

COLD CHAIN SOLUTIONS



Industrial Cold Chain Solutions -
Powered by GREE Technology



Smarter
Technology



Higher
Efficiency



Greater
Reliability



Why DWP Refrigeration?

End-to-End Project Execution

Managing every stage with precision.



Energy Efficient Designs

Optimized systems that reduce energy consumption.



Lifecycle Support

Maintenance & technical support throughout your system's lifespan.



24/7 Service

Round-the-clock assistance without interruptions.



Turnkey EPC Contractor

Complete engineering construction solutions under one roof.



Industrial Refrigeration Specialists

Delivering advanced cooling solutions.



National Engineering Network

a nationwide team ensuring seamless process.



Refrigeration Services provided by DWP:

Your trusted turnkey EPC partner for industrial refrigeration, backed by a nationwide engineering network and comprehensive end-to-end project execution.



**ENERGY AUDIT**
Optimize. Save. Sustain.

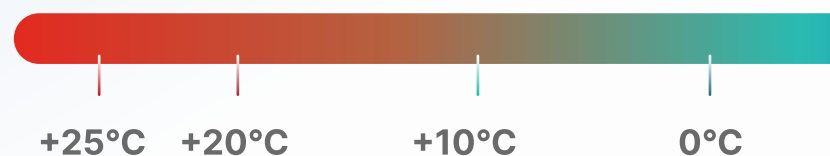
**THERMOGRAPHY**
Detect. Prevent. Protect.

**RETROFIT**
Upgrade. Improve. Perform.

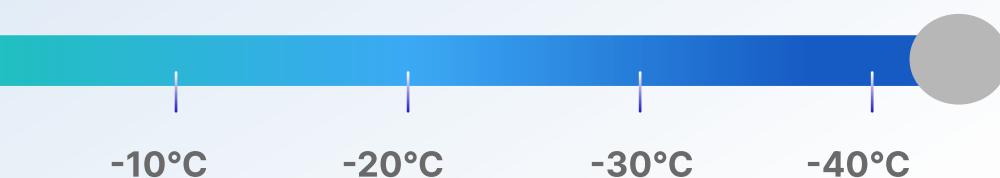
**SPARE PARTS AND BEYOND**
Reliable Supply. Lasting Support.



