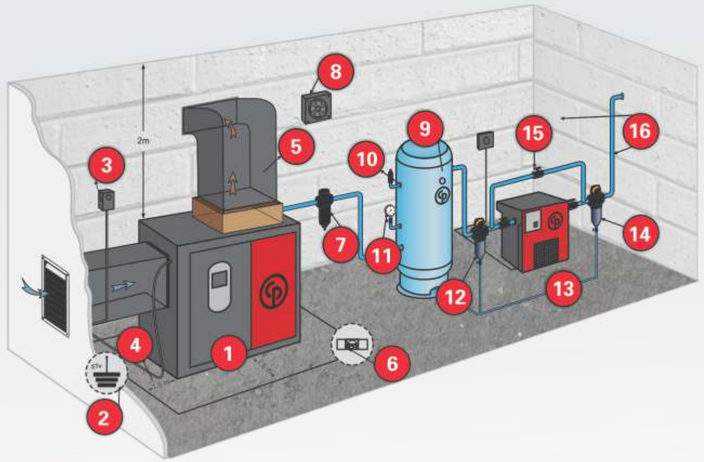
Maintenance and Installation Guidelines



1 Compressor	6 Floor leveling	12 Pre-filter
2 Earthing	7 Moisture separator	13 Dryer
3 SFU (switch fusing unit)	8 Exhaust fan	14 After Filter
4 Copper cable	9 Air receiver	15 By pass valve
5 Exhaust dust	10 Safety valve	16 Air Net Pipings
	11 Pressure gauge	

- Use Chicago Pneumatic Genuine parts only.
- Use service kits as per the service schedule.
- Compressor service should be carried out by trained professionals only.
- Use of Safety PPE during maintenance schedule is a must.
- LMRA and use of LOTO during maintenance schedule is mandatory.
- Hazardous waste disposal to be regulated through authorised agency only.



Chicago Pneumatic: full offer, global presence





Chicago Pneumatic Compressor
Sveanagar, Mumbai Pune Highway, Dapodi,
Pune - 411012 Maharashtra, India
: + (91) 93 7191 9200 / 93 7106 0896

Design Manufacture,Sales and Service of air compressors, Air dryers and air filters

ISO 9001
Chicago Pneumatic's Environmental Management System forms an integral part of each business process.

ISO 14001
ISO 14001 EMS forms integral part of each business process.

Regional Customer Centres

BRANCH	ADDRESS
WEST	Rushabh, II Floor, Near American Heart Institute, Ghodbunder Road, Thane (W) 400601
NORTH	Unitech Business Park, Tower - A, First Floor, Block - F, Sector -41, South City -I ,Gurgaon - 122001
EAST	Trinity Plaza, 2nd Floor, East Wing, 84/1A, Topsia Road, (South) Kolkata 700 046
CENTRAL	4th Floor, Block A, Amsri Shamira Building, Old Lancer Lines, Secunderabad 500 025
SOUTH	No.1-A, Kushal Garden, Peenya Industrial Area, Peenya 2nd Phase, Bangalore - 560 058

Area offices : Ahmedabad, Baroda, Chandigarh, Chennai, Pune
Resident Offices : Coimbatore, Erode, Kochi, Jaipur, Raipur, Vizag

Dealer Representation at :
• Ahmedabad • Aurangabad • Bangalore • Baroda • Bhubaneswar • Belgaum • Bellari • Bhopal • Chandigarh • Chennai • Cochin • Coimbatore • Dehradun • Delhi • Durgapur • Faridabad • Gandhidham • Gurgaon • Guwahati • Hospet • Hyderabad • Indore • Jaipur • Jammu • Jamshedpur • Jodhpur • Kanpur • Karimnagar • Kathmandu • Katni • Kolhapur • Kolkata • Lucknow • Ludhiana • Madurai • Mumbai • Nagpur • Nashik • Nellore • Noida Patna • Phuntsholing • Puduchery • Pune • Raipur • Rajkot • Silvassa • Surat • Thane • Tirupur • Udaipur • Vaizag • Vapi

Toll Free No : 1800 200 0040

For more information, please contact your CP partner:

TRINITY Tradex Pvt. Ltd.
10/8, Siddhinath Chatterjee Road
Manton, Behala
Kolkata - 700034
Phone : 033 2407 1703/1900/0099
Mobile : 9830267864
Email : samit@trinitytradex.com

www.cp.com

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Chicago Pneumatic

1915 2015



CPC
CPD
CPE

People. Passion. Performance



We value good service to ensure customer satisfaction!

