

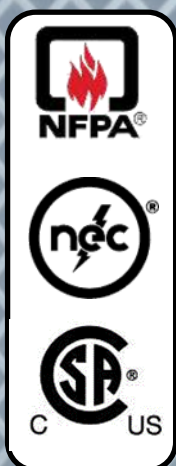


## **AH-XPC Series**

*Custom Severe Duty Air Handler Units*

*Available For NEC/IEC Rated: General Purpose,  
Class I/Class II, & Division 1/ Division II Applications*

**1.5 to 200 Ton Capacities Available**



### **Standard Features**

- ***All Electrical Components are UL/CSA Approved***
- ***Easily Accessible Evaporator Blowers and Motors for Fast and Easy Maintenance***
- ***Non-Sparking and Non-Static Blower Designs Available***
- ***Industrial Continuous Duty Bearings for Improved Performance and Longer Unit Life***
- ***Severe Duty Motors with a Minimum 1.15 Service Factor Installed***
- ***N.E.C. "Certificate of Conformance" Issued***
- ***Operation, Maintenance & Installation Manuals Included***



**Offering The Keys to Success:**  
**Quality**  
**Pricing**  
**On Time Delivery**

225.303.0007  
sales@explosionproof.net

[www.explosionproof.net](http://www.explosionproof.net)

4133 Evan Brooks Drive  
Baton Rouge, Louisiana 70814



## System Description

**Safe Air Technology AH-XPC Series Systems** are designed to provide cooling, heating, and pressurization for industrial, severe duty, and marine applications. Each **AH-XPC 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** 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](mailto: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

- |                                   |                                                   |
|-----------------------------------|---------------------------------------------------|
| ◇ <b>Industrial Refineries</b>    | ◇ <b>Fuel Transfer Docks and Pumping Stations</b> |
| ◇ <b>Chemical Plants</b>          | ◇ <b>Analyzer Buildings</b>                       |
| ◇ <b>Offshore Platforms</b>       | ◇ <b>MCC Rooms</b>                                |
| ◇ <b>Gas Plants and Pipelines</b> | ◇ <b>Control Rooms</b>                            |

## Unit Specifications

### Division 2 Specifications

- All Electrical Components *UL and CSA Approved*
- Division 2 Explosion Proof Blower Motor Over-load Protection Installed
- Non-Sparking Division 2 Approved 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

### Division 1 Specifications

- All Electrical Components *UL and CSA Approved*
- Division 1 Explosion Proof Blower Motor Installed
- Non-Sparking Division 1 Approved 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

## Available Options

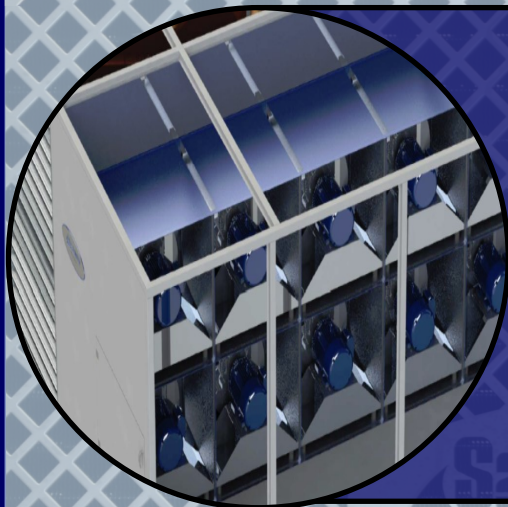
<b>-ADC</b>	<b>Adsil Coated Coils for Corrosion Protection</b>
<b>-B</b>	<b>Group B Classification</b>
<b>-CC</b>	<b>Copper Tube and Copper Fin Coils</b>
<b>-CF</b>	<b>Custom Pressurization Filtration Module</b>
<b>-CRT</b>	<b>Export Crate for Sea/Air Shipping</b>
<b>-DSI</b>	<b>System Disconnect Installed</b>
<b>-DW</b>	<b>Double Wall-Evaporator Section</b>
<b>-EPX</b>	<b>646 Micro Epoxy Coated Housing</b>
<b>-HCC</b>	<b>Heresite Coated Coils and Copper for Corrosion Protection</b>
<b>-MG1</b>	<b>Marine Grade Coated Coils and Copper</b>
<b>-MG2</b>	<b>Marine Grade Coated Coils, Copper and Sheet Metal</b>
<b>-MOD</b>	<b>Custom Modification (Consult Sales Dept.)</b>
<b>-RT</b>	<b>Remote Thermostat</b>
<b>-SH6</b>	<b>316 Stainless Steel Housing</b>
<b>-WC</b>	<b>Water Cool Condenser Coil</b>
<b>-XPR</b>	<b>Explosion Proof Receptacle Installed</b>

