



**The "Core" Power Emitting the Charm of Science and Technology.
Rigid Technology-Small & Fast Cooling Solution Provider.**



W W W . R I G I D H V A C . C O M



About Us

RIGID is a company specialized in manufacturing, marketing, research & development of microclimate cooling systems and provides small cooling solutions for extreme hot environment and confined space. We specialize in and focus on Mini Compressor, Compact Liquid Chiller, DC Condensing Unit. Our micro cooling modules are well suited for a variety of applications covering the ordinary to the extraordinary, for example, commercial & personal refrigeration, small cooling system, and tiny liquid cycle refrigeration devices. The qualification of most products has met the technical and quality standard of Germany, U.S., Italy and Asian countries.



Mini DC Compressor

RIGID Mini Compressor is developed for mini fridge and micro air conditioner. The mini compressor has features of the lightest weight, smallest size and extraordinary efficiency to satisfy the growing refrigeration compressor market nowadays. RIGID mini compressor has as much as 30W to 550W of cooling capacity under standard ASHRAE conditions, using a single cylinder configuration. By using R134A refrigerant, RIGID micro compressor is able to run on 12V, 24V and 48V DC or AC power through an AC-DC conversion. RIGID mini dc compressor is starting a new trend in various compact mobile cooling systems as well as small footprint countertop appliances.

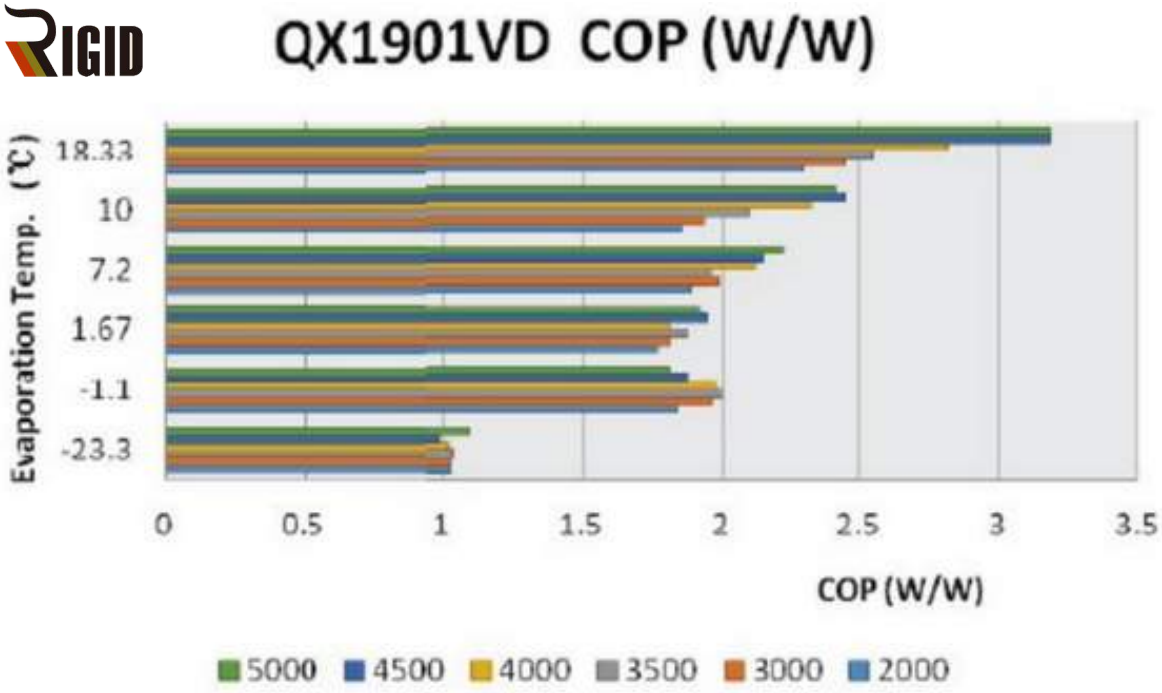
RIGID rotary mini compressors are ideally suited for mobile or portable refrigeration, cooling electronics, and in numerous commercial appliance types, where space and weight are important



