



**Chicago  
Pneumatic**

**CPX/HT  
Series**



**REFRIGERATED AND HIGH  
TEMPERATURE DRYER  
12 to 2400 CFM**

*High-performance products.  
Designed for you !*

# 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 after-cooler 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.



CPA 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.



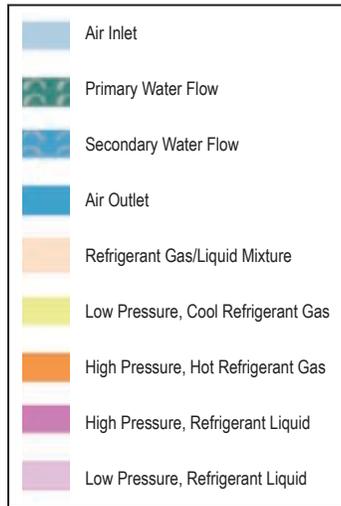
## WATER CONTAMINATION RISKS

- **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 air production.
- **Malfunction of the Pneumatic Equipment:**  
Malfunction of equipment and instrumentation, reduction of component life, 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

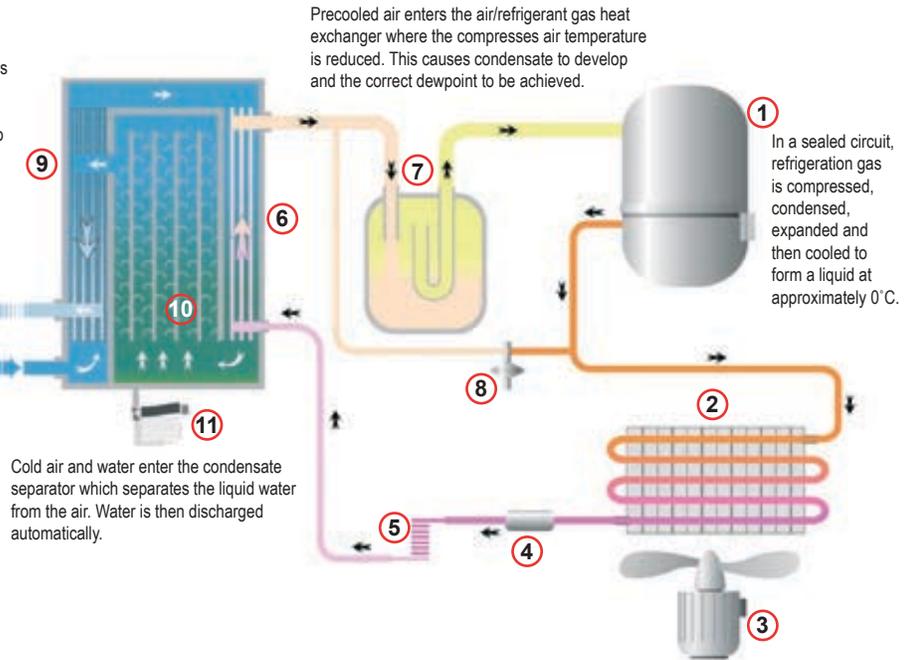
Sized to handle 12 to 2400 CFM, the CPX dryers fit any application. Extremely quiet and reliable, CPX dryers deliver dry air with minimal pressure drop.



The cold air then passes through the air/air heat exchanger, raising it to a temperature where no condensate will collect in the pipe distribution system.

**Air Outlet**  
**Air Inlet**

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



- |                                    |                                    |
|------------------------------------|------------------------------------|
| 1. Refrigerant compressor          | 7. Liquid separator                |
| 2. Refrigerant condenser           | 8. Hot gas bypass valve            |
| 3. Fan                             | 9. Air / 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 psig	Electrics* V/Hz/Ph	L in.	W in.	H in.	Weight lbs.	Refrigerant	Noise dBa
CPX 10	12	240	230/60/1	13.8	19.6	17.7	42	R-134a	50
CPX 20	21	240	230/60/1	13.8	19.6	17.7	42	R-134a	50
CPX 30	30	240	230/60/1	13.8	19.6	17.7	44	R-134a	47
CPX 40	42	240	230/60/1	13.8	19.6	17.7	55	R-134a	53
CPX 60	65	240	230/60/1	13.8	19.6	17.7	59	R-134a	53
CPX 80	83	240	230/60/1	14.6	19.6	30.1	97	R-404a	57
CPX 100	106	195	230/60/1	14.6	19.6	30.1	97	R-404a	57
CPX 125	127	195	230/60/1	18.1	22	31.1	117	R-404a	58
CPX 150	145	195	230/60/1	18.1	22	31.1	132	R-404a	58
CPX 180	184	195	230/60/1	18.1	22	31.1	145	R-404a	58
CPX 225	200	195	230/60/1	22.8	23.2	35.4	176	R-404a	59
CPX 270	230	195	230/60/1	22.8	23.2	35.4	176	R-404a	59
CPX 350	270	195	460/60/3	28.9	35.4	37.9	282	R-404a	60
CPX 425	360	195	460/60/3	28.9	35.4	37.9	321	R-404a	67
CPX 530	500	195	460/60/3	28.9	35.4	37.9	348	R-404a	67
CPX 700	600	195	460/60/3	28.9	35.4	37.9	363	R-404a	68
CPX 850	860	195	460/60/3	40.2	42.6	60.4	737	R-404a	70
CPX 1000	1000	195	460/60/3	40.2	42.6	60.4	759	R-404a	71
CPX 1200	1216	195	460/60/3	40.2	42.6	60.4	777	R-404a	71
CPX 1700	1760	195	460/60/3	40.2	82.6	60.4	880	R-404a	74
CPX 2500	2400	195	460/60/3	40.2	82.6	60.4	891	R-404a	74

\* CPX-10 through CPX-180 available in 115/60/1

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

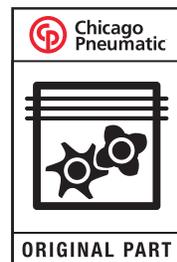
Reference conditions CPX225-CPX2500: 100°F ambient, 100° inlet, 100 psig, 38°F pressure dewpoint

## 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.



# CPXHT - HIGH TEMP DRYERS

The CPXHT High Temp air 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. Included filtration eliminates dirt and oil giving you clean, dry compressed air.

Model	50°F PDP cfm@100 psig	Use with	Electrics	Ref hp	Heat Exchanger	Max psig	Refrigerant	L in.	W in.	H in.	Lbs.	Cnxn (NPT)
CPXHT-25	25	5 hp	115/1/60	1/4	Copper	175	R-134a	17.5	19	18	85	1/2"
CPXHT-50	50	10 hp	115/1/60	1/4	Copper	175	R-134a	28	20	30	128	1/2"
CPXHT-75	75	15 hp	115/1/60	1/2	SS/Copper	175	R-134a	28	18	40	183	1"
CPXHT-100	100	20 hp	115/1/60	3/4	SS/Copper	175	R-134a	28	18	40	194	1"
CPXHT-125	125	25 hp	115/1/60	3/4	SS/Copper	175	R-134a	28	18	40	200	1"

Maximum Ambient 100°F      Dew Point Temp 50°F +/- 2°F  
 Minimum Ambient 40°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 an air cooled aftercooler, refrigerated air dryer, moisture separator, electronic water drain and coalescing filter.

## FEATURES

- 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 Splotches
- 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





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