

# XA(T,V)S 1000-1200, V900 Cud WUX

## Portable Compressor



### Standard Scope of Supply

The Atlas Copco V900 is a silenced, two-stage and XATS 1200 and XAVS 1000 are silenced, single-stage, oil-injected screw compressors, powered by liquid-cooled, six-cylinder Cummins diesel engine.

The unit consist of two high efficient compressor elements, diesel engine, cooling, air/oil separation and control systems - all enclosed within a sound dampened power coated steel enclosure.

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

|           |                                                        |
|-----------|--------------------------------------------------------|
| V900      | Two Stage – 805 cfm@363 psi – Cummins Diesel Engine    |
| XATS 1200 | Single Stage – 1102 cfm@150 psi– Cummins Diesel Engine |
| XAVS 1000 | Single Stage – 901 cfm@203 psi – Cummins Diesel Engine |

### Features

- PACE
- Tandem undercarriage
- New concept of oil separator vessel
- Central drain system
- Additional fuel filter as standard
- Toggle switch for dual pressure

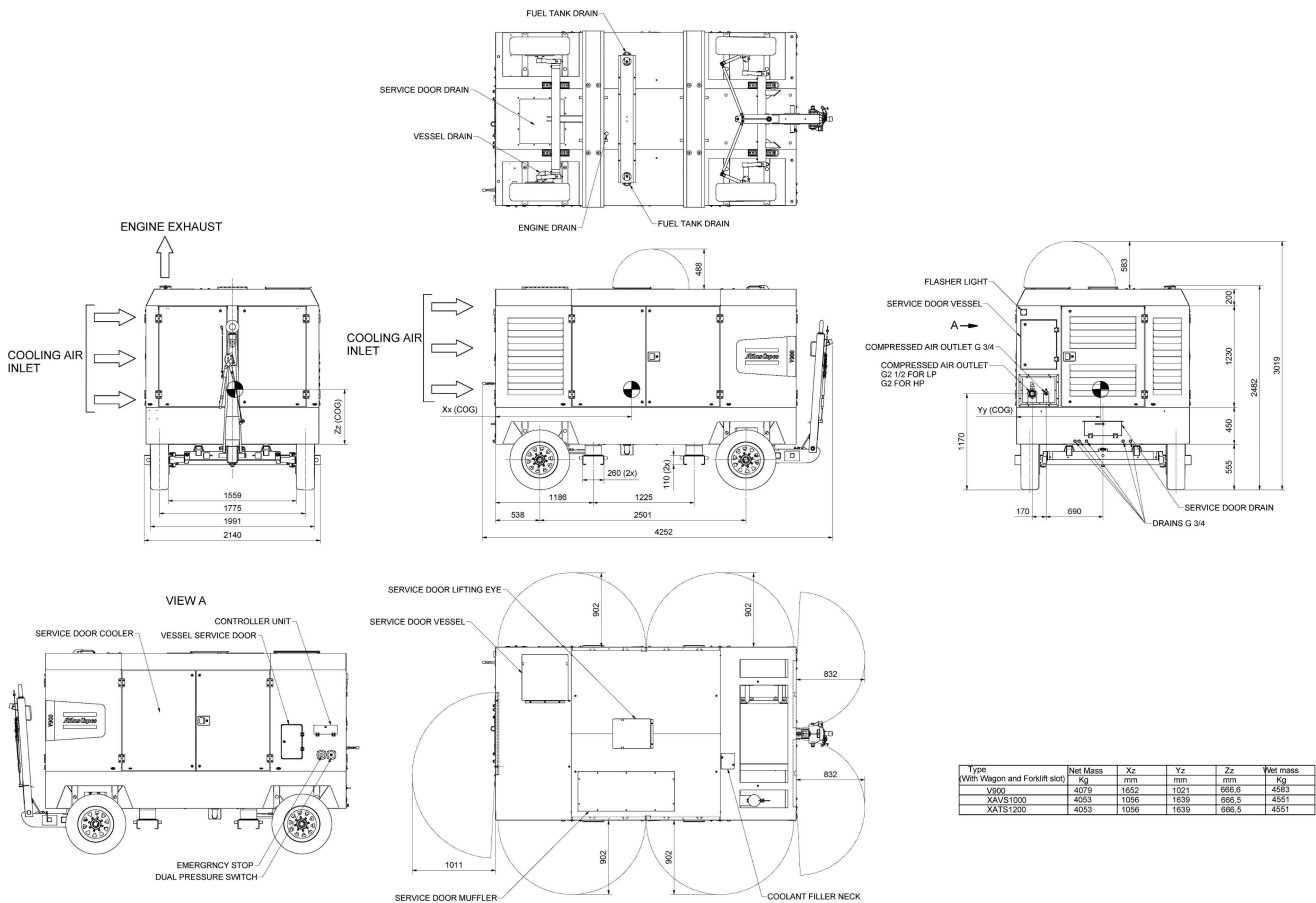
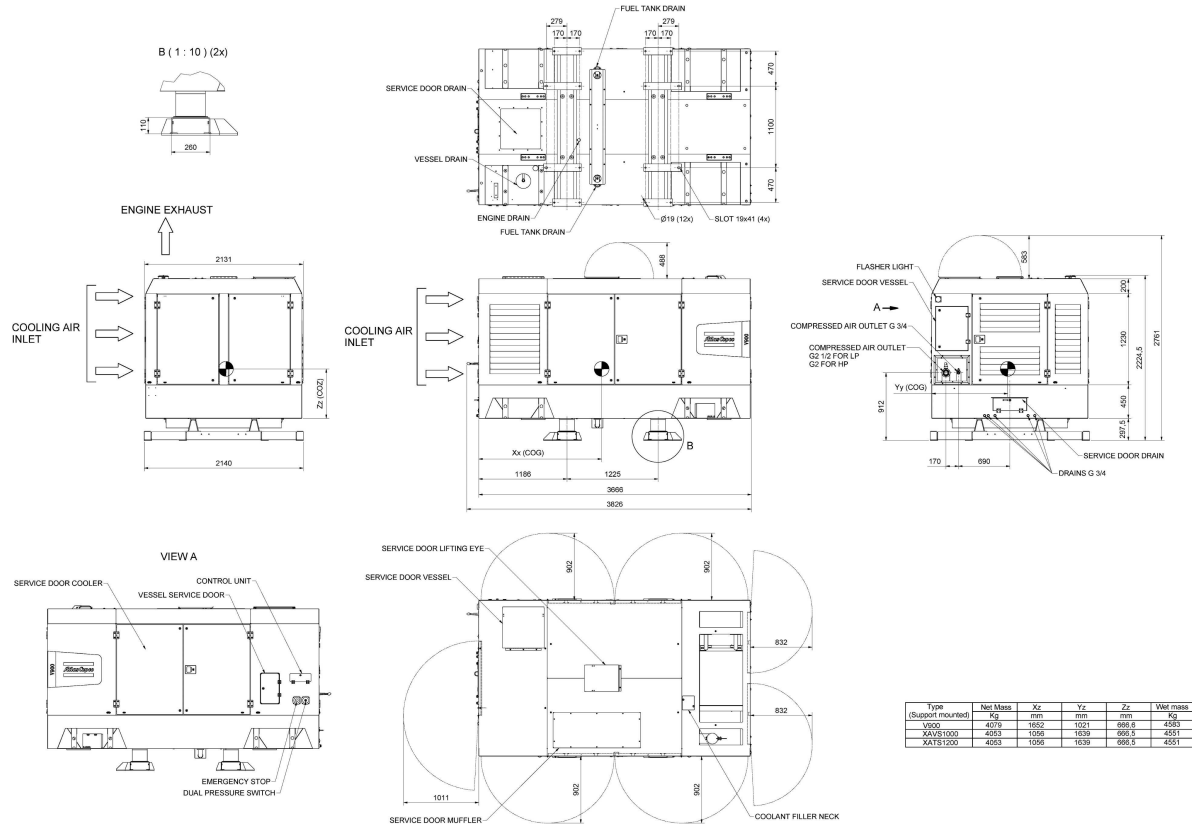
### Benefits

