# E-Air V1100 VSD APP



# **Standard Scope of Supply**

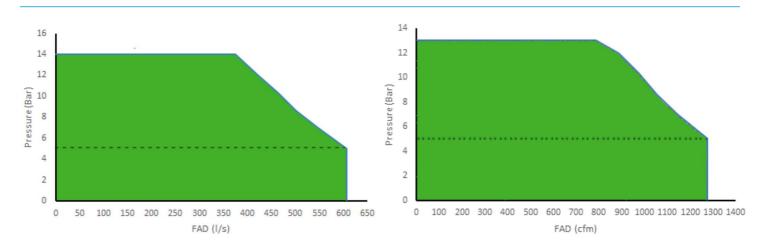
The Atlas Copco E-Air V1100 VSD is a single-stage, oil-injected, rotary screw type air compressor, powered by a Danfoss, electric motor with Class F insulation. The E-Air VSD compressor is a game changer when it comes to performance, energy-efficiency and versatility.

The unit hosts the new generation Screw element in its air end combined with a Danfoss 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 XC4004 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

Model		E-Air V1100 VSD	
Minimum effective receiver pressure	bar(g)	5	
	psi(g)	72.5	
Maximum effective receiver pressure (Unloaded)	bar(g)	14	
	psi(g)	203.1	
Free air delivery	1 (0)	Motor speed (rpm)	FAD (I/s)
- FAD at pressure setting of 14 bar(g)		2250	375
- FAD at pressure setting of 12 bar(g)		2436	422
- FAD at pressure setting of 10 bar(g)		2674	465
- FAD at pressure setting of 8.6 bar(g)		2863	501
- FAD at pressure setting of 7 bar(g)		3150	545
- FAD at pressure setting of 5 bar(g)		3511	607
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	100	
Compressed air temperature at outlet valve with aftercooler	°C (°F)	A+15°C	
Max. ambient temperature at sea level	°C (°F)	50	
Max. ambient temperature at sea level with aftercooler	°C (°F)	45	
Min. starting temperature with cold weather equipment	°C (°F)	-25	
Min. starting temperature without cold weather equipment	°C (°F)	<-25	
Max. oil content of compressed air	mg/m³	2.7	
Number of compression stages		1	
Capacity of compressor oil system	1	72	
Net capacity of air receiver	I	180	
Air volume at inlet grating (approx.)	m³/s	11.5	
Motor			
Installed motor power	kW	208	
Voltage	V	380-460 +/- 10%	
Current	А	350	
Fan(s) electrical power input	kW	7.5	
Frequency	Hz	50-60	
Number of phases		3	

# **Features**

- Highest efficiency with the rugged Permanent Magnet Motor in combination with screw element
- Unmatched Compact, sound attenuated, corrosion resistant enclosure
- Extended Pressure range
- Designed with environmental protection in mind
- Triple layer painting
- Lowest Energy consumption Smallest footprint.
- Advanced XC4004 controller
- Electric Quick couplings (Powerlocks/Camlocks)

# **Benefits**

- 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, this makes the compressor suitable for use in all areas of the EU
- High resale value
- Low cost of ownership and service. (1 Service in 2 years or 2000 hours)
- IP65: fully dust and waterproof. Tested for resistance to vibrations/shocks
- 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 V1100 VSD** compressors utilize an Atlas Copco element which 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 coolers with an 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 Aftercooler, with canopy doors closed.

#### Compressor Regulating System / PACE with ECO mode

Introduction of intuitive PACE functionality allows the compressor to operate at any pressure setting between 5 and 12 bar. 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 0.1 bar.

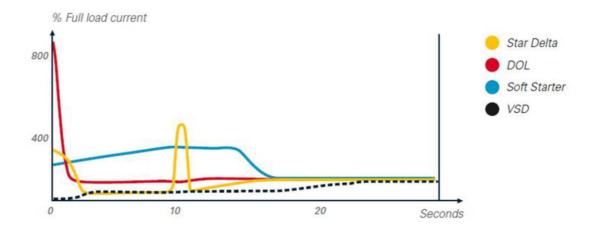
Economic power consumption is assured by the fully automatic 100% step-less speed regulator that adapts motor speed to air demand.

# 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 XC4004 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 shutdowns on various parameters (listed below).





- Easy to use interface
  - 7-inch anti-glare LED screen.
  - Simultaneous view of pressure and flow increase control on the output flow required by your application.
  - Personalized interaction through metrics and language settings.
- Powerful insights increase uptime
  - Easy access to trends of 15 parameters.
  - Increase uptime through preventative maintenance.
- Save time through remote controlling
  - Mirror application: control feed air compressor through second controller at point of use.
  - All machine parameters remotely adjustable: ECO mode, Dynamic Flow Boost, multi pressure / flow settings, emergency stop.
  - Hard wired or RRC (radio remote connection)

#### **Bodywork**

The compressor's frame and canopy come standard with ASTM A653 Zincor steel plate work with powder coat paint finish providing excellent corrosion protection.

# **Supplied Documentation**

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, CE (Upon request only).

#### **Warranty Coverage**

Please refer to product presentation for warranty info

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

