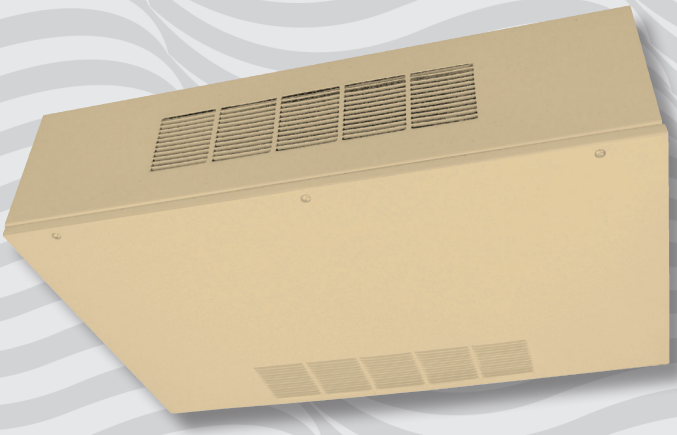
UNITAIRE IV
FAN COIL UNITS

High Quality Engineered Fan Coils Since 1931



AIRTHERM
A Mestek Company

MADE IN THE USA

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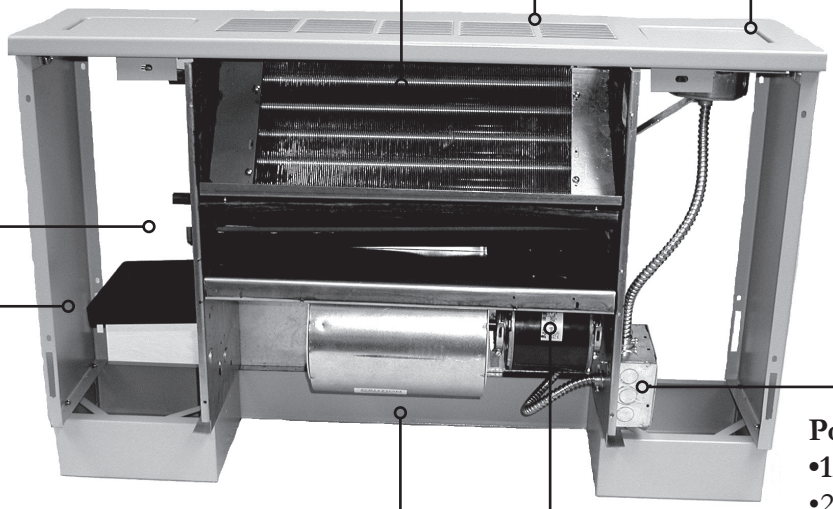
Features

Coils:
•3-Row Water
•3-Row Water High Capacity
•1-Row Hot Water
•1-Row Steam
•Manual Air Vents
•Auto Air Vents
•Piping Packages

Unit:
•18 Gauge Cabinet
•16 Gauge Cabinet
•14 Gauge Cabinet
•Extended End Pockets
•Leveling Legs
•Tamperproof Front Panel & Access Doors

Right or left hand coil and drain connections. 4-pipe systems can be same end or opposite end connections.

Powder Coat:
See color chart for available colors.



Power Supply:
•120v/1/60
•208/240v/1/60
•277v/1/60

Auxiliary Drain Pans:
•Plastic
•Galvanized

Motors:
•PSC
•ECM

Outside Air:
•Manual Damper
•Motorized Damper

Bold type indicates a standard feature.

UNITAIRE Vertical Fan Coil Unit Model Number Description

Following is a complete description of the fan coil model number. Each "Code Item" in the model number has a corresponding code that identifies specific unit options.

31U	F	E	T	F	02	3	L	A	1	N	1	M	N	1	U	A	V	S	1
1				5					10					15					20

Code Item 1—Product Line/Factory Location
31 = Forest City
U = Unitaire

Code Items 2-6—Base Unit

Code Item 2—Installed
C = Ceiling
F = Floor
L = Low Profile
R = Reduced Height
S = Slope Top
W = Wall

Code Item 3—Application
C = Concealed
D = Deluxe
E = Exposed
F = Semi Recessed 5"
P = Plenum Concealed
R = Recessed
S = Semi Recessed 7"
T = Semi Recessed 3"
W = Windowsill

Code Item 4—Discharge Air Location
B = Bottom
F = Front
T = Top

Code Item 5—Return Air Location
B = Bottom
F = Front
R = Rear

Code Item 6—CFM
02 = 200
03 = 300
04 = 400
06 = 600
08 = 800
10 = 1000
12 = 1200

Code Item 7—Series
Pre-set by AIRTHERM

Code Item 8—Primary Coil Connection
L = Left Hand
R = Right Hand

Code Item 9—Motor Option
A = Standard Motor
C = Standard Motor with Quick Disconnect
E = ECM Motor
F = ECM with Quick Disconnect
J = High Static ECM Motor
K = High Static ECM Motor with Quick Disconnect

Code Item 10—Supply Voltage
1 = 120 Volts (Standard)
2 = 208 Volts
3 = 240 Volts
4 = 277 Volts

Code Item 11—Service Switch
N = None (Standard)
1 = Electric Heat Fused Switch
2 = Non Fused Switch (Hydronic Units) DDC
3 = Toggle Operated Switch (Hydronic Units)
4 = Toggle Operated Fused Switch (Hydronic Units)

Code Item 12—Primary Coil
1 = 3-Row, Number 1 (Standard)
2 = 3-Row, Number 2 High Capacity

Code Item 13—Air Vent
M = Manual (Standard)
A = Automatic Primary
B = Automatic Secondary
C = Both

Code Item 14—Heating Coil
N = None (Standard)
1 = 1-Row Water, Same End
2 = 1-Row Water, Opposite End
3 = 1-Row Steam, Same End
4 = 1-Row Steam, Opposite End
E = 120/208/240/277, 1.0 K.W.
F = 120/208/240/277, 1.5 K.W.
G = 208/240/277, 2.0 K.W.
H = 208/240/277, 3.0 K.W.
J = 208/240/277, 4.0 K.W.
Other K.W. Consult Factory

Code Item 15—Control Voltage
1 = 120 Volts (Standard)
2 = 24 Volts

Code Item 16—Thermostat Type
S = Standard
E = Electric Heat
M = Modulating
C = Control Interface (ECM)

Code Item 17—Thermostat Location
R = Remote Mounted
U = Unit Mounted
N = None (Field furnished)

Code Item 18—Changeover Control
A = Automatic
M = Manual
D = Auto Dead Band
N = None

Code Item 19—Cycle
V = Valve Cycle
F = Fan and Valve Cycle

Code Item 20—Primary Coil Connection
S = Solder (Standard)
U = Union

Nomenclature

S	P	1	A	1	S	P	1	A	1	B	2	C	1	B	U	1	N	N	A	1	A	A	31
21			25					30					35					40						45

Code Item 21—Primary Coil Test Port
N = None (Standard)
G = Gauge Cock
P = Pressure Temperature Port
B = Gauge Cock & P/T Port

Code Item 22—Primary Coil Control Valve
N = None (Standard)
1 = 2-Way N.C. Electric Valve
2 = 2-Way N.C. Electric Valve w/Bleed Line
3 = 3-Way N.C. Electric Valve
7 = 2-Way N.C. 50 PSI Electric Valve
9 = 3-Way N.C. 50 PSI Electric Valve
B = 2-Way Modulating (NSR, 3-Wire Floating)
C = 3-Way Modulating (NSR, 3-Wire Floating)
S = 2-Way Steam (available on secondary coil only)

Code Item 23—Primary Coil Flow Control
N = None (Standard)
A = Manual Balance Valve (3-Way Bypass)
B = Manual Circuit Setter
M = Manual Balance Valve & Manual Circuit Setter
C = .25 GPM Griswold Flo-Control
D = .33 GPM Griswold Flo-Control
E = .50 GPM Griswold Flo-Control
F = 1.00 GPM Griswold Flo-Control
G = 1.50 GPM Griswold Flo-Control
H = 2.00 GPM Griswold Flo-Control
J = 2.50 GPM Griswold Flo-Control
K = 3.00 GPM Griswold Flo-Control

Code Item 24—Primary Coil Shutoff
N = None (Standard)
B = Ball Valves
S = Steam Gate Valves (available on aux. coil only)
C = Strainer (factory installed)
D = Ball Valve & Strainer

Code Items 25—29 use Identical Codes as Code Items 20—24.

Code Item 30—Blower Wheels
A = Plastic (Standard)
B = Aluminum

Code Item 31—Left End Pocket Modification
Standard end pocket is 9". End pocket may be reduced to 2" or extended to 14 3/4". Indicate total length of end pocket required, I.E. 5" indicates a 5" end pocket required, 4" would be removed. 13" indicates a 13" end pocket required, 4" would be added.

Code Item 32—Right End Pocket Modification
See description above for Code Item 31, left hand end pocket modification.

Code Item 33—Rear Extensions
N = None (Standard)
2 = 2" Rear Extension
4 = 4" Rear Extension
6 = 6" Rear Extension

Code Item 34—Discharge Air Options
N = None
1 = Aluminum Bar Grille
3 = 2-Way Single Deflection Aluminum Grille
4 = 4-Way Double Deflection Aluminum Grille
5 = 1" Duct Collar

Code Item 35—Return Air Options
A = Stamped Steel Grille
B = 1" Duct Collar
C = 6" Round Inlet Duct Collar
D = Extruded Aluminum Linear Grille (Anodized)
E = Extruded Aluminum Linear Grille (Black)

Code Item 36—Outside Air Dampers
3 = 25% Rear Inlet—(Actuator by others)
4 = 25% Bottom Inlet—(Actuator by others)
6 = Motorized 25% Rear Inlet
7 = Motorized 25% Bottom Inlet
8 = Motorized 25% Rear Inlet Damper (horizontal units only)

Code Item 37—Steel Painted Cabinets
A = 18 Gauge Steel (Standard)
B = 16 Gauge Steel
C = 16 Gauge Steel Front Panel
D = 14 Gauge Steel
E = 14 Gauge Steel Front Panel

Code Item 38—Color
6 = VP2 - Eggshell
7 = SB1 - Light Gray
8 = SB6 - Deluxe Beige
9 = SB7 - Soft Dove
A = WB2 - Almond
C = DB1 - Dark Bronze
D = DB5 - Flat Black
E = P1 - White
F = VP1 - Bright White
G = SAI - Silver Aluminum
H = MC2 - Champagne
J = MC3 - Bronze Mica
X = Special Color

Code Item 39—Tamperproof Fasteners
A = Access Doors (Hex Key)

Code Item 40—Filters
T = 1" Throwaway Glass Media (Standard)
A = 1" Cleanable Aluminum Mesh

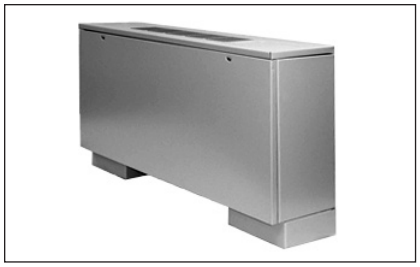
Code Item 41—Insulation
A = 1/2" Coated Fiberglass (Standard)
B = 1/2" Foil Faced Fiberglass
C = Insulated Plenum Section, CPFR & CPFB Models Only
D = 1/2" Foil Faced, Unit & Plenum, CPFR & CPFB Models Only
E = Closed Cell
F = Closed Cell, Unit & Plenum, CPFR & CPFB Models Only

Code Item 42—Drain Pans
1 = Stainless Steel Drain Trough - Vertical Units Only
2 = Stainless Steel Drain Pan - Horizontal Units Only
3 = 18 Gauge Steel Auxiliary Drain Pan - Vertical Units Only
4 = Stainless Steel Drain Trough and 18 Gauge Steel Auxiliary Drain Pan - Vertical Units
A = Standard Drain Trough with Safety Overflow Switch
B = Stainless Steel Drain Trough with Safety Overflow Switch
C = 18 Gauge Auxiliary Drain Pan with Safety Overflow Switch
D = Stainless Steel Drain Trough and 18 Gauge Auxiliary Drain Pan with Safety Overflow Switch
E = Standard Drain Pan with Safety Overflow Switch
F = Stainless Steel Drain Pan with Safety Overflow Switch

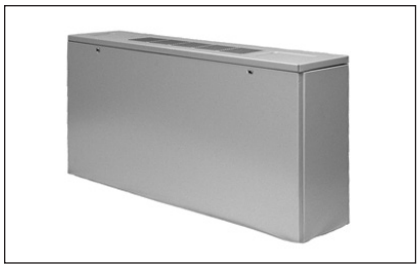
Code Item 43—Leveling Feet/Vibration Isolation
A = Manually Adjusted Leveling Bolts - Vertical Units Only
V = Vibration Isolation Grommets - Horizontal Units Only
N = None

Code Item 44—Speed Switch
A = Unit Mount Speed Switch (horizontal units only)
B = Omit Speed Switch
C = 24V Speed Switching

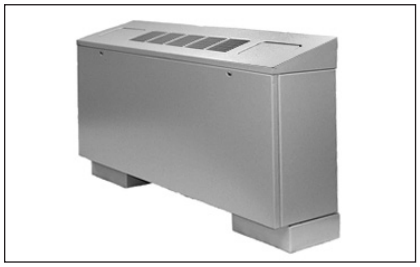
Code Item 45– Ship Loose Items
31STRAINER - Strainer
31GLASSFILTER - Spare Throwaway Filter
31ALFILTER - Spare Aluminum Mesh Filter



FETF and FEFF
FETF (shown) and FEFF are floor exposed units with return air in the front of the unit. The FETF has air discharge out of the top while the FEFF has front air discharge.
Construction features are on pages 9 & 10.
Dimensional data is on page 47.

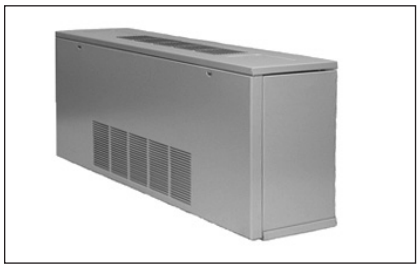


WETB and WEFB
WETB (shown) and WEFB are wall exposed units with return air in the bottom of the unit. The WETB has air discharge out of the top while the WEFB has front air discharge.
Construction features are on pages 9 & 10.
Dimensional data is on page 48.

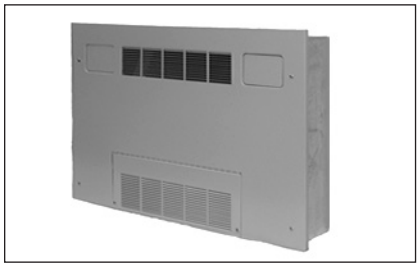


SETF
SETF is a floor exposed sloped top unit with return air in the front of the unit. The SETF is a top discharge unit.
Construction features are on pages 9 & 10.
Dimensional data is on page 49.

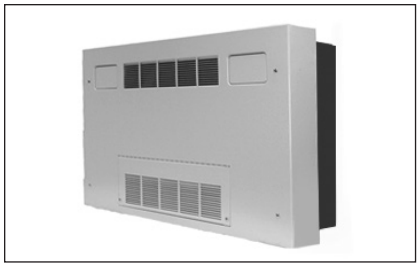
FDTF
FDTF is an exposed floor mounted deluxe vertical cabinet with return air in the front of the unit. The FDTF is a top discharge unit.
Construction features are on pages 9 & 10.
Dimensional data is on page 50.



RETF and REFF
RETF (shown) and REFF are reduced height floor mounted exposed units. The RETF has air discharge out of the top while the REFF has front air discharge.
Construction features are on pages 9 & 10.
Dimensional data is on page 54.



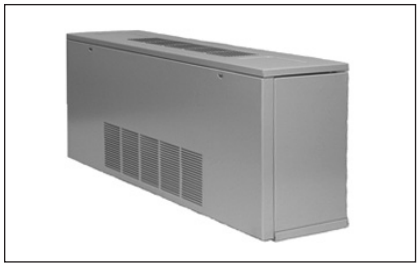
FRFF and WRFF
FRFF is a floor mounted, fully recessed unit.
The WRFF (shown) is a wall mounted, fully recessed unit.
Construction features are on pages 9 & 10.
Dimensional data is on page 51.



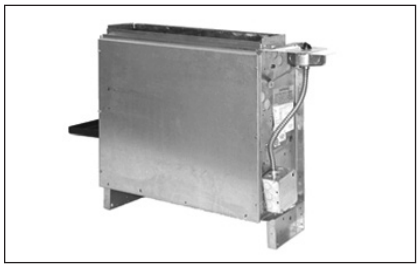
FTFF and WTFF
FTFF is a floor mounted, partially recessed unit.
WTFF (shown) is a wall mounted, partially recessed unit.
Both of these units are recessed 3".
Construction features are on pages 9 & 10.
Dimensional data is on page 52.

FFFF and WFFF
FFFF is a floor mounted, partially recessed unit.
WFFF (shown) is a wall mounted, partially recessed unit.
Both of these units are recessed 5".
Construction features are on pages 9 & 10.
Dimensional data is on page 52.

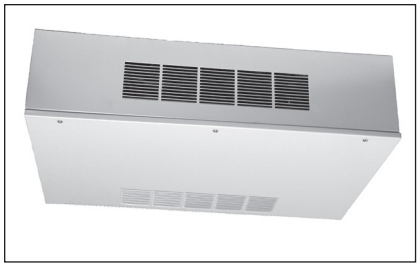
FSFF and WSFF
FSFF is a floor mounted, partially recessed unit.
WSFF (shown) is a wall mounted, partially recessed unit.
Both of these units are recessed 7".
Construction features are on pages 9 & 10.
Dimensional data is on page 52.