For Chicago Pneumatic, it isn't just about products. We value our end-users' and distributors' **performance**, and do our ultimate best to make it easy to work with our **people** while providing reliable products with a **passion**.

- **Broad product portfolio** of robust compressors & accessories
- **Decades of experience & innovation**
- **100% committed** distributor partnership

People. Passion. Performance.

At Chicago Pneumatic, it is our constant endeavor to provide you with the best equipment and service solutions. Our compressors are supported by a network of trained service technicians and dealers who provide complete service support and ensure spare parts availability. They are available for any technical consultation to optimize the performance of your equipment and ensure reliable operation. With a wide network spread across the country, we are never too far away, to help you solve your problems.

24 7 Service ahead of time.

Define your needs, our broad offer does the rest

Continuing the innovation in product development Chicago Pnumatic is introducing new addition into the product family. With vast experience in rotary screw compressor, CPD / CPE new dimension with gear drive technology for energy efficient production. The gear driven transmission maximizes machine output for the given pressure and power.

"The Standard in the industry"

GEAR DRIVEN



CPC/CPD

Noise level	Silent: 73-75 dB(A)
Capacity	142-462 cfm
Power	40-100 hp
Pressure	7-13 bar

User benefits

- Industry leading performance.
- Compact solution
- Easy maintenance - one man job
- Highly reliable components
- User-friendly operation
- ES 4000 standard controller

"Maximum productivity"

GEAR DRIVEN



CPE

Noise level	Silent: 75 dB(A)
Capacity	362-570 cfm
Power	100-120 hp
Pressure	7-13 bar

User benefits

- Industry leading performance
- Reduced energy consumption for optimum output
- High product efficiency
- Cost savings on maintenance and energy consumption
- ES 4000 standard controller

"Top value through energy efficiency"

INVERTER DRIVEN



CPVS

Noise level	Silent: 73-75 dB(A)
Capacity	67-505 cfm
Power	40-100 hp
Pressure	5-13 bar

User benefits

- Save electricity over 30%
- Optimal efficiency perfectly matching the air flow
- Quick return on investment
- ES 4000 standard controller
- Environment friendly - reduced CO_2 emissions.



Maximize productivity with reliable compressed air solutions.

Chicago Pneumatic's gear driven range of oil-injected screw compressors is the true standard in the industry.

The components have been carefully selected to assure optimal quality and reliability. While the footprint is reduced due to the smart transmission system and component arrangement, performance is guaranteed thanks to the in-house designed air end.

Premium performance



Highest reliability

- Eliminating transmission losses & optimizing running cost
- Reduced bearing loads resulting in longer lifetime & extended service intervals

Robust design

- Designed for 46°C ambient temperature
- High quality components ensures maximum longevity in operating conditions

Serviceability

- Easy access to every service points





1 **Air end**

In house designed air end, unique 4/6 screw profile for premium performance



2 **Motor**

High efficiency motor designed to suit Indian conditions



10 **Filteration baffle**

Highly efficient filteration baffle to protect dust entry



9 **Unloader**

vacuum unloader with less wear and tear, maintenance for tough operating conditions



8 **Control Panel**

Reputed make electrical components ensuring safety and optimal efficiency and reliability



7 **Cooling fan**

Low RPM cooling fan for minimum operating cost and quiet operation



6 **Air/oil separator**

Vertical air / oil vessel for 3 stage filteration & optimized operating temperature, ensuring minimum oil carry over <3ppm



5 **Air inlet filter**

High efficient paper filter for improved efficiency



4 **Coolers**

Optimized cooler design to ensure lower operating temperature



3 **Smart controller**

Advance control system with user friendly interface



Reliable compressed air solution for varying load demands.