Mini DC Compressor

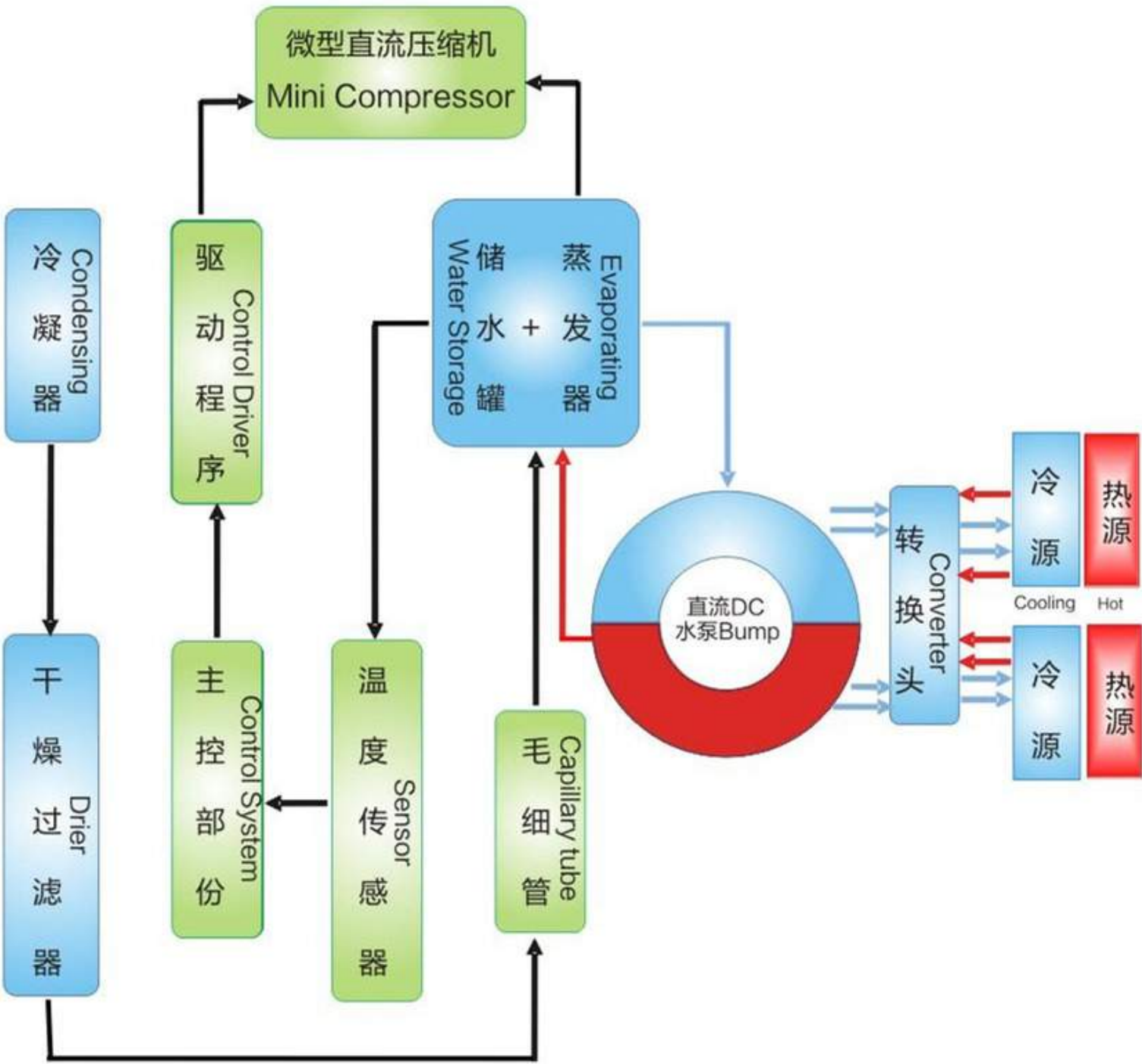
DV19 & DV32 Series

Technical Data	
Cooling Capacity	100W~500W Adjustable
Heat Exchangers Material	Copper or Stainless Steel
Coolant Temperature	0°C to 50°C (32°F to 122°F)
Maximum Power Draw	500 Watts
Voltage	12V & 24V & 48V DC
Compressor	Brushless Inverter Compressor
Noise	<40 dBA
Weight	5.1 lbs / 2.3kgs
Dimensions (L x W x H)	25 x 16 x 13.5 mm (9.8 x 6.3 x 5.3 in)
Orientation	Must operate within 30° of flat
Operating Ambient Temperature	0°C to 50°C (32°F to 122°F)
Refrigerant	R-134a

