LNEYA®

无锡冠亚恒温制冷

Low Temp. CHILLERS

LC Series

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

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

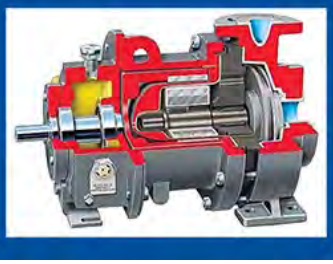

Plate Heat Exchanger
Heat exchanger to improve the heat exchange efficiency per unit area

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	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									

Typical Application

Plant Extracts
Depending on the physical state of the solvent under standard conditions, it must be liquefied by cooling or pressure or evaporated by heating at the end of the extraction process. Whether for decarboxylation, distillation or overwintering, careful temp. management not only ensures high extraction yields, but also efficient recovery of the solvent used.

Temp. Control in Chemical and Pharmaceutical Process Engineering
In the chemical industry in general, and process engineering in particular, temp. control systems are used that must be able to react continuously and rapidly to change and stabilize the process.

Reactor Temperature Control
In chemical and biological processes, the transformation of substances usually takes place in reactors, which can create consistent conditions and a safe space for the reactions. This requires a temperature control system with fast, precise compensation and a wide temperature range.

Lab Benchmarks
The requirements of a temp. control system also depend on the scope of its application. When developing new procedures in the laboratory, not only the performance and reaction speed but also the wide operating temp. range and the simple and flexible change between applications are of decisive importance for the choice of a temperature control system.

About Us

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.

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~+250°C continuous temperature control, and high precision linear control of the reactor material temp.

300 million
Annual sales

15 years
R&D experience