

TCDU150 Series Centrifugal Cooling Pumps

Tark TCDU150 Series Cooling Pumps leverage a hermetically sealed pump combined with a motor controller for precision cooling in water-based direct-to-chip applications. TCDU Series Cooling 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.

TCDU150 Series Cooling Pumps Benefits

- **High performance** output with low energy consumption
- **Cooling densities** for 100kW – 150kW racks
- **Flow Rate** deliverables for 10 – 60 GPM / 38 – 225 LPM
- **Pressure capabilities** up to 33 PSI / 2.25 BAR
- **Liquid Cooled PCB & Motor***** – No need for auxiliary fans
- **Quality material** selection to ensure longevity and no leaching
- **Compact footprint** to minimize space claim (4u)
- **Wet motor** design with 48v Brushless DC Motor
- **Low decibel** operation
- **Connectivity** – Adjustable motor speed, temperature sensors, and current feedback



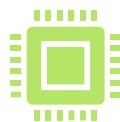
TCDU Advantage

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

TCDU Applications



Coolant
Distribution
Units



Secondary
Immersion
Cooling
Loops

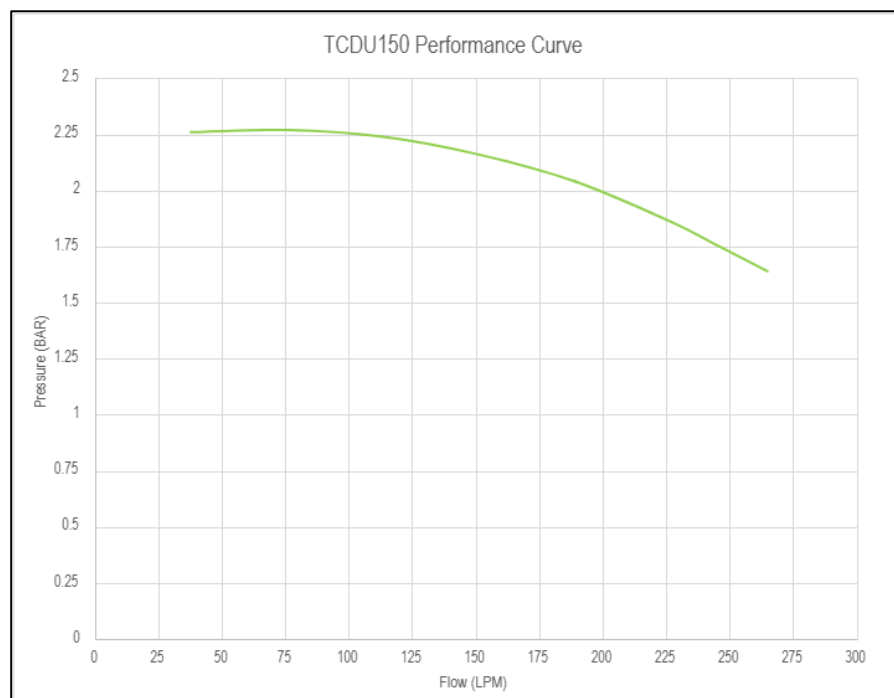


Energy
Conscious
Data Centers

TCDU150 Series Centrifugal Cooling Pumps

PERFORMANCE	
	TCDU150
Input Voltage	48 VDC
Power	1250W
Flow Rate Range (GPM/LPM)	10-60 / 75-225
Pressure Range (PSI/BAR)	26-33 / 1.8-2.25
Inlet/Discharge*	2" Sanitary Clamp
Reliability	80,000 hours / 10-year life
Max Ambient & Liquid Temperature (°C)	40
Communication*	ModBus RS485

WETTED MATERIAL								
Shaft	Magnets	Rotor	Housing	Bearings	O-rings	Impeller	Wear Ring	Tubing
304 SS	Neo w/ Nickle plating	Silicon Steel	Aluminum or SS	SS or Hybrid Ceramic	EPDM/Silicon	304 SS	Zinc Free Brass	PTFE



TCDU150 Series Centrifugal Cooling Pumps

TCDU150 Dimensions