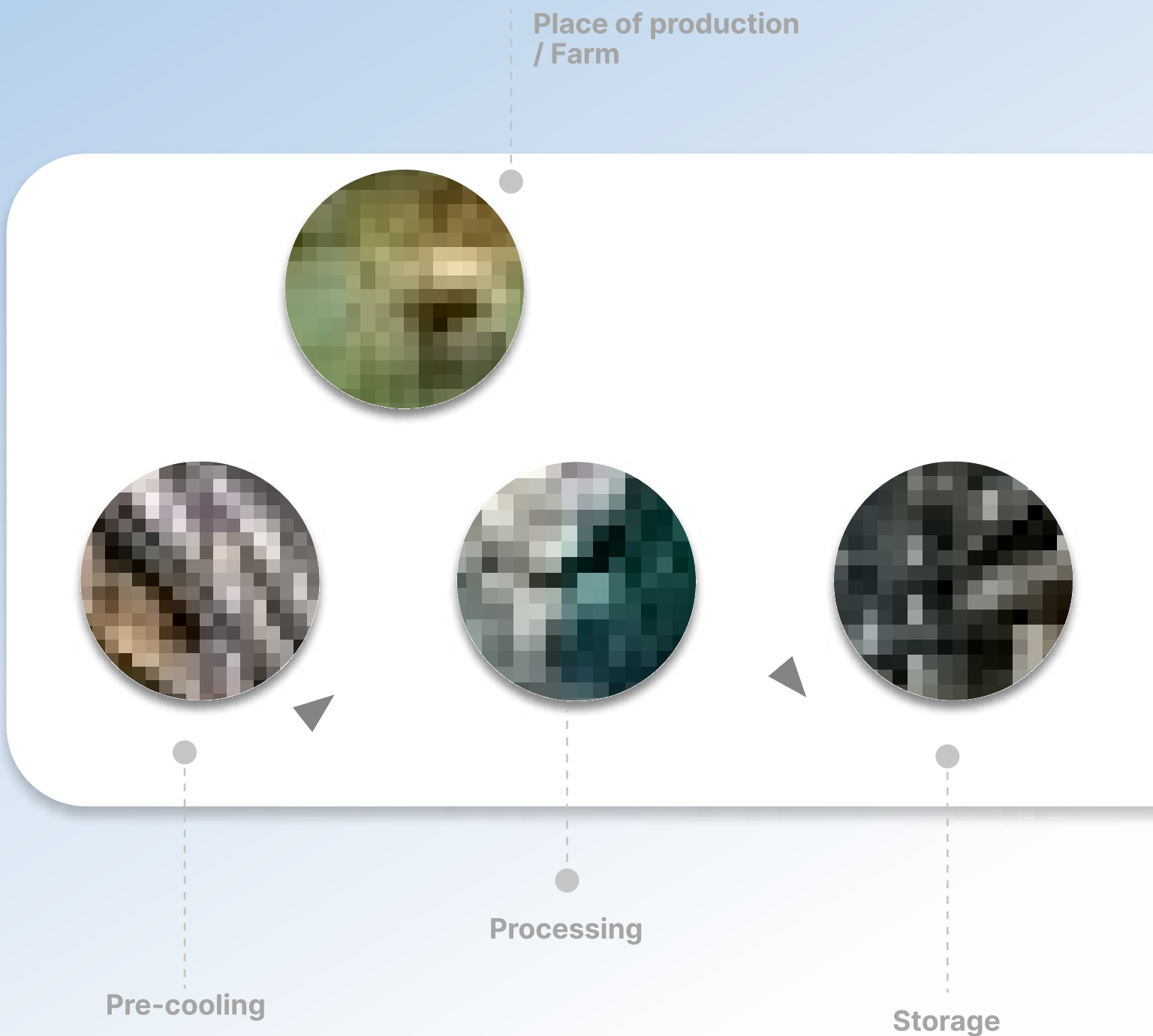
TEMPERATURE RANGE	PROFESSIONAL RANGE NAME	APPLICATIONS / IDEAL FOR	GREE REFRIGERATION SOLUTIONS	TYPICAL PRODUCTS
+15°C to +25°C (Ambient / Comfort Range)	Ambient & Comfort Ranger Environment control & general applications	• Offices, Retail Stores • Hotels, Restaurants • Comfort Air Conditioning	Ambient Cooling Solutions High Efficiency Air Conditioners & Ventilation Systems	• Split AC • Cassette AC • Ducted Units • Ventilation Systems
+2°C to +15°C (Cooler Range)	Cooler Range Fresh products storage & short term preservation	• Fruit & Vegetables • Dairy Products • Beverages • Flowers	Commercial Cooling Systems Split Systems, Packaged Units & Display Refrigeration	• Display Chillers • Reach-in-Coolers • Under Counter Coolers • Bottle Coolers
+2°C to -2°C (Chiller Range)	Chiller Range Precision cooling for extended shelf life	• Meat (Short term) • Seafood • Pharmaceuticals • Vaccines	Chilling Solutions Low Temperature Packaged Units & Chiller Systems	• Chiller Units • Low Temp. Packaged Units • Cold Rooms • Terminal Units

