



»»» Quality Air Solutions

**CDX 10-240
FILTER 7-405**

Quality, Safe, Reliable
Professional Compressed
Air Purification



บริษัท นิวแม็กซ์ จำกัด | แพนค AIR COMPRESSOR

107/1 Chaloom Phrakiat R.9 Rd., Pravet, Bangkok 10250, Thailand.

Tel. 02-726-8000 ต่อ 640, 644 Email : sales.air@pneumax.co.th

www.pneumax.co.th



User benefits

Quality purification

- » Rotary refrigerant compressor
- » ISO9001, ISO14001 Quality assurance
- » Patented 3 stage cooler design
- » Hot gas by-pass valve
- » Stable dew point

Environment safety

- » Low (GWP) global warming potential
- » Low (ODP) ozone depletion potential
- » Energy saving
- » Green refrigerant gasses

Smart control

- » Informative digital display
- » Six failure alarms
- » Fan control
- » High quality timer drain with settings

Reliable and easy to install

- » A lifetime investment
- » Peace of mind
- » Connection from top
- » Plug and play design

Protect your compressed air installation against:



Moisture



Particles



Oil



Hydrocarbons



Viruses



Bacteria

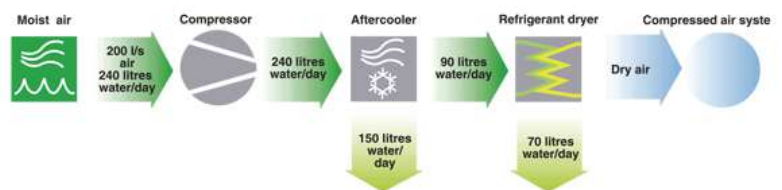
CDX REFRIGERATION AIR DRYERS



How clean is your compressed air?

Atmospheric air naturally contains several impurities such as dust, various forms of hydrocarbons and water in the form of humidity. Once sucked into the compressor, these are compressed and delivered down the line along with oily particles. These polluting agents interact with each other and can generate abrasive and corrosive emulsions that can cause wear and corrosion in the downstream equipment.

Ceccato has developed a range of quality air solutions to ensure professional air quality. Increase efficiency & productivity and extend the life span of your equipment & tools. It is a matter of vital importance to the user that the compressed air is of the right quality. If air that contains contamination comes into contact with the final product, rejection costs can quickly become unacceptably high and the cheapest solution can quickly become the most expensive.



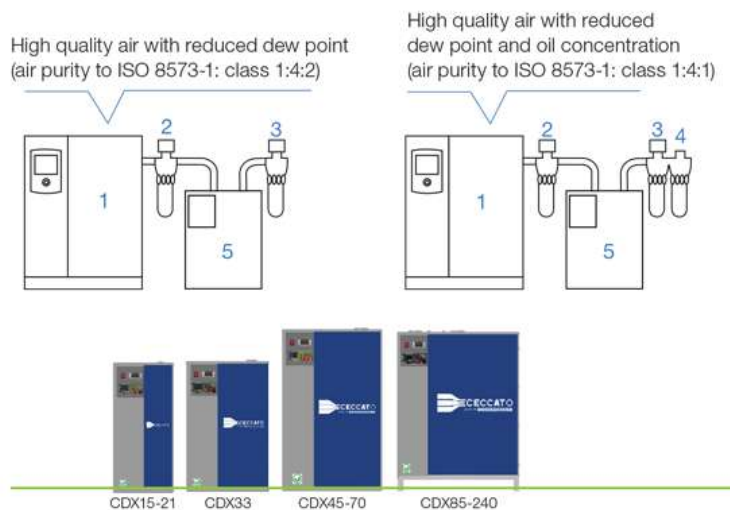
The benefits of refrigerant dryers

Clean and dry air

- Compressed air is cooled down by refrigerant gas, condensing the water in the air, allowing it to be removed.
- Protection of the air network from corrosion, rust and leakages.
- Higher final product quality.
- Increase your overall productivity.
- Protection for the downstream equipment.

Typical installations

1. Compressor with after cooler
2. G filter
3. C filter
4. V filter
5. Refrigerant dryer. Vertical receiver is always recommended



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»»» Digital Controller

CDX dryers are installed with professional control technology to inform all important information to the user:



Technical details:

- Status of the refrigerant dryer
- Status of the fan
- Dewpoint indication

Alarm display:

- Alarm about high or low dewpoint
- Fan failure
- Low or high refrigerant pressure

»»» Professional timer operated discharge

The dryers are installed with high quality & reliable timer operated condensate drain discharge. User friendly with easy settings to adjust the drain interval & operating period.



