

Product Reference X-Air⁺ 900-25, 1050-14, 1100-25, 1250-10 Cd S3A WUX

Portable Compressor



Standard Scope of Supply

The Atlas Copco **X-Air⁺ 900-25**, **X-Air⁺ 1050-14**, **X-Air⁺ 1100-25** and **X-Air⁺ 1250-10** are silenced, one and two-stage, oil-injected screw compressors, powered by liquid-cooled, six-cylinder Caterpillar diesel engine.

The unit consist of high efficient compressor elements, diesel engine, cooling, air/oil separation and control systems - all enclosed within a sound dampened power coated steel enclosure.

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.

Available Models

X-Air ⁺ 1250-10	Single Stage - 1235-1136 cfm@72-150 psi - Caterpillar Diesel Engine
X-Air ⁺ 1050-14	Single Stage - 1038-943 cfm@72-203 psi - Caterpillar Diesel Engine
X-Air ⁺ 900-25	Two Stage - 886-759 cfm@232-362 psi - Caterpillar Diesel Engine
X-Air ⁺ 1100-25	Two Stage - 1095-1008 cfm@232-362 psi - Caterpillar Diesel Engine

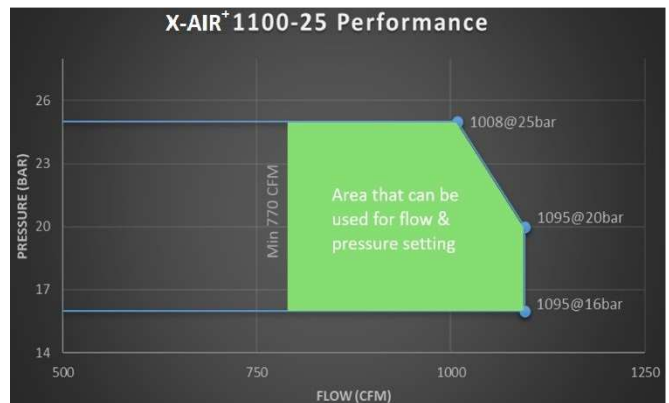
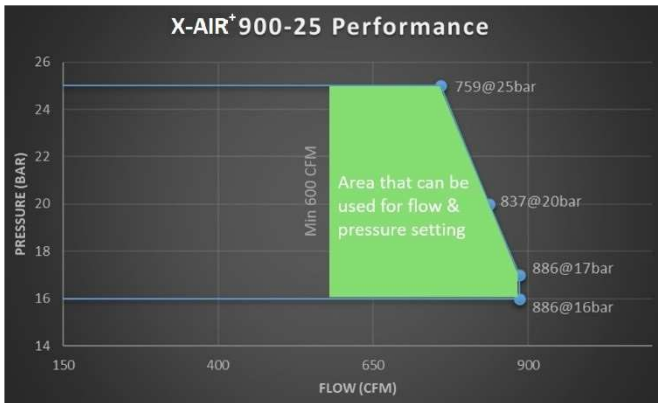
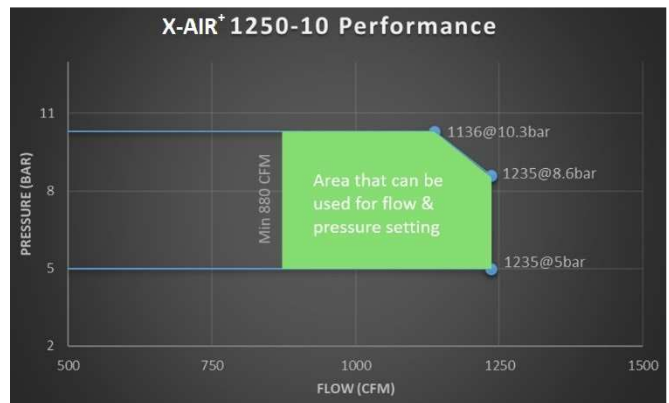
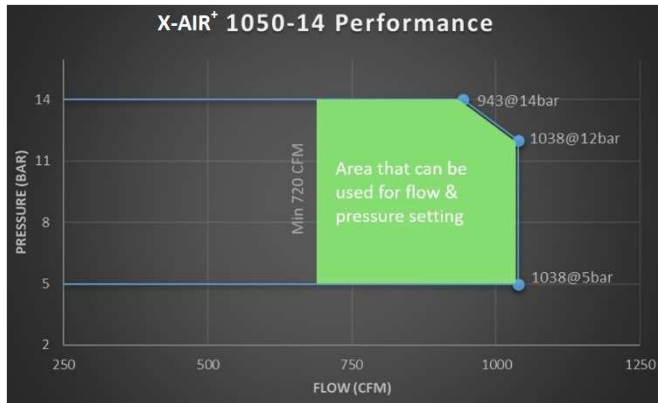
Features

