

ENERVEX® DCX 200-3000 ECONOMIZERS

020.4710.0125 01.25

Product Information

Use

The DCX, Condensing Direct Contact Heat Recovery System, is highly versatile and the most efficient economizer concept available. It can recover 100% of the waste of any boiler chimney or hot and humid air stream by lowering the exhaust gas temperature within 10°F of the incoming cold water temperature.

It is a fully packaged, lightweight, cylindrical configuration for easy installation. The stainless steel 316L construction makes it suitable for all condensing applications including oil fired applications.

The economizer can be used for multiple applications simultaneously to preheat multiple heat sinks with one single unit such as: Building Make-up air, domestic hot water, hydronic loop, boiler make-up, pool water, etc.

The DCX can be used with CASV and CASI Chimney Automation Systems as well as with the HCU Heat Conversion Units and HRC80 controllers to reach over 100% efficiency.

Description

The DCX's compact design utilizes an atmospheric gravity design stainless steel cylindrical atmospheric vessel.

Cold water enters the unit at the top and is uniformly distributed over the upper surface of a heat transfer media comprised of a bed of packing ring. The water flows down through the bed where it comes in "direct-contact" with the rising, hot products of combustion entering the bottom part of the economizer. Both the sensible and latent heat contained in the gases are transferred to the water. The heated water is pumped directly to the process, or via a plate and frame heat transfer module.

The DCX is fully designed and packaged to combine with an automated mechanical draft system capable of optimizing the exhaust rate of the appliance to completely stabilize the appliance efficiency as well as to assure a proper and constant draft for the appliance. This allows a single economizer to serve multiple boilers no matter whether they are of atmospheric, fan-assisted or forced draft design.

Applications

Typical applications include:

- Hospitals
- Hotels
- Pools and aquatic parks
- Condos and Apartments
- Pulp & Paper Mills
- Chemical Plants
- Concrete and Ready Mix Plants
- Food, Meat & Poultry Processing



- Breweries and Distilleries
- Bottling & Packaging
- Industrial & textile plants
- Automotive Plants
- Commercial Laundries

Material

Housing and heat exchanger media bed are made of 100% 316L stainless steel. It is suitable for use with natural gas, #2 fuel oil, low sulfur biomass and hot, humid exhaust/air streams.

Warranty

2-Year Factory Warranty. Complete warranty conditions are available from ENERVEX Inc.

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Specifications

MODEL	Maximum boiler input (MBH)	Maximum boiler output (MBH)	Boiler steam output (PPH)	Maximum heat recovery (MBH)*	Minimum heat recovery (MBH)**	Maximum water flow (usgpm)*	Minimum water flow (usgpm)*	DIAMETER (feet)	HEIGHT (feet)	Estimated WEIGHT (Lb)	CONNECTIONS (INCHES)				
											1	2	3	4	5
DCX200	8,369	6,695	6,900	1,674	753	33	15	2.5	11	2,100	16	2	1.5	1.5	1
DCX300	12,553	10,043	10,350	2,511	1,004	50	20	3	11.5	2,600	16	3	1.5	2	1
DCX400	16,738	13,390	13,800	3,348	1,255	67	25	3.5	12	3,400	16	3	2	2.5	1.5
DCX500	20,922	16,738	17,250	4,184	1,506	84	30	4	12	4,250	16	3	2	2.5	1.5
DCX800	25,106	20,085	20,700	5,021	2,511	100	50	4.5	13	5,000	16	4	2.5	3	2
DCX1000	41,844	33,475	34,500	8,369	3,138	167	63	5	14	6,500	16	4	3	3	2
DCX1250	52,305	41,844	43,125	10,461	3,768	209	75	6	14	8,750	16	6	3	4	2
DCX1500	62,766	50,213	51,750	12,553	4,394	251	88	6.5	15	10,500	16	6	4	4	2.5
DCX1750	73,227	58,581	60,375	14,645	5,021	293	100	7.5	15	12,000	16	8	4	6	2.5
DCX2000	83,688	66,950	69,000	16,738	5,649	335	113	8	16	14,000	16	8	4	6	2.5
DCX2250	94,148	75,319	77,625	18,830	6,277	377	126	8.5	16.5	15,500	16	8	6	6	3
DCX2500	104,609	83,688	86,250	20,922	7,532	418	151	8.5	17	17,500	16	8	6	6	3
DCX3000	125,531	100,425	103,500	25,106	-	502	-	9	17	20,000	16	8	6	6	3

* Based on 40 degF cold water and 140 degF water outlet

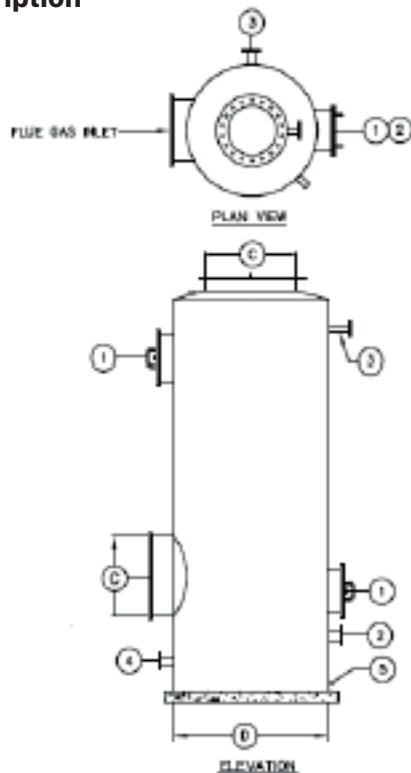
Notes: Max pressure drop of all units: 0.5"WC

Units are all available for Propane, Natural gas or Oil#2 applications

Smaller and larger sizes available upon request

Economizer Description

1. 16" Manhole
2. Overflow
3. Water Inlet
4. Water Outlet
5. Drain



Specifications are subject to change without notice.

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