

400 Series JD T4F

Portable compressor



Standard Scope of Supply

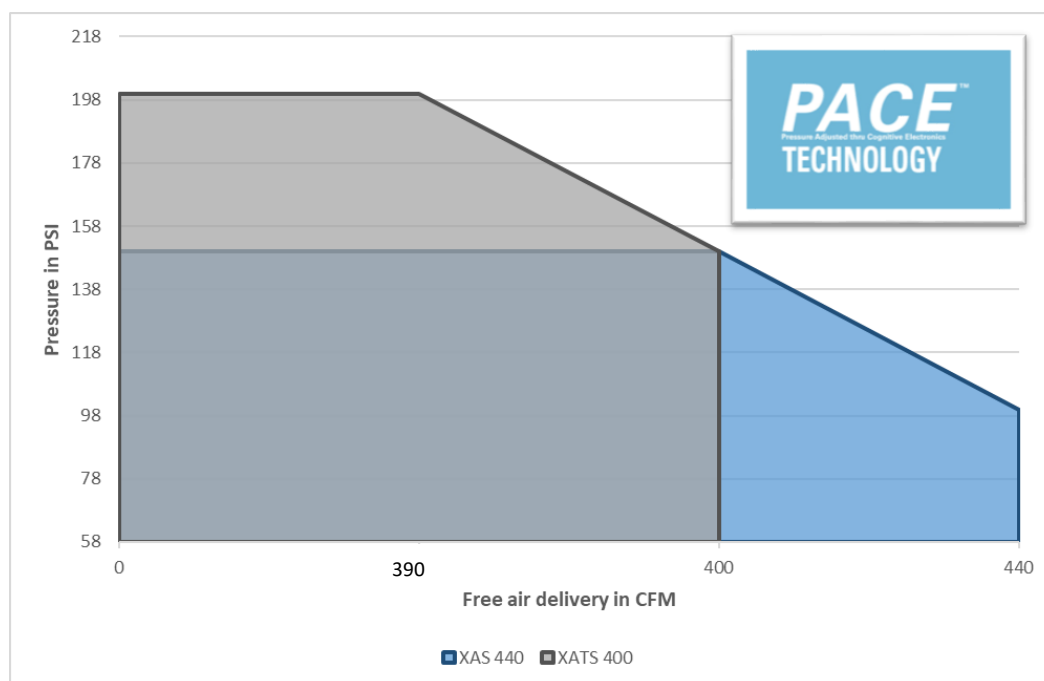
The Atlas Copco **400 Series JD T4F** is a single-stage, oil-injected, rotary screw type air compressor, powered by a liquid-cooled, four-cylinder turbocharged diesel engine.

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

A 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.

Pressure and Flow



Available Models

XAS 440 JD T4F
XATS 400 JD T4F

single stage – 100 to 150 psi – John Deere engine
single stage – 150 to 200 psi – John Deere engine

Features

- John Deere T4F engine
- Atlas Copco Controller XC2003 PACE
[Pressure Adjusted](#) through [Cognitive Electronics](#)
- Low Fuel Shutdown
- Heavy Duty Single Axle Trailer w/ 15" tires
- HardHat™ enclosure

Benefits

- Meets all current T4F emission regulations.
- Integrated exhaust aftertreatment makes T4F integration easy
- 5 Year extended warranty from factory on John Deere Engine (must be registered with John Deere to qualify).
- Proven controller for easy operation and diagnostics of the compressor and engine.
- Allows operator to view compressor parameters including: Pressure settings, reading engine codes, two programmable service timers, all temperatures and pressures of compressor, fuel levels and consumptions, and load/unload compressor.
- Reduces downtime on site when operator runs out of fuel as there is no longer a need to "re-prime" the fuel system
- Well balanced for safer towing or moving around site
- High ground clearance for rough site and road conditions
- Heavy ¼" double wall polyethylene enclosure
- Dent and UV Resistant
- Keeps looking new for longer and adds to resale value

Optional Features

- Aftercooler, water separator w/ filters
- Cold Weather Package

Benefits

- Provides cool, dry, clean air for applications where instrument quality air is required.
- Features required for reliable cold weather operation. Including; synthetic compressor oil and block heater.

