

# Screw Compressors

90kW to 355kW Fixed & Variable Speed Drive



**AIRPLUS**  
Industrial

[www.airplusindustrial.ca](http://www.airplusindustrial.ca) 604-882-8886



People.  
Passion.  
Performance.



**Chicago  
Pneumatic**

# Define your needs, our broad offer does the rest



For Chicago Pneumatic, it isn't just about products. We value our end-user's performance and do our ultimate best to make it a pleasant experience to work with us while providing reliable products with a passion.

**Broad product portfolio of robust compressors and tools**

**Decades of experience and innovation**

**100% committed to customer satisfaction**

This is how we keep your business productive at all times, meeting the needs of professionals in every industry around the globe.  
**People. Passion. Performance.**



The reliability of the CPE, CPF and CPVS compressors will guarantee a continuous supply of compressed air thanks to a strict selection and qualification process of each component we use. As a result, trouble-free operation and long lifetime are guaranteed.

The CPE, CPF and CPVS help our customers achieve higher pay-back & low life cycle cost. State of the art screw element, intelligent controller, frequency drive technology are some features that will Assure your return on Investment.

Furthermore, we have developed a wide range of features and options to meet the needs of the most demanding industries. Your efficiency and productivity, our bottom line.



Scope of Supply	CPE		CPF	
	FS	VSD	FS	VSD
IE 2 Motor (IP55)	S	S	S	S
4000 Hour Oil	S	S	S	S
8000 Hour Oil	O	O	O	O
ES 4000T Controller	S	S	S	S
Witness Test Certificate	O	O	O	O

O - Option, S - Standard  
HV: 6kV/10kV (IP23/54). Machines are available as Special order  
For more product features, please contact local sales team







Compressor Station Layout

## “Maximized productivity”

### GEARBOX DRIVE



Noise level		Silent in its class: 77-80 dB(A)
FAD		14.49 -60.5 m³/min 512-2135 cfm
Power		120 -480hp 90 - 355kW
Pressure		8-10 bar 116 -145 psi





### User benefits

- New design for highest reliability
- High performance models ensure lowest LCC
- Group screw element to ensure maximum uptime
- Unmatched efficiency
- Air Cooled & Water Cooled variants
- Many options to meet demanding Industrial Requirements

## “Top value through energy efficiency”

### INVERTER DRIVEN



Noise level		Silent in its class: 77-80 dB(A)
FAD		14.23- 39.3 m³/min 502-1389 cfm
Power		120 -480hp 90 - 355kW
Pressure		8 bar (15- 50Hz) 10 bar (15-50Hz)

### User benefits

- Reduce Energy use by 30%
- 25-30% Maximum Turn Down
- More savings in every application
- Fast ROI with maximum pay back
- Lowest LCC (Life Cycle Cost)
- Reliable ABB Inverter with good aftermarket



# Gearbox Driven Compressors CPE 120-180



## Professional Solutions for Maximum Productivity

The CPE range is a unique design by our engineers after careful consideration of voice of customer & result of continuous improvement to ensure reliable compressed air in the demanding applications of modern industries.

- High efficiency total package
- Maximize productivity
- Keep your running costs low
- Carefully selected components
- Optimum reliability
- Ensure trouble free operation
- Simple installation and maintenance

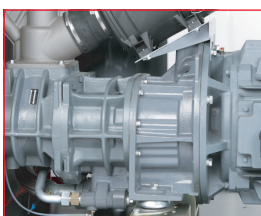


**CPE 150**



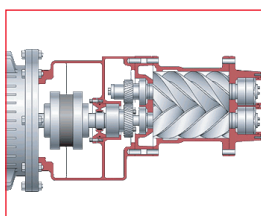
### Robust and powerful compressor

1. Oil separator
2. Compression element
3. Oil filters
4. Motor
5. Cooling fan
6. Airfilter



#### State of the art screw element

High air delivery and efficient operation.



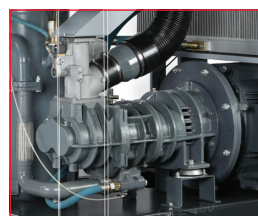
#### High efficiency drive system

Sureflex coupling: reliable, efficient, compact and quiet.