»»» Compressed air quality according to ISO 8573-1:2010

PURITY CLASS	Solid particles			Water		Total oil*
	Number of particles per m ³			Pressure dewpoint		Concentration
	0,1 - 0,5 µm	0,5 - 1,0 µm	1,0 - 5,0 µm	°C	°F	mg/m ³
0	As specified by the equipment user or supplier and more stringent than Class 1.					
1	≤ 20.000	≤ 400	≤ 10	≤ -70	≤ -94	≤ 0,01
2	≤ 400.000	≤ 6.000	≤ 100	≤ -40	≤ -40	≤ 0,1
3	-	≤ 90.000	≤ 1000	≤ -20	≤ -4	≤ 1
4	-	-	≤ 10.000	≤ 3	≤ 37,4	≤ 5
5	-	-	≤ 100.000	≤ 7	≤ 44,6	-
6	≤ 5 mg/m ³			≤ 10	≤ 50	-



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HOW DOES CDX DRYER WORK?

Refrigerant circuit

The refrigerant circuit compresses and expands the refrigerant medium in a circular system in order to efficiently transfer heat from the wet compressed air to the atmosphere. The CDX dryer's refrigerant circuit is designed as a whole and only uses components of high and reliable quality, supplied by globally recognized manufacturers.

1 Refrigerant Separator

Ensures that only refrigerant gas can enter the compressor, as liquid would cause damage.

2 Refrigerant Compressor

Brings the gaseous refrigerant to a high pressure and a high temperature.

3 Digital controller

To show operation status and inform alarm information to users

4 Max. Pressure Switch

Protects by ensuring that the refrigerant gas never exceeds the maximal pressure.

5 Condenser Fan

Efficiently provides constant flow of ambient air to the air condenser (only for air cooled).

6 Condenser

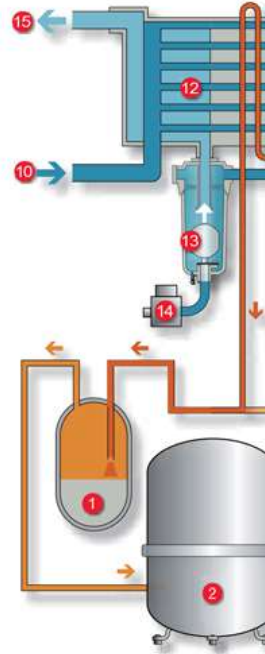
Cools the refrigerant slightly so that it can change from gas to liquid; refrigerant is more effective in the liquid state.

7 Capillary Filter

Protects the expansion device from harmful particles.

8 Capillary Tube

Reduces the refrigerant's pressure, thereby lowering its temperature and increasing its cooling capacity; the refrigerant is now almost all liquid, with some residual gas. Capillary tubes are expansion devices that are extremely reliable, and stabilize the dewpoint of the dryer.



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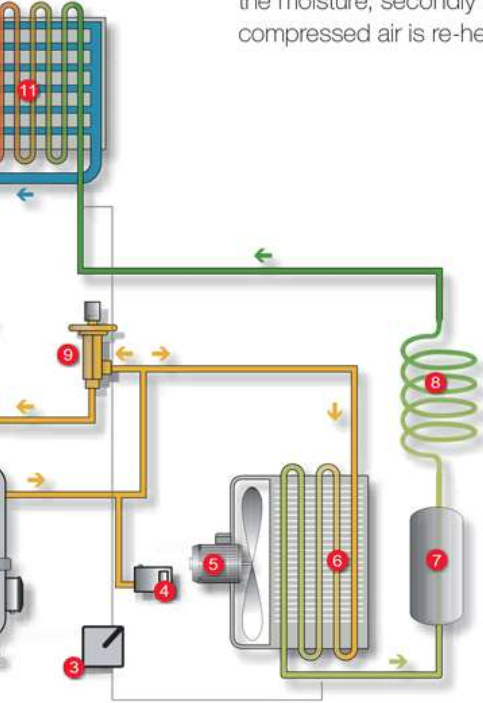
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Air circuit

Wet compressed air flows directly through the CDX dryer's internal 3-in-1 heat exchanger, where in the 3 key dryer functions are combined. Firstly the wet compressed air is cooled down to condensate the moisture, secondly this condensed moisture will be collected and drained out. Finally the dried compressed air is re-heated before it enters the factory's pipework.



9 Hot Gas Bypass

Regulates the amount of refrigerant passing through the air-to-refrigerant heat exchanger, ensuring a stable pressure dewpoint, and eliminating the chance of the condensate freezing.

10 Air Inlet

Hot saturated air enters the dryer.

11 Air-To-Refrigerant Heat Exchanger

Transfers heat from the compressed air to the cold refrigerant, forcing water vapor in the compressed air to condense.

12 Air-To-Air Heat Exchanger

Cools down the air inlet whilst re-heating the outlet air.

13 Water Separator

Collects and drains out condensate from the cooled air flow. 3-in-1 aluminum heat exchangers combine above points 11,12 and 13 making them highly efficient and reliable.

14 Automatic Drain

Removes the free water collected in the water separator.

15 Air Outlet

Re-heats the outgoing air to prevent condensation on the factory's pipework.