- AirXpert 2.0
- OilXpert
- Designed with environmental protection in mind
- New improved vessel design
- ECO mode
- Fleetlink standard

Benefits

- Boosts your compressor's efficiency while saving on fuel
- Increases the lifetime of the DrillAir's critical components
- Spillage free frame and condensate flash are available as options
- Provides much easier access to the oil separator, decreasing service time considerably
- Unmatched fuel savings with automated load / no-load switching and star / stop based on air usage
- Our intelligent Fleetlink Smartbox telematics solution provides full monitoring of the compressor from anywhere in the world

Pressures and Flow



Main data

Model		X-Air+ 1250-10	X-Air+ 1050-14	DrillAir X-Air+ 900-25	DrillAir X-Air+ 1100-25					
Normal effective working pressure	bar	5 - 10.3	5 - 14	16 - 25	16 - 25					
Absolute inlet pressure	bar	1	1	1	1					
Relative air humidity	%	0	0	0	0					
Air inlet temperature	°C	20	20	20	20					
Minimum effective receiver pressure	bar	4	4	15	15					
Maximum effective receiver pressure (Unloaded)	bar	10.3	14	25	25					
Actual free air delivery	l/s	583 - 536	490 - 445	418 - 358	517 - 476					
Fuel consumption		8.6 bar	10.3 bar	12 bar	14 bar	17 bar	20 bar	25 bar	20 bar	25 bar
at 100% FAD (full load)	kg/h	46.60	45.80	45.93	44.62	46.08	44.82	44.30	57.10	57.48
at 75% FAD	kg/h	37.14	34.83	37.70	39.58	36.00	36.56	36.50	45.72	46.45
at 50% FAD	kg/h	28.77	30.39	30.36	32.80	26.82	28.36	31.18	33.96	36.22
at 25% FAD	kg/h	23.49	25.59	26.80	28.52	20.30	21.96	25.18	25.20	28.66
at unload	kg/h	19.74	22.82	24.23	27.24	17.42	19.62	24.00	18.74	23.37
at No load	kg/h	8.80	8.80	7.55	7.55	10.28	10.28	10.28	9.09	9.21
Specific fuel consumption at 100% FAD	g/m³	22.20	23.74	26.04	27.85	30.62	31.52	34.37	30.70	33.54
Maximum typical oil content of compressed air	mg/m³	5		5		5			5	
Max. sound power level (Lw @ 2000/14/EC)	dB(A)	106		106		107			107	
Max. sound pressure level(Lp -7m @ ISO 2151)	dB(A)	76.3		76.3		77.3			77.3	
Compressed air temperature at outlet valve	°C	100		100		100			100	
Max. ambient temperature at sea level without aftercooler	°C	50		50		50			50	
Min. starting temperature with cold weather equipment	°C	-25		-25		-25			-25	
Min. starting temperature without cold weather eqp	°C	-10		-10		-10			-10	
Number of compression stages		1		1		2			2	

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		X-Air ⁺ 1250-10	X-Air ⁺ 1050-14	DrillAir X-Air ⁺ 900-25	DrillAir X-Air ⁺ 1100-25
Engine		Caterpillar	Caterpillar	Caterpillar	Caterpillar
Type		C9.3B LRC	C9.3B LRC	C9.3B LRC	C9.3B LRC
Emission stage		Stage IIIA	Stage IIIA	Stage IIIA	Stage IIIA
Coolant		Liquid	Liquid	Liquid	Liquid
Number of cylinders		6	6	6	6
Bore	mm	115	115	115	115
Stroke	mm	149	149	149	149
Swept volume	l	9.3	9.3	9.3	9.3
Engine power at normal shaft speed @ SAE J 1995	kW	250	250	250	280
Full Load	rpm	2200	2200	2200	2200
Unload	rpm	1300	1300	1300	1300
Capacity of oil sump	l	30	30	30	30
Capacity of cooling system	l	64	64	64	68
Capacity of compressor oil system	l	75	75	75	75
Net capacity of air receiver	l	164	164	158	158
Air volume at inlet grating (approx.)	m ³ /s	13.1	13.1	13.1	14.6
Capacity of standard fuel tanks	l	796	796	796	796
Dimensions: support mounted (L x W x H)	mm	4063 x 2140 x 2305	4063 x 2140 x 2305	4063 x 2140 x 2305	4063 x 2140 x 2305
Weight - Wet	kg	5200	5200	5200	5500
Dimensions: undercarriage (L x W x H)	mm	6125 x 2140 x 2480	6125 x 2140 x 2480	6125 x 2140 x 2480	6125 x 2140 x 2480
Weight - Wet	kg	5700	5700	5700	6000

