# Product Reference E-Air H250 VSD APP

Portable Compressor



## **Standard Scope of Supply**

The Atlas Copco **E-Air H250 VSD** is a single-stage, oil-injected, rotary screw type air compressor, powered by an Atlas Copco electric motor with Class H insulation powering up to 9000rpm.

The unit hosts the new generation C90 Screw element in its air end combined with an Atlas Copco integrated permanent magnet motor, cooling circuit, air/oil separation and control systems, an undercarriage with fixed towbar, brakes and pintle eye is available as standard.

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 H250 VSD		
Model		63A	32A	16A
Minimum effective receiver pressure	bar(g)	5	5	5
	psi(g)	72,5	72,5	72,5
Maximum effective receiver pressure (Unloaded)	bar(g)	12	12	10,5
	psi(g)	174	174	152
Free air delivery				
FAD at pressure setting of 174 psi	cfm	178	87	NA
FAD at pressure setting of 150 psi	cfm	194	97	42
FAD at pressure setting of 125 psi	cfm	209	107	48
FAD at pressure setting of 100 psi	cfm	224	117	54
FAD at pressure setting of 87 psi	cfm	233	123	57
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	65	63	61
Compressed air temperature at outlet valve with aftercooler	°C (°F)	54 (129)	54 (129)	54 (129)
Max. ambient temperature at sea level	°C (°F)	50 (122)	50 (122)	50 (122)
Max. ambient temperature at sea level with aftercooler	°C (°F)	45 (113)	45 (113)	45 (113)
Min. starting temperature with cold weather equipment	°C (°F)	-20 (-4)	-20 (-4)	-20 (-4)
Min. starting temperature without cold weather equipment	°C (°F)	-10 (-14)	-10 (-14)	-10 (-14)
Max. oil content of compressed air	mg/m³	8	8	8
Number of compression stages		1	1	1
Capacity of compressor oil system	US Gal (I)	4.4 (17)	4.4 (17)	4.4 (17)
Net capacity of air receiver	US Gal (I)	9.25 (35)	9.25 (35)	9.25 (35)
Air volume at inlet grating (approx.)	ft³/s	46.97	46.97	46.97
Motor		Atlas Copco	Atlas Copco	Atlas Copco
Max. power	hp (kW)	50 (37)	50 (37)	50 (37)
Voltage	Π <u>ρ</u> (κνν) V	380-460 (+/-10%)	380-460 (+/-10%)	380-460 (+/-10%
Current	A	63	<u> </u>	63
Fan(s) electrical power input	hp (kW)	1.25 (0.92)	1.25 (0.92)	1.25 (0.92)
Frequency	Hz	60	60	60
Number of phases	112	3	3	3
Service Factor		1.25	1.25	1.25

## E-Air H250 VSD APP - Product Reference

Feat	tures	Benefits
	Highest efficiency with the rugged Permanent Magnet Motor in combination with the C80 screw element.	Reliable performance in the roughest conditions (IP66)
	Unmatched Compact, sound attenuated, corrosion resistant enclosure	<ul> <li>Compact and maneuverable, saving valuable space on your job site, ar during transportation</li> </ul>
•	Extended Pressure range with PACE	Highly versatile     Lower capital Investment
•	Designed with environmental protection in mind	• The unit comes with a Spillage Free frame as Standard with 110% fluid containment and a class H electric motor
•	Hardhat + Triple layer painting	High resale value
	Lowest Energy consumption Smallest footprint.	<ul> <li>Low cost of ownership and service.</li> <li>(1 Service in 2 years or 2000 hours)</li> </ul>
•	Advanced XC2003 controller with PACE	IP65: fully dust and water proof. Tested for resistance to vibrations/shock
•	Smart Socket	No need for phase sequence alarms     Inbuilt Amperage limit in Controller

## **Dimensions**

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 fuel consumption goes down.

The **E-Air H250 VSD** compressor utilizes an Atlas Copco C90 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. Vessel is ASME/CRN approved and stamped accordingly.

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  $50^{\circ}$ C ( $122^{\circ}$ F) and  $45^{\circ}$ C ( $113^{\circ}$ F) with After Cooler, with canopy doors closed.

## **Compressor Regulating System / PACE**

Introduction of intuitive PACE functionality allows the compressor to operate at any pressure setting between 72.5 and 174 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 H250 VSD to produce filtered air that meets ISO 8573-1: 1.7.2 quality air.

#### Motor

## Atlas Copco

Out 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.

Cold start options are available for up to -25°C (-13°F).





## **Electrical System**

The E-Air H250 VSD is equipped with a 12 Volt negative ground electrical starting 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
  - Battery voltage \_
  - 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**

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 sound attenuated to meet the most current legal noise requirements.

## Undercarriage

The **E-Air H250 VSD** compressor is available with an undercarriage alternative, providing utmost flexibility in installation or towing requirements.

- Single axle trailer setup with:
  - Undercarriage with DoT road homologation and foldable towbar
  - o 155R13 Wheels for trailer use
  - Jack stand
  - Single point lifting structure
  - Pintle eye

## **Supplied Documentation**

The unit is delivered with documentation regarding:

- Hard copies of the Atlas Copco Operators Safety and Instruction Manual, Atlas Copco Parts Book, Motor Manual and 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

Please refer to product presentation for warranty info

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