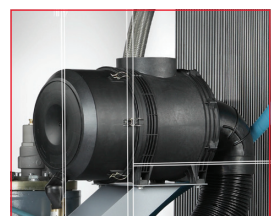
#### Energy saving controller

Advance and friendly use controller in large color screen. Trending chart, reliable and durable monitoring the air compressor's performance.



#### Easy maintenance








Quick and easy access to all components.



#### Efficient air filtration

Protect internal components from contamination.








## Technical Table (Air Cooled)

									
Model	Working Pressure	Motor Power		FAD		Voltage	Noise Level	Dimensions	Weight
	bar	kW	HP	l/s	cfm	V	dB	L x W x H(mm)	kg
CPE 120	8	90	120	271	574	380/400	76	2259 x 1060 x 1594	1570
	10	90	120	242	512	380/400	76	2259 x 1060 x 1594	1570
CPE 150	8	110	150	308	653	380/400	78	2255 x 1230 x 1600	1870
	10	110	150	265	562	380/400	78	2255 x 1230 x 1600	1870
CPE 180	8	132	180	374	793	380/400	79	2255 x 1230 x 1600	1920
	10	132	180	325	689	380/400	79	2255 x 1230 x 1600	1920

\* Variants - SQL , ASME+MOM(AUA/SGP), Air/Water Cooled

\* Variants - ML, AS1210, MOM, Air & Water Cooled

## Technical Table (Water Cooled)

									
Model	Working Pressure	Motor Power		FAD		Voltage	Noise Level	Dimensions	Weight
	bar	kW	HP	l/s	cfm	V	dB	L x W x H(mm)	kg
CPE 120	8	90	120	271	574	380/400	71	2210 x 1060 x 1594	1620
	10	90	120	242	512	380/400	71	2210 x 1060 x 1594	1620
CPE 150	8	110	150	308	653	380/400	78	2255 x 1230 x 1600	2400
	10	110	150	265	562	380/400	78	2255 x 1230 x 1600	2400
CPE 180	8	132	180	374	793	380/400	79	2255 x 1230 x 1600	2550
	10	132	180	325	689	380/400	79	2255 x 1230 x 1600	2550

Notes: Variants - SQL , ASME+MOM(AUA/SGP), Air/Water Cooled

IE3 Motor (IP55) FS Only

HV - 6kV/10kV (IP23)

315kW-355kW

# Gearbox Driven Compressors CPF 150-480



## Optimized Efficiency for highest productivity

A brand new design architecture of CPF range screw air compressor brings customer an excellent application feeling, ensuring to improve your production efficiency and reduce the life cycle operating costs.

- Design for maximum 46 degrees ambient temperature
- Industry leading efficiency class
- Best in class performance models
- High efficiency air and oil flow systems
- Strict selection and verification of high quality components
- Ultimate reliability and stable operation assurance
- Minimum footprint
- Easy access to components & minimum service cost
- Outstanding scope of options to match industry requirements



CPF 220



## Robust and powerful compressor

1. Airfilters
2. Motor
3. Gear driven transmission
4. Water separator drain
5. Air/oil coolers
6. Oil separator vessel
7. Cooling fan



### State-of-the-art screw element

State-of-the-art screw element, the latest generation of asymmetric rotor profile, reliable designed and production methods bring you maximum compressor package efficiency.



### Reliable unloading/loading

Reliable unloading/loading regulation, simple and optimized for lower pressure drop bring high energy saving.



### Energy saving controller

Advanced and friendly use controller in large color screen. Trending chart, reliable and durable monitoring the air compressor's performance.



### Customer mindset water separator








The customer care mindset of water separator ensure the dry compressor air supply to customer air net. Considerable design of manual and automatic drain as standard available.



### Easy maintenance








Thoughtfully designed easy access for maintenance.

