

# Data Temp Systems

Air Cooled, Water/Glycol Cooled

and Chilled Water Cooled

2, 3, 4 and 5 Ton

## R-407C







*... the pioneer and builder of the most complete line of precision cooling equipment*

Back in the late 1960's and early 70's with the advancement of the computer and computer rooms, precision environmental control equipment with high sensible cooling ratios became a necessity. Data Aire, a division of Supreme Aire, worked with leading computer facility engineers to develop one of the first down discharge air conditioning units for raised floor application.

Today, as one of the most experienced manufacturers of precision cooling equipment, Data Aire offers a wide range of precision cooling units with an array of options to meet the specific needs of owners and their projects.

Product innovation, to meet the needs of our customers and the industry, has always been a guiding principle at Data Aire. This is demonstrated by our continuous product improvements. In the mid 1980's we were the first to include the steam generator humidifier as standard equipment, eliminating standing water and high maintenance infrared lights. In 1989 Data Aire developed the first solid-state control panel and monitor used in precision cooling and holds the original patent. The Data Alarm Processor (DAP) is well into its fourth generation, dap4. Then in the early to mid 1990's Data Aire was the first to make scroll compressors standard, introducing them in smaller sizes then gradually across the entire product line. Today these type of compressors are recognized worldwide as the most efficient and reliable compressors available. In 2003 we were awarded an AHR Honorable Mention Innovation Award for our Intelli-DART - a site monitoring device that allows the owner to use the fax, telephone and/or e-mail to monitor their controlled spaces and provides for Internet access to both monitor and modify settings for each individual unit. In 2005 we introduced R-410A refrigerant into our product line to meet the 2010 EPA mandates. We are the only manufacturer of precision cooling equipment to make such an offering. Many of our earlier innovations are today's industry standards among modern manufacturers, and we expect our more recent changes to become industry standards as well.

Data Aire produces solutions. We have offered environmental solutions to meet specific needs in the smallest of places and in areas of thousands of square feet. We are prepared to assist you, your in-house engineering department, consulting engineer, or construction department in defining the proper solutions and bringing them to a predefined outcome. Our moderate size, housed in a single facility, allows us to accommodate your special needs quickly and efficiently.

Data Aire is committed to being the supplier of choice for precision cooling with the flexibility, reliability, and expertise required to meet our customer's needs. One of our actions to this commitment is being an ISO 9001 certified company. To be successful, it is essential to be creative and use our resources to their fullest capabilities. Data Aire's mission is to provide the reliable choice of products and services to our customers

Data Aire is a member of the C/S Group of Companies specializing in unique architectural products. The C/S Group of Companies, a private corporation, has been in business since 1949.

Data Aire Delivers!

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# Data Temp

- Front Access
- 2, 3,4 and 5 ton
- Air, Water/Glycol Cooled
- Chilled Water

## R-407C



### DATA TEMP SERIES

*Data Temp Series* units are precision environmental control systems that bring a standard of reliable performance required by today's market demands. Small to midsize data centers, telecommunication sites, or where access and/or floor space is limited, Data Temp units can meet these demands. Data Temp process cooling systems are available in 2, 3, 4, and 5 ton nominal capacities with upflow or downflow air distribution in air cooled, water/glycol cooled, or chilled water models. Each Data Temp unit is factory run tested and put through a vigorous quality control procedure.

### COMFORT

Computer rooms and other mission critical spaces require air that is clean and properly distributed, with precisely controlled temperature and humidity. Building or "people comfort" systems are not designed to meet these demands. Data Temp systems are designed to satisfy these goals.

### DESIGN

Data Temp systems feature a specially designed compact tubular steel frame which allows for minimum space requirement of air conditioning equipment in the controlled area. Although compact, all parts are easily accessible providing excellent serviceability. Units are finished with a furniture-grade insulated steel cabinet painted in your choice of color.

### CONTROL

The heart of the Data Temp system is the *Data Alarm Processor*, a microprocessor based controller designed for precision environmental control. The **dap4** not only controls and monitors temperature, humidity, airflow, and cleanliness, it provides component runtimes, alarm history, and automatic self-tests. All information is provided on a 2 row, 80 character, backlit liquid crystal display.

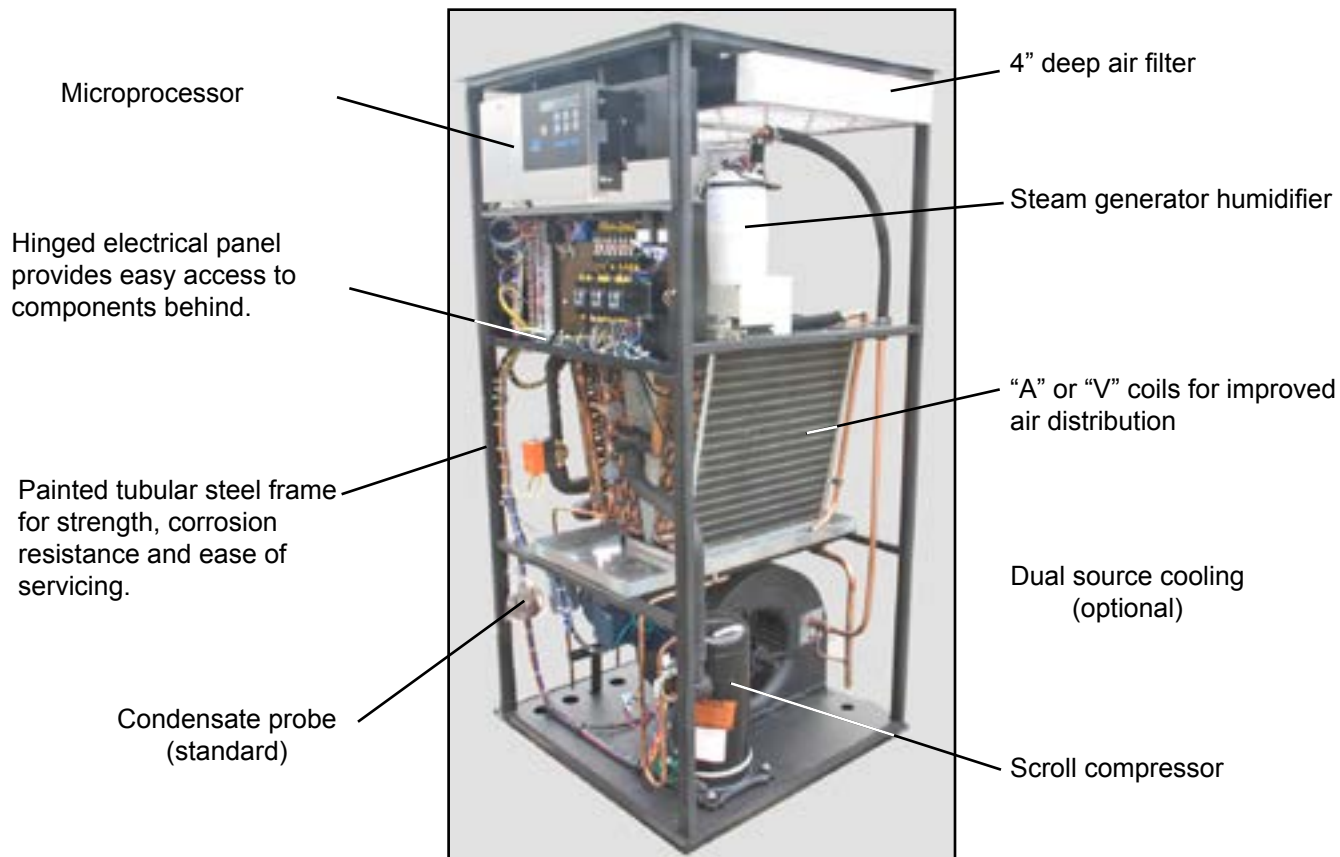
### HIGH PERFORMANCE

Engineered for high performance and reliability, each Data Temp unit comes with Data Aire's commitment to excellence. This commitment began with Data Aire's first process cooling unit and has continued for more than 40 years of building the industry's finest precision control equipment.

### DATA AIRE DELIVERS

Standard ship cycle is 30 days from date of order. With the optional premium "*quick ship*" program, units can be expedited to ship in as little as one week. All units are built to your specific order. Call your nearest Data Aire representative for more information or visit us on line at [www.dataaire.com](http://www.dataaire.com).

## DESIGN FEATURES



### **FRAME AND CABINET**

The heliarc welded tubular steel frame provides for maximum strength and ease of access. Side and front panels can be easily opened and removed with quarter-turn fasteners allowing full access to all unit components. All panels include one inch thick, 1-1/2 pound density insulation for protection and sound attenuation.

### **COIL SECTION**

Designed for draw through application, the computer selected coil offers greater efficiency in the cooling and dehumidification process. Air bypass is provided to prevent saturated air from being introduced into the controlled space. The coil section is provided with a stainless steel drain pan.

### **FAN SECTION**

The centrifugal, forward curved, double width, double inlet blower configuration is engineered for quiet reliable operation. The belt driven variable pitch drive section provides adjustable airflow capability to match load requirements of the controlled space. The draw through design ensures even air distribution across the coil and bypass, low internal cabinet losses, and static sealing of the filter section. Motor is mounted on an adjustable slide base and has internal overload protection.

### **FILTER SECTION**

Units are provided with 4 inch deep MERV 8 air filters.

### **ELECTRIC REHEAT**

Low-watt density finned tubular sheathed coils provide ample capacity to maintain room dry bulb conditions during a call for dehumidification. Low-watt density coils eliminate ionization associated with open air electric resistance heating. Three stages of reheat are standard.

### **HUMIDIFICATION**

Data Temp units include an electric steam generator humidifier with a "quick change" disposable cylinder and an auto-flush cycle. The steam generator humidifier with its patented control system optimizes cylinder life and energy efficiency by concentrating incoming water to a predetermined conductivity much higher than that of the entering water. The control system continuously monitors the conductivity in the cylinder through its electronics which allows water to be flushed as often as is necessary to maintain the capacity at this design conductivity. The high design conductivity results in a minimum flushing of heated water, thereby saving energy. The humidifier is designed to allow units at any voltage to produce full rated steam output at an optimum water level based on the design conductivity.

**COMPRESSORIZED SYSTEMS**

The single stage refrigeration circuit includes a hermetic scroll type compressor. These durable, heavy duty, fully welded compressors have no gaskets or seals, eliminating the possibility of refrigerant or oil leaking into the controlled space or environment. Scroll compressors also bring a combination of reliability, efficiency, and improved system sound performance. The refrigeration circuit includes built-in compressor overload protection, crankcase heater, filter drier, sight-glass, adjustable expansion valve with external equalizer, low pressure override timer (air cooled units), manual reset high pressure control, and compressor short cycle timer.

Water/glycol cooled units include a counterflow plate-fin condenser sized to provide the required capacity for heat rejection with minimum water/glycol flow and low total pressure drop. Head pressure regulating valves control the condensing temperature and maintain required capacity at various water/glycol flow rates and temperatures.

***Air Cooled with Remote Outdoor Condenser -***

A wide range of outdoor condensers are available. Condensers are manufactured by Data Aire and sized to meet the heat rejection and ambient conditions as required. The industrial duty design includes aluminum corrosion resistant housing, aluminum finned copper tube coils, coated fan guards, energy efficient thermally protected direct drive motors, and variable fan speed control on lead fan motor for proper control down to -20° F. Additional fan motors are controlled with ambient thermostats.

***Air Cooled with Indoor Condenser -***

A wide range of floor mounted indoor condensers with horizontal intake and discharge are available for applications where an outdoor condenser cannot be used. Units include a forward curved, double width, double inlet blower engineered for quiet, reliable operation. The belt driven variable pitch drive provides adjustable air flow. Indoor condensers are provided with a factory mounted and piped receiver. The receiver has a head pressure control valve to maintain flooded condenser control.

***Air Cooled with Outdoor Condensing Unit -***

Data Temp units are also available with remote outdoor condensing units. The condensing unit includes a hermetic scroll compressor with built-in overload protection, crankcase heater, filter drier, sight-glass, and condenser coil. The coil is constructed with copper tubes and aluminum fins. The housing is aluminum with vertical air discharge. The condenser fan is a variable speed type for head pressure control down to -20° F.

