

XAS 188 CD T4F

Portable compressor



Standard Scope of Supply

The Atlas Copco **XAS 188 CD T4F** is a single-stage oil-injected rotary screw type air compressor, powered by a liquid-cooled, four cylinder diesel engine.

The unit consists of an air end, diesel engine, cooling circuit, air/oil separation and control systems - all enclosed within a sound dampened HardHat™ polyethylene shell.

A broad range of undercarriage formats, factory and locally 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

XAS 188 CD HardHat™

single stage - 100 psi – Caterpillar engine

Standard Features

Benefits

- | | |
|---|---|
| <ul style="list-style-type: none">• 49Hp Engine with 189 CFM Free Air Delivery• Low Fuel Shutdown• Tool box• Spin on type compressor oil separator• 110% Spillage Free Containment Frame• HardHat™ Enclosure | <ul style="list-style-type: none">• 189 CFM free air delivery @ 2.37Gal/hr (8.97L/hr)• Direct drive compressor, no gearbox required which saves horsepower and fuel• Reduces downtime on site when operator runs out of fuel as there is no longer a need to “re-prime” the fuel system• Internal Tool Box – Fits 90 lb hammer• Easy and fast service.• Protects environment, avoids costly clean up liability• Heavy ¼” double wall polyethylene enclosure• Dent and UV Resistant• Keeps looking new for longer and adds to resale value• Click here to watch our HardHat video online!!! |
|---|---|

Optional Features

- Hose reels
- Heavy Duty Single Axle Trailer w/ 15" tires
- Cold weather package

Benefits

- Keeps all of the customer's hoses in the same place, great for municipal bids.
- Well balanced for safer towing or moving around site
- High ground clearance for rough site and road conditions
- Features required for reliable cold weather operations. Includes coolant heater block.

Technical Data

Compressor	Units	XAS 188 CD T4F
Actual free air delivery ¹ (FAD)	cfm	189
Normal effective working pressure	Psi	100
Maximum unloading pressure	Psi	125
Minimum working pressure	Psi	58
Max. sound pressure level @ 23' (7m) at normal working speed & pressure ²	dB(a)	76
Compression Stages		1
Air Receiver Capacity	US Gal (L)	4.76 (18.0)
Compressor oil capacity	US Gal (L)	2.5 (9.7)
Approximate air outlet temperature	°F (°C)	TBD
Air Compressor outlets		2 x ¾"
Max. ambient temperature (at sea level) ³	°F (°C)	122 (50)
Maximum altitude	ft (m)	TBD
Minimum starting temperature (without cold weather options)	°F (°C)	14 (-10)
Minimum starting temperature (with cold weather options)	°F (°C)	TBD

Engine	Caterpillar	C2.2T
Emissions Regulation	US EPA	Tier 4 Final
US EPA Engine Family		EKBXL02.4END
Output at rated speed (2700 rpm) ⁴	HP	48,8
Number of cylinders		4
Aspiration		Turbocharged
Displacement	cu in (L)	135 (2.21)
Engine speed (Unloaded)	rpm	1600
Engine speed (Maximum loaded)	rpm	2800
Engine oil capacity	US Gal (L)	2.05 (7.76)
Engine coolant capacity	US Gal (L)	2.6 (9.9)
Fuel tank capacity	US Gal (L)	27 (102)
Fuel consumption at 100% load	Gal/Hr (L/Hr)	2.37 (8.97)
Fuel consumption at 75% load	Gal/Hr (L/Hr)	1.92 (7.26)
Fuel consumption at 50% load	Gal/Hr (L/Hr)	1.69 (6.40)
Fuel consumption at 25% load	Gal/Hr (L/Hr)	1.24 (4.69)
Fuel consumption at 0% load	Gal/Hr (L/Hr)	1.02 (3.86)
Electrical System (Negative Ground)	V	12
Battery Capacity (Cold Cranking Amps) ⁵	A	725

