CPS 750-200

Portable compressor

People. Passion. Performance.

Chicago Pneumatic

Standard Scope of Supply

The Chicago Pneumatic CPS 750-200 is a single-stage, oil-injected, rotary screw type air compressors, powered by a liquid-cooled, six-cylinder Cummins diesel engine.

The unit hosts the new generation C142 air end combined with a Cummins B6.7 diesel engine. 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 Compressor is the MultiPressure functionality coupled with the intuitive XC2003 controller. This pioneering technology enables electronic pressure regulation - that maintains the pressure within 4 psi of the set pressure. Ensuring you a better match of the air flow and pressure to your application needs.

Main data

Main data	Units	CPS 750-200			
Minimum working pressure	psi	78			
Maximum effective working pressure	psi	205			
Normal effective working pressure	psi	100	150	175	200
Actual free air delivery	cfm	785	785	735	690
Engine speed	rpm	2000	2000	1875	1750
Fuel consumption (at pressure setting 150 psi)					
at 100% FAD (full load)	gal/h	11			
at 75% FAD	gal/h	8.2			
at 50% FAD	gal/h	6.3			
at 25% FAD	gal/h	5.3			
Maximum typical oil content of compressed air	PPM	5			
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	72			
Max. ambient temperature at sea level	°F	113			
Min. starting temperature with cold weather equipment	°F	-13			
DEF consumption (% of fuel consumption)	%	10			
Number of compression stages		1			

Engine	Units	Cummins B6.7
Emission stage		T4F
Coolant		PARCOOL EG
Number of cylinders		6
Bore	mm	107
Stroke	mm	124
Swept volume	l	6.7
Engine power at normal shaft speed @ SAE J1995	hp	235
Full Load	rpm	2000
Unload	rpm	1100
Capacity of oil sump: - Initial fill	gal	5
Capacity of oil sump: - Refill (max)	gal	4.7
Capacity of cooling system	gal	11.9
Capacity of compressor oil system	gal	14.9
Net capacity of air receiver	gal	24
Air volume at inlet grating (approx.)	Cf/s	261
Capacity of standard fuel tanks	gal	71.3
Capacity of DEF tank	gal	15.8
Safety valve - minimum opening pressure	psi	287

Features	Benefits
• Multi Pressure	• The versatility of the Xc2003 controller gives you the flexibility to tune your machine to a wider range of applications. This increases potential utilization improving the ROI. The MP functionality closely maintains the desired operating pressure and helps maximize the output while decreasing the total fuel consumption.
• Designed with environmental protection in mind	• The unit comes with a Spillage Free frame as Standard with 110% fluid containment and T4F emission compliant engine, this makes the compressor suitable for use in all areas of the US.
• Compact, sound attenuated, corrosion resistant enclosure	• For EPA compliance the unit is enclosed in a sound attenuated Zincor coated steel enclosure. This coating acts as a protective barrier against corrosion, providing extended lifespan to the underlying metal. 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, less than 8000 lbs
• · Battery Cut off switch	• Extends the life of the battery
• · 3-layer painting	• High residual value with C3 painting standard.

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 decreases, and fuel consumption goes down.

The **CPS 750-200** compressors utilize a Chicago Pneumatic C142 element that is driven by a Cummins 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. New patented design reduces service time.

Designed for a higher maximum working pressure, the separator is equipped with a high pressure sealed and certified safety relief valve. The new improved simple vessel design allows removing the Oil Separator in less than 10 minutes without having to touch the scavenge line

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 109°F with Aftercooler, with canopy doors closed.

Compressor Regulating System

The compressor is provided with a electronic regulating system (MP) and a blow-off valve which is integrated in the unloader assembly. The air receiver pressure is maintained between the preselected working pressure and the corresponding unloading pressure.

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

Working pressure can be changed easily on the XC 2003 controller with the electronic pressure controls with the Multi pressure feature.