***Water/Glycol Cooled with Remote Outdoor Dry Cooler -*** Remote outdoor dry coolers are available in a variety of sizes. Each dry cooler includes aluminum corrosion resistant housing, aluminum finned copper tube coil, coated fan guards, surge tank, pump contactor, and energy efficient thermally protected direct drive motors. Fan cycling is controlled by water sensing thermostats on dry coolers with more than one fan.

**CHILLED WATER SYSTEMS**

Chilled water systems include all the same features of the Data Temp product line. Designed for draw through application, the computer selected coil offers greater efficiency in the cooling and dehumidification process. Air bypass is provided to prevent saturated air from being introduced into the controlled space. Chilled water flow is controlled by a 3-way modulating valve for accurate and economical temperature control and dehumidification.

## SYSTEM CONTROL

Every Data Temp unit come equipped with a dap™ 4 control system, which is the fastest and most advance microprocessor controller available on the market today. The system is comprised of two components – a display module and a control module. The display module includes a backlit liquid crystal display and six buttons for easy programming and communication. All programming, status and alarm conditions are displayed on the module in easy to read verbiage. The control module is mounted inside the unit and connected to the display module via a special “telephone” like cable.

The display module will allow recall and display of the high and low temperature and high and low humidity for the last 24 hours; current percent of capacity and average percent of capacity for the last hour of operation for cool 1, cool 2, reheat, humidification, dehumidification, component runtimes for fan motor(s), cooling stages, reheat, humidification, dehumidification and chilled water valve. Programming will have multilevel password and accomplished entirely from the front of the unit. Programmable functions shall be entered on flash memory to ensure program retention should power fail. The historical database shall be maintained by rechargeable battery backup. Multiple messages shall be displayed by automatically by scrolling from each message to the next. Alarm conditions shall be displayed by automatically scrolling from each message to the next. Alarm conditions, in addition to being displayed, shall enunciate an audible alarm. Four programmable summary contacts shall be available for remote alarm monitoring. Additional test or service terminal shall not be required for any functions. The control shall include temperature anticipation, moisture level humidity control and automatic flush cycles.

An alarm condition shall continue to be displayed until the malfunction is corrected. Multiple alarms shall be displayed sequentially in order of occurrence and only those alarms, which have not been acknowledged, shall continue to sound an audible alarm. The dap4 panel shall perform an automatic self-test on system start-up. A user accessible diagnostic program shall aid in system component trouble shooting by displaying on the unit LCD screen the name of the controlled item, output relay number, terminal plug and pin number for each controlled item.

### Automatic Control Functions

Humidity Anticipation	Auxiliary Chilled Water Operation*	Sequential Load Activation
Start Time Delay	Automatic Reheat Element Rotation	Automatic or Manual Restart
Temperature Anticipation	Energy Saver (Glycol Operation)*	Hot Water Coil Flush Cycle*
Dehumidification Lockout	Chilled Water Coil Flush Cycle*	Energy Saver Coil Flush Cycle*
Selectable Water Under Floor Alarm Action		Compressor Short Cycle

### Condition and Data Routinely Displayed

Current Date and Time	Unit Status	Temperature Setpoint
Humidity Setpoint	Current Temperature	Cooling 1, 2, 3, 4*
Current Humidity	Dehumidification	Humidification
Current Fan Speed*	Reheat 1, 2, 3Current	Discharge Temperature*
Current Chilled Water Valve Position	Current Percent of Capacity Utilized	

### Switching and Control functions

System On/Off/Esc Button	Menu Selection Buttons	Menu Exit Button
Select Buttons	Alarm Silence Button	Program Set Button

Manual Override for:

Cool 1, Cool 2, Heat 1, Humidification, CW Valve and Fan Speed



## SYSTEM CONTROL, continued

### Alarms

High Temperature Warning	High Humidity Warning	Local Alarm
Low Temperature Warning	Low Humidity Warning	Manual Override
Low Pressure Compressor 1	Low Pressure Compressor 2	Humidifier Problem
High Pressure Compressor 1	High Pressure Compressor 2	Custom Message*
Dirty Filter	Under Floor Water Detection	Power Failure Restart
Firestat Tripped	Compressor Short Cycle	Maintenance Required
Temperature Sensor Error	Humidity Sensor Error	Discharge Sensor Error*
No Water Flow*	Smoke Detector*	High Condensate Water Level*
Fan Motor Overload*	Standby Pump On*	Person to Contact on Alarm*

### Historical Data

High Temperature Last 24 Hours	Low Temperature Last 24 Hours	High Humidity Last 24 Hours
Low Humidity Last 24 Hours	Alarm History (Last 100 Alarms)	Hourly Average of Duty
Equipment Runtimes for: Blower, Compressor 1, Compressor 2, Reheat 1, 2, 3, Dehumidification, Energy Saver*, Humidifier, Condenser and Chilled Water		

### Programmable Functions

Temperature Setpoint	Temperature Deadband	Fan Control Mode
System Start Delay	Low Temperature Alarm Limit	Humidity Deadband
Humidity Setpoint	High Humidity Alarm Limit	Low Humidity Alarm Limit
Define Password	Reset Equipment Runtimes	Audio Alarm Mode
Reverse Acting Water Valve	Compressor Short Cycle Alarm	Humidity Anticipation
Compressors(s)	Analog Module Sensor Setup*	Calibrate Temperature Sensor
Temperature Scale	High Temperature Alarm Limit	Fan Speed Settings
Water Valve Voltage Range	Delay for Optional Alarm 1, 2, 3, 4	Firestat Temperature Alarm Limit
Manual Diagnosis	Remote Alarm 1, 2, 3, 4 Selection	Calibrate Discharge Air Sensor*
Person to contact on Alarm	Compressor Lead/Lag Sequence	Dehumidification Mode
Humidifier Autoflush Timer*	Power Problem or Restart Mode	Scheduled Normal Maintenance
Reheat Stages	Water Valve Mode	Calibrate Humidity
Humidifier	Compressor Supplements to Energy Saver*	
Network Protocol	Low Discharge Temperature Alarm Limit*	
Calibrate Chilled Water Temperature Sensor*		

In addition, the dap4 control panel shall support the following network protocols for integration with a Building Management System (BMS) for Computer Room Air Conditioning (CRAC) system monitoring and control: Modbus RTU, TCP/IP, SNMP V1 or V2, BACnet IP or MS/TP and LonTalk SNVT.

Building Management System Interface: Unit(s) shall be furnished with an optional interface card to communicate directly with the Building Automation System (BAS) through a RS-485, Ethernet or LonTalk port. All alarms, set points, and operating parameters that are accessible from the unit mounted control panel shall also be made available through the BAS.

\* Some of the programmable selections, displays or alarms may require additional components or sensors

**Energy Saver Coil** - The Data Aire *Energy Saver Coil* is built into the system to provide total required capacity. Whenever the incoming water/glycol temperature is below 45° F/7.2° C, *Energy Saver* cooling is available. *Energy Saver* mode operates in the following range: Return air setpoint plus deadband plus two degrees. The *Energy Saver* will operate providing there is a need for cooling. The valve will open at setpoint plus deadband. The valve will modulate as long as the space is between setpoint plus deadband plus 2 degrees. If the temperature falls below the deadband minus setpoint, the valve will close and the space is considered satisfied. While still in *Energy Saver* with the valve modulating, if the temperature goes beyond setpoint plus deadband plus 2 degrees the *Energy Saver* valve will close and DX cooling will begin.

The *Energy Saver Coil* includes the next size motor, 3-way pressure control valve on condenser water circuit, and a 3-way valve on the *Energy Saver* coil. Common piping for coil and condenser is provided.

**Energy Saver/Compressor Supplement** - Units with the *Energy Saver Coil* can be provided with compressor supplement if the *Energy Saver* is not sufficient as a stand alone system. When the incoming water/glycol temperature is below the setpoint of the water changeover thermostat, the *Energy Saver* mode is enabled (even if there is no call for cooling). Upon a call for cooling (setpoint plus deadband), the valve will open proportionally - 10% for each 0.1° above setpoint plus deadband. The compressor will come on at setpoint plus deadband plus 1.0° (the valve is 100% open at this point). The compressor will go off at setpoint plus deadband plus 0.7°. The valve will close proportionally - 10% for each 0.1° below setpoint plus deadband. An air discharge sensor is factory installed.

**Auxiliary Chilled Water Coil** - Where an existing chilled water loop is available, units can be fitted with an auxiliary chilled water coil. Units will operate using the chilled water for cooling. Upon a loss of water flow or an increase in room temperature the system will bring on compressor (DX) cooling. The *Auxiliary Chilled Water Coil* includes the next size motor. Separate piping is provided for the chilled water coil and refrigeration connections.

**Auxiliary Chilled Water Coil/Compressor Supplement** - The *Auxiliary Chilled Water Coil* can be provided with compressor supplement for extended savings by allowing the compressor to supplement operation as needed when the chilled water is not sufficient on a stand alone basis. An discharge air sensor is factory installed. (See *Energy Saver/Compressor Supplement* for details).

**Remote Temperature and Humidity Sensors** - Temperature and humidity sensors may be ordered for remote wall mounting in lieu of the standard return air sensors. Sensors are provided in a wall mounted plastic case for remote sensing of temperature and humidity. 25 feet of shielded cable is provided for field wiring.

**Smoke Detector** - A unit mounted smoke detector will shut down the unit if smoke is sensed. The microprocessor will sound an alarm and display a “SMOKE DETECTED” message. The smoke detector is mounted in the return air stream and is provided with auxiliary contacts.

**Next Size Larger Motor** - Should your installation require additional airflow or increased static pressure you can order a larger motor to meet these requirements.

**Hot Water Reheat** - Where hot water is available, a unit installed reheat coil can use hot water reheat. The coil is designed for 150 psi maximum water pressure and includes a 2-way valve (a 3-way valve is optional).

**Hot Gas Reheat** - Unit hot gas discharge is used for reheat and maximum system efficiency.

(**Note:** Units with *Hot Gas Bypass* option are not available with hot gas reheat).

**Steam Reheat** - When your building already has steam lines this option may be a more beneficial way of providing reheat to your unit. When selected the unit comes with a steam coil and 2-way valve, replacing the standard electric reheat.

**Compressor Rotalock Valves** - These valves facilitate servicing and permit the changing of compressor without the complete loss of refrigerant.

**Unit Mounted Disconnect** - A unit mounted nonautomatic disconnect switch is installed in the high voltage electrical section. The operating mechanism allows access to the high voltage electrical components when switched to the “OFF” position. The operating mechanism (handle) protrudes through the decorative door.

**Hot Gas Bypass** - A hot gas bypass valve is available for applications that create low suction pressure conditions that could lead to coil freeze and/or compressor cycling. In facilities such conditions generally exist in instances where; 1) a unit’s dehumidification mode needs to run for extended period of time; or

2) a room is designed for low entering air conditions; or 3) a unit is utilizing an oversized condenser at low outdoor ambient conditions.

When the system suction pressure is high enough it will maintain pressure on the leaving side of the hot gas bypass valve to keep the valve port closed. Should the suction pressure decrease below the desired setting, the pressure from the suction line forces the diaphragm, which off-sets the spring pressure, allowing the spring to push the valve open. The opening of this valve allows some hot gas to mix with the refrigerant in the suction line raising the evaporator pressure. This increases the suction pressure in the system back to the desired setting. The hot gas bypass can be manually adjusted within a certain range to fine tune the unit to a desired suction pressure in the field.

**3-Way Water Regulating Valve** - 3-way water regulating valve for pressure control may be ordered to replace standard 2-way valve installed in water/glycol unit. 3-way valves provide control of condensing temperature maintaining constant system capacity and condenser water flow.

**Condensate Pump** - Condensate pumps may be ordered as factory installed or for field installation. Condensate pumps are complete with sump, motor, and automatic control. The pumps are rated for 130 GPH at 20 foot maximum or 40 GPH at 20 feet with check valve. Pumps shipped loose are available in 115, 230, or 460 volt.

**Upflow Plenum** - Upflow plenums are fully insulated with front discharge air grille. Side grilles for both or one side are available. Standard plenums are 18 inches high and are painted to match the unit color.

**Floorstand** - Floorstands are adjustable -1/+3 inches and are available with a factory installed turning vane or with seismic construction.

