



Standard Scope of Supply

The CPS 500E have been designed to offer true versatility through compact dimensions and useful and intuitive electronic controller. Providing exceptional reliability and efficiency, these units are designed to operate in a wide range of applications in the harshest of work environments.

Whether being used for running pneumatic breakers, general construction work, sandblasting or for rental are all within the capability of these units. Wide choices of options are available which to build these units specific from the simplest to most complex specialized application.

Despite the overall compactness these compressors still provide exceptional access to all the service and maintenance points. The compressor is driven by the latest high efficient IE3motor ensuring low operational costs and high resale value.

Above all Chicago Pneumatic compressors are build for reliability, easily maintained, CE and CSA/UL compliant, providing many years of trouble free performance

Available models

CPS 500E

Single stage – 500CFM @10 bar

Features

- Controls grouped on one panel as standard
- Designed with environmental protection in mind
- Compact, sound attenuated, corrosion resistant enclosure
- 2-layer painting
- Long service intervals

Benefits

- Easy to monitor and control.
- The unit comes with a robust frame on a skid based in CPDG platform, CE and CSA/UL compliant equipment
- Unit is enclosed in a sound attenuated Zincor steel enclosure
- High residual value
- Low operating costs

Main data

| Model | | CPS 500E | CPS 500E |
|--|-----------|----------------|----------------|
| Frequency | Hz | 60 | 50 |
| Minimum effective receiver pressure | bar | 4 | 4 |
| | PSI | 58 | 58 |
| Maximum effective receiver pressure | bar | 10 | 10 |
| | PSI | 150 | 150 |
| Maximum ambient temperature | °C (°F) | 50 (122) | 50 (122) |
| Minimum ambient temperature | °C (°F) | -10 (14) | -10 (14) |
| Motor shaft speed (rpm) | rpm | 3570 | 2976 |
| Free air delivery | | | |
| Effective working pressure (bar(g)) 10 | CFM (l/s) | 500 (237) | 500 (237) |
| Total electrical power input (kW) | | | |
| Effective working pressure (bar(g)) 10 | kW (HP) | 108 (144) | 103 (138) |
| Total electrical power input at unload | kW (HP) | 22 (30) | 24 (32) |
| Compressed air temperature at outlet valve | °C | Amb+25 +/- 5°C | Amb+25 +/- 5°C |
| Fan(s) shaft power | kW (HP) | 3,61 (4,8) | 3,61 (4,8) |
| Fan(s) electrical power input | kW (HP) | 4,2 (5,6) | 4,1 (5,6) |

DESIGN DATA

| | | | |
|-----------------------------|---------|-------------------|-------------------|
| Drive motor installed power | kW | 90 kW (125 HP-cv) | 90 kW (125 HP-cv) |
| Drive motor name | | Motor 3Ph W22 WEG | Motor 3Ph W22 WEG |
| Housing | | 250S/M | 250S/M-02 |
| Motor shaft speed | rpm | 3570 | 2976 |
| Frequency | | 60 Hz | 50 Hz |
| Voltage | | 380/440 Volts | 400 Volts |
| Current | A | 190/150 | 179 |
| Service Factor | | 1,15 | 1,17 |
| Ip/In | | 9,6 | 9,8 |
| I.P. | | IPW55 | IPW55 |
| Fan motor name | | AT112S-4 | AT112S-4 |
| Housing | | 112M | 112M |
| Motor shaft speed | rpm | 1740 | 1460 |
| Frequency | | 60 Hz | 50 Hz |
| Voltage | | 220/380/440V | 400V |
| Current | A | 14,2/8,24/7,11 | 8,14 |
| Service Factor | | 1,15 | 1,17 |
| Ip/In | | 7 | 8,2 |
| I.P. | | IP55 | IP55 |
| Shipping mass (kg) | | | |
| CPS 500E 50 Hz wet | Kg (lb) | - | 1807 (3984) |
| CPS 500E 50 Hz net | Kg (lb) | - | 1770 (3902) |
| CPS 500E 60 Hz wet | Kg (lb) | 1771 (3904) | - |
| CPS 500E 60 Hz net | Kg (lb) | 1736 (3827) | - |

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.

Air/Oil Separator

Air and oil separation is achieved through a centrifugal oil separator combined with a filter element. Vessel is ASME 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

Compressor Regulating System

The compressor regulating system consists of air filter, air receiver/oil separator, compressor element, unloader assembly with unloader valve, blow down valve and loading valve.

Discharge outlets

Compressed air is available from 1 x G1.1/2 + 3 x 3/4" outlet.

Motor

WEG

High efficiency CE and CSA/UL compliant motor provides ample power to operate the compressor continuously at full load. Motor output at rated speed is 90kW for CPS 500E.

The Motor has the capability to start the compressor to 0°C without the addition of a cold start aid.

Electrical System

Instrumentation

The instrument control panel is located on the side of the compressor closed with a canopy's door for safety and protection.

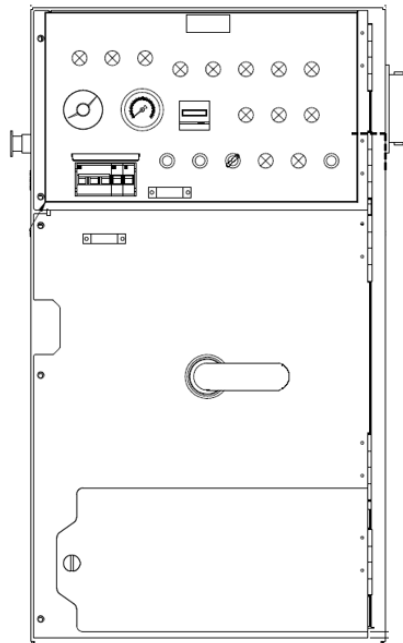
Standard instrument package includes an hour meter, operating pressure gauge, start button, load and unload switch and diagnostic shutdown indicator lamps.

An electric circuit breaker switch avoids unauthorized starting of the compressor.

Safety devices

The compressor is standard equipped with safety devices for the compressor and the motor. The unit will be completely turned off should:

- Compressor oil temperature rise too high
- Wrong phase sequence connection
- Short circuit
- Motor overload
- High air temperature



Bodywork

The compressor is delivered as standard with a zincor coated steel canopy with powder coat paint finish providing excellent corrosion protection. The canopy is available in either un-silenced or fully sound attenuated versions meeting the most current legal noise requirements. The hood concept door provides complete service access to all components.

The standard colour combination is Chicago Pneumatic red and RAL 9011 black, however, other colour combinations are also available on demand.

Undercarriage

The **CPS 500E** compressor is available with an undercarriage alternative, providing utmost flexibility in installation or towing requirements.

- Skid mounted;
- 2-wheel style fixed height undercarriage with brakes.

Supplied Documentation

The unit is delivered with documentation regarding:

- Hard copies of the Chicago Pneumatic Operators Safety and Instruction Manual, Chicago Pneumatic Parts Book, motor Manual and Parts book, as well as electronic copies available on request.
- Warranty Registration card for Motor 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.