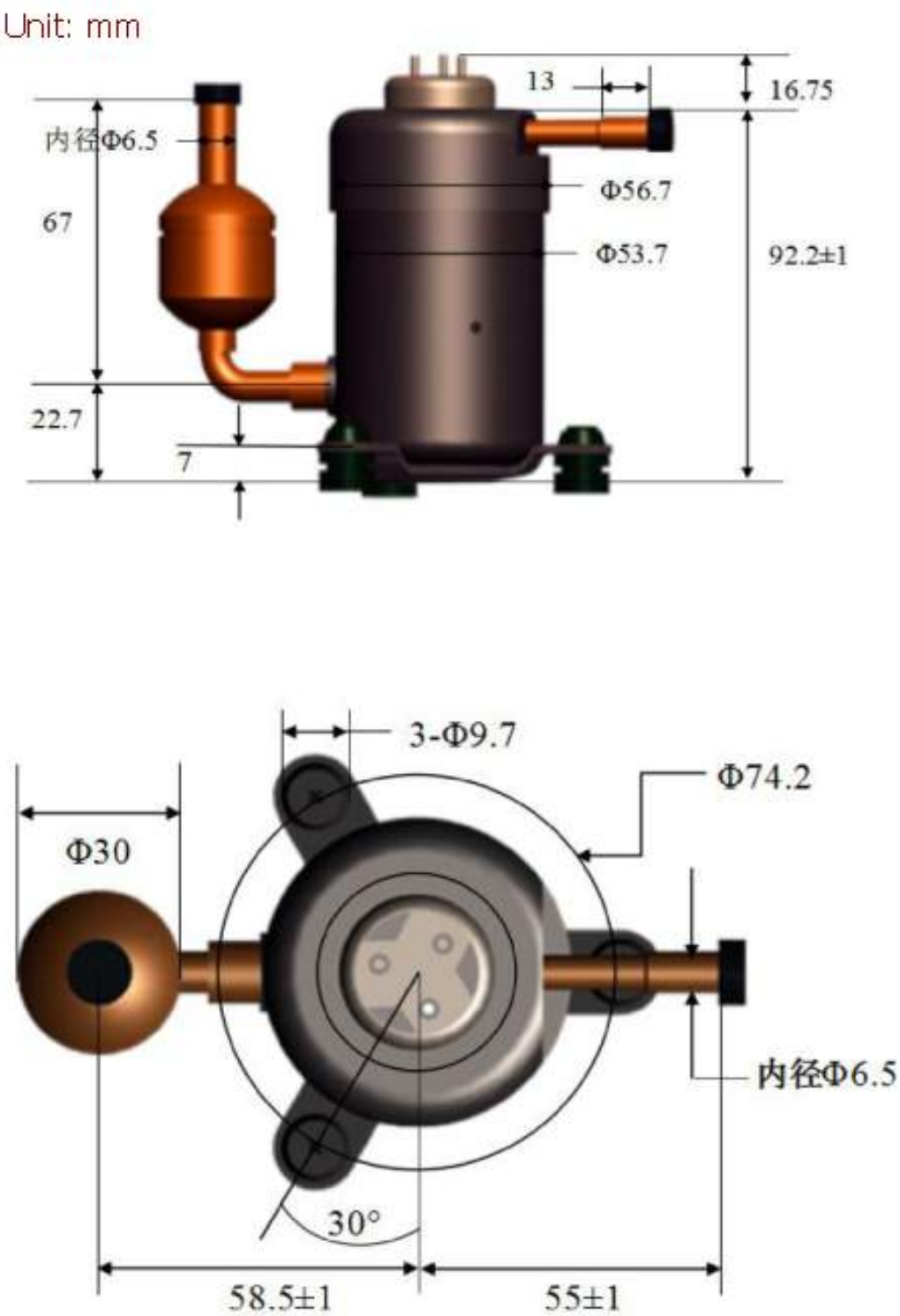


RIGID's DC Liquid Chiller is designed for high cooling capacity combined with stability.

微型水循环系统结构
Super Small Circulating Water System Structure



Miniature Inverter Compressor External Dimension



RIGID DC Mini Compressor works as refrigeration compressor; it's suitable for mobile refrigeration systems, where battery or vehicle alternator is the source of power. It brings best result and creates new opportunities for innovative appliances that do not rely on grid power.

RIGID Small Cooling Systems

DV19 & DV32 Series

Rigid Technology – 8 Years of Innovation in Miniature Cooling Systems



Background

RIGID specializes in manufacturing, research and development of Mini Compressor, Compact Liquid Chiller, DC Condensing Unit. We work directly with our customers to provide custom cooling solutions to meet their specific requirements. Products are widely used in commercial & personal refrigeration, miniature & portable cooling systems, and other tiny liquid cycle refrigeration devices etc. RIGID products has qualified European Quality Standard CE certificate, has met the technical and quality standard of Germany, U.S., Italy as well as Asian countries.

