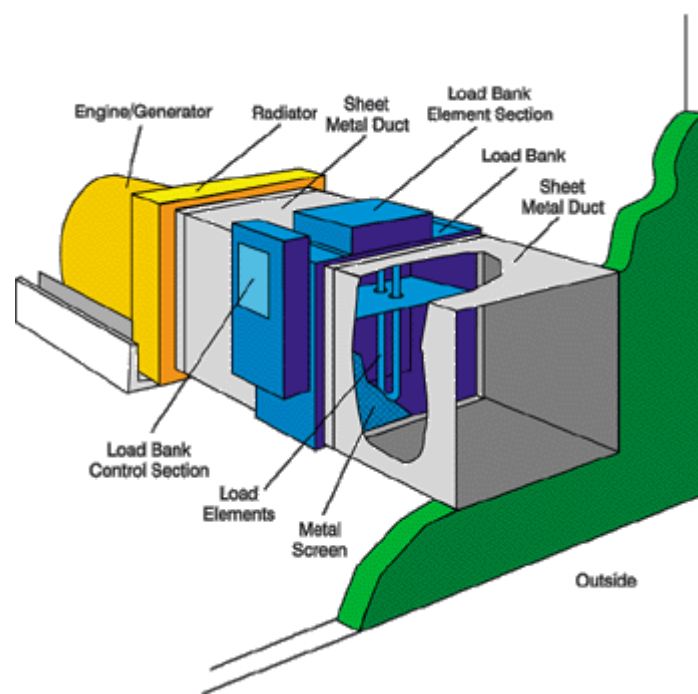


Radiator Cooled

LBD-Series

1000KW,
800KW, 750KW
600KW, 500KW,
400KW, 300KW,
200KW, 150KW,
100KW, 75KW,
50KW, 40KW,
30KW, 25KW,
20KW, 15KW,
10KW, 5KW

REQUEST QUOTE



The Simplex **LBD-Series** is special form of stationary, resistive, forced air-cooled Load Banks which utilize the air outflow of an engine radiator for cooling of the resistive load elements. This application recovers and uses the volume and velocity of air exiting the radiator. It may appear incongruous that "hot air" from the radiator is used for "cooling". However, "hot" and "cold" are highly relative in this case. The air exhausting from the radiator and entering the Load Bank may be as hot (or cold) as 180°F. However, the load elements are heated to an average of 700°F, and, most important, the air volume and velocity is very high relative to the heat energy being dissipated by the Load Bank. Consequently, the critical value of "air temperature rise" is limited to a conservative nominal 100°F. Despite an apparent "hot" environment, **LBD-Series** Load Banks actually operate "cooler" than those comparably rated equipped with integral cooling fans installed in the relative "cold."

Simplex **LBD-Series** Load Banks are intended for use with water cooled engine generator sets equipped with unit mounted radiators.

The essential consideration for installation is that it be located somewhere within the radiator air outflow. Installation is simple and adaptive to site/system conditions in numerous ways, including direct bolted attachment to the radiator, mounting within an air duct, wall mounting over the air outflow opening, indoors or



Capacity

5KW, 10KW, 15KW, 20KW, 25KW,
30KW, 40KW, 50KW, 75KW, 100KW,
150KW, 200KW, 300KW, 400KW,
500KW, 600KW, 750KW, 800KW,
1000KW

Voltage

All common 50, 60 or 400Hz AC

Load Steps

20KW at 208V
25KW or 50KW at 480V
25KW or 50KW at 240V, 1-ph.
5KW and/or 10KW available

Features

This product has earned the UL Listing Mark

[Utilizes the UL Recognized "Pow'r Rod" load element](#)

[Branch circuit fuse protection of load](#)

outdoors.

Since the design is adaptive to varying site conditions, Simplex **LBD-Series** Load Banks are ideal for after market retrofit. Many options are available to suit individual requirements and simplify installation.

Applications

Reliability Exercise and testing of standby generator sets to assure readiness and eliminate the negative effects of both prolonged standby and of no-load exercise.

Base load leveling to eliminate the deleterious effects of low load operation: manual application or fully automatic in response to dynamic load demand.

Automatic protection against generator reverse power and motoring of prime mover by power regenerated by inertial loads.



LBD-Series Load Banks are of a modular-building block design. Simplex builds them up from stock modular parts to match your radiator or duct dimensions exactly.

elements

Magnetic contactor control of load

Multiple step load configurations

150°C XLP insulated power wiring

Power terminal block with standard size pressure terminals for common building wire

Local or remote control available

Manual or automatic control available

120V control circuits

Install at any point within radiator air outflow

Install indoors or outdoors (via option modification)

Many installation accessories available

Galvanized steel construction

Automatic over temperature protection

Control components separate and isolated from load elements

Continuous duty

The control section's standard location is on the left side, but it may be ordered on the right side. A control section may be required on both sides in some applications.

Calculating Load Bank Depth, Dimensions, and Width

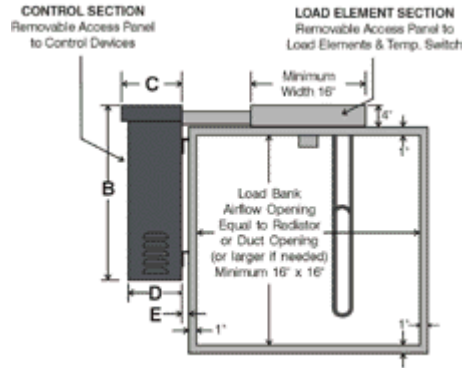
DEPTH	
Capacity	Depth "A"
less than 50KW	10"
50-150KW, 480V	10"
150-350KW, 480V	20"
50-200KW, 208V	20"
200-350KW, 208V	20"
350-800KW	30"
<small>Note: Depth "A" does not include 2" Mounting Adapters (Angle Flanges) or 3" Louvered Exhaust.</small>	

DIMENSIONS				
A	B	C	D	E
10"	24"	8.5"	7.575"	.855"
20"	24"	10.0"	8.075"	1.355"
20"	48"	12.0"	10.075"	1.355"

Dimensions are approximate. Due to system complexity, actual dimensions may vary.



LEFT SIDE VIEW



FRONT VIEW

TOTAL WIDTH

Total Width = Opening Width + 2" + Control Section(s) Width

- 10" x 24" Control Section Width = 19.355"
- 20" x 24" Control Section Width = 11.355"
- 20" x 48" Control Section Width = 13.355"

Note: A Control Section may be required on both sides for some applications. Due to system complexity, actual dimensions may vary.



Remote Control Panel
15" W x 15" H x 10" D
24" W x 24" H x 12" D

Mounting Instructions and Options

[Back to top of page.](#)

LBD-Series Sample Specifications click [here](#).



Simplex, Inc., 5300 Rising Moon Road, Springfield, IL 62711-6228
800-637-8603, 217-483-1600 (24 Hr.), Fax 217-483-1616