### **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



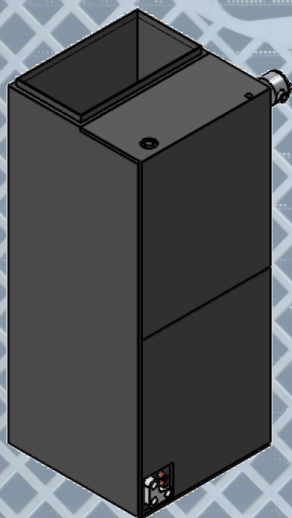
## AH-XPC Design Information



### Custom Engineered Air Handler Units

*Each AH-XPC Air Handler Unit is Dutifully Engineered by Safe Air Technology's In House Engineering Team to Exceed the NEC and IEC Codes and Match Your Specifications.*

*The AH-XPC Series can be Configured for High Ambient, Low Ambient, Severe Duty, Hazardous Duty, or Any Specific Application Necessary.*



*Safe Air Technology's Engineering Team Carefully Selects Each Component of Your AH-XPC Series Unit Based on Project Specifications, Performance Ratings, Ease of Maintenance, NEC/IEC Hazardous Location Requirements, Environmental and Ambient Condition Applicability, and Length of Service Life.*



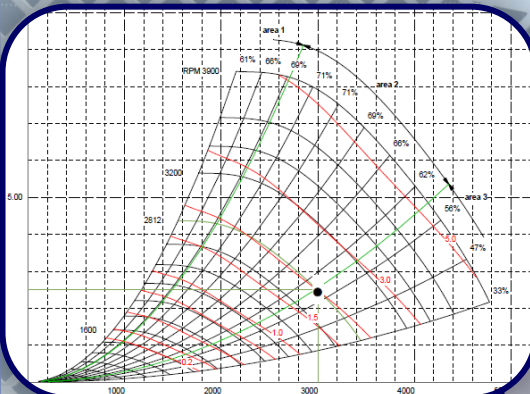
## AH-XPC Blower Selection Information



### Backward Inclined Centrifugal Blowers

*SAT'S AH-XPC Series Utilizes Backward Inclined Centrifugal Blowers Which Offer a Wide Variety of Benefits Over Traditional Evaporator Blower Styles:*

- ◆ *Efficient Blower Design Reduces Operation and Maintenance Cost*
- ◆ *Direct Drive Design Reduces Maintenance Costs*
- ◆ *Higher Flow Rate Capacity in a Smaller Space Reduces Unit Footprint*



### Evaporator Blower Selection

*Evaporator Blowers are Carefully Selected to Suit Your Application. The Most Efficient Blower is Selected Based on the Airflow Required, Environmental Operating Conditions, and Power Supply Available. Our Engineering Team Conducts All Calculations Necessary to Ensure the Best Fit Blower for Your Needs.*



### Evaporator Blower Motors

*AH-XPC Evaporator Blower Motors Boast a 1.15 Service Factor and are Selected by Our Engineering Team to Meet the NEC/IEC Hazardous Location Rating and Environmental Conditions of Your Application.*



## AH-XPC Filtration Package Information



### Standard MERV 8 Pre/Post Filters

*SAT'S AH-XPC Series Features Standard MERV 8 Pre and Post Filters, Which Filter Out Particulates as Small as 10.0–3.0  $\mu$ m from the Return Air Stream. Higher MERV Ratings Are Available Upon Request.*