System Configuration

RIGID small cooling system is a compact, hermetically sealed heat transfer system (including a miniature variable speed inverter dc compressor and drive board (patented sine wave), condenser, heat exchanger, capillary, filter drier, dc fan motor, and other small parts).

The system is fully charged with R-134a, insulated and mounted to a baseplate to drop directly into the end application. User only need to connect his machine or system, and runs on DC power supply (12V/24V/48V). If user wants more functions, he can interface with the drive board (included) for temperature control or compressor speed control as desired.

Key Benefits:

- Miniature DC compressor;
- Stationary or portable available;
- Minimize weight&footprint&noise;
- Compact complete integrated for precise thermal control.

Features:

- Weight: 6.6 lbs / 4.0kgs;
- 12V 24V 48V DC input;
- Excellent heat transfer rate;
- Exceptionally compact mini compressors;
- Wide range cooling capacity 300Btu~1,876Btu .

Compact Liquid Module

Copper Coil Chiller



Specifications:

Product Name: Compact Liquid Chiller-Coil Type
Compressor: BLDC Variable Speed Motor
Size: 27x17.5x15 cm (10.6x6.9x5.9 inch)
Weight: 2.3kgs (5.1lbs)
Capacity: 106~360W
Refrigerant: R134A

Applications:

Small liquid cooling;
Liquid cycling refrigeration;
Portable & compact hospital equipment cooling;
Precision instrument or PC or Laser Beam Cooling;
Various heat transfer Systems (Laser, Glycol, Military, Body cooling etc);
... .. (Included above applications but not limited)

Compact Liquid Module

Stainless St. Coil Chiller



Specifications:

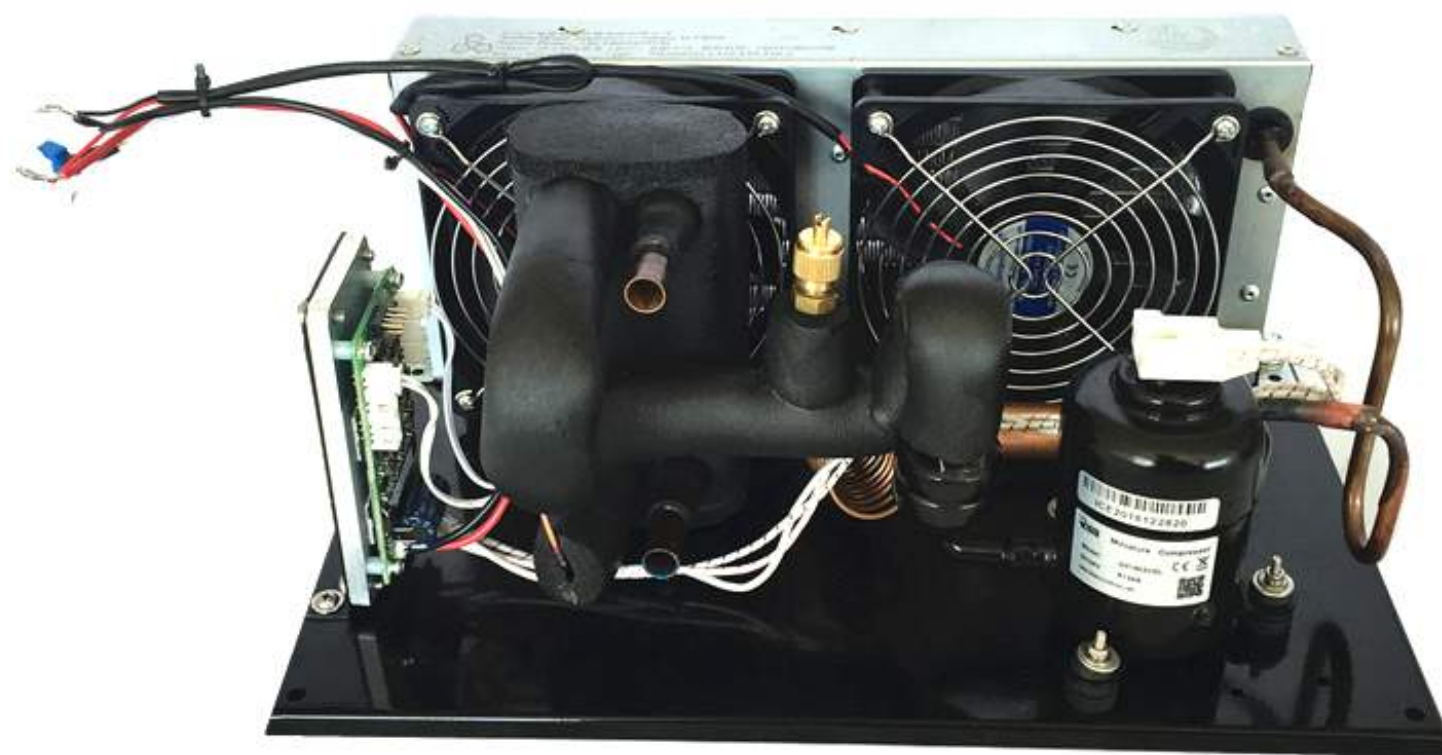
Product Name: Compact Liquid Chiller-Coil Type
Compressor: BLDC Variable Speed Motor
Size: 27x17.5x15 cm (10.6x6.9x5.9 inch)
Weight: 2.3kgs (5.1lbs)
Capacity: 106~360W
Refrigerant: R134A

