



The ASCO Model 6164 are resistive/ reactive load banks designed for outdoor installation when up to 1150 kVA of electrical load is required.

LOAD BANK RATINGS

Standard capacity rating up to:

- 1150 kVA

Standard load step resolution:

- 1 kW
- 1 kVAR

Standard voltage ratings:

Voltage*	Hz	Max. Capacity
400	50	950 kVA
415	50	1025 kVA
440	60	970 kVA
480	60	1150 kVA

*NOTE: Other voltages are available. Please contact sales for further information.

Airflow and Noise Level

Forced-air cooling is by a single axial metal-bladed aerofoil fan, giving horizontal discharge. Fan motor is rated at 50Hz (DOL), 2x 3kW at 3 phase and airflow is 9.6 m³/s (20,341 CFM).

Typical noise level is 80dBA at 50Hz. Measurements are taken 3 metres from the load bank and at 90° to the airflow direction. Noise readings are subject to a tolerance of ±3dBA.

Load Control

The resistive elements and inductors are connected to the supply on test by electro-mechanical contactors fitted internally within the load bank. These are controlled by the SIGMA load control system.

SIGMA allows quick and easy operation without having to resort to lengthy calculations to determine the proportion of resistors and inductors to be connected for a given kVA at any power factor – for the various voltages and frequencies applied.

For comprehensive information on SIGMA control please see separate data sheet and system layout diagram for further details.

Construction

The frame of the load bank is constructed from 2mm 'Zintec' steel, folded and welded to form a monocoque construction. The top half of the load bank houses the resistive load and the bottom half the inductive.

Double skinned recessed doors allow easy access to the separate enclosures for control, switchgear and power connections. The double skinned, vertical discharge duct with aluminised steel heat shield contains the resistive load elements and cooling fan below.

Stainless steel mesh screens on the main air inlet and outlet provide protection against hazardous parts to IP1X on the resistive section.

On the inductive section, louvres with stainless steel mesh grills provide ventilation and protection to IP2X. All electrical enclosures are to IP54. The whole assembly is mounted within a crash frame to provide an exceptionally solid and robust assembly.

Optional four point lifting frame has corner tie bars to connect the frame to the base. The overall effect provides a mini crash frame.

Finish

High quality two-pack industrial acrylic paint system applied to an electro-plated zinc base and low-bake finish. Standard colour is grey (RAL7042). Other colours are available on request. Stainless steel construction is also available as an option.

Safety Features

An emergency stop/disconnect switch gives full isolation of the fan and control supply. A 110 Volt AC control circuit transformer provides isolation and operator safety. Stop/start buttons ensure the load bank will not automatically restart. On static load banks provision is also made for the connection of remote stop/start buttons.

The fan motor is fully protected with fuses and a thermal overload. Movable load banks are also fitted with phase rotation detection to automatically ensure correct airflow direction. Single phasing protection is provided by the overload. Thermal detectors are fitted to protect against overheating in the resistive duct and switchgear enclosure. Over voltage protection for the control and load circuit is provided by Sigma load control if specified.

Each element group and its associated contactor are protected by an HRC fuse. This is very important when testing large capacity power supplies, due to the possible high fault currents.

The load contactors are interlocked with the fan controls to ensure load can be applied only when the fan is running.

Internal access is restricted by key operated door catches. Polycarbonate screens behind the doors prevent accidental contact with live parts.

Warranty

The equipment is covered by a 12-month warranty as detailed in our Conditions of Trade.

