

## Item # CADS 48M8, CADS Series Ammonia Desuperheaters (25 to 325 tons)



**\$48,615.00**

**For Ammonia Refrigeration Systems**

**Heats Hot Water Utilizing Waste Heat From Industrial Refrigeration Systems**

**The Doucette CADS Extends Your Hot Water Capability Inexpensively**

- Lowers hot water heating costs by utilizing waste heat
- Heats potable water up to 140 °F
- Reduces refrigeration operating costs 3% to 5% by adding the equivalent of 15% more condenser capacity
- Typical Payback Period of Two Years or Less
- Vented double-wall construction prevents cross contamination
- UL and USDA Listed with CRN

The Doucette Industries CADS Series Ammonia Desuperheater/Water Heater™ delivers cost-effective energy savings by heating potable water through the recovery of waste heat from industrial refrigeration systems. The CADS unit supplements potable hot water heating used for process applications by capturing "superheat" which accounts for approximately 10% to 15% of the total system heat of rejection. The CADS Series can effectively heat the water up to 140 °F.

- Food Processing Plants
- Food Distribution Plants
- Beverage Plants
- Ice Rinks

### Specifications

TR	150 tons
Cleanability	Mechanical
Refrig. Conn.	3" BW
Water Conn.	1-1/4" MPT
Length	68 "
Width	20 1/4 "



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Height	36 "
Weight	925 lbs
GPM <sup>1</sup>	10.92 gpm
Application	Screw Compressor

<sup>1</sup> Performance: GPM of potable water heated from 60°F to 110°F with TR shown and 220°F discharge temperature.

### Field-Proven Performance

The CADS Series utilizes efficient counterflow design with low refrigerant pressure drop for efficient operation. The CADS Series includes positive oil and liquid refrigerant return design for compressor protection, and the unit is equipped with high pressure water fittings for mechanical cleaning.

### Vented Double Wall for Safety and Reliability

The CADS series of ammonia Desuperheater / Water Heater tubes are designed with vented double-wall stainless steel construction for an added measure of safety and reliability. The double-wall system prevents contamination of the potable water from the refrigeration circuit and guarantees Desuperheater compliance with all code requirements. Each tube is fluted such that a vent path is created between the outer and inner tube. If a tube leak should ever occur, the gas vents to the atmosphere for easy detection. This double protection system is endorsed by the USDA for food protection.

### Applicable to All Brands of Ammonia Refrigeration Equipment

Doucette Desuperheaters can be used for hot water with any industrial refrigeration system where waste heat is available. The unit is designed to integrate with all brands of compressors including: Frick, FES, Vilter, Mycom and others.



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Technical drawing of a rectangular panel, likely a control panel or door, showing dimensions and features. The drawing includes a top view and a side view.

**Top View Dimensions:**

- Overall width: 68.6250
- Overall height: 36.0000
- Left side features:
  - Top-left corner: 10.1250 (width), 3.6250 (height)
  - Top-left corner: 20.2500 (width)
  - Top-left corner: 1.6875 (width)
- Right side features:
  - Top-right corner: 2.2500 (width)
  - Top-right corner: 20.3750 (width)
  - Top-right corner: (4 TYP.) (width)

**Side View Dimensions:**

- Overall width: 68.6250
- Overall height: 22.0000
- Left side features:
  - Top-left corner: 3.0000 (width), 5.2500 (height)
  - Top-left corner: 4.5000 (width)
- Right side features:
  - Top-right corner: 1.5000 (width)
  - Top-right corner: 5.6250 (width)
  - Top-right corner: 53.0000 (width)
  - Top-right corner: 13.0000 (width)

**Labels and Features:**

- NAME PLATE (located on the left side)
- (4 TYP.) (located on the right side)
- 9/16" HOLES (located on the right side)
- ①, ②, ③, ④ (circled numbers indicating specific features or components)

NOTES:

(1) 1/2" RELIEF FITTING REQUIRED, TOPSIDE CONNECTION #1	DESIGN PRESSURE:
(1) 1/2" DRAIN FITTING REQUIRED, BOTTOMSIDE CONNECTION #3	SHELLSIDE 300PSIG
	TUBESIDE 150PSIG

CONNECTIONS:		TOLERANCES		DOUCETTE INDUSTRIES, INC.		LUBESIDE TUBE SIZE	
		DECIMAL	FRACTIONAL	SCALE	DRAWN BY:	APPROVED BY:	
		±	±		MLB	RJR	
1.)	AMMONIA SUPPLY 3" NOM SCH 40 A53B BUTT WELD				0.078125		
2.)	WATER RETURN 1-1/4" NOM 304/304L S/S MPT						
3.)	WATER SUPPLY 1-1/4" NOM 304/304L S/S MPT						
4.)	AMMONIA RETURN 3" NOM SCH 40 A53B BUTT WELD						
		ANGULAR		DATE	DRAWING NUMBER		
		±			4/30/04		98311
63.375 X 20.25 X 30.6875		GAUGE	20	ALL DIMENSIONS INCHES, UNLESS SPECIFIED			