**Seismic Bases** - When required you can order 12" to 24" seismic bases for your unit.

**Vibration Isolation Pads** - Ribbed neoprene cork filled pads installed between either the evaporator or condenser unit and the floor. These pads minimize the vibrations created with the operation of the unit resulting in quieter operation

**Compressor Sound Jackets** - Should you have a concern

about the noise generated by the compressor one way to minimize the noise is by using this option. Jackets are shipped loose and must be installed in the field.

**Extended Compressor Warranties** - Data Aire offers either a two year or a four year extended compressor warranty in addition to the standard three parts parts warranty. These extended warranties cover parts only - not labor.

## Site Monitoring Devices

**DARA-4** - Data Aire Relay Auto Changeover controller allows for unit rotation and backup capabilities while interfacing via a summary alarm with BMS systems. This economical controller manages up to four Data Aire units.

**AIR COOLED: Performance data at STANDARD AIRFLOW with remote air cooled condenser**

<i>MODEL NUMBER</i>		<i>DTAD/U-02</i>	<i>DTAD/U-03</i>	<i>DTAD/U-04</i>	<i>DTAD/U-05</i>
<b>CAPACITY in Btu/hr - gross</b>					
80° DB/67° WB	Total	24,900	37,000	52,000	62,500
	50% RH Sensible	19,800	29,200	40,200	48,600
75° DB/62.5° WB	Total	23,100	34,300	48,400	57,900
	50% RH Sensible	19,100	28,200	39,000	47,000
75° DB/61° WB	Total	22,500	33,300	47,000	56,400
	45% RH Sensible	20,500	30,100	41,600	50,300
72° DB/60° WB	Total	21,900	32,600	46,300	55,200
	50% RH Sensible	18,700	27,600	38,300	46,000
72° DB/58.6° WB	Total	21,500	31,900	44,900	53,800
	45% RH Sensible	20,000	29,400	40,600	49,000
<b>BLOWER SECTION</b>					
Airflow - CFM		800	1,200	1,600	2,000
Standard motor - horsepower		1/2	3/4	1	1 1/2
External static pressure (E.S.P.) - inches of W.G .		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.	(Standard Motor)	0.8	0.7	1.0	1.0
Minimum E.S.P.	(Next Size Motor)	0.8	1.0	1.2	1.2
Next size motor - horsepower		3/4	1	1 1/2	2
<b>COMPRESSORS</b>					
Type		Scroll	Scroll	Scroll	Scroll
Quantity		1	1	1	1
Refrigerant		R-407C	R-407C	R-407C	R-407C
<b>EVAPORATOR COIL</b>					
Face area - sq ft		4.2	4.2	6.25	6.25
Rows of coils		3	3	4	4
Face velocity - fpm		190	286	256	320
<b>REHEAT SECTION</b>					
Electric		Standard	Standard	Standard	Standard
kW		6	6	12	12
Capacity - Btu/hr		20,490	20,490	40,980	40,980
<b>HUMIDIFIER SECTION</b>					
Steam generator		Standard	Standard	Standard	Standard
kW		3.4	3.4	3.4	3.4
Capacity - lb/hr		10	10	10	10

**AIR COOLED: Performance data at STANDARD airflow with remote air cooled condenser**

<b>MODEL NUMBER</b>		<b>DTAD/U-02</b>	<b>DTAD/U-03</b>	<b>DTAD/U-04</b>	<b>DTAD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Liquid line - O.D. Copper		1/2	1/2	1/2	1/2
Hot gas line - O.D. Copper		1/2	1/2	1/2	1/2
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance manual for recommended pipe sizing between indoor/outdoor sections.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
Electrical data based on STANDARD unit, electric reheat - <b>YES</b> , steam generator humidifier - <b>YES</b> , and STANDARD MOTOR.					
208-230/1/60	FLA/MCA/MOP	44/54/60	50/61/70	83/103/110	95/117/125
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	52/64/70	55/68/70
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	24/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/23/25	21/26/30

Electrical data based on: electric reheat - <b>NO</b> , steam generator humidifier - <b>YES</b> , and STANDARD MOTOR.					
208-230/1/60	FLA/MCA/MOP	31/38/45	38/46/50	42/51/60	54/65/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/36/40	35/42/50	38/47/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	16/20/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	12/15/20	15/18/20

Electrical data based on: electric reheat - <b>YES</b> , steam generator humidifier - <b>NO</b> , and STANDARD MOTOR.					
208-230/1/60	FLA/MCA/MOP	44/54/60	50/61/70	83/103/110	95/117/125
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	52/64/70	55/68/70
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	24/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/23/25	21/26/30

Electrical data based on: electric reheat - <b>NO</b> , steam generator humidifier - <b>NO</b> , and STANDARD MOTOR.					
208-230/1/60	FLA/MCA/MOP	15/18/25	21/25/40	26/30/50	38/45/70
208-230/3/60	FLA/MCA/MOP	10/11/15	13/16/25	18/22/35	22/26/40
460/3/60	FLA/MCA/MOP	4.6/5.5/15	6.6/7.9/15	8.9/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	6.5/7.88/15	9.1/11/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		1/2	3/4	1	1 1/2
208-230/1/60		3.4	5.3	6.8	8.8
208-230/3/60		2.2	3.0	3.6	4.8
460/3/60		1.1	1.6	1.8	2.4
575/3/60		N/A	N/A	1.4	2.0

FLA - Full load amps    MCA - Minimum circuit amps (wire sizing amps)    MOP - Maximum overcurrent protection device  
amps



**AIR COOLED: Performance data at OPTIONAL airflow with remote air cooled condenser**

<i>MODEL NUMBER</i>		<i>DTAD/U-02</i>	<i>DTAD/U-03</i>	<i>DTAD/U-04</i>	<i>DTAD/U-05</i>
<b>CAPACITY in Btu/hr - gross</b>					
80° DB/67° WB 50% RH	Total	25,800	38,100	54,000	64,700
	Sensible	22,600	33,100	45,900	55,300
75° DB/62.5° WB 50% RH	Total	23,900	35,300	50,100	60,100
	Sensible	21,700	31,900	44,200	53,300
75° DB/61° WB 45% RH	Total	23,100	34,400	48,600	58,200
	Sensible	22,800	33,800	47,200	56,800
72° DB/60° WB 50% RH	Total	22,700	33,700	47,800	57,300
	Sensible	21,200	31,200	43,200	52,100
72° DB/58.6° WB 45% RH	Total	22,100	32,800	46,500	55,700
	Sensible	21,900	32,500	45,800	54,900
<b>BLOWER SECTION</b>					
Airflow - CFM		1,000	1,500	2,000	2,500
Standard motor - horsepower		3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G.		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P. (Standard Motor)		0.8	0.7	1.0	1.2
Maximum E.S.P. (Next Size Motor)		1.0	1.0	1.2	N/A
Next size motor - horsepower		1	1 1/2	2	N/A
<b>COMPRESSORS</b>					
Type		Scroll	Scroll	Scroll	Scroll
Quantity		1	1	1	1
Refrigerant		R-407C	R-407C	R-407C	R-407C
<b>EVAPORATOR COIL</b>					
Face area - sq ft		4.2	4.2	6.25	6.25
Rows of coils		3	3	4	4
Face velocity - fpm		238	357	320	400
<b>REHEAT SECTION</b>					
Electric		Standard	Standard	Standard	Standard
kW		6	6	12	12
Capacity - Btu/hr		20,490	20,490	40,980	40,980
<b>HUMIDIFIER SECTION</b>					
Stream generator		Standard	Standard	Standard	Standard
kW		3.4	3.4	3.4	3.4
Capacity - lb/hr		10	10	10	10

**AIR COOLED: Performance Data at OPTIONAL airflow with remote air cooled condenser**

<b>MODEL NUMBER</b>		<b>DTAD/U-02</b>	<b>DTAD/U-03</b>	<b>DTAD/U-04</b>	<b>DTAD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Liquid line - O.D. Copper		1/2	1/2	1/2	1/2
Hot gas line - O.D. Copper		1/2	1/2	1/2	1/2
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance Manual for recommended pipe sizing between indoor/outdoor sections.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - <b>YES</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	32/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20

<u>Electrical data based on: electric reheat - <b>YES</b>, steam generator humidifier -<b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>NO</b> and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	9.5/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	10/11/15

<b>STANDARD MOTOR</b>		<i>FLA - full load amps</i>			
Horsepower		3/4	1	1 1/2	2
208-230/1/60		5.3	6.4	8.8	10.5
208-230/3/60		3.0	3.6	4.8	6.2
460/3/60		1.5	1.8	2.4	3.1
575/3/60		N/A	N/A	2.0	2.5

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps



**AIR COOLED: Performance data at OPTIONAL airflow with remote air cooled condenser**

**MODEL NUMBER** **DTAD/U-02** **DTAD/U-03** **DTAD/U-04** **DTAD/U-05**

**ELECTRICAL SECTION**

**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	46/56/60	54/65/70	87/107/110	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	32/39/45	54/66/70	N/A
460/3/60	FLA/MCA/MOP	13/16/20	15/18/20	25/31/35	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	20/24/25	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	34/41/45	41/49/60	46/55/70	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	31/38/40	37/45/50	N/A
460/3/60	FLA/MCA/MOP	13/15/20	15/18/20	18/21/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	14/16/20	N/A

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	46/56/60	54/65/70	87/107/110	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	32/39/45	54/66/70	N/A
460/3/60	FLA/MCA/MOP	13/16/20	15/18/20	25/31/35	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	20/24/25	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	17/20/30	25/29/45	30/35/50	N/A
208-230/3/60	FLA/MCA/MOP	11/13/20	15/18/25	21/25/35	N/A
460/3/60	FLA/MCA/MOP	5.3/6.2/15	7.5/8.8/15	10/12/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	7.6/8.9/15	N/A

**NEXT SIZE MOTOR**

*FLA - full load amps*

Horsepower		1	1 1/2	2	N/A
208-230/1/60		6.4	8.8	11.0	N/A
208-230/3/60		3.6	4.8	6.2	N/A
460/3/60		1.8	2.4	3.1	N/A
575/3/60		N/A	N/A	2.5	N/A

**COMPRESSOR**

*FLA - full load amps*

Nominal tons		2	3	4	N/A
208-230/1/60		11.0	16.0	19.0	N/A
208-230/3/60		7.1	10.3	15.0	N/A
460/3/60		3.5	5.1	7.1	N/A
575/3/60		N/A	N/A	5.1	N/A

**CONDENSER**

*FLA - full load amps*

Condenser selection at 95° F ambient	DARC-03	DARC-03	DARC-05	DARC-05
Condenser selection at 100° F ambient	DARC-03	DARC-03	DARC-05	DARC-07
Condenser selection at 105° F ambient	DARC-03	DARC-05	DARC-07	DARC-07

*(Note: Condensers are not available in 575 volts. Condensers are selected at sea level.)*

FLA - Full load amps

MCA - Minimum circuit amps (wire sizing amps)

MOP - Maximum overcurrent protection device amps

**AIR COOLED: Performance data at STANDARD airflow with remote outdoor condensing unit**

<b>MODEL NUMBER</b>		<b>DTAD/U-02</b>	<b>DTAD/U-03</b>	<b>DTAD/U-04</b>	<b>DTAD/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>					
80° DB/67° WB 50% RH	Total	24,900	37,000	52,000	62,500
	Sensible	19,800	29,200	40,200	48,600
75° DB/62.5° WB 50% RH	Total	23,100	34,300	48,400	57,900
	Sensible	19,100	28,200	39,000	47,000
75° DB/61° WB 45% RH	Total	22,500	33,300	47,000	56,400
	Sensible	20,500	30,100	41,600	50,300
72° DB/60° WB 50% RH	Total	21,900	32,600	46,300	55,200
	Sensible	18,700	27,600	38,300	46,000
72° DB/58.6° WB 45% RH	Total	21,500	31,900	44,900	53,800
	Sensible	20,000	29,400	40,600	49,000

<b>BLOWER SECTION</b>					
Airflow - CFM		800	1,200	1,600	2,000
Standard motor - horsepower		1/2	3/4	1	1 1/2
External static pressure (E.S.P.) - inches of W.G.		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.	(Standard Motor)	0.8	0.7	1.0	1.0
Maximum E.S.P.	(Next Size Motor)	0.8	1.0	1.2	1.2
Next size motor		3/4	1	1 1/2	2