Technical Data

| Compressor | | XAS 440 JD T4F | | XATS 400 JD T4F | |
|--|------------|-------------------|-----|-------------------|-----|
| | | | | | |
| Actual free air delivery ¹ (FAD) | Cfm | 440 | 400 | 397 | 390 |
| Normal effective working pressure | Psi | 100 | 150 | 150 | 200 |
| Maximum unloading pressure | Psi | 175 | | 175 (225) | |
| Minimum working pressure | Psi | 58 | | 58 | |
| Max. sound pressure level @ 23' (7m) at normal working speed & pressure ² | dB(a) | 76 | | 76 | |
| Compression Stages | | 1 | | 1 | |
| Air Receiver Capacity | US Gal (L) | 11 (41.6) | | 11 (41.6) | |
| Compressor oil capacity | US Gal (L) | 6.3 (23.8) | | 6.3 (23.8) | |
| Approximate air outlet temperature | °F (°C) | 200 (93) | | 200 (93) | |
| Air Compressor outlets | | 2 x ¾" & 1 x 1 ½" | | 2 x ¾" & 1 x 1 ½" | |
| Max. ambient temperature (at sea level) ³ | °F (°C) | 115 (46) | | 115 (46) | |
| Maximum altitude | Ft (m) | 14,000 (4267) | | 14,000 (4267) | |
| Minimum starting temperature (without cold weather options) | °F (°C) | 14 (-10) | | 14 (-10) | |
| Minimum starting temperature (with cold weather options) | °F (°C) | -4 (-20) | | -4 (-20) | |

| Engine | John Deere | 4045HFC04 | 4045HFC04 |
|---|---------------|-----------------------------------|--------------|
| Emissions Regulation | US EPA Tier | T4F | T4F |
| Output at rated speed (2400 rpm) | HP | 134 | 148 |
| Number of cylinders | | 4 | 4 |
| Aspiration | | Turbocharged | Turbocharged |
| Displacement | cu in (L) | 269 (4.5) | 269 (4.5) |
| Engine speed (Unloaded) | Rpm | 1500 | 1500 |
| Engine speed (Maximum loaded) | Rpm | 2400 | 2250 |
| Engine oil capacity | US Gal (L) | 5.4 (20.5) | 5.4 (20.5) |
| Engine oil required | | Low Ash Oil per API CJ-4, ACEA C9 | |
| Engine coolant capacity | US Gal (L) | 6.25 (23.6) | 6.25 (23.6) |
| Fuel tank capacity | US Gal (L) | 52 (197) | 52 (197) |
| Fuel consumption at 0% load | Gal/Hr (L/Hr) | 1.7 (6.4) | 1.7 (6.4) |
| Fuel consumption at 100% load | Gal/Hr (L/Hr) | 6.5 (24.5) | 6.5 (24.5) |
| DEF tank capacity | US Gal (L) | 5.7 (21.7) | 5.7 (21.7) |
| DEF consumption at 100% load | Gal/Hr (L/Hr) | 0.30 (1,1) | 0.30 (1,1) |
| Battery Capacity (Cold Cranking Amps ⁴) | A | 1100 | 1100 |