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 **X-Air⁺ 1250-10** and **X-Air⁺ 1050-14** compressors utilize an Atlas Copco C190 element and
The **X-Air⁺ 900-25** and **X-Air⁺ 1100-25** compressors utilize combination of Atlas Copco C190 and J34 element. They are driven from the Caterpillar diesel engine. 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.

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

Compressor Regulating System

The compressor is provided with an inlet valve assembly and a blow off system which are controlled via instructions sent from the DrillAirXpert controller. The user interface to the DrillAirXpert controller is the main Compressor Control Module (CCM).

The butterfly valve in the inlet valve assembly allows an open, closed or angular setpoint. The system allows for pre-set point for pressure or flow. These are easily set in the CCM.

A toggle switch is part of the system to allow for preset of two working points of pressure / flow.
Fuel savings are integrated into the DrillAirXpert system which controls the engine speed in relation to air demand.
This variable regulating system has a 'Dynamic Flowboost' function that gives extra air at lower pressures.

Automax pressure functionality for ease of putting units in parallel.

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

Cooling System

The cooling system consists of integrated side-by-side aluminum oil cooler 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.

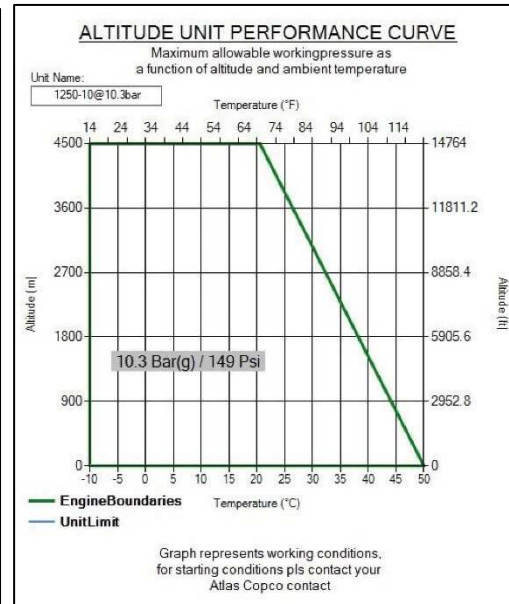
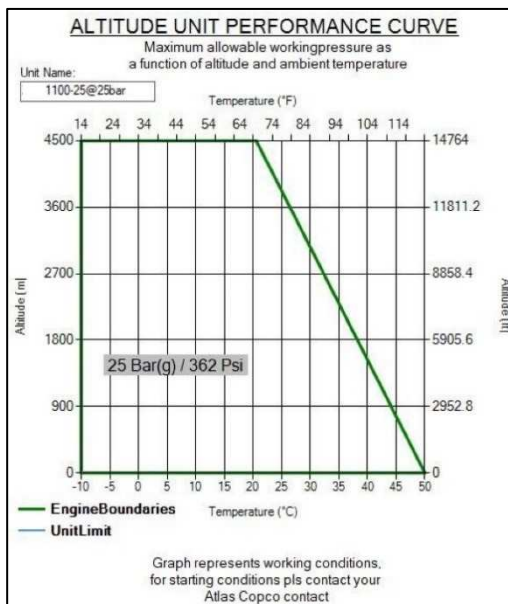
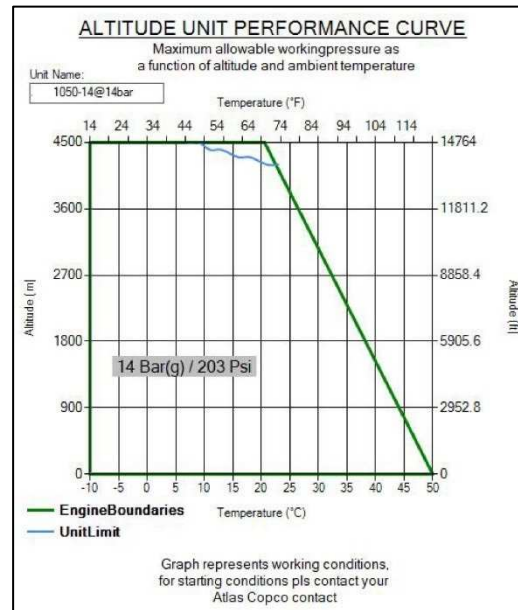
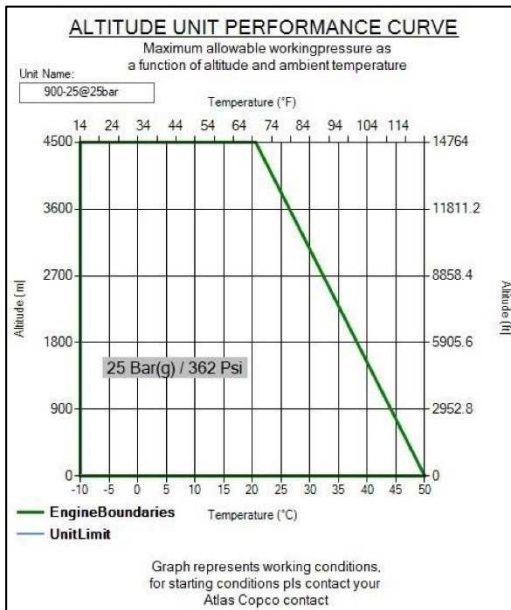
The cooling system is suitably designed for continuous operation in ambient conditions up to 50°C (122°F) and 45°C (113°F) with Aftercooler, with canopy doors closed.