## Technical Table (Air Cooled)

Model									
	Pressure	Motor Power		FAD		Voltage	Noise Level	Dimensions	Weight
	bar	kW	HP	l/s	cfm	V	dB	L x W x H(mm)	kg
CPF 150	8	110	150	335	710	380/400	77	2845 x 1750 x 1930	3580
	10	110	150	297	630	380/400	77	2845 x 1750 x 1930	3580
CPF 180	8	132	180	396	840	380/400	77	2845 x 1750 x 1930	3580
	10	132	180	350	742	380/400	77	2845 x 1750 x 1930	3580
CPF 220	8	160	220	450	954	380/400	78	2845 x 1750 x 1930	3630
	10	160	220	419	888	380/400	78	2845 x 1750 x 1930	3630
CPF 270	8	200	270	546	1158	380/400	79	3500 x 1750 x 1985	4160
	10	200	270	503	1066	380/400	79	3500 x 1750 x 1985	4160
CPF 271	8	200	270	612	1297	380/400	77	4800 x 2150 x 2250	5325
	10	200	270	555	1177	380/400	77	4800 x 2150 x 2250	5325
CPF 340	8	250	340	646	1370	380/400	80	3500 x 1750 x 1985	4390
	10	250	340	610	1293	380/400	80	3500 x 1750 x 1985	4390
CPF 341	8	250	340	705	1495	380/400	77	4800 x 2150 x 2250	5895
	10	250	340	656	1391	380/400	77	4800 x 2150 x 2250	5895
CPF 450	8	315	450	871	1847	380/400	78	5100 x 2150 x 2250	6350
	10	315	450	804	1704	380/400	78	5100 x 2150 x 2250	6350
CPF 480	8	355	480	1007	2135	380/400	79	5100 x 2150 x 2250	6380
	10	355	480	890	1887	380/400	79	5100 x 2150 x 2250	6380

\* Variants - SQL, ASME+MOM(AUA/SGP), Air/Water Cooled

## Technical Table (Water Cooled)

Model									
	Pressure	Motor Power		FAD		Voltage	Noise Level	Dimensions	Weight
	bar	kW	HP	l/s	cfm	V	dB	L x W x H(mm)	kg
CPF 150	8	110	150	335	710	380/400	77	2845 x 1750 x 1930	3140
	10	110	150	297	630	380/400	77	2845 x 1750 x 1930	3140
CPF 180	8	132	180	396	840	380/400	77	2845 x 1750 x 1930	3200
	10	132	180	350	742	380/400	77	2845 x 1750 x 1930	3200
CPF 220	8	160	220	450	954	380/400	78	2845 x 1750 x 1930	3250
	10	160	220	419	888	380/400	78	2845 x 1750 x 1930	3250
CPF 270	8	200	270	546	1158	380/400	79	3500 x 1750 x 1985	3640
	10	200	270	503	1066	380/400	79	3500 x 1750 x 1985	3640
CPF 271	8	200	270	612	1297	380/400	77	4800 x 2150 x 2250	4890
	10	200	270	555	1177	380/400	77	4800 x 2150 x 2250	4890
CPF 340	8	250	340	646	1370	380/400	80	3500 x 1750 x 1985	3840
	10	250	340	610	1293	380/400	80	3500 x 1750 x 1985	3840
CPF 341	8	250	340	705	1495	380/400	77	4800 x 2150 x 2250	5460
	10	250	340	656	1391	380/400	77	4800 x 2150 x 2250	5460
CPF 450	8	315	450	871	1847	380/400	78	5100 x 2150 x 2250	5730
	10	315	450	804	1704	380/400	78	5100 x 2150 x 2250	5730
CPF 480	8	355	480	1007	2135	380/400	79	5100 x 2150 x 2250	5760
	10	355	480	890	1887	380/400	79	5100 x 2150 x 2250	5760

Notes: Variants - SQL, ASME+MOM(AUA/SGP), Air/Water Cooled  
IE3 Motor (IP55) FS Only  
HV - 6kV/10kV (IP23)  
315kW-355kW