LETF, LEFF and LWTF
LETF (shown) and LEFF are Low Profile, floor exposed units with return air in the front of the unit. The LETF has air discharge out of the top while the LEFF has front air discharge.
Construction features are on pages 9 & 10.
Dimensional data is on page 55.
LWTF is on page 56.
Note: Models not available with electric heat.

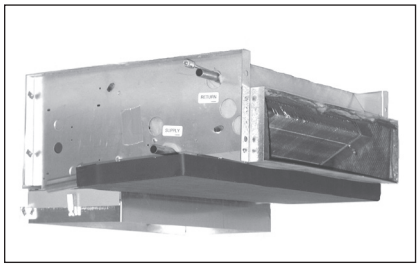


FCTF and LCTF
FCTF (shown) is a floor mounted concealed unit.
LCTF is a Low Profile concealed unit.
Both of these units feature return air to the front and top air discharge.
Construction features are on pages 9 & 10.
Dimensional data for the FCTF is on page 53.
LCTF is on page 57.
Note: Model LCTF is not available with electric heat.

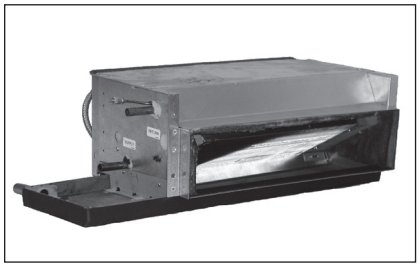


CEFR and CEFB
CEFB (shown) is a ceiling mounted exposed cabinet with front discharge.
The CEFR (not shown) has rear inlet
Construction features are on pages 9 & 10.
Dimensional data is on page 58.

***CRFB and CRFR**
CRFB (shown) is a ceiling recessed unit with front discharge and bottom inlet.
The CRFR (not shown) has rear inlet.
Construction features are on pages 9 & 10.
Dimensional data is on page 59.



CPFR and CPFB
CPFB (shown) is a ceiling concealed unit with bottom inlet on the plenum. Discharge is to the front.
CPFR (not shown) has a rear inlet on the plenum.
Construction features are on pages 9 & 10.
Dimensional data is on page 61.



CCFR
CCFR is a ceiling concealed unit.
No filter is provided with this unit.
Construction features are on pages 9 & 10.
Dimensional data is on page 62.

***CRBR and CRBB**
CRBB (shown) is a ceiling recessed unit with bottom inlet and discharge.
The CRBR (not shown) has a rear inlet and bottom discharge.
Construction features are on pages 9 & 10.
Dimensional data is on page 60.
Note: Models not available with electric heat.

* Opposite end piping not available on these units.

Construction Features

BASIC UNIT—Is constructed of galvanized steel and insulated to meet the AHRI Fan-coil industry test standard for insulation efficiency. Insulation and adhesive meet U.L. and NFPA 90A requirements. Included in the basic unit are the coil, motor speed control, electric junction box, primary and auxiliary drain pans, motor board, motor(s) and fan(s).

COILS—May be No. 1 standard or No. 2 high capacity, for 2-pipe systems. An optional 1-row heating coil is used in combination with the above for 4-pipe systems. Manual air vents are supplied on all coils. Coils, including return bends, are completely enclosed within the insulated basic unit.

MOTOR SPEED CONTROL—(PSC) A multi-speed switch is mounted on the side opposite piping, subject to control requirements. (ECM) ECM motors accept a 0-10 vdc signal provided by Building Management System or optional Airtherm interface Control Board.

ELECTRIC JUNTION BOX—Each unit is supplied with an electric junction box located on the side opposite the piping. This location may vary, depending on control requirements.

INTERNAL WIRING—Is in accordance with the National Electric Code. Exposed wiring is in flexible conduit. Unit mounted electrical devices are pre-wired to a junction box.

DRAIN PANS—Vertical models have a externally insulated galvanized steel drip shield mounted beneath the coil surface to direct condensate from the coil to a drain trough. Drain surfaces are separate from the motor board assembly.

The galvanized steel drain trough rapidly carries condensate directly into a molded plastic auxiliary drain pan. The drain trough exterior is insulated with 8 lb. per cubic foot density closed cell vinyl foam.

FANS—Wheels are centrifugal, forward curved, dynamically balanced. Fan housings are constructed of galvanized steel with streamlined air inlets.

MOTORBOARD—Motor(s) and fan(s) are mounted on a galvanized steel motor-board assembly, which is removable.

MOTORS—Are resilient mounted permanent split capacitor, totally enclosed, tap wound for three speeds, with integral thermal overload protection and automatic reset, for 115/60/1. Minimum power factor is .96. Optional brushless DC ECM motors 0-10 vdc.

Motors are permanently lubricated. Under normal operating conditions, anticipated motor life is 100,000 hours.

CABINETS—Are constructed with 18 gauge steel fronts and tops and 16 gauge end panels. Front and discharge panels are insulated with 1/2", 2 lb. density glass fiber insulation. Cabinet parts are cleaned and phosphatized before powder coating.

The standard finish is light beige powder coat that may be field painted.

Cabinets have 9" end pockets on both sides. Two die-formed, flush hinged access doors are provided.

Front panels are one piece, secured using tamperproof fasteners. (not for Horizontal units)

FRONT PANELS—For models FRFF, WRFF, FSFF and WSFF are 18 gauge steel and provided with a hinged front inlet grille for easy access to the filter. Two die-formed flushed, hinged access doors are furnished for fan control and piping access. Front panels are cleaned, phosphatized and powder coated with a beige color that may be field painted.

GRILLES—For model FDTF are linear extruded aluminum. All other models with cabinets have integrally stamped outer grilles.

Models FRFF, WRFF, FSFF and WSFF have hinged stamped inlet grilles in the front panel.

FILTERS—1" throwaway filters are standard in all models. Filters on all vertical models with cabinets, except WETB, WEFB and FDTF, are removable without removing the front panel.

PHYSICAL DATA									
				UNIT SIZE					
				2	3	4	6	8	10	12
CFM – No. 1 Standard Coil			High	240	310	400	600	800	1020	1170
			Med	220	275	350	535	710	900	1065
			Low	175	220	280	425	560	710	800
CFM – No. 2 High Capacity Coil			High	230	300	390	590	780	995	1300
			Med	210	270	340	525	700	875	1100
			Low	170	220	270	420	540	700	840
Air Inlet Opening – Minimum Free Area – Square Inches				67.6	81.2	94.9	149.6	190.7	259.1	259.1
Air Outlet Opening – Minimum Free Area – Square Inches				57.9	69.6	81.4	128.3	163.4	222.1	222.1
Filters – Throwaway and Cleanable			QTY	1	1	1	1	1	1	1
1" Thick – 9" Wide			Length (In.)	20 7/8	26 7/8	30 7/8	44 7/8	56 7/8	76 7/8	76 7/8
Fans		QTY		1	1	2	2	3	4	4
		Diameter (In.)		5.72	5.72	5.72	5.72	5.72	5.72	5.72
		Width (In.)		7.875	7.875	7.875	7.875	7.875	7.875	7.875
	Wheel	Type		Double Width – Double Inlet – Forward Curve						
		Construction		U.L. Rated Plastic Fan – Dynamically Balanced						
	Housing	Width (In.)		9.175						
		Construction		Galvanized Steel						
Coils		Air Vent		Manual Air Vent Furnished On All Coils						
		Tube Diameter		5/8" Seamless Copper						
		Connection Size		5/8" O.D. Sweat						
		Test Pressure		300 PSI						
		Working Pressure		200 PSIG Maximum						
		Depth (In.)		3.75						
		Width (In.)		7.5						
		Length (In.)		16	23	27	40	52	72	72
		Face Area (Sq. Ft.)		0.83	1.2	1.41	2.08	2.71	3.75	3.75
		Fin Material		Aluminum						
		FPI	No. 1 Standard Coil	10.5						
			No. 2 High Capacity Coil	12					14	
		Water Volume Gal		0.296	0.382	0.438	0.636	0.807	1.09	1.09

STANDARD PSC MOTOR DATA											
STANDARD 115/60/1 HIGH EFFICIENCY PERMANENT SPLIT CAPACITOR MOTOR											
UNIT SIZE/ COIL NO	QTY PER UNIT	HP PER MOTOR	RUNNING AMPS	WATTS INPUT	POWER FACTOR	HIGH SPEED		MED SPEED		LOW SPEED	
						RPM	CFM	RPM	CFM	RPM	CFM
02-1	1	0.03	0.38	55	0.99	1010	240	950	220	750	175
02-2	1	0.03	0.38	55	0.99	1020	230	950	210	750	170
03-1	1	0.04	0.54	60	0.97	1060	310	950	275	750	220
03-2	1	0.04	0.54	60	0.97	1080	300	950	270	750	220
04-1	1	0.04	0.52	58	0.99	1060	400	950	350	750	280
04-2	1	0.04	0.52	58	0.99	1070	390	950	340	750	270
06-1	1	0.06	0.7	80	0.99	1060	600	950	535	750	425
06-2	1	0.06	0.7	80	0.99	1070	590	950	525	750	420
08-1	2	.04/.06	1.2	135	0.98	1070	800	950	710	750	560
08-2	2	.04/.06	1.2	135	0.98	1070	780	950	700	750	540
10-1	2	0.06	1.36	150	0.96	1080	1020	950	900	750	710
10-2	2	0.06	1.36	150	0.96	1090	995	950	875	750	700
12-1	2	0.13	2.4	320	0.98	1220	1170	1110	1065	830	800
12-2	2	0.13	3.1	348	0.99	1350	1300	1140	1100	875	840

Optional Motor Data

MOTOR DATA OPTIONAL POWER SUPPLY 60 Hz - SINGLE PHASE													
UNIT SIZE	VOLTS	QTY PER UNIT	HP PER MOTOR	RUNNING AMPS	WATTS INPUT	POWER FACTOR	HIGH SPEED		MED SPEED		LOW SPEED	
							RPM	CFM	RPM	CFM	RPM	CFM
02	208 240 277	1 Motor 1 Blower	.03	.35 .30 .26	71	.97	1010	240	950	220	750	175
03	208 240 277	1 Motor 1 Blower	.04	.39 .34 .29	80	.97	1060	310	950	275	750	220
04	208 240 277	1 Motor 2 Blowers	.04	.42 .39 .29	79	.98	1060	400	950	350	750	280
06	208 240 277	1 Motor 2 Blowers	.06	.50 .43 .37	101	.97	1060	600	950	535	750	425
08	208 240 277	2 Motors 3 Blowers	.04/.06	.77 .67 .58	157	.97	1070	800	950	710	750	560
10	208 240 277	2 Motors 4 Blowers	.06	.87 .75 .65	172	.95	1080	1020	950	900	750	710
12-1	208 240 277	2 Motors 4 Blowers	.13	1.70 1.47 1.28	340	.96	1220	1170	1100	1065	830	800
12-2	208 240 277	2 Motors 4 Blowers	.13	1.84 1.59 1.37	366	.96	1350	1300	1140	1100	875	840

STANDARD ECM MOTOR DATA								
UNIT SIZE/ COIL NO	QTY PER UNIT	HP PER MOTOR	WATTS INPUT	POWER FACTOR	HIGH SPEED		LOW SPEED	
					RPM	CFM	RPM	CFM
02/1	1	1/15	24/4	0.99	1050	240	400	90
02/2	1	1/15	25/4	0.99	1100	220	400	90
03/1	1	1/15	27/4	0.99	1050	320	400	105
03/2	1	1/15	29/4	0.99	1100	310	400	105
04/1	1	1/15	33	0.99	1050	420	400	150
04/2	1	1/15	33	0.99	1100	410	400	150
06/1	1	1/15	52	0.99	1050	610	400	170
06/2	1	1/15	52	0.99	1100	600	400	170
08/1	2	1/15	60	0.99	1050	815	400	210
08/2	2	1/15	60	0.99	1100	800	400	210
10/1	2	1/15	85	0.99	1050	1020	400	250
10/2	2	1/15	85	0.99	1100	1000	400	250
12/1	2	1/10	170	0.99	1330	1250	425	370
12/2	2	1/10	175	0.99	1350	1230	425	370

HIGH STATIC ECM MOTOR DATA @ .3 ESP								
UNIT SIZE/ COIL NO	QTY PER UNIT	HP PER MOTOR	WATTS INPUT	POWER FACTOR	HIGH SPEED		LOW SPEED	
					RPM	CFM	RPM	CFM
02/1	1	1/10	42	.99	1350	240	400	84
02/2	1	1/10	42	.99	1350	233	400	80
03/1	1	1/8	100	.99	1600	380	800	150
03/2	1	1/8	100	.99	1600	370	800	147
04/1	1	1/7	120	.99	1600	630	800	220
04/2	1	1/7	120	.99	1600	620	800	220
06/1	1	1/7	130	.99	1600	740	800	225
06/2	1	1/7	130	.99	1600	700	800	225
08/1	2	1/7	200	.99	1600	1050	800	510
08/2	2	1/7	200	.99	1600	1040	800	520
10/1	2	1/7	250	.99	1600	1330	800	530
10/2	2	1/7	250	.99	1600	1320	800	525
12/1	2	1/7	250	.99	1600	1330	800	530
12/2	2	1/7	250	.99	1600	1320	800	525

Code Item 9	MOTOR OPTIONS
CODE	DESCRIPTION
A	Standard 115v PSC Motor
C	Standard Motor with Motor Cord Quick Disconnect
E	ECM Motor 0-10 vdc
F	ECM with Quick Disconnect
J	High Static ECM Motor
K	High Static ECM Motor with Quick Disconnect

Code Item 10	SUPPLY VOLTAGE OPTIONS
CODE	DESCRIPTION
1	120 Volt (standard)
2	208 Volt
3	240 Volt
4	277 Volt

Code Item 11	SERVICE SWITCH OPTIONS
CODE	DESCRIPTION
N	None
1	Electric Heat Fused Switch - All Voltages (30 Amp max.)
2	Non Fused Switch - Hydronic & Electric Heat Units Only - All Voltages (30 Amp max.)
3	Toggle Operated Switch - Hydronic Units Only - 115 Volt Only
4	Toggle Operated Fused Switch - Hydronic Units Only - 115 Volt Only

Code Item 12	PRIMARY COIL	
CODE	DESCRIPTION	NOTES
1	3-Row Standard Coil (standard)	1, 2
2	3-Row High Capacity	1, 2

NOTES:
1. Specify right hand or left hand connection when ordering. Hand of piping determined when facing air outlet.

2. Water coils include manual air vents.

Code Item 13	COIL OPTIONS
CODE	DESCRIPTION
M	Manual Air Vent (standard)
A	Automatic Air Vent - Primary
B	Automatic Air Vent - Secondary
C	Automatic Air Vent - Both

Code Item 14	AUXILIARY HEATING COILS	
CODE	DESCRIPTION	NOTES
1=Same End 2=Opposite End	1-Row Water	1, 2, 3, 4
3=Same End 4=Opposite End	1-Row Steam	1, 2, 3, 4

NOTES:
1. Specify same end or opposite end piping connection when ordering. Hand of piping determined when facing air outlet.

2. Water coils include manual air vents (Standard).

3. Heating coils are in the reheat position.

4. Auxiliary heating coils are not available on units with electric heat (field 14, items E-M).

Code Item 14	ELECTRIC HEAT			
CODE	VOLTAGE ALL SINGLE PHASE	KW	AVAILABLE ON UNIT SIZE	NOTES
E	120/208/240/277	1.0	02-03	1, 2, 3, 4
F	120/208/240/277	1.5	02-03	1, 2, 3, 4
F	208/240/277	1.5	04-06	1, 2, 3, 4
G	120/208/240/277	2.0	02-06	1, 2, 3, 4
H	208/240/277	3.0	03-10	1, 2, 3, 4
J	208/240/277	4.0	04-10	1, 2, 3, 4

CONSULT FACTORY FOR K.W. OVER 4.0

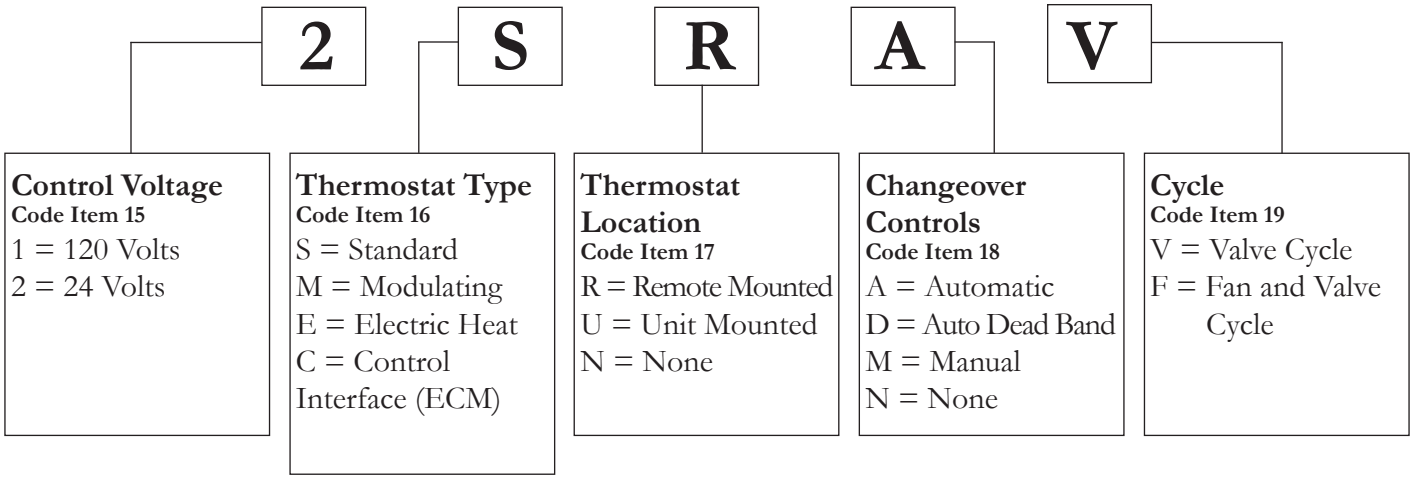
NOTES:
1. Price includes electric heating element, linear limit control and fusible link safety thermal cutoff(s).

