



CL-81

CL-151

CL-601

COOLNIT CL-81/151/601

Long-selling, open circuit chiller with high precise temperature control
Redesigned to be more user-friendly and much lighter

For temperature control of constant temperature water baths and analytical instruments.

- ✓ **Air-cooled, precision temperature control, and long selling chillers for open circuits. Renewal improves detailed usability.**



Example of circulation to water bath

CL series is an air-cooled, high-precision open-circuit chiller (constant temperature water circulation system).

It is mainly used for temperature control of constant temperature water baths, and is ideal for circulation to temperature control water baths required for quality tests, etc.



Drain cock (inside the front cover)

This series is a long-selling product that has been refined for over 35 years.

CL-81/151/601 is reliable as in the previous model and their weight were reduced by 3kg/7kg/1kg each. In addition, the drain cock was repositioned from the rear side of the unit to the front side for better usability.

- ✓ **Temperature recording and safety device output are possible, and optional program control are possible**

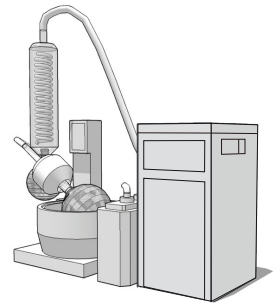
The CL series allows for temperature recording and safety device operation signal output, and external temperature sensors can be used. Also, by connecting to a program setting device (sold separately), temperature and time program control are possible.



Input/Output terminal on the right side of CL series unit.

- ✓ **Optional port tank allows for circulation in closed circuits**

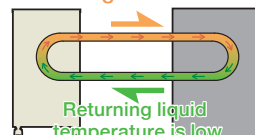
In addition to circulation to the water bath as a chiller for the open circuit, it can also circulate to equipment (= closed-circuit circulation) using a separately sold port tank. Even for the one targets with high piping resistance such as rotary evaporators, circulation can be easily started with the built-in priming pump.



- ✓ **High-temperature cooling possible [CL-601]**

[Heating control]

e.g.: +50°C



For temperature control in high temperature range. The general chiller is only for heating control.

[Cooling control]

e.g.: +50°C



Cooling in high temperature range is required in this temperature control.

The CL-601 has a "high temperature cooling" function that enables cooling control even in the high temperature range. This enables high precision temperature control even in the high temperature range.

■ Specifications

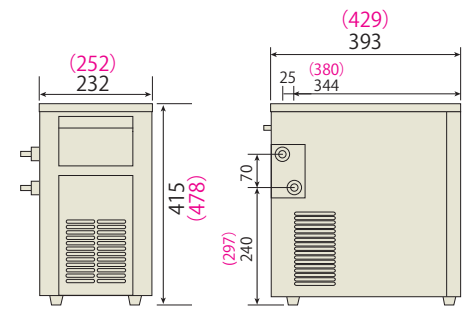
Model name	CL-81	CL-151	CL-601
Operating environmental temp. range (*1)	+5°C ~ +30°C		
Operating temperature range	-10°C ~ +70°C (*2)		-15°C ~ +70°C (*2) (*3)
Temperature control accuracy	~ ±0.3°C (*4) (*5)		±0.05 ~ 0.5°C (*4)
Cooling capacity (*6)	Approx. 140W	Approx. 270W	Approx. 750W
Compressor (air-cooled) output	75W	150W	600W
Pump capacity	Max. flow rate	~ 7L/min	13/14L/min
	Max. lift height	4m (at 3L/min, both 50/60Hz)	8/11m (at 1L/min, 50/60Hz)
Temperature display	Digital (PV/SV independent display/ PV display in 0.01°C unit)		Digital (PV/SV independent display/ PV display in 0.1°C units)
Flow display	Digital display		
Heater	450W	600W	1.8kW
Circulation nozzle diameter	Outer diameter φ13 mm		Outer diameter φ22 mm
Safety device/Safety function	Earth leakage/overcurrent breaker, Flow low limit error, High/Low temperature safety device, Anti-freezing safety device		
Other functions	Remote temperature setting, Temperature recording output, Safety device operation signal external output, External temperature sensor connection, RS-485ModBus communication		
External Dimensions	232×393×415Hmm	252×429×478Hmm	380×543×704Hmm
Mass	Approx. 23kg	Approx. 28kg	Approx. 73kg
Power supply	AC100V · 7A	AC100V · 13.5A	AC100V · 30A
Standard accessories	Insulated circulation hose(1m) × 2, hose band × 2		