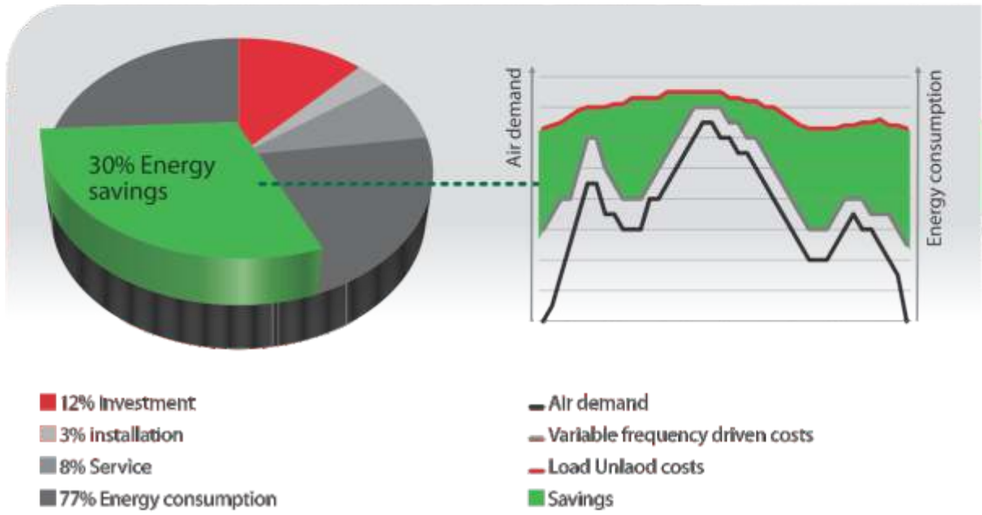
The variable speed compressor series allows you to find the perfect match between air demand and air supply. Thanks to the inverter driven technology, the energy cost can be reduced upto 30%. Due to the robust design of the gear driven transmission, you can rely on high quality compressed air in the most demanding applications.

Components are carefully selected assuring quality and reliability. Moreover, installation and maintenance is kept simple thanks to the easy accessibility. Last but not least, cooling performance is guaranteed by the oversized cooler package. A high efficiency cooling fan is designed to deliver a high cooling flow at low noise level.

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%.





Lower running cost

Only uses energy for air production; no wastage of energy on partial unload

Electromagnetic compatibility

No interference to near by equipments

Constant power factor

Machine maintains high power factor even with reduced loads

Profitable investment

Saves upto 30% power ensuring early payback and (long run power saving)



Frequency converter

Built in frequency converter to perfectly match the varying air demand and supply

Smart controller

Advanced controller with fully loaded features

Pressure band

Regulates pressure within 0.1 bar

Soft startup

Ensures no current peaks extending life of parts

No unloading power

Eliminates unloading power to almost 0% ensuring energy savings

Environment friendly

Reduced carbon-di-oxide emissions in turn saving environment

Silent running

Very low noise level ensuring machine can be kept close to the point of use

100% factory tested

Factory tested machines at critical speed to minimize vibration / resonance risk

Smart Controller



Next generation controllers for easy access.

Advanced new generation controller with latest features to suit all your needs.

Chicago Pneumatic offers range of control and monitoring systems for all compressed air products. The next generation ES 4000 standard and advance controller system offers a great variety of control & monitoring features that allow you to increase your compressor's efficiency and reliability.

To maximize energy efficiency the controller has following features:

- Latest icon based controller
- Ideal for load / unload compressors
- Improved controller algorithm
- Continuous pressure follow up algorithm
- Auto restart after voltage failure
- Always restart (when activated)
- Loaded with communication ports
  - Ethernet connection
  - CAN connection
  - I/O expansion connection

Dual pressure band

Multiple pressure bands can be switched using either of the following:

- Manually
- By timer
- By external DCS systems

By reducing the system pressure energy is instantly saved, a drop of 1 bar or 14.5 psi saves a total of 9.6% when leakage losses are taken into account.



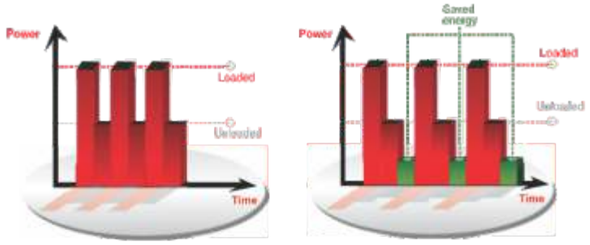
Online Monitoring

Monitor your compressor over ethernet with the new controller. Monitoring features include warning indication, compressor shutdown & many more...



Delayed Second Stop

- Most production processes create fluctuating levels of demand which, in turn, can create energy waste in low use periods.
- New Controller is more efficient - it keeps track of the time since the last stop occurred (Intelligent Unload Cycles)
- The result is that the machine can simply stop rather than unload, eliminating several minutes of unloaded running.
- Controller unloads rather than stops the machine if the pressure is dropping fast.
- Controller can predict the time until the minimum pressure limit is reached once the machine has stopped.
- Compressor restarts soon enough to ensure that the system pressure never drops below the desired minimum.



Optional DCS connectivity

Connect & monitor the compressor from your control centre. Inbuilt RS 485 port facilitates DCS connectivity to your control centre.