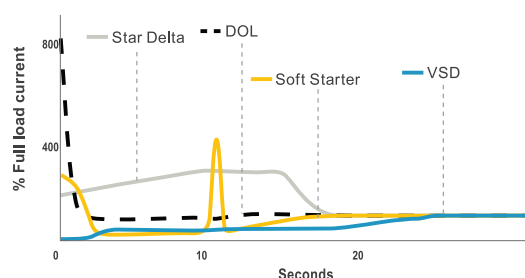
# Inverter Driven Compressors CPVS 120-340



## Optimized solutions to save energy

The CPVS variable speed compressor series allows you to find the perfect match between air demand and air supply. Thanks to the inverter driven technology, the energy cost could be reduced by 30%. This is the best in class compressor for your energy efficiency & minimum life cycle cost (LCC)

- Reliable Inverter with best aftersales service
- Robust & user-friendly
- Maximum turn down to cater wide range of air usage
- Eliminating the inefficient transition period from full to no load power
- Avoiding excessive off-load power consumption
- Maintaining the net pressure band to within 0.10 bar, 1.5 psi
- Reducing overall average working pressure
- Minimizing system leakage due to a lower system pressure



## Robust and powerful compressor

1. Filtration panels
2. Frequency converters
3. Oil separator vessel
4. Airfilter
5. Gear drive transmission
6. Base frame



### Premium energy saving

State-of-the-art screw element, the latest generation of asymmetric rotor profile, reliable designed and production methods bring you maximum compressor package efficiency.



### Perfectly matched ABB inverter

A unique inverter control unit, specially programmed to optimize energy saving for customer's different power consumption time.



### State-of-the-art screw element

High air delivery and efficient operation.



### High efficient vessel

High efficient vessel bring 3-stage separation, provide low residual oil content in the compressed air <3ppm.










### Energy saving controller

Advance and friendly use controller in large color screen. Trending chart, reliable and durable monitoring the air compressor's performance.








## Technical Table (Air Cooled)

Model									
	Pressure	Motor Power		FAD	Voltage	Noise Level	Dimensions	Weight	
	bar	kW	HP	l/s	cfm	V	dB	L x W x H(mm)	kg
CPVS 120	8	90	120	266	563	380/400	79	2259 x 1060 x 1594	1650
	10	90	120	237	502	380/400	79	2259 x 1060 x 1594	1650
CPVS 150	8	110	150	308	653	380/400	78	2450 x 1230 x 1600	2070
	10	110	150	265	562	380/400	78	2450 x 1230 x 1600	2070
CPVS 151	8	110	150	335	710	380/400	77	2845 x 1750 x 1930	3580
	10	110	150	297	630	380/400	77	2845 x 1750 x 1930	3580
CPVS 180	8	132	180	374	793	380/400	79	2255 x 1230 x 1600	2330
	10	132	180	325	689	380/400	79	2255 x 1230 x 1600	2330
CPVS 181	8	132	180	396	840	380/400	77	2845 x 1750 x 1930	3580
	10	132	180	350	742	380/400	77	2845 x 1750 x 1930	3580
CPVS 220	8	160	220	458	971	380/400	78	2845 x 1750 x 1930	4010
	10	160	220	419	888	380/400	78	2845 x 1750 x 1930	4010
CPVS 270	8	200	270	552	1170	380/400	79	3500 x 1750 x 1985	4660
	10	200	270	505	1071	380/400	79	3500 x 1750 x 1985	4660
CPVS 340	8	250	340	655	1389	380/400	80	3500 x 1750 x 1985	4890
	10	250	340	625	1325	380/400	80	3500 x 1750 x 1985	4890

