



## Standard Scope of Supply

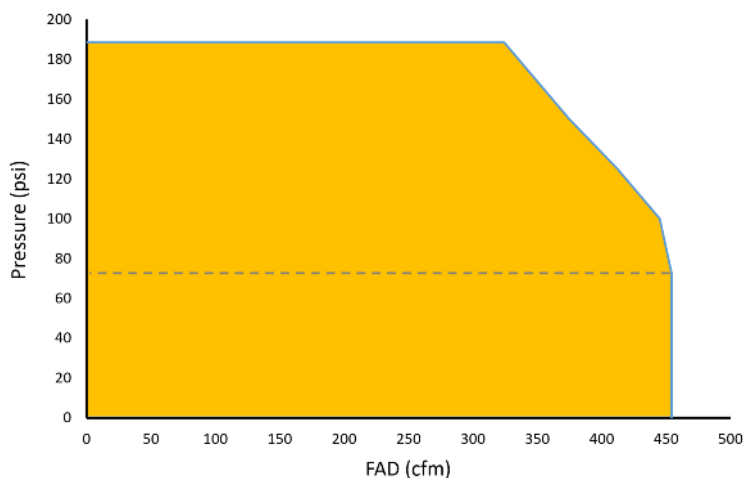
The Atlas Copco **E-Air H450 VSD** is a single-stage, oil-injected, rotary screw type air compressor, powered by an Atlas Copco electric motor with Class H insulation. The E-Air VSD compressor is a game changer when it comes to performances, energy-efficiency and versatility.

The unit hosts the new generation C106 Screw element in its air end combined with an Atlas Copco integrated permanent magnet motor, cooling circuit, air/oil separation and control systems.

Special attention has been given to the overall product quality, user friendliness, ease of serviceability, and economical operation to ensure best in class cost of ownership.

The Unique feature of this new range is the PACE functionality coupled with the intuitive XC2003 controller. This pioneering technology enables multiple pressure and flow settings, ensuring you match air flow and pressure to your application needs.

## Pressures and flow



## Main data

E-Air H450 VSD		
<b>Model</b>		
Minimum effective receiver pressure	bar(g)	5
	psi(g)	72.5
Maximum effective receiver pressure (Unloaded)	bar(g)	13
	psi(g)	188.5
<b>Free air delivery</b>		
FAD at pressure setting of 188.5 psi	cfm	324.2
FAD at pressure setting of 150 psi	cfm	374.6
FAD at pressure setting of 125 psi	cfm	412.1
FAD at pressure setting of 100 psi	cfm	445.0
FAD at pressure setting of 72.5 psi	cfm	454.3
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	68.6
Compressed air temperature at outlet valve with aftercooler	°C (°F)	Ambient +10°C (+50°F)
Max. ambient temperature at sea level	°C (°F)	50 (122)
Max. ambient temperature at sea level with aftercooler	°C (°F)	45 (113)
Min. starting temperature with cold weather equipment	°C (°F)	-25 (-13)
Min. starting temperature without cold weather equipment	°C (°F)	<-25 (<-13)
Max. oil content of compressed air	mg/m <sup>3</sup>	10
Number of compression stages		1
Capacity of compressor oil system	US Gal (l)	6.6 (25)
Net capacity of air receiver	US Gal (l)	11.1 (42)
Air volume at inlet grating (approx.)	ft <sup>3</sup> /s	120
<b>Motor</b>		
Installed motor power	hp (kW)	100 (75)
Voltage	V	380-460 +/- 10%
Current	A	150
Fan(s) electrical power input	hp (kW)	2.7 (2)
Frequency	Hz	50-60
Number of phases		3
Service Factor		1.15

## Features

## Benefits

- Highest efficiency with the rugged Permanent Magnet Motor in combination with C106 screw element.
- Unmatched Compact, sound attenuated, corrosion resistant enclosure
- Extended Pressure range with PACE
- Designed with environmental protection in mind
- Hardhat + Triple layer painting
- Lowest Energy consumption  
Smallest footprint.
- Advanced XC2003 controller with PACE
- Electric Quick couplings (Camlocks)
- Reliable performance in the roughest conditions (IP66)
- Compact and maneuverable, saving valuable space on your job site, and during transportation
- Highly versatile  
Lower capital Investment
- The unit comes with a Spillage Free frame as Standard with 110% fluid containment and a class H electric motor
- High resale value
- Low cost of ownership and service.  
(1 Service in 2 years or 2000 hours)
- IP65: fully dust and water proof. Tested for resistance to vibrations/shocks
- No need for phase sequence alarms  
Inbuilt Amperage limit in Controller

## Dimensions

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See dimension drawing

## Principle Data

### Compressor Element

The quality of a compressor can be measured through the reliability, efficiency and durability of the compressor element used. Through decades of expertise in the design of compressor elements, the result is the production of most efficient and reliable compressors in the market. When the screw element is efficient durability excels, maintenance intervals decrease and energy consumption goes down.

The **E-Air H450 VSD** compressor utilizes an Atlas C106 element and is driven by an electric motor. Inlet air is filtered through a heavy-duty air filter.