2. Electric heat is not available on units with auxiliary water/steam heating coil (field 14, items A-D).

3. 30 Amp max on all disconnects.

4. Not available on low profile units.

Control Package Code
Code Item 15-19



UNIT/REMOTE MOUNTED THERMOSTAT OPTIONS							
VOLTAGE	SYSTEM TYPE	THERMOSTAT LOCATION	FAN SWITCH	CONTROL SYSTEM	CHANGEOVER CONTROLS	CONTROL CYCLE	THERMOSTAT CODE
120	2-Pipe (3)	Unit	Integral	Heat/Cool	Automatic	Valve	1SUAV
	2-Pipe (3)	Wall	Integral	Heat/Cool	Automatic	Valve	1SRAV (1)
	2-Pipe	Unit	Integral	Heat/Cool	Automatic	Fan & Valve	1SUAF
	2-Pipe	Wall	Integral	Heat/Cool	Automatic	Fan & Valve	1SRAF
	4-Pipe	Unit	Integral	Heat/Cool	Dead Band	Valve	1SUDV
	4-Pipe (1)	Wall	Integral (4)	Heat/Cool	Dead Band	Valve	1SRDV (1)
	2-Pipe EH	Unit	Integral	Cool/EH	Dead Band	Electric Heat	1EUDV
	2-Pipe EH	Wall	Wall	Cool/EH	Dead Band	Electric Heat	1ERDV (1)
	2-Pipe EH	Unit	Integral	Cool/EH	Automatic	Electric Heat	1EUAV (3)
	2-Pipe EH	Wall	Integral	Cool/EH	Automatic	Electric Heat	1ERAV (1, 3)
24	2-Pipe	Wall	Unit	Heat/Cool	Automatic	Valve	2SRAF
	4-Pipe	Wall	Unit	Heat/Cool	Dead Band	Valve	2SRDV (1)
	4-Pipe	Field Furnished	Unit	Heat/Cool	Dead Band	Valve	2SNDV
	2-Pipe Mod	Wall	Integral	Heat/Cool	Automatic	Valve-Modulating	2MRAV (1, 2)
	2-Pipe Mod	Unit	Integral	Heat/Cool	Automatic	Valve-Modulating	2MUAV (2)
	4-Pipe Mod	Wall	Integral	Heat/Cool	Automatic	Valve-Modulating	2MRDV (1, 2)
	4-Pipe Mod	Unit	Integral	Heat/Cool	Automatic	Valve-Modulating	2MUDV (2)
	2-Pipe EH	Wall	Wall	Cool/EH	Dead Band	Electric Heat	2ERDV (1)
ECM	2-Pipe	Wall	ECM	Heat/Cool	Automatic	Valve	2CRAV
	2-Pipe	Unit	ECM	Heat/Cool	Automatic	Valve	2CUAV
	4-Pipe	Unit	ECM	Heat/Cool	Dead Band	Valve	2CUDV
	4-Pipe	Wall	ECM	Heat/Cool	Dead Band	Valve	2CRDV
	Control Interface and Foot Mount Transformer Only						2CNDV

NOTES:

(1) Remote wall mounted thermostats are shipped loose for field installation.

(2) Modulating thermostat controls require the use of modulating valves on page 16.

(3) This control package requires a 2-way valve with bleed line or a 3-way valve.

(4) Fan switch locations - Horizontal, wall; Vertical, unit.

Control Packages

24 Volt, 4-Pipe, Wall Mount

Used on the following control packages:

2SRDV
2ERDV

115 Volt, 2 or 4-Pipe, Unit or Wall Mount, Auto Changeover

Used on the following control packages:

1SUAV	1EUAV	1SUAF
1SRAV	1ERAV	1SRAF
1SUDV	1EUDV	2CRAV
1SRDV	1ERDV	2CUAV

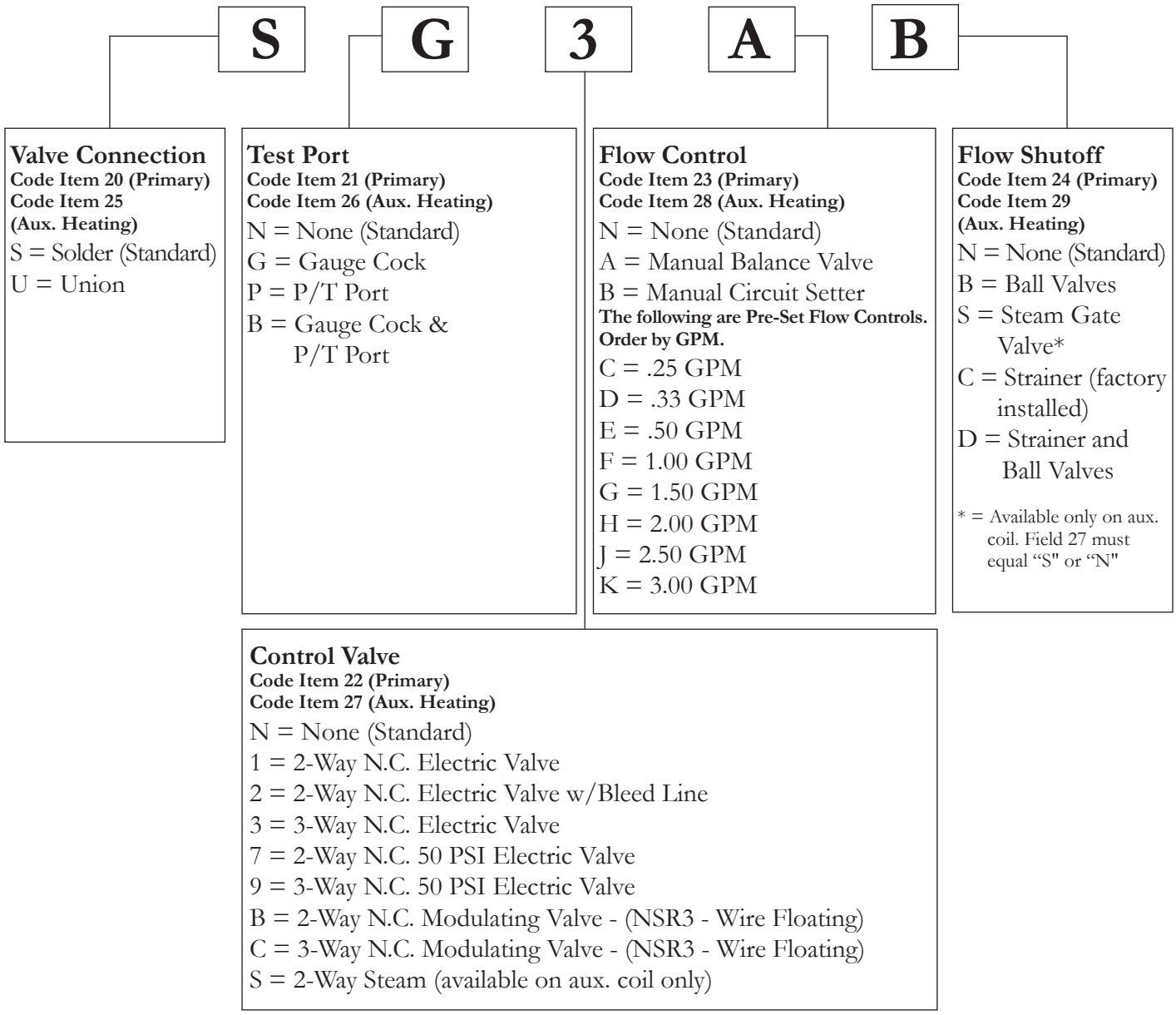
24 Volt, 2-Pipe, Wall Mount, Manual Changeover

Used on the following control packages:

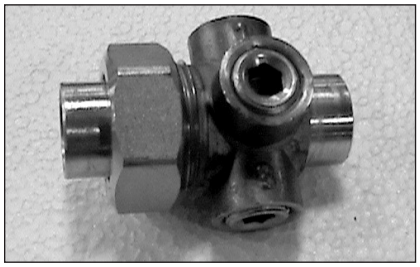
2SRAF

NOTE: Photos are for representation purposes only. Vendors and models subject to change without notice.

Valve Package Code
Code items 20-24 are for the primary coil. Code items 25-29 are for an auxiliary heating coil.
Valve package codes are the same for both coils.



Valve Package Glossary



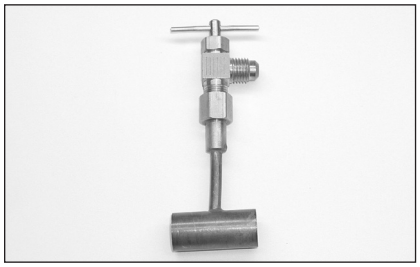
Unions

Code Item 20 for Primary Coil

Code Item 25 for Auxiliary Heating Coil

A fitting used to provide a means of quickly disconnecting and re-connection valve packages from the unit.

Nominal Size:	1/2"
Body Material:	Bronze/Copper
Connection:	Sweat
Pressure Rating (psig):	125
Temp. Rating:	200°F

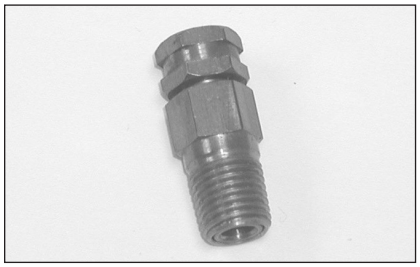


Gauge Cock

Code Item 21 for Primary Coil

Code Item 26 for Auxiliary Heating Coil

Nominal Size:	1/2"
Body Material:	Bronze/Copper
Connection:	Sweat
Pressure Rating (psig):	125
Temp. Rating:	200°F



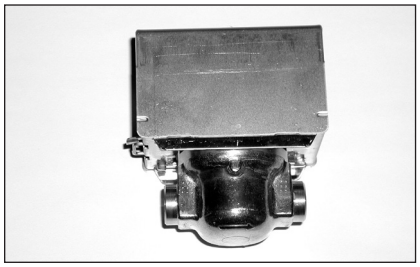
Pressure/Temperature (P/T) Ports

Code Item 21 for Primary Coil

Code Item 26 for Auxiliary Heating Coil

Designed to allow testing of water pressure, differential pressure or water temperature without interrupting the operation of the fan coil.

Nominal Size:	1/4"
Body Material:	Brass
Connection:	Threaded
Pressure Rating (psig):	400
Temp. Rating:	250°F



2-Way Control Valve (typical)

Code Item 22 for Primary Coil

Code Item 27 for Auxiliary Heating Coil

A 2-position water control valve driven open or closed upon a call for heating or cooling to maintain space temperature. Control valves are piped normally closed to the coil as standard. Actuators can be line (120) or low (24) voltage.

Nominal Size:	1/2"
Body Material:	Brass
Connection:	Sweat
Pressure Rating (psig):	300
Temp. Rating:	200°F
Cv:	2.5
Max. Close-off Press. (psig):	30

2-Way Modulating Control Valve (typical)

Code Item 22 for Primary Coil

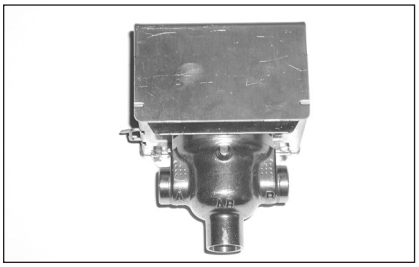
Code Item 27 for Auxiliary Heating Coil

A 3-wire modulating non-spring return control valve, when connected to a compatible modulating thermostat incrementally adjusts the valve actuator to maintain a set point. Valves are piped normally closed to the coil as standard. Actuators are 24V only.

Nominal Size:	1/2"
Body Material:	Brass
Connection:	Sweat
Pressure Rating (psig):	400
Temp. Rating:	200°F
Cv:	4.0
Max. Close-off Press. (psig):	50

NOTE: Photos are for representation purposes only.
Vendors and models subject to change without notice.

Valve Package Glossary



3-Way Control Valve (typical)

Code Item 23 for Primary Coil

Code Item 27 for Auxiliary Heating Coil

A 3-position water control valve driven open or closed (bypass) upon a call for heating or cooling to maintain space temperature. Control valves are piped normally closed to the coil as standard (in full bypass) Valve actuators can be line (120) or low (24) voltage

Nominal Size:	1/2"
Body Material:	Brass
Connection:	Sweat
Pressure Rating (psig):	300
Temp. Rating:	200°F
Cv:	3.0
Max. Close-off Press. (psig):	25

3-Way Modulating Control Valve (typical)

Code Item 22 for Primary Coil

Code Item 27 for Auxiliary Heating Coil

A 3-wire modulating non-spring return control valve, when connected to a compatible modulating thermostat incrementally adjusts the valve actuator to maintain a set point. Valves are piped normally closed to the coil as standard. Actuators are 24V only.

Nominal Size:	1/2"
Body Material:	Brass
Connection:	Sweat
Pressure Rating (psig):	400
Temp. Rating:	200°F
Cv:	4.0
Max. Close-off Press. (psig):	50

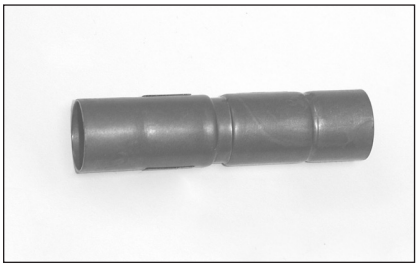
Manual Circuit Setter

Code Item 23 for Primary Coil

Code Item 28 for Auxiliary Heating Coil

A control fitting designed to allow maximum water flow through the fan coil unit in the open position, and as little as 10% of flow in the closed position. Has calibrated nameplate, built in test ports and adjustable mechanical stops, and is suitable for positive shutoff.

Nominal Size:	1/2"
Body Material:	Bronze
Connection:	Sweat
Pressure Rating (psig):	300
Temp. Rating:	250°F



Pre-Set Flow Controls

Code Item 23 for Primary Coil

Code Item 28 for Auxiliary Heating Coil

A automatic fixed flow control device designed to limit the GPM (gallons per minute) flow through the fan coil unit. Available in the following GPM's: .25, .33, .50, 1.00, 1.50, 2.00, 2.50, 3.00

Nominal Size:	1/2"
Body Material:	Copper
Connection:	Sweat
Pressure Rating (psig):	400
Temp. Rating:	250°F

NOTE: Photos are for representation purposes only.
Vendors and models subject to change without notice.

Valve Package Glossary

Manual Balance Valve

Code Item 23 for Primary Coil

Code Item 28 for Auxiliary Heating Coil

A plug type valve designed to balance the waterside of the fan coil to ensure proper flow through the bypass circuit of a 3-Way control valve. Manual adjustment is required. No calibration is provided at the valve

Nominal Size:	1/2"
Body Material:	Bronze
Connection:	Sweat
Pressure Rating (psig):	350
Temp. Rating:	200°F
Cv:	Adjustable

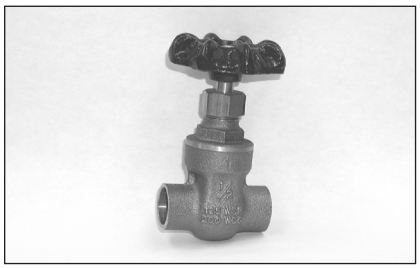
Ball Valves

Code Item 24 for Primary Coil

Code Item 29 for Auxiliary Heating Coil

A full port forged brass ball valve used to isolate the Fan Coil Unit and associated piping. This valve requires manual operation.

Nominal Size:	1/2"
Body Material:	Brass
Connection:	Sweat
Pressure Rating (psig):	600
Temp. Rating:	325°F



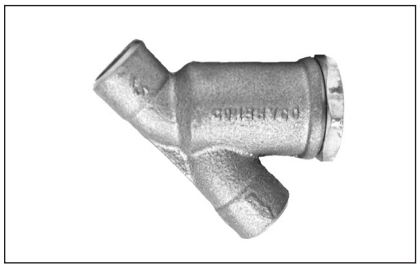
Steam Gate Valve

Not Available on Primary Coil

Code Item 29 for Auxiliary Heating Coil

Designed to allow testing of water pressure, differential pressure or water temperature without interrupting the operation of the fan coil

Nominal Size:	1/2"
Body Material:	Brass
Connection:	Sweat
Pressure Rating (psig):	400
Temp. Rating:	250°F



Strainer

Code Item 24 for Primary Coil

Code Item 29 for Auxiliary Heating Coil

Designed to allow water to flow through a built-in screen to filter debris or contaminants from the water system

Nominal Size:	1/2"
Body Material:	Bronze
Connection:	Sweat
Pressure Rating (psig):	200
Temp. Rating:	150°F
Screen:	20 Mesh Stainless Steel

NOTE: Photos are for representation purposes only.
Vendors and models subject to change without notice.

Code Item 30	BLOWER WHEEL OPTIONS
CODE	DESCRIPTION
A	Plastic (standard)
B	Aluminum

Code Item 31	LEFT HAND END POCKET MODIFICATION	
CODE	DESCRIPTION	NOTES
N	None	
L	Left Hand End Pocket Modification	1, 2, 3

NOTES:
1. Total length of the end pocket must be specified. Standard length is 9". End pocket length is available from 2" to 14 3/4".
   EXAMPLE:
   If 3" end pocket is specified, 6" will be eliminated from the end pocket selected. If 13" end pocket is specified, 4" will be added to the end pocket.

