









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



Self-diagnosis of security functions Timely alarms are displayed



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



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



## **LD Series**

Model	LD4W	LD6W	LD8W	LD12W	LD20W	LD30W	LD40W	LD60W	LD90W	LD120W
Temp. Range	-80°C~-30°C									
Cooling Capacity at -75°C	4kW	6kW	8kW	12kW	20kW	30kW	40kW	60kW	90kW	120kW
	3440 kcal/h	5160 kcal/h	8600 kcal/h	10320 kcal/h	17200 kcal/h	25800 kcal/h	34400 kcal/h	51600 kcal/h	77400 kcal/h	103200 kcal/h
Circulation Pump Info	6.6m³/h 1.2bar	6.6m³/h 1.2bar	9m³/h 1.2bar	15m³/h 2.5bar	25m³/h 2.5bar	25m³/h 2.5bar	25m³/h 2.5bar	35m³/h 2.5bar	35m³/h 2.5bar	50m³/h 2.5bar
Inlet&outlet connection size	DN-25	DN-32	DN-40	DN-40	DN-50	DN-50	DN-50	DN-65	DN-65	DN80
Cooling Water At 30 degree	10m³/h DN40	14m³/h DN40	20m³/h DN50	25m <sup>3</sup> /h DN65	35m <sup>3</sup> /h DN80	45m³/h DN80	65m <sup>3</sup> /h DN100	90m³/h DN125	120m³/h DN150	180m³/h DN150
Cold Storage tank (optional)	200L	350L	500L	750L	1000L	1200L	1500L	2200L	3000L	4000L
Expansion tank (standard)	100L	175L	250L	350L	500L	600L	750L	1000L	1350L	1800L
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	200*145 *205	200*145 *205	250*145 *225	250*145 *225	350*160 *205	380*160 *205	400*160 *225	500*200 *225	650*200 *225
Power max 380V 50HZ	14kW	18kW	30kW	43kW	69kW	101kW	136kW	200kW	295kW	396kW
dB	within 75 dB within 80 dB					within 90 dB				
Weight(kg)	950kg	1100kg	1400kg		2200kg	3000kg	3500kg	4000kg	5000kg	6000kg
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~+250°C continuous temperature control, and high precision linear control of the reactor material temp.



300 million Annual sales



15 years R&D experience