Applications:

Small liquid cooling;
Liquid cycling refrigeration;
Portable & compact hospital equipment cooling;
Precision instrument or PC or Laser Beam Cooling;
Various heat transfer Systems (Laser, Glycol, Military, Body cooling etc);
... .. (Included above applications but not limited)

Liquid Chiller Module

Plate & Frame Chiller



Specifications:

Product Name: Compact Liquid Chiller-Plate Type
Compressor: BLDC Variable Speed Motor
Size: 27x17.5x13 cm (10.6x6.9x5.1 inch)
Weight: 4kgs (8.82lbs)
Capacity: 106~360W
Refrigerant: R134A

Applications:

Body Cooling(Race car driver, firefighter...);
Portable liquid cycling refrigeration device;
Portable & compact hospital equipment cooling;
Precision instrument or PC or Laser Beam Cooling;
Special types of work (Military, Firefighting, Body cooling etc);
... ... (Included above applications but not limited)

Liquid Chiller Module

Coaxial St. St. Chiller



Specifications:

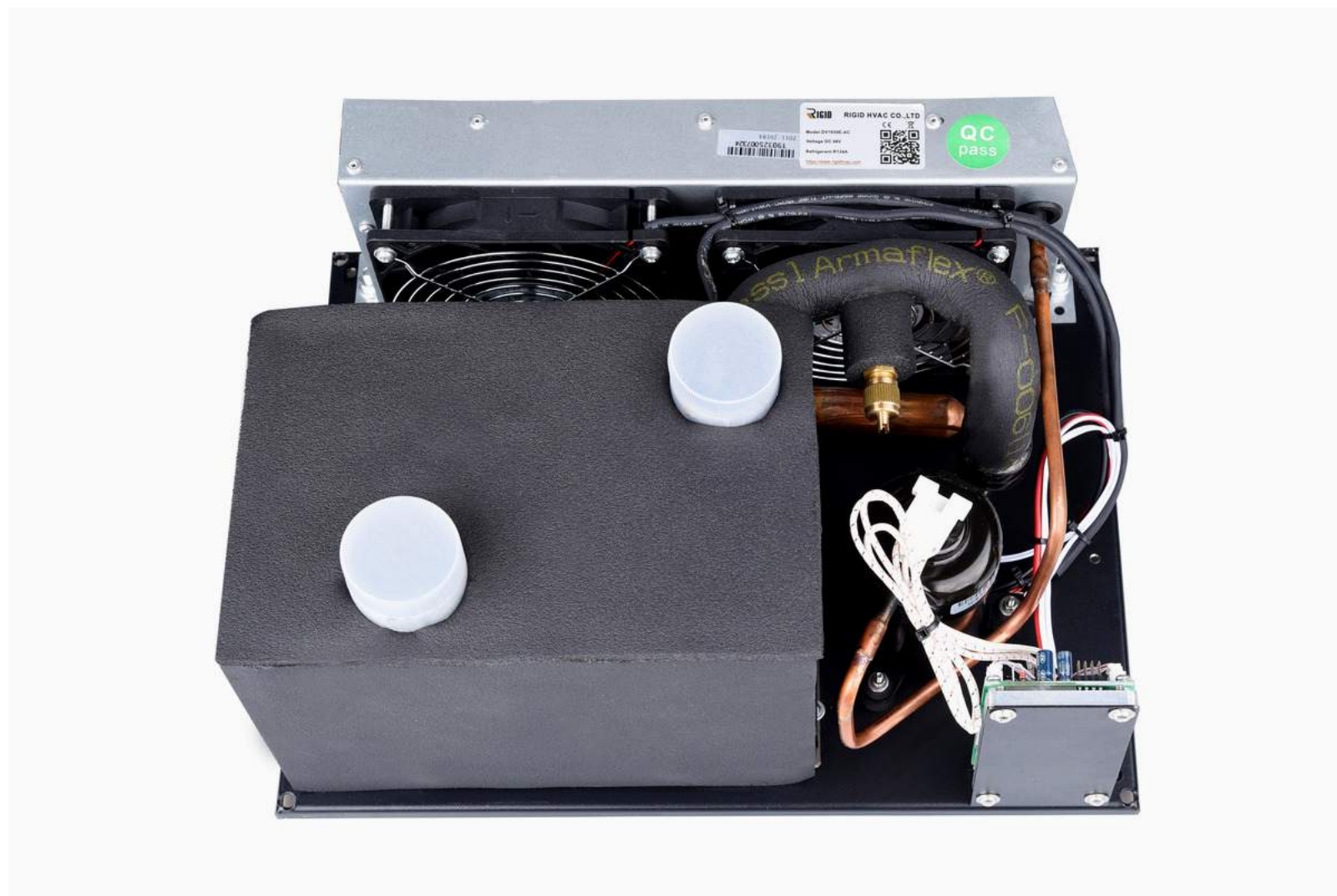
Product Name: Compact Liquid Chiller-Coaxial Type
Compressor: BLDC Variable Speed Motor
Size: 33x18x18 cm (13x7.1x7.1 inch)
Weight: 4.5kgs (9.92lbs)
Capacity: 106~360W
Refrigerant: R134A