- You control the pressure and flow
- High speed on-road towing, high maneuverability
- Save 1 hour for OSE change
- Easy for maintenance
- Able to work in areas with bad fuel quality
- Preset 2 frequently used pressures

## Technical data basic unit\*

| Model                                                          |       | V900  |       | XATS 1200          |       | XAVS 1000 |       |
|----------------------------------------------------------------|-------|-------|-------|--------------------|-------|-----------|-------|
| Normal effective working pressure                              | bar   | 20    | 25    | 8.6                | 10.3  | 12        | 14    |
| Absolute inlet pressure                                        | bar   | 1     |       | 1                  |       | 1         |       |
| Relative air humidity                                          | %     | 0     |       | 0                  |       | 0         |       |
| Air inlet temperature                                          | °C    | 20    |       | 20                 |       | 20        |       |
| Minimum effective receiver pressure                            | bar   | 15    | 15    | 4                  | 4     | 4         | 4     |
| Maximum effective receiver pressure (Unloaded)                 | bar   | 20    | 25    | 10                 | 11.7  | 13.5      | 15.5  |
| Actual free air delivery                                       | l/s   | 423   | 380   | 578                | 520   | 482       | 425   |
| Fuel consumption                                               |       |       |       |                    |       |           |       |
| at 100% FAD (full load)                                        | kg/h  | 51.02 | 48.44 | 48.60              | 46.02 | 47.90     | 45.28 |
| at 75% FAD                                                     | kg/h  | 42.50 | 44.30 | 41.18              | 43.44 | 41.60     | 42.92 |
| at 50% FAD                                                     | kg/h  | 36.84 | 37.96 | 38.60              | 38.20 | 37.50     | 38.92 |
| at 25% FAD                                                     | kg/h  | 23.88 | 26.88 | 25.64              | 26.96 | 24.97     | 26.24 |
| at unload                                                      | kg/h  | 18.60 | 21.36 | 20.36              | 22.86 | 21.06     | 23.40 |
| Specific fuel consumption at 100% FAD                          | g/m³  | 34.05 | 36.42 | 23.43              | 24.60 | 26.63     | 28.68 |
| Maximum typical oil content of compressed air                  | ppm   | <5    |       | <5                 |       | <5        |       |
| Max. sound pressure level (Lw @ 2000/14/EC)                    | dB(A) | -     |       | -                  |       | -         |       |
| Max. sound pressure level (Lp @ ISO 2151)                      | dB(A) | -     |       | -                  |       | -         |       |
| Compressed air temperature at outlet valve without aftercooler | °C    | 100   |       | 90                 |       | 90        |       |
| Max. ambient temperature at sea level                          | °C    | 50    |       | 50                 |       | 50        |       |
| Max. ambient temperature at sea level with aftercooler         | °C    | 45    |       | 45                 |       | 45        |       |
| Min. starting temperature with cold weather equipment          | °C    | -25   |       | -25                |       | -25       |       |
| Min. starting temperature without cold weather equipment       | °C    | -10   |       | -10                |       | -10       |       |
| Number of compression stages                                   |       | 2     |       | 1                  |       | 1         |       |
| <b>Engine</b>                                                  |       |       |       | Cummins Stage III  |       |           |       |
| Type                                                           |       |       |       | QSL8.9-C360-30     |       |           |       |
| Coolant                                                        |       |       |       | Coolant            |       |           |       |
| Number of cylinders                                            |       |       |       | 6                  |       |           |       |
| Bore                                                           | mm    |       |       | 114                |       |           |       |
| Stroke                                                         | mm    |       |       | 145                |       |           |       |
| Swept volume                                                   | l     |       |       | 8.9                |       |           |       |
| Engine power at normal shaft speed @ SAE J 1995                | kW    |       |       | 264                |       |           |       |
| Full Load                                                      | rpm   |       |       | 1700               |       |           |       |
| Unload                                                         | rpm   |       |       | 1200               |       |           |       |
| Capacity of oil sump                                           | l     |       |       | 21                 |       |           |       |
| Capacity of cooling system                                     | l     |       |       | 58                 |       |           |       |
| Capacity of compressor oil system                              | l     |       |       | 89                 |       |           |       |
| Net capacity of air receiver                                   | l     |       |       | 143                |       |           |       |
| Air volume at inlet grating (approx.)                          | m³/s  |       |       | 13.1               |       |           |       |
| Capacity of standard fuel tanks                                | l     |       |       | 420                |       |           |       |
| Dimensions wagon (L x W x H)                                   | mm    |       |       | 4252 x 2100 x 2500 |       |           |       |
| Dimensions support (L x W x H)                                 | mm    |       |       | 3830 x 2100 x 2250 |       |           |       |
| Dimensions Skid (L x W x H)                                    | mm    |       |       | 3650 x 2100 x 2360 |       |           |       |
| Dry weight wagon                                               | kg    |       |       | 4079               |       |           |       |
| Wet weight wagon                                               | kg    |       |       | 4583               |       |           |       |
| Dry weight support                                             | kg    |       |       | 3850               |       |           |       |
| Wet weight support                                             | kg    |       |       | 4355               |       |           |       |

## Dimensions



## 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.

### 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 sealed high-pressure safety relief valve, minimum pressure valve, automatic blow-down valve, and pressure regulator.

### Cooling System

The engine is provided with a liquid-cooler and intercooler and the compressor is provided with an oil cooler. The cooling system is suitably designed for continuous operation in ambient conditions up to 50°C, with all canopy doors closed.

### Compressor Regulating System

The compressor regulating system consist of air filters, an air receiver/oil separator, compressor element, an inlet valve assembly with inlet valve and a blow down valve; all controlled by an electronic regulating system.

The variable regulating system gives full control of compressor pressure and flow. It controls vessel pressure and outlet flow by measuring air pressure and air temperature at several points and controls the air inlet valve, engine speed and blow off valve corresponding the values measured.

Economic fuel 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 G2 and 1 x G<sup>3</sup>/<sub>4</sub> outlet valves.

## Engine

### Cummins Diesel Engine

The compressor is driven by a liquid-cooled, six-cylinder Cummins QSL8.9-C360-30 diesel engine. The engine's power is transmitted to the compressor element through a heavy-duty coupling.

## Electrical System

The V900, XATS 1200, and XAVS 1000 are equipped with a 24-volt negative ground electrical system.

### Instrumentation - XC2003

The XC2003 control panel is located on the side of the compressor canopy.

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
- 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
- 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
- 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)



## 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 goes 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

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.

## Manufacturing & Environmental Standards

The V900, XATS 1200, and XAVS 1000 are 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.

## Supplied Documentation

The unit is delivered with the following documents and certificates:

- Spare parts list for compressor.
- Instruction manual for both compressor and engine.
- Machine test certificate
- Vessel certificate.

## Warranty Coverage

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- Please refer to product presentation for warranty info.
- Extended Warranty Programs are available; please contact your local sales representative for more info.

\* **Note:** Due to continuous improvements in the products, the technical specifications are subject to change without prior notice.