\* Variants - SQL, ASME+MOM(AUA/SGP), Air/Water Cooled

## Technical Table (Water Cooled)

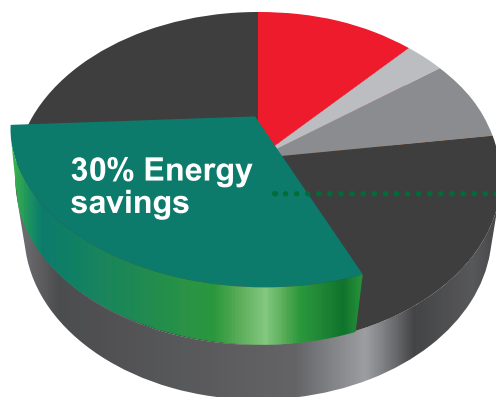
Model									
	Pressure	Motor Power		FAD	Voltage	Noise Level	Dimensions	Weight	
	bar	kW	HP	l/s	cfm	V	dB	L x W x H(mm)	kg
CPVS 120	8	90	120	266	563	380/400	71	2557 x 1060 x 1594	2060
	10	90	120	237	502	380/400	71	2557 x 1060 x 1594	2060
CPVS 150	8	110	150	308	653	380/400	72	2450 x 1230 x 1600	2670
	10	110	150	265	562	380/400	72	2450 x 1230 x 1600	2670
CPVS 151	8	110	150	335	710	380/400	77	2845 x 1750 x 1930	3380
	10	110	150	297	630	380/400	77	2845 x 1750 x 1930	3380
CPVS 180	8	132	180	374	793	380/400	79	2255 x 1230 x 1600	2770
	10	132	180	325	689	380/400	79	2255 x 1230 x 1600	2770
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CPVS 220	8	160	220	458	971	380/400	78	2845 x 1750 x 1930	3530
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	10	200	270	505	1071	380/400	79	3500 x 1750 x 1985	3950
CPVS 340	8	250	340	655	1389	380/400	80	3500 x 1750 x 1985	4180
	10	250	340	625	1325	380/400	80	3500 x 1750 x 1985	4180

Notes: Variants - SQL, ASME+MOM(AUA/SGP), Air/Water Cooled

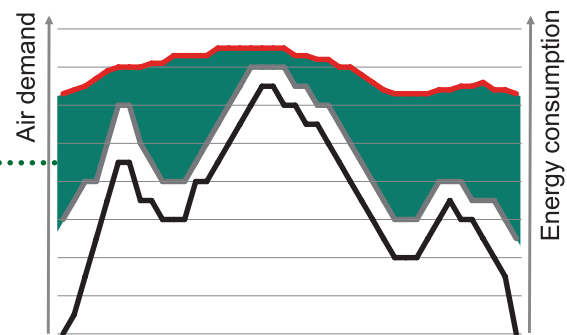
# Energy Efficiency

## We protect your efficiency

Energy costs represent about 70% of the total operating cost of your compressor over a 5 year period. That's why reducing the operating cost of a compressed air solution is a major focus. Variable frequency driven compressors can cut the energy bill of your compressor by up to 30%.



