VPACPB Series

Vertical Package Explosion Proof Air Conditioner & Room Pressurization System

Hazardous Location N.E.C. and I.E.C. Approved

2.0 to 50.0 Tons Standard

Class I, Division 1 and 2 Available

Over 50 Ton Upon Request

Standard Features

- Unit Housing Constructed of 316L Stainless Steel Double-Wall Foam Injected Panels
- 12 Gauge 316L Stainless Steel All Welded Super Structure
- All Panels Are Laser Cut to Ensure Precision and Durability
- Severe Duty Copeland Scroll Compressors Installed
- Multiwing PAGAS Non-Sparking Fan Blade Installed
- All Motors Feature a 1.15 Service Factor to Ensure Optimal Severe Duty Operation
- Direct Drive Blower Motors Lessen Unit Downtime and Maintenance in Severe Duty Applications
- VFD Controls Installed on All Blowers to Allow for Optimum Air Flow
- All Wiring Utilized CLX Armored Cable
- All Electrical Terminations Protected by TMCX Glands

Offering The Keys to Success:

- Quality
- Pricing
- On Time Delivery
System Description

Safe Air Technology VPACPB Series Systems are designed to provide cooling, heating, and pressurization for industrial, severe duty, and marine applications. Each VPACPB Series Unit is custom designed by our in-house engineering team to meet your specific needs.

Our units are fully tested for operational performance and NEC / IEC Compliance to ensure customer satisfaction and many years of safe operation in even the harshest operational conditions.

We work closely with our customers to determine the most appropriate system for your application. Once the correct system has been selected, Safe Air Technology will provide a full Engineering Submittal Package for approval prior to the manufacturing of the system.

Please contact our Sales Engineering Department at sales@explosionproof.net or by phone at 225.303.0007 with any questions that you may have. We look forward to working with you and serving your HVAC/R needs.

System Applications

- Industrial Refineries
- Chemical Plants
- Offshore Platforms
- Gas Plants and Pipelines
- Fuel Transfer Docks and Pumping Stations
- Analyzer Buildings
- MCC Rooms
- Control Rooms

Unit Specifications

A/C Specifications
- All Electrical Components UL and CSA Approved
- Maintenance Friendly General Purpose Control Box Included for A/C
- Explosion Proof Motor and Compressor Overload Protection Installed
- General Purpose Thermostat Included to Control Room Temperature
- High and Low Pressure Safety Switches Installed
- Easily Accessible Condenser Fan Section with Non Sparking Fan Blade
- System Shut-Down Circuit Provided in Case of Gas/Smoke Detection (Gas Detectors Provided by Others)
- Industrial Grade Scroll Compressor
- Environmentally Friendly R-407C Refrigerant Installed
- Severe Duty Blowers to Move Air Quickly and Quietly
- Copper Tubes with Aluminum Fin Coils Installed
- Unit Fully Tested for Operational Performance and NEC Compliance
- O & M Manuals Included
- Certificate of Conformance to Explosion Proof Codes Issued

Pressure Blower Specifications
- All Electrical Components UL and CSA Approved
- Pressure Blower Integrated into the A/C System
- Maintenance Friendly General Purpose Control Box Included for PB to be Installed inside Building
- Variable Frequency Drive Installed for Pressurization Motor with Overload Protection
- Easy Turn Latches on PB Housing for Easy Access to Pressurization Motor and Filter
- Room Pressure Gauge Installed
- System Shut-Down Circuit Provided in Case of Gas or Smoke Detection (Gas Detectors Provided by Others)
- Loss of Room Pressure Light Installed
- Non Sparking Aluminum Blower Housing
- Unit Fully Tested for Operational Performance and NEC Compliance
- O & M Manuals Included
- N.E.C. Certificate of Conformance to Explosion Proof Codes Issued
### Available Options

- **ADC**: Adsil Coated Coils
- **B**: Group B Classification
- **CC**: Copper Tube and Copper Fin Coils
- **CF**: Custom Pressurization Filtration Module
- **CRT**: Export Crate for Sea/Air Shipping
- **DSI**: System Disconnect Installed
- **DW**: Double Wall-Evaporator Section
- **EPX**: 646 Micro Epoxy Coated Housing
- **HC**: Humidity Controls Installed
- **HCC**: Heresite Coated Coils
- **HG**: Hot Gas Bypass Valve Installed
- **HL**: High and Low Pressure Safety Switches Installed
- **ISV**: Refrigeration Isolation Valves
- **LAC**: Low Ambient Controls Installed
- **LOC**: Lock Out Switch Installed
- **MG1**: Marine Grade Coated Coils and Copper
- **MG2**: Marine Grade Coated Coils, Copper and Sheet Metal
- **MOD**: Custom Modification (Consult Sales Dept.)
- **PBD**: Pressure Blower Isolation Damper
- **RT**: Remote Thermostat
- **RMT**: Remote Control Box
- **SD**: Smoke Detector Installed
- **SH6**: 316 Stainless Steel Housing
- **WC**: Water Cooled Condenser Coil
- **XPR**: Explosion Proof Receptacle Installed

