

Data Cool™

Air Cooled, Water/Glycol Cooled
or Chilled Water

2 and 3 ton



DAI
DATA AIRE INC.®

ISO 9001:2000 Certified



DATA COOL™

- **Compact Design**

- **Versatile**

- **Rugged Construction**

- **Options**

Today's electronic componentry is shrinking in size while becoming more powerful, a tremendous advantage for those of us who use it daily, however, smaller, faster and more functional requires more power and results in more heat being produced. This is precisely the reason Data Aire introduced the Data Cool. Whether you are in a large data center with out of the way areas or a confined space with high powered computers, cooling can be a difficult problem.

Compact Design – Data Cool is small in size allowing it to fit in the minimal amount of space, out of the way, while providing a high degree of cooling. Just over a foot and a half deep it takes up a limited amount of floor space. This means that it is perfect for a hard to manage area of a data center or a small office setting. Having the compressor outside allows the Data Cool to operate quietly, just the sound of the cool air blowing across the space.

Versatile – Not only is the Data Cool compact it can be mounted either on the floor or wall, eliminating the need for any floor space at all. You also have the option of air, water/glycol cooling or chilled water. In order to meet your requirements exactly, the Data Cool is offered in 2 or 3 ton capacities. For additional installation flexibility Data Cool comes in 208 voltage single phase. All components are



accessible via the front of the unit, eliminating the need for access on the back side. A concealed hinged control panel allows easy access, should the need arise. Data Cool comes standard with an electronic control but can be equipped with an optional Data Aire microprocessor controller, Mini DAP II or DAP II, providing a wide range of controls and direct communication to your building management system (BMS).

Rugged Construction – Data Cool starts with a welded tubular steel frame to ensure stability. Mounted inside is a specifically designed coil consisting of aluminum fins and copper tubing for maximum heat transfer. To facilitate condensate removal Data Cool is equipped with a stainless steel drain pan with cut off switch to eliminate any possibility of leakage. Sides of the Data Cool are manufactured from aluminum and steel providing additional strength with a minimum amount of weight. Sound absorbing insulation is attached to each side to ensure the quietest operation possible. Frame and sides are powder coated to eliminate the possibility of rust resulting in a long life with always a professional appearance. Finally the Data Cool is equipped with load leveling legs allowing it to be adjusted.

Options – Data Aire's standard Data Cool is fully functional for immediate use in most any application; however, in some instances the need may arise to add options to meet more demanding conditions. Data Cool has a wide variety of options.

		Air Cooled		Water/Glycol Cooled	
CAPACITY in Btu/hr - gross		DCAU-02	DCAU-03	DCWU-02	DCWU-03
80° DB/67° WB	<i>Total</i>	24,200	33,300	25,200	36,400
50% RH	<i>Sensible</i>	21,200	24,600	21,600	25,800
75° DB/62.5° WB	<i>Total</i>	22,400	30,700	23,200	33,800
50% RH	<i>Sensible</i>	20,800	24,200	21,100	25,500
75° DB/61° WB	<i>Total</i>	21,800	30,100	22,800	32,800
50% RH	<i>Sensible</i>	21,700	25,900	22,700	27,000
72° DB/60° WB	<i>Total</i>	21,400	29,600	22,300	32,200
50% RH	<i>Sensible</i>	20,300	23,800	20,700	25,000
72° DB/58.6° WB	<i>Total</i>	20,800	28,900	21,800	31,200
50% RH	<i>Sensible</i>	20,700	25,300	21,700	26,400

Chilled Water at 45° F entering chilled water temperature					
		DCCU-02	DCCU-03	DCCU-02	DCCU-03
80° DB/67° WB	<i>Total</i>	31,200	34,800		
50% RH	<i>Sensible</i>	23,800	25,300	Using 45° Entering Water Temperature (EWT)	
75° DB/62.5° WB	<i>Total</i>	24,700	27,100	GPM	6.0
50% RH	<i>Sensible</i>	21,500	22,600	PD, PSI	9.7
75° DB/61° WB	<i>Total</i>	23,500	25,300		9.0
50% RH	<i>Sensible</i>	22,300	23,400		25.3
72° DB/60° WB	<i>Total</i>	21,400	23,200		
50% RH	<i>Sensible</i>	19,900	20,900		
72° DB/58.6° WB	<i>Total</i>	20,600	22,000		
50% RH	<i>Sensible</i>	20,500	21,500		