2. Only available on vertical models listed on page 6-7, except FCTF and LCTF.

3. 10 and 12 sized units cannot be increased in length.

Code Item 32	RIGHT HAND END POCKET MODIFICATION	
CODE	DESCRIPTION	NOTES
N	None	
R	Right Hand End Pocket Modification	1, 2, 3

NOTES:
1. Total length of the end pocket must be specified. Standard length is 9". End pocket length is available from 2" to 14 3/4".
   EXAMPLE:
   If 3" end pocket is specified, 6" will be eliminated from the end pocket selected. If 13" end pocket is specified, 4" will be added to the end pocket.

2. Only available on vertical models listed on page 6-7, except FCTF and LCTF.

3. 10 and 12 sized units cannot be increased in length.

Code Item 33	REAR EXTENSION	
CODE	DESCRIPTION	NOTES
N	None	
2	2" Rear Extension	1
4	4" Rear Extension	1
6	6" Rear Extension	1

NOTE:
1. Exposed vertical cabinet models, except WETB and WEFB. Cabinet extension attached to the rear of top and sides of vertical cabinet. Sheet metal extension between unit and outside air opening furnished and mounted by the installer.

Code Item 34	GRILLES & DUCT COLLARS DISCHARGE AIR	
CODE	DESCRIPTION	NOTES
N	None	
1	Aluminum Bar Grille	
3	2-Way Single Deflection Aluminum Grille (removable)	
4	4-Way Double Deflection Aluminum Grille (removable)	
5	1" Duct Collar - 2	1

NOTES:
1. Models CEFR, CEFB and vertical cabinet units. Field installed

Code Item 35	GRILLES & DUCT COLLARS RETURN AIR	
CODE	DESCRIPTION	NOTES
N	None	
A	Stamped Steel Grille (powder coated to match unit color)	1
B	1" Inlet Duct Collar	2
C	6" Round Duct Collar	3
D	Extruded Aluminum Linear Grille (anodized)	1
E	Extruded Aluminum Linear Grille (painted black)	1

NOTES:
1. Models FETF, FEFF, FDTF and SETF only. Front panel must be removed to change the filter.

2. Model CEFR. Shipped loose, field installed.

3. Models CRFB, CRBB and CEFB only. Shipped loose, field installed.

Code Item 36	OUTSIDE AIR DAMPERS	
CODE	**DESCRIPTION**	**NOTES**
N	None	
3	25% Rear Inlet Damper	2, 4, 6
4	25% Bottom Inlet Damper	2, 4, 6
6	Motorized 25% Rear Inlet Damper	4, 5
7	Motorized 25% Bottom Inlet Damper	4, 5
8	Motorized 25% Rear Inlet Damper (horizontal units only)	4, 5

NOTES:
1. Includes damper, manually adjustable through return air opening, and block-off plate to minimize O.A. blow-through.

2. Damper motor and linkage furnished and installed by others.

3. Models FETF, FEFF, SETF and FDTF only.

4. Not available on units with electric heat.

5. Units will not be U.L. labeled.

6. Linkage and Actuator by others.

Code Item 37	METAL GAUGE OPTIONS	
CODE	**DESCRIPTION**	**NOTES**
A	18 Gauge Steel Cabinet (standard)	
B	16 Gauge Steel Cabinet	
C	16 Gauge Steel Front Panel	1
D	14 Gauge Steel Cabinet	
E	14 Gauge Steel Front Panel	1

NOTE:
1. Models FRFF, WRFF, FFFF, WFFF, FSFF,WSFF, FTFF and WTFF only.

Code Item 38	CABINET COLORS	
CODE	DESCRIPTION	NO
8	Deluxe Beige (standard)	SB-6
F	Bright White	VP-1
E	White	P-1
A	Almond	SA-1
G	Silver Aluminum	SA-1
H	Champagne	MC-2

Code Item 38	CABINET COLORS	
CODE	DESCRIPTION	NO
6	Eggshell	VP-2
7	Light Grey	SB-1
9	Soft Dove	SB-7
C	Dark Bronze	DB-1
D	Flat Black	DB-5
J	Bronze Mica	MC-3

Code Item 39	TAMPER PROOF FASTENERS	
CODE	DESCRIPTION	NOTES
N	None	
A	Access Doors	1, 2

NOTES:
1. Requires Allen Wrench, furnished by others.

2. Not available on Model FDTF or with fixed blade linear steel bar grille, option 1 Code Item 34.

Code Item 40	FILTERS
CODE	DESCRIPTION
T	Throwaway Fiberglass Media (standard)
A	Cleanable Aluminum Mesh

Code Item 41	INSULATION
CODE	DESCRIPTION
A	1/2" Coated Fiberglass (standard)
B	1/2" Foil Faced Fiberglass
C	Insulated Plenum Section, CPFR & CPFB Models Only - 1/2" Fiberglass
D	1/2" Foil Faced Fiberglass, Unit and Plenum, CPFR & CPFB Models Only
E	Closed Cell
F	Closed Cell, Unit and Plenum, CPFR & CPFB Models Only

Code Item 42	DRAIN PAN OPTIONS
CODE	DESCRIPTION
1	Stainless Steel Drain Trough (vertical units only)
2	Stainless Steel Drain Pan (horizontal units only)
3	18 Gauge Steel Auxiliary Drain Pan (vertical units only)
4	Stainless Steel Drain Trough and 18 Gauge Steel Auxiliary Drain Pan (vertical units only)
A	Standard Drain Trough with Safety Overflow Switch (vertical units only)
B	Stainless Steel Drain Trough with Safety Overflow Switch (vertical units only)
C	18 Gauge Auxiliary Drain Pan with Safety Overflow Switch (vertical units only)
D	Stainless Steel Drain Trough and 18 Gauge Auxiliary Drain Pan with Safety Overflow Switch (vertical units only)
E	Standard Drain Pan with Safety Overflow Switch (horizontal units only)
F	Stainless Steel Drain Pan with Safety Overflow Switch (horizontal units only)

Code Item 43	LEVELING FEET/VIBRATION ISOLATION
CODE	DESCRIPTION
N	None
A	Manually Adjustable Leveling Bolts (vertical floor mounted units only)
V	Vibration Grommet (horizontal units only)

Code Item 44	SPEED SWITCH OPTIONS
CODE	DESCRIPTION
N	None
A	Unit Mount Speed Switch (horizontal units only)
B	Omit Speed Switch
C	24V Fan Switching (add to control package) (PSC motors only)

	SHIP LOOSE ITEMS
CODE	DESCRIPTION
31STRAINER	Strainer (field installed)
31GLASSFILTER	Spare Throwaway Glass Media Filter
31ALFILTER	Spare Aluminum Cleanable Mesh Filter

Before unit sizes can be selected, the following design criteria must be developed.

Indoor design conditions
Entering water temperatures
Ventilation air requirements
Room sensible cooling loads
Room total cooling loads
Room heat loss
Heating season room design temperatures
Decide - 2-pipe system
- 4-pipe system
- 2-pipe system with intermediate electric heat
- 2-pipe system with total electric heat

CABINETS—Unitaire fan coil units are offered in seven sizes and a variety of arrangements and enclosure types to accommodate most building design requirements.

COILS—Two primary coil options are 3-row, No. 1 standard and No. 2 high capacity 3-row, are available for all unit sizes.

Cooling capacities at high speed are tabulated on pages 32-43. The capacity tables list four water temperature rises at fifteen entering air conditions for each of the two chilled water coils. Interpolation may be used on flow rates, entering water temperatures and entering air temperatures.

Capacity correction factors for medium and low speeds and external static pressure are given on pages 29-30.

Heating requirements are usually met by using the same water flow rate as cooling, and adjusting the hot water temperature to obtain required heating capacity at medium or low speed. Heating capacities for the No. 1 and No. 2 coils are listed on page 44.

A 1-row auxiliary coil is available to provide heating in a 4-pipe system. Hot water and steam capacities are listed on page 45.

VALVE PACKAGES— AIRTHERM offers a wide selection of valve packages which are described on pages 16-19.

CAPACITIES AT HIGH ALTITUDE—Cooling and heating capacities in this manual are for sea level conditions. If design capacities are for high elevation conditions, apply the altitude correction factors on page 29, to adjust design capacities, before entering the capacity tables.

VENTILATION—When ventilation air is to be provided by the fan coil unit, it is mixed with return air before the coil. The ventilation air load is added to the room load to arrive at the unit capacity requirements.

A damper motor is interlocked with the fan speed control switch. The damper is driven to the open position when fans are running and to the closed position when the fans are off. A spring return operator closes the damper on power failure. Care should be taken to prevent coil freeze up during winter months when outside air is brought directly into the fan coil unit.

CONTROL SYSTEMS—Each unit is supplied with a basic fan speed control selector switch. Control systems to provide automatic operation are listed on pages 14-15.

ELECTRIC HEAT—Airtherm offers electric heat coils factory installed on fan coil units for either total heating or as an intermediate season heat source. Electric heat coils are offered on 2-pipe fan coils only. Total electric heat is used in buildings that do not have a hydronic boiler loop to provide heat in winter months such as in southern climates. When the electric heat coils are furnished with intermediate season controls in moderate and cold climates, the user always has a heating option even though the hydronic system may be operating in the cooling mode. When the hydronic system is operating in the heating mode the electric heat coils are locked out so that all heating is provided by the boiler loop. Some models are not available with electric heat, see pages 6-8 for details.

Selection Example No. 1
Unit Model FETF - 2-pipe system

COOLING		HEATING	
Total Cooling Load	15.9 MBH	Sensible Load	32.2 MBH
Sensible Cooling Load	13.2 MBH	Outside Design Condition	0°F
Outside Design Conditions	94°F DB, 74°F WB	Inside Design Condition	70°F
Inside Design Conditions	78°F DB, 64°F WB	Outside Air Requirement	150 CFM
Total CFM Requirement	600 CFM	Entering Water Temperature	150°F
Outside Air Requirement	150 CFM		
Entering Water Temperature	45°F		
Water Temperature Rise	8°F		

Determine:
Unit Size • Temperature of Air to Coil • Coil No. • Fan Speed • Coil GPM • Coil Pressure

Unit Size:
A size 06, 600 CFM, unit handling 25% outside air and 75% re-circulated air is required to meet the 150 CFM outside air requirement.

Temperature of air to coil:

COOLING
78 + [.25 x (94-78)] = 82°F DB
64 + [.25 x (74-64)] = 66.5°F WB

HEATING
70 - [.25 x (70-0)] = 52.5°F

Cooling Selection:
A No. 1 coil, page 35, will meet the required conditions. GPM is 3.2 and pressure drop is 1.7 ft. of water.

Heating Selection:
At 4.0 GPM, determined by the cooling coil selection, base rating, page 44, for a No. 1 coil is 330 at low speed.

Required Base Rating:

$$\frac{\text{BTU Required}}{\text{(entering water-entering air)}} = \frac{32{,}200}{(150\text{-}52.5)} = 330.26$$

The cooling coil selected (330 base rating) will produce required heating capacity at low speed.

Selection Example
Unit Model CPFR - 4-pipe system

COOLING

Total Cooling Load	9.2 MBH
Sensible Cooling Load	7.9 MBH
Inside Design Conditions	78°F DB, 63.5°F WB
Entering Water Temperature	45°F
Water Temperature Rise	10°F
Unit Size	04
External Static Pressure	.10"

HEATING

Sensible Load	19,600 BTU
Inside Design Condition	70°F
Entering Water Temperature	190°F

Determine:
- CFM at .10" External Static Pressure
- Total and Sensible Cooling Loads at Free Delivery
- Cooling Coil No.
- Cooling Coil GPM
- Cooling Coil Pressure Drop
- Required Heating Coil Base Rating at Free Delivery
- Heating Coil GPM
- Heating Coil Pressure Drop

CFM at .10" external static pressure:
External static pressure correction factor from table on page 29 is .90.

400 x .90 = 360 CFM with No. 1 coil

390 x .90 = 351 CFM with No. 2 coil

Required cooling loads at free delivery:
From capacity correction chart on page 30.
Total heat factor - .97
Sensible heat factor - .95

$$\frac{\text{Total Load}}{\text{Total Heat Factor}} = \frac{9.2}{.97} = 9.52 \text{ total MBH at free delivery}$$

$$\frac{\text{Sensible Load}}{\text{Sensible Heat Factor}} = \frac{7.9}{.95} = 8.33 \text{ total MBH at free delivery}$$

Cooling Coil:
Enter coil No. 1 capacity table on page 34 at 78°F DB-64°F WB entering air which is essentially the same as the specified inside design condition.

At 10°F water temperature rise size 04 has a capacity of 9.3 MBH total cooling, 7.1 MBH sensible cooling, which meet the cooling requirements, at 1.9 GPM and 2.5 pressure drop.

Required heating coil base at free delivery:

$$\frac{\text{BTU Required}}{\text{(Ent water-Ent air)}} = \frac{19600}{(190\text{-}70)} = 163.3$$

= Base rating at free air delivery

$$\frac{163}{.95 \text{ (sensible heat factor)}} = 171.6$$

171.6 = Base rating at .10" external static pressure

From 1-row auxiliary heating coil capacity table on page 45, size 04 has the required base rating of 172 at 3.0 GPM and 7.8 water pressure drop.

Electric Heat Element Selection

Selection at Free Delivery

1. Calculate the room sensible heat loss, BTUH.

2. Determine air temperature rise (ΔT) for the unit size selected. Unit size is usually selected to provide cooling requirements. CFM for each unit size is listed on page 10.

$$\frac{\Delta T}{CFM \times 1.085} = BTUH$$

3. Determine KW required from the nomogram below.

EXAMPLE: Unit size 04, Model FETF, (400 CFM at high speed), sensible heating load 17,000 BTUH.

Determine the required heating element KW.

$$\Delta T = \frac{17{,}000}{CFM \times 1.085} = 39°F$$

From the nomogram below, KW = 5.0.

Medium and Low Speed Operation

1. CFM at medium and low speed is given on page 10. CalculateΔT at either medium or low speed CFM and determine the required electric heating element KW from the nomogram below.

EXAMPLE: Determine the KW required for a size 10-1 Unitaire operating at low speed, 710 CFM. Room sensible heat loss is 28,000 BTUH.

$$\Delta T = \frac{28{,}000}{710 \times 1.085} = 36.3°F$$

From thenomogram below, KW = 8.5.

Selection at External Static Pressure

CalculateΔT at the corrected CFM and determine the required electric heating element KW from the nomogram.

EXAMPLE: Determine the KW required for a size 04 Unitaire, Model CCFR. Room sensible heat loss is 8500 BTUH at .125" external static pressure.

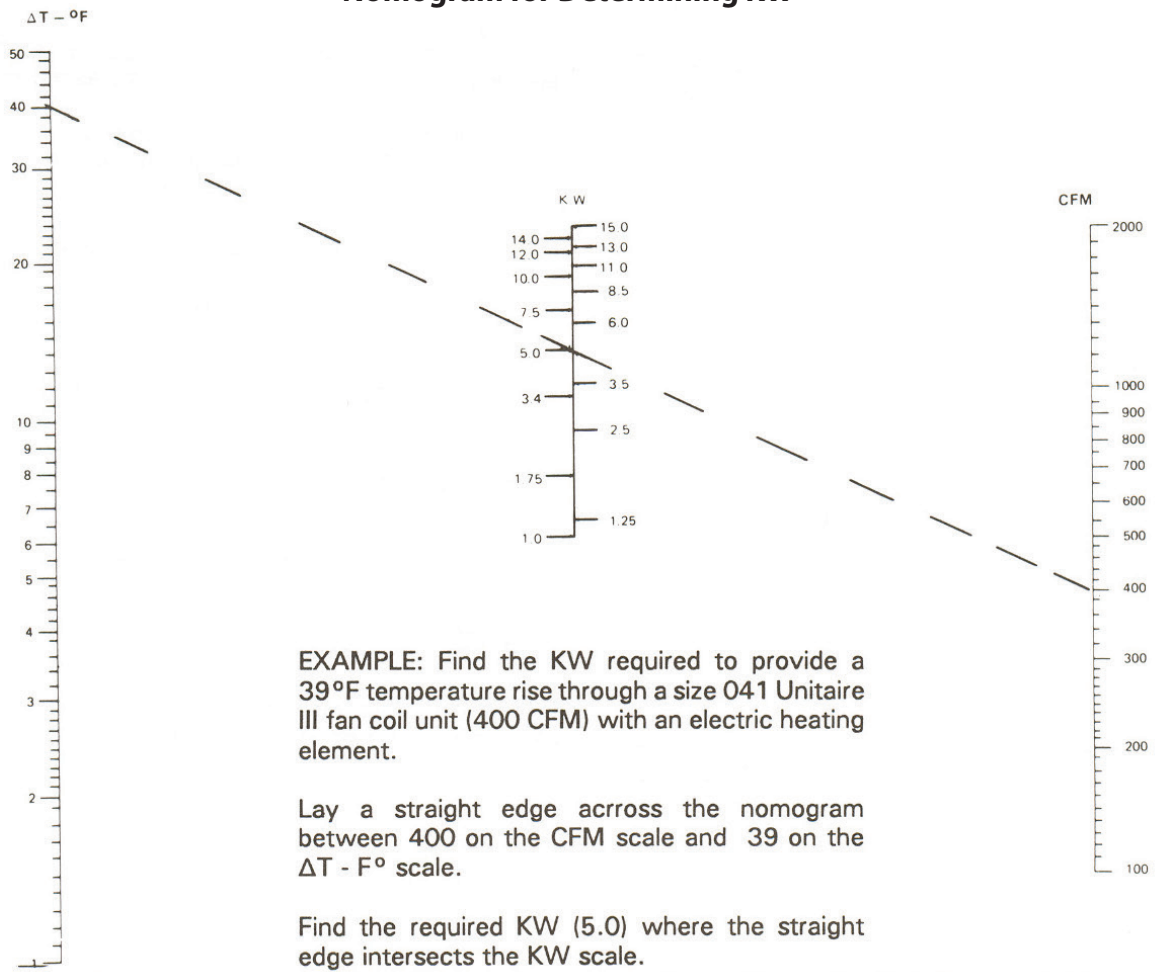
1. Calculate CFM at .125" external static pressure using correction factor from the table on page 29.

