

XA(M,T,H,V)S 650-850 CD7

Portable compressor



Standard Scope of Supply

The Atlas Copco **XA(M,T,H,V)S 650-850 CD7** is a single-stage oil-injected asymmetrical rotary screw type air compressor, powered by a liquid-cooled, six cylinder turbocharged inter-cooled diesel engine.

The unit consists of an element, diesel engine, cooling, air/oil separation and control systems - all enclosed within a sound dampened strong steel canopy.

A broad range of undercarriage types and standard factory installed options are available.

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

XAMS 850 CD7	single stage -125 psi - Caterpillar engine
XATS 800 CD7	single stage -149 psi - Caterpillar engine
XAHS 710 CD7	single stage -174 psi - Caterpillar engine
XAVS 650 CD7	single stage -203 psi - Caterpillar engine

Features

- Low noise and exhaust emissions.
- Practical design with easy service and maintenance access.
- Few moving parts.
- Engine speed adapts to air demand

Benefits

- Our compressors satisfy international standards and can operate in the vicinity of hospitals, schools, and residential areas, even at night.
- Short service downtime.
- Reliability second to none and long working life.
- Economical power and fuel consumption.
- Stable air flow.

Technical Data

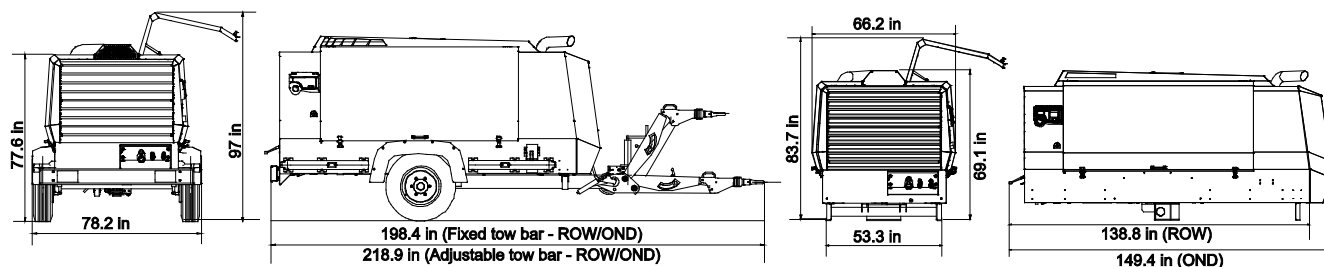
		XAMS 850	XATS 800	XAHS 710	XAVS 650
		CD7	CD7	CD7	CD7
Compressor - EC					
Normal effective working pressure	psi	125	149	174	203
Actual free air delivery ¹	cfm	854	788	727	665
Max. sound power level (Lw) ²	dB(A)	100	100	100	100
Max. sound pressure level at 7 m (Lp)	dB(A)	72	72	72	72
Oil Capacity	us gallon	12.68	12.68	12.68	12.68
Max. ambient temperature	°F	113	113	113	113
Air Compressor outlets		1 x 2" / 2 x 3/4"	1 x 2" / 2 x 3/4"	1 x 2" / 2 x 3/4"	1 x 2" / 2 x 3/4"
Maximum altitude	ft	13100	13100	13100	13100
Minimum starting temperature	°F	14	14	14	14
Engine					
Caterpillar		C7	C7	C7	C7
Number of cylinders		6	6	6	6
Output at rated speed	BHP	249	249	249	249
Swept volume	cu in	439.34	439.34	439.34	439.34
Engine speed (nominal)	rpm	2000	2000	2000	2000
Engine speed (unloaded)	rpm	1300	1300	1300	1300
Capacity oil system	us gallon	6.34	6.34	6.34	6.34
Capacity of fuel tank	us gallon	66	66	66	66
Fuel consumption at 0% load	lb/h	37	38.8	40.3	41.4
Fuel consumption at 25% load	lb/h	41.9	43	44.1	44.5
Fuel consumption at 50% load	lb/h	49.2	49.6	50.5	50.5
Fuel consumption at 75% load	lb/h	64.8	64.8	65.3	64.8
Fuel consumption at 100% load	lb/h	88	87.5	85.5	86.6

		XAMS 850	XATS 800	XAHS 710	XAVS 650
		CD7	CD7	CD7	CD7
Compressor - NON EC					
Normal effective working pressure	psi	125	149	174	203
Actual free air delivery ¹	cfm	854	788	727	665
Oil Capacity	us gallon	12.68	12.68	12.68	12.68
Max. ambient temperature	°F	122	122	122	122
Air Compressor outlets		1 x 2" / 2 x 3/4"	1 x 2" / 2 x 3/4"	1 x 2" / 2 x 3/4"	1 x 2" / 2 x 3/4"
Maximum altitude	ft	13100	13100	13100	13100
Minimum starting temperature	°F	14	14	14	14
Engine					
Deutz		C7	C7	C7	C7
Number of cylinders		6	6	6	6
Output at rated speed	BHP	249	249	249	249
Swept volume	cu in	439.34	439.34	439.34	439.34
Engine speed (nominal)	rpm	2000	2000	2000	2000
Engine speed (unloaded)	rpm	1300	1300	1300	1300
Capacity oil system	us gallon	6.34	6.34	6.34	6.34
Capacity of fuel tank	us gallon	66	66	66	66
Fuel consumption at 0% load	lb/h	37	38.8	40.3	41.4
Fuel consumption at 25% load	lb/h	47.8	49.4	50.9	51.8
Fuel consumption at 50% load	lb/h	64.4	65.3	66.6	66.8
Fuel consumption at 75% load	lb/h	78.5	78.9	79.6	79.1
Fuel consumption at 100% load	lb/h	88	87.5	87.7	86.6