### MeadWestvaco VersaComb Chemical Filtration

*For Applications Needing Specialized Chemical Filtration, Safe Air Technology Offers Chemical Filtration Packages Featuring MeadWestvaco Versacomb Carbon Matrix Material. These Filtration Packages Have a Smaller Footprint and Higher Efficiency Than Traditional Pellet Based Filtration Modules.*



### HEPA Filtration

*Safe Air Technology's HEPA Filtration Packages Offer a Filtration Efficiency of at Least 99.97% and up to 99.99% of Airborne Particles of 0.3 microns in size. The HEPA Filtration Package Provides Premium Filtration Efficiency for Clean Rooms, Laboratories, Medical Facilities, and Other Applications Requiring HEPA Filtration.*



## AH-XPC Series Electrical Features



### Armored Electrical Cable

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

### Available Touchscreen HMI Controls

*The AH-XPC Offers Optional Touchscreen HMI Controls, Which Allow for Simplified Control of the AH-XPC's Functions. The Touchscreen Module Displays Temperature and Unit Alarm Status Data. It can be Customized to Meet Your Project's Needs.*



### Service Friendly Control Panel

*Every AH-XPC 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*





## AH-XPC Series Air Handler Design

*Safe Air Technology's AH-XPC Air Handler Series Comes in a Wide Range of Designs to Suit the Needs of Our Clients. The Configurations Displayed Below Give an Idea of the Range of Available Designs for the AH-XPC Series. The AH-XPC Air Handler Series Can be Custom Designed and Tailored to Meet Your Specific Needs.*



High Wall Mini-Split



DX Coil AHU



Steam Coil AHU



Chilled Water AHU



## VPACPB-Series Nomenclature Guide

**AH- XPC- H- DX- R22- 2.0- 800- 4- ICD2- \*\*\*\***

### AH-XPC Series

AH= Air Handler  
XPC= SAT Engineering Use

### Design Type

H= Ceiling Mount Horizontal Flow  
V= Floor or Closet Type Vertical Flow  
HW= High Wall Mini Split (Ductless Design)  
HC= Ceiling Mount (Ductless Design)

### Coil Type

DX = Direct Expansion Refrigerant Type Coil  
CW = Chill Water Coil  
HW = Hot Water Coil  
ST = Steam Coil

### Refrigerant Type

R-22	Coils)
R-134a	R-407 C
N= Not in Use (Chill	R-410
Water, Steam, Hot	
Water Types of	

### Cooling Capacity (Tons)

2.0 = 24,000 BTU/HR = 2 Tons of Cooling

### Unit Options

Listed Below

### NEC Classification

Explosion Proof Classification

### Power Supply

1 = 110-120 Volt/ 1 Phase/ 60 Hz  
2 = 208-230 Volt/ 1 Phase/ 60 Hz  
2(50) = 220-240 Volt/ 1 Phase/ 50 Hz  
3 = 208-230 Volt/ 3 Phase/ 60 Hz  
4 = 230-460 Volt/ 3 Phase/ 60 Hz

### Air Flow

400 CFM/ Ton under ARI Conditions

### Unit Options

- ADC = Adsil Coated Coils
- B = Meet Group B
- CC = Copper/Copper Coils Installed
- CF = Custom Filtration Module
- CRT = Export Crate Included
- DSI = Disconnect Switch Installed
- DW = Double Wall-Evaporator Section
- EPX = 646 Micro Epoxy Coated Housing

- HCC = Heresite Coated Coils
- MG1 = Marine Grade Coating Option 1
- MG2 = Marine Grade Coating Option 2
- MOD = Custom Modification
- RT = Remote Thermostat
- SH6 = 316 Stainless Steel Housing
- WC = Water Cool Condenser Coil
- XPR = Explosion Proof Receptacle Installed





## Safe Air Technology Office Locations

**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.**



**Safe Air Technology**  
U.S.A.



**Safe Air Technology**  
U.A.E.



**Safe Air Technology**  
Singapore