¹ According to ISO 1217 ed.3 1996 annex D

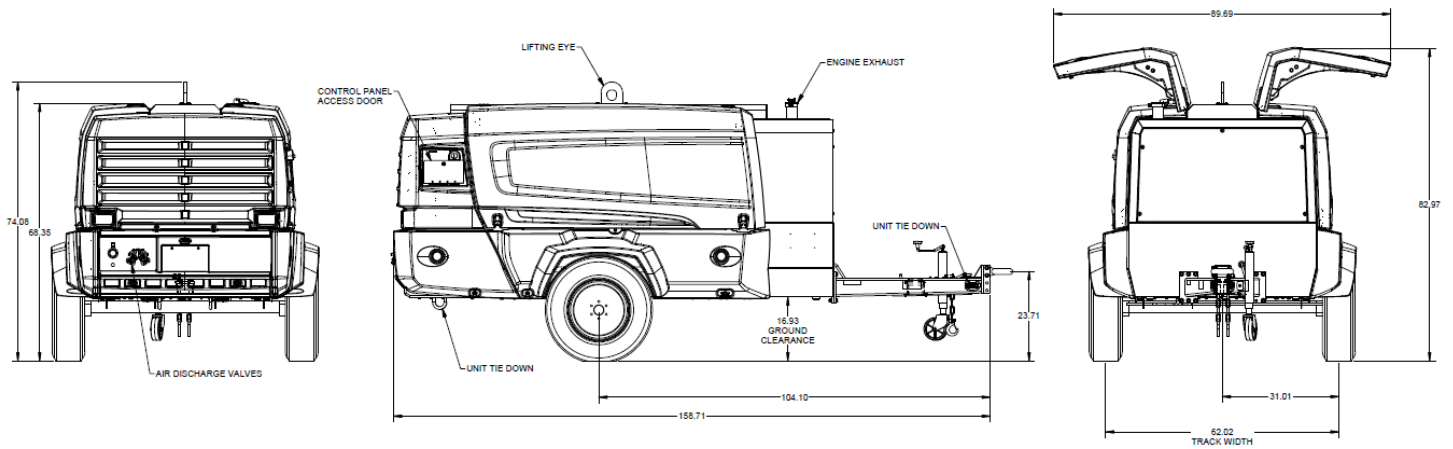
² Measured in accordance with ISO 2151 under free field conditions @ 7m distance

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

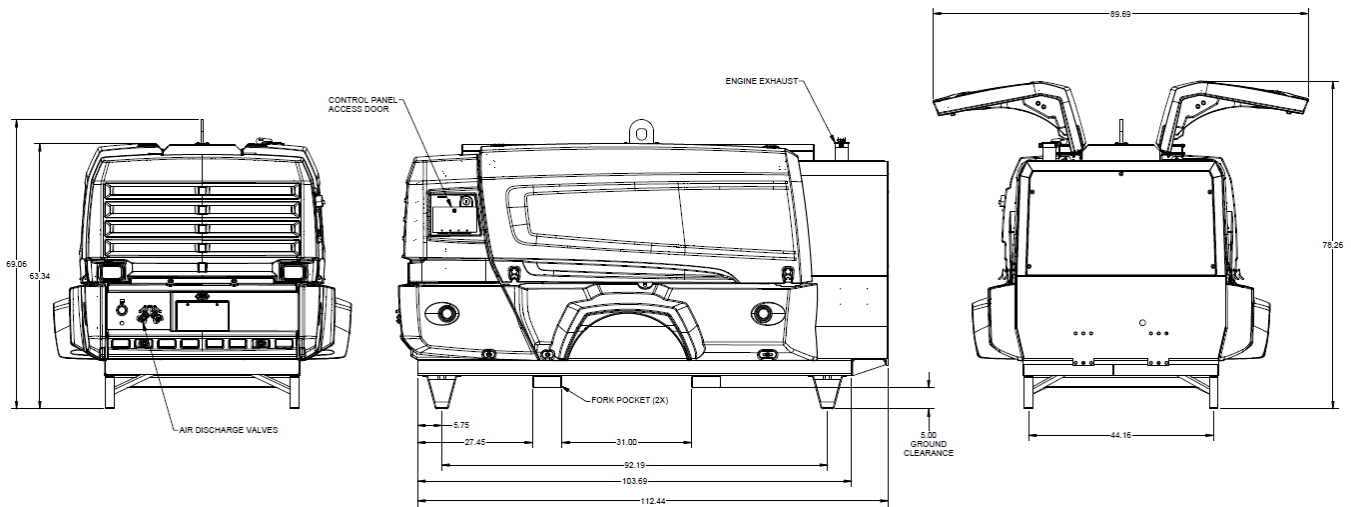
⁴ According to DIN 72311

Dimensions

Trailer mounted



Support mounted



Weight (Wet - Ready-to-operate)

