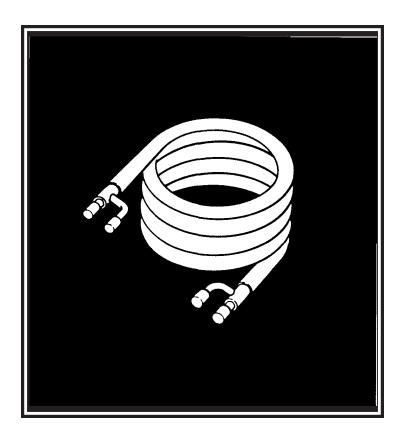


doucette industries, inc.

# **COAXIAL COILS**



1/3 to 10 tons

Fresh Water and Marine for Condensers, Chillers and Water-Source Heat Pumps



# **Coaxial Coils**

## Condenser, Evaporator and Heat Pump Applications

1/3 to 10 tons

Doucette Coaxial Coils are designed for use as Water Cooled Condensers, Water Chillers and in Water Source Heat Pumps. This design is being used by major OEM's around the world and in the ever expanding wholesale replacement market. Simplicity of design and installation makes this product ideal in both markets.

## 3 Reasons to Use Doucette Coaxial Coils

# 1 Design

Doucette Coaxial Coils are engineered for maximum heat transfer with the incorporation of the most advanced and innovative tubing in the industry. The copper or cupronickel tubing is deeply fluted to enhance heat transfer and minimize fouling and scaling. Because of this efficient tube design, Doucette units may be used as both a condenser and/or evaporator; making them ideal for heat pump applications.

OEM's periodically change product design and, as a result, after market technicians sometime suffer because of it. Doucette has incorporated a universal mounting bracket for ease of installation to help eliminate those in-field problems.

# 2 Quality

Doucette's quality is second to none. Raw materials must meet stringent specification requirements before they are accepted for manufacture. Quality is manually checked at every step of fabrication. Each unit is tested on the water side to 350 psig and on the refrigerant side to 450 psig. All Doucette Coaxial Coils are UL and CSA listed. Quality is the number one obligation to our customers.

# 3 Delivery

Doucette maintains a vast inventory of product at our design and manufacturing facilities in York, Pennsylvania, and around the country. Because of this commitment, shipping is generally the same or next day after we receive the order. This is equally valuable to both the Wholesaler and OEM.



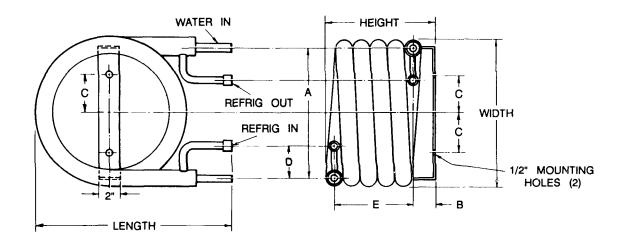
## **Applications and Capabilities**

Doucette Coils are designed for R-22, R-12, and R-502 and other freon refrigerants. The units are rated at standard ARI conditions, Standard 450-79 using R-22.

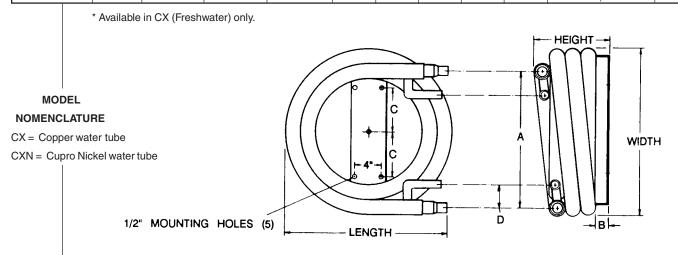
- Condenser Applications are rated for various TD's (Temperature Difference), Condensing Temperature (CTp) minus Entering Water Temperature (EWT). Nominal Rating at 3 gpm per 15,000 BTUH ton, based on a 20° FTD, 105° F condensing, 85° F EWT.
- Water-Source Heat Pumps are rated for various Entering Water Temperature (EWT), typically 70° F EWT, with corresponding Suction Temperatures (ETp). Nominal Rating at 2.4 gpm per 12,000 BTUH ton.
- Water Chiller Applications, typical EWT is 50° F at 2.4 gpm per 12,000 BTUH ton. Actual tons will be less than "Nominal Tons" due to the lower EWT. Therefore, select the appropriate coil based on total BTUH cooling requirement. For glycol chilling and other applications, please contact the factory.

## **Engineering Support**

Doucette provides excellent Engineering support. For design or product selection assistance, please call us.



