



# Product Reference

## XAT(V)S 186 Jd Stage IV

Portable compressor

### Standard Scope of Supply

The Atlas Copco **XATS 186 and XAVS 186** is a single-stage, oil-injected, rotary screw type air compressor, powered by a liquid-cooled, 4-cylinder turbocharged diesel engine.

The unit host the new generation C106 Screw element in its air end and is powered by a John Deere branded Stage IV diesel engine model 4045HFC04 with exhaust treatment, cooling circuit, air/oil separation and control systems - all enclosed within a sound dampened powder + primer coated Zincor steel enclosure.

An undercarriage with adjustable brakes 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 technology coupled with the intuitive XC2003 controller that allows the compressor to be configured to operate at any pressure between 2 pressure presets. The controller can be used as a toggle to select between the presets.

### Available Models

XATS 186 Jd

Bar (g)	7	8,6	10
Psi (g)	100	125	150
cfm	403	403	345
m3/min	11,4	11,4	9,8

XAVS 186 Jd

7	8,6	10,3	12	14
100	125	150	175	205
403	403	400	384	358
11,4	11,4	11,3	10,9	10,1

### Features

- PACE
- Designed with environmental protection in mind
- Compact, sound attenuated, corrosion resistant enclosure

### Benefits

- The PACE gives you the flexibility to tune your machine to a wider range of applications.. This feature make the compressor very versatile as the same unit can be used for various application. This increases the utilization and hence the ROI as against a standard compressor. The PACE technology ensures that the air flow matches the desired operating pressure to maximize output without compromising on the fuel efficiency.
- The unit comes with a Spillage Free frame as Standard with 110% fluid containment and Stage IV Final emission compliant engine , This makes the compressor suitable for use in all areas of the EU
- For OND compliance the unit is enclosed in a sound attenuated Zincor steel enclosure. The large gull wing doors allows superior access and makes maintenance easy.
- Compact and maneuverable, saving valuable space on your job site, and during transportation.

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Compressor - EC		XATS 186 Jd			XAVS 186 Jd				
		Normal effective Working Pressure	Bar (g)	7	8,6	10	7	8,6	10,3
	Psi (g)	100	125	150	100	125	150	175	205
Free Air Delivery	cfm	403	403	345	403	403	400	384	358
	m3/min	11,4	11,4	9,8	11,4	11,4	11,3	10,9	10,1
	l/Sec	190	190	163	190	190	189	181	169
Max. ambient temperature at sea level	°C	50			50				
Min. Starting Temperature	°C	-10			-10				
Min. Starting Temperature (Cold Start Aid)	°C	-25			-25				

## Engine

Engine Brand	John Deere								
Engine Model	4045HFC04 - STAGE IV								
Number of Cylinder	4								
Power output @ normal shaft speed	kW	86			104				
Full load RPM	rpm	2200	1900		2200	2200	2100	1950	
Unload RPM	rpm	1500	1500		1500	1500	1500	1500	
Capacity									
Engine Oil	l	14,7	14,7		14,7	14,7	14,7	14,7	
Compressor Oil	l	26,5	26,5		26,5	26,5	26,5	26,5	
Fuel Tank	l	168	168		168	168	168	168	

## Dimensions : Trailer Mounted

Length	mm	4940							
Width	mm	1580							
Height	mm	1800							
Weight	kg	2340							

## Dimensions : Support Mounted

Length	mm	3000							
Width	mm	1490							
Height	mm	1690							
Weight	kg	2070							

## Dimensions : Skid Mounted

Length	mm	3150							
Width	mm	1490							
Height	mm	1890							
Weight	Kg	2240							

<sup>1</sup> According to ISO 1217 ed.4 2009 annex D

<sup>2</sup> Measured in accordance with 2000/14/EC

<sup>4</sup> Consult Atlas Copco for proper de-rating instructions for operation beyond ambient limitations

<sup>5</sup> Power limited by Engine ECU

<sup>6</sup> Engine and emissions require the use of Ultra Low Sulfur Diesel in accordance to ASTM-D975 Grade No.1-D S15 & No.2-D S15

