



6255 HALLE DRIVE, CLEVELAND, OH, U.S.A. 44125
(1) 216-573-7600 • FAX: (1) 216-573-5953

HIGH CAPACITY MEDIUM VOLTAGE LOAD BANK

- High Capacity per Module
- No Step-Down Transformer Required
- Direct Connection to Medium Voltage Source
- Reduced Installation Costs
- Outdoor Construction
- Vertical Air Discharge



The Avtron Model K922A resistive load bank is ideal for testing medium-voltage generators or turbines. Avtron is leading the industry by offering a true medium-voltage load bank while others still supply a conventional step-down transformer and a low voltage load bank (typically 480 VAC). A medium-voltage load bank eliminates the need for a costly step-down transformer, which reduces the overall package size and installation cost.

The load bank is designed for permanent outdoor installation with vertical hot air discharge. Each load bank module is typically rated between 3 and 7 MW. Multiple modules are used when tens or hundreds of megawatts are required. Voltages from 5 kV class to 15 kV class are available.

The K922A load bank incorporates 4, 6 or 8 independent resistive stacks. Each resistive stack contains its own integral cooling fan. A medium-voltage compartment houses the main input load bus connections as well as the medium-voltage vacuum load step contactors. The operator controls are housed in a separate remote enclosure.

The Model K922A load bank is ideal for high power resistive loading of medium voltage generating systems in factory production lines or test cells. It is designed for permanent outdoor mounting.

For complete information on all Avtron load banks and assistance in selecting the right load bank for your application, contact your Avtron sales representative at (216) 573-7600.

K922A LOAD CAPACITY RATINGS

Total Load KW	Voltage	Load Step Resolution
3000 to 7000 per module	5 kV to 15 kV class	250 KW, 500 KW or 1000 KW typical. Bulk load also available.

K922A SPECIFICATIONS

CONSTRUCTION: The load bank is fabricated from heavy gauge formed steel and welded structural steel, making a rigid, drip-proof structure suitable for permanent outdoor mounting. Cooling air for the resistive load elements is drawn in from the bottom and exhausted out the top. Weather-resistant exhaust hoods and welded intake screens provide maximum protection to the resistor cases and blower assemblies. Structural extension legs are provided for mounting the load bank at the proper field elevation.

RESISTOR ELEMENTS: Avtron Helidyne™ load elements are helically wound from nickel chromium resistance alloy and are specially insulated for medium voltage. The elements are fully supported across their entire length with ceramic insulators on stainless steel support rods.

CONTROL POWER: The K922A requires control power of 120 VAC, 1-Phase, 60 Hz (control transformer optional).

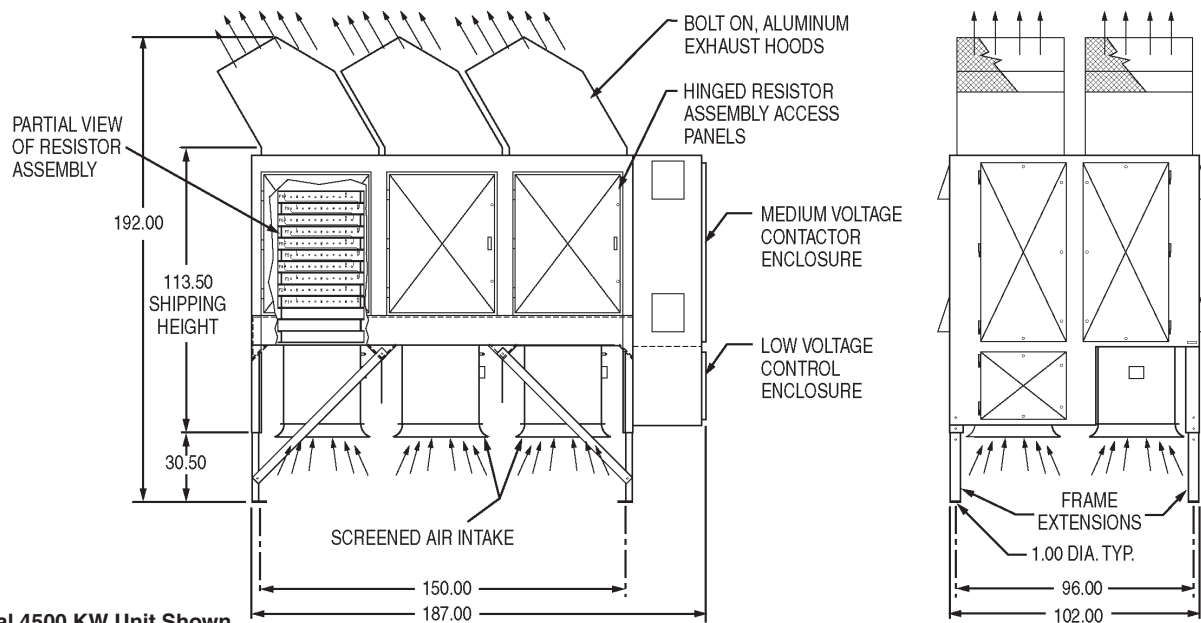
COOLING: The resistive load elements are air cooled by multiple integrally-mounted blower motors. The blower motors are controlled by motor starter relays located within the load bank and feature a time delay starting sequence to reduce in-rush current. An external power

source rated 460 VAC, 3-Phase, 60 Hz is required to power the blowers. Motors rated 575 VAC, 60 Hz, 415 VAC, 50 Hz, or 380 VAC, 50 Hz are available as options.

MANUAL CONTROLS: A rack-mounted control panel is provided for remote mounting. Controls include a POWER ON-OFF switch, a POWER ON light, BLOWER START/STOP push buttons with a BLOWER FAILURE light, OVERTEMPERATURE light, MASTER LOAD ON-OFF switch, and individual load step ON-OFF toggle switches which actuate the medium-voltage vacuum contactors located within the load bank. PLC or computer based controls are also available as an option.

PROTECTION: Differential air pressure switches are provided for each blower. Over-temperature protection is provided via a thermal switch for each resistor stack. Should an air-loss or over-temperature condition occur, all load is automatically removed. Fuses and motor-overload relays also protect the blowers.

WEIGHT:
 Approximately: 13,000 pounds - 3000 to 5000 KW
 17,000 pounds - 5500 to 7000 KW



Typical 4500 KW Unit Shown



Helidyne™ is a trademark of Avtron.
 All dimensions are in inches.
 Specifications subject to change without notice.
 Printed in U.S.A. Rev. A