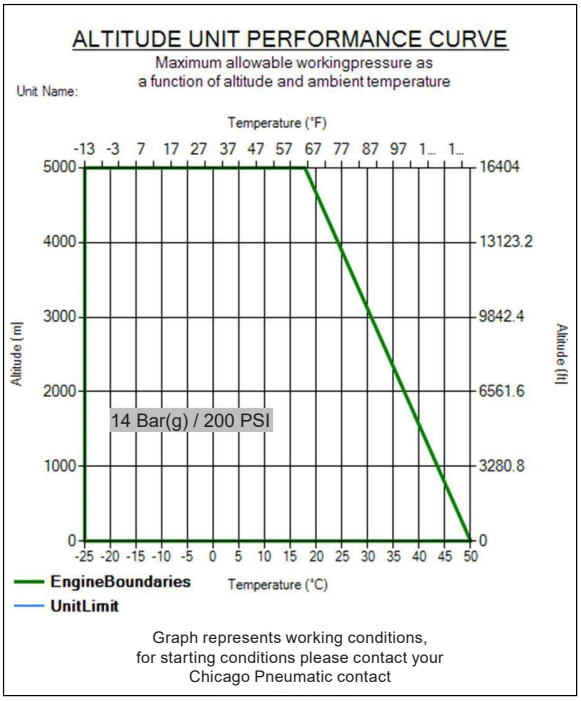
Engine

Cummins

Cummins B6.7, six-cylinder, liquid-cooled diesel engine provides ample power to power the compressor continuously at fullload.

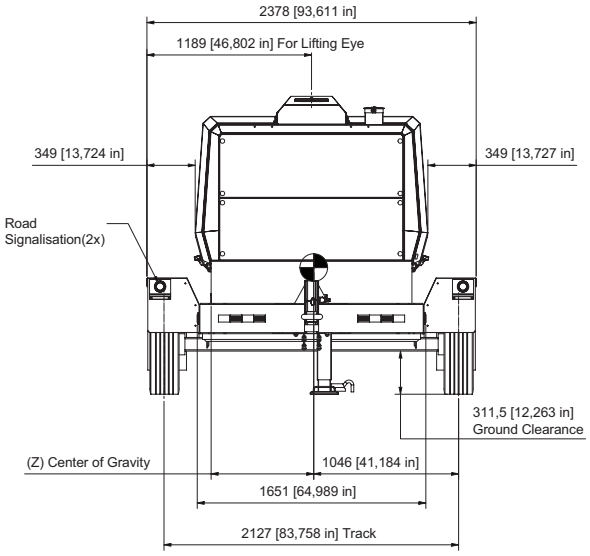
Cold start standard for safe operations as low as -13°F.

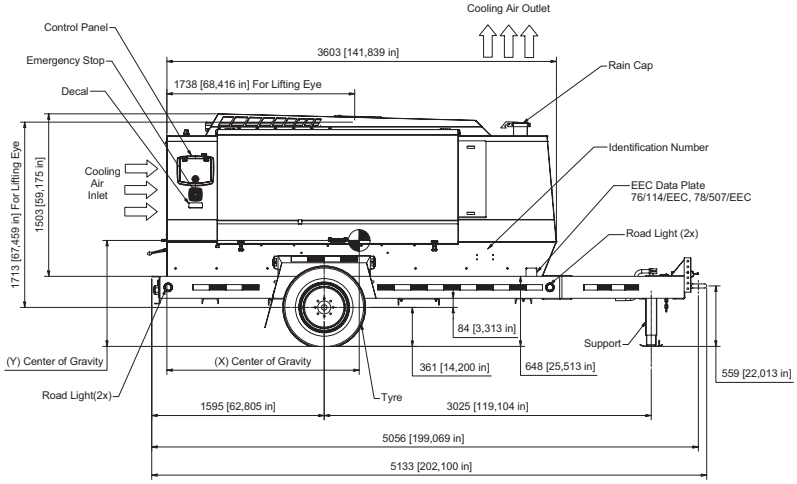
The 71.3 gal fuel tank is sufficiently sized to allow autonomy of 6h.