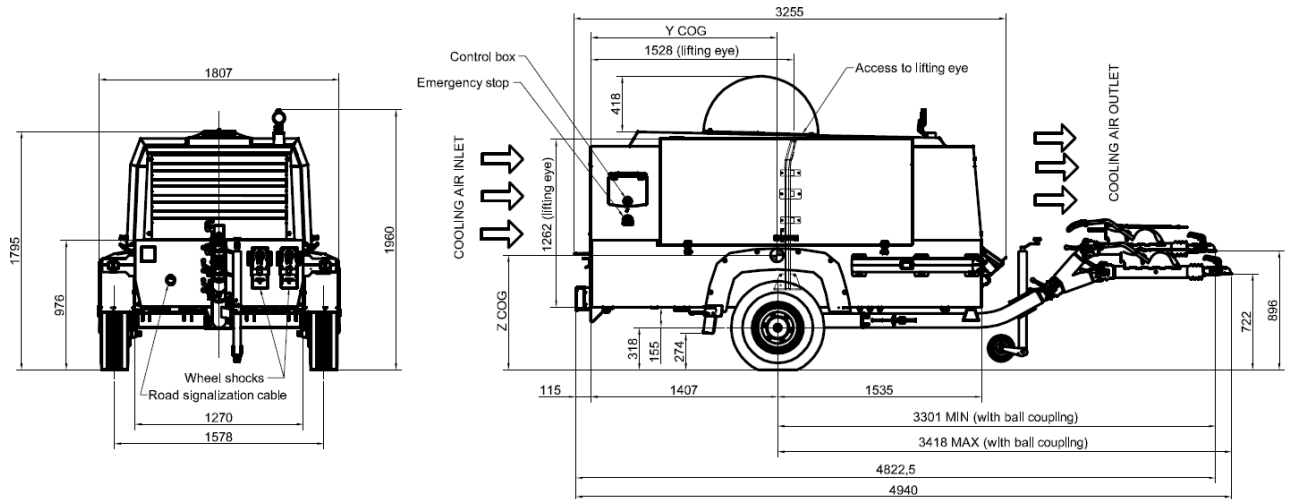
<sup>7</sup> Diesel Exhaust Fluid in accordance with ISO 2224, consumption rate is dependent on DEF age, quality and site conditions

<sup>8</sup> According to DIN 72311

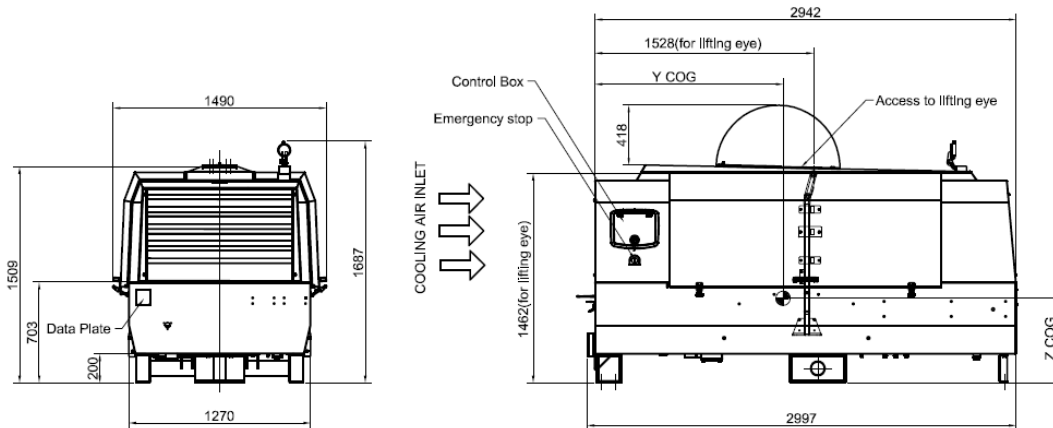
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## Dimensions

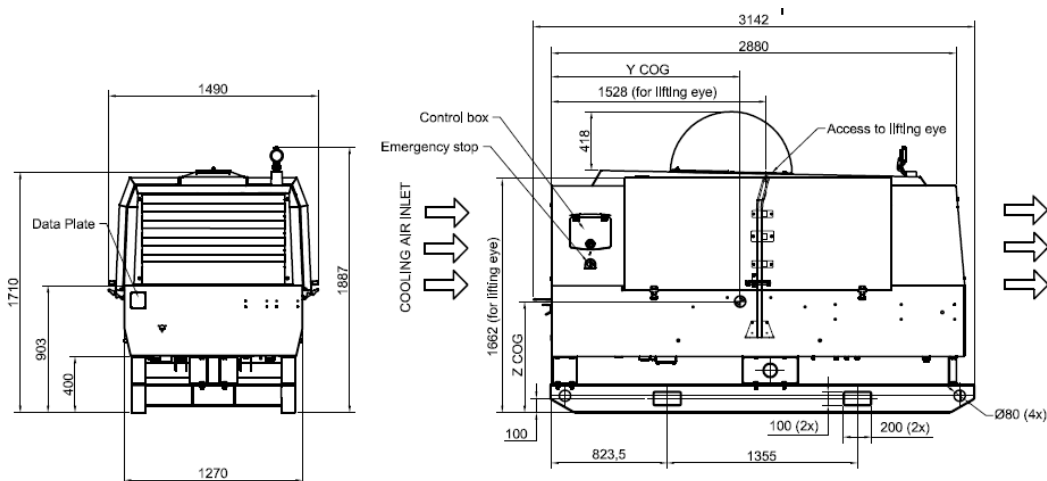
### Trailer mounted



### Support mounted



### Skid mounted



## 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 the efficient and reliable compressors in the market. When the screw element its efficient durability excels, maintenance intervals decrease and fuel consumption goes down.