- (*1) Make sure there is no condensation on the unit
- (*2) Use a low-temperature heating medium when using the product at a temperature of 7°C or less. (Contact us for details.) Pure water and distilled water cannot be used.
- (*3) External thermal loading of 200W is required at +5°C environmental temperature and 60Hz.
- (*4) The temperature accuracy is when the inside of the water bath is sufficiently stirred. The temperature accuracy and power consumption vary depending on various conditions, such as the set temperature, environmental temperature, water bath capacity, and stirring state. We recommend using a lid for the water bath. The specifications of this unit include the performance values according to our specified measurement method
- (*5) Temperature control accuracy at 25.0°C setting is ~ ±0.1°C using environmental temperature 25°C/clean water 5L/heat insulation water bath/lid
- (*6) Capacity when the environmental temperature is 25°C and the circulating fluid is +10°C, and 50Hz. The cooling capacity will be reduced in environments exceeding 30°C.

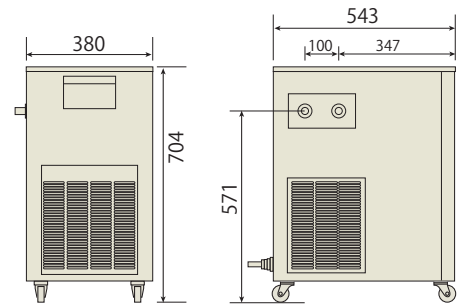
■ Externals

CL-81/151

Black CL-81 (Red)CL-151



CL-601

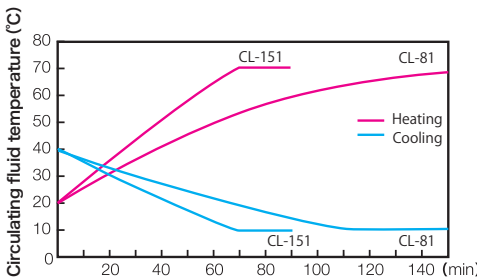


Program unit
PU-5N▶



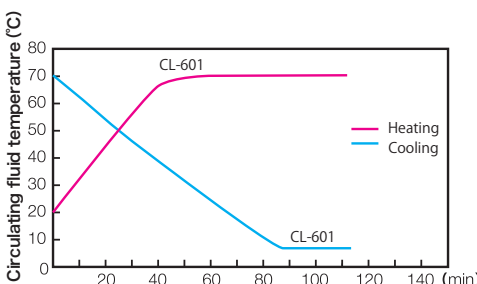
■ Heating/cooling curve

CL-81/151



(Conditions)
Circulating fluid: Clean water
Volume: 10L
Water bath:
CL-81: Insulated water bath (without cover)
CL-151: Stainless-steel insulated water bath type A (φ13) (with lid)
Environmental temperature: 25°C
Power supply: AC100V, 50Hz
*Cooling to anti-freezing safety device activation point

CL-601



(Conditions)
Circulating fluid: Clean water
Volume: 20L
Water bath: Stainless steel insulated water bath type A (φ22) (with lid)
Environmental temperature: +25°C
Power supply: AC100V, 50Hz

■ Option

Product/Model	Description
Port tank	Closed circuit circulation optional for CL-81/151 New and old compatible
φ10 nozzle	For CL-81/151 and for changing the diameter of the circulation nozzle. Old and New Compatibility Flow rate may decrease when installed on the old model
Compatible connection cables	For CL-81/151/601, a cable that converts the D-sub connector of this unit and the connector used in old unit (external input/output, temperature recording output, safety device operation signal)
Stainless insulation water bath type A (φ13)	Inner dimension 300×400×200Hmm, With φ13mm outer diameter nozzle
Stainless insulation water bath type A (φ22)	Inner Dimensions 300×400×200Hmm, with Outer Diameter φ22mm Nozzle. CL-601 can support closed circuit circulation with this product
PVC insulation water bath type D (φ13)	Inner dimension 164×294×150Hmm, With φ13mm outer diameter nozzle.
Spring net rack type B2	External Dimensions 280×320×140 Hmm
Spring net rack table C	External Dimensions 140×240×140 Hmm
Caster	Set of 4, for CL-81/151
Program unit PU-5N	For external temperature program control, for CL series
Heating medium for low temperature Show Brine Blue	20kg, 1 can, use when setting below +7°C

● Containers for all product photos are not included.