¹ According to ISO 1217 ed.3 1996 annex D

² Measured in accordance with ISO 2151 under free field conditions @ 7m distance

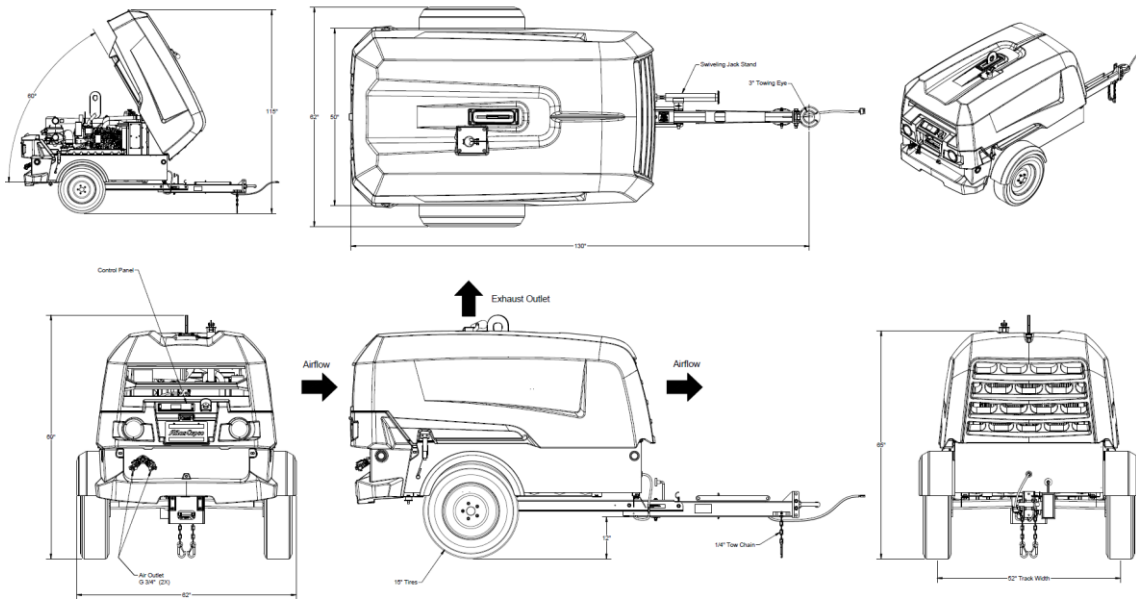
³ Consult Atlas Copco for proper de-rating instructions for operation beyond ambient limitations

⁴ Horsepower limited by Engine ECU

⁵ According to DIN 72311

Dimensions

Trailer mounted - HardHat™ Version



Weight (Wet - Ready-to-operate)

		XAS 188 CD HardHat™
Trailer mounted	lb (Kg)	1900 (862)
Support mounted	lb (Kg)	NA

Dimensions

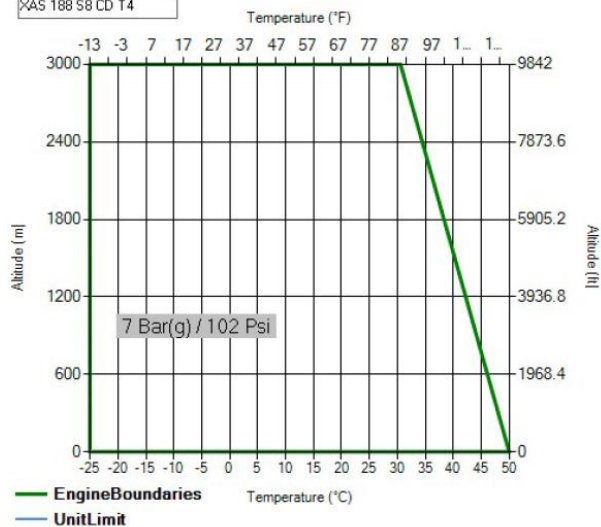
		XAS 188 CD HardHat™
Trailer mounted (Inches)	L x W x H	130 x 62 x 69
Trailer mounted for shipping – tow arm folded upright (Inches)	L x W x H	TBD
Support mounted (Inches)	L x W x H	NA

ALTITUDE UNIT PERFORMANCE CURVE

Maximum allowable working pressure as a function of altitude and ambient temperature

Unit Name:

