# XAS 188-10, XAS 188-14 PACE Jd S5 APP

Portable Compressor



# **Standard Scope of Supply**

The Atlas Copco **XAS 188-10 and XAS 188-14** are single-stage, oil-injected, rotary screw type air compressor, powered by a liquid- cooled, four-cylinder turbocharged John Deere diesel engine.

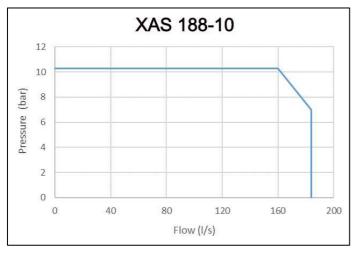
The unit hosts the new generation C106 screw element in its air end combined with a John Deere made Stage 5 diesel engine 4045HI551 with a DPF in DOC exhaust treatment system, cooling circuit, air/oil separation and control systems, an undercarriage with fixed towbar, brakes and pintle eye is available as standard.

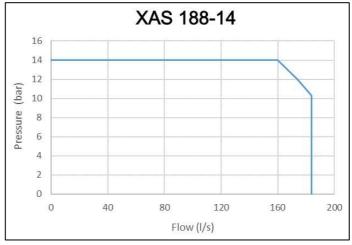
Special attention has been given to the overall product quality, user friendliness, ease of serviceability, and economical operation to ensure best in class cost of ownership.

The Unique feature of this new range is the PACE functionality coupled with the intuitive XC2003 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		XAS 188-10 PACE	XAS 188-14 PACE
Minimum effective receiver pressure	bar(g)	5	5
Maximum effective receiver pressure (Unloaded)	bar(g)	10.5	14.2
Nominal effective working pressure	bar(g)	10.3	14
Actual free air delivery			
at pressure setting 7 bar(g)	I/s	182	182
at pressure setting 8.6 bar(g)	l/s	171	182
at pressure setting 10.3 bar(g)	I/s	160	182
at pressure setting 12 bar(g)	I/s	-	175
at pressure setting 14 bar(g)	I/s	-	162
Fuel consumption			
at 100% FAD (full load)	kg/h	17.46	20.81
at 75% FAD	kg/h	12.64	15.14
at 50% FAD	kg/h	11.1	13.67
at 25% FAD	kg/h	10.32	12.9
Specific fuel consumption at 100% FAD	g/m³	30.31	36.13
Maximum typical oil content of compressed air	mg/m³	5	5
Max. sound pressure level (Lw @ 2000/14/EC)	dB(A)	99	99
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	71	71
Compressed air temperature at outlet valve without aftercooler	°C (°F)	100 (212)	105 (221)
Compressed air temperature at outlet valve with aftercooler	°C (°F)	40 (104)	40 (104)
Max. ambient temperature at sea level without aftercooler	°C (°F)	45 (113)	45 (113)
Max. ambient temperature at sea level with aftercooler	°C (°F)	40 (104)	40 (104)
Min. starting temperature with cold weather equipment	°C (°F)	-25 (-13)	-25 (-13)
Min. starting temperature without cold weather equipment	°C (°F)	-10 (14)	-10 (14)
Number of compression stages		1	1
Engine		John Deere 4045HI551	John Deere 4045HI551
Emission stage		Stage 5	Stage 5
Coolant		ParCool EG	ParCool EG
Number of cylinders		4	4
Bore	mm	106	106
Stroke	mm	127	127
Swept volume	I	4.5	4.5
Engine power at normal shaft speed @ ISO 9249G	kW	86	104
Full Load	rpm	1960	1950
Unload	rpm	1510	1500
Capacity of oil sump: - Initial fill	İ	14.7	14.7
Capacity of oil sump: - Refill (max)	I	13.5	13.5
Capacity of cooling system	I	23.7	23.7
Capacity of compressor oil system	I	26.5	26.5
Net capacity of air receiver	I	42	42
Air volume at inlet grating (approx.)	m³/s	5.3	5.3
Capacity of standard fuel tanks	1	164	164
Capacity of DEF tank	I	21.65	21.65
Safety valve - minimum opening pressure	bar(g)	13.1	16.1