| | | XAS 440 JD T4F | XATS 400 JD T4F |
|-----------------|---------|----------------|-----------------|
| Trailer mounted | lb (Kg) | 4555 (2066) | 4470 (2028) |
| Support mounted | lb (Kg) | 4183 (1897) | 4183 (1897) |

Dimensions

| | | XAS 440 JD T4F | XATS 400 JD T4F |
|--------------------------|-----------|-----------------|-----------------|
| Trailer mounted (Inches) | L x W x H | 161 x 71.5 x 70 | 161 x 71.5 x 70 |
| Support mounted (Inches) | L x W x H | 113 x 71.5 x 65 | 113 x 71.5 x 65 |

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, Atlas Copco remains a world leader in designing the most efficient and reliable compressors on the market. With air-end efficiency, maintenance intervals are extended and fuel consumption is reduced.

The 400 Series JD T4F compressor utilizes Atlas Copco's C106 element and is driven from the diesel engine through a gear box with a rubber disc coupler.

The compressor system comes with Atlas Copco ParOil compressor oil. The oil cooler comes equipped with a standard thermostatic by-pass valve for superior cold weather lubrication.

Air/Oil Separator

Air and oil separation is achieved through a centrifugal oil separator combined with a filter element. Separators are available in 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, minimum pressure valve, automatic blow-down valve, and pressure regulator.

Air/Oil Separator Tank:

| | |
|----------------|------------------|
| Volume | 11 US Gal / 42 L |
| Certifications | ASME / CRN |
| MAWP | 261psi @ 266°F |

Cooling System

The cooling system consists of integrated side-by-side aluminum oil cooler with axial fan to ensure optimum cooling. The cooling system is suitably designed for continuous operation in ambient conditions up to 125°F, with canopy door closed for the 400 Series JD T4F.

Compressor Regulating System

The compressor regulating system consists of an air filter, air receiver/oil separator, compressor element, unloader assembly with unloader valve, blow down valve and loading 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 (XAS 440 version only) and 1 x 1 1/2" NPT valve.

Engine

John Deere 4045HFC04

John Deere 4045HFC04 T4F turbo charged four-cylinder, liquid-cooled diesel engine provides ample power to operate the compressor continuously at full-load.

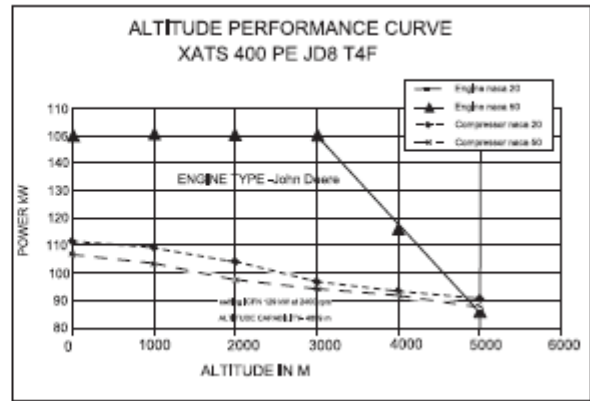
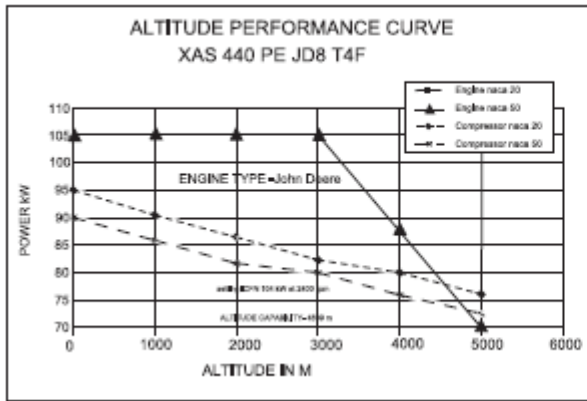
Meets all US EPA and Environment Canada exhaust legislations with Final Tier 4 compliance.

