

LNEYA[®]



Low Temp. CHILLERS LC Series

Temp. control $-25^{\circ}\text{C} \sim -5^{\circ}\text{C}$

Color Touch Screen
Large touch screen
Curved form shows
real-time temp. changes



Totally Closed Loop

Low temp. does not absorb water in the air
Ensure the purity of the medium



Security Alarm

Self-diagnosis of security functions
Timely alarms are displayed

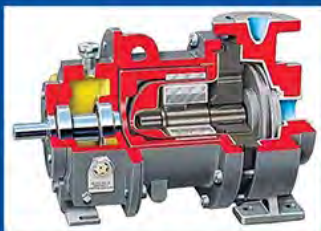
Brand Compressor
Adopt brand compressor,
Expansion valve combined
with control to ensure stable
temperature



Wide Temp. Control

Medium-sized single-fluid temp. control
Temp. control range $-150^{\circ}\text{C} \sim -5^{\circ}\text{C}$

Circulating Pump
With magnetic pump, no
mechanical shaft seal
Solve the problem of
circulating pump leakage



Curve Temp. Control

Automatic control, temp. curve display
Support temp. record U disk export

Typical Applications



- High pressure reactor cold source
- Double glass reactor cold source
- Double layer reactor cold source
- Microchannel reactor cold source
- Small cold source low temperature
- Distillation system low temperature
- Low temp. weathering test of materials
- Combined chemical cold source
- Semiconductor equipment cooling
- Vacuum chamber refrigeration



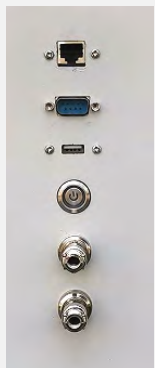
Plate Heat Exchanger
Heat exchanger to improve the heat exchange efficiency per unit area



Temperature Control
Continuously adjust PID parameters
Gives better control over temperature and response time



Communication Interface
Standard PT100
USB interface
RS485
Optional
Various analog interfaces
Ethernet interface



LC Series

| Model | LC12W | LC20W | LC30W | LC40W | LC60W | LC80W | LC120W | LC180W | LC240W | LC360W |
|---------------------------------|--|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------|-------------------------------|
| Temp. Range | -25°C~-5°C | | | | | | | | | |
| Cooling Capacity At -20°C | 12kW | 20kW | 30kW | 40kW | 60kW | 80kW | 120kW | 180kW | 240kW | 360kW |
| | 10320 Kcal/h | 17200 Kcal/h | 25800 Kcal/h | 34400 Kcal/h | 51600 Kcal/h | 68800 Kcal/h | 103200 Kcal/h | 154800 Kcal/h | 206400 Kcal/h | 309600 Kcal/h |
| Circulation Pump Info | 6.6m ³ /h 1.2bar | 9m ³ /h 1.2bar | 15m ³ /h 2.5bar | 15m ³ /h 2.5bar | 25m ³ /h 2.5bar | 25m ³ /h 2.5bar | 25m ³ /h 2.5bar | / | / | / |
| Inlet&outlet connection size | DN-25 | DN-25 | DN-32 | DN-32 | DN-40 | DN-40 | DN-40 | DN-50 | DN-50 | DN-65 |
| Cooling Water At 30 degree | 8m ³ /h DN40 | 10m ³ /h DN40 | 16m ³ /h DN50 | 20m ³ /h DN65 | 25m ³ /h DN65 | 30m ³ /h DN80 | 38m ³ /h DN80 | 55m ³ /h DN100 | 70m ³ /h DN125 | 100m ³ /h DN150 |
| Cold Storage tank (optional) | 150L | 200L | 250L | 350L | 500L | 600L | 750L | / | / | / |
| Expansion tank (standard) | 100L | 175L | 250L | 350L | 500L | 600L | 750L | / | / | / |
| Compressor | Emerson Copeland、Dorin semi-closed compressor、Carlyle | | | | | | | | | |
| Safety Protection | Plate heat exchanger | | | | | | | | | |
| Refrigerant | R404A /R507C | | | | | | | | | |
| Secondary refrigerant | Non-corrosive liquid, aqueous ethanol solution, aqueous glycol solution, etc. | | | | | | | | | |
| Safety Protection | High pressure protect; water supply cut-off protection; over-current protection; leakage protection; sequential and phase failure protection; High temperature protection; Sensor Failure protection etc. multi-safety protection | | | | | | | | | |
| Level Indicator | Adopt glass liquid level indication | | | | | | | | | |
| Piping material | Expansion tank, cold storage tank and circulation pipeline are all made of SUS304 | | | | | | | | | |
| Case material | Channel steel + square tube + cold rolled plate sealing plate Spray | | | | | | | | | |
| Operation Panel | 7-inch color touch screen display, temperature curve record | | | | | | | | | |
| Control System | PLC&Module | | | | | | | | | |
| Circulation Pump | LNEYA Mangetic Pump | | | | | | | | | |
| Evaporator | Casing type water-cooled condenser / tube-type water-cooled condenser | | | | | | | | | |
| Condenser | AORI plate heat exchanger | | | | | | | | | |
| Refrigeration accessory | Oil separators, drying filters, mirrors, etc. use Emerson/Danfoss and other brands | | | | | | | | | |
| Electric | AC contactors, intermediate relays, circuit breakers, etc. are Schneider / ABB brand | | | | | | | | | |
| Closed Circulation System | The whole system is a full closed circulation, there is no oil mist at high temperature and no water vapor at low temperature, pressure do not rise up when system is running. The system will supplement oil automatically at low temperature | | | | | | | | | |
| Dimension cm | 100*150 *185 | 100*150 *185 | 200*145 *205 | 200*145 *205 | 250*145 *225 | 250*145 *225 | 300*160 *225 | 350*160 *205 | 400*160 *225 | 500*200 *225 |
| Power max 380V 50HZ | 12kW | 19kW | 28kW | 38kW | 50kW | 61kW | 86kW | 127kW | 167kW | 247kW |
| dB | within 75 dB | | within 80 dB | | | within 90 dB | | | | |
| Weight(kg) | 800kg | 950kg | 1100kg | 1350kg | 1500kg | 1800kg | 2400kg | 3100kg | 3600kg | 5000kg |
| Throttle type | Electronic expansion valve | | | | | | | | | |



Wuxi Guanya Refrigeration Technology Co., Ltd. (LNEYA) specialized in the Industrial Chiller, Industrial Refrigerator, Multi-reactor Chiller (TCU), Battery Motor / Semiconductor Temperature Testing System and Ultra-low Temperature Chiller. Used in pharmaceutical, aerospace, semiconductor, new energy automotive battery / motor and other industries.

About Us

The company is at the advanced level in the same industry in the research and development of single-machine cascade refrigeration technology, and the research on high and low temperature rapid temp. rise and temperature technology is at the international advanced level. In particular, the high-precision temp. control of the reactor is an internationally advanced single medium control $-90\sim+250^{\circ}\text{C}$ continuous temperature control, and high precision linear control of the reactor material temp.



300 million
Annual sales



15 years
R&D experience