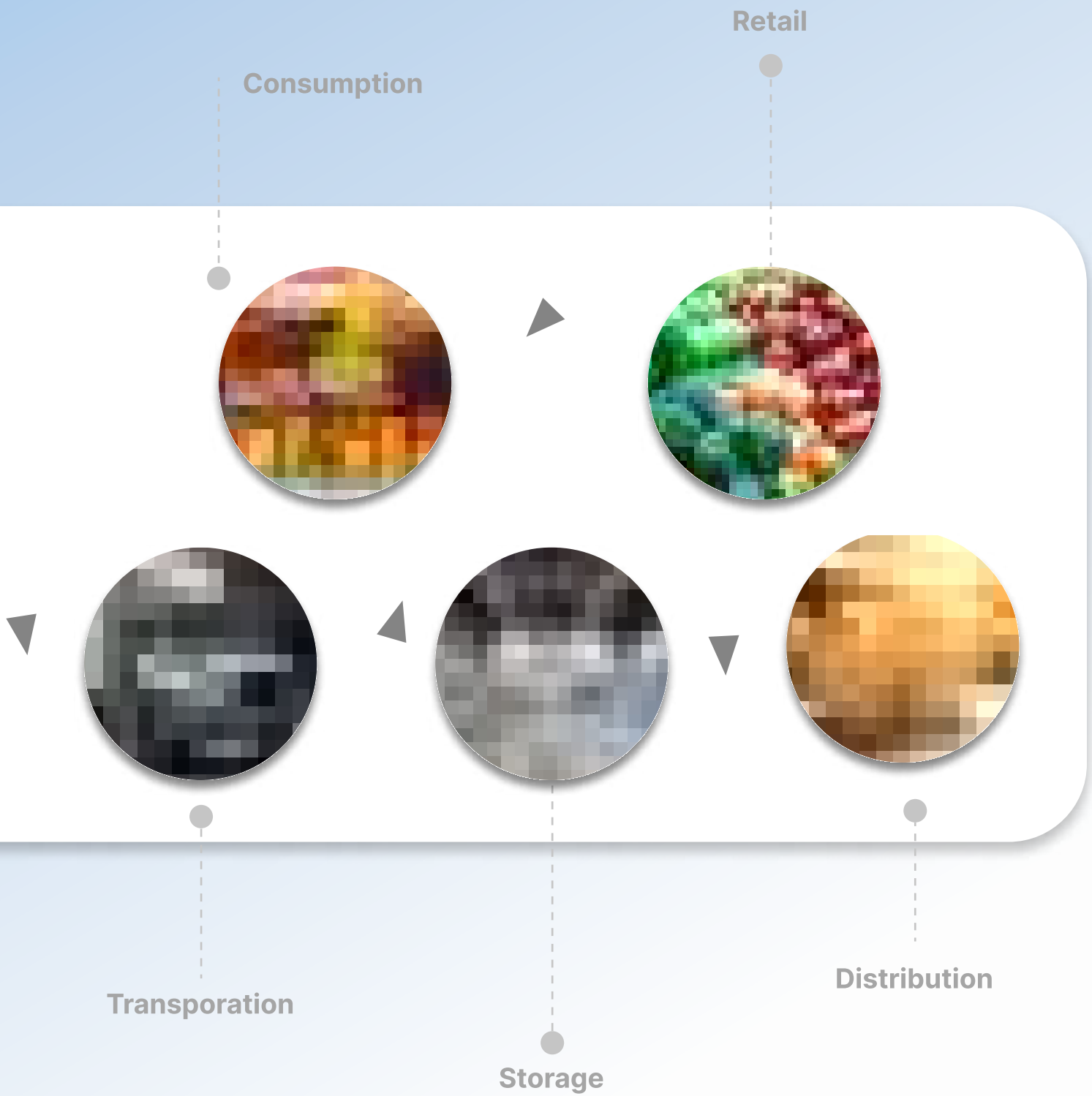


TEMPERATURE RANGE	PROFESSIONAL RANGE NAME	APPLICATIONS / IDEAL FOR	GREE REFRIGERATION SOLUTIONS	TYPICAL PRODUCTS
-18°C to -2°C (Chiller Range)	Chiller Range Precision cooling for extended shelf life	• Meat (Short term) • Seafood • Pharmaceuticals • Vaccines	Chilling Solutions Low Temperature Packaged Units & Chiller Systems	• Chiller Units • Low Temp. Packaged Units • Cold Rooms • Terminal Units
-25°C to -18°C (Deep Freezer Range)	Deep Freezer Range Long term deep frozen storage & industrial applications	• Industrial Frozen Foods • Bulk Meat Storage • Fish & Seafood • Large Scale Storage	Deep Freezer Solutions Deep Freezer Rooms & Low Temperature Systems	• Deep Freezer Rooms • Low Temp. Systems • Industrial Cooling Units • Condensing Units
-40°C to -25°C (Ultra Low Temperature Range)	Ultra Low Temperature Range Specialized Ultra low temperature storage	• Ice cream production • Pharmaceuticals • Speciality Chemicals • Scientific & Laboratory Use	Ultra Low Temperature Solutions Ultra low temperature systems & special purpose solutions	• Ultra low freezer rooms • Cascade Systems • Low Temp. Compressors • Special Application Units



DWP Complete Cold Chain Solutions





Products We Offer

Condensing Units

Reliable outdoor units designed for high efficiency and long service life.

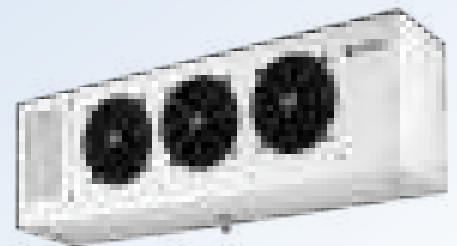
- Air Cooled / Water Cooled
- Hermetic / Semi-Hermetic
- Variable Speed Options
- Wide Capacity Range



Air Coolers