MODEL	NOM'L	OVERALL DIMENSIONS (in.)								CONNECTIONS		SHIP.
CX & CXN	TONS	Width	Length	Height	Α	В	О	D	Е	Refrig OD	Water OD	WT. (LBS.)
CX-H 033*	1/3	7	9-3/4	3-1/2	6-1/8	2-1/2	2-1/2	1-1/4	2-1/8	3/8	5/8	4
CX-H 050	1/2	7-3/8	9-3/4	6-1/8	5-3/4	5-1/8	2-1/2	1-3/4	3-7/8	3/8	5/8	7
CX-H 075	3/4	7-3/8	9-3/4	7-3/8	5-7/8	6-3/8	2-1/2	1-3/4	4-7/8	3/8	5/8	8
CX-H 100	1	7-3/8	9-3/4	8-1/2	5-7/8	7-1/2	2-1/2	1-3/4	6-1/4	3/8	5/8	9
CX-H 150	1-1/2	10-3/4	12-1/2	7-1/2	8-7/8	6-1/2	4	2-3/8	5	1/2	3/4	11
CX-H 200	2	10-3/4	13-1/4	8-1/4	9-1/4	7-1/4	4	2-3/8	5-3/4	1/2	3/4	17



MODEL CX & CXN	NOM'L TONS	OVERALL DIMENSIONS (in.)							CONNECTIONS		SHIPPING
		Width	Length	Height	Α	В	С	D	Refrig OD	Water OD	WEIGHT (LBS.)
CX-S 250	2-1/2	13-3/8	14-1/2	5-5/8	10	6-1/2	2-3/8	7	1/2	3/4	25
CX-S 300	3	15	15-7/8	6	11-1/4	6-1/2	2-1/2	7-3/4	5/8	7/8	28
CX-S 400	4	18-3/8	19	7	14-1/2	8	2-3/8	9-1/4	7/8	1-1/8	42
CX-S 500	5	19-1/8	20	7-5/8	14-5/8	8	2-3/8	9-3/4	7/8	1-1/8	52
CX-S 700	7	21	22-1/2	9-1/2	17	10	2-3/4	11	1-1/8	1-3/8	100
Manifolded Models											
CX-S 750	7-1/2	13-3/8	15-3/4	17-1/2	10	_	2-3/8	8-1/4	1-3/8	1-3/8	100
CX-S 1000	10	19-1/8	21-1/2	15-3/4	14-5/8	_	2-3/8	11-1/4	1-3/8	1-5/8	120

## FreshWater Condensers & Evaporators

The CX Series is designed for fresh water applications using copper water tube and carbon steel outer shell.

## Marine Condensers & Evaporators

Doucette manufactures a full line of marine condenser/ evaporators, the CXN Series, which are designed for sea water and brackish water applications, using cupronickel water tubes and carbon steel outer shell.

#### Selection and Ordering

The Quick Selection Table below shows each unit rated for BTUH Heat of Rejection (Condenser mode) or Heat of Absorption (Evaporator mode).

When ordering, specify CX models for fresh water or CXN models for marine applications.

We invite your call for product selection assistance.

#### Quick Selection Table - BTUH'S

## Water Pressure Drop - PSID

		CONDENSER	EVAPORATOR			WATER PRESSURE DROP PSID				
MODEL NOM'		Wtr-Cooled Condenser	Wtr-Source Heat Pump	Water 35° F S	GPM per Ton*					
CX & CXN	CX & CXN TONS		@ 70° F EWT	@45° F LWT	45° F LWT   @40° F LWT		2	3	4	
CX-H 033	1/3	5,000				.03	.09	.12	.2	
CX-H 050	1/2	7,500	6,000	6,300	4,200	.2	.4	.7	1.3	
CX-H 075	3/4	11,000	8,200	8,000	5,400	.4	.9	2.1	3.8	
CX-H 100	1	16,000	16,000	9,500	6,400	.7	2.2	4.0	6.0	
CX-H 150	1-1/2	22,000	18,000	12,000	8,200	1.0	3.0	5.5	8.2	
CX-H 200	2	30,000	22,000	18,000	12,000	.5	1.5	3.2	5.5	
CX-S 250	2-1/2	38,000	30,000	24,000	16,000	.9	2.6	4.5	7.0	
CX-S 300	3	45,000	36,000	26,000	18,000	.7	2.2	4.1	6.3	
CX-S 400	4	62,000	47,000	37,000	25,000	.8	2.4	4.6	8.2	
CX-S 500	5	75,000	60,000	44,000	30,000	1.0	3.6	8.0	14.2	
CX-S 700	7	104,000	84,000	52,000	35,000	.9	2.7	5.5	9.9	
CX-S 750*	7-1/2	115,000	90,000	71,000	48,000	1.4	3.1	5.0	7.5	
CX-S 1000**	10	151,000	120,000	88,000	59,000	2.1	4.7	9.2	14.9	

Condenser Mode - Heat of Rejection, BTU/H's Evaporator Mode - Heat of Absorption, BTU/H's

\* 3 GPM per condensing ton

Note: Multi-section evaporators are provided with manifolded connections and distributor.







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<sup>\*</sup> For Evaporator Application, Order CC 500

<sup>\*\*</sup> For Evaporator Application, Order CC 750