

# Heating and Ventilating Air - Conditioning Unit HVAC



**PESO**



## FEATURES

- » High efficiency filters
- » Stainless steel drain pan
- » Low noise and vibrations
- » Ease of maintenance
- » Effective fresh and return air mixing
- » HVAC/VAC configurations
- » Insulated panels as per Requirement
- » Redundant blower and Unit option



## ADVANTAGES

- » Compressors carry their compliance certificate and are fully complying with IEC standards.
- » Refrigerants are CFC-free and fully comply with Montreal protocol requirements.
- » The equipment design is very user-friendly with full and easy service access to all components for regular servicing.
- » The unit's unique design and component reliability ensures minimum servicing except for routine filter-condenser cleaning or general maintenance.
- » This can work within the harsh environment and high ambient of 55°C temps.
- » Unit design allows high moisture removal capacity to provide both sensible and latent heat reductions for temperature and humidity control.
- » Flameproof & weatherproof Ex d electrical enclosure.
- » Flame-proof electrical motors.
- » Adjustable dampers for air balancing and control.
- » Complete engineered HVAC solutions to suit your specific application including, air conditioning, heating, pressurization, barometric dampers, duct work, stack, grills, and filters with full integration/adjustment control at the site.
- » Large element area ensures effective cleaning with less pressure drop
- » Proper alignment & accurate reseating after servicing.
- » SS material option ensures high reliability of the component

## DESCRIPTION

Is a mandatory requirement by the statutory body to use HVAC along with Shelters to make the Shelters installable for a given area classification.

The basic requirement for any HVAC is to perform according to a given parameter with trouble-free operations.

These are mainly remote locations or very challenging locations or experiencing extreme weather conditions.

AXIS brings you explosion-proof equipment to meet diverse and exacting demands which runs trouble-free 24 X 7 in the Oil & Gas Refinery and Petrochemical industry for conditioning of air.

**ORDERING INFORMATION**

<b>XVAC</b>											
<b>Area classification</b>											
0			Safe Area (Non hazardous )								
1			Hazardous Area ( Zone 1 & 2 IIB + H2 )								
2			Hazardous Area ( Zone 1 & 2 IIC )								
<b>Power Supply</b>											
0			3-Ø+ N, 415 VAC, 50 Hz, Control : 115 VAC, 50 Hz								
1			3-Ø+ N, 415 VAC, 50 Hz, Control : 230 VAC, 50 Hz								
2			Others (Note 2)								
<b>Housing material</b>											
0			MS CRCA								
1			SS 304								
2			SS 316								
3			SS 316L								
<b>Capacity</b>											
0			3 Ton								
1			5 Ton								
2			7.5 Ton								
3			10 Ton								
4			12.25 Ton								
5			Others (Note 2)								
<b>No. of Blowers</b>											
0			1 working								
1			1 Working + 1 stand by ( only for 3 Ton )								
2			2 Working + 1 stand by ( only for 5 Ton )								
<b>Alarm option</b>											
0			Standard Group fault Alarm								
1			Additional Alarm								
<b>Temp./ RH Control</b>											
0			With Thermostat & without hygrostat								
1			With Thermostat & hygrostat								
<b>Refrigeration tube coating</b>											
0			Without Coating								
1			With Anti corrosive coating								
<b>Certification</b>											
0			CCOE Certificate (Note 1)								
1			ATEX Unit Certified								
2			IECEX Certificate								
3			ATEX & IECEX Certificate								
4			ATEX ( Individual comp. certified ) (Note 2)								

**TECHNICAL SPECIFICATIONS :**

**Area Class :**

Suitable for zone 1, IIB+H2, T3

**Casings:**

Unit casing fabricated from MSCRCA sheet steel (optional: SS 304 / SS316 / SS 316L grade Stainless Steel) with more than 70-80 micron paint thickness. Compressor and fan motors are epoxy painted.

**Condenser / Evaporator Coils :**

Fabricated from copper tubing with anti-corrosive blue aluminum fin and end plates, fully compliant for long service life in corrosive environments.

**Condenser Air Entry / Exit :**

These are formed on the casings with removable intake and side panels in the form of a Square slot punched in the metal giving a neat finish with adequate free airflow for condenser air requirements.

**Compressor :**

Fully hermetically sealed reciprocating type compressor operating on refrigerant R134a (or specified if others). The compressor with the flameproof terminal box is certified up to zone 1, IIC area.

**Service access :**

Service access is provided on both side of the unit by means of removable covers to give full access to all major components.

**Insulation :**

Complete Unit is designed for excellent thermal and acoustic performance using high density insulation with good efficiency and low noise level.

**Evaporator (Supply air) fans :**

Designed for continuous operation. Galvanized Fan and housing, fully lined with GI, Copper, Aluminum as per requirement. Fans give adequate air flow and static pressure. Capacity to cater for required air changes per hour and to maintain room pressure. (Refer to individual unit specifications) Stainless steel fan casing option.

**Condenser Fans :**

GI housing & Aluminum impeller fan assembly with alloy hub.

**Motors – Fans :**

Certified flameproof zone 1 operation.

**Control :**

Control module for off / Vent / Air Condition and thermostat for remote or unit mounting.

**Power Supply :**

3 phase+Neutral, 415VAC, 50 Hz.

**Options :**

Dual evaporator fans, alternate fan, power supply, casing material and color, alarm, lights and contacts, remote shut down relay, outside air intake.

Note 1 : Individual components certified.

Note 2 : Customised Design