Engine

Caterpillar

The compressor is driven by a liquid-cooled, six-cylinder Caterpillar C9.3B diesel engine. The engine's power is transmitted to the compressor element through a heavy-duty coupling.

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



Electrical System

The **X-Air+ 900-25, X-Air+ 1050-14, X-Air+ 1100-25 and X-Air+ 1250-10** are equipped with a 24 Volt negative ground electrical starting system.

Instrumentation

The **Xc4004** control panel is located on the front of the compressor canopy.

The intuitive Atlas Copco XC4004 controller is easy to operate with all functions conveniently at your fingertips. The controller also manages the engine ECU operating system, and a number of safety warnings and shutdowns on various parameters (listed below).



XC4004 Controller Functionality:

- Main Screen
 - Vessel Pressure
 - Fuel level
 - Running Hours
 - RPM
 - Air Flow CFM
- Measurements
 - Fuel Consumption
 - Engine Coolant Temperature
 - Compressor Element Temperature
 - Vessel Pressure
 - Engine Load
 - Engine Oil Pressure
 - DPF Soot Load
 - Fuel Temperature
 - Battery Voltage
 - Regulatory Pressure
 - Loaded/Unloaded Hours
 - Successful/Unsuccessful Starts
 - Service Timers (2)
- Service
 - Data trending
 - Project Backup
- General Settings
 - DPF Stationary Regeneration
 - Engine Diagnostics
 - Auto Start/Load/Stop
 - Languages
 - Units of Measure
- Alarm
 - Active Alarms
 - Event Log History
 - Alarm Log History
- Operational Controls
 - Preset flow or operating pressure

Bodywork

The compressor is delivered as standard with a zinc coated steel canopy with powder coat paint finish providing excellent corrosion protection. Wide doors provide complete service access to all components.

Manufacturing & Environmental Standards

The **X-Air+ 900-25, X-Air+ 1050-14, X-Air+ 1100-25 and X-Air+ 1250-10** are manufactured following stringent ISO 9001 regulations, and by a fully implemented Environmental Management System fulfilling ISO 14001 requirements. Attention has been given to ensure minimum negative impact to the environment.

Supplied Documentation

The unit is delivered with the following documents and certificates:

- Spare parts list for compressor.
- Instruction manual for both compressor and engine.
- Machine test certificate.
- Vessel certificate.

Warranty Coverage

- Please refer to product presentation for warranty info.
- Extended Warranty Programs are available; please contact your local sales representative for more info.

* **Note:** Due to continuous improvements in the products, the technical specifications are subject to change without prior notice.