Optional Multiple compressor control

Can synchronize upto 6 compressors including other brands under a simple license. Inverter driven compressors can either be a master or slave.

- Control different compressors over CAN network
- 4/6 compressors sequencer – with the use of simple licence
- All Competitors machines over Can-Box
- Built-in sequencer for 4 (1 IVR) or 6 compressors (IVR)





Eliminate water,oil & dirt from your air system for efficient productivity

Today, process equipments are extremely sophisticated which require compressed air free from impurities like moisture, oil, dust etc.

Thanks to the reliable and efficient quality air solution products from Chicago Pneumatic customers are rest assured about the quality of air delivered at the point of application.

Online filters

Reliable filtration for superior system protection from dirt, oil and moisture.

G Series - Pre filter with micron rating 0.1, maximum oil carry over0.1

C Series - After filter with micron rating 0.01, maximum oil carry over 0.008

V Series - Carbon activated filter with micron rating 0.005

S Series - Particulate filters for dust protection.(MPPS = 0.1 micron)



CPX dryers (Refrigerated)



Environment friendly, quality dry air from refrigerated dryers for cost effective compressed air system. CPX range of dryers assures constant PDP of +3°at full load.

Technical Data - Gear Driven

Model	in bar G	HP	kW	CFM	Noise dB (A)	End Connection	Weight in kg.	L W H in m.m.
CPC 40	7 8.5 10 13	40	30	204 187 170 142	73	G 1 1/2"	865	1680 x 951 x 1503
CPC 50	7 8.5 10 13	50	37	240 223 206 170	73	G 1 1/2"	875	1680 x 951 x 1503
CPC 60	7 8.5 10 13	60	45	288 265 246 214	74	G 1 1/2"	895	1680 x 951 x 1503
CPD 75	7 8.5 10 13	75	55	356 329 305 263	75	G 2"	1162	1850 x 1060 x 1630
CPD 100	7 8.5 10 13	100	75	462 437 392 341	75	G 2"	1192	1850 x 1060 x 1630
CPE 100	7 10 13	100	75	517 429 362	75	G 2"	1640	2210 x 1060 x1594
CPE 120	7 10 13	120	90	570 498 423	75	G 2"	1670	2210 x 1060 x1594

Technical Data - Inverter Driven

Model	Max Operating pr	CFM Min	CFM Max	Noise dB (A)	End Connection	Weight in kg.	L W H in m.m.
CPVS 40 -10	5 7 8 10	83 82 82 81	198 199 181 165	73	G 1 1/2"	885	1680 x 951 x 1503
CPVS 40 -13	7 8 10 13	69 68 68 67	167 167 160 144	73	G 1 1/2"	885	1680 x 951 x 1503
CPVS 50-10	5 7 8 10	102 101 101 100	239 238 221 201	73	G 1 1/2"	905	1680 x 951 x 1503
CPVS 50-13	7 8 10 13	84 83 83 82	208 208 197 165	73	G 1 1/2"	905	1680 x 951 x 1503
CPVS 60-10	5 7 8 10	123 122 122 122	283 282 266 237	73	G 1 1/2"	935	1680 x 951 x 1503
CPVS60-13	7 8 10 13	104 104 103 102	244 244 231 208	73	G 1 1/2"	935	1680 x 951 x 1503
CPVS 75-10	5 7 8 10	145 144 144 143	351 350 328 255	75	G 2"	1115	1850x1060x1630
CPVS 75-13	7 8 10 13	124 123 123 121	307 306 276 255	75	G 2"	1115	1850x1060x1630
CPVS 100-7	5 6 7	190 189 187	508 507 505	75	G 2"	1640	2210x1060x1594
CPVS 100-10	5 7 8 10	163 161 160 157	444 442 440 438	75	G 2"	1640	2210x1060x1594
CPVS 100-13	7 8 10 13	134 133 130 126	376 375 372 368	75	G 2"	1640	2210x1060x1594

Note : 1. Unit performance measured according to Iso 1217 Ed 3 Annex C. 1996.
2. Noise level measured according to ISO2151 / Pneurop / CAGI PN8NTC2.

Flow diagram

1. Air / Oil separator filter
2. Safety valve
3. Pressure gauge
4. Temperature switch
5. Minimum pressure valve
6. Air Filter (Air in)
7. Main Motor
8. Unloader
9. Screw element
10. After Cooler
11. Oil cooler
12. Thermostatic valve
13. Fan motor
14. Fan