<b>COMPRESSOR</b>		<i>in Condensing Unit</i>			
Type		Scroll	Scroll	Scroll	Scroll
Quantity		1	1	1	1
Refrigerant		R-407C	R-407C	R-407C	R-407C

<b>EVAPORATOR COIL</b>					
Face area - sq ft		4.2	4.2	4.2	4.2
Rows of coils		3	3	4	4
Face velocity - fpm		190	286	256	320

<b>REHEAT SECTION</b>					
Electric		Standard	Standard	Standard	Standard
kW		6	6	12	12
Capacity - Btu/hr		20,490	20,490	40,980	40,980

<b>HUMIDIFIER SECTION</b>					
Steam generator		Standard	Standard	Standard	Standard
kW		3.4	3.4	3.4	3.4
Capacity - lb/hr		10	10	10	10

**AIR COOLED: Performance data at STANDARD airflow with remote outdoor condensing unit**

MODEL NUMBER		DTAD/U-02	DTAD/U-03	DTAD/U-04	DTAD/U-05
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Liquid line - O.D. Copper		1/2	1/2	1/2	1/2
Suction line - O.D. Copper		3/4	3/4	3/4	3/4
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance manual for recommended pipe sizing between indoor section and condensing unit.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/41/45	34/43/45	64/80/90	67/83/90
208-230/3/60	FLA/MCA/MOP	19/24/25	20/25/30	37/46/50	38/48/50
460/3/60	FLA/MCA/MOP	8.6/11/15	9/11/15	17/21/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	20/25/30	22/27/30	23/28/30	25/31/35
208-230/3/60	FLA/MCA/MOP	19/23/25	19/24/25	20/25/30	21/26/30
460/3/60	FLA/MCA/MOP	8.5/11/15	8.9/11/15	9.2/12/25	10/12/15
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/41/45	34/43/45	64/80/90	67/83/90
208-230/3/60	FLA/MCA/MOP	19/24/25	20/25/30	37/46/50	38/48/50
460/3/60	FLA/MCA/MOP	8.6/11/15	9/11/15	17/21/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	4/5/15	5.3/6.6/15	6.4/8.0/15	8.8/11/20
208-230/3/60	FLA/MCA/MOP	2.2/2.8/15	3.0/3.8/15	3.6/4.5/15	4.8/6.0/15
460/3/60	FLA/MCA/MOP	1.1/1.4/15	1.5/1.9/15	1.8/2.3/15	2.4/3.0/15
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		1/2	3/4	1	1 1/2
208-230/1/60		4.0	5.3	6.4	8.8
208-230/3/60		2.2	3.0	3.6	4.8
460/3/60		1.1	1.5	1.8	2.4
575/3/60		N/A	N/A	N/A	N/A

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps



**AIR COOLED: Performance data at STANDARD airflow with remote outdoor condensing unit**

<i>MODEL NUMBER</i>		<i>DTAD/U-02</i>	<i>DTAD/U-03</i>	<i>DTAD/U-04</i>	<i>DTAD/U-05</i>
<b>CONDENSING UNIT</b>					
Condensing unit at 95° F ambient		<i>DRCU-03</i>	<i>DRCU-03</i>	<i>DRCU-05</i>	<i>DRCU-05</i>
208-230/1/60	FLA/MCA/MOP	18/21/30	20/24/40	28/34/50	33/40/60
208-230/3/60	FLA/MCA/MOP	13/15/20	15/17/25	18/21/30	22/26/40
460/3/60	FLA/MCA/MOP	6.6/7.7/15	7.2/8.5/15	10/11/15	11/13/20
Condensing unit at 100° F ambient		<i>DRCU-03</i>	<i>DRCU-03</i>	<i>DRCU-05</i>	<i>DRCU-06</i>
208-230/1/60	FLA/MCA/MOP	18/21/30	20/24/40	28/34/50	33/40/60
208-230/3/60	FLA/MCA/MOP	13/15/20	15/17/25	18/21/30	22/26/40
460/3/60	FLA/MCA/MOP	6.6/7.7/15	7.2/8.5/15	10/11/15	11/13/20
Condensing unit at 105° F ambient		<i>DRCU-03</i>	<i>DRCU-05</i>	<i>DRCU-06</i>	<i>DRCU-07</i>
208-230/1/60	FLA/MCA/MOP	18/21/30	20/24/40	28/34/50	33/40/60
208-230/3/60	FLA/MCA/MOP	13/15/20	15/17/25	18/21/30	22/26/40
460/3/60	FLA/MCA/MOP	6.6/7.7/15	7.2/8.5/15	10/11/15	11/13/20

Notes: Condensing units are not available in 575 volts.

Condensing units are selected at sea level.

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**AIR COOLED: Performance data at OPTIONAL airflow with remote outdoor condensing unit**

<i>MODEL NUMBER</i>		<i>DTAD/U-02</i>	<i>DTAD/U-03</i>	<i>DTAD/U-04</i>	<i>DTAD/U-05</i>
<b>CAPACITY in Btu/hr - gross</b>					
80° DB/67° WB	Total	25,800	38,100	54,000	64,700
	50% RH Sensible	22,600	33,100	45,900	55,300
75° DB/62.5° WB	Total	23,900	35,300	50,100	60,100
	50% RH Sensible	21,700	31,900	44,200	53,300
75° DB/61° WB	Total	23,100	34,400	48,600	58,200
	45% RH Sensible	22,800	33,800	47,200	56,800
72° DB/60° WB	Total	22,700	33,700	47,800	57,300
	50% RH Sensible	21,200	31,200	43,200	52,100
72° DB/58.6° WB	Total	22,100	32,800	46,500	55,700
	45% RH Sensible	21,900	32,500	45,800	54,900
<b>BLOWER SECTION</b>					
Airflow - CFM		1,000	1,500	2,000	2,500
Standard motor - horsepower		3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G .		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P. (Standard Motor)		0.8	0.7	1.0	1.2
Maximum E.S.P. (Next Size Motor)		1.0	1.0	1.2	N/A
Next size motor		1	1 1/2	2	N/A
<b>COMPRESSOR</b>					
		<i>in Condensing Unit</i>			
Type		Scroll	Scroll	Scroll	Scroll
Quantity		1	1	1	1
Refrigerant		R-407C	R-407C	R-407C	R-407C
<b>EVAPORATOR COIL</b>					
Face area - sq ft		4.2	4.2	6.25	6.25
Rows of coils		3	3	4	4
Face velocity - fpm		238	357	320	400
<b>REHEAT SECTION</b>					
Electric		Standard	Standard	Standard	Standard
kW		6	6	12	12
Capacity - Btu/hr		20,490	20,490	40,980	40,980
<b>HUMIDIFIER SECTION</b>					
Steam generator		Standard	Standard	Standard	Standard
kW		3.4	3.4	3.4	3.4
Capacity - lb/hr		10	10	10	10

**AIR COOLED: Performance data at OPTIONAL airflow with remote outdoor condensing unit**

<b>MODEL NUMBER</b>		<b>DTAD/U-02</b>	<b>DTAD/U-03</b>	<b>DTAD/U-04</b>	<b>DTAD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Liquid line - O.D. Copper		1/2	1/2	1/2	1/2
Suction line - O.D. Copper		3/4	3/4	3/4	3/4
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance manual for recommended pipe sizing between indoor section and condensing unit.)					

<b>ELECTRICAL</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - <b>YES</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	34/43/45	35/44/45	67/83/90	68/85/90
208-230/3/60	FLA/MCA/MOP	20/25/30	20/25/30	38/48/50	40/49/50
460/3/60	FLA/MCA/MOP	9/11/15	9.3/12/15	18/22/25	18/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	22/27/30	23/28/30	25/31/35	27/34/40
208-230/3/60	FLA/MCA/MOP	19/24/25	20/25/30	21/26/30	23/28/30
460/3/60	FLA/MCA/MOP	8.9/11/15	9.2/12/15	10/12/15	11/13/15
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<u>Electrical data based on: electric reheat - <b>YES</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	34/43/45	35/44/45	67/83/90	68/85/90
208-230/3/60	FLA/MCA/MOP	20/25/30	20/25/30	38/48/50	40/49/50
460/3/60	FLA/MCA/MOP	9/11/15	9.3/12/15	18/22/25	18/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	5.3/6.6/15	6.4/8.0/15	8.8/11/20	11/13/20
208-230/3/60	FLA/MCA/MOP	3.0/3.8/15	3.6/4.5/15	4.8/6.0/15	6.2/7.8/15
460/3/60	FLA/MCA/MOP	1.5/1.9/15	1.8/2.3/15	2.4/3.0/15	3.1/3.9/15
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<b>STANDARD MOTOR</b>					
Horsepower		3/4	1	1 1/2	2
208-230/1/60		5.3	6.4	8.8	10.5
208-230/3/60		3.0	3.6	4.8	6.2
460/3/60		1.5	1.8	2.4	3.1
575/3/60		N/A	N/A	N/A	N/A

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**AIR COOLED: Performance Data at OPTIONAL airflow with remote outdoor condensing unit**

<b>MODEL NUMBER</b>	<b>DTAD/U-02</b>	<b>DTAD/U-03</b>	<b>DTAD/U-04</b>	<b>DTAD/U-05</b>
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<b>ELECTRICAL</b>
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**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	35/44/45	38/47/50	68/85/90	N/A
208-230/3/60	FLA/MCA/MOP	20/25/30	22/27/30	40/49/50	N/A
460/3/60	FLA/MCA/MOP	9.3/12/15	10/12/15	18/23/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	23/28/30	25/31/35	27/34/40	N/A
208-230/3/60	FLA/MCA/MOP	20/25/30	21/26/30	23/28/30	N/A
460/3/60	FLA/MCA/MOP	9.2/12/15	10/12/15	11/13/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	35/44/45	38/47/50	68/85/90	N/A
208-230/3/60	FLA/MCA/MOP	20/25/30	22/27/30	40/49/50	N/A
460/3/60	FLA/MCA/MOP	9.3/12/15	10/12/15	18/23/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	6.4/8.0/15	8.8/11/20	11/13/20	N/A
208-230/3/60	FLA/MCA/MOP	3.6/4.5/15	4.8/6.0/15	6.2/7.8/15	N/A
460/3/60	FLA/MCA/MOP	1.8/2.3/15	2.4/3.0/15	3.1/3.9/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	N/A	N/A

<b>NEXT SIZE MOTOR</b>
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*FLA- Full load amps*

Horsepower		1	1 1/2	2	N/A
208-230/1/60		6.4	8.8	10.5	N/A
208-230/3/60		3.6	4.8	6.2	N/A
460/3/60		1.8	2.4	3.1	N/A
575/3/60		N/A	N/A	N/A	N/A

<b>COMPRESSOR</b>
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*FLA - Full load amps*

Nominal tons		2	3	4	N/A
208-230/1/60		11.0	16.0	19.2	N/A
208-230/3/60		7.1	10.3	14.7	N/A
460/3/60		3.5	5.1	7.1	N/A
575/3/60		N/A	N/A	N/A	N/A

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps



**AIR COOLED: Performance data at OPTIONAL airflow with remote outdoor condensing unit**

<i>MODEL NUMBER</i>		<i>DTAD/U-02</i>	<i>DTAD/U-03</i>	<i>DTAD/U-04</i>	<i>DTAD/U-05</i>
<b>CONDENSING UNIT</b>					
Condensing unit at 95° F ambient		<i>DRCU-03</i>	<i>DRCU-03</i>	<i>DRCU-05</i>	<i>DRCU-05</i>
208-230/1/60	FLA/MCA/MOP	18/21/30	20/24/40	28/34/50	33/40/60
208-230/3/60	FLA/MCA/MOP	13/15/20	15/17/25	18/21/30	22/26/40
460/3/60	FLA/MCA/MOP	6.6/7.7/15	7.2/8.5/15	10/11/15	11/13/20
Condensing unit at 100° F ambient		<i>DRCU-03</i>	<i>DRCU-03</i>	<i>DRCU-05</i>	<i>DRCU-06</i>
208-230/1/60	FLA/MCA/MOP	18/21/30	20/24/40	28/34/50	33/40/60
208-230/3/60	FLA/MCA/MOP	13/15/20	15/17/25	18/21/30	22/26/40
460/3/60	FLA/MCA/MOP	6.6/7.7/15	7.2/8.5/15	10/11/15	11/13/20
Condensing unit at 105° F ambient		<i>DRCU-03</i>	<i>DRCU-05</i>	<i>DRCU-06</i>	<i>DRCU-07</i>
208-230/1/60	FLA/MCA/MOP	18/21/30	20/24/40	28/34/50	33/40/60
208-230/3/60	FLA/MCA/MOP	13/15/20	15/17/25	18/21/30	22/26/40
460/3/60	FLA/MCA/MOP	6.6/7.7/15	7.2/8.5/15	10/11/15	11/13/20

Notes: Condensing units are not available in 575 volts.