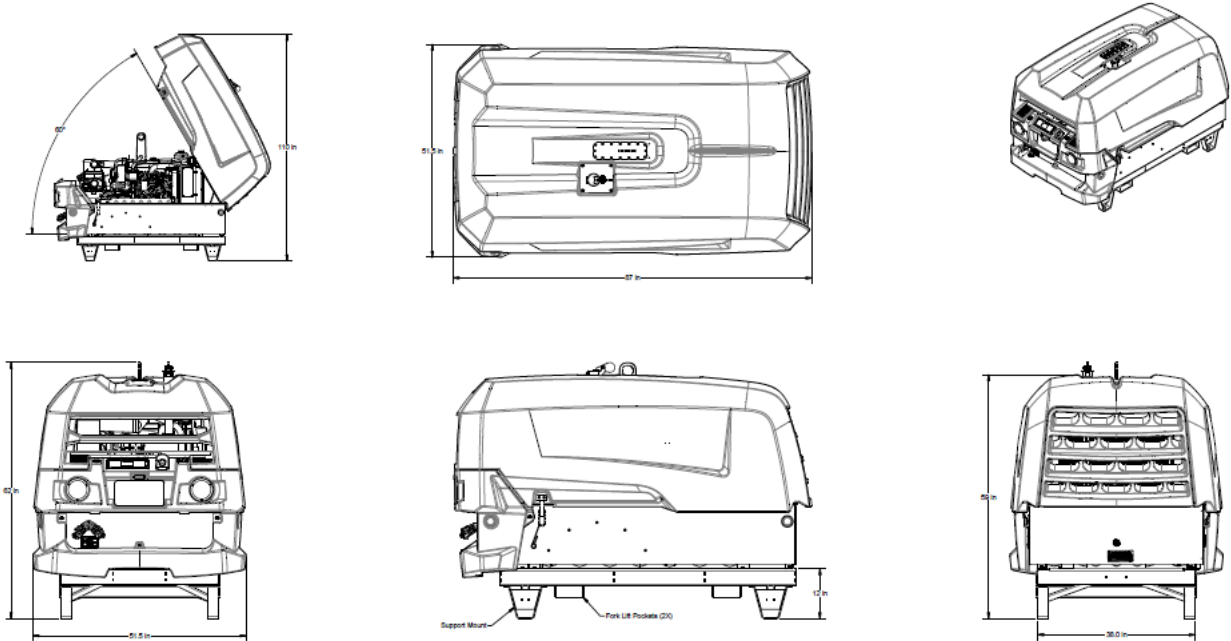
XAS 188 S8 CD T4



Graph represents working conditions, for starting conditions pls contact your Atlas Copco contact

Dimensions

Support mounted - HardHat™ Version



Weight (Wet - Ready-to-operate)

		XAS 188
Support mounted	lb (Kg)	TBD

Dimensions

		XAS 188
Support mounted Inches (m)	L x W x H	87 (2.21) x 51.5 (1.31) x 62 (1.58)

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 XAS 188 CD T4F compressor utilizes Atlas Copco's new C-90 Flexbox which element is driven from the diesel engine with gearbox. New element, means more flow with less fuel consumption.

Inlet air is filtered through a heavy duty two stage air filter.

Air/Oil Separator

Air and oil separation is achieved through a centrifugal spin on type compressor oil separator with a filter element for easy maintenance. Separators are ASME/CRN 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, sonic nozzle, automatic blow-down valve, and pressure regulator.

Air/Oil Separator Tank:

Volume	4.76 US Gal / 18 L
Certifications	ASME / CRN
MAWP	160psi @ 248°F

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 at the front of the machine for easy cleaning

The cooling system is suitably designed for continuous operation in ambient conditions up to 120°F, with canopy door closed.

Compressor Regulating System

The compressor regulating system consists of two stage air filter, air receiver/oil separator, compressor element, blow down valve, and pressure safety valve.

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

Discharge Outlets

Compressed air is available from 2 x 3/4" claw type (Chicago) outlet valves.

Storage Compartment

The compressor has a built in tool box compartment. Tool box dimension is: **33.8" L x 7.4" W x 10" H. Open top**

Engine

Caterpillar C2.2T

Caterpillar C2.2T Tier 4 Final, turbocharged, four-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously at full-load.

Meets all US EPA and Environment Canada exhaust legislations with Tier 4 Final compliance. The US EPA engine family is "EKBXL02.4END". The engine utilizes a DOC to meet Tier 4 Final emissions. All functionality of the engine and exhaust after treatment are controlled automatically on the XC1004 controller.

Engine output at rated speed, in accordance to SAE Standard, is 49hp at 2800 rpm, as limited by the engine ECU.

The engine has the capability to start the compressor to 14°F (-10°C) with standard glow-plug aid. Cold start options are available for up to (TBA).