High performance air coolers ensuring optimal heat transfer and uniform cooling.

- Ceiling Mounted
- Wall Mounted
- Dual Discharge
- Electric Defrost



Compressors

Advanced compressors delivering superior efficiency, durability and reliability.

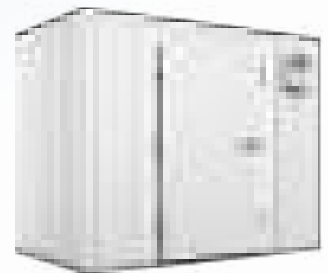
- Hermetic & Semi-Hermetic
- Scroll / Reciprocating
- Variable Speed
- R404A / R134A / R448A / R449A
- Wide Application Range



Cold Rooms

Custom built cold rooms for safe storage, long shelf life and energy efficiency.

- Modular & Custom Design
- Precise Temperature Control
- Hygienic & Durable
- Wide Range of Applications



Chillers

Efficient chiller systems for industrial and commercial cooling applications.

- Air Cooled / Water Cooled
- Scroll / Screw Compressors
- Precise Temperature Control
- Energy Efficient Design



Products We Offer

Refrigeration Controls

Intelligent control solutions for accurate monitoring, control and system protection.

- Advanced Controllers
- Temperature Controllers
- Pressure & Safety Controls
- System Integration



Hinged, Vertical, Sliding Doors

High quality doors for cold rooms and industrial refrigeration applications.

- Hinged Doors
- Vertical Doors
- Sliding Doors
- Durable & Insulated



EPS, PU, PIR, XPS Sandwich Panels

Premium insulation panels offering excellent thermal performance & strength.

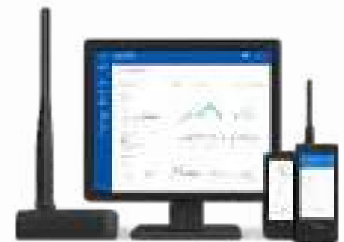
- EPS - Economical Insulation
- PU / PIR - High Performance
- XPS - High Compressive Strength
- Custom Thickness & Density