The XAT(V)S 186 compressor utilizes an Atlas Copco C106 element. Inlet air is filtered through a heavy duty two stage air filter.

### Air/Oil Separator

Air and oil separation is achieved through a centrifugal oil separator combined with a filter element. Vessel is CE approved and stamped accordingly.

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

#### Air/Oil Separator Tank:

Volume	42
Certifications	CE
MAWP	18 bar

### 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 operations in ambient conditions up to 45 °C (40°C with aftercooler), with canopy doors closed.

### Compressor Regulating System / PACE

Introduction of intuitive PACE technology allows the compressor to operate at any pressure setting between 7 and 10 bar for XATS and 7 and 14 bar for XAVS. The compressor can have 2 pressure presets and we can use the controller to toggle between the pressure presets

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

### Discharge Outlets

Standard compressed air is available from a 1 ½" NPT ball valve and three ¾" Fittings.

Standard Air	1 x 1 ½" NPT / 3 x ¾"
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## Engine

### John Deere

John Deere 4045HFC04 Stage IV Final, turbocharged, four-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously in any application.

Meets all EU exhaust legislations with Stage IV compliance, a Diesel Oxidation Catalyst (DOC) and a Selective Catalytic Reduction (SCR) system to help meet stage IV emissions. All functionality of the engine and exhaust after treatment are controlled automatically on the XC2003 controller.

The DOC + SCR exhaust after treatment eliminates diesel particulate matter and NOx in compliance with Stage IV emission norms. A DPF required for emission compliance in select markets is not available as a factory fitted option and respective customer center will have to arrange for retrofitting of the DPF.

Engine output at rated speed, in accordance to J1995 and ISO 3046 Standard, is 86 kW at 2200 RPM for the XATS186 and 104 kW at 2200 rpm for XAVS186.

Cold start options are available for up to -25°C.

The 168 L fuel tank is sufficiently sized to allow full shift autonomy (8h). As well the unit requires Diesel Exhaust Fluid (DEF). There is a DEF tank sufficiently sized to operate the unit for a minimum of 24 hours.

## Electrical System

The **XAT(V)S 186 Jd Stage IV** is equipped with a 12 Volt negative ground electrical starting system.

## Instrumentation

The instrument control panel houses an intuitive Atlas Copco Xc 2003 controller and is located on the rear corner, of the compressor canopy with easy access.

The Atlas Copco XC2003 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).

### XC2003 Controller Functionality:

- Displayed while running
  - Hours
  - Fuel level
  - DEF level
  - RPM
  - Outlet pressure
- Operational Buttons
  - Power button
  - Start and stop of the unit
  - Load button
  - View measurements, settings and alarms
  - Multi position cursor to navigate menus
- Compressor measurements displayed
  - Running hours
  - Fuel level
  - DEF level
  - Clock
  - Battery voltage
  - Regulating pressure
  - Emergency stop count
  - Average fuel consumption
  - Minor and major service counters in hours and days
- Engine measurements displayed
  - Current fuel consumption
  - Engine coolant temperature
  - Engine RPM
- Warnings and Shutdowns
  - High temperature engine coolant
  - High temperature compressor oil
  - Engine oil pressure
  - Low fuel level
  - Low DEF 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
  - Reset service timers
  - Diagnostics for engine ECU
  - Language settings
  - Unit of measure changes



## Bodywork

The compressor comes standard with ASTM A653 Zincor steel canopy with primer and powder coat paint finish providing excellent corrosion protection. The canopy is sound attenuated to meet the most current legal noise requirements. Gullwing style doors offer easy service access to all components from both sides of the machine.

## Undercarriage

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The **XAT(V)S 186 JD Stage IV** compressor is available with an undercarriage alternative, providing utmost flexibility in installation or towing requirements.

- Single axle trailer setup with:
  - Undercarriage with road homologation and Adjustable towbar
  - 205R14C Wheels for trailer use
  - Trailer brakes
  - Heavy Duty torsion axle
  - Jockey wheel / support leg
  - Single point lifting structure
- Support mounted frame
- Skid mounted frame

## Factory Options Available

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- Undercarriages: support mounted, adjustable or fixed towbar
- Towing eyes (DIN, ITA, NATO, BNA, Ball coupling and loose ball coupling)
- Jockey wheel or leg support
- Road light system
- Wheel chocks
- Quality air equipment (AfterCooler + WSD + bypass, AfterCooler + WSD + PD + Bypass)
- Special application equipment: inlet shut down valve and spark arrester
- Cold start
- Safety cartridge
- Metal filler neck
- Special color

## Supplied Documentation

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The unit is delivered with documentation regarding:

- Hard copies of the Atlas Copco Operators Safety and Instruction Manual, Atlas Copco Parts Book, John Deere 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, CE.

## Warranty Coverage

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**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 startup, whichever occurs first, without limitation of running hours.

Atlas Copco service kits including parts and oils (Paroil's) must be used to maintain warranty. Failure to register warranty upon initial startup may cause warranty claim delays or rejection of claims.