The 27 Gal (102L) fuel tank is sufficiently sized to operate the unit for minimum of 11 hours at full-load condition.

Electrical System

The **XAS 188 CD T4F** is equipped with a 12 Volt negative ground electrical starting system.

Instrumentation

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

Standard instrument package includes an operating pressure gauge, and fully diagnostic ECU controller with large 3.5" display. The intuitive Atlas Copco XC1004 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 shut downs on various parameters (listed below).

XC1004 Controller Functionality:

- Displayed while running
 - Hours
 - Fuel level
 - RPM
 - Outlet pressure
- Operational Buttons
 - Start and stop of the unit
 - View measurements, settings and alarms
 - Multi position cursor to navigate menus
- Compressor measurements displayed
 - Running hours
 - Fuel level
 - Clock
 - Battery voltage
 - Running hours
 - Regulating pressure
 - Emergency stop count
 - Average fuel consumption
 - Minor and major service counters in hours and days
- Engine measurements displayed
 - Current fuel rate
 - Engine coolant temperature
 - Engine oil pressure
 - Engine RPM
- Warnings and Shutdowns
 - High temperature engine coolant
 - High temperature compressor oil
 - Engine oil pressure
 - Low fuel level
 - High DPF soot level
- Alarms
 - View current & historical alarms present
 - History of last 20 alarms and events with time and date stamps
 - DM1 & DM2: View current engine codes (SPN/FMI)
- Settings
 - Manual regeneration of DPF
 - Reset service timers
 - Diagnostics for engine ECU
 - Language settings
 - Unit of measure changes



Bodywork

The compressor is delivered in the HardHat™ version.

HardHat™: Our HardHat™ version comes standard with dual wall, 5" thick, Polyethylene material providing superior corrosion, and UV protection against fading and discoloration. As well as unmatched dent and damage resistance. The canopy is sound attenuated to meet the most current legal noise requirements. A clamshell style hood offers easy service access to all components.

Undercarriage

The **XAS 188 CD T4F** compressor is available with two undercarriage alternatives, providing utmost flexibility in installation or towing requirements.

- Single axle trailer setup with:
 - US DOT/Federal MVSS 49CFR571 approved light package and 4 way trailer plug
 - Adjustable height pintle hitch (3" lunette)
 - External lifting eye
 - 15" Rims w/ ST205/75D15 Tires for trailer use

- Trailer brakes not standard (can be added as option)
- Heavy Duty torsion axle rated at 2,500lbs
- Safety chains
- Screw jack leveling
- Single point lifting structure

Factory Options Available

- Hydraulic or electric trailer brake package
- 15" Rims w/ ST205/75D15 Tires
- Single or dual, 50' or 100' live hose reels (18" extended drawbar added)
- Airline lubricator (shipped loose)
- O.S.H.A. 3/4" check valve
- Custom color canopy (minimum order may be required)
- Cold weather package (includes: 120V block heater, synthetic compressor oil)
- 2" or 2 5/16" ball hitches (shipped loose)
- Extended drawbar (18" extension)
- D-Ring tie downs

Manufacturing & Environmental Standards

The **XAS 188 CD T4F** 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 **XAS 188 CD T4F** meets all current US EPA, CARB and Environment Canada exhaust and noise emission directives.



Supplied Documentation

The unit is delivered with documentation regarding:

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

Warranty Coverage

Caterpillar Engine: Two (2) years / 2,000 hours of operation (whichever occurs first) & Major Component Warranty (MCW) for three (3) years / 3,000 hours (whichever occurs first) warranty from Caterpillar Engine America. Unit must be registered directly with Caterpillar upon receipt to be eligible for warranty. Failure to register warranty upon initial startup may cause warranty claim delays or rejection of claim by Caterpillar.

Atlas Copco Compressor: Warrantied to be free from defects with regard to material and workmanship for the period of eighteen (18) months from date of shipment from the factory, or twelve (12) months from date of initial start-up, whichever occurs first, without limitation of running hours.

Air compressor element assemblies used in Atlas Copco portable air compressors, is warranted to be free from defects with regard to materials and workmanship for the period of thirty (30) months from date of shipment from the factory, or twenty four (24) months from date of initial start up, whichever occurs first, without limitation of running hours. Atlas Copco service kits including parts and oils (PAR Oil's) must be used to maintain warranty. Failure to register warranty upon initial start-up may cause warranty claim delays or rejection of claims.

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