Cooling fin



Curlan hose pipe



BRT exhaust sensor



Thermostat

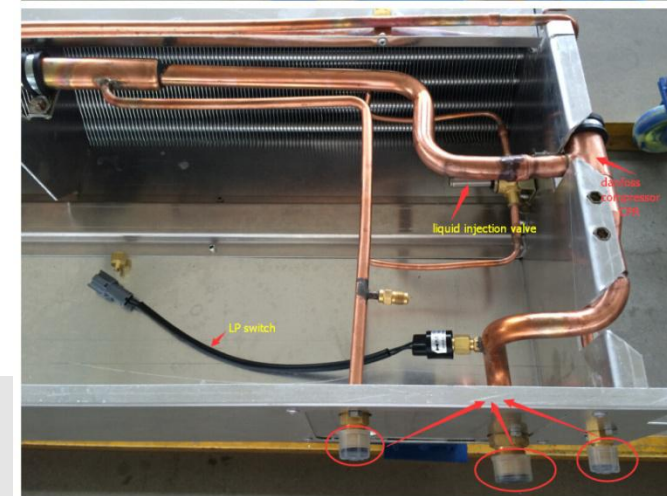
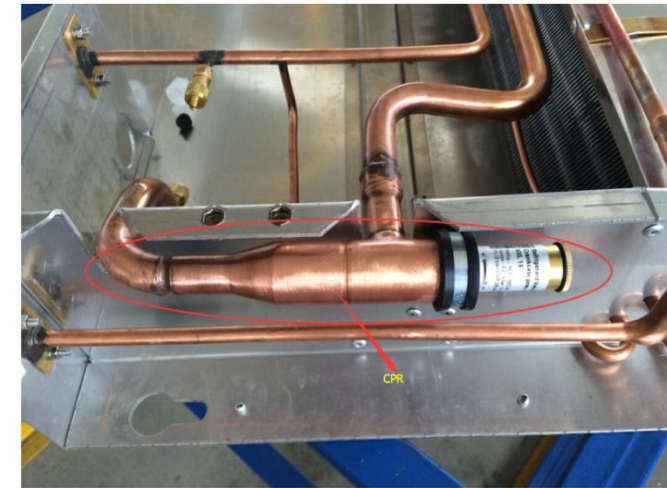
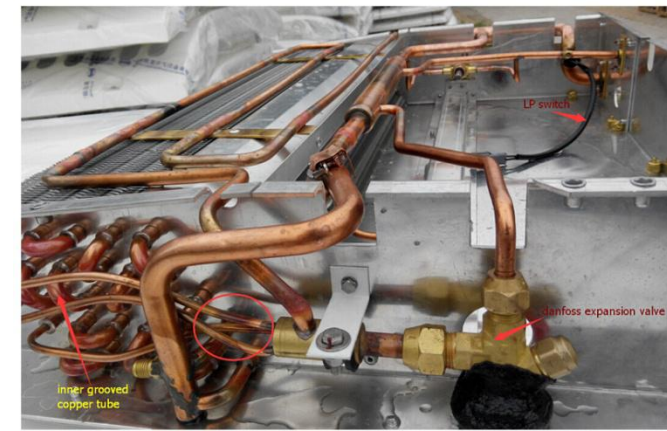