400 CFM x .83 = 332 CFM

2. $$\Delta T = \frac{8{,}500}{332CFM \times 1.085} = 36.3°F$$

3. From the nomogram below, KW = 2.5.

Nomogram for Determining KW



EXAMPLE: Find the KW required to provide a 39°F temperature rise through a size 041 Unitaire III fan coil unit (400 CFM) with an electric heating element.

Lay a straight edge acrross the nomogram between 400 on the CFM scale and 39 on the ΔT - F° scale.

Find the required KW (5.0) where the straight edge intersects the KW scale.

UNIT AIR FLOW AT FREE DELIVERY AND EXTERNAL STATIC PRESSURES												
UNIT SIZE	FAN SPEED	CFM FACTORS (1) AT FREE DELIVERY STANDARD PSC MOTOR		CFM CORRECTION FACTORS (3) CFM AT EXTERNAL STATIC PRESSURE FOR UNITS WITH 1" AIR OUTLET DUCT COLLAR EXTERNAL STATIC PRESSURE								
		UNITS WITH CABINET AND INTEGRAL AIR OUTLET GRILLE	UNITS (2) WITH 1" AIR OUTLET DUCT COLLAR	.025	.05	.075	.10	.125	.15	.20	.225	.250
02	High	1.00	1.00	.96	.92	.88	.83	.78	.73	.59	.51	.43
	Medium	.92	.92	.86	.82	.79	.75	.71	.67	.55	.48	.41
	Low	.73	.73	.67	.66	.64	.62	.59	.56	.49	.43	.37
03	High	1.00	1.11	1.02	.97	.89	.88	.82	.77	.65	.58	.52
	Medium	.890	.89	.87	.85	.82	.81	.74	.70	.60	.55	.48
	Low	.73	.79	.77	.76	.73	.71	.68	.65	.56	.52	.47
04	High	1.00	1.09	1.05	1.00	.95	.90	.83	.78	.65	.59	.51
	Medium	.89	.96	.95	.93	.88	.83	.78	.73	.63	.56	.50
	Low	.70	.76	.75	.75	.75	.73	.70	.66	.59	.51	.48
06-08 10-12	High	1.00	1.03	1.00	.97	.92	.88	.84	.79	.69	.63	.56
	Medium	.89	.89	.87	.84	.82	.78	.75	.72	.63	.58	.52
	Low	.71	.72	.71	.70	.68	.67	.65	.62	.57	.53	.48

NOTES:

1. To obtain CFM at medium or low speed, multiply high speed CFM rating from the table below by the appropriate factor.

EXAMPLE:

Determine medium speed CFM size 04, Model FETF with a No. 1 coil.

High Speed CFM = 400
Correction Factor = .89
400 x .89 = 356 CFM at medium speed

2. To obtain CFM at free delivery for units with 1" air outlet duct collar (no outlet grille) multiply high speed CFM rating from the table below by the appropriate factor.

EXAMPLE:

Determine high speed CFM at free delivery for size 03, model CCFR with a No. 1 coil.

High Speed CFM = 310
Correction Factor = 1.11
310 x 1.11 = 344 CFM at free delivery

3. To obtain CFM at external static pressure for units with 1" air outlet duct collar, multiply high speed CFM rating from the table below by the appropriate factor.

EXAMPLE:

Determine high speed CFM at .10" external static pressure for size 041, model CCFR with a No. 2 coil.

High Speed = 390
Correction Factor = .90
390 x .90 = 351 CFM at .10" external static pressure

HIGH SPEED CFM RATINGS							
COIL NO.	CFM UNIT SIZE						
	02	03	04	06	08	10	12
1–Standard	240	310	400	600	800	1020	1170
2–High Capacity	230	300	390	590	780	995	1300

ALTITUDE CORRECTION FACTORS		
ELEVATION	TOTAL HEAT	SENSIBLE HEAT
1000	.99	.96
2000	.98	.93
3000	.97	.896
4000	.96	.864
5000	.94	.83
6000	.93	.80

$$\text{Load at Sea Level} = \frac{\text{Design Load at Elevation}}{\text{Altitude Correction Factor}}$$

Total heat factor approaches 1.0 at total/sensible ratios less than .75.

AHRI APPROVED STANDARD RATINGS

APPROVED RATINGS ARE IN ACCORDANCE WITH INDUSTRY STANDARD 440 FOR EQUIPMENT TESTING AND RATING OF FAN COIL AIR CONDITIONERS.

UNIT SIZE (1)	RATED CFM (2)	COOLING CAPACITIES				MOTOR (5)			FILTERS (6)	MINIMUM FREE AREA	
		GPM	PD (4)	SENS. HEAT MBH	TOTAL HEAT MBH	AMPS	WATTS	RPM HIGH	SIZE L x W INCHES	INLET SQ IN	OUTLET SQ IN
02-1	240	1.24	1.0	4.0	4.5	.50	55	1010	20 7/8 x 9	67.6	57.9
02-2	230	1.60	7.0	3.5	4.9			1020			
03-1	310	1.84	2.5	5.5	6.8	.56	60	1060	26 7/8 x 9	81.2	69.6
03-2	300	2.24	15.9	4.8	6.8			1080			
04-1	400	2.44	4.2	7.5	9.1	.53	58	1060	30 7/8 x 9	94.9	81.4
04-2	390	2.95	21.3	6.4	9.0			1070			
06-1	600	3.36	2.2	10.4	12.5	.70	80	1060	44 7/8 x 9	149.6	128.3
06-2	590	4.25	12.2	9.6	13.2			1070			
08-1	800	4.70	4.5	14.1	17.5	1.26	135	1070	56 7/8 x 9	190.7	163.4
08-2	780	5.75	24.4	12.6	17.7			1070			
10-1	1020	6.75	8.9	19.4	25.3	1.40	150	1080	76 7/8 x 9	259.1	222.1
10-2	990	7.00	9.1	15.4	21.7			1090			
12-1	1170	7.43	10.8	22.7	27.5	2.83 (7)	320	1220			
12-2	1300	8.70	13.1	19.4	26.5	3.10 (7)	365	1350			

NOTES:

(1) Capacity ratings apply to all models.

(2) Air flow under dry conditions. Inlet air 70°F - 80°F DB.

(3) Based on entering air = 80°F DB and 67°F WB.
Entering Water Temperature = 45°F
Leaving Water Temperature = 55°F
High Fan Speed.

(4) PD = Coil Pressure Drop (Feet of Water). Maximum average water temperature = 50°F.

(5) PSC motor at high fan speed. 115/60/1 electrical supply.

(6) 1" thick throwaway filter.

(7) Running amps. Others refer to nameplate amps.

CHILLED WATER COOLING CAPACITIES HIGH SPEED COIL NO. 1 40° F ENTERING WATER TEMPERATURE																	
Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
75°F EDB 61°F EWB	02	6.4	5.2	2.1	2.2	5.1	4.6	1.0	.6	4.5	4.4	.8	.4	3.7	3.7	.5	.2
	03	9.2	7.3	3.1	4.9	7.6	6.6	1.5	1.5	6.9	6.2	1.2	1.0	5.7	5.7	.7	.4
	04	12.5	9.9	4.2	9.3	10.3	8.9	2.1	2.9	9.4	8.4	1.6	1.9	7.8	7.7	1.0	.8
	06	17.3	13.9	5.8	4.6	14.0	12.4	2.8	1.4	12.6	11.8	2.1	.9	10.3	10.3	1.3	.4
	08	23.3	18.4	7.8	9.2	19.2	16.5	3.8	2.9	17.5	15.7	2.9	1.9	14.5	14.4	1.8	.9
	10	32.6	25.3	10.9	19.5	27.5	22.9	5.5	6.4	25.3	21.9	4.2	4.1	21.3	20.1	2.7	1.9
	12	36.3	28.4	12.1	23.2	30.3	26.5	6.1	7.5	27.8	24.4	4.6	4.8	23.3	22.4	2.9	2.2
75°F EDB 63°F EWB	02	7.5	5.2	2.5	2.8	5.8	4.5	1.2	.8	5.1	4.2	.8	.5	3.9	3.7	.5	.2
	03	10.6	7.3	3.5	6.2	8.8	6.4	1.8	1.9	7.8	6.0	1.3	1.2	6.2	5.3	.8	.5
	04	14.4	9.8	4.8	11.7	12.0	8.7	2.4	3.7	10.7	8.2	1.8	2.3	8.6	7.2	1.1	1.0
	06	20.0	13.8	6.7	5.9	16.1	12.0	3.2	1.8	14.2	11.2	2.4	1.1	11.1	9.9	1.4	.4
	08	26.8	18.3	8.9	11.6	22.3	16.2	4.5	3.7	19.9	15.2	3.3	2.3	15.9	13.4	2.0	1.0
	10	37.2	25.1	12.4	24.2	32.1	22.7	6.4	8.2	29.1	21.4	4.9	5.2	23.6	19.0	3.0	2.3
	12	41.5	28.3	13.8	29.0	35.4	25.2	7.1	9.6	32.0	23.8	5.3	6.0	25.9	21.2	3.2	2.7
75°F EDB 64°F EWB	02	8.0	5.2	2.7	3.1	6.3	4.5	1.3	.9	5.5	4.1	.9	.5	4.1	3.6	.5	.2
	03	11.3	7.2	3.8	6.8	9.5	6.4	1.9	2.2	8.5	6.0	1.4	1.3	6.6	5.2	.8	.6
	04	15.3	9.8	5.1	13.0	13.0	8.7	2.6	4.3	11.6	8.1	1.9	2.6	9.2	7.1	1.1	1.1
	06	21.3	13.7	7.1	6.5	17.5	12.0	3.5	2.0	15.4	11.1	2.6	1.2	11.8	9.6	1.5	.5
	08	28.5	18.2	9.5	12.8	24.1	16.2	4.8	4.2	21.6	15.1	3.6	2.6	17.0	13.1	2.1	1.1
	10	39.5	25.0	13.2	26.7	34.5	22.6	6.9	9.2	31.5	21.3	5.3	5.9	25.3	18.6	3.2	2.6
	12	44.2	28.2	14.7	32.0	38.3	25.4	7.7	11.0	34.8	23.9	5.8	7.0	27.8	20.8	3.5	3.0
78°F EDB 64°F EWB	02	8.0	5.8	2.7	3.1	6.4	5.0	1.3	.9	5.6	4.7	.9	.6	4.5	4.2	.6	.2
	03	11.3	8.0	3.8	6.8	9.5	7.1	1.9	2.2	8.6	6.7	1.4	1.4	7.0	6.1	.9	.6
	04	15.3	10.8	5.1	13.0	12.9	9.7	2.6	4.2	11.7	9.1	1.9	2.7	9.6	8.2	1.2	1.2
	06	21.4	15.2	7.1	6.5	17.5	13.5	3.5	2.0	15.6	12.7	2.6	1.2	12.5	11.4	1.6	.5
	08	28.5	20.1	9.5	12.8	24.0	18.0	4.8	4.2	21.8	17.0	3.6	2.7	17.8	15.3	2.2	1.2
	10	39.5	27.5	13.2	26.7	34.4	25.1	6.9	9.2	31.5	23.8	5.3	5.9	26.2	21.5	3.3	2.7
	12	44.2	31.0	14.7	32.1	38.1	28.1	7.6	10.9	34.7	26.6	5.8	6.9	28.8	24.0	3.6	3.2
78°F EDB 65°F EWB	02	8.5	5.7	2.8	3.4	6.8	5.0	1.4	1.0	6.0	4.7	1.0	.6	4.7	4.1	.6	.3
	03	12.0	8.0	4.0	7.6	10.2	7.1	2.0	2.5	9.2	6.7	1.5	1.5	7.4	5.9	.9	.7
	04	16.3	10.7	5.4	14.4	13.9	9.7	2.8	4.8	12.6	9.1	2.1	3.0	10.2	8.1	1.3	1.3
	06	22.7	15.1	7.6	7.2	18.8	13.4	3.8	2.3	16.8	12.5	2.8	1.4	13.3	11.1	1.7	.6
	08	30.3	20.0	10.1	14.1	25.9	18.0	5.2	4.8	13.3	16.9	3.9	3.0	18.9	15.0	2.4	1.3
	10	42.0	27.4	14.0	29.5	36.9	25.1	7.4	10.3	33.9	23.7	5.7	6.7	28.0	21.2	3.5	3.0
	12	46.9	30.9	15.6	35.3	41.0	28.1	8.2	12.3	37.5	26.6	6.2	7.8	30.7	23.6	3.8	3.5
78°F EDB 68°F EWB	02	10.1	5.7	3.4	4.6	8.5	5.0	1.7	1.5	7.6	4.6	1.3	.9	5.8	3.9	.7	.4
	03	14.3	7.9	4.8	10.0	12.5	7.1	2.5	3.4	11.5	6.7	1.9	2.2	9.3	5.7	1.2	1.0
	04	19.2	10.6	6.4	19.0	17.0	9.6	3.4	6.6	15.7	9.0	2.6	4.3	12.8	7.8	1.6	1.9
	06	27.0	15.0	9.0	9.6	23.2	13.3	4.6	3.2	21.2	12.4	3.5	2.1	16.6	10.6	2.1	.9
	08	35.8	19.8	11.9	18.6	31.5	17.8	6.3	6.6	29.1	16.8	4.9	4.3	23.8	14.5	3.0	1.9
	10	49.4	27.2	16.5	38.6	44.4	24.8	8.9	14.0	41.6	23.6	6.9	9.3	35.2	20.8	4.4	4.4
	12	55.3	30.6	18.4	46.4	49.4	27.9	9.9	16.7	46.1	26.4	7.7	11.0	38.9	23.3	4.9	5.2
80°F EDB 63.5°F EWB	02	7.7	6.1	2.6	2.9	6.2	5.5	1.2	.9	5.7	5.2	.9	.6	4.7	4.7	.6	.3
	03	11.0	8.5	3.7	6.5	9.2	7.7	1.8	2.1	8.5	7.4	1.4	1.3	7.1	6.8	.9	.6
	04	14.8	11.5	4.9	12.3	12.5	10.4	2.5	4.0	11.5	10.0	1.9	2.6	9.7	9.2	1.2	1.2
	06	20.6	16.2	6.9	6.2	17.0	14.6	3.4	1.9	15.5	13.9	2.6	1.2	13.0	12.8	1.6	.6
	08	27.6	21.4	9.2	12.2	23.2	19.4	4.6	4.0	21.4	18.5	3.6	2.6	18.1	17.1	2.3	1.2
	10	38.5	29.4	12.8	25.6	33.2	26.9	6.6	8.7	30.7	25.7	5.1	5.7	26.4	23.8	3.3	2.8
	12	42.9	33.0	14.3	30.6	36.7	30.1	7.3	10.2	33.9	28.8	5.6	6.6	29.0	26.6	3.6	3.2
80°F EDB 67°F EWB	02	9.6	6.1	3.2	4.2	8.0	5.3	1.6	1.3	7.0	5.0	1.2	.8	5.5	4.3	.7	.3
	03	13.5	8.4	4.5	9.1	11.7	7.6	2.3	3.1	10.7	7.2	1.8	2.0	8.6	6.3	1.1	.9
	04	18.2	11.3	6.1	17.3	15.9	10.3	3.2	6.0	14.7	9.7	2.4	3.9	11.9	8.6	1.5	1.7
	06	25.5	16.0	8.5	8.8	21.7	14.3	4.3	2.9	19.6	13.3	3.3	1.8	15.5	11.7	1.9	.8
	08	33.9	21.1	11.3	17.0	29.6	19.1	5.9	5.9	27.2	18.1	4.5	3.8	22.0	15.9	2.8	1.7
	10	46.9	28.9	15.6	35.4	41.8	26.6	8.4	12.7	39.0	25.3	6.5	8.4	32.6	22.5	4.1	3.9
	12	52.4	32.6	17.5	42.5	46.5	29.8	9.3	15.1	43.3	28.4	7.2	9.9	35.8	25.2	4.5	4.5