Applications:

Pure water cooling & freezing;
Medical & Aesthetic Liquid cycling refrigeration;
Portable & compact hospital equipments cooling;
Precision instrument or PC or Laser Beam Cooling;
Special types of work (Military, Firefighting, Body cooling etc);
... .. (Included above applications but not limited)

Micro DC Air conditioner

Micro DC Aircon Module



Specifications:

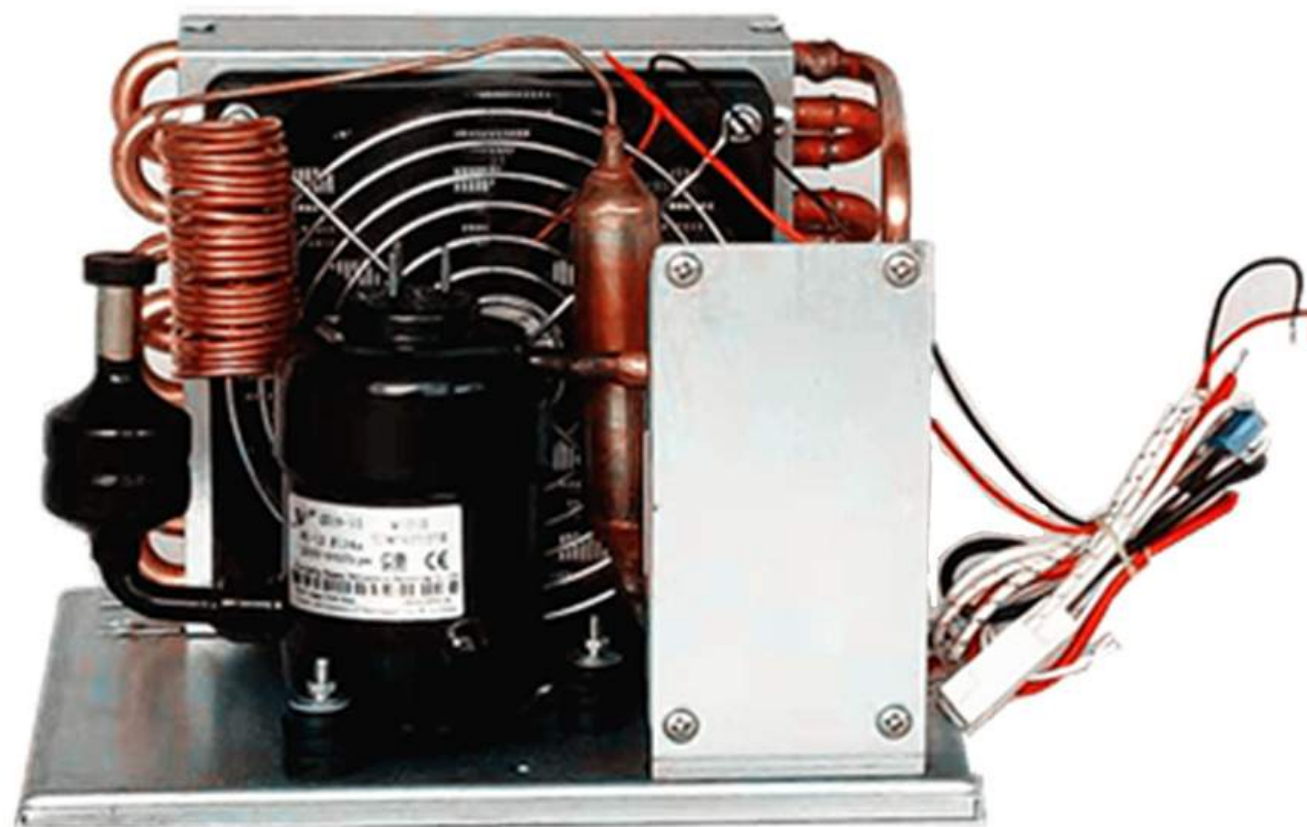
Product Name: Micro DC Aircon Module
Compressor: BLDC Variable Speed Motor
Size: 34x20.8x14.5 cm (13.3x8.2x5.7 inch)
Weight: 4.5kgs (9.92lbs)
Capacity: 106~550W
Refrigerant: R134A

