Explosion Proof Hazardous Location Vertical Air Conditioner

VAC1 Series Vertical Wall Mount A/C - 50 Hz Models

VAC1 Series - 50 Hz Models
(21,200 – 59,000 BTU/HR) Standard

VAC1 Series Vertical Air Conditioning Systems are designed to provide maximum indoor comfort while meeting the demanding requirement of severe duty industrial applications. Our systems are fully tested for operational performance and compliance. Units are manufactured to N.E.C. and I.E.C. explosion proof codes as well as CSA Certified for use in hazardous locations.

Standard Features
- UL and CSA certified
- Overload protection on motors and compressors
- Easily accessible electrical components for routine inspection and maintenance
- Non sparking condenser fan blade
- Aluminum finned copper tube coils
- Twin blowers to move air more quietly
- Built-in full length mounting brackets
- Motors are easily accessible for fast and easy maintenance
- Powder coated steel cabinet
- Engineering data sheets available with detailed system specification
- N.E.C. and I.E.C. “Certificate of Conformance” issued for hazardous location
- Operation, maintenance & installation manuals included

N.E.C. Rated and Approved
Safe Air Technology
Offering The Keys to Success: Quality, Pricing and On Time Delivery

4133 Evan Brooks Road • Baton Rouge LA 70814 U.S.A
Phone (225) 303-0007 • Fax (225) 303-0020
www.explosionproof.net • Email: sales@explosionproof.net
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System Overview

Safe Air Technology’s VAC1 Series Systems are designed to provide cooling and heating for the demanding needs of today’s industry. Safe Air Technology produces a standard product line of VAC1 systems that are CSA Certified, but also has a team of in house engineers that can custom design a system to meet your particular requirements. Safe Air Technology’s units are fully tested for operational performance and NEC Compliance to ensure customer satisfaction and many years of reliable service.

Safe Air Technology works with its customers to determine the most appropriate system for the customers application. Once the correct system has been selected, Safe Air Technology will provide an Engineering Submittal package for approval prior to the manufacturing of the system.

System Applications

- Industrial Refineries
- Chemical Plants
- Offshore Platforms
- Gas Plants and Pipelines
- Corrosive and Hazardous Storage Facilities
- Ammunition Storage Bunkers
- Paint Rooms
- Fuel Transfer Docks and Pumping Stations

Available Options

- ADC  Adsil Coated Coils and Copper for Corrosion Protection
- B    Meets Group “B” Classification for NEC Codes
- CC   Copper/Copper Coils Installed
- CRT  Export Crate Included
- DSI  System Disconnect Installed
- EPX  646 Micro Epoxy Coated Metal for Corrosion Protection
- FAD  Fresh Air Intake with Motorized Damper
- HCC  Heresite Coated Coils and Copper for Corrosion Protection
- HG   Hot Gas By-Pass Valve Installed
- HL   High and Low Pressure Safety Switches Installed
- ICP  Control Panel Installed Internally
- ISV  Refrigeration Isolation Valves
- LAC  Low Ambient Controls Installed
- LOC  Lock Out Switch Installed (Standard Feature)
- MOD  Custom Modification (See Sales)
- RMC  Remote Control Panel
- SH4  304 Stainless Steel Housing
- SH6  316 Stainless Steel Housing
- WC   Water Cooled Condenser Coil
- XPR  Explosion Proof Receptacle Installed
VAC1 Series - 50 Hz Models
21,200 BTU/HR

VAC1 Series - 50 Hz Models
26,000 to 31,200 BTU/HR

*** Drawing apply to standard VAC1 systems. See Engineering Data Sheets***
VAC1 Series - 50 Hz Models
36,000 to 48,500 BTU/HR

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VAC1 Series - 50 Hz Models
59,000 BTU/HR

*** Drawing apply to standard VAC1 systems. See Engineering Data Sheets***
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Notes:
(1) See SafetyKing® Nomenclature for Unit ID (Page 5)
(2) THHN 75°C Copper Wire
(*** Options that can be added. See page 2 (*NEC Group “B” Available on Request)

Contact our Sales Department should your specifications require a variation on our standard units.

IMPORTANT NOTICE

T Codes:
It is important to know the auto ignition temperature of the Gas or Vapor the unit will be operating in or around. The Gas or Vapor temperature should be above the rating of the equipment.

