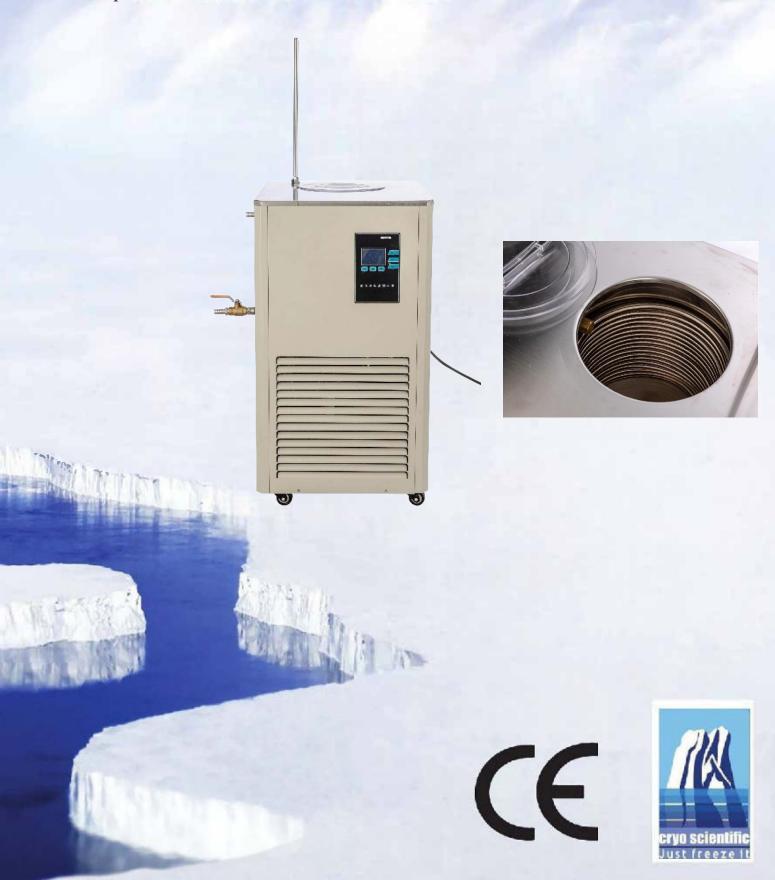
SUB-ZERO CIRCULATION CHILLER BATH

Microprocessor based



Working Principle

- The Recirculation chiller is mechanically cooled by a hermatically sealed compressor based Refrigeration system. The
 cooling evaporator is made of high purity copper coils provided on the interior of the inner walls of the cooling tank.
 CFC-free, eco-friendly refrigerant is continuously expanded and circulated through the evaporator coil which in turn
 cools the secondary coolant/water in the tank.
- The cooled secondary refrigerant is then circulated through built-in circulation pump, which can be used to convey to the
 heat exchanger of the supporting equipment or condensation coil through external circulation pipeline. This method can
 indirectly cool the material in the reactor or cool and liquefy evaporating vapours by indirect contact with condensation
 tube.
- During external circulation, the outlet pipe of this equipment from the built-in pump is connected to the lower inlet pipe
 of the kettle body or condenser of external system. The cold liquid exits from the circulation discharge port and then
 returns to inlet of equipment through pipeline into the recirculation chiller tank system forming a complete circulation.
 Generally speaking, this chiller can connected to the interlayer of double glass reactor, rotary evaporator, condensation
 coil of reactor etc for secondary cooling purposes.
- If the equipment is to be used for internal circulation only, then outlet of the discharge valve is to be connected to the inlet valve for closed loop circulation of coolant liquid/water. Use the Digital Temp controller to set the required temperature so that the heater output can regulate and maintain the desired temperature in the chiller tank.

Technical Parameters

| Model | SZCCB-20 | |
|----------------------------------|--|-------------------------|
| Usable temperature range | -20°C ∼ ambient temperature | |
| Environment temperature | +5°C ~ +35 °C | |
| Environment humidity | 70% ventilation | |
| Power supply | Single phase 220V 50Hz | |
| Safety protection | Delay, over-current, overheat | |
| Display | LED display, key operation | |
| Temp control accuracy | ±0.1°C | |
| Sensor | PT100 | |
| Total power | 2000 W | |
| Compressor | Power | 1300W |
| | Cooling capacity | 1700W @ -25°C evap temp |
| Circulation pump | Power | 165W |
| | Lift | 4-6M |
| | Flow | 50L/min |
| | Pressure | 0.1MPa 1 bar |
| Air-cooling condenser | Power | 140W |
| | Heating exchange area | 2.0 m^2 |
| | Air flow | 2600 m ³ /h |
| Refrigerant | CFC & HCFC- free, Eco-friendly R404A | |
| Evaporator coil | Φ12 copper tube plated by nickel | |
| Equipment Outer / inner material | Cold plate spray, anti-corrosion / Stainless Steel SS304 | |
| Inner tank Dimension & volume | 200W × 300D × 400H (mm) About 24L | |
| Usable water tank size | 175W × 275D × 400H (mm) | |
| Lid opening Size | 200 W × 300 D (mm) | |
| Outer circulation interface | Ball Valve with Φ12mm outer diameter | |
| Overall dimension(W*D*H) | 650 × 500 ×1100 (mm) | |
| Net weight approx | 95KG | |



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