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»»» Technical data 50Hz

Model	Max. Working Pressure	Air Treatment Capacity			Electrical	Connections	Dimensions (mm)			Weight	Refrigerant gas
	bar	l/min	m ³ /h	cfm	V/Hz/Ph	G	L	W	H	Kg.	
CDX10	13	1000	60	35	230/50/1	G3/4"	352	430	445	30	R134a
CDX15	13	1500	90	53	230/50/1	G1"	550	370	800	32	R134a
CDX21	13	2100	126	74	230/50/1	G1"	550	370	800	36	R134a
CDX33	13	3500	210	124	230/50/1	G1"	520	500	800	60	R410A
CDX45	13	4500	270	159	230/50/1	G1.5"	550	600	980	68	R410A
CDX55	13	6000	360	212	230/50/1	G1.5"	550	600	980	75	R410A
CDX70	13	7500	450	265	230/50/1	G2"	550	600	980	85	R410A
CDX85	13	9000	540	318	230/50/1	G2"	900	750	1000	120	R410A
CDX110	13	11500	690	406	230/50/1	G2.5"	1025	660	1120	138	R410A
CDX140	13	15000	900	530	230/50/1	G2.5"	1025	660	1120	156	R410A
CDX170	13	17500	1050	618	230/50/1	G2.5"	1025	660	1120	168	R410A
CDX200	13	22500	1350	794	230/50/1	G2.5"	1025	660	1120	175	R410A

»»» Technical data 60Hz

Model	Max. Working Pressure	Air Treatment Capacity			Electrical	Connections	Dimensions (mm)			Weight	Refrigerant gas
	bar	l/min	m ³ /h	cfm	V/Hz/Ph	G	L	W	H	Kg.	
CDX10	13	1000	60	35	220/60/1	G3/4"	432	354	445	32	R134a
CDX15	13	1500	90	53	220/60/1	G1"	550	370	800	32	R134a
CDX21	13	2100	126	74	220/60/1	G1"	550	370	800	36	R134a
CDX33	13	3300	198	116	220/60/1	G1.5"	520	500	800	60	R410A
CDX45	13	4500	270	159	220/60/1	G2"	550	600	980	68	R410A
CDX55	13	5700	342	201	220/60/1	G2"	550	600	980	75	R410A
CDX70	13	7200	432	254	220/60/1	G2"	550	600	980	85	R410A
CDX85	13	8400	504	297	220/60/1	G2.5"	1025	660	1120	120	R410A
CDX110	13	10800	648	381	220/60/1	G2.5"	1025	660	1120	130	R410A
CDX140	13	13800	828	487	220/60/1	G2.5"	1025	660	1120	135	R410A
CDX170	13	17000	1020	600	220/60/1	G2.5"	1025	660	1120	150	R410A
CDX200	13	20000	1200	706	220/60/1	G2.5"	1025	660	1120	155	R410A
CDX240	13	24000	1440	847	220/60/1	G2.5"	1025	660	1120	155	R410A



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»»» Correction factor

for conditions differing from the project $K = A \times B \times C$

(A) Ambient temperature	°C	25	30	35	40	45
		1.00	0.91	0.81	0.72	0.62

(B) Inlet temperature	°C	25	30	35	40	45	50	55
		1.00	1.00	1.00	0.82	0.69	0.58	0.49

(C) Inlet pressure	bar	5	6	7	8	9	10	11	12	13
		0.90	0.96	1.00	1.03	1.06	1.08	1.10	1.12	1.13



Design Condition		Limit Conditions:	
Operating Pressure:	7 bar (100psi)	Max Operating Pressure	13 bar (188psi)
Operating Temperature:	35°C	Max Operating Temperature	55°C
Room Temperature:	25°C	Min/Max Room Temperature	5°C/45°C

»»» Pressure Dew Point 3-7°C

- High efficiency plate-fin heat exchanger
- Professional water removing function
- Low relative humidity in outlet air

»»» Professional Energy efficiency

- 50% less energy consumption compared to shell and tube type dryers
- Optimized refrigeration system



»»» Environmental friendly refrigerant gases

A key objective in the design of the CDX dryer was to deliver a product that offers performance, reliability and safety with the lowest possible environmental impact.

- Environmentally friendly thanks to the use of R134a, R410A gas.
- No impact on the ozone layer.
- R410A benefits:
 - Low Global Warming Potential (GWP)
 - Energy saving by use of rotary refrigerant compressor



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**Refrigerant Dryers
Line Filters**

**Condensate Removal &
Treatment**

**Part of a full range of
Quality air products**



- A high quality product offering you **technology you can trust**.
- Our products are **easy to use** and guarantee high **reliability**.
- Distributors are always nearby ensuring **availability** of both products and support.
- Choosing our high performance products entails a **partnership** that will boost your business.
- Safeguarding long-term productivity through optimal **serviceability** and use of original parts.



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.



Contact your local sales representative now!

www.ceccato-compressors.com



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