Hansun pressure switch

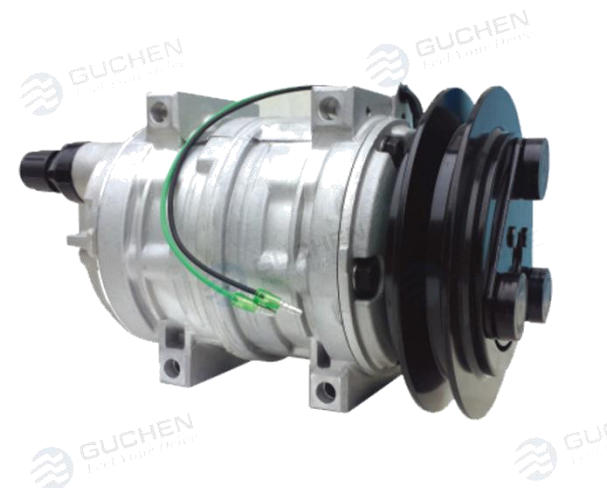


QP compressor

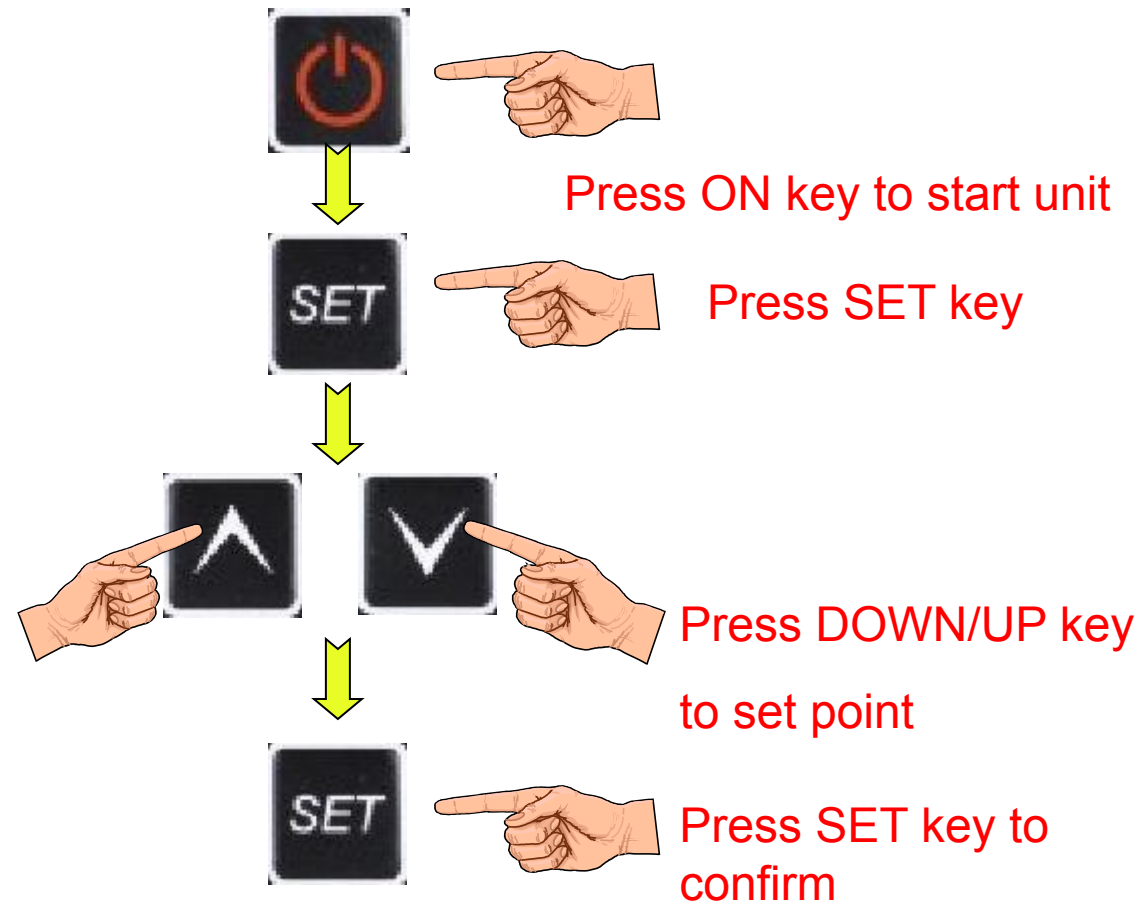
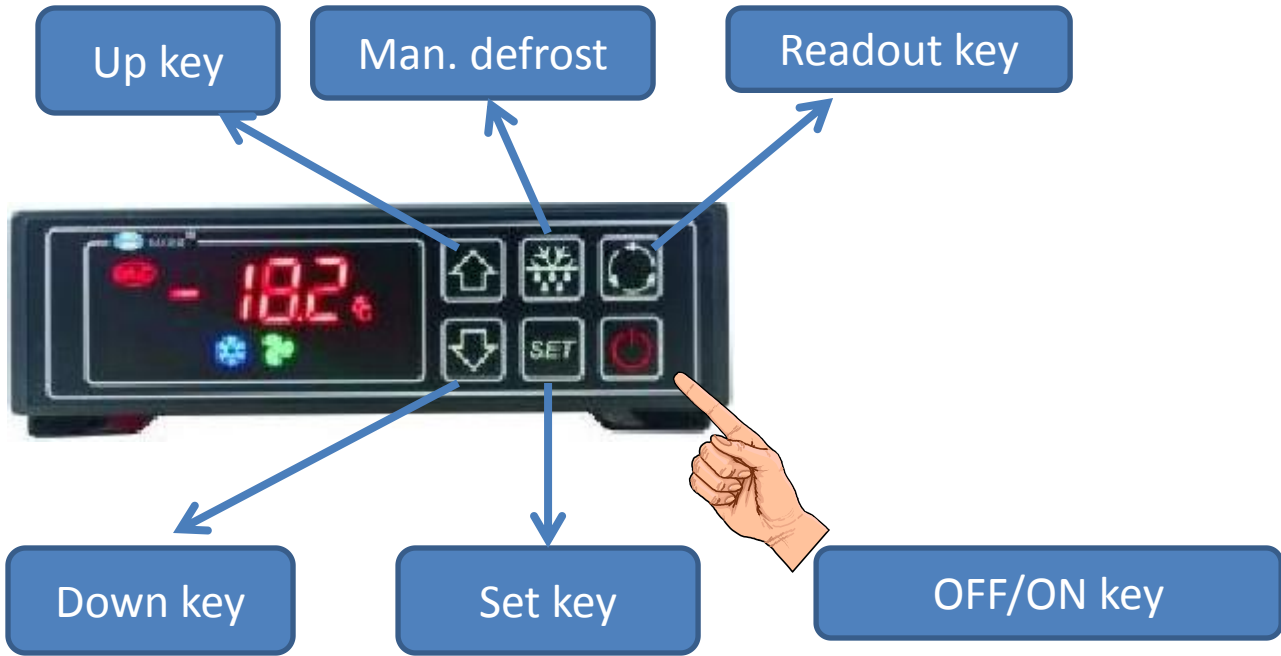
The GUCHEN THERMO Key Parts