Evaporator Electrical Data (208-230/1/60) - All Types of Cooling		
	DCxU-02	DCxU-03
<u>Standard Unit - no electric reheat, no steam generator humidifier</u>	2.9/3.6/15*	2.9/3.6/15
<u>Electric reheat - NO, 5 lbs steam generator humidifier - YES</u>	11/14/15	11/14/15
<u>Electric reheat - 4 kW YES, steam generator humidifier - NO</u>	22/28/30	22/28/30
<u>Electric reheat - 4 kW YES, 5 lbs steam generator humidifier - YES</u>	22/28/30	22/28/30

Evaporator Motor - 1/3 HP - 2.9 FLA

Component Data

Blower Section - Airflow - 975 CFM Standard motor - 1/3 hp

Filter Section - Quantity - 3 Size: 2 - 16 x 20 X 1 and 1 - 16 x 16 x 1 MERV Rating - 8

OPTIONAL - Reheat Section - Electric 4 kW, capacity - 13,650 Btu/hr

OPTIONAL - Humidifier Section - Steam generator, capacity - 5 lbs/hr - 1.7 kW

* FLA/MCA/MFS - FLA - Full load amps - MCA - Minimum circuit amps (wire sizing amps) - MFS - Maximum over-current protection device

Air Cooled Outdoor Condensing Unit (AO)

Condensing unit at 95° and 100° F ambient

208-230/1/60
FLA/MCA/MFS*

DCAU-02

DRCU-0312
15/17/25

DCAU-03

DRCU-0312
20/24/40

Condensing fan motor 3/4 hp - FLA 4.2

208-230/3/60
FLA/MCA/MFS*

DRCU-0332
11/13/20

DRCU-0332
15/17/25

Condensing fan motor 3/4 hp - FLA 4.2

460/3//60
FLA/MCA/MFS*

DRCU-0334
5.6/6.5/15

DRCU-0334
7.2/8.5/15

Condensing fan motor 3/4 hp - FLA 2.1

Condensing unit at 105° F ambient

208-230/1/60
FLA/MCA/MFS*

DRCU-0312
15/17/25

DRCU-0512
20/24/40

Condensing fan motor 3/4 hp - FLA 4.2

208-230/3/60
FLA/MCA/MFS*

DRCU-0332
11/13/20

DRCU-0532
15/17/25

Condensing fan motor 3/4 hp - FLA 4.2

460/3//60
FLA/MCA/MFS*

DRCU-0334
5.6/6.5/15

DRCU-0534
7.2/8.5/15

Condensing fan motor 3/4 hp - FLA 2.1

Compressor - tons

208-230/1/60 FLA
208-230/3/60 FLA
460/3/60 FLA

2
10.3
7.1
3.5

3
16.0
10.3
5.1

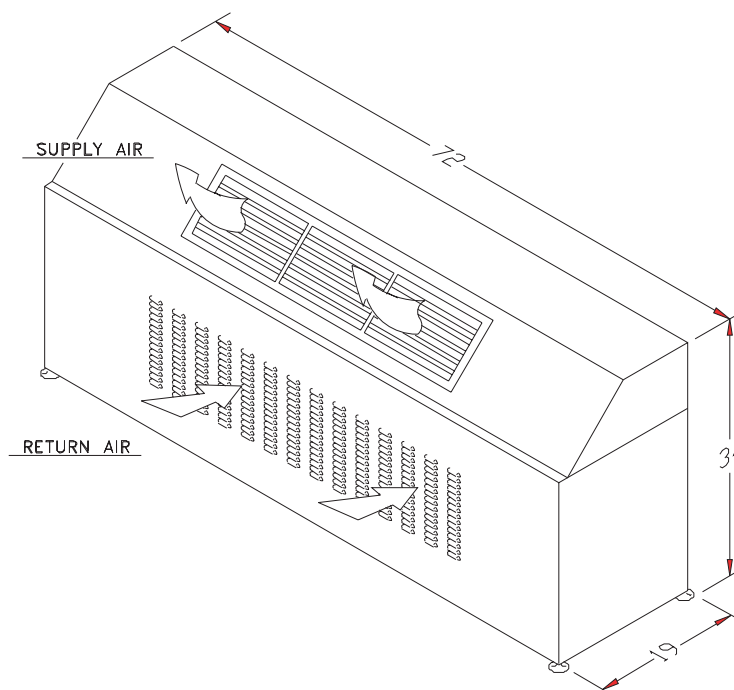
Water Cooled (WS) Indoor Condensing Unit

Indoor Water Cooled Condensing Unit
FLA/MCA/MFS*

DAWC-02
10/13/20

DAWC-03
16/20/35

Dimension Drawing



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