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

COIL NO. 1

CHILLED WATER COOLING CAPACITIES HIGH SPEED COIL NO. 1 40° F ENTERING WATER TEMPERATURE																	
Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
80°F EDB 70°F EWB	02	11.3	6.0	3.8	5.5	9.7	5.3	1.9	1.8	8.8	4.9	1.5	1.2	6.9	4.2	.9	.5
	03	15.8	8.3	5.3	11.9	14.0	7.5	2.8	4.2	13.1	7.1	2.2	2.7	10.9	6.2	1.4	1.3
	04	21.4	11.2	7.1	22.5	19.0	10.2	3.8	8.0	17.8	9.6	3.0	5.3	15.0	8.5	1.9	2.5
	06	30.0	15.8	10.0	11.5	26.2	14.1	5.2	4.0	24.2	13.2	4.0	2.6	19.7	11.4	2.5	1.1
	08	39.8	20.9	13.3	22.0	35.4	18.9	7.1	7.9	33.0	17.9	5.5	5.3	27.8	15.7	3.5	2.5
	10	54.7	28.7	18.2	45.6	49.7	26.3	9.9	16.8	46.9	25.1	7.8	11.3	40.7	22.4	5.1	5.6
	12	61.3	32.3	20.4	54.9	55.4	29.6	11.1	20.1	52.1	28.1	8.7	13.5	45.0	25.1	5.6	6.6
82°F EDB 66.5°F EWB	02	9.3	6.5	3.1	4.0	7.6	5.7	1.5	1.2	6.8	5.4	1.1	.8	5.5	4.8	.7	.3
	03	13.1	8.9	4.4	8.7	11.3	8.1	2.3	2.9	10.3	7.7	1.7	1.9	8.5	6.9	1.1	.8
	04	17.7	12.0	5.9	16.6	15.4	11.0	3.1	5.7	14.1	10.4	2.3	3.6	11.7	9.4	1.5	1.7
	06	24.8	17.0	8.3	8.4	20.9	15.2	4.2	2.7	18.9	14.4	3.1	1.7	15.4	12.9	1.9	.8
	08	33.0	22.4	11.0	16.3	28.6	20.4	5.7	5.6	26.1	19.3	4.4	3.6	21.6	17.4	2.7	1.7
	10	45.6	30.7	15.2	33.8	40.6	28.3	8.1	12.1	37.6	27.0	6.3	7.9	31.8	24.5	4.0	3.7
	12	51.0	34.5	17.0	40.6	45.1	31.8	9.0	14.4	41.6	30.2	6.9	9.3	35.0	27.3	4.4	4.4
82°F EDB 69°F EWB	02	10.7	6.4	3.6	5.1	9.1	5.7	1.8	1.6	8.2	5.3	1.4	1.0	6.4	4.6	.8	.4
	03	15.0	8.9	5.0	10.9	13.2	8.0	2.6	3.8	12.3	7.6	2.0	2.5	10.1	6.7	1.3	1.1
	04	20.3	11.9	6.8	20.7	18.0	10.9	3.6	7.3	16.7	10.3	2.8	4.8	13.8	9.1	1.7	2.2
	06	28.5	16.8	9.5	10.5	24.7	15.1	4.9	3.6	22.6	14.3	3.8	2.3	18.1	12.4	2.3	1.0
	08	37.7	22.2	12.6	20.3	33.4	20.2	6.7	7.2	31.0	19.2	5.2	4.8	25.6	16.9	3.2	2.2
	10	52.0	30.4	17.3	42.0	47.0	28.0	9.4	15.3	44.2	26.8	7.4	10.3	37.8	24.1	4.7	5.0
	12	58.2	34.2	19.4	50.5	52.3	31.5	10.5	18.3	49.0	30.1	8.2	12.2	41.6	26.9	5.2	5.8
82°F EDB 71.5°F EWB	02	12.2	6.3	4.1	6.3	10.6	5.6	2.1	2.1	9.7	5.3	1.6	1.4	7.8	4.5	1.0	.6
	03	17.1	8.8	5.7	13.5	15.3	8.0	3.1	4.8	14.3	7.6	2.4	3.2	12.1	6.7	1.5	1.5
	04	23.0	11.8	7.7	25.4	20.7	10.8	4.4	9.2	19.4	10.2	3.2	6.1	16.6	9.1	2.1	3.0
	06	32.4	16.7	10.8	13.0	28.6	15.0	5.7	4.5	26.5	14.1	4.4	3.0	22.0	12.3	2.7	1.4
	08	42.8	22.0	14.3	24.9	38.4	20.1	7.7	9.1	36.1	19.0	6.0	6.1	30.8	16.9	3.9	2.9
	10	58.9	30.2	19.6	51.4	53.8	27.9	10.8	19.2	51.0	26.6	8.5	13.0	44.9	24.0	5.6	6.6
	12	65.9	34.0	22.0	61.9	60.0	31.3	12.0	22.9	56.7	29.9	9.5	15.5	49.7	26.9	6.2	7.8
85°F EDB 67°F EWB	02	9.6	7.0	3.2	4.2	7.9	6.3	1.6	1.3	7.2	6.0	1.2	.8	5.9	5.4	.7	.4
	03	13.5	9.7	4.5	9.1	11.7	8.8	2.3	3.1	10.7	8.4	1.8	2.0	9.1	7.7	1.1	.9
	04	18.2	13.0	6.1	17.4	15.8	11.9	3.2	5.9	14.6	11.4	2.4	3.8	12.4	10.4	1.5	1.8
	06	25.5	18.4	8.5	8.8	21.6	16.6	4.3	2.9	19.7	15.9	3.3	1.8	16.5	14.5	2.1	.8
	08	34.0	24.3	11.3	17.1	29.4	22.2	5.9	5.9	27.1	21.2	4.5	3.8	23.0	19.4	2.9	1.8
	10	46.9	33.2	15.6	35.4	41.7	30.7	8.3	12.6	38.8	29.4	6.5	8.3	33.5	27.1	4.2	4.1
	12	52.5	37.3	17.5	42.5	46.3	34.5	9.3	15.0	42.9	32.9	7.2	9.8	36.9	30.3	4.1	4.8
85°F EDB 71°F EWB	02	11.9	6.9	4.0	6.0	10.3	6.2	2.1	2.0	9.4	5.8	1.6	1.3	7.5	5.1	.9	.5
	03	16.6	9.5	5.5	12.9	14.8	8.7	3.0	4.6	13.8	8.3	2.3	3.	11.6	7.4	1.5	1.4
	04	22.4	2.8	7.5	24.4	20.1	11.8	4.0	8.8	18.8	11.2	3.1	5.8	16.0	10.1	2.0	2.8
	06	31.6	18.2	10.5	12.5	27.7	16.4	5.5	4.3	25.7	15.6	4.3	2.8	21.1	13.7	2.6	1.3
	08	41.7	23.9	13.9	23.9	37.4	21.9	7.5	8.7	35.0	20.9	5.8	5.8	29.7	18.7	3.7	2.8
	10	57.4	32.7	19.1	49.3	52.3	30.4	10.5	18.3	49.5	29.1	8.3	12.4	43.4	26.5	5.4	6.2
	12	64.3	36.9	21.4	59.4	58.3	34.1	11.7	21.9	55.1	32.7	9.2	14.8	48.0	29.7	6.0	7.3
85°F EDB 74°F EWB	02	13.8	6.9	4.6	7.7	12.2	6.1	2.4	2.7	11.3	5.8	1.9	1.7	9.3	5.0	1.2	.8
	03	19.2	9.5	6.4	16.4	17.4	8.7	3.5	6.0	16.4	8.2	2.7	4.0	14.3	7.4	1.8	2.0
	04	25.9	12.7	8.6	30.9	23.5	11.7	4.7	11.4	22.2	11.1	3.7	7.7	19.5	10.0	2.4	3.9
	06	36.5	18.0	12.2	15.9	32.6	16.3	6.5	5.7	30.5	15.4	5.1	3.8	26.0	13.6	3.3	1.8
	08	48.2	23.7	16.1	30.2	43.8	21.7	8.8	11.2	41.3	20.7	6.9	7.6	36.2	18.6	4.5	3.8
	10	66.1	32.5	22.0	62.2	61.0	30.1	12.2	23.5	58.3	28.9	9.7	16.2	52.2	26.4	6.5	8.4
	12	74.1	36.6	24.7	75.0	68.1	33.9	13.6	28.2	64.9	32.5	10.8	19.3	57.9	29.5	7.2	10.0

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

CHILLED WATER COOLING CAPACITIES HIGH SPEED
COIL NO. 1
45° F ENTERING WATER TEMPERATURE

Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
75°F EDB 61°F EWB	02	4.7	4.5	1.6	1.3	3.8	3.8	.8	.4	3.5	3.5	.6	.2	2.8	2.8	.3	.1
	03	6.8	6.3	2.3	2.9	5.6	5.6	1.1	.9	5.2	5.2	.9	.6	4.3	4.3	.5	.3
	04	9.2	8.4	3.1	5.6	7.6	7.6	1.5	1.8	7.0	7.0	1.2	1.2	5.9	5.9	.7	.5
	06	12.7	11.9	4.2	2.8	10.4	10.4	2.1	.9	9.5	9.5	1.6	.5	7.8	7.8	1.0	.2
	08	17.1	15.7	5.7	5.6	14.2	14.2	2.8	1.8	13.0	13.0	2.2	1.2	10.9	10.9	1.4	.5
	10	24.1	21.5	8.2	11.8	20.4	19.9	4.1	3.9	18.8	18.8	3.1	2.5	15.9	15.9	2.0	1.2
	12	26.5	24.0	8.8	13.9	22.4	22.2	4.5	4.5	20.6	20.6	3.4	2.9	17.4	17.4	2.2	1.4
75°F EDB 63°F EWB	02	5.5	4.4	1.8	1.7	4.1	3.8	.8	.4	3.6	3.6	.6	.3	2.8	2.8	.3	.1
	03	8.0	6.1	2.7	3.8	6.3	5.4	1.3	1.1	5.6	5.1	.9	.7	4.4	4.4	.6	.3
	04	10.8	8.2	3.6	7.3	8.6	7.3	1.7	2.2	7.6	6.9	1.3	1.3	6.1	6.1	.8	.6
	06	14.8	11.6	4.9	3.6	11.5	10.1	2.3	1.0	10.1	9.6	1.7	.6	7.9	7.9	1.0	.3
	08	20.1	15.3	6.7	7.3	15.9	13.5	3.2	2.2	14.1	12.8	2.4	1.3	11.2	11.2	1.4	.6
	10	28.5	21.2	9.5	15.6	23.1	18.8	4.6	4.8	20.7	17.8	3.4	3.0	16.7	16.2	2.1	1.3
	12	31.5	23.7	10.5	18.4	25.3	21.0	5.1	5.6	22.7	19.9	3.8	3.4	18.2	18.0	2.3	1.5
75°F EDB 64°F EWB	02	6.0	4.3	2.0	1.9	4.4	3.7	.9	.5	3.8	3.4	.6	.3	2.9	2.9	.4	.1
	03	8.7	6.1	2.9	4.5	6.8	5.3	1.4	1.3	5.9	4.9	1.0	.7	4.6	4.4	.6	.3
	04	11.9	8.2	4.0	8.5	9.3	7.1	1.9	2.5	8.1	6.7	1.4	1.5	6.3	6.0	.8	.6
	06	16.3	11.5	5.4	4.2	12.3	9.9	2.5	1.1	10.7	9.2	1.8	.7	8.2	8.2	1.0	.3
	08	22.0	15.3	7.3	8.4	17.2	13.3	3.4	2.5	15.1	12.4	2.5	1.5	11.7	11.0	1.5	.6
	10	30.9	21.1	10.3	17.8	25.1	18.6	5.0	5.5	22.3	17.4	3.7	3.3	17.6	15.6	2.2	1.3
	12	34.3	23.7	11.4	21.2	27.6	20.8	5.5	6.4	24.4	19.5	4.1	3.9	19.2	17.3	2.4	1.5
78°F EDB 64°F EWB	02	6.0	4.3	2.0	1.9	4.4	3.7	.9	.5	3.8	3.4	.6	.3	2.9	2.9	.4	.1
	03	8.0	6.1	2.9	4.5	6.8	5.3	1.4	1.3	5.9	4.9	1.0	.7	4.6	4.4	.6	.3
	04	11.9	8.2	4.0	8.5	9.3	7.1	1.9	2.5	8.1	6.7	1.4	1.5	6.3	6.0	.8	.6
	06	16.3	11.5	5.4	4.2	12.3	9.9	2.5	1.1	10.7	9.2	1.8	.7	8.2	8.2	1.0	.3
	08	22.0	15.3	7.3	8.4	17.2	13.3	3.4	2.5	15.1	12.4	2.5	1.5	11.7	11.0	1.5	.6
	10	30.9	21.1	10.3	17.8	25.1	18.6	5.0	5.5	22.3	17.4	3.7	3.3	17.6	15.6	2.2	1.4
	12	34.3	23.7	11.4	21.2	27.6	20.8	5.5	6.4	24.4	19.5	4.1	3.9	19.2	17.3	2.4	1.6
78°F EDB 65°F EWB	02	6.5	4.9	2.0	2.2	5.0	4.2	1.0	.6	4.4	4.0	.7	.4	3.4	3.4	.4	.1
	03	9.4	6.8	3.1	5.1	7.5	6.0	1.5	1.5	6.7	5.7	1.1	.9	5.4	5.1	.7	.4
	04	12.8	9.2	4.3	9.7	10.3	8.1	2.1	2.9	9.2	7.7	1.5	1.8	7.3	7.0	.9	.8
	06	17.6	12.9	5.9	4.8	13.8	11.3	2.8	1.4	12.2	10.7	2.0	.8	9.7	9.7	1.2	.3
	08	23.8	17.1	7.9	9.6	19.1	15.1	3.8	2.9	17.0	14.3	2.8	1.8	13.6	12.9	1.7	.8
	10	33.3	23.6	11.1	20.2	27.5	21.1	5.5	6.4	24.8	20.0	4.1	4.0	20.3	18.1	2.5	1.8
	12	37.1	26.5	12.4	24.1	30.3	23.6	6.1	7.5	27.3	22.3	4.5	4.7	22.2	20.2	2.8	2.1
78°F EDB 68°F EWB	02	8.2	4.8	2.7	3.2	6.5	4.1	1.3	.9	5.5	3.8	.9	.5	3.9	3.2	.5	.2
	03	11.7	6.7	3.9	7.2	9.7	5.9	1.9	2.3	8.6	5.5	1.4	1.4	6.5	4.7	.8	.5
	04	15.8	9.1	5.3	13.6	13.2	8.0	2.6	4.4	11.8	7.4	2.0	2.7	9.0	6.4	1.1	1.1
	06	21.9	12.7	7.3	6.8	17.9	11.1	3.6	2.1	15.5	10.2	2.6	1.2	11.4	8.6	1.4	.5
	08	29.3	16.9	9.8	13.4	24.6	14.9	4.9	4.4	21.9	13.8	3.6	2.7	16.6	11.8	2.1	1.1
	10	40.8	23.2	13.6	28.1	35.3	20.9	7.1	9.6	32.1	19.6	5.4	6.1	25.0	16.9	3.1	2.5
	12	45.5	26.2	15.2	33.6	39.1	23.5	7.8	11.3	35.3	21.9	5.9	7.1	27.4	18.8	3.4	2.9
80°F EDB 63.5°F EWB	02	5.8	5.4	1.9	1.9	4.8	4.8	1.0	.6	4.4	4.4	.7	.4	3.7	3.7	.5	.2
	03	8.4	7.4	2.8	4.2	7.1	6.8	1.4	1.4	6.5	6.5	1.1	.9	5.6	5.6	.7	.4
	04	11.3	10.0	3.8	7.9	9.6	9.2	1.9	2.6	8.9	8.9	1.5	1.7	7.6	7.6	.9	.8
	06	15.7	14.1	5.2	3.9	13.1	13.0	2.6	1.2	12.0	12.0	2.0	.8	10.2	10.2	1.3	.4
	08	21.1	18.6	7.0	7.8	17.8	17.2	3.6	2.6	16.5	16.5	2.7	1.7	14.1	14.1	1.8	.8
	10	29.6	25.4	9.9	16.6	25.4	23.6	5.1	5.6	23.6	22.8	3.9	3.7	20.5	20.5	2.6	1.8
	12	32.7	28.5	10.9	19.6	28.0	26.4	5.6	6.5	25.9	25.5	4.3	4.3	22.4	22.4	2.8	2.1
80°F EDB 67°F EWB	02	7.6	5.2	2.5	2.9	6.0	4.8	1.2	1.0	5.1	4.2	.9	.5	4.0	3.8	.5	.2
	03	10.9	7.3	3.6	6.4	9.0	6.6	1.8	2.5	7.9	6.0	1.3	1.2	6.3	5.4	.8	.5
	04	14.8	9.8	4.9	12.2	12.0	8.8	2.4	4.2	10.8	8.2	1.8	2.3	8.6	7.3	1.1	1.0
	06	20.5	13.8	6.8	6.1	16.5	12.2	3.4	2.2	14.4	11.3	2.4	1.1	11.2	10.1	1.4	.4
	08	27.5	18.2	9.2	12.1	23.0	16.5	4.7	4.5	20.1	15.2	3.3	2.3	16.0	13.6	2.0	1.0
	10	38.3	25.0	12.8	25.3	33.2	22.7	6.8	8.9	29.3	21.3	4.9	5.2	23.8	19.1	3.0	2.3
	12	42.6	28.2	14.2	30.3	36.0	26.5	7.4	10.8	32.2	23.8	5.4	6.1	26.0	21.3	3.3	2.7

