



The Avtron Model 7410 are reactive load banks designed for outdoor installation when up to 1875 kVAr of lagging power factor load is required.

LOAD BANK RATINGS

Standard capacity ratings of:

- 375 thru 1875 kVAr

Standard load step resolution of either 3.75 or 37.5 kVAr.

Select from standard three phase voltage ratings of:

- 480-60Hz • 600-60Hz

Please consult factory for non-standard ratings.

Cooling Fan and Control Circuit

External 120V, 1 phase, 60 Hz required for cooling fan and control power. An optional step-down transformer is available to provide the required 120V control power. The transformer receives its power from the main power input.

Cooling System

Internal fans provide the necessary cooling air for the load reactors. The cooling fan operates from a 120V control power source. Fans are protected by overtemperature sensors.

Operator Controls

The standard load control for the 7410 is a remote manual control panel. Controls include: Power On/Off switch, Master Load On/Off switch, and Individual Load Step switches. Visual indicators include: Power On and overtemperature.

Other control options are available, please consult factory.

Construction

The 7410 is constructed of aluminized steel and is designed for continuous outdoor weatherproof operation. The base is constructed of formed heavy gauge steel making a rigid structure for lifting. Forklift channels are provided.

All exterior fasteners are stainless steel. The main input bus, load step relays, fuses, and blower/control relays are located in the main enclosure.

Finish

The 7410 has a high quality baked polyester powder coated finish with a film thickness of 2.8 +/- 0.4 mils per coat. The standard color is gray (ANSI 61).

Two Year Warranty Included

The equipment is covered by an industry exclusive 24-month parts and labor warranty.

Model 7410 Specifications

Reactors

The reactive elements are of non-saturating single and 3 phase iron-core construction impregnated with high dielectric varnish. Single and 3 phase iron-core reactors are designed for 120°C rise in a 50°C environment with a maximum of 5% waveform distortion and 0.05 pf.

Safety Features

A temperature switch is provided to monitor the exhaust air temperature. This temperature switch is electrically interlocked with the load application controls to prevent load application if the blower is not working properly (OVER TEMP indicator light comes on). The temperature switch contains hysteresis to avoid temperature cycling. The temperature switch will open at 180° +/-5°F and reset automatically at 140° +/-5°F.

An overtemperature switch is provided to monitor the temperature of each reactor. This overtemperature switch is electrically interlocked with the load application controls to prevent load step application if the reactor overheats. The overtemperature switch contains hysteresis to avoid temperature cycling.

Each load step is fused using UL class T fuses with 200,000 AIC rating.

The 7410 contains a cooling fan(s). These fans provide the necessary cooling air for the load reactors. The cooling fan operates from a 120V control power source. Fans are protected by an internal over-temperature protector.

The exterior of the load bank has appropriate warning and caution statements on access panels.

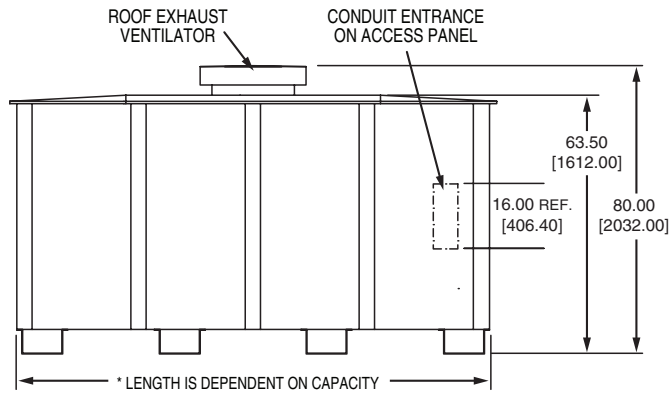
Internal access is restricted by bolt on exterior panels.

The air intake on the 7410 is designed to prevent objects greater than 0.50" diameter from being ingested into the unit.

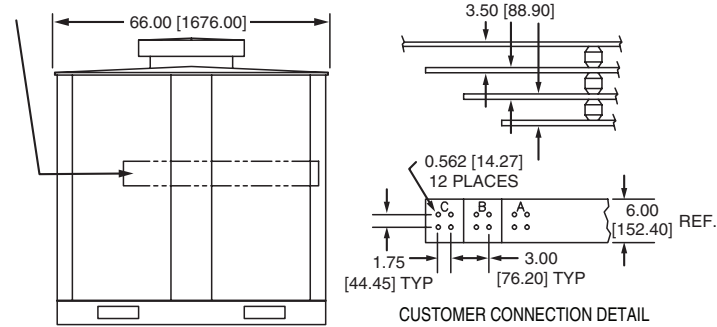
Vertical air discharge is provided and exhaust air is directed upward away from personnel.

Ambient Temperature

The 7410 load bank is designed for continuous duty cycle with no limitations. The ambient temperatures range is -20°F to 120°F (-28°C to 50°C).



CUSTOMER CONNECTION
SEE DETAIL



All dimensions are in inches [millimeters].
Specifications subject to change without notice.

Mounting

The 7410 is designed for outdoor installation on a concrete pad, structural base or trailer.

Power Terminals and Cable Entry

Load connections to the load bank are made at the phase bus bars marked A, B, and C, which are located inside the load end of the unit.

Optional Accessories

- Control Power Transformer
- Load Control Panel
- Digital Monitoring
- Digital Load Control
- Remote I/O Control
- Pilot Relay Control
- PLC Control
- Arctic Rating (low temperature)

Documentation - Operating Manual

A comprehensive operator's manual is supplied electronically via a USB drive.

Sections include: Safety, Installation, Operation, Maintenance, and Troubleshooting.

Testing and Standards

Avtron load banks comply with NEMA, NEC, and ANSI standards. Quality control system is certified to ISO9001 standards.

Weight and Dimensions

Dimensions (approx. in/mm)			Weight
Height	Width	Length	
80/2032	66/1676	*	*

* NOTE: Length and weight values are dependent on capacity and voltage.