

LLB 670

Product Data Sheet



Thermal Management
Innovation

an Eren Groupe Company

The LLB 670 is a 500/670kW Liquid-Cooled Load Bank designed to validate high-density compute infrastructure by rigorously testing electrical and mechanical systems in new mission-critical facilities. It supports 500kW at 415V and up to 670kW at 480V, delivering robust, reliable, and repeatable performance for commissioning data centers and other critical environments.

Applications

Purpose-built for comprehensive commissioning, the LLB 670 ensures full validation of UPS systems, Technology Cooling Systems (TCS), and Technology Water Distribution Systems (TWDS). By simulating real-world load conditions, it verifies system performance, resilience, and reliability before going live.

OCP Wetted Materials Compliance

Fully compliant with Open Compute Project (OCP) guidelines for water-based transfer fluids in single-phase, cold plate-based liquid-cooled racks, the LLB 670 is constructed with 316 Stainless Steel and INCOLOY 800 components to mitigate the risk of chloride crevice corrosion, ensuring long-term durability in demanding environments.

Safety Features

Engineered with multiple automatic protections, the LLB 670 features automatic shutdown mechanisms for minimum flow per kW, maximum temperature, and maximum pressure. These safeguards ensure the safe operation of both the load bank and the infrastructure under test, preventing potential failures during commissioning.

Instrumentation & Data Monitoring

The LLB 670 is equipped with advanced instrumentation, providing precise mechanical and electrical measurements that enable data centers to validate performance against their Service Level Agreements (SLAs). Mechanical parameters include input and output fluid temperature, input and output fluid pressure, and fluid flow rate, while electrical monitoring captures power (kW), current (Amps), and frequency (Hz). This high-fidelity data ensures accurate system testing, helping facilities meet operational and reliability commitments.



liquid load banks

Model	LLB-670-480-01
Capacity	500 kW @ 415V / 670 kW @ 480V
Power	415V / 480V 3-Phase, 60 Hz
Electrical Resolution	5kW @ 415V / 6.7kW @ 480V
Mechanical Resolution	0.1C ▲ T
Primary Wetted Materials	316 Stainless Steel & Incoloy 800
Standard Controls Options	Local, Digital, Remote/Network
HMI Display	10"
Designed Flow Rate	1.5 LPM per kW
Minimum Flow Rate	0.75 LPM per kW
Max Flow Rate	3.0 LPM per kW
Max Working Pressure	80 PSI
Max Pressure	150 PSI
Max Input Water Temp	50C
Max Output Water Temp	70C
Flow Control	Pressure Dependant and Independent
Mechanical Connection	3 in 150# Flange (others available)
Power Connection	400A Camlock
Load Element Circuit Protection	Circuit Breakers
Certifications	US and Candian UL 508
Manufacturing	ISO 9001
Handling	Casters and Forklift Channels
Dimensions and Weight	40" x 60" x 80" 2750 lbs. (approx.)
Control Power	Internal Buss / External (120V)
Duty Cycle	Continuous