

**LNEYA<sup>®</sup>**



# Low Temp. CHILLERS LC Series

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

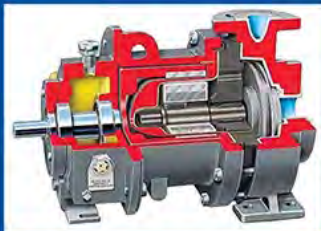
Color Touch Screen  
Large touch screen  
Curved form shows  
real-time temp. changes



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



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



## 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



## Wide Temp. Control

Medium-sized single-fluid temp. control  
Temp. control range -150 ~-5



## 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



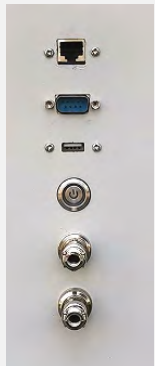
Plate Heat Exchanger  
Heat exchanger to improve the heat exchange efficiency per unit area



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 <sup>3</sup> /h 1.2bar	9m <sup>3</sup> /h 1.2bar	15m <sup>3</sup> /h 2.5bar	15m <sup>3</sup> /h 2.5bar	25m <sup>3</sup> /h 2.5bar	25m <sup>3</sup> /h 2.5bar	25m <sup>3</sup> /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 <sup>3</sup> /h DN40	10m <sup>3</sup> /h DN40	16m <sup>3</sup> /h DN50	20m <sup>3</sup> /h DN65	25m <sup>3</sup> /h DN65	30m <sup>3</sup> /h DN80	38m <sup>3</sup> /h DN80	55m <sup>3</sup> /h DN100	70m <sup>3</sup> /h DN125	100m <sup>3</sup> /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	205*145 *205	205*145 *205	205*145 *175	245*145 *205	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**