



**Chicago  
Pneumatic**



**CPX & CPXHT Series  
Refrigerated Air Dryers**

**People. Passion. Performance.**

# CPXHT - High Temp Dryers

The CPXHT dryers are a perfect complement to the RCP line of reciprocating air compressors. With a maximum inlet temperature of 180°F, no aftercooler is required.

Model	50°F PDP cfm @ 100 psig	Use with	Electrics V/Hz/Ph	Oper. kW	Heat Exchanger	Max psig	Refrig.	Weight (lbs.)	L (in.)	W (in.)	H (in.)	Conn. (NPT)
CPXHT-25	25	5 & 7.5 HP	115/1/60	1/4	SS/Copper	232	R-134a	85	20	14	18	3/4"
CPXHT-50	50	10 HP	115/1/60	1/4	SS/Copper	232	R-404A	128	23	18	31	1"
CPXHT-75	75	15 HP	115/1/60	1/2	SS/Copper	232	R-404A	183	23	18	31	3/4"
CPXHT-100	100	20 HP	115/1/60	3/4	SS/Copper	232	R-404A	194	23	18	41	3/4"
CPXHT-125	125	25 HP	115/1/60	3/4	SS/Copper	232	R-404A	200	23	18	41	3/4"

Maximum Ambient 95°F  
Minimum Ambient 34°F

Dew Point Temp 50°F +/- 2°F  
Maximum Inlet Temp 180°F

The CPXHT dryers are easy to install and have a compact design. Supplied with 115 Volt power means no special wiring is required and the space saving design incorporates refrigerated air dryer, moisture separator, and electronic water drain.

## Standard Features:

- Equipped with stainless steel/copper heat exchanger
- Eliminates water, oil and dirt from air systems
- Prevents damage to tools and cylinders, adding to their longevity
- Fewer finished product defects
- Prevents "fisheye" paint splashes
- Reduces operational downtime
- Increases profitability and productivity
- Eliminates air line purging
- Compact design for small footprint
- Quality components for efficient cooling
- Internal layout and enclosure allow for quiet operation



## Compressed Air Water Contamination

Atmospheric air contains water in vapor form in different volumes according to the ambient conditions. Under compression, this water is drawn in along with the air. After compression, the air and water are then discharged to the distribution system, with some of the water content normally being removed by a compressed air aftercooler and then discharged.

However, a large proportion of the water vapor content remains in the compressed air, moving in the pipe distribution system as the air is consumed.

Compressed air may undergo further cooling in the piping, as a result of ambient temperature and/or due to expansion, resulting in liquid water lying in the pipe distribution system, receivers and pneumatic equipment.



As time passes, the condensate can cause serious damage to pipes and applications, resulting in production downtime and higher maintenance costs. During processes, where compressed air comes into contact with the final product, it can even damage the product itself.

CPX dryers are machines designed for treating compressed air. By using the refrigerant characteristics of certain fluid, these dryers lower the temperature of the compressed air, causing water vapor to condense and discharge prior to it entering any distribution system.



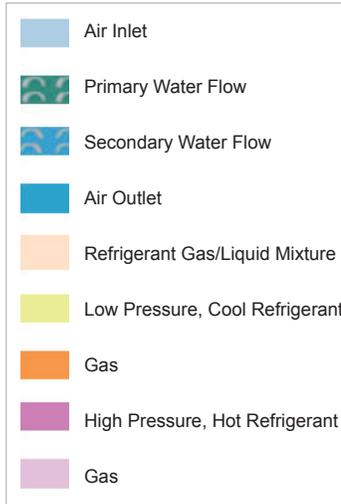
## Water Contamination Risks

- **Corrosion in the network:**  
Increasing pressure drop due to deterioration of the air network with increasing pipe scale and rust. Damage to joints will cause air leaks, significantly increasing the cost of plant production.
- **Malfunction of the pneumatic equipment:**  
Excess water will lead to malfunctioning of equipment and instrumentation, a reduction of component life and an increase in production losses and manufacturing costs.
- **Product contamination:**  
The efficiency of the production process can reduce product spoilage caused by product contamination; fitting moisture separators improves air quality. During painting, condensate causes imperfections on the finished product creating future corrosion areas. In pharmaceutical and electronic applications, condensate product contamination can be harmful and/or extremely expensive.

# CPX Refrigerated Air Dryers

## The CPX Refrigerated Air Dryers For All Applications

Sized to handle 12 to 2400 cfm, the CPX dryers fit any application. Extremely quiet and reliable, CPX dryers deliver dry air with minimal pressure drop.



The cold air then passes through the air heat exchanger, raising it to a temperature where plant pipes will not sweat.

