PRODUCT DATASHEET

# Coolant Distribution Unit (CDU) for Liquid Cooling

In-row coolant distribution unit for direct-to-chip liquid cooling in data centres

Product page





Close-up: CDU front with controller and status lamps in a row of server racks

## OVERVIEW

The Tech Inc. Coolant Distribution Unit (CDU) for Liquid Cooling transfers the heat from the technology cooling loop that serves liquid-cooled servers to the facility water system. Inside a rack-format cabinet, a liquid-to-liquid plate exchanger separates the two loops; redundant variable-speed pumps circulate the coolant to the rack manifolds; a filter protects the cold plates; and the controller holds the coolant supply temperature above the room dew point.

## TYPICAL DESIGN DATA

| | |
|---|---|
| **Duty** | IT heat load and coolant flow to your racks |
| **Coolant** | Treated water or water/propylene glycol to the server maker's specification |
| **Facility water** | Supply temperatures as set out in the ASHRAE TC 9.9 liquid cooling guidelines |
| **Codes and standards** | CE marking |
| **Redundancy** | Redundant pumps; dual power feeds as an option |
| **Control** | Supply temperature held above the dew point; leak detection; Modbus TCP and SNMP |
| **Wetted parts** | Stainless steel and materials compatible with the cold plates |

## MODELS AND CAPACITIES

- **TI-CDU-R** – in-row rack-format CDU
- **TI-CDU-F** – floor-standing facility CDU
- **TI-CDU-A** – liquid-to-air CDU

CDUs are built to the IT heat load, the coolant and your facility water temperatures.

## ORDERING CODE

Example **TI-CDU-R-400**: **R** type: R in-row, F facility, A liquid-to-air; **400** heat duty in kW.

## SCOPE OF SUPPLY

**Included:** factory acceptance test with a written report; drawings for approval, material certificates and manual. **Options:** dual power feeds; liquid-to-air build; coolant treatment and monitoring; installation, commissioning and operator training.

## KEY ADVANTAGES

- **Loops kept apart** – servers never see facility water
- **Redundant pumps** – no single point of failure in the pumping
- **Dew-point control** – no condensation on cold plates
- **Connected** – Modbus TCP and SNMP to the BMS

**Designed and built by Tech Inc.** · **Part of the Davey Group since 1990**

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