¹ according to ISO 1217 ed.3 1996 annex D

² according to 2000/14/EC, 84/533/EEC and 85/406/EEC limits

Dimensions



Weight (Ready-to-operate)

		XAMS 850	XATS 800	XAHS 710	XAVS 650
		CD7	CD7	CD7	CD7
Box version (ROW/OND)	lbs	6614 / 6834	6614 / 6834	6614 / 6834	6614 / 6834
Box version (skid) (ROW/OND)	lbs	7385 / 7518	7385 / 7518	7385 / 7518	7385 / 7518
fixed tow bar – brakes/no brakes (ROW/OND)	lbs	7716	7716	7716	7716
adjustable tow bar - brakes (ROW/OND)	lbs	7716	7716	7716	3500

Options

Vessel type

- EC
- ASME
- MOM

Undercarriages

- Without undercarriage
- Fixed tow bar with brakes
- Adjustable tow bar with brakes
- Support mounted
- Skid mounted

Towing eyes

- NATO
- DIN
- Italian
- Ball coupling

Road equipment

- Wheel chocks
- Road signalization

Special applications

- Spark arrestor
- Inlet shutdown valve
- Full refinery equipment

Air treatment

- After-cooler + water separator
- After-cooler + water separator + fine filter
- After-cooler + water separator + reheater
- After-cooler + water separator + fine filter + reheater
- AFT bypass

Others

- - Cold start (-13° F)
- - COSMOS™
- - FuelXpert™
- - Customer colours

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 on the market. When the screw element is efficient- durability excels, maintenance intervals increase and fuel consumption goes down.

Air/Oil Separator

Air and oil separation is achieved through a centrifugal oil separator combined with a filter element. Separators are available in CE and ASME, approved versions and are stamped accordingly. Designed for a higher maximum working pressure, the separator is equipped with a sealed high pressure safety relief valve, minimum pressure nozzle, automatic blow-down valve, and pressure regulator.

The compressor is delivered as standard with mineral based compressor oil.

Cooling System

The cooling system consists of an integrated aluminium oil cooler and radiator with axial fan to ensure optimum cooling. The intercooler is roof mounted and powered by two electrical fans. The cooling system is suitably designed for continuous operation in ambient conditions up to 113°F for European Outdoor Noise Directive (OND) compliant units, and 122°F for non-OND compliant units. Units should be operated with all doors closed to ensure optimal cooling performance.

The compressor is delivered as standard with radiator coolant PARCOOL.

Compressor Regulating System

The compressor regulating system consists of air filter, air receiver/oil separator, compressor element, unloader assembly with unloader valve, blow down valve and loading valve.

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

Discharge Outlets

Compressed air is available from 1 x 2" outlet valve or 2 x ¾" outlet valves.

Engine

Caterpillar C-7 acert

COM III/Tier 3 compliant four -cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously at full-load.

Engine output at rated speed, in accordance to SAE standard is 249 BHP at 2000 rpm.

The engine has the capability to start the compressor to 14°F without the addition of a cold start aid. Cold start options are available for up to -13°F.

Fuel System

The **XA(M,T,H,V)S 650-850 CD7** is standard equipped with a steel fuel tank sufficiently sized to operate the unit for minimum of running 8 hours. The fuel system includes a 10 micron pre-filter, a 3 micron high efficiency filter, and a RACOR fuel filter & water separator.

Electrical System

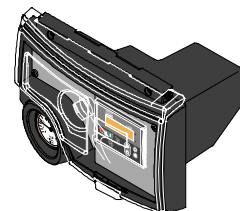
The **XA(M,T,H,V)S 650-850 CD7** is equipped with a 24 Volt negative ground electrical starting system.

Instrumentation

The instrument control panel is located on the back, curb side of the compressor canopy, with a protective metal cover for safety and protection.

Standard instrument package includes a multi-functional control / scroll pad, operating pressure gauge, and LCD operations & diagnostic display providing access to all machine performance data.

Starting is achieved with a rotary power switch and push button starter for ease of operation.



Safety Devices

The compressor is standard equipped with safety devices for the compressor and the engine. The unit will be completely turned off should:

- Engine oil temperature rise too high
- Engine oil pressure drop too low
- Outlet temperature of the compressed air go outside a specified range
- Low fuel level

The starter motor is also protected against overloading from operating for an excessive period or when the engine is running.

Bodywork

Steel Canopy

The compressor is delivered as standard with a zinc coated steel canopy with powder coat paint finish providing excellent corrosion protection. The canopy is sound attenuated to meet the most current legal noise requirements. Wide doors provide complete service access to all components.

The standard colour combination is Atlas Copco Yellow and Grey, however, other colour combinations are also available on demand.

Undercarriage

The **XA(M,T,H,V)S 650-850 CD7** compressor is available with numerous undercarriage alternatives, providing utmost flexibility in installation or towing requirements.

- Support mounted
- Skid mounted
- 2-wheel fixed height towing bar undercarriage with overrun brakes
- 2-wheel adjustable height towing bar undercarriage with overrun brakes

Manufacturing & Environmental Standards

The **XA(M,T,H,V)S 650-850 CD7** is 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.

The **XA(M,T,H,V)S 650-850 CD7** meets all current EU exhaust and noise emission directives.

Supplied Documentation

The unit is delivered with following documentation:

- Test certificate for air delivery pressure and capacity, acc. ISO 1217
- Certificate for air/oil separator vessel and safety valve approval (CE/ASME)
- Declaration of conformity (for CE variants only)
- Operating and instruction manual
- Spare parts manual

Warranty Coverage

For our standard warranty conditions and options to extend, please check your local Atlas Copco representative.