Precooled air enters the air/refrigerant gas heat exchanger where the compressed air temperature is reduced. This causes condensate to develop and the correct

Warm air entering the dryer is pre-cooled in an air heat exchanger by air that has been through the refrigeration

Cold air and water enter the condensate separator which separates the liquid water from the air. Water is then discharged

In a sealed circuit, refrigeration gas is compressed, condensed, expanded and then cooled to form a liquid at approximately 32°F.

- |                                  |                                    |
|----------------------------------|------------------------------------|
| 1. Refrigerant compressor        | 7. Liquid separator                |
| 2. Refrigerant condenser         | 8. Hot gas bypass valve            |
| 3. Fan                           | 9. Air heat exchange               |
| 4. Refrigerant filter            | 10. Condensate separator           |
| 5. Capillary tube                | 11. Automatic condensate discharge |
| 6. Air/refrigerant heat exchange |                                    |



# CPX Performance

Model	cfm @ 100 psig	Max. Pressure	Electrics* V/Hz/Ph	Weight (lbs.)	L (in.)	W (in.)	H (in.)	Refrig.	Noise (dBa)
CPX-10	12	232	115/230/60/1	42	14	20	18	R-134a	50
CPX-20	21	232	115/230/60/1	42	14	20	18	R-134a	50
CPX-30	30	232	115/230/60/1	44	14	20	18	R-134a	47
CPX-40	43	232	115/230/60/1	55	14	20	18	R-134a	53
CPX-60	65	232	115/230/60/1	59	14	20	18	R-134a	53
CPX-80	83	232	115/230/60/1	97	15	20	30	R-404A	57
CPX-100	106	188	115/230/60/1	97	15	20	30	R-404A	57
CPX-125	127	188	115/230/60/1	117	18	22	31	R-404A	58
CPX-150	145	188	115/230/60/1	132	18	22	31	R-404A	58
CPX-180	184	188	115/230/60/1	145	18	22	31	R-404A	58
CPX-225	200	188	230/60/1	176	23	23	35	R-404A	59
CPX-270	230	188	230/60/1	176	23	23	35	R-404A	59
CPX-350	270	188	460/60/3	282	29	35	38	R-410A	60
CPX-425	360	188	460/60/3	321	29	35	38	R-410A	67
CPX-530	500	188	460/60/3	348	29	35	38	R-410A	67
CPX-700	600	188	460/60/3	363	29	35	38	R-410A	68
CPX-850	860	188	460/60/3	737	40	43	60	R-404A	70
CPX-1000	1000	188	460/60/3	759	40	43	60	R-404A	71
CPX-1200	1216	188	460/60/3	777	40	43	60	R-404A	71
CPX-1500	1398	188	460/60/3	836	40	44	60	R-404A	71
CPX-1700	1760	188	460/60/3	880	83	40	60	R-404A	74
CPX-2500	2400	188	460/60/3	891	83	40	60	R-404A	74
CPX-3000	2966	188	460/60/3	1433	83	40	60	R-404A	74

\* CPX-10 through CPX-180 available in 230/60/1

Reference conditions CPX10-CPX180: 77°F ambient, 100° inlet, 100 psig, 38°F pressure dewpoint

Reference conditions CPX225-CPX2500: 100°F ambient, 100° inlet, 100 psig, 38°F pressure dewpoint

## No Air Loss Automatic Condensate Drain



All models are equipped with a smart condensate discharger. Carefully sized for each model, it assures exceptional reliability and efficiency in discharging water, without compressed air. In case of malfunction, an alarm signal is displayed.

- It discharges only water, NOT compressed air.
- Silent, eliminating noise pollution.
- Comes with standard 1 year warranty.



## Over 100 years of experience

Since 1901 the Chicago Pneumatic name has represented high-performance tools and equipment designed for an extensive range of applications. Today, Chicago Pneumatic has a global reach, with local customer centers around the world. Chicago Pneumatic products are tailored to the needs of the industrial, vehicle service, and construction markets. Every day we develop and manufacture new products that are meant to meet your demands not only today, but tomorrow as well.

To learn more about our extensive range of tools, hydraulic attachments, industrial and portable compressors, accessories and workshop equipment, please visit [www.cp.com](http://www.cp.com).

CP compressors are supported by a network of trained service technicians who can provide complete warranty support, spare parts and technical consultation. For more information on our products, please contact your CP territory sales manager or a local authorized CP distributor.



## Original parts. Your quality assurance.

The "original part" identification confirms that these components passed our strict test criteria. All parts are designed to match the compressor. They have been thoroughly tested to obtain the highest level of protection, extending the compressors' lifetime and keeping the cost of ownership to an absolute minimum. No compromises are made on reliability. The use of "original part" certified quality components helps ensure reliable operation and will not impact the validity of your warranty, unlike other parts. Look for the quality assurance seal.

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