The US EPA engine family is "EJDXL04.5315" and rated at 134hp at 2400 rpm, in accordance to SAE Standard for the XAS 440 JD T4F.

The US EPA engine family is "EJDXL04.5315" and rated at 148hp at 2200 rpm, in accordance to SAE Standard for the XATS 400 JD T4F.

Engine starting capacity at 14°F (-10°C) without the addition of cold start options. Cold start options are available up to -4°F (-20°C).

The 52Gal (192L) fuel tank enables operation for over 8 hours at full load and comes standard with a low fuel shutdown at 5%.



Emissions Treatment

The John Deere 4045HFC04 after treatment consists of a Diesel Oxidization Catalyst (DOC) and Selective Catalytic Reduction (SCR). The SCR utilizes the temperature of the exhaust to passively regenerate during normal use.

Electrical System

The **400 Series JD T4F** is equipped with a 12 Volt negative ground electrical starting system.

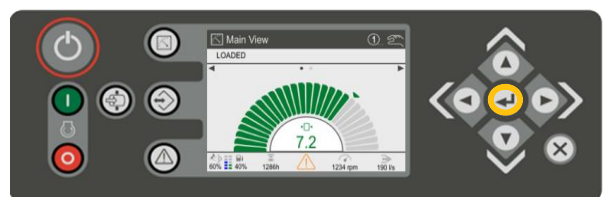
Instrumentation

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

Standard instrument package includes fully diagnostic ECU controller with large 3.5" display. 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, shut downs on various parameters (listed below) and full digital pressure control with PACE.

XC2003 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
 - PACE digital pressure control
- 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
 - Low coolant
- 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
 - Electronic pressure adjustment (**PACE**)
 - Presetting two (high/low) pressure settings



Bodywork

HardHat™: Our HardHat™ version comes standard with dual wall, ¼" 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 **400 Series JD T4F** compressor is available with two undercarriage alternatives, providing utmost flexibility in installation or towing requirements.

- Single axle trailer setup with:
 - DOT approved light package
 - Adjustable height pintle hitch (3" lunette)
 - 5,200 lbs torsional axle
 - 15" Rims w/ ST225/75D15 8 Ply Tires (weight rating 2,540 lbs @ 65psi)
 - Electric trailer brakes as standard (with 7 pin flat blade connector)
 - 750lbs jack leg stand, with wheel
- Support mounted version, on steel frame, less undercarriage is available

Factory Options Available

- Spill Free Containment Frame
- Support Mounted (skid)
- Loose Ball Coupling 2" or 2 5/16"
- OSHA ¾" valves
- Block Heater
- Aftercooler with water separator
- Aftercooler with water separator and DD/PD coalescing filters
- Synthetic Compressor Oil (ParOil S)
- Special color canopy doors
- LoJack (Theft recovery system)
- Telematics

Manufacturing & Environmental Standards

The **400 Series JD T4F** is manufactured following stringent ISO 9001 regulations, and a fully implemented Environmental Management System fulfilling ISO 14001 requirements.

Attention has been given to ensure minimum negative impact to the environment.

The **400 Series JD T4F** meets all current EPA 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, John Deere Engine Manual and Parts book, as well as electronic copies, available upon request.
- Warranty Registration card for John Deere Engine and Atlas Copco Compressor (Units must be registered upon receipt).
- Test certificate for air delivery pressure and capacity, acc. ISO 1217 (Upon request only).
- Certificate for air/oil separator vessel and safety valve approval, ASME (Upon request only).

Warranty Coverage

John Deere Engine: Please refer to the specific Engine OEM warranty terms and conditions.

Atlas Copco Compressor: Warranted 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.