### Air/Oil Separator

Air and oil separation is achieved through a centrifugal oil separator combined with a filter element. Multiple Certification levels of the vessel are available.

Designed for a higher maximum working pressure, the separator is equipped with a high pressure sealed and certified safety relief valve, automatic blow-down valve

### Cooling System

The cooling system consists of integrated side-by-side aluminum oil cooler with axial fan to ensure optimum cooling. The fan is protected by a guard for operator safety. There is an access port for easy cleaning of coolers

The cooling system is suitably designed for continuous operation in ambient conditions up to 50°C (122°F) and 45°C (113°F) with After Cooler, with canopy closed.

### Compressor Regulating System / PACE with ECO mode

Introduction of intuitive PACE functionality allows the compressor to operate at any pressure setting between 72.5 and 188.5 psi. The compressor can have multiple pressure presets and we can use the controller to toggle between the pressure presets. Pressure can be adjusted in increments of 2.0 psi.

Economic power consumption is assured by the fully automatic 100% step-less speed regulator that adapts motor speed to air demand.

### Aftercooler + Water separator + UD Filter

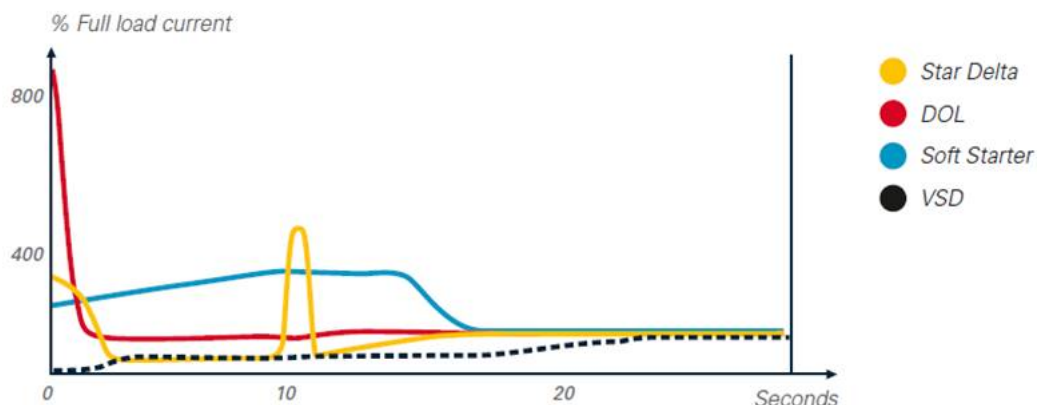
Aftercooler + Water separator + UD Filter are standard for the E-Air H450 VSD to produce filtered air that meets ISO 8573-1: 1.7.2 quality air.

## Motor

### Atlas Copco

Our Atlas Copco in-house designed and patented integrated permanent magnet motor provides ample power to operate the compressor continuously at full-load without peak load at start-up.

This water-cooled and ruggedized motor with sealed windings will protect the machine.



## Electrical System

### Instrumentation

The instrument control panel is located on the rear of the compressor canopy with easy access.

Standard instrument package includes an operating pressure gauge, and fully diagnostic ECU controller with large display. The intuitive Atlas Copco XC2003 controller is easy to operate with all functions conveniently at your fingertips. The controller also manages the motor operating system, and a number of safety warnings and shut downs on various parameters (listed below).

#### XC2003 Controller Functionality:

- Displayed while running
  - Hours
  - Outlet pressure
- Compressor measurements displayed
  - Running hours
  - Clock
  - Regulating pressure
  - Emergency stop count
  - Air discharge pressure
  - Minor and major service counters in hours and days
- Warnings and Shutdowns
  - Power phase detection
  - Main Motor Overload
  - Fan Motor Overload
  - Vessel pressure
  - Pressure Air Discharge
  - Element Temperature
- Operational Buttons
  - Start and stop of the unit
  - View measurements, settings and alarms
  - Multi position cursor to navigate menus
- Alarms
  - View current & historical alarms present
  - History of last 20 alarms and events with time and date stamps
- Settings
  - Reset service timers
  - Language settings
- ECO-mode
- Remote start



## Bodywork

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The compressor's frame comes standard with ASTM A653 Zincor steel plate work with powder coat paint finish providing excellent corrosion protection. The canopy is a PE hardhat with sound attenuated to meet the most current legal noise requirements.

## Undercarriage

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The **E-Air H450 VSD** compressor is available with the following undercarriage:

- Single axle trailer setup with:
  - Undercarriage with DoT road homologation and Fixed towbar
  - 205R14C Wheels for trailer use
  - Heavy Duty torsion axle
  - Jockey wheel
  - Single point lifting structure
  - Pintle eye

## Supplied Documentation

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The unit is delivered with documentation regarding:

- Hard copies of the Atlas Copco Operators Safety and Instruction Manual, Atlas Copco Parts Book, as well as electronic copies available on request.
- Warranty Registration card for motor and Atlas Copco Compressor (Units must be registered upon receipt).
- Certificate for air/oil separator vessel and safety valve approval.

## Warranty Coverage

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Please refer to product presentation for warranty info

Extended Warranty Programs are available; please contact your local sales representative for more info.