Monitoring Systems

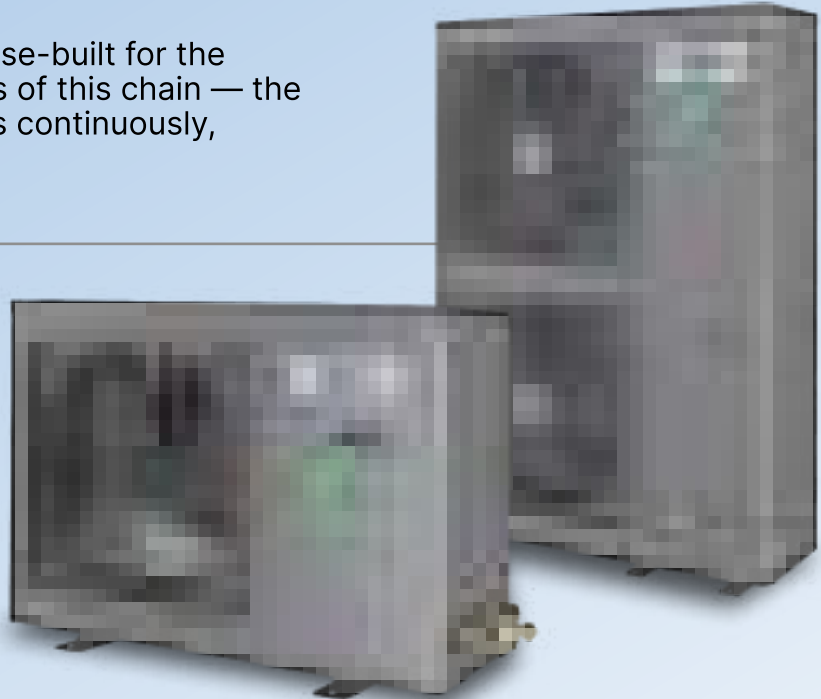
Real-time monitoring for complete visibility, safety and operational efficiency.

- Temperature Monitoring
- Alarm & Notifications
- Data Logging & Reporting
- Remote Access



Packaged Units for Traditional Cold Rooms

Gree's packaged unit is purpose-built for the storage and processing nodes of this chain — the points where a cold room runs continuously, unattended, for years.



INSIDE THE COLD ROOM



Uniform low temperature keeps products fresh for longer



Air circulation ensures even cooling throughout the room.



Hygienic and controlled environment protects quality and safety.

Packaged Unit Sizes for Traditional Cold Rooms

HP	MODEL	EVAPORATION TEMPERATURE RANGE	ROOM TEMPERATURE	REFRIGERANT
3HP	GNJ-QFT3CG/ NaD-E	(-15°C ~ 10°C)	(-5°C ~ 20°C)	R410A
5HP	GNJ-QFT5CG/ NaD-M			
6HP	GNJ-QFT6CG/ NaD-E			
8HP	GNJ-QFT8CG/ NaD-E			
10HP	GNJ-QFT10CG/ NaD-E			
12HP	GNJ-QFT12CG/ NaD-E			
16HP	2 X GNJ- QFT8CG/NaD-M			
20HP	2 X GNJ- QFT10CG/NaD-M			
24HP	2 X GNJ- QFT12CG/NaD-M			



Traditional units:

They are all semi-finished products, equipped with air coolers and expansion valves of different sizes, and too much or too little refrigerant charged; the matching degree of the overall system is extremely low; the compressor is prone to run with liquid refrigerant and over-range operation, and the operation reliability is low.

The outdoor units:

The outdoor unit integrates the compressor, condenser, throttling valve, thermostat and other components, and the system is perfectly matched to ensure the reliability of the unit.



UPS's of Packaged Unit Proposal for Traditional Cold Rooms

A traditional cold room is assembled on-site from separately sourced parts. Gree's packaged proposal pre-integrates and pre-charges those same parts at the factory — removing the variables that most often cause field failures.

PROJECT STATUS - FIELD-ENGINEERED

- ⊗ Condensing Unit (bare)
- ⊗ Air Cooler (separately sized)
- ⊗ Electric control box + wired controller
- ⊗ Fan + electric heating, sourced separately
- ⊗ Compressor wiring run on-site
- ⊗ Engineering welding of refrigerant lines
- ⊗ Field-charged communication wire & sensors

Outcome: variable refrigerant charge, inconsistent welding quality, and reliability that depends on the skill of the local installation crew.