Condensing units are selected at sea level.

FLA - Full load amps

MCA - Minimum circuit amps (wire sizing amps)

MOP - Maximum overcurrent protection device amps

**WATER COOLED: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>		<b>DTWD/U-02</b>	<b>DTWD/U-03</b>	<b>DTWD/U-04</b>	<b>DTWD/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>					
80° DB/67° WB	Total	26,000	40,700	54,300	65,200
	50% RH Sensible	20,200	30,600	41,100	49,700
75° DB/62.5° WB	Total	24,100	37,800	50,400	60,500
	50% RH Sensible	19,500	29,600	39,800	48,100
75° DB/61° WB	Total	23,400	36,600	49,100	58,900
	45% RH Sensible	20,900	31,600	42,500	51,300
72° DB/60° WB	Total	22,900	36,000	48,100	57,700
	50% RH Sensible	19,100	29,000	39,100	47,100
72° DB/58.6° WB	Total	22,400	35,000	46,900	56,200
	45% RH Sensible	20,400	30,800	41,500	50,100

<b>BLOWER SECTION</b>					
Airflow - CFM		800	1,200	1,600	2,000
Standard motor - horsepower		1/2	3/4	1	1 1/2
External static pressure (E.S.P.) - inches of W.G .		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.	(Standard motor)	0.8	0.7	1.0	1.0
Maximum E.S.P.	(Next size motor)	0.8	1.0	1.2	1.2
Next size motor - horsepower		3/4	1	1 1/2	2

<b>COMPRESSORS</b>					
Type		Scroll	Scroll	Scroll	Scroll
Quantity		1	1	1	1
Refrigerant type		R-407C	R-407C	R-407C	R-407C

<b>EVAPORATOR COIL</b>					
Face area - sq ft		4.2	4.2	6.25	6.25
Rows of coils		3	3	4	4
Face velocity - fpm		190	286	256	320

<b>REHEAT SECTION</b>					
Electric		Standard	Standard	Standard	Standard
kW		6	6	12	12
Capacity - Btu/hr		20,490	20,490	40,980	40,980

<b>HUMIDIFIER SECTION</b>					
Steam generator		Standard	Standard	Standard	Standard
kW		3.4	3.4	3.4	3.4
Capacity - lb/hr		10	10	10	10

**WATER COOLED: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>		<b>DTWD/U-02</b>	<b>DTWD/U-03</b>	<b>DTWD/U-04</b>	<b>DTWD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Condenser water supply - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condenser water return - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance Manual for piping information between indoor unit and water source.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	44/54/60	50/61/70	83/103/110	95/117/125
208-230/1/60	FLA/MCA/MOP	26/32/35	30/37/40	52/64/70	55/68/70
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	24/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/23/25	21/26/30

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	31/38/45	38/46/50	42/51/60	54/65/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/36/40	35/42/50	38/47/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	16/20/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	12/15/20	15/18/20

<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	44/54/60	50/61/70	83/103/110	95/117/125
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	52/64/70	55/68/70
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	24/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/23/25	21/26/30

<u>Electric data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	15/18/25	21/25/40	26/30/50	38/45/70
208-230/3/60	FLA/MCA/MOP	9.3/11/15	13/16/25	18/22/35	22/26/40
460/3/60	FLA/MCA/MOP	4.6/5.5/15	6.6/7.9/15	8.9/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	6.5/7.8/15	9.1/11/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		1/2	3/4	1	1 1/2
208-230/1/60	FLA	4.0	5.3	6.4	8.8
208-230/3/60	FLA	2.2	3.0	3.6	4.8
460/3/60	FLA	1.1	1.5	1.8	2.4
575/3/60	FLA	N/A	N/A	1.4	2.0

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**WATER COOLED: Performance data at STANDARD airflow**

**MODEL NUMBER:** *DTWD/U-02* *DTWD/U-03* *DTWD/U-04* *DTWD/U-05*

**ELECTRICAL SECTION**

**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	9.5/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	9.6/11/15

**NEXT SIZE MOTOR**

*FLA - Full load amps*

Horsepower		3/4	1	1 1/2	2
208-230/1/60	FLA	5.3	6.4	8.8	10.5
208-230/3/60	FLA	3.0	3.6	4.8	6.2
460/3/60	FLA	1.5	1.8	2.4	3.1
575/3/60	FLA	N/A	N/A	2.0	2.5

**COMPRESSOR**

*FLA - Full load amps*

Nominal tons		2	3	4	5
208-230/1/60	FLA	10.9	16	19.2	28.8
208-230/3/60	FLA	7.1	10.3	14.7	17.3
460/3/60	FLA	3.5	5.1	7.1	8.2
575/3/60	FLA	N/A	N/A	5.1	7.1

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**WATER COOLED: Performance data at STANDARD airflow**

**MODEL NUMBER:** *DTWD/U-02* *DTWD/U-03* *DTWD/U-04* *DTWD/U-05*

<b>CONDENSER WATER</b>
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**Requirements at maximum design water pressure of 150 psi (high pressure optional).**

65° F entering fluid temperature	GPM	2.6	3.9	5.2	6.5
	PD in PSI	0.9	1.9	0.9	1.2
75° F entering fluid temperature	GPM	4.2	6.2	8.3	10.4
	PD in PSI	1.6	5.8	1.5	2.5
85° F entering fluid temperature	GPM	6.0	9.0	12.0	15.0
	PD in PSI	3.2	7.5	3.5	5.0
With fluid cooler	GPM	7.0	10.5	14	17.5
	PD in PSI	4.0	8.2	4.4	6.5

<b>PUMP SELECTION</b>
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**At design flow**

Horsepower		3/4	3/4	1	1
Pump electrical data					
208-230/1/60	FLA	4.8	4.8	5.8	.8
208-230/3/60	FLA	2.6	2.6	3.2	3.2
460/3/60	FLA	1.3	1.3	1.6	1.6

FLA - Full Load Amps

**WATER COOLED: Performance data at OPTIONAL airflow**

<i>MODEL NUMBER:</i>	<i>DTWD/U-02</i>	<i>DTWD/U-03</i>	<i>DTWD/U-04</i>	<i>DTWD/U-05</i>
<b>CAPACITY in Btu/hr - gross</b>				
80° DB/67° WB	26,800	42,200	56,400	67,900
50% RH	22,900	34,700	46,700	56,500
75° DB/62.5° WB	24,800	39,100	52,400	62,800
50% RH	22,100	33,400	45,100	54,400
75° DB/61° WB	24,200	38,100	50,700	60,700
45% RH	23,600	35,900	48,300	58,200
72° DB/60° WB	23,600	37,200	49,900	59,700
50% RH	21,600	32,700	44,100	53,200
72° DB/58.6° WB	23,100	36,300	48,600	58,000
45% RH	22,800	35,000	47,100	56,700
<b>BLOWER SECTION</b>				
Airflow - CFM	1,000	1,500	2,000	2,500
Standard motor - horsepower	3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G.	0.5	0.5	0.5	0.5
Number motors/fans	1/1	1/1	1/1	1/1
Maximum E.S.P. (Standard motor)	0.8	0.7	1.0	1.2
Maximum E.S.P. (Next size motor)	1.0	1.0	1.2	N/A
Next size motor - horsepower	1	1 1/2	2	N/A
<b>COMPRESSORS</b>				
Type	Scroll	Scroll	Scroll	Scroll
Quantity	1	1	1	1
Refrigerant type	R-407C	R-407C	R-407C	R-407C
<b>EVAPORATOR COIL</b>				
Face area - sq ft	4.2	4.2	6.25	6.25
Rows of coils	3	3	4	4
Face velocity FPM	238	357	320	400
<b>REHEAT SECTION</b>				
Electric	Standard	Standard	Standard	Standard
kW	6	6	12	12
Capacity - Btu/hr	20,490	20,490	40,980	40,980
<b>HUMIDIFIER SECTION</b>				
Steam generator	Standard	Standard	Standard	Standard
kW	3.4	3.4	3.4	3.4
Capacity - lb/hr	10	10	10	10

**WATER COOLED: Performance data at OPTIONAL airflow**

<b>MODEL NUMBER:</b>		<b>DTWD/U-02</b>	<b>DTWD/U-03</b>	<b>DTWD/U-04</b>	<b>DTWD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - Inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Condenser water supply - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condenser water return - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance Manual for piping information between indoor unit and water source.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - <b>YES</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/1/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electric data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20
<u>Electrical data based on: electric reheat - <b>YES</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	10/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	10/11/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		3/4	1	1 1/2	2
208-230/1/60	FLA	5.3	6.4	8.8	10.5
208-230/3/60	FLA	3.0	3.6	4.8	6.2
460/3/60	FLA	1.5	1.8	2.4	3.1
575/3/60	FLA	N/A	N/A	2.0	2.5

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amp

**WATER COOLED: Performance data at OPTIONAL airflow**

**MODEL NUMBER:** *DTWD/U-02* *DTWD/U-03* *DTWD/U-04* *DTWD/U-05*

**ELECTRICAL SECTION**

**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	46/56/60	54/65/70	87/107/110	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	32/39/45	54/66/70	N/A
460/3/60	FLA/MCA/MOP	13/16/20	15/18/20	25/31/35	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	20/24/25	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	34/41/45	41/49/60	46/55/70	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	31/38/40	37/45/50	N/A
460/3/60	FLA/MCA/MOP	13/15/20	15/18/20	18/21/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	14/16/20	N/A

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	46/56/60	54/65/70	87/107/110	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	32/39/45	54/66/70	N/A
460/3/60	FLA/MCA/MOP	13/16/20	15/18/20	25/31/35	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	20/24/25	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	17/20/30	25/29/45	30/35/50	N/A
208-230/3/60	FLA/MCA/MOP	11/13/20	15/18/25	21/25/35	N/A
460/3/60	FLA/MCA/MOP	5.3/6.2/15	7.5/8.8/15	10/12/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	7.6/8.9/15	N/A

**NEXT SIZE MOTOR**

*FLA - Full load amps*

Horsepower		1	1 1/2	2	N/A
208-230/1/60	FLA	6.4	8.8	10.5	N/A
208-230/3/60	FLA	3.6	4.8	6.2	N/A
460/3/60	FLA	1.8	2.4	3.1	N/A
575/3/60	FLA	N/A	N/A	2.5	N/A

**COMPRESSOR**

*FLA - Full load amps*

Nominal tons		2	3	4	N/A
208-230/1/60	FLA	10.9	16.0	219.2	N/A
208-230/3/60	FLA	7.1	10.3	14.7	N/A
460/3/60	FLA	3.5	5.1	7.1	N/A
575/3/60	FLA	N/A	N/A	5.1	N/A

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps



**WATER COOLED: Performance data at OPTIONAL airflow**

**MODEL NUMBER:** *DTWD/U-02* *DTWD/U-03* *DTWD/U-04* *DTWD/U-05*

**CONDENSER WATER**

**Requirements at maximum design water pressure of 150 psi (high pressure optional).**

65° F entering fluid temperature	GPM	2.6	3.9	5.2	6.5
	PD in PSI	0.9	1.9	0.9	1.2
75° F entering fluid temperature	GPM	4.2	6.2	8.3	10.4
	PD in PSI	1.6	5.8	1.5	2.5
85° F entering fluid temperature	GPM	6.0	9.0	12.0	15.0
	PD in PSI	3.2	7.5	3.5	5.0
With fluid cooler	GPM	7.0	10.5	14.0	17.5
	PD in PSI	4.0	8.2	4.4	6.5

**PUMP SELECTION**

**At design flow**

Horsepower		3/4	3/4	1	1
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**PUMP ELECTRICAL DATA**