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

COIL NO. 1

CHILLED WATER COOLING CAPACITIES HIGH SPEED
COIL NO. 1
45° F ENTERING WATER TEMPERATURE

Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
80°F EDB 70°F EWB	02	9.4	5.2	3.1	4.0	7.6	4.5	1.5	1.2	6.6	4.1	1.1	.7	4.8	3.4	.6	.3
	03	13.2	7.2	4.4	8.8	11.3	6.4	2.3	2.9	10.2	5.9	1.7	1.8	7.9	5.1	1.0	.7
	04	17.8	9.6	5.9	16.7	15.4	8.6	3.1	5.6	13.9	8.0	2.3	3.6	10.9	6.9	1.4	1.5
	06	24.9	13.6	8.3	8.5	20.8	11.9	4.2	2.7	18.6	11.0	3.1	1.7	13.9	9.3	1.7	.6
	08	33.2	18.0	11.1	16.4	28.6	16.1	5.7	5.6	25.9	15.0	4.3	3.5	20.1	12.8	2.5	1.5
	10	46.0	24.7	15.3	34.3	40.5	22.4	8.1	12.0	37.4	21.1	6.2	7.8	30.0	18.3	3.8	3.4
	12	51.3	27.8	17.1	41.1	45.0	25.1	9.0	14.3	41.4	23.7	6.9	9.2	33.0	20.5	4.1	4.0
82°F EDB 66.5°F EWB	02	7.3	5.6	2.4	2.7	5.8	5.0	1.2	.8	5.2	4.7	.9	.5	4.2	4.1	.5	.2
	03	10.5	7.8	3.5	6.1	8.6	7.0	1.7	1.9	7.8	6.7	1.3	1.2	6.4	6.1	.8	.5
	04	14.3	10.5	4.8	11.6	11.7	9.4	2.3	3.6	10.7	9.0	1.8	2.3	8.8	8.3	1.1	1.0
	06	19.7	14.8	6.6	5.7	15.9	13.2	3.2	1.7	14.2	12.5	2.4	1.1	11.7	11.5	1.5	.5
	08	26.5	19.5	8.8	11.4	21.8	17.5	4.4	3.6	19.8	16.7	3.3	2.0	16.4	15.4	2.0	1.0
	10	37.1	26.8	12.4	24.1	31.3	24.3	6.3	7.9	28.7	23.3	4.8	5.0	24.0	21.4	3.0	2.4
	12	41.3	30.2	13.8	28.7	34.5	27.2	6.9	9.2	31.5	26.0	5.3	5.9	26.3	23.9	3.3	2.7
82°F EDB 69°F EWB	02	8.8	5.6	2.9	3.6	7.0	4.8	1.4	1.1	6.1	4.5	1.0	.6	4.6	3.9	.6	.2
	03	12.4	7.7	4.1	8.0	10.5	6.9	2.1	2.6	9.4	6.4	1.6	1.6	7.4	5.7	.9	.7
	04	16.8	10.4	5.6	15.1	14.3	9.3	2.9	5.0	12.8	8.7	2.1	3.1	10.2	7.7	1.3	1.3
	06	23.4	14.6	7.8	7.6	19.3	12.9	3.9	2.4	17.0	12.0	2.8	1.4	13.2	10.6	1.7	.6
	08	31.3	19.3	10.4	14.9	26.5	17.3	5.3	5.0	23.7	16.2	4.0	3.1	18.9	14.4	2.4	1.3
	10	43.4	26.5	14.5	31.1	37.9	24.2	7.6	10.8	34.6	22.8	5.8	6.9	28.0	20.3	3.5	3.0
	12	48.4	29.8	16.1	37.2	42.0	27.1	8.4	12.8	38.2	25.6	6.4	8.1	30.7	22.6	3.8	3.5
82°F EDB 71.5°F EWB	02	10.3	5.5	3.4	4.7	8.5	4.8	1.7	1.5	7.5	4.4	1.3	.9	5.6	3.7	.7	.3
	03	14.4	7.6	4.8	10.2	12.5	6.8	2.5	3.5	11.4	6.4	1.9	2.2	9.1	5.5	1.1	.9
	04	19.5	10.2	6.5	19.3	17.0	9.2	3.4	6.7	15.6	8.7	2.6	4.3	12.4	7.5	1.6	1.8
	06	27.3	14.4	9.1	9.8	23.2	12.8	4.6	3.2	20.9	11.9	3.5	2.0	16.1	10.1	2.0	.8
	08	36.2	19.1	12.1	19.0	31.6	17.2	6.3	6.6	29.0	16.1	4.8	4.3	23.0	13.9	2.9	1.8
	10	50.1	26.2	16.7	39.5	44.6	23.9	8.9	14.1	41.5	22.7	6.9	9.3	34.4	19.9	4.3	4.2
	12	55.9	29.5	18.6	47.3	49.5	26.9	9.9	16.7	46.0	25.4	7.7	11.0	37.8	22.3	4.7	5.0
85°F EDB 67°F EWB	02	7.6	6.1	2.5	2.8	6.2	5.6	1.2	.9	5.6	5.3	.9	.5	4.7	4.7	.6	.3
	03	10.9	8.5	3.6	6.4	9.1	7.8	1.8	2.0	8.4	7.5	1.4	1.3	7.1	7.0	.9	.6
	04	14.7	11.5	4.9	12.1	12.3	10.5	2.5	3.9	11.3	10.1	1.9	2.5	9.7	9.4	1.2	1.2
	06	20.3	16.2	6.8	6.0	16.8	14.7	3.4	1.9	15.4	14.2	2.6	1.2	12.9	12.9	1.6	.6
	08	27.3	21.3	9.1	11.9	22.9	19.5	4.6	3.9	21.1	18.8	3.5	2.5	18.0	17.5	2.2	1.2
	10	38.2	29.3	12.7	25.3	32.8	27.0	6.6	8.5	30.3	25.9	5.1	5.5	26.1	24.3	3.3	2.7
	12	42.4	32.9	14.1	30.0	36.1	30.2	7.2	10.0	33.4	29.0	5.6	6.5	28.7	27.1	3.6	3.2
85°F EDB 71°F EWB	02	10.0	6.1	3.3	4.5	8.2	5.3	1.6	1.4	7.2	5.0	1.2	.8	5.6	4.4	.7	.3
	03	14.0	8.4	4.7	9.7	12.1	7.6	2.4	3.3	10.9	7.1	1.8	2.1	8.8	6.3	1.1	.9
	04	18.9	11.3	6.3	18.4	16.4	10.2	3.3	6.3	15.0	9.7	2.5	4.0	12.0	8.5	1.5	1.7
	06	26.5	15.9	8.8	9.3	22.4	14.3	4.5	3.0	20.0	13.3	3.3	1.9	15.7	11.8	2.0	.8
	08	35.2	21.0	11.7	18.1	30.5	19.1	6.1	6.2	27.9	18.0	4.6	4.0	22.2	15.9	2.8	1.7
	10	48.7	28.8	16.2	37.7	43.2	26.5	8.6	13.4	40.1	25.2	6.7	8.8	33.1	22.5	4.1	4.0
	12	54.4	32.4	18.1	45.1	48.0	29.7	9.6	15.9	44.4	28.3	7.4	10.4	36.3	25.1	4.5	4.6
85°F EDB 74°F EWB	02	11.8	6.0	3.9	6.0	10.0	5.3	2.0	1.9	9.1	4.9	1.5	1.2	7.0	4.2	.9	.5
	03	16.6	8.3	5.5	12.8	14.6	7.5	2.9	4.5	13.5	7.1	2.3	2.9	11.2	6.2	1.4	1.3
	04	22.3	11.1	7.4	24.2	19.8	10.1	4.0	8.6	18.4	9.6	3.1	5.6	15.3	8.4	1.9	2.6
	06	31.4	15.7	10.5	12.4	27.2	14.1	5.4	4.2	25.0	13.2	4.2	2.7	20.0	11.4	2.5	1.2
	08	41.5	20.8	13.8	23.7	36.8	18.8	7.4	8.5	34.2	17.8	5.7	5.6	28.4	15.7	3.6	2.6
	10	57.2	28.5	19.1	49.1	51.7	26.2	10.3	18.0	48.7	24.9	8.1	12.0	41.8	22.3	5.2	5.9
	12	64.0	32.1	21.3	58.9	57.5	29.4	11.5	21.4	54.0	28.0	9.0	14.3	46.1	25.0	5.8	6.9

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

CHILLED WATER COOLING CAPACITIES HIGH SPEED
COIL NO. 1
50° F ENTERING WATER TEMPERATURE

Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
75°F EDB 61°F EWB	02	3.6	3.6	1.2	.8	3.0	3.0	.6	.3	2.7	2.7	.4	.2	2.0	2.0	.2	.1
	03	5.2	5.2	1.7	1.9	4.4	4.4	.9	.6	4.0	4.0	.7	.4	3.2	3.2	.4	.2
	04	6.9	6.9	2.3	3.5	6.0	6.0	1.2	1.2	5.5	5.5	.9	.8	4.3	4.3	.5	.3
	06	9.7	9.7	3.2	1.8	8.2	8.2	1.6	.6	7.4	7.4	1.2	.4	5.7	5.7	.7	.1
	08	12.9	12.9	4.3	3.5	11.1	11.1	2.2	1.2	10.1	10.1	1.7	.8	8.1	8.1	1.0	.3
	10	17.9	17.9	6.0	7.3	15.7	15.7	3.1	2.5	14.5	14.5	2.4	1.7	11.9	11.9	1.5	.7
	12	19.8	19.8	6.6	8.6	17.3	17.3	3.5	3.0	15.9	15.9	2.7	1.9	13.0	13.0	1.6	.9
75°F EDB 63°F EWB	02	3.7	3.7	1.2	.9	2.9	2.9	.6	.3	2.6	2.6	.4	.2	1.9	1.9	.2	.1
	03	5.4	5.1	1.8	2.0	4.4	4.4	.9	.6	3.9	3.9	.7	.4	3.1	3.1	.4	.2
	04	7.4	6.9	2.5	3.9	5.9	5.9	1.2	1.2	5.3	5.3	.9	.7	4.2	4.2	.5	.3
	06	10.1	9.7	3.4	1.9	8.0	8.0	1.6	.6	7.2	7.2	1.2	.3	5.5	5.5	.7	.1
	08	13.7	12.8	4.6	3.9	11.0	11.0	2.2	1.2	9.9	9.9	1.6	.7	7.9	7.9	1.0	.3
	10	19.5	17.6	6.5	8.4	15.9	15.9	3.2	2.6	14.4	14.4	2.4	1.6	11.5	11.5	1.4	.7
	12	21.3	19.5	7.1	9.7	17.4	17.4	3.5	3.0	15.8	15.8	2.6	1.9	12.6	12.6	1.6	.8
75°F EDB 64°F EWB	02	4.0	33.5	1.3	1.0	3.0	3.0	.6	.3	2.6	2.6	.4	.2	1.9	1.9	.2	.1
	03	5.9	5.0	2.0	2.3	4.5	4.4	.9	.6	4.0	4.0	.7	.4	3.1	3.1	.4	.2
	04	8.0	6.7	2.7	4.5	6.2	6.0	1.2	1.3	5.5	5.5	.9	.8	4.2	4.2	.5	.3
	06	10.9	9.4	3.6	2.2	8.3	8.3	1.7	.6	7.2	7.2	1.2	.3	5.5	5.5	.7	.1
	08	14.9	12.4	5.0	4.4	11.5	11.1	2.3	1.3	10.1	10.1	1.7	.8	7.8	7.8	1.0	.3
	10	21.3	17.2	7.1	9.6	16.7	15.4	3.3	2.8	14.9	14.9	2.5	1.7	11.7	11.7	1.5	.7
	12	23.4	19.2	7.8	11.3	18.3	17.1	3.7	3.3	16.3	16.3	2.7	2.0	12.7	12.7	1.6	.8
78°F EDB 64°F EWB	02	4.3	4.2	1.4	1.1	3.5	3.5	.7	.3	3.2	3.2	.5	.2	2.5	2.5	.3	.1
	03	6.2	5.8	2.1	2.5	5.1	5.1	1.0	.8	4.7	4.7	.8	.5	3.9	3.9	.5	.2
	04	8.3	7.9	2.8	4.8	6.9	6.9	1.4	1.5	6.4	6.4	1.1	1.0	5.3	5.3	.7	.4
	06	11.5	11.2	3.8	2.3	9.5	9.5	1.9	.7	8.7	8.7	1.4	.5	7.0	7.0	.9	.2
	08	15.5	14.6	5.2	4.7	12.9	12.9	2.6	1.5	11.8	11.8	2.0	1.0	9.8	9.8	1.2	.5
	10	21.9	20.1	7.3	10.1	18.5	18.5	3.7	3.3	17.0	17.0	2.8	2.1	14.3	14.3	1.8	1.0
	12	24.1	22.4	8.0	11.8	20.3	20.3	4.1	3.9	18.6	18.6	3.1	2.5	15.6	15.6	2.0	1.2
78°F EDB 65°F EWB	02	4.5	4.1	1.5	1.2	3.5	3.5	.7	.3	3.1	3.1	.5	.2	2.5	2.5	.3	.1
	03	6.7	5.7	2.2	2.8	5.3	5.2	1.1	.8	4.8	4.8	.8	.5	3.8	3.8	.5	.2
	04	9.0	7.7	3.0	5.4	7.2	7.0	1.4	1.6	6.5	6.5	1.1	1.0	5.3	5.3	.7	.4
	06	12.3	10.8	4.1	2.6	9.7	9.7	1.9	.8	8.7	8.7	1.4	.5	7.0	7.0	.9	.2
	08	16.7	14.3	5.6	5.4	13.4	13.0	2.7	1.6	12.0	12.0	2.0	1.0	9.7	9.7	1.2	.5
	10	23.7	19.7	7.9	11.5	19.3	17.9	3.9	3.6	17.6	17.2	2.9	2.3	14.4	14.4	1.8	1.0
	12	26.1	22.0	8.7	13.5	21.2	20.0	4.2	4.1	19.2	19.2	3.2	2.6	15.7	15.7	2.0	1.2
78°F EDB 68°F EWB	02	6.1	4.0	2.0	2.0	4.3	3.3	.9	.5	3.6	3.1	.6	.3	2.5	2.5	.3	.1
	03	8.8	5.6	2.9	4.5	6.7	4.8	1.3	1.2	5.7	4.4	1.0	.7	4.2	3.8	.5	.3
	04	12.0	7.5	4.0	8.7	9.1	6.4	1.8	2.4	7.8	6.0	1.3	1.4	5.8	5.2	.7	.5
	06	16.4	10.5	5.5	4.2	12.0	8.9	2.4	1.1	10.2	8.2	1.7	.6	7.4	7.2	.9	.2
	08	22.3	14.0	7.4	8.6	16.9	12.0	3.4	2.4	14.5	11.1	2.4	1.4	10.7	9.7	1.3	.5
	10	31.3	19.3	10.4	18.2	24.9	16.9	5.0	5.4	21.6	15.6	3.6	3.2	16.3	13.7	2.0	1.2
	12	34.8	21.8	11.6	21.6	27.3	18.9	5.5	6.3	23.6	17.5	3.9	3.7	17.8	15.3	2.2	1.4
80°F EDB 63.5°F EWB	02	4.5	4.5	1.5	1.2	3.9	3.9	.8	.4	3.6	3.6	.6	.3	2.9	2.9	.4	.1
	03	6.4	6.4	2.1	2.6	5.6	5.6	1.1	.9	5.2	5.2	.9	.6	4.4	4.4	.6	.3
	04	8.5	8.5	2.8	5.0	7.6	7.6	1.5	1.8	7.1	7.1	1.2	1.2	6.0	6.0	.8	.6
	06	12.0	12.0	4.0	2.5	10.5	10.5	2.1	.9	9.7	9.7	1.6	.6	8.1	8.1	1.0	.3
	08	15.9	15.9	5.3	4.9	14.1	14.1	2.8	1.8	13.2	13.2	2.2	1.2	11.2	11.2	1.4	.6
	10	22.1	22.1	7.4	10.3	19.7	19.7	3.9	3.7	18.6	18.6	3.1	2.5	16.2	16.2	2.0	1.2
	12	24.4	24.4	8.1	12.1	21.8	21.8	4.4	4.3	20.5	20.5	3.4	2.9	17.8	17.8	2.2	1.4
80°F EDB 67°F EWB	02	5.5	4.4	1.8	1.7	4.1	3.9	.8	.4	3.6	3.6	.6	.3	2.8	2.8	.4	.1
	03	8.0	6.1	2.7	3.9	6.3	5.4	1.3	1.1	5.6	5.2	.9	.7	4.4	4.4	.6	.3
	04	10.8	8.2	3.6	7.4	8.5	7.3	1.7	2.1	7.6	7.0	1.3	1.3	6.1	6.1	.8	.6
	06	14.9	11.6	5.0	3.6	11.5	10.3	2.3	1.0	10.1	9.8	1.7	.6	8.0	8.0	1.0	.3
	08	20.1	15.3	6.7	7.3	15.9	13.6	3.2	2.1	14.1	13.0	2.4	1.3	11.3	11.3	1.4	.6
	10	28.6	21.1	9.5	15.7	23.0	18.9	4.6	4.7	20.6	18.0	3.0	2.9	16.7	16.6	2.1	1.3
	12	31.5	23.6	10.5	18.4	25.2	21.1	5.0	5.5	22.6	20.1	3.8	3.4	18.3	18.3	2.3	1.5