The GUCHEN THERMO Key Parts



Control Panel-Direct Driven Units



Control Panel-Direct Driven Units



Press the OFF/ON key circularly will display:

- 1: Defrost temperature
- 2: Working voltage
- 3: Operating time

After-sales Service

- TECHNICAL SUPPORT AND TRAINING
- SPARE PARTS SUPPLY



Newly developed products- 1

Dual-temperature Rooftop Van Refrigeration Units TR-360MT

Your preferred option for the last 1 km in Cold Chain Transport!



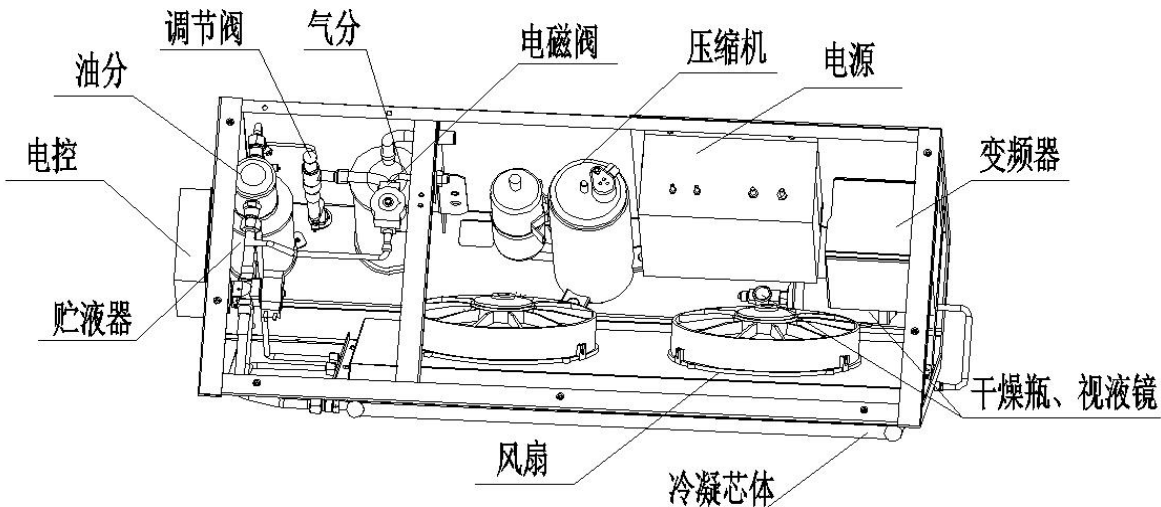
Thickness of Condenser: 150mm
Thickness of Evaporator: 100mm

Refrigerant	Cooling Capacity		Air Vol.	Dimensions(mm)		Weight(Kg)		Recommended Box Vol.	
Model	0°C/38°C	-18°C/38°C	m³/h	Condenser	Evaporator	Condenser	Evaporator	-18°C	0°C
R404a	3365W	1985W	600*2	815*965*150	570*450*100	22kg	11kg*2	10m³	20m³

Newly developed products- 2

Full electric truck refrigeration unit TR-550E

- Apply for new energy electric vehicles, driven by AC power supply.
- No noise, low energy consumption, stable cooling capacity
- Dual or single temperature area application; temperature minimum to -20°C.
- Connected with the vehicle CAN system.



The GUCHEN team in Australia



The GUCHEN team in Mexico



The GUCHEN team in Belgium



The GUCHEN team in Shanghai





22-29.Sep.2016

Guchen will be at **66th IAA**
Commercial Vehicles in Hannover, German.

H11 Exhibition Hall, I17 Booth Number.



Search for "guchen"



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