208-230/1/60	FLA	4.8	4.8	5.8	5.8
208-230/3/60	FLA	2.6	2.6	3.2	3.2
460/3/60	FLA	1.3	1.3	1.6	1.6

*(Note: Pump selection is based on total available head pressure of 80 feet of water.)*

FLA - Full Load Amps

**GLYCOL COOLED: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>	<b>DTGD/U-02</b>	<b>DTGD/U-03</b>	<b>DTGD/U-04</b>	<b>DTGD/U-05</b>	
<b>CAPACITY in Btu/hr - gross</b>					
80° DB/67° WB 50% RH	Total Sensible	24,300 19,600	36,400 28,900	50,700 39,700	61,200 48,100
75° DB/62.5° WB 50% RH	Total Sensible	22,500 18,900	33,700 27,900	47,000 38,400	56,800 46,600
75° DB/61° WB 45% RH	Total Sensible	21,900 20,200	32,600 29,900	46,100 41,300	55,200 49,800
72° DB/60° WB 50% RH	Total Sensible	21,400 18,500	32,000 27,300	44,700 37,600	54,200 45,600
72° DB/58.6° WB 45% RH	Total Sensible	20,900 19,700	31,100 29,100	44,000 40,200	52,800 48,500
<b>BLOWER SECTION</b>					
Airflow - CFM	800	1,200	1,600	2,000	
Standard motor - horsepower	1/2	3/4	1	1 1/2	
External static pressure (E.S.P.) - inches of W.G.	0.5	0.5	0.5	0.5	
Number of motors/fans	1/1	1/1	1/1	1/1	
Maximum E.S.P. (Standard Motor)	0.8	0.7	1.0	1.0	
Maximum E.S.P. (Next Size Motor)	0.8	1.0	1.2	1.2	
Next size motor - horsepower	3/4	1	1 1/2	2	
<b>COMPRESSORS</b>					
Type	Scroll	Scroll	Scroll	Scroll	
Quantity	1	1	1	1	
Refrigerant type	R-407C	R-407C	R-407C	R-407C	
<b>EVAPORATOR COIL</b>					
Face area - sq ft	4.2	4.2	6.25	6.25	
Rows of coils	3	3	4	4	
Face velocity - fpm	190	286	256	320	
<b>REHEAT SECTION</b>					
Electric	Standard	Standard	Standard	Standard	
kW	6	6	12	12	
Capacity - Btu/hr	20,490	20,490	40,980	40,980	
<b>HUMIDIFIER SECTION</b>					
Steam generator	Standard	Standard	Standard	Standard	
kW	3.4	3.4	3.4	3.4	
Capacity - lb/hr	10	10	10	10	

**GLYCOL COOLED: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>		<b>DTGD/U-02</b>	<b>DTGD/U-03</b>	<b>DTGD/U-04</b>	<b>DTGD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Condenser water supply - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condenser water return - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance Manual for piping information between indoor unit and dry cooler.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - <b>YES</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	44/54/60	50/61/70	83/103/110	95/117/125
208-230/1/60	FLA/MCA/MOP	26/32/35	30/37/40	52/64/70	55/68/70
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	24/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/23/25	21/26/30

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	31/38/45	38/46/50	42/51/60	54/65/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/36/40	35/42/50	38/47/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	16/20/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	12/15/20	15/18/20

<u>Electrical data based on: electric reheat - <b>YES</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	44/54/60	50/61/70	83/103/110	95/117/125
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	52/64/70	55/68/70
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	24/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/23/25	21/26/30

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	15/18/25	21/25/40	26/30/50	38/45/70
208-230/3/60	FLA/MCA/MOP	9.3/11/15	13/16/25	18/22/35	22/26/40
460/3/60	FLA/MCA/MOP	4.6/5.5/15	6.6/7.9/15	8.9/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	6.5/7.8/15	9.1/11/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		1/2	3/4	1	1 1/2
208-230/1/60	FLA	4.0	5.3	6.4	8.8
208-230/3/60	FLA	2.2	3.0	3.6	4.8
460/3/60	FLA	1.1	1.5	1.8	2.4
575/3/60	FLA	N/A	N/A	1.4	2.0

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**GLYCOL COOLED: Performance data at STANDARD airflow**

**MODEL NUMBER:** *DTGD/U-02* *DTGD/U-03* *DTGD/U-04* *DTGD/U-05*

**ELECTRICAL SECTION**

**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and STANDARD MOTOR.

208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and STANDARD MOTOR.

208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and STANDARD MOTOR.

208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	10/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	10/11/15

**NEXT SIZE MOTOR**

*FLA - Full load amps*

Horsepower		3/4	1	1 1/2	2
208-230/1/60	FLA	5.3	6.4	8.8	10.5
208-230/3/60	FLA	3.0	3.6	4.8	6.2
460/3/60	FLA	1.5	1.8	2.4	3.1
575/3/60	FLA	N/A	N/A	2.0	2.5

**COMPRESSOR**

*FLA - Full load amps*

Nominal tons		2	3	4	5
208-230/1/60	FLA	10.9	16.0	19.2	28.8
208-230/3/60	FLA	7.1	10.3	14.7	17.3
460/3/60	FLA	3.5	5.1	7.1	8.2
575/3/60	FLA	N/A	N/A	5.1	7.1

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**GLYCOL COOLED: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>		<b>DTGD/U-02</b>	<b>DTGD/U-03</b>	<b>DTGD/U-04</b>	<b>DTGD/U-05</b>
<b>FLUID COOLER SELECTIONS</b>					
Fluid cooler at 95° F ambient		<b>DAFC-06</b>	<b>DAFC-06</b>	<b>DAFC-06</b>	<b>DAFC-07</b>
208-230/1/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15
208-230/3/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15
460/3/60	FLA/MCA/MOP	2.1/2.6/15	2.1/2.6/15	2.1/2.6/15	2.1/2.6/15
Fluid cooler at 100° F ambient		<b>DAFC-06</b>	<b>DAFC-06</b>	<b>DAFC-09</b>	<b>DAFC-15</b>
208-230/1/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	8.4/9.5/15
208-230/3/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	8.4/9.5/15
460/3/60	FLA/MCA/MOP	2.1/2.6/15	2.1/2.6/15	2.1/2.6/15	4.2/4.7/15

**CONDENSER WATER**

**Requirements at maximum design water pressure of 150 psi (high pressure optional).**

65° F entering fluid temperature	GPM	2.6	3.9	5.2	6.5
	PD in PSI	0.9	1.9	0.9	1.2
75° F entering fluid temperature	GPM	4.2	6.2	8.3	10.4
	PD in PSI	1.6	5.8	1.5	2.5
85° F entering fluid temperature	GPM	6.0	9.0	12.0	15.0
	PD in PSI	3.2	7.5	3.5	5.0
With fluid cooler	GPM	7.0	10.5	14.0	17.5
	PD in PSI	4.0	8.2	4.4	6.5

**PUMP SELECTION**

**At design flow**

Horsepower		3/4	3/4	1	1
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**PUMP ELECTRICAL DATA**

208-230/1/60	FLA	4.8	4.8	5.8	5.8
208-230/3/60	FLA	2.6	2.6	3.2	3.2
460/3/60	FLA	1.3	1.3	1.6	1.6

Notes: Fluid coolers are not available in 575 volts.

Fluid coolers are selected at sea level.

Pump selection is based on total available head pressure of 80 feet of water.

FLA - Full load amps

**GLYCOL COOLED: Performance data at OPTIONAL airflow**

<i>MODEL NUMBER:</i>	<i>DTGD/U-02</i>	<i>DTGD/U-03</i>	<i>DTGD/U-04</i>	<i>DTGD/U-05</i>
<b>CAPACITY in Btu/hr - gross</b>				
80° DB/67° WB	25,400	37,500	53,000	63,400
50% RH	22,500	32,900	45,500	54,800
75° DB/62.5° WB	24,100	34,700	49,200	58,900
50% RH	21,600	31,700	43,800	52,800
75° DB/61° WB	22,600	33,800	47,700	56,800
45% RH	22,400	33,300	46,600	55,900
72° DB/60° WB	22,200	33,000	46,800	56,200
50% RH	21,000	30,900	42,800	51,600
72° DB/58.6° WB	21,400	32,300	45,400	54,400
45% RH	21,300	32,000	44,900	53,900
<b>BLOWER SECTION</b>				
Airflow - CFM	1,000	1,500	2,000	2,500
Standard motor - horsepower	3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G.0.5	0.5	0.5	0.5	
Number of motors/fans	1/1	1/1	1/1	1/1
Maximum E.S.P. (Standard Motor)	0.8	0.7	1.0	1.2
Maximum E.S.P. (Next Size Motor)	1.0	1.0	1.2	N/A
Next size motor - horsepower	1	1 1/2	2	N/A
<b>COMPRESSORS</b>				
Type	Scroll	Scroll	Scroll	Scroll
Quantity	1	1	1	1
Refrigerant type	R-407C	R-407C	R-407C	R-407C
<b>EVAPORATOR COIL</b>				
Face area - sq ft	4.2	4.2	6.25	6.25
Rows of coils	3	3	4	4
Face velocity - fpm	238	357	320	400
<b>REHEAT SECTION</b>				
Electric	Standard	Standard	Standard	Standard
kW	6	6	12	12
Capacity - Btu/hr	20,490	20,490	40,980	40,980
<b>HUMIDIFIER SECTION</b>				
Steam generator	Standard	Standard	Standard	Standard
kW	3.4	3.4	3.4	3.4
Capacity - lb/hr	10	10	10	10

**GLYCOL COOLED: Performance data at OPTIONAL airflow**

<b>MODEL NUMBER:</b>		<b>DTGD/U-02</b>	<b>DTGD/U-03</b>	<b>DTGD/U-04</b>	<b>DTGD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>CONNECTION SIZES</b>					
Condenser water supply - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condenser water return - O.D. Copper		3/4	3/4	1 1/8	1 1/8
Condensate drain		3/4	3/4	3/4	3/4
Humidifier supply		1/4	1/4	1/4	1/4
(Note: Refer to Operation and Maintenance Manual for piping information between indoor unit and dry cooler.)					

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20

<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	10/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	10/11/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		3/4	1	1 1/2	2
208-230/1/60	FLA	5.3	6.4	8.8	10.5
208-230/3/60	FLA	3.0	3.6	4.8	6.2
460/3/60	FLA	1.5	1.8	2.4	3.1
575/3/60	FLA	N/A	N/A	2.0	2.5

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**GLYCOL COOLED: Performance data at OPTIONAL airflow**

**MODEL NUMBER:** *DTGD/U-02* *DTGD/U-03* *DTGD/U-04* *DTGD/U-05*

**ELECTRICAL SECTION**

**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	46/56/60	54/65/70	87/107/110	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	32/39/45	54/66/70	N/A
460/3/60	FLA/MCA/MOP	13/16/20	15/18/20	25/31/35	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	20/24/25	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	34/41/45	41/49/60	46/55/70	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	31/38/40	37/45/50	N/A
460/3/60	FLA/MCA/MOP	13/15/20	15/18/20	18/21/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	14/16/20	N/A

Electrical data based on: electrical reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	46/56/60	54/65/70	87/107/110	N/A
208-230/3/60	FLA/MCA/MOP	27/33/35	32/39/45	54/66/70	N/A
460/3/60	FLA/MCA/MOP	13/16/20	15/18/20	25/31/35	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	20/24/25	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	17/20/30	25/29/45	30/35/50	N/A
208-230/3/60	FLA/MCA/MOP	11/13/20	15/18/25	21/25/35	N/A
460/3/60	FLA/MCA/MOP	5.3/6.2/15	7.5/8.8/15	10/12/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	7.6/8.9/15	N/A

**NEXT SIZE MOTOR**

Horsepower		1	1 1/2	2	N/A
208-230/1/60	FLA	6.4	8.8	10.5	N/A
208-230/3/60	FLA	3.6	4.8	6.2	N/A
460/3/60	FLA	1.8	2.4	3.1	N/A
575/3/60	FLA	N/A	N/A	2.5	N/A

**COMPRESSOR**

Nominal tons		2	3	4	N/A
208-230/1/60	FLA	10.9	16.0	19.2	N/A
208-230/3/60	FLA	7.1	10.3	14.7	N/A
460/3/60	FLA	3.5	5.1	7.1	N/A
575/3/60	FLA	N/A	N/A	5.1	N/A

