

AES Group, Inc.

Sales • Construction • Service

Powerex Simplex Laboratory Vacuum System - Specification

BASE MODEL NUMBER: IBVS0303-AES-SPL
SYSTEM CAPACITY: 17 SCFM @ 19" HGVAC
HORSEPOWER: 3 HP
RECEIVER SIZE/CONFIGURATION: 80 Gal. / Vertical
ELECTRICAL: 208/230/460V, 3PH, 60Hz.
(MUST SPECIFY VOLTAGE WHEN ORDERING.)

GENERAL DESCRIPTION

The package shall include one oil-sealed rotary vane vacuum pumps and associated equipment, one ASME tank and one control panel. Each pump is factory piped to a common intake manifold. The system shall be operationally tested prior to shipment.

DETAILED PRODUCT DESCRIPTION:

ROTARY VANE VACUUM PUMP

Three oil sealed carbon-fiber vanes are housed in the pump rotor. As the rotor turns, centrifugal force pushes the vanes against the cylinder wall to help form suction. The rotor and pump housings are made of cast iron and machined with precision tolerances to provide increased vane life and reliability. Oil is used for lubrication and cooling and also helps seal the suction system. Lubrication oil is separated from the vapor as the materials are pumped through the exhaust compartment. The exhaust process shocks and expands the material through a 0.01-micron cartridge coalescing filter. The vapor is vented to the atmosphere and the oil is trapped for automatic recycling. Inlet filtration is required to prevent solid particles from entering the pump. Powerex provides polyester inline filters to 10 micron as standard. Certain applications such as pumping solvents, alkaline solutions or corrosive vapors require particulate and carbon filters.

RECEIVER TANK

The system shall include an ASME rated air receiver rated for 200 PSI MAWP. The tank shall be equipped with a manual condensate drain.

CONTROL PANEL

The system shall include a UL508A listed control panel in a NEMA 1 enclosure with 120-volt control transformer, fused primary and secondary circuits, and pump HOA selector switch. Each vacuum pump will have a full voltage magnetic starter with overload protection, and elapsed run-time meter. Operation is start/stop with a minimum run timer to prevent short cycling of the motor. For duplex systems, the lag vacuum pump shall be able to start automatically if the lead vacuum pump fails to operate.

DISCHARGE TEMPERATURE SWITCH

High discharge air temperature shutdown alarm with visual indicators and dry contacts

OPTION(S) FOR ROTARY VANE VACUUM UNITS: - NOT INCLUDED

PRICING ON OPTION(S) LISTED BELOW IS OR ARE NOT INCLUDED IN ABOVE PRICE.

NEMA 4/ ELECTRIC AUTO PURGE

Pumps will run through an automatic 10–15-minute purge cycle prior to shutting down to purge any gases from the pump to atmosphere. A 3-position switch is provided to allow automatic purge, manual purge, or purge off modes. Includes electric purge isolation valve.

4330 Redwood Highway, Suite 100
San Rafael, CA 94903
Tel 415 507-9373 Fax 415 507-9376