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# REACTIVE LOAD BANK

150 TO 375 KVAR

- Suitable for Indoor or Outdoor Installation
- Designed for Continuous Operation
- Reactive KVAR Matches Resistive KW at 0.8 Power Factor
- Remote Operator Controls
- Non-Saturating Iron Core Reactors

## MODEL K841/K843



QUALITY SYSTEM CERTIFIED TO  
**ISO 9001**

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he Avtron Model K841/K843 is a reactive load bank designed to be used in conjunction with a resistive load bank to provide loading of AC power sources at less than unity power factor. This type of testing is necessary to provide a true test of actual generator output.

**Application:** An inductive/reactive load bank is intended to be used in conjunction with a resistive load bank to test a generator or power source at 0.8 power factor (lagging). To achieve a 0.8 power factor, the reactive load bank should be sized at 75% of the resistive load bank KW rating. The resistive and reactive load banks are connected and operated in parallel.

The K841 is available in balanced 3-phase loads of 150, 188, 191, 225, 228, 300 and 375 KVAR at 240 or 480 volts. These units are available with different size load steps, depending on customer requirements. The typical load steps are 3.75, 7.5, 9.38, 18.8, and 37.5 KVAR. An optional, continuously variable, 0-3.75 KVAR load adjustment is available.

For testing 400 Hz power sources, an Avtron Model K843 may be used. It is similar to the K841 except it is designed to operate at common 400 Hz voltages. The maximum capacity of the K843 is 300 KVAR.

These load banks contain iron core reactors and a blower motor housed in a rigid structure of formed heavy gauge steel and are designed for indoor or outdoor installation. The outdoor units are equipped with two hoods mounted on each end of the load bank and screens that cover the inlet opening in the bottom of the unit. Channels are provided in the base structure to facilitate handling by a fork lift truck.

*The K841/K843 is used to test diesel generator sets, Uninterruptible Power Supplies (UPS), and other AC power sources that require testing at less than 1.0 power factor.*

*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@avtron.com](mailto:LBsales@avtron.com).*

# K841/K843 LOAD CAPACITY RATINGS

	K841	K843
<b>Maximum Capacity (KVAR)</b>	375 KVAR	300 KVAR
<b>Voltages (AC)</b>	240/480, 120/208	120/208, 208/416, 200, 450
<b>Frequency</b>	50/60 Hertz	400 Hertz
<b>Load Step Resolution</b>	3.75 or 37.5 KVAR	3.75 or 30 KVAR

Other load characteristics are available upon request. Consult factory.

Note: Designs for International 50/60 Hertz Design Voltages are also available.

## K841/K843 SPECIFICATIONS

**CONSTRUCTION:** Heavy-gauge steel enclosure provides a rigid structure. Side panels are removable for interior access and the base of the unit features fork lift channels for simplified handling.

**COOLING:** The K841 contains a cooling fan and a cooling air detection circuit. The cooling fan requires a power source of 120 volts, single phase, 60 hertz.

**CONTROLS:** The standard 19" rack mount control panel includes a POWER ON-OFF switch, a POWER ON light, a BLOWER ON-OFF switch with a BLOWER FAILURE light, a MASTER LOAD ON-OFF switch, a VOLTAGE SELECTION (if dual voltage unit), and load toggle switches.

**CONTROL POWER:** The K841 requires control power of 120 volts, single phase, 60 hertz.

**REACTORS:** The reactors are designed and built with an iron core and air gap combination that limit magnetic flux levels to assure a power factor of less than 0.05 at rated voltage and frequency.

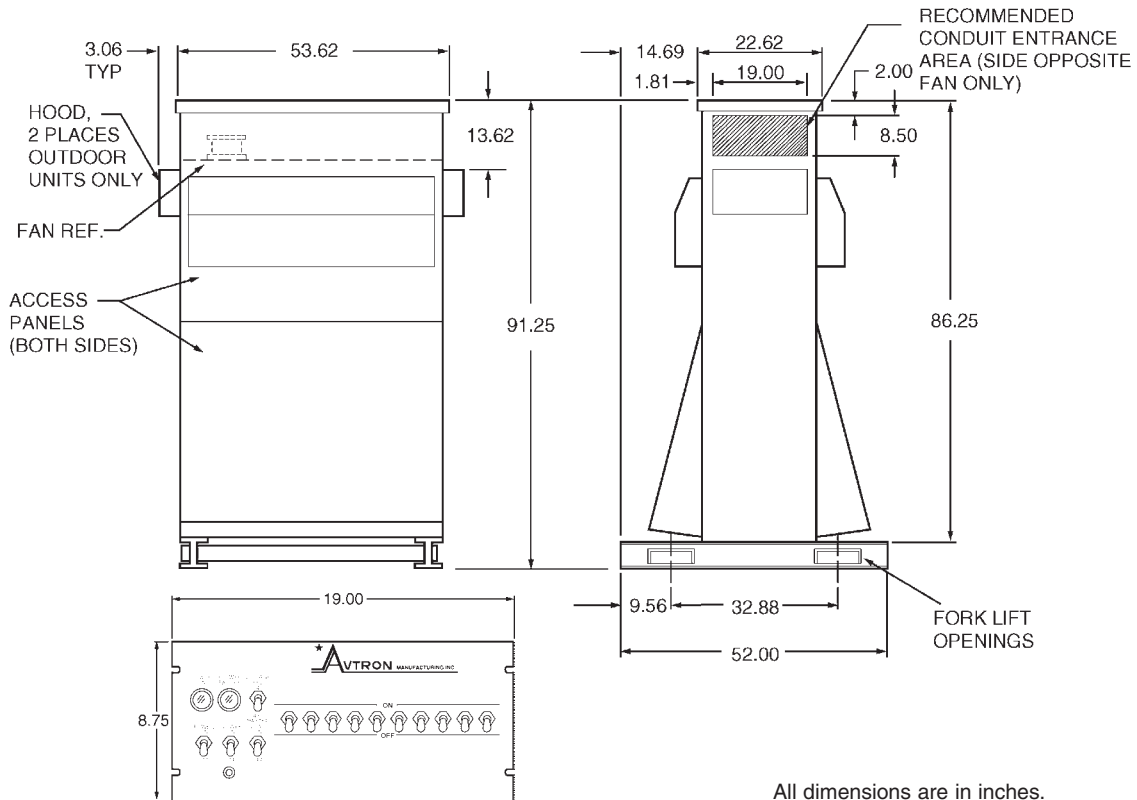
**PROTECTION:** The load bank is equipped with thermal switches that drop out the load if an overtemperature condition is detected.

**WEIGHT:** Approximately 4100 pounds.

### OPTIONS:

- Control Panel Enclosure
- Control Power Transformer

**NOTE:** The outline shown is for a K841 load bank. Some models of the K843 load bank differ slightly from this outline.



All dimensions are in inches.  
Specifications subject to change without notice.  
Printed in U.S.A. Rev. B