Class I, Groups B*, C & D, Division 2

VAC1 Series Vertical Wall Mount  240/220-1PH/50HZ

<table>
<thead>
<tr>
<th>21,200 BTU</th>
<th>Model</th>
<th>BTU/HR Cooling</th>
<th>Heat BTUH</th>
<th>Electrical Rating - 50 HZ</th>
<th>Minimum Circuit Ampacity</th>
<th>Maximum External Fuse or Ckt. Brkr.</th>
<th>CFM</th>
<th>Weight Lbs</th>
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NEC, IEC Rated and Approved

Notes:
( 1 ) See Safety King® Nomenclature for Unit ID ( Page 5 )
( 2 ) THHN 75°C Copper Wire
( *** ) Options that can be added. See page 2 (*NEC Group “B” Available on Request)

Contact our Sales Department should your specifications require a variation on our standard units.

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Class I, Groups B*, C & D, Division 2

VAC1 Series Vertical Wall Mount  415/380-3PH/50HZ

### 21,200 BTU

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<thead>
<tr>
<th>Model</th>
<th>BTU/HR Cooling</th>
<th>Heat BTUH</th>
<th>Electrical Rating - 50 HZ</th>
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<th>Weight Lbs</th>
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Offering The Keys to Success: Quality, Pricing and On Time Delivery

**VAC1 Series Vertical Wall Mount 415/380-3PH/50HZ**

### 36,000 BTU

<table>
<thead>
<tr>
<th>Model</th>
<th>BTU/HR Cooling</th>
<th>Heat BTUH</th>
<th>Electrical Rating - 50 HZ</th>
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<td>41,500</td>
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<td>20</td>
<td>1271 - .2 ESP</td>
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<tr>
<td>VAC1-H-D-41500-14KW(EH/S)-4(50)-CND-ICD2-1C-LOC</td>
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<th>Minimum Circuit Ampacity</th>
<th>Maximum External Fuse or Ckt. Brkr.</th>
<th>CFM</th>
<th>Weight Lbs</th>
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<td>415/380 - 3</td>
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<td>VAC1-H-D-48500-14KW(EH/S)-4(50)-CND-ICD2-1C-LOC</td>
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### 59,000 BTU

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<td>1483 - .2 ESP</td>
<td>525</td>
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</tbody>
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**VAC1-Series Model Number Nomenclature**

### Model Number

VAC1 = Vertical A/C

### Air Flow Direction

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

### Refrigerant Type

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

### Cooling Capacity (12,000 BTU/HR per Ton)

- 36000 = 36,000 BTU/HR

### Heating Capacity in KW / BTU

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

### Unit Supply Voltage

- **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

### System's Component Classification

- **AU** = Entire Unit Complies with Explosion Proof Codes
- **CND** = Condenser Section Complies with Explosion Proof Codes

### Explosion Proof N.E.C. Classification

Please Contact our Sales Engineers for Classification Codes

### Control Box Type

- **1C** = General Purpose Operational Controls
- **2C** = Explosion Proof Operational Controls

### Available Options

- **ADC** = Adsil Coated Coils and Copper for Corrosion Protection
- **B** = Meets Group “B” Classification for NEC Codes
- **CC** = Copper/Copper Coils Installed
- **CRT** = Export Crate Included
- **DSI** = System Disconnect Installed
- **EPX** = 646 Micro Epoxy Coated Metal for Corrosion Protection
- **FAD** = Fresh Air Intake with Motorized Damper
- **HCC** = Heresite Coated Coils and Copper for Corrosion Protection
- **HG** = Hot Gas By-Pass Valve Installed
- **H/L** = High and Low Pressure Safety Switches Installed
- **ICP** = Control Panel Installed Internally
- **ISV** = Refrigeration Isolation Valves
- **LAC** = Low Ambient Controls Installed
- **LOE** = Lock Out Switch Installed (Standard Feature)
- **MOD** = Custom Modification (See Sales)
- **RMC** = Remote Control Panel
- **SH4** = 304 Stainless Steel Housing
- **SH6** = 316 Stainless Steel Housing
- **WC** = Water Cooled Condenser Coil
- **XPR** = Explosion Proof Receptacle Installed

**PLEASE CONTACT OUR SALES DEPARTMENT IF YOUR OPTION IS NOT LISTED**

**STANDARD CONFIGURATIONS (VAC1)**

1. **Air Flow Direction**: **(H)** = Horizontal Discharge Air Flow
2. **Refrigerant Type**: **(D)** = 410A
3. **System Component Classification**: **(CND)** = Condenser Section Complies with Explosion Proof Codes
4. **Control Box Type**: **(1C)** = General Purpose Operational Controls