Applications:

Small Space Cooling;
Compact Air Conditioning;
Portable & compact cycle refrigeration;
Cabins, cuddy cabins and electric vehicles;
Other compact and confined space cooling, run on battery;
... .. (Included above applications but not limited)

Compact Condensing Unit

DC Condensing Unit



Specifications:

Product Name: DC Condensing Unit
Compressor: BLDC Variable Speed Motor
Size: 19.5x16x17 cm (7.85x6.3x6.7 inch)
Weight: 3kgs (6.61lbs)
Capacity: 106~360W
Refrigerant: R134A

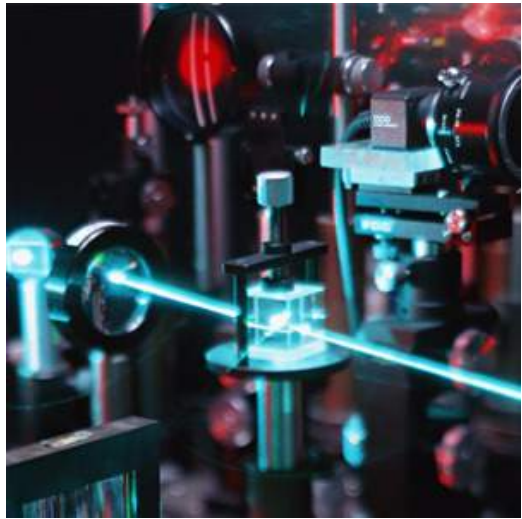
Applications:

Use variable speed inverter compressors, with the adjustable speed at 2000 ~ 6000 rpm, is suitable for miniature freezer, refrigerator and small mobile refrigeration applications.

Features: Compact Size, Low Noise, and Portability.

Applications

- Body Cooling
- Racing Motorcycle
- Medical Device
- Laser Diode
- Electronics Cooling
- Home-made Farming
- Greenhouse Soil-less Cultivation
- Electric Vehicle Charging Stations
- UV LED Systems Liquid Cycling refrigeration;
- Precision instrument or PC or Laser Beam Cooling;
- Special types of work (Military, Firefighting, Body cooling etc);
- (Included above applications but not limited)



“Your chiller is a remarkable cooling device. Reliable with lower amps draw, while very good heat transfer rate. We can get sufficient cooling as expected. Most importantly, it is in a very compact package, perfect match of our small device. That remarkability, that performance and that packaging is why we will continue to look at your products.”

