



Standard Scope of Supply

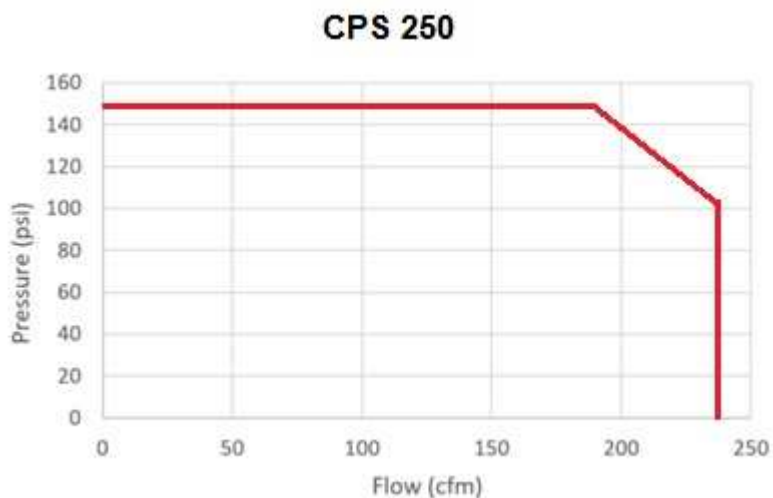
The Chicago Pneumatic **CPS 250** is a single-stage, oil-injected, rotary screw type air compressor, powered by a liquid-cooled, Four-cylinder turbocharged Kubota diesel engine.

The unit hosts the new generation C90 Screw element in its air end combined with a Kubota made diesel engine model V2403-CR-T-E4B 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		CPS 250
Minimum effective receiver pressure	psig	72.51
Maximum effective receiver pressure (Unloaded)	psig	150
Actual free air delivery		
at pressure setting 100 psig	cfm	238
at pressure setting 125 psig	cfm	214
at pressure setting 150 psig	cfm	189
Fuel consumption		
at 100% FAD (full load)	US gal/hr	3.43
at 75% FAD	US gal/hr	2.34
at 50% FAD	US gal/hr	1.95
at 25% FAD	US gal/hr	1.70
Specific fuel consumption at 100% FAD	g/m ³	26.4
Maximum typical oil content of compressed air	mg/m ³	5
Max. sound pressure level (Lw @ 2000/14/EC)	dB(A)	98
Max. sound pressure level (Lp @ ISO 2151)	dB(A)	70
Compressed air temperature at outlet valve without aftercooler	°F (°C)	177 (80)
Max. ambient temperature at sea level with aftercooler	°F (°C)	113 (45)
Min. starting temperature with cold weather equipment	°F (°C)	-4 (-20)
Min. starting temperature without cold weather equipment	°F (°C)	14 (-10)
Engine		Kubota V2403-CR-T-E4B
Emission stage		Tier 4F
Number of compression stages		1
Coolant		GENCool EG
Number of cylinders		4
Bore	mm	87
Stroke	mm	102.4
Swept volume	l	2.4
Engine power at normal shaft speed @ ISO 9249G	hp	65
Full Load	rpm	2700
Unload	rpm	1800
Capacity of oil sump: - Initial fill	US gal	2.5
Capacity of oil sump: - Refill (max)	US gal	2.3
Capacity of cooling system	US gal	3.03
Capacity of compressor oil system	US gal	3
Net capacity of air receiver	US gal	8
Air volume at inlet grating (approx.)	Cfm/min	5720
Capacity of standard fuel tanks	US gal (liter)	23 (87)
Safety valve - minimum opening pressure	psig	190

Features

Benefits

- PACE
- Designed with environmental protection in mind
- Compact, sound attenuated, corrosion resistant enclosure
- Battery Cut off switch
- 3-layer painting
- 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.
- The unit comes with a Spillage Free frame as Standard with 110% fluid containment and Tier 4 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 U-Flex canopy doors allows superior access and makes maintenance easy.
Compact and maneuverable, saving valuable space on your job site, and during transportation, less than 750 Kg
- Prevents damage to the engine by cutting of the power from the batteries
- High residual value

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 CPS 250 compressor utilizes an Chicago Pneumatic C90 element and is driven from the diesel engine. 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 ASME/CRN approved and stamped accordingly.

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 114°F (45°C) and 110°F (40°C) 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 bar. 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.

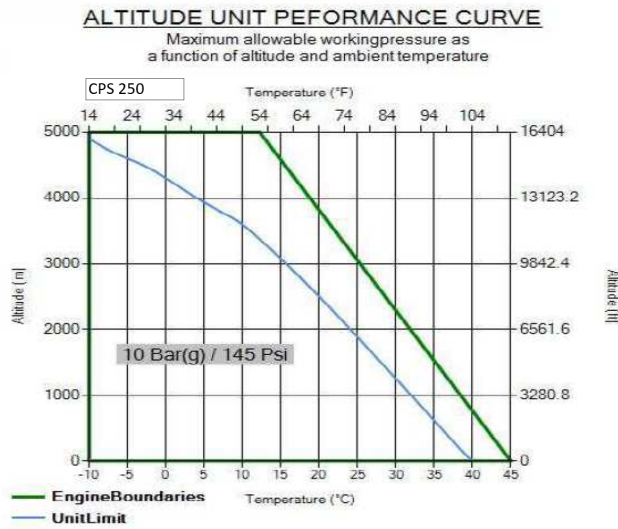
Engine

Kubota

Kubota V2403 CR-T-E4B, 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 -4°F (-20°C).

The 23 Gal (87 L) fuel tank is sufficiently sized to allow full shift autonomy (8h).



Graph represents working conditions, for starting conditions please contact your Chicago Pneumatic contact

Electrical System

The **CPS 250** is 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.

Standard instrument package includes an operating pressure gauge, and fully diagnostic ECU controller with large display. 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
 - 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
 - DPF Soot level
 - Engine RPM
- Warnings and Shutdowns
 - High temperature engine coolant
 - High temperature compressor oil
 - Engine oil pressure
 - Low fuel level
 - High DPF soot 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
 - Manual regeneration of DPF
 - Reset service timers
 - Diagnostics for engine ECU
 - Language settings
 - Unit of measure changes



Bodywork

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

Undercarriage

The **CPS 250** 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 Fixed towbar
 - 205R14C Wheels for trailer use
 - Hydraulic Trailer brakes
 - Heavy Duty torsion axle
 - Jockey wheel
 - Single point lifting structure
 - Pintle eye

Supplied Documentation

The unit is delivered with documentation regarding:

- Hard copies of the Chicago Pneumatic Operators Safety and Instruction Manual, Chicago Pneumatic Parts Book, Kubota Engine Manual and Parts book, as well as electronic copies available on request.
- Warranty Registration card for engine and Chicago Pneumatic Compressor (Units must be registered upon receipt).
- Certificate for air/oil separator vessel and safety valve approval (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.