# Avtron K711/K711A/K711L Resistive Load Bank - 5 to 1250 KW

**Testing Your Emergency Standby Generator with a Load Bank Means** Reliability When it Matters Most.

### **Key Features**

- Economical Uses Engine Air for Cooling
- Reduces "Wet-Stacking" Problems
- Provides Load for Routine **Generator Testing**
- Corrosion Resistant Aluminized Steel Frame
- Includes Lifting Eyes and Duct Flange for Easy Installation

Superior Avtron quality combined with simple operation and maintenance will provide years of trouble free service.

Avtron's extensive line of Load Bank and Industrial Resistor Products are solid performers used throughout the world.

For total technical support or additional information, please contact Avtron at (216) 573-7600 or LBsales@Emerson.com.

Quality System Certified to ISO 9001

# The Avtron Model K711 Load Bank are intended for use as a supplemental load for lightly loaded engine gen sets.

The Avtron K711/K711A/K711L load banks are designed for duct or radiator mounting and are available in a variety of frame dimensions. The load banks are permanently mounted to the front of the engine generator and sized to match the radiator or exhaust duct opening. The K711 load banks utilize the engine cooling air rather than an internal cooling fan found on conventional load banks.

The primary cause of premature diesel engine failure is "wet-stacking" which is literally "wet" unburned fuel accumulating in the engine exhaust ("stack"), due to under-loading of the generator. Diesel engines that are lightly loaded or allowed to idle for long periods never reach their recommended full operating temperature. Over time, this unburned fuel coats the combustion chamber and pistons with a thick coating of tar and carbon build-up, reducing efficiency and life span of the engine considerably. A supplemental radiator load bank helps to "burn-off" these harmful carbon deposits, greatly increasing engine life.

These units are offered in 208, 240, 480 or 600 volt versions (at 60 Hz) or 380, 400 or 416 volt versions (at 50 Hz). Load rating varies and ranges between 5 and 1250 KW. Most engine manufacturers recommend sizing the radiator load bank to 40-60% of engine nameplate rating to eliminate "wet-stacking" problems.

The K711 load bank is controlled from a built-in control panel which contains the individual load-step toggle switches. The control panel is also available sized for standard 19" [482.6] rack mounting when remote installation of the panel is desired.

The K711 family is intended for use as a supplemental load for lightly loaded engine generator sets. The load bank utilizes the engine cooling air to cool the resistive load elements.





K711 500 KW Resistive **Radiator Mount Avtron** Load Bank.





## Specifications subject to change without notice.

#### Construction

Formed aluminized steel frame provides a rigid enclosure to match the height and width of the engine radiator or duct. Lifting eyes and a radiator duct flange are included to simplify installation. The standard K711 depth is 13" [330.2]. For applications where the amount of load element KW required exceeds the available 13" depth, then a "double-deep" K711A can be used instead, with a 26" [660.4] depth. Designed for NEMA-1 indoor installation, the K711/K711A is also available in NEMA-3R outdoor construction as an option. The K711L frame can be used for special mounting of 1250 KW load banks to high capacity 2000/2500 KW generator sets.

#### **Control Power**

The K711/K711A/K711L requires external control power of 120 VAC, single phase, 50/60 Hz. A control power transformer is available as an option for sites where 120 VAC is not readily available.

#### Cooling

The K711/K711A/K711L does not have its own cooling system. Instead, it relies on cooling air from the engine driven radiator fan or separately powered duct blowers. A built-in thermal switch drops all load if an overtemperature condition is detected.

#### **Controls**

The local control panel contains a POWER ON -OFF switch, a MASTER LOAD ON-OFF switch, and individual load step toggle switches for application of individual load sections. A MANUAL/AUTO switch is also provided (if the optional automatic load step controller is included). A remote rack-mounted control panel with wall-mounted enclosure is available as an option.

#### **Resistor Elements**

The fully supported Avtron Helidyne™ resistive load elements are made of corrosion resistant chromium alloy wire and are engineered to operate at conservative temperature ratings. This provides more stable loading, extends resistance element operating life, and eliminates the need for a cool down period after load bank operation.

#### 🚰 🖳 Emerson Network Power

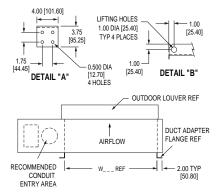
Avtron • 6255 Halle Drive, Cleveland, Ohio 44125, U.S.A. 216-573-7600 • FAX: 216-573-5953 • LBsales@Emerson.com

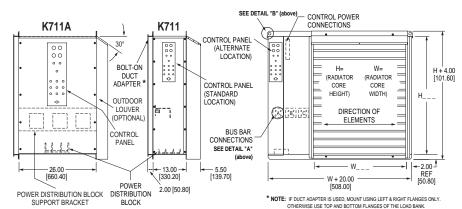
EmersonNetworkPower.com/loadbank

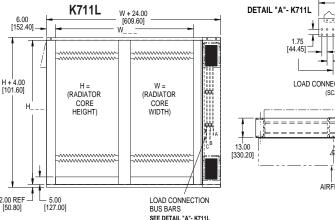
#### **Options**

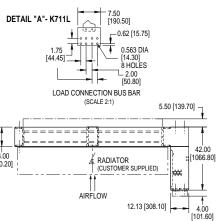
- Control Power Transformer
- Outdoor Construction with Bolt-on Louver Assembly
- Automatic Load Step Controller
- ADMS<sup>™</sup> Digital Metering System, Remote Mounted
- Remote Control Panel with Enclosure
- · Remote I/O for Interface with Switch Gear

**NOTE** Designs for international 50/60 Hz voltages are also available. Consult factory.









All dimensions are in inches [millimeters].

Emerson. Consider it Solved and Emerson Network Power are trademarks of Emerson Electric Co. or one of its affiliated companies. All the other marks are the property of their respective owners.

ADMS™ and Helidyne™ are trademarks of Avtron. Specifications subject to change without notice.

©2015 Emerson Network Power

Bulletin 263A • Rev. |