

TCDU Series Cooling Pumps

TCDU Series Cooling Pumps leverage a hermetically sealed pump combined with a motor controller for precision cooling in water-based direct-to-chip applications. These pumps offer high efficiency, extended life, and quiet operation with the added advantage of precise speed controls to deliver variable flow and energy savings to your data center operations.



TCDU Series Cooling Pumps Benefits

- **High performance** output with low energy consumption
- **Cooling capabilities** for 50kW – 200kW densities
- **Flow Rate** deliverables from 10–80 GPM / 38–300 LPM
- **Quality material** selection to ensure longevity and no leaching
- **Compact footprint** to minimize space claim
- **Wet motor** design with 48v Brushless DC Motor
- **Low decibel** operation
- **Cavitation prevention** for increased longevity and efficiency
- **Connectivity** - adjustable motor speed, temperature sensors, and current feedback

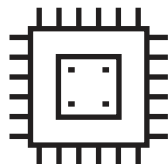
The TCDU Series Advantage

- Increased durability via optimized flow path and minimized wetted material wear
- Low energy consumption and power draw
- Precision motor controls that optimize cooling performance
- Low maintenance design w/ easy service accessibility
- Adjustable speed for variable operation conditions
- Preventative maintenance communication
- Cavitation prevention measures
- Reduced footprint minimizing space claim with rack (4u)

TCDU Applications



Coolant
Distribution
Units



Immersion
Cooling



Energy
Conscious
Data Centers



TCDU Series Cooling Pump Specifications

	TCDU75	TCDU100	TCDU150*	TCDU200
Input Voltage	48VDC			COMING IN 2026
Power	600W	800W	1250W	
Variable Speed (RPM)	500-5000		600-4500	
Flow Rate Range (GPM/LPM)	5-30 / 20-110	10-40 / 40-150	10-60 / 38-225	
Pressure Range (PSI/BAR)	7-25 / .5-1.7	15-33 / 1-2.2	31-26 / 2.15-1.8	
Inlet/Discharge*	1 1/2" Sanitary Clamp	1 1/2" Sanitary Clamp	1.5"/2" Sanitary Clamp	
Reliability	Minimum 80,000 hours / 10 years			
Temperature Range (°C)	10-80			
Communication*	ModBus RS485			

Customization available as well as multiple outlet configurations upon request

*UL & CE certification in process

WETTED MATERIAL

SHAFT	MAGNETS	ROTOR	HOUSING	BEARINGS	O-RINGS	IMPELLER	WEAR RING
304SS	Neo w/ Nickle plating	Silicon Steel	Aluminum or SS	SS or Hybrid Ceramic	EPDM/Silicon	304/316 SS	Zinc Free Brass

