

# FluidCore CDU

## About FluidCore CDU

The liquid cooling system, with its excellent heat dissipation performance, has become a highly favored cooling solution that occupies a considerable market share. The FluidCore CDU, a coolant distribution unit by Taybo, serves as a key and core component in both cold plate liquid cooling and immersion liquid cooling solutions. It can maximize the heat exchange capacity of the unit within an extremely limited footprint.

This device can completely isolate the Facility Water Supply System (FWS) from the Process Cooling System (TCS) side of the liquid cooling system. With minimal power consumption, it can precisely control the supply temperature and flow rate of the coolant to ensure the stable operation of the system.

The FluidCore CDU integrates important components such as brazed plate heat exchangers, water pumps, water valves, stainless steel pipes, and controllers, enabling your liquid cooling system to calmly handle various complex heat dissipation requirements.



### Advantage

#### Environmentally friendly, energy-saving and efficient

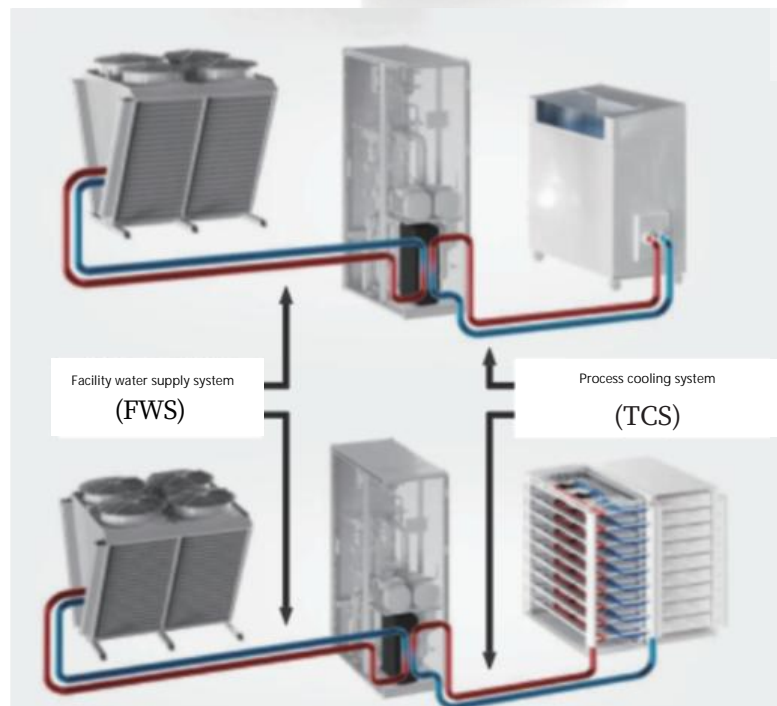
- Large heat exchanger, low water side pressure drop
- Low load variable speed pumps are more energy efficient and do not require liquid roadside access
- Large pipe diameter design, increase the water flow while reducing the power consumption of the pump
- Support year-round natural cooling (ASHRAEW32-W+ warm water cooling)

#### Excellent quality and reliable operation

- Key components such as controllers, power supplies, and pumps can be configured in redundancy mode
- Integrated anti-condensation function
- Optional leak detection
- Sanitary grade stainless steel piping ensures high liquid quality, while The filter on the TCS side guarantees a coolant cleanliness of 50um

#### Diversified specifications and flexible configurations

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Compact design with different size specifications for easy assembly into the existing server rack structure
- In order to enhance system compatibility, the unit is provided with a variety of structures and control options such as adaptation to different liquids and electrical loads



#### Reliable and efficient

By isolating FWS and TCS circuits, cross-contamination and leakage risks are reduced. In addition, It can also control each side of the cooling system more precisely, thus making it more easy to manage coolant flow rate, temperature and pressure to improve efficiency of the system.

## Precise control and reliable operation

FluidCore CDU has flexible and precise control performance, which can provide the most reliable guarantee for the system during the continuous operation of the equipment. The self-developed controller enables perfect collaboration between software, hardware and liquid cooling units, fundamentally avoiding compatibility problems. In addition, FluidCore CDU is equipped with a touch screen, and its menu navigation is clear and simple, and the operator can easily get started without complicated training, which greatly improves the efficiency of use.

## More advantages

- The coolant pump operates in both cold and hot standby modes
- Pressure difference, flow rate, temperature difference adjustment
- Multiple protocols are supported, such as Modbus RTU, Modbus TCP/IP, BACnet IP, SNMP, HTTP and other protocols
- There are various control modes, including single-machine control, group control, local control and remote control
- Provides RS485 serial port or RJ45 network port



## Service and maintenance

- The main components are connected by quick-disconnecting chuck, which is easy to disassemble
- Both FWS and TCS side filters support online maintenance
- The TCS side supports online automatic fluid replenishment
- Coolant pump, filter and other components are equipped with relevant break valves, easy to maintain
- All components can be maintained from the front and back of the unit



## Specification

Model		TB-DCWM350	TB-DCWM450	TB-DCWM850	TB-DCWM1100	TB-DCWM1400
Rated water supply temperature	kW	350	450	850	1.100	1.400
Rated liquid supply temperature ( Process cooling system )	°C	36				
Rated water supply temperature ( Facility water supply system )	°C	32				
Net Weight	kg	430	470	750	835	890
Dimensions (W × L × H)	mm	650 × 1200 × 2000			850 × 1200 × 2000	

notes

All data are applicable to 400VAC/3Ph/50Hz+N+PE

If you need to replace the high heat, please contact TAYBO technicians