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection service amps



**GLYCOL COOLED: Performance data at OPTIONAL airflow**

<b>MODEL NUMBER:</b>		<b>DTGD/U-02</b>	<b>DTGD/U-03</b>	<b>DTGD/U-04</b>	<b>DTGD/U-05</b>
<b>FLUID COOLER SELECTION</b>		Electrical Data			
Fluid cooler at 95° F ambient		<b>DAFC-06</b>	<b>DAFC-06</b>	<b>DAFC-06</b>	<b>DAFC-07</b>
208-230/1/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15
208-230/3/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15
460/3/60	FLA/MCA/MOP	2.1/2.6/15	2.1/2.6/15	2.1/2.6/15	2.1/2.6/15
Fluid cooler at 100° F ambient		<b>DAFC-06</b>	<b>DAFC-06</b>	<b>DAFC-09</b>	<b>DAFC-15</b>
208-230/1/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	8.4/9.5/15
208-230/3/60	FLA/MCA/MOP	4.2/5.3/15	4.2/5.3/15	4.2/5.3/15	8.4/9.5/15
460/3/60	FLA/MCA/MOP	2.1/2.6/15	2.1/2.6/15	2.1/2.6/15	4.2/4.7/15

**CONDENSER WATER**

**Requirements at maximum design water pressure of 150 psi (high pressure optional).**

65° F entering fluid temperature	GPM	2.6	3.9	5.2	6.5
	PD in PSI	0.9	1.9	0.9	1.2
75° F entering fluid temperature	GPM	4.2	6.2	8.3	10.4
	PD in PSI	1.6	5.8	1.5	2.5
85° F entering fluid temperature	GPM	6.0	9.0	12.0	15.0
	PD in PSI	3.2	7.5	3.5	5.0
With fluid cooler	GPM	7.0	10.5	14.0	17.5
	PD in PSI	4.0	8.2	4.4	6.5

**PUMP SELECTION**

**At design flow**

Horsepower		3/4	3/4	1	1
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**PUMP ELECTRICAL DATA**

208-230/1/60	FLA	4.8	4.8	5.8	5.8
208-230/3/60	FLA	2.6	2.6	3.2	3.2
460/3/60	FLA	1.3	1.3	1.6	1.6

Notes: Fluid Coolers are not available in 575 volts.  
 Fluid Coolers are selected at sea level.  
 Pump selection is based on total available head pressure of 80 feet of water.

**AUXILIARY CHILLED WATER: Performance data at STANDARD airflow**

*Based on 45° F entering fluid temperature - 0% glycol.*

<b>MODEL NUMBER</b>		<b>DT*D/U-02</b>	<b>DT*D/U-03</b>	<b>DT*D/U-04</b>	<b>DT*D/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>					
75° F DB/62.5° F WB 50% RH	Total	23,100	34,300	48,400	57,900
	Sensible	19,100	28,200	39,000	47,000
72° F DB/62.5° F WB 50% RH	Total	23,800	33,600	46,200	55,500
	Sensible	19,900	28,700	38,900	47,400
Rows of coils		4	4	4	4
GPM		7.0	10.5	14.0	17.5
Pressure drop in PSI		1.8	3.6	6.5	9.7

<b>BLOWER SECTION</b>					
Airflow - CFM		800	1,200	1,600	2,000
Standard motor - horsepower (with Auxiliary CW coil)		3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G.		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.		0.8	1.0	1.0	1.2

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on standard unit: electric reheat - <b>YES</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/70
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/31/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	32/39/40	39/47/50	44/53/60	57/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20
<u>Electrical data based on: electric reheat - <b>YES</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	85/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/69/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/31/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	19/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	9.5/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	9.6/11/15

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**AUXILIARY CHILLED WATER: Performance data at OPTIONAL airflow**

*Based on 45° F entering fluid temperature - 0% glycol.*

<b>MODEL NUMBER</b>		<b>DT*D/U-02</b>	<b>DT*D/U-03</b>	<b>DT*D/U-04</b>	<b>DT*D/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>					
75° F DB/62.5° F WB 50% RH	Total	23,900	35,300	50,100	60,100
	Sensible	21,700	31,900	44,200	53,300
72° F DB/62.5° F WB 50% RH	Total	27,300	38,300	52,800	63,400
	Sensible	23,700	28,700	46,100	56,000
Rows of coils		4	4	4	4
GPM		7.0	10.5	14.0	17.5
Pressure drop in PSI		1.8	3.6	6.5	9.7

<b>BLOWER SECTION</b>					
Airflow - CFM		1,000	1,500	2,000	2,500
Standard motor - horsepower (with Auxiliary CW coil)		1	1 1/2	2	2
External static pressure (E.S.P.) - inches of W.G.		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.		0.7	0.9	1.0	1.0

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20
<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	9.5/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	9.6/11/15

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**ENERGY SAVER: Performance data at STANDARD airflow**

*Based on 45° F entering fluid temperature with 40% glycol solution - capacity in Btu/hr.*

<b>MODEL NUMBER</b>		<b>DT*D/U-02</b>	<b>DT*D/U-03</b>	<b>DT*D/U-04</b>	<b>DT*D/U-05</b>
<b>CAPACITY in Btu/hr- gross</b>					
75° F DB/62.5° F WB 50% RH	Total	22,500	33,700	47,000	56,800
	Sensible	18,900	27,900	38,400	46,600
72° F DB/62.5° F WB 50% RH	Total	20,200	27,500	40,400	48,600
	Sensible	18,200	25,700	36,100	44,000
Rows of coils		4	4	4	4
GPM		7.0	10.5	14.0	17.5
Pressure drop - PSI		4.6	10.1	9.2	14.6

<b>BLOWER SECTION</b>					
Airflow - CFM		800	1,200	1,600	2,000
Standard motor - horsepower (with Energy Saver coil)		3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G.		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.		0.8	1.0	1.0	1.2

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/117/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	54/65/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20
<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	95/117/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	38/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	9.5/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	9.6/11/15

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**ENERGY SAVER: Performance data at OPTIONAL airflow**

*Based on 45° F entering fluid temperature with 40% glycol solution - capacity in Btu/hr.*

<b>MODEL NUMBER</b>		<b>DT*D/U-02</b>	<b>DT*D/U-03</b>	<b>DT*D/U-04</b>	<b>DT*D/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>					
75° F DB/62.5° F WB 50% RH	Total	23,400	34,700	49,200	58,900
	Sensible	21,600	31,700	43,800	52,800
72° F DB/62.5° F WB 50% RH	Total	22,700	30,900	45,500	54,700
	Sensible	21,300	29,800	42,400	51,500
Rows of coils		4	4	4	4
GPM		7.0	10.5	14.0	17.5
Pressure drop - PSI		4.6	10.1	9.2	14.6

<b>BLOWER SECTION</b>					
Airflow - CFM		1,000	1,500	2,000	2,500
Standard motor - horsepower (with Energy Saver coil)		1	1 1/2	2	2
External static pressure (E.S.P.) - inches of W.G.		0.5	0.5	0.5	0.5
Number of motors/fans		1/1	1/1	1/1	1/1
Maximum E.S.P.		0.7	0.9	1.0	1.0

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/39/45	39/47/50	44/53/60	56/67/90
208-230/3/60	FLA/MCA/MOP	26/32/35	30/37/40	36/44/50	40/48/60
460/3/60	FLA/MCA/MOP	12/15/20	14/17/20	17/21/25	19/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	13/16/20	16/19/20
<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	45/55/60	51/63/70	86/105/110	97/119/125
208-230/3/60	FLA/MCA/MOP	27/33/35	31/37/40	53/65/70	57/70/80
460/3/60	FLA/MCA/MOP	13/15/20	14/18/20	25/30/35	26/32/35
575/3/60	FLA/MCA/MOP	N/A	N/A	19/24/25	22/27/30
<u>Electrical data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	16/19/30	22/26/40	28/33/50	39/47/70
208-230/3/60	FLA/MCA/MOP	10/12/15	14/17/25	20/23/35	24/28/45
460/3/60	FLA/MCA/MOP	5.0/5.9/15	6.9/8.2/15	9.5/11/15	11/13/20
575/3/60	FLA/MCA/MOP	N/A	N/A	7.1/8.4/15	9.6/11/15

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**CHILLED WATER: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>		<b>DTCD/U-02</b>	<b>DTCD/U-03</b>	<b>DTCD/U-04</b>	<b>DTCD/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>		<b>Based on 45° F entering chilled water</b>			
80° DB/67° WB 50% RH	Total	37,500	51,500	71,500	84,900
	Sensible	25,000	35,300	48,200	58,200
	Flow rate - GPM	8.0	11.0	15.0	18.0
	Pressure drop - PSI	2.1	3.6	7.3	10.3
75° DB/62.5° WB 50% RH	Total	26,900	36,700	51,200	60,600
	Sensible	21,200	29,900	40,900	49,400
	Flow rate - GPM	6.0	8.0	11.0	13.0
	Pressure drop - PSI	1.3	2.3	4.2	5.6
75° DB/61° WB 45% RH	Total	25,000	34,400	47,700	56,700
	Sensible	21,900	31,300	42,400	51,300
	Flow rate - GPM	6.0	8.0	11.0	13.0
	Pressure drop - PSI	1.3	2.3	4.2	5.6
72° DB/60° WB 50% RH	Total	21,900	29,100	41,600	49,800
	Sensible	19,000	26,400	36,700	44,500
	Flow rate - GPM	8.0	6.0	9.0	11.0
	Pressure drop - PSI	2.1	2.3	2.8	3.9
72° DB/58.6° WB 45% RH	Total	20,700	28,000	39,500	48,500
	Sensible	19,800	27,500	38,100	46,200
	Flow rate - GPM	5.0	6.0	9.0	11.0
	Pressure drop - PSI	0.9	1.3	2.8	3.9

**BLOWER SECTION**

Airflow - CFM	800	1,200	1,600	2,000
Standard motor - horsepower	1/2	3/4	1	1 1/2
External static pressure (E.S.P.) - inches of W.G.	0.5	0.5	0.5	0.5
Number of motor/fans	1/1	1/1	1/1	1/1
Maximum E.S.P. (Standard motor)	0.8	0.7	1.0	1.0
Maximum E.S.P. (Next size motor)	0.8	1.0	1.2	1.2
Next size motor - horsepower	3/4	1	1 1/2	2

**CHILLED WATER COIL**

Face area - sq ft	4.2	4.2	4.2	4.2
Rows of coils	4	4	4	4
Face velocity - fpm	190	286	256	320

**CHILLED WATER CONTROL**

*Design pressure 250 psi*

Control method	Modulating	Modulating	Modulating	Modulating
Valve body	3-way	3-way	3-way	3-way
Valve CV	14	14	14	14
Valve size - inches	1	1	1	1

**REHEAT SECTION**

Electric	Standard	Standard	Standard	Standard
kW	6	6	12	12
Capacity - Btu/hr	20,490	20,490	40,980	40,980

**CHILLED WATER: Performance data at STANDARD airflow**

<b>MODEL NUMBER:</b>		<b>DTCD/U-02</b>	<b>DTCD/U-03</b>	<b>DTCD/U-04</b>	<b>DTCD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>HUMIDIFIER SECTION</b>					
Steam generator		Standard	Standard	Standard	Standard
kW		3.2	3.2	3.2	3.2
Capacity - lb/hr		10	10	10	10

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - <b>YES</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	33/41/45	34/43/45	64/80/90	67/83/90
208-230/3/60	FLA/MCA/MOP	19/24/25	20/25/30	37/46/50	38/48/50
460/3/60	FLA/MCA/MOP	8.6/11/15	9.0/11/15	17/21/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	14/17/20	14/18/20

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>YES</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	20/25/30	22/27/30	23/28/30	25/31/35
208-230/3/60	FLA/MCA/MOP	19/23/25	19/24/25	20/25/30	21/26/30
460/3/60	FLA/MCA/MOP	8.5/11/15	839/11/15	9.2/12/15	10/12/15
575/3/60	FLA/MCA/MOP	N/A	N/A	7.3/9.1/15	7.9/10/15

<u>Electrical data based on: electric reheat - <b>YES</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	32/41/45	34/43/45	64/80/90	67/83/90
208-230/3/60	FLA/MCA/MOP	19/24/25	19/25/30	37/46/50	38/48/50
460/3/60	FLA/MCA/MOP	9/11/15	9.0/11/15	17/21/25	18/22/25
575/3/60	FLA/MCA/MOP	N/A	N/A	14/17/20	14/18/20

