

LBS-1600 / Load Bank









## **Features**

- UL/CUL Listed
- · Slide-out, tray mounted load elements
- Branch circuit fuse protection of load elements
- Digital Control
- Comprehensive malfunction detection system
- Modular enclosure design with separate and isolated control and power sections
- Type 3R, oversize control section with generous cable connection space
- · Vertical airflow, exhausts hot air above level of personnel and away from buildings, pavement etc.
- · Comprehensive overload, short circuit and malfunction protection

# **Specifications**

High capacity: 2,146 hp (1,600 kW) Voltage: All common 3-phase 50/60 Hz voltages Digital load control, 5 kW load step resolution Touchscreen operator interface

The Dyne Systems' LBS-1600 is stationary, outdoor (or indoor) load bank designed to provide high capacity load testing of generators, UPS, and other AC power sources; periodic reliability exercise of standby generators and other load bank applications. Operator interface is via a handheld remote controller with touchscreen. Load control is via screen keypad. All electrical values are displayed on the screen and recorded by the system for future data retrieval.

The LBS-1600 offers resistive load for all common 3-phase 60, 50 Hz voltages:

**60 Hz:** 208 V, 220 V, 240 V, 416 V, 440 V, 450 V, 460 V, 480 V, 575 V and 600 V

**50 Hz:** 190 V, 200 V, 208 V, 380 V, 400 V and 416 V



### Resistive Load Element

The LBS load bank uses an advanced design, air-cooled power resistor specifically designed for application to Load Bank systems. The elements are conservatively operated at half the maximum temperature rating of the alloy and features a short-circuit safe design based on continuous mechanical support of the element by high temperature, ceramic clad stainless steel rods. The elements are assembled into discrete trays which are assembled in a vertical "stack." Each tray in the "stack" is independently serviceable without disturbing adjacent trays.

## Specifications

Alloy: FeCrAl

Maximum continuous temperature rating: 1,920°F (1,049°C)

Maximum operating temperature as applied in Load Bank: 1,080°F (582°C) Cool down time from operating to ambient temperature is 10 seconds

### Construction

- · Ceramic clad, stainless steel through rods
- UL Recognized

# Capacity

Model	240/480 V	400 V	380 V 3-phase
LBS-1600			50/60 Hz
	1,600 kW	1,111 kW	1,002 kW

# **Cooling System**

	hp	CFM	Exhaust Rise	Hot Spots
Model	(kW)	(M <sup>3</sup> /H)	°F (°C)	°F (°C)
LBS-1600	30	60,000	150-200	575
	(22.3)	(101,940)	(65-93)	(301)

# **Digital Load Step Control**

5.0 kW step resolution

# **Detailed Specifications**

#### Voltage

All common 3-phase 60, 50 Hz voltages:

**60 Hz:** 208 V, 220 V, 240 V, 416 V, 440 V, 450 V, 460 V, 480 V, 575 V and 600 V

**50 Hz:** 190 V, 200 V, 208 V, 380 V, 400 V and 416 V

#### Frequency

50, 60 Hz

### Connection

Plated bus bar within an oversized terminal junction box

#### **Time Rating**

Continuous

### **Ambient Air Temperature**

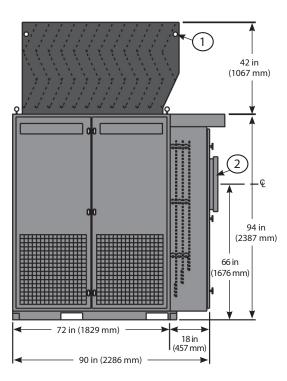
120°F (49°C) maximum

### **Control/Fan Power**

External or internal from load bus. Control circuits at 120 V via transformer. The cooling fan operates at 3-phase line voltage. Load control circuits and fan motor control operate at 120 V. Control circuits are fused. Control circuit fuses are 100,000 A.I.C., 600 V rated.

## **Net Weight**

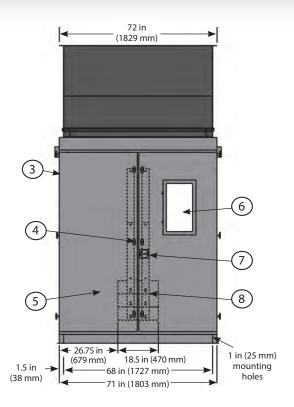
Load Bank is 5,200 lb (2,358 kg) Exhaust Hood is 940 lb (426 kg)



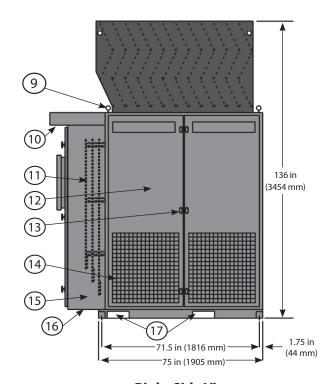
**Left Side View** 

## **Features**

- 1. Lifting provisions (for exhaust hood only)
- 2. Control panel
- 3. Stainless steel hinge
- 4. Lockable latch
- 5. Control compartment hinged door
- 6. Local control panel hinged door
- 7. Optional disconnect switch
- 8. Load source connections
- 9. Lift eyes (4) removable
- 10. Rain shield vent screen
- 11. Distribution bus tin/silver plated copper bar
- 12. Hinged doors access to load elements
- 13. Lockable latch
- 14. Screened air intake (2 each side)
- 15. Nema 3R control section
- 16. Conduit entry location
- 17. Forklift channels



**Front View** 



**Right Side View** 

Everything you need to succeed