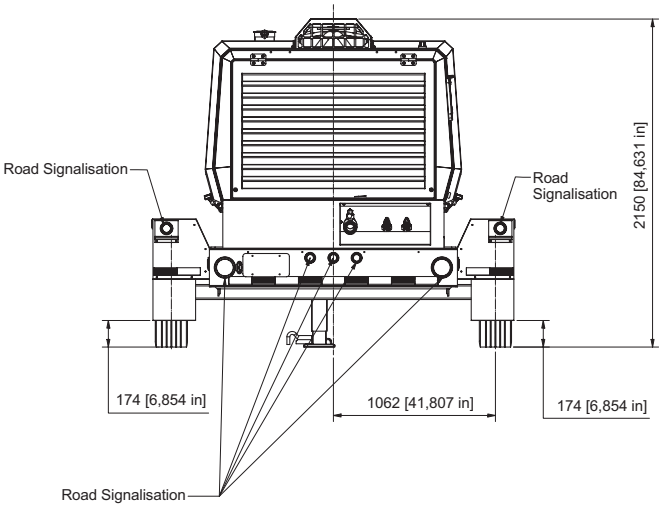


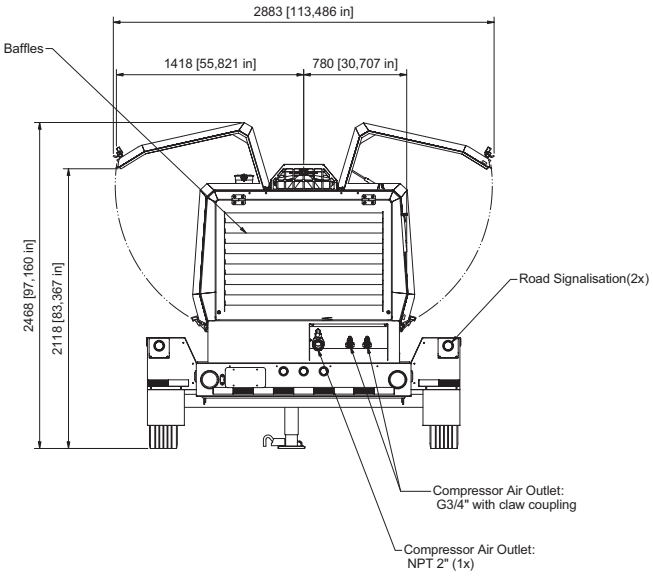
Dimensions

See dimension drawing









Weight and Dimensions

(Excluding Fuel)	Wet (including fuel)
7174 lbs.	7810 lbs.

Length	Width	Height
202,1 in [5133 mm]	93,6 in [2378 mm]	84,6 in [2150 mm]

Electrical System

The **CPS 750-200** are equipped with a 24 Volt negative ground electrical starting system.

Instrumentation

The controller is located on the rear corner, of the compressor canopy with easy access.

The intuitive Chicago Pneumatic 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
- 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)

Bodywork

The compressor's frame comes standard with ASTM A653 Zincor steel platework with 2-layer powder coat paint finish providing excellent corrosion protection. The canopy is sound attenuated to meet the most current legal noise requirements. Gull wing canopy offers easy service access to all components from both sides of the machine.

Undercarriage

The **CPS 750-200** compressors are available with an undercarriage alternative, providing utmost flexibility in installation or towing requirements.

- Single axle trailer setup with:
  - DOT trailer with A frame towbar
  - Electric brakes with electric breakaway connection and battery
  - Heavy Duty torsion axle
  - Jack Stand
  - Tie-down points
  - Lifting structure

Supplied Documentation

The unit is delivered with documentation regarding:

- Hard copies of the Chicago Pneumatic Operators Safety and Instruction Manual, as well as electronic copies available on request.
- Certificate for air/oil separator vessel and safety valve approval, ASME (Upon request only).

Warranty Coverage

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

Note: End users are authorized to complete the required preventative maintenance utilizing genuine parts and lubricants purchased from an authorized dealer. Service maintenance recorded into Machines Online are to be completed by the authorized dealer where products purchased or another authorized dealer after providing proof of purchase for genuine parts and fluids utilized.

Note: Equipment/machinery/components/Accessories/parts/items sold by SELLER but not manufactured by SELLER or an affiliate (including but not limited to a Product's engine, alternator, tires, battery, carrier, electrical equipment, and hydraulic transmission, if applicable) are not warranted by SELLER and shall carry whatever warranty (if any) which the manufacturer has conveyed to SELLER to the extent it can be passed on to the purchaser.

For more information, please contact your CP partner:

Use only Chicago Pneumatic parts. Any damage or malfunction caused by the use of unauthorized parts is not covered by Warranty or Product Liability.