<u>Electrical data based on: electric reheat - <b>NO</b>, steam generator humidifier - <b>NO</b>, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	4.0/5.0/15	5.3/6.6/15	6.4/8.0/15	8.8/11/15
208-230/3/60	FLA/MCA/MOP	2.2/2.8/15	3.0/3.8/15	3.6/4.5/15	4.8/6.0/15
460/3/60	FLA/MCA/MOP	1.1/1.4/15	1.5/1.9/15	1.8/2.3/15	2.4/3.0/15
575/3/60	FLA/MCA/MOP	N/A	N/A	1.4/1.8/15	2.0/2.5/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		1/2	3/4	1	1 1/2
208-230/1/60		4.0	5.3	6.4	8.8
208-230/3/60		2.2	3.0	3.6	4.8
460/3/60		1.1	1.5	1.8	2.4
575/3/60		N/A	N/A	1.4	2.0

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**CHILLED WATER: Performance data at STANDARD airflow**

**MODEL NUMBER:** *DTCD/U-02* *DTCD/U-03* *DTCD/U-04* *DTCD/U-05*

**ELECTRICAL SECTION**

**Next Size Motor**

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	34/43/45	64/81/90	66/83/90	67/84/90
208-230/3/60	FLA/MCA/MOP	20/25/30	37/46/50	38/48/50	39/49/50
460/3/60	FLA/MCA/MOP	9/11/15	17/21/25	18/22/25	18/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	14/18/20	15/18/20

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	22/27/30	23/29/30	25/31/35	26/32/35
208-230/3/60	FLA/MCA/MOP	19/24/25	20/25/30	21/26/30	22/28/30
460/3/60	FLA/MCA/MOP	8.9/11/15	9/11/15	10/13/15	10/13/15
575/3/60	FLA/MCA/MOP	N/A	N/A	7.9/9.9/15	8.4/10.5/15

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	34/43/45	64/81/90	66/83/90	67/84/90
208-230/3/60	FLA/MCA/MOP	20/25/30	37/46/50	38/48/50	39/49/50
460/3/60	FLA/MCA/MOP	9/11/15	17/21/25	18/22/25	18/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	14/18/20	15/18/20

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	5.3/6.6/15	6.8/8.5/15	9/11/15	9/12/20
208-230/3/60	FLA/MCA/MOP	3.0/3.8/15	3.6/4.5/15	4.8/6.0/15	6.0/7.5/15
460/3/60	FLA/MCA/MOP	1.5/1.9/15	1.8/2.3/15	2.8/3.5/15	3.0/3.8/15
575/3/60	FLA/MCA/MOP	N/A	N/A	2.0/2.5/15	2.5/3.1/15

**NEXT SIZE MOTOR**

*FLA - Full load amps*

Horsepower		3/4	1	1 1/2	2
208-230/1/60		5.3	6.8	8.8	9.3
208-230/3/60		3.0	3.6	5.7	6.0
460/3/60		1.5	1.8	2.4	3.0
575/3/60		N/A	N/A	2.0	2.5

**CONNECTION SIZES**

CW supply - O.D. Copper	1 1/8	1 1/8	1 1/8	1 1/8
CW return - O.D. Copper	1 1/8	1 1/8	1 1/8	1 1/8
Condensate drain	3/4	3/4	3/4	3/4
Humidifier supply	1/4	1/4	1/4	1/4

FLA - Full load amps  
MCA - Minimum circuit amps  
MOP - Maximum overcurrent protection device amps



**CHILLED WATER: Performance data at OPTIONAL airflow**

<b>MODEL NUMBER:</b>		<b>DTCD/U-02</b>	<b>DTCD/U-03</b>	<b>DTCD/U-04</b>	<b>DTCD/U-05</b>
<b>CAPACITY in Btu/hr - gross</b>		<i>Based on 45°F entering chilled water</i>			
80° DB/67° WB 50% RH	Total	42,500	57,800	80,700	95,200
	Sensible	29,300	41,200	56,500	67,900
	Flow rate - GPM	8.0	11.0	15.0	18.0
	Pressure drop - PSI	2.2	3.9	7.3	10.3
75° DB/62.5° WB 50% RH	Total	30,500	41,100	57,700	67,900
	Sensible	25,000	35,100	48,100	57,800
	Flow rate - GPM	6.0	8.0	11.0	13.0
	Pressure drop - PSI	1.3	2.3	4.2	5.6
75° DB/61° WB 45% RH	Total	28,700	39,100	54,500	64,500
	Sensible	26,000	36,600	50,100	60,300
	Flow rate - GPM	6.0	8.0	11.0	13.0
	Pressure drop - PSI	1.3	2.3	4.2	5.6
72° DB/60° WB 50% RH	Total	24,900	32,600	47,000	56,100
	Sensible	22,400	30,800	43,000	52,000
	Flow rate - GPM	5.0	6.0	9.0	11.0
	Pressure drop - PSI	0.9	2.3	2.8	3.9
72° DB/58.6° WB 45% RH	Total	23,900	31,900	45,400	54,400
	Sensible	23,400	31,900	44,700	53,900
	Flow rate - GPM	5.0	6.0	9.0	11.0
	Pressure drop - PSI	0.9	1.3	2.8	3.9

**BLOWER SECTION**

Airflow - CFM	1,000	1,500	2,000	2,500
Standard motor - horsepower	3/4	1	1 1/2	2
External static pressure (E.S.P.) - inches of W.G .	0.5	0.5	0.5	0.5
Number of motors/fans	1/1	1/1	1/1	1/1
Maximum E.S.P. (Standard Motor)	.08	0.7	1.0	1.2
Maximum E.S.P. (Next Size Motor)	1.0	1.0	1.2	N/A
Next size motor - horsepower	1	1 1/2	2	N/A

**CHILLED WATER COIL**

Face area - sq ft	4.2	4.2	6.25	6.25
Rows of coils	4	4	4	4
Face velocity - fpm	238	357	320	400

**CHILLED WATER CONTROL**

*Design pressure 250 psi*

Control method	Modulating	Modulating	Modulating	Modulating
Valve body	3-way	3-way	3-way	3-way
Valve CV	14	14	14	14
Valve size - inches	1	1	1	1

**REHEAT SECTION**

Electric	Standard	Standard	Standard	Standard
kW	6	6	12	12
Capacity - Btu/hr	20,490	20,490	40,980	40,980

**CHILLED WATER: Performance data at OPTIONAL airflow**

<b>MODEL NUMBER:</b>		<b>DTCD/U-02</b>	<b>DTCD/U-03</b>	<b>DTCD/U-04</b>	<b>DTCD/U-05</b>
<b>FILTER SECTION</b>					
Quantity		2	2	2	2
Size - inches	<i>Downflow</i>	16x25x4	16x25x4	16x25x4	16x25x4
	<i>Upflow</i>	16x20x4	16x20x4	16x20x4	16x20x4
Efficiency - MERV		8	8	8	8
(Note: Efficiency based on ASHRAE Std. 52.2)					

<b>HUMIDIFIER SECTION</b>					
Steam generator		Standard	Standard	Standard	Standard
kW		3.2	3.2	3.2	3.2
Capacity - lb/hr		10	10	10	10

<b>ELECTRICAL SECTION</b>		<b>Standard Motor</b>			
<u>Electrical data based on STANDARD unit: electric reheat - YES, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	34/43/45	35/44/45	67/83/90	68/85/90
208-230/3/60	FLA/MCA/MOP	20/25/30	20/25/30	38/48/50	40/49/50
460/3/60	FLA/MCA/MOP	9.0/11/15	9.3/12/15	18/22/25	18/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	14/18/20	15/18/20

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - YES, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	22/27/30	23/28/30	25/31/35	27/34/40
208-230/3/60	FLA/MCA/MOP	19/24/25	20/25/30	21/26/30	23/28/30
460/3/60	FLA/MCA/MOP	8.9/11/15	9.2/12/15	10/12/15	11/13/15
575/3/60	FLA/MCA/MOP	N/A	N/A	7.9/10/15	8.4/11/15

<u>Electrical data based on: electric reheat - YES, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	34/43/45	35/44/45	67/83/90	68/85/90
208-230/3/60	FLA/MCA/MOP	20/25/30	20/25/30	38/48/50	40/49/50
460/3/60	FLA/MCA/MOP	9.0/11/15	9.0/12/15	18/22/25	18/23/25
575/3/60	FLA/MCA/MOP	N/A	N/A	14/18/15	15/18/20

<u>Electrical data based on: electric reheat - NO, steam generator humidifier - NO, and STANDARD MOTOR.</u>					
208-230/1/60	FLA/MCA/MOP	5.3/6.6/15	6.4/8.0/15	8.8/11/15	11/13/20
208-230/3/60	FLA/MCA/MOP	3.0/3.8/15	3.6/4.5/15	4.8/6.0/15	6.2/7.8/15
460/3/60	FLA/MCA/MOP	1.5/1.9/15	1.8/2.3/15	2.4/3.0/15	3.1/3.9/15
575/3/60	FLA/MCA/MOP	N/A	N/A	2.0/2.5/15	2.5/3.1/15

<b>STANDARD MOTOR</b>		<i>FLA - Full load amps</i>			
Horsepower		3/4	1	1 1/2	2
208-230/1/60		5.3	6.8	8.8	9.3
208-230/3/60		3.0	3.6	5.7	6.0
460/3/60		1.5	1.8	2.4	3.0
575/3/60		N/A	N/A	2.0	2.5

FLA - Full load amps  
MCA - Minimum circuit amps (wire sizing amps)  
MOP - Maximum overcurrent protection device amps

**CHILLED WATER: Performance data at OPTIONAL airflow**

**MODEL NUMBER:** *DTCD/U-02* *DTCD/U-03* *DTCD/U-04* *DTCD/U-05*

**ELECTRICAL SECTION**

*Next Size Motor*

Electrical data based on: electric reheat - **YES**, steam generator humidifier- **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	36/45/50	66/83/90	67/84/90	N/A
208-230/3/60	FLA/MCA/MOP	20/25/30	38/48/50	39/49/50	N/A
460/3/60	FLA/MCA/MOP	9/12/15	18/22/25	18/23/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	15/18/20	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **YES**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	23/29/30	25/31/35	26/32/35	N/A
208-230/3/60	FLA/MCA/MOP	20/25/30	21/26/30	22/28/30	N/A
460/3/60	FLA/MCA/MOP	9/11/15	10/13/15	10/13/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	8.4/10.5/15	N/A

Electrical data based on: electric reheat - **YES**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	36/45/50	66/83/90	67/84/90	N/A
208-230/3/60	FLA/MCA/MOP	20/25/30	38/48/50	39/49/50	N/A
460/3/60	FLA/MCA/MOP	9/12/15	18/22/25	18/23/25	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	15/18/20	N/A

Electrical data based on: electric reheat - **NO**, steam generator humidifier - **NO**, and NEXT SIZE MOTOR.

208-230/1/60	FLA/MCA/MOP	6.8/8.5/15	8.8/11/15	9/12/15	N/A
208-230/3/60	FLA/MCA/MOP	3.6/4.5/15	5.7/7.1/15	6.0/7.5/15	N/A
460/3/60	FLA/MCA/MOP	1.8/2.3/15	2.8/3.5/15	3.0/3.8/15	N/A
575/3/60	FLA/MCA/MOP	N/A	N/A	2.5/3.1/15	N/A

**NEXT SIZE MOTOR**

*FLA - Full load amps*

Horsepower		1	1 1/2	2	N/A
208-230/1/60		6.8	8.8	9.3	N/A
208-230/3/60		3.6	5.7	6.0	N/A
460/3/60		1.8	2.4	3.0	N/A
575/3/60		N/A	N/A	2.5	N/A

**CONNECTION SIZES**

CW supply - O.D. Copper	1 1/8	1 1/8	1 1/8	1 1/8
CW return - O.D. Copper	1 1/8	1 1/8	1 1/8	1 1/8
Condensate drain	3/4	3/4	3/4	3/4
Humidifier supply	1/4	1/4	1/4	1/4

FLA - Full load amps  
MCA - Minimum circuit amps  
MOP - Maximum overcurrent protection device amps











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