**NOTE:**
If an option you require due to your specifications is not listed, please contact our Sales Engineering Department. We will be happy to assist in ensuring that your system fully complies with your specifications.
VPACPB Series Features

316 Low Carbon Content Stainless Steel

Each VPACPB Unit is built from 316 low carbon stainless steel double wall foam injected panels. Which, along with the 316 stainless steel all welded super structure, ensures unit durability for an extended service life.

Pressurization Module

The pressurization module uses Comefri backward curved direct drive centrifugal blowers. The highly efficient direct drive non-sparking design meets NEC hazardous location requirements while offering ease of service. Custom pressurization/filtration modules are available.

Industrial Grade Scroll Compressor

We utilize industrial grade Copeland scroll compressors in each VPACPB system, specifically modified for the severe duty and hazardous location operational requirements of our clients.
VPACPB Series Features

Armored Electrical Cable

CLX Metal Clad Rubberized Armored Cable and TMC Armored Connection Glands are Utilized Throughout the VPACPB Unit, Ensuring Electrical Protection in the Harshest Operating Conditions. TMCX Glands are Used for Division 1 Applications.

Touchscreen HMI Controls

The VPACPB Unit’s Touchscreen HMI Controls Allow for Simplified Control of the VPACPB’s Functions. The Touchscreen Module Displays Temperature, Pressurization, and Unit Alarm Status Data. It can be Customized to Meet Your Project’s Needs.

Service Friendly Control Panel

Every VPACPB Unit Control Panel is Engineered to Meet Your Exact Specifications. All Wires Are Labelled Using Chemical Resistant Heat Shrink Labels and Neatly Organized with a Service Loop Incorporated to Allow for Ease of Serviceability.
VPACPB - 1300A - 1 - H - D - 2.0 - N - 3 - ICD2 - 1C - B - ****

**VPACPB**
Vertical A/C Unit with Pressurization Module

**Pressure Blower Specifications**
- 1300 CFM A = Attached
- 2600 CFM S = Stand Alone
- 3000 CFM

**Pressure Blower Controls**
- 1 = Variable Frequency Drive
- 2 = Constant Flow / Damper Control

**Air Flow**
- V = Vertical
- H = Horizontal

**Refrigerant Type**
- A = R22
- B = 407
- C = 134 A
- D = 410

**Cooling Capacity**
- 2.0 to 50.0 Ton Capacity Larger Units Available Upon Request

**Heating Capacity**
- 10KW (EH/S) = Electric Heat / Standard
- 10KW (EH/XP) = Electric Heat / Explosion Proof
- N = No Heat Installed

**Classification Codes**
- Please Contact our Sales Engineers for Classification Codes

**Unit Options**
- See Options List on Page 3
- **Please Contact our Sales Department if Your Needed Option is not Listed**

**Configuration**
- B = Base Mounted
- W = Wall Mounted

**Control Box Type**
- 1C = General Purpose Controls
- 2C = Explosion Proof Controls

**Classification**
- Please Contact our Sales Engineers for Classification Codes

**Power Supply**
- 2 = 208-230 / 1 / 60 Hz
- 2(50) = 220-240 / 1 / 50 Hz
- 3 = 208-230 / 3 / 60 Hz
- 3(50) = 220-240 / 3 / 50 Hz
- 4 = 460-480 / 3 / 60 Hz
- 4(50) = 415-440 / 3 / 50 Hz
Safe Air Technology specializes in the engineering and manufacture of Explosion Proof, Corrosion Resistant, and Severe Duty HVAC/R systems and Pressurization Equipment. Our explosion proof, severe duty systems are designed to offer a safe solution at a competitive price. We strive to maintain the highest level of quality in both our systems and services.

Safe Air Technology is headquartered in Baton Rouge, Louisiana. This allows us to easily serve many of our petrochemical, oil and gas, and industrial clients. To better serve our clients around the world, Safe Air Technology has international offices in Dubai and Singapore. Our international reach has given us the opportunity to work with clients in over 40 countries to design and deliver durable and reliable explosion proof HVAC/R systems.

At Safe Air Technology, we understand that our clients’ HVAC/R needs are continuously adapting and changing. By forging a relationship with you, we can be better equipped to understand and meet your specific needs as they arise. Our engineering and production team takes pride in every system they deliver, from one of our standard window units to our complex custom designed projects.

Contact Safe Air Technology and Let Us Help to Keep Industry Safe for Your World.

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U.S.A.

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