### Features Benefits

- PACE (Pressure Adjusted Cognitive Electronic)
- The versatility of the Xc2003 controller gives you the flexibility to tune your
  machine to a wider range of applications. This feature makes 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 functionality ensures that the air flow matches the
  desired operating pressure to maximize output without compromising on the
  fuel efficiency.
- Designed with environmental protection in mind
- The unit comes with a Spillage Free frame as Standard with 110% fluid containment and Stage 5 emission compliant engine, this makes the compressor suitable for use in all areas of the EU with DPF as Standard.
- Compact, sound attenuated, corrosion resistant enclosure
- For OND compliance the unit is enclosed in a sound attenuated Zincor steel and PE enclosure. The large gull-wing canopy doors allows superior access and makes maintenance easy.
   Compact and maneuverable, saving valuable space on your job site, and during transportation.

New improved vessel design

- Provides much easier access to the oil separator, decreasing service time considerably
- 3-layer painting and PE canopy parts
- High residual value with C3 painting quality and indestructible PE doors and canopy parts for excellent resale value.

ECO mode

 Unmatched fuel savings with automated load/no-load switching and start-stop based on air usage

#### **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 XAS 188-10 PACE and XAS 188-14 PACE compressor utilizes an Atlas Copco C106 element and is driven from the 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 high pressure sealed and certified safety relief valve, automatic blow-down valve

#### 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 for continuous operation in ambient conditions up to 45°C (113°F) and 40°C (104°F) with AC, with canopy doors closed.

## **Compressor Regulating System / PACE**

Introduction of intuitive PACE functionality allows the compressor to operate at any pressure setting between 7 and 10 or 14 bar respectively.

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.

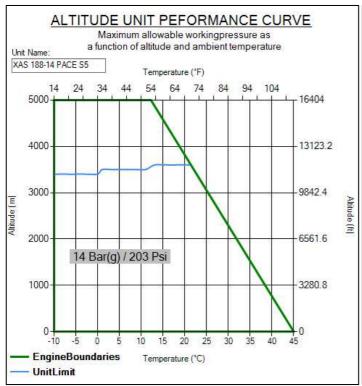
# **Engine**

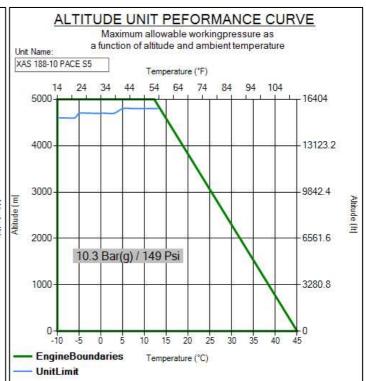
#### John Deere

John Deere 4045HI551, turbocharged, four-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously at full-load.

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

The 164 L fuel tank is sufficiently sized to allow full shift autonomy (8h).







## **Electrical System**

The XAS 188-10 PACE and XAS 188-14 PACE are equipped with a 12 Volt negative ground electrical starting system.

#### Instrumentation

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

The intuitive 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
- · 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
- Warnings and Shutdowns
  - High temperature engine coolant
  - High temperature compressor oil
  - Engine oil pressure
  - Low fuel level
  - High DPF soot level
- Settings
  - Manual regeneration of DPF
  - Reset service timers
  - Diagnostics for engine ECU
  - Language settings
  - Unit of measure changes



- Operational Buttons
  - Start and stop of the unit
    - View measurements, settings and alarms
  - Multi position cursor to navigate menus
- Engine measurements displayed
  - Current fuel rate
  - Engine coolant temperature
  - Engine oil pressure
  - DPF Soot level
  - Engine RPM
- 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)
  - ÈCO modé



### **Bodywork**

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# **Undercarriage**

The XAS 188-10 PACE and XAS 188-14 PACE compressors are available with an undercarriage alternative, providing utmost flexibility in installation or towing requirements.

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

# **Supplied Documentation**

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 (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.