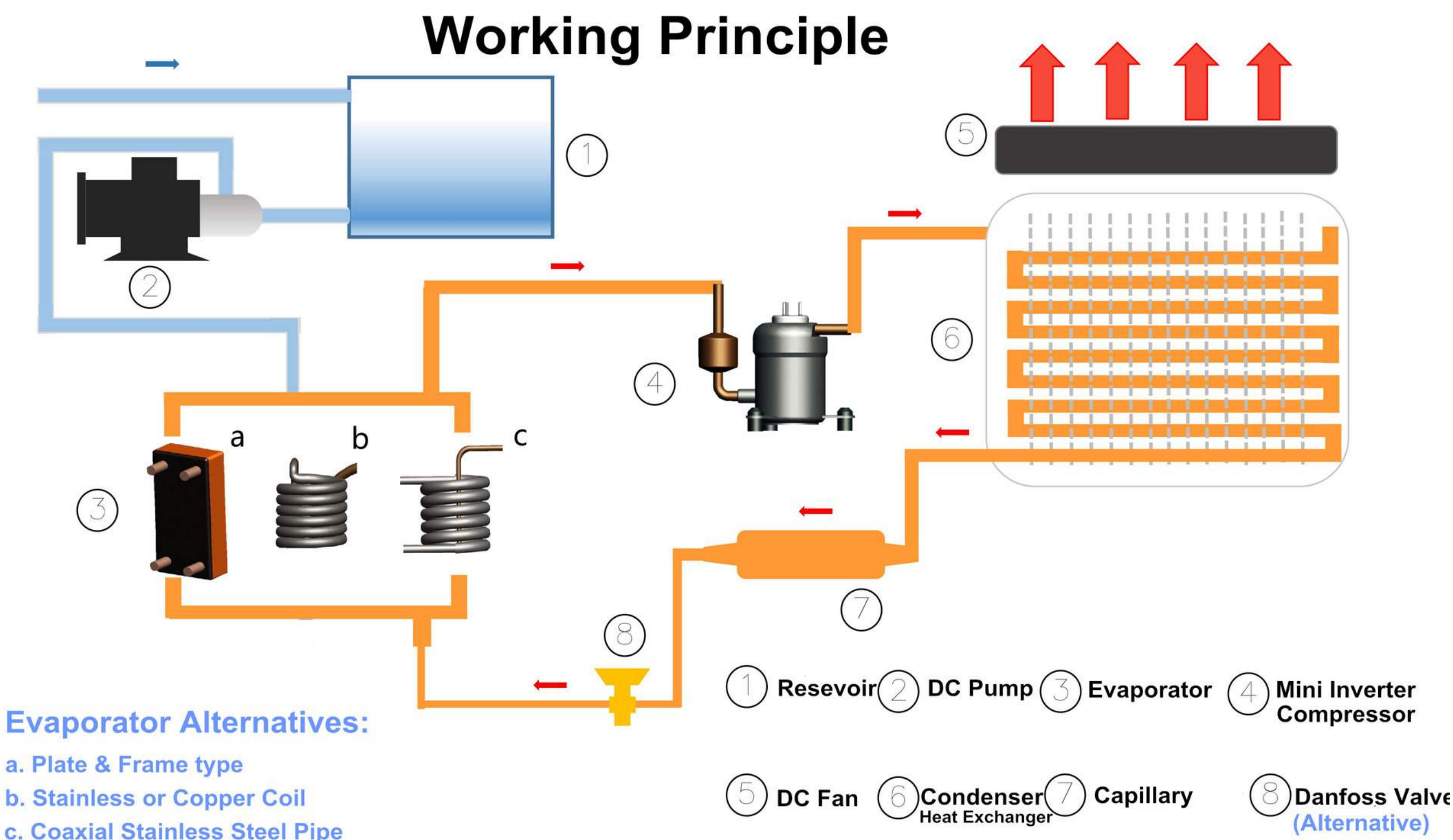
-- Stated by the client

Micro Refrigeration System

The Smallest Vapor Compression Refrigeration System for Active Thermal Management

Rigid Micro Refrigeration System is kind of active thermal management module. It is driven by bldc compressor-one of the many refrigeration cycles and is the most widely used cooling method for liquid chill, water cooler, and small portable air-conditioning. It is also used in CO2 laser chiller, laboratory chiller, small water chiller, glycol chiller system and large-scale vapor-compression refrigeration systems.

Refrigeration is also defined as lowering the temperature of an enclosed space, or liquid temperature by removing heat from that space and transferring it elsewhere. Rigid specializes in the design and production of compact, micro refrigeration units to meet challenging active thermal management in extreme conditions defined by the commercial, personal, industrial, and military areas.





CONTACT

Email: info@rigidhvac.com
WWW.RIGIDCHILL.COM / WWW.RIGIDHVAC.COM

Phone: (0086) 579-8837-9768
NO.8, XINGYE ROAD, LANJIANG STREET, LANXI CITY, ZHEJIANG , CHINA