PACKAGED PROPOSAL - GREE

- ✓ Condensing Unit (factory pre-charged)
- ✓ Air Cooler (matched & pre-selected)
- ✓ Wired controller (pre-configured)
- ✓ Fan, integrated and balanced at factory
- ✓ Power supply - single plug-and-run circuit
- ✓ Communication wire - pre-terminated
- ✓ Temperature sensor - calibrated, ready to mount

Outcome: consistent factory-tested performance, installation in hours instead of days, and a single point of accountability.

Intelligent Control: Best Feature for Traditional Cold Rooms

Gree Intelligent Control

VS

Traditional Units



The operating parameters and status display are clear; the parameters can be viewed and set directly by button operation, which is simple and convenient.

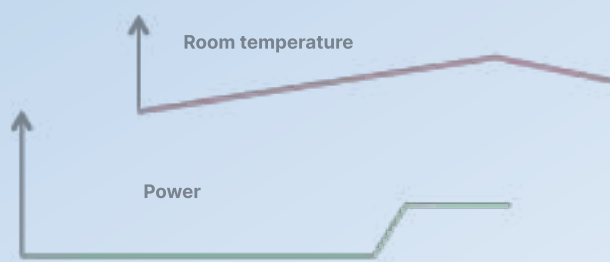
The error code is clear at a glance for quick maintenance.



- Adopt mechanical pressure controller with complex adjustment. It may occur errors easily and the control accuracy is low.
- There is no display of other parameters except pressure. The unit will shut down directly due to failure, without knowing the reason.

The outdoor unit **mainboard adopts microcomputer control packaged system**, which controls the operation of compressor directly according to the cold room temperature, to realize the cooling on demand.

- Mainboard control
- Intelligent display

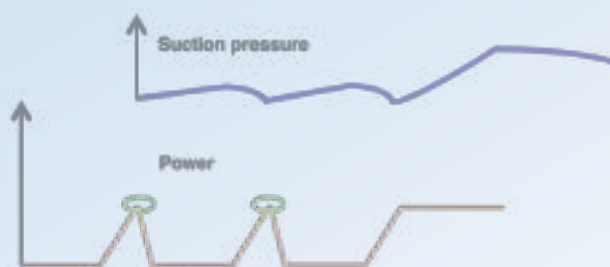


Control of room temperature

Unit startup controlled by room temperature

When the temperature of the cold room rises to the startup value, the compressor starts operation and synchronises with the indoor unit, to avoid ineffective frequent startup and stoppage of the compressor.

It is efficient and energy-saving, and the oil return is reliable.

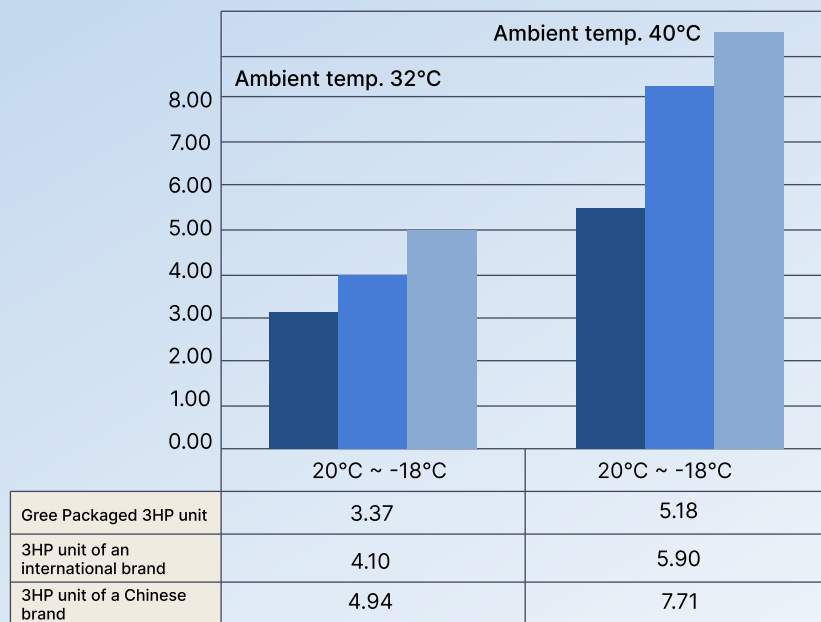


Control of pressure

Traditional units: Unit startup and stoppage are controlled mechanically by pressure. Ineffective frequent startup and stoppage of the compressor are existed.