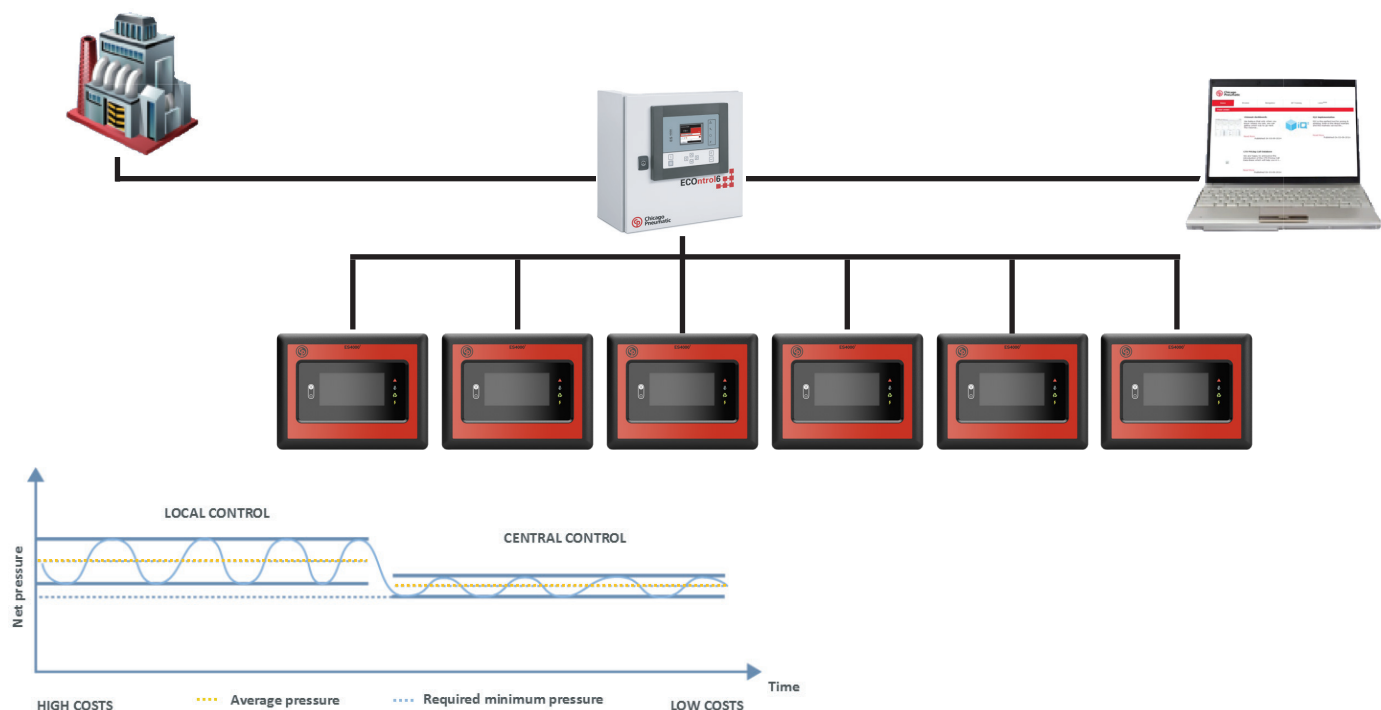
- 12% Investment
- 3% Installation
- 8% Service
- 77% Energy consumption



- Air demand
- Variable frequency driven costs
- Load/Unload costs
- Savings

## E Control 6 - Central Compressor Control

Centralised Control System capable to control up to 6 compressors with 2 Inverter Compressors, Connectable with Internet with the modern IoT Internet of Things technology.



# Chicago Pneumatic Original Parts

## Engineered lubricants

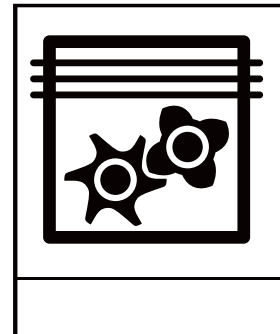


Chicago Pneumatic tailored coolants you can trust.

1. Do not limit warranty of compressor.
2. Maximum performance & efficiency.
3. Tested and approved for all applications & environments.
4. Increase significantly the reliability & minimizes risks absolutely.
5. Extending the compressors' lifetime.
6. Offer a firm grip on maintenance cost.



Lubricants are of vital importance.



Look for your quality assurance! Use Chicago Pneumatic Original Parts. Chicago Pneumatic is always at your service with comprehensive screw kits:

- Easy
- Guaranteed long life time
- Reliable operation
- All-in-one cost effectiveness





Since 1901 the Chicago Pneumatic name has represented reliability and attention to customer needs, with construction, maintenance and production tools and compressors designed for specific industrial applications. Today, Chicago Pneumatic has a global reach, with local distributors around the world.

Our people start every single day with a passion to research, develop, manufacture and deliver new products that are meant to meet your needs not only today, but tomorrow as well. To learn more, visit [www.cp.com](http://www.cp.com).

## Chicago Pneumatic: full offer, global presence



Industrial screw compressors



Screw compressors with tank



Inverter compressors



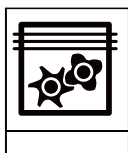
Gear driven compressors



Refrigerant dryers



Filter



### Care. Trust. Efficiency.

#### Care.

Care is what service is all about: professional service by knowledgeable people, using high-quality original parts.

#### Trust.

Trust is earned by delivering on our promises of reliable, uninterrupted performance and long equipment lifetime.

#### Efficiency.

Equipment efficiency is ensured by regular maintenance. Efficiency of the service organization is how Original Parts and Service make the difference.

For more information, please contact your CP partner:

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

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