

## Overview

- 500KW Water-Cooled Load Bank
- Compact, space-efficient design with casters
- Totally quiet operation
- Suitable for use with chilled-water systems in data centers
- Digital control with portable touchscreen
- Power transducer, V-A-Hz-KW display on screen

## Description

The Atlantis-Series is an attractive alternative to air-cooled Load Banks: it is perfectly quiet and cool running; it is extremely compact and may be installed in otherwise unutilized space; it is virtually maintenance free.

The Atlantis-500 is ideal for data center chiller system commissioning. With its large 4-inch water connections and minimal pressure drop, the Atlantis will accept the high water flows required for limited temperature rise, typically 12.5°F.

Multiple Atlantis Load Banks can be networked to form large systems controlled from a single operator interface. In addition, the Atlantis shares the same control architecture with the Simplex Nautilus-250, 250kw water-cooled load bank, permitting any number of Atlantis and Nautilus Load Banks to be networked together. Control and data acquisition software is available from Simplex for systems integration and for control from PC's.

Each load cell includes sensors for normal operation, cooling failure, overpressure and loss of flow / low water level.

Load elements are water immersion power resistors. Load control is via magnetic contactors with branch circuit power fuses.

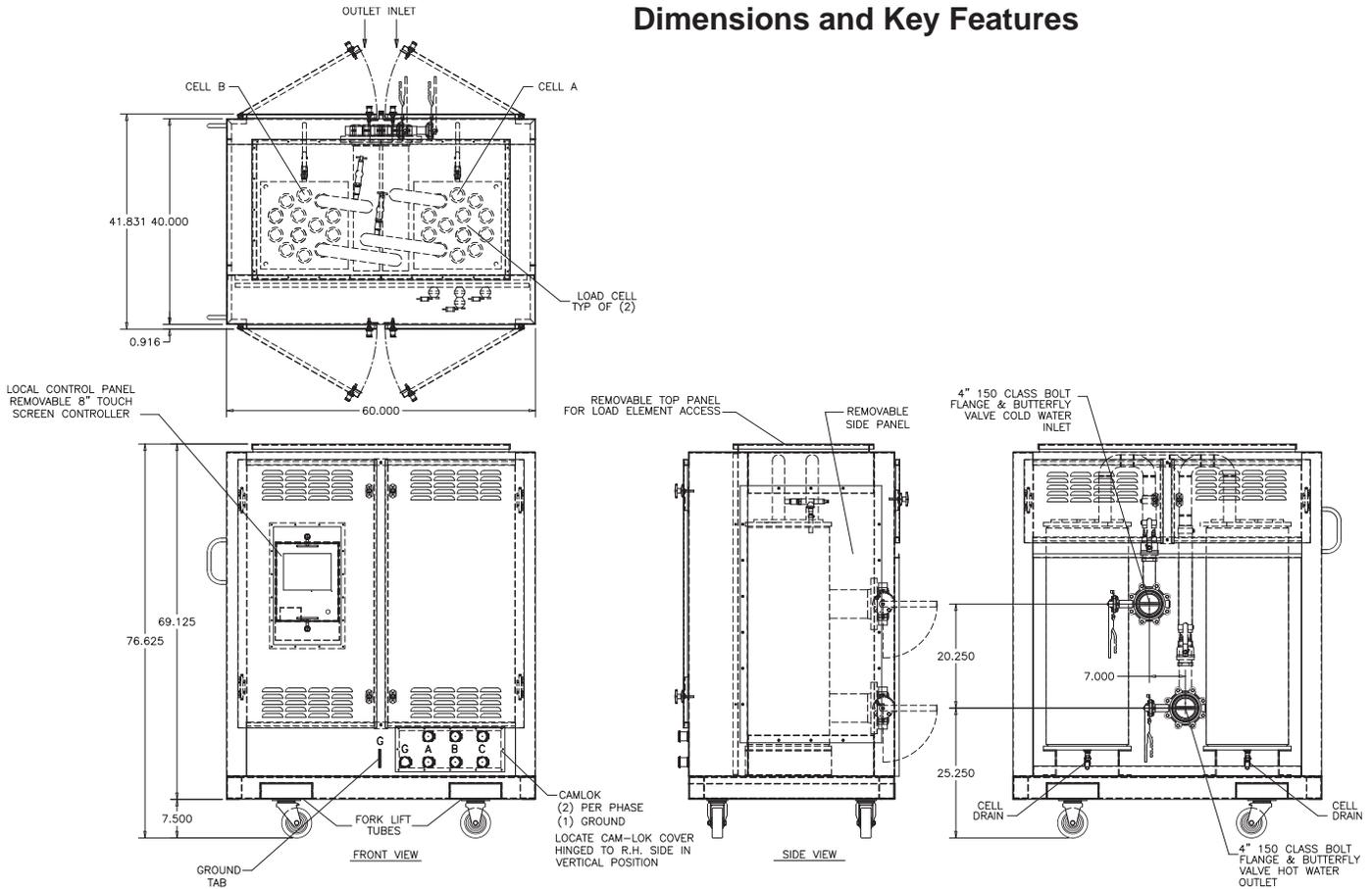
Control power for the Load Bank is provided by 120V, transformer isolated, internal power supplies. Control power is derived internally, from the connected power source or from an external source.

Power distribution within the Load Bank is via a 3-phase main copper load bus. Field connections are via cam-lok type connectors.

The Atlantis 500 is suitable for use with a variety of cooling media, including city water (nominal 50 PSI), closed loop chilled water systems, heat exchanger systems, pumped water from natural sources (lake, river, etc.) or brine or sea water (requires optional nickel alloy construction and elements).



## Dimensions and Key Features



### SPECIFICATIONS

<b>CAPACITY:</b>	500KW, Resistive, 1.0 p.f.
<b>VOLTAGE:</b>	Low voltage to 600V, specify
<b>FREQUENCY:</b>	50Hz, 60Hz and 400Hz
<b>LOAD STEPS:</b>	50KW resolution standard. 1-5-10-25KW resolution available.
<b>COOLANT:</b>	Chiller, city water, closed -loop heat exchanger, natural water (river, lake, etc.)
<b>COOLING:</b>	<p>Normal Duty: 10 GPM per 100KW, 62.5°F rise</p> <p>Minimum Cooling Requirements: 6.25 GPM per 100KW, 100°F rise, outlet not to exceed 170°F</p> <p>Typical Duty, Chilled Water Systems, 50 GPM per 100KW, 12.5°F rise</p> <p>Coolant Requirements:</p> <p><math>KW = GPM \times Temp. Rise (F) \times .16</math>, <math>GPM = KW / (Temp. Rise \times .16)</math></p> <p><math>Temp. Rise (F) = KW / (GPM \times .16)</math></p> <p>Particles must be less than 150 microns or a filter is required</p>
<b>PRESSURE DROP:</b>	5 PSI or less
<b>CONTROL POWER:</b>	Internal or external source, transformer isolated, 120V
<b>PRESSURE:</b>	180 PSI test pressure, 50 PSI nominal / operating pressure
<b>DUTY CYCLE:</b>	Continuous