The electronic expansion valve adjusts the liquid refrigerant supply according to the actual demand to ensure the best energy efficiency of the system.

Energy Consumption Comparison for Cooling of Cold Rooms

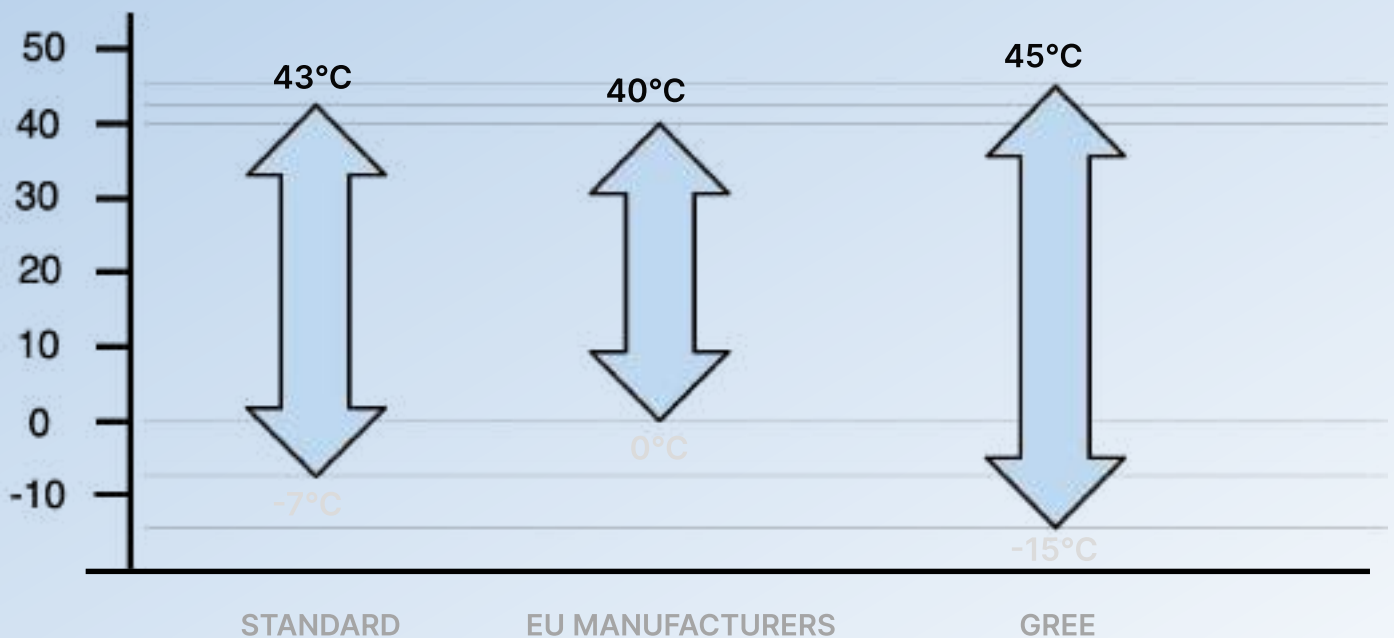


Traditional units:

Adopt mechanical throttling devices such as thermal expansion valves, with limited adjustment range; it is difficult for the units to achieve the optimal energy efficiency.

Traditional units:

- When the ambient temperature is high in summer, the temperature of cold room cannot reach the standard or malfunction protection occurs.
- When the ambient temperature in North China is low in winter, the unit cannot start operation.



GREE:

The high-efficiency condenser is designed according to the extreme working conditions to meet the normal operation under extreme working conditions; the outdoor ambient temperature for operation is as high as 45°C.

