AES Group, Inc.

Sales ▪ Construction ▪ Service

SPECIFICATION

BASE MODEL NUMBER:	CVPT0755A-AES-WAGD-SPL
SYSTEM CAPACITY:	104 SCFM @ 19"HGVAC
HORSEPOWER:	19.2 HP Total (6.4 HP x 3)
RECEIVER SIZE/CONFIGURATION:	200 Gal./Vertical
ELECTRICAL:	460V, 3PH, 60Hz. – 65KAIC SCCR
(MUST SPECIFY VOLTAGE WHEN ORDERING.)	
OSHPD SEISMIC CERTIFIED:	OSP0393-10

GENERAL DESCRIPTION

The Powerex medical vacuum system is designed to create a suction system to remove unwanted fluids or gases from hospital working areas. The medical vacuum system package is compliant with the NFPA 99 requirements for medical vacuum and is operationally tested prior to shipment. The package shall include multiple oil-free rotary claw vacuum pumps and associated equipment, one ASME tank and one medical control panel. All components shall be completely pre-piped and pre-wired to single-point service connections. System shall be provided with intake and discharge flexible connectors. All interconnecting piping and wiring shall be completed and operationally tested prior to shipment. Vibration isolation pads are included with the system.

DETAILED PRODUCT DESCRIPTION:

OIL-FREE ROTARY CLAW VACUUM PUMP

The medical vacuum pumps shall be of an air-cooled oil-free rotary claw design. Each claw vacuum pump is equipped with a set of opposing rotors with frictionless operation, eliminating the need to service or to replace wearing parts. Each oil-free rotary claw vacuum pump shall be equipped with:

- TEFC, standard efficiency electric motor with coupling
- Inlet filter
- Vibration isolation pads
- Check valve.

VACUUM RECEIVER

The system shall include an ASME rated air receiver rated for 200 PSIG and full vacuum. The tank will have external paint and internal lining to resist corrosion. The tank shall be equipped with a vacuum gauge, bypass valves, a tank sight gauge and a manual drain.

PREMIUM NFPA CONTROL PANEL

The control system provides automatic lead/lag activation based on demand and automatic alternation of all pumps to equalize the amount of usage among the available pumps. The control panel shall include:

- A color touch screen panel which displays the operating status of the unit. The touch screen will display pump status, pump faults, pump run hours, system pressure, system alarms and service alert notifications for the pumps.
- Building automation communication gateway, with BacNet® protocol. Ethernet port for connection to BacNet® /IP server or direct connection to facility Ethernet for viewing of system operations and status via device IP-address.
- A PLC controller that includes logic programmed to appropriately manage start-stop, lead-lag and other pump operations.
- UL508A listed control panel in a NEMA 12 enclosure.

SYSTEM CONNECTIONS

The system is supplied with a remote intake connection and flexible connectors for both intake and discharge. All piping complies with current NFPA 99 requirements.

EXHAUST SILENCER(S) – ADDER OPTION – NOT Included

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

2” Silencer(s) shipped loose for field installation on the discharge of each pump to reduce exhaust noise

TOTAL OXIDIZER MONITOR: Vacuguard+ (installed)

Total Oxidizer Monitor with mitigation, Oxygen monitoring system range 0-95%, with dry contact alarm relays and 10' remote KF25 vacuum flange (1" MPT). Mitigation system includes vacuum transducer and mitigation solenoid valve. Monitor to be mounted on the vacuum skid and powered from the main control panel. Includes dry contact for remote monitoring. Mitigation gas to be inert gas (typically nitrogen – customer supplied) or ambient air.

INTEGRATED MEDICAL VACUUM FILTRATION

Integrated inlet filtration designed to remove solid, liquid, and bacterial contamination as small as 0.3 micron through HEPA-grade filters. Each inlet canister to contain two ports with a translucent sight tube and drain valve to detect and drain liquid accumulation.

OSHPD SEISMIC CERTIFIED

This system has been tested and certified in accordance with California’s Office of Statewide Health Planning and Development (POSHPD), California Building Code (CBC) 2013, and International Building Code (IBS) 2012.

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