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

CHILLED WATER COOLING CAPACITIES HIGH SPEED
COIL NO. 1
50° F ENTERING WATER TEMPERATURE

Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
80°F EDB 70°F EWB	02	7.2	4.3	2.4	2.6	5.3	3.6	1.1	.7	4.4	3.3	.7	.4	3.1	2.8	.4	.1
	03	10.4	6.0	3.5	5.9	8.2	5.2	1.6	1.7	7.0	4.8	1.2	1.0	5.1	4.1	.6	.4
	04	14.0	8.1	4.7	11.3	11.3	7.1	2.3	3.4	9.7	6.5	1.6	2.0	7.1	5.6	.9	.7
	06	19.4	11.4	6.5	5.6	14.9	9.7	3.0	1.5	12.6	8.9	2.1	.9	9.0	7.6	1.1	.3
	08	26.1	15.1	8.7	11.1	20.9	13.1	4.2	3.4	17.9	12.1	3.0	1.9	13.1	10.4	1.6	.7
	10	36.6	20.8	12.2	23.5	30.4	18.4	6.1	7.5	26.6	17.1	4.4	4.5	20.0	14.7	2.5	1.7
	12	40.6	23.4	13.5	28.0	33.5	20.7	6.7	8.8	29.2	19.1	4.9	5.2	21.9	16.5	2.7	2.0
82°F EDB 66.5°F EWB	02	5.3	4.8	1.8	1.6	4.3	4.3	.9	.5	3.9	3.9	.6	.3	3.2	3.2	.4	.1
	03	7.7	6.7	2.6	3.6	6.4	6.1	1.3	1.1	5.8	5.8	1.0	.7	4.9	4.9	.6	.3
	04	10.4	9.0	3.5	6.9	8.6	8.3	1.7	2.2	7.9	7.9	1.3	1.4	6.6	6.6	.8	.7
	06	14.4	12.7	4.8	3.4	11.7	11.7	2.3	1.0	10.7	10.7	1.8	.7	8.9	8.9	1.1	.3
	08	19.4	16.7	6.5	6.9	16.0	15.4	3.2	2.2	14.7	14.7	2.4	1.4	12.3	12.3	1.5	.7
	10	27.4	22.9	9.1	14.6	22.9	21.2	4.6	4.7	21.1	20.5	3.5	3.1	18.0	18.0	2.2	1.5
	12	30.2	25.7	10.1	17.2	25.3	23.7	5.1	5.5	23.2	22.9	3.9	3.6	19.7	19.7	2.5	1.7
82°F EDB 69°F EWB	02	6.6	4.7	2.2	2.3	4.9	4.1	1.0	.6	4.3	3.8	.7	.4	3.3	3.3	.4	.1
	03	9.6	6.6	3.2	5.2	7.5	5.8	1.5	1.5	6.6	5.4	1.1	.9	5.2	4.9	.7	.4
	04	13.0	8.8	4.3	9.9	10.2	7.8	2.0	2.9	9.0	7.3	1.5	1.7	7.2	6.7	.9	.7
	06	17.8	12.4	5.9	4.9	13.7	10.9	2.7	1.3	12.0	10.2	2.0	.8	9.3	9.3	1.2	.3
	08	24.2	16.5	8.1	9.8	19.0	14.5	3.8	2.9	16.8	13.7	2.8	1.7	13.3	12.4	1.7	.7
	10	34.0	22.7	11.3	20.8	27.6	20.2	5.5	6.4	24.6	19.1	4.1	3.9	19.7	17.3	2.5	1.7
	12	37.7	25.5	12.6	24.7	30.3	22.6	6.1	7.5	26.9	21.3	4.5	4.6	21.5	19.3	2.7	2.0
82°F EDB 71.5°F EWB	02	8.1	4.7	2.7	3.2	6.2	3.9	1.2	.9	5.2	3.6	.9	.5	3.7	3.1	.5	.2
	03	11.6	6.5	3.9	7.1	9.5	5.7	1.9	2.2	8.2	5.2	1.4	1.3	6.1	4.5	.8	.5
	04	15.7	8.7	5.2	13.5	12.9	7.7	2.6	4.2	11.3	7.1	1.9	2.5	8.4	6.1	1.0	1.0
	06	21.7	12.3	7.2	6.7	17.3	10.6	3.5	2.0	14.8	9.7	2.5	1.1	10.7	8.3	1.3	.4
	08	29.1	16.3	9.7	13.3	24.0	14.3	4.8	4.2	20.9	13.2	3.5	2.5	15.5	11.3	1.9	1.0
	10	40.6	22.4	13.5	28.0	34.5	20.0	6.9	9.2	30.8	18.7	5.1	5.7	23.6	16.1	3.0	2.3
	12	45.2	25.2	15.1	33.3	38.1	22.4	7.6	10.9	33.9	20.9	5.6	6.6	25.8	18.0	3.2	2.6
85°F EDB 67°F EWB	02	5.7	5.4	1.9	1.8	4.8	4.8	1.0	.6	4.4	4.4	.7	.4	3.8	3.8	.5	.2
	03	8.2	7.5	2.7	4.0	7.0	7.0	1.4	1.3	6.5	6.5	1.1	.9	5.6	5.6	.7	.4
	04	11.0	10.1	3.7	7.6	9.4	9.4	1.9	2.5	8.8	8.8	1.5	1.7	7.6	7.6	1.0	.8
	06	15.3	14.3	5.1	3.8	13.0	13.0	2.6	1.2	12.0	12.0	2.0	.8	10.4	10.4	1.3	.4
	08	20.6	18.7	6.9	7.5	17.6	17.5	3.5	2.5	16.3	16.3	2.7	1.7	14.2	14.2	1.8	.8
	10	28.9	25.6	9.6	16.0	25.0	24.0	5.0	5.4	23.3	23.3	3.9	3.6	20.4	20.4	2.6	1.8
	12	31.9	28.6	10.6	18.8	27.5	26.9	5.5	6.4	25.6	25.6	4.3	4.2	22.4	22.4	2.8	2.1
85°F EDB 71°F EWB	02	7.8	5.2	2.6	3.0	6.0	4.5	1.2	.8	5.2	4.3	.9	.5	4.0	3.8	.5	.2
	03	11.2	7.3	3.7	6.7	9.0	6.4	1.8	2.0	8.0	6.0	1.3	1.2	6.3	5.5	.8	.5
	04	15.1	9.8	5.0	12.7	12.3	8.7	2.5	3.9	10.9	8.2	1.8	2.4	8.7	7.4	1.1	1.0
	06	21.0	13.8	7.0	6.3	16.5	12.1	3.3	1.8	14.4	11.4	2.4	1.1	11.3	10.3	1.4	.5
	08	28.1	18.2	9.4	12.6	22.8	16.2	4.6	3.9	20.2	15.2	3.4	2.4	16.1	13.8	2.0	1.0
	10	39.3	25.0	13.1	26.5	32.9	22.5	6.6	8.5	29.5	21.3	4.9	5.3	23.7	19.2	3.0	2.3
	12	43.7	28.1	14.6	31.5	36.2	25.2	7.2	10.0	32.4	23.8	5.4	6.2	26.0	21.4	3.2	2.7
85°F EDB 74°F EWB	02	9.7	5.1	3.2	4.3	7.8	4.5	1.6	1.3	6.7	4.1	1.1	.7	4.8	3.5	.6	.3
	03	13.7	7.2	4.6	9.4	11.6	6.4	2.3	3.0	10.4	5.9	1.7	1.9	7.8	5.1	1.0	.7
	04	18.5	9.6	6.2	17.7	15.7	8.6	3.1	5.9	14.2	8.0	2.4	3.7	10.9	6.9	1.4	1.5
	06	25.8	13.5	8.6	8.9	21.3	11.9	4.3	2.8	18.8	11.0	3.1	1.7	13.8	9.4	1.7	.6
	08	34.4	17.9	11.5	17.4	29.2	16.0	5.8	5.8	26.3	14.9	4.4	3.6	20.1	12.8	2.5	1.5
	10	47.7	24.6	15.9	36.4	41.7	22.3	8.3	12.6	38.2	21.0	6.4	8.1	30.3	18.3	3.8	3.5
	12	53.1	27.7	17.7	43.4	46.2	25.0	9.2	14.9	42.2	23.6	7.0	9.5	33.1	20.4	4.1	4.0

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

CHILLED WATER COOLING CAPACITIES HIGH SPEED
COIL NO. 2
40° F ENTERING WATER TEMPERATURE

Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
75°F EDB 61°F EWB	02	7.2	5.8	1.8	8.9	6.6	5.5	1.3	5.3	6.1	5.2	1.0	3.3	5.1	4.8	.6	1.5
	03	7.0	7.9	2.5	20.0	9.3	7.5	1.9	11.9	8.6	7.2	1.4	7.5	7.3	6.6	.9	3.4
	04	13.1	10.3	3.3	26.9	12.1	9.9	2.4	15.9	11.2	9.4	1.9	10.0	9.4	8.6	1.2	4.5
	06	19.2	15.1	4.8	15.3	17.8	14.5	3.6	9.2	16.4	13.8	2.7	5.9	13.8	12.7	1.7	2.7
	08	25.8	20.2	6.4	30.3	23.8	19.3	4.8	18.4	21.9	18.4	3.7	11.8	18.5	16.9	2.3	5.5
	10	31.7	24.8	7.9	11.6	29.4	23.7	5.9	6.8	27.1	22.6	4.5	4.3	22.9	20.7	2.9	1.9
	12	38.9	31.3	9.7	16.8	36.0	29.9	7.2	9.8	33.2	28.6	5.5	6.1	28.1	26.3	3.5	2.7
75°F EDB 63°F EWB	02	8.4	5.8	1.8	11.6	7.7	5.4	1.5	6.8	7.0	5.1	1.2	4.2	5.7	4.5	.7	1.8
	03	11.6	7.9	2.5	25.7	10.8	7.5	2.2	15.4	9.9	7.1	1.6	9.7	8.2	6.3	1.0	4.2
	04	15.2	10.3	3.3	34.7	14.1	9.8	2.8	20.7	12.9	9.3	2.2	12.9	10.6	8.2	1.3	5.5
	06	22.3	15.1	4.8	19.5	20.7	14.4	4.1	11.9	18.9	13.6	3.2	7.6	15.5	12.1	1.9	3.3
	08	29.9	20.3	6.4	38.5	27.8	19.3	5.6	23.7	25.5	18.2	4.2	15.1	20.9	16.2	2.6	6.8
	10	36.4	24.7	7.9	14.9	33.9	23.5	6.8	8.8	31.1	22.2	5.2	5.5	25.6	19.7	3.2	2.3
	12	45.0	31.1	9.7	21.8	41.6	29.5	8.3	12.7	38.0	27.9	6.3	7.8	31.2	24.9	3.9	3.3
75°F EDB 64°F EWB	02	8.9	5.7	2.1	13.0	8.3	5.4	1.7	7.8	7.6	5.1	1.3	4.8	6.1	4.5	.8	2.0
	03	12.3	7.8	2.9	28.6	11.6	7.5	2.3	17.4	10.7	7.1	1.8	11.0	8.8	6.2	1.1	4.7
	04	16.2	10.3	3.8	38.9	15.2	9.8	3.0	23.5	14.0	9.3	2.3	14.9	11.4	8.1	1.4	6.3
	06	23.7	15.1	5.6	21.7	22.2	14.4	4.4	13.4	20.5	13.6	3.4	8.6	16.7	11.9	2.1	3.8
	08	31.8	20.2	7.5	43.0	29.9	19.3	6.0	26.7	27.6	18.2	4.6	17.3	22.6	16.0	2.8	7.7
	10	38.8	24.6	9.1	16.7	36.4	23.5	7.3	10.0	33.5	22.2	5.6	6.3	27.4	19.5	3.4	2.6
	12	48.0	31.0	11.2	24.5	44.7	29.5	8.9	14.5	41.0	27.8	6.8	9.0	33.3	24.5	4.2	3.7
78°F EDB 64°F EWB	02	8.9	6.3	2.2	13.0	8.3	6.0	1.7	7.7	7.6	5.7	1.3	4.8	6.3	5.2	.8	2.1
	03	12.3	8.7	3.1	28.7	11.5	8.3	2.3	17.3	10.7	7.9	14.8	11.0	9.0	7.1	1.1	5.0
	04	16.3	11.4	4.1	39.0	15.1	10.9	3.0	23.3	13.9	10.3	2.3	14.7	11.7	9.3	1.5	6.6
	06	23.7	16.6	5.9	21.8	22.1	15.9	4.4	13.3	20.4	15.1	3.4	8.6	17.2	13.7	2.1	4.0
	08	31.8	22.3	8.0	43.1	29.7	21.3	5.9	26.5	27.5	20.2	4.6	17.1	23.1	18.3	2.9	8.0
	10	38.9	27.1	9.7	16.8	36.3	25.9	7.3	10.0	33.6	24.7	5.6	6.3	28.3	22.3	3.5	2.8
	12	48.0	34.3	12.0	24.5	44.6	32.7	8.9	14.4	41.1	31.1	6.9	9.0	34.6	28.3	4.3	4.0
78°F EDB 65°F EWB	02	9.5	6.3	2.4	14.5	8.9	6.0	1.8	8.7	8.2	5.7	1.4	5.5	6.7	5.1	.8	2.4
	03	13.1	8.6	3.3	31.8	12.4	8.3	2.5	19.5	11.5	7.9	1.9	12.5	9.6	7.0	1.2	5.6
	04	17.3	11.3	4.3	43.3	16.2	10.9	3.2	26.4	15.0	10.3	2.5	16.8	12.5	9.2	1.6	7.4
	06	25.2	16.6	6.3	24.1	23.7	15.9	4.7	15.0	22.0	15.1	3.7	9.7	18.3	13.5	2.3	4.4
	08	33.8	22.2	8.5	47.7	31.9	21.3	6.4	29.8	29.6	20.2	4.9	19.4	24.7	18.1	3.1	8.9
	10	41.3	27.1	10.3	18.7	38.8	25.9	7.8	11.3	36.0	24.6	6.0	7.1	30.2	22.0	3.8	3.1
	12	51.1	34.2	12.8	27.3	47.8	32.7	9.6	16.3	44.1	31.0	7.4	10.2	36.8	27.8	4.6	4.4
78°F EDB 68°F EWB	02	11.3	6.3	2.8	19.5	10.7	6.0	2.1	12.1	10.0	5.7	1.7	7.8	8.5	5.0	1.1	3.5
	03	15.5	8.6	3.9	42.8	14.8	8.2	3.0	26.7	14.0	7.8	2.3	17.6	12.1	7.0	1.5	8.3
	04	20.4	11.3	5.1	58.1	19.5	10.8	3.9	36.2	18.3	10.3	3.1	23.7	15.8	9.2	2.0	11.1
	06	29.9	16.4	7.5	32.0	28.5	15.8	5.7	20.3	26.8	15.0	4.5	13.5	23.1	13.4	2.9	6.5
	08	40.0	22.0	10.0	63.1	38.2	21.2	7.6	40.2	36.0	20.2	6.0	27.0	31.2	18.1	3.9	13.1
	10	48.8	26.9	12.2	25.3	46.6	25.8	9.3	15.6	43.9	24.5	7.3	10.1	37.7	21.8	4.7	4.6
	12	60.8	33.8	15.2	37.3	57.7	32.4	11.5	22.8	54.0	30.8	9.0	14.6	45.9	27.3	5.7	6.6
80°F EDB 63.5°F EWB	02	8.6	6.7	2.2	12.2	8.0	6.4	1.6	7.3	7.4	6.2	1.2	4.6	6.3	5.7	.8	2.1
	03	11.9	9.2	3.0	27.0	11.2	8.8	2.2	16.3	10.4	8.5	1.7	10.5	9.0	7.8	1.1	5.0
	04	15.6	12.0	3.9	36.3	14.6	11.6	2.9	21.9	13.5	11.1	2.3	14.0	11.7	10.3	1.5	6.6
	06	22.9	17.6	5.7	20.4	21.3	16.9	4.3	12.5	19.8	16.2	3.3	8.2	17.1	15.0	2.1	3.9
	08	30.6	23.6	7.7	40.4	28.6	22.6	5.7	24.9	26.6	21.7	4.4	16.3	23.0	20.1	2.9	7.9
	10	37.5	28.8	9.4	15.7	35.2	27.7	7.0	9.4	32.8	26.6	5.5	6.0	28.4	24.6	3.5	2.8
	12	46.3	36.5	11.6	23.0	43.2	35.1	8.6	13.6	40.2	33.7	6.7	8.7	34.8	31.36	4.4	4.0
80°F EDB 67°F EWB	02	10.7	6.7	2.7	17.7	10.1	6.4	2.0	10.9	9.4	6.1	1.6	7.0	7.8	5.4	1.0	3.1
	03	14.7	9.1	3.7	38.9	14.0	8.8	2.8	24.2	13.1	8.4	2.2	15.8	11.2	7.5	1.4	7.2
	04	19.4	12.0	4.8	52.8	18.4	11.5	3.7	32.8	17.2	11.0	2.9	21.3	14.6	9.8	1.8	9.6
	06	28.3	17.5	7.1	29.2	26.9	16.8	5.4	18.4	25.2	16.1	4.2	12.2	21.3	14.4	2.7	5.7
	08	37.9	23.4	9.5	57.6	57.6	22.6	7.2	36.6	33.9	21.6	5.6	24.3	28.8	19.3	3.6	11.5
	10	46.3	28.6	11.6	22.9	22.9	27.5	8.8	14.0	41.2	26.2	6.9	9.0	35.0	23.5	4.4	4.0
	12	57.4	36.1	14.4	33.7	33.7	34.6	10.8	20.4	50.6	33.0	8.4	13.1	42.6	29.6	5.3	5.7

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

COIL NO. 2

CHILLED WATER COOLING CAPACITIES HIGH SPEED COIL NO. 2 40° F ENTERING WATER TEMPERATURE																	
Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
80°F EDB 70°F EWB	02	12.6	6.6	3.1	23.5	12.0	6.4	2.4	14.7	11.3	6.1	1.9	9.6	9.8	5.4	1.2	4.6
	03	17.2	9.1	4.3	51.4	16.5	8.7	3.3	32.3	15.7	8.4	2.6	21.6	13.9	7.5	1.7	10.5
	04	22.7	11.9	5.7	69.8	21.7	11.4	4.3	43.8	20.7	11.0	3.4	29.2	18.1	9.8	2.3	14.1
	06	33.2	17.4	8.3	38.1	31.8	16.7	6.4	24.4	30.2	16.0	5.0	16.5	26.5	14.4	3.3	8.2
	08	44.4	23.3	11.1	75.1	42.6	22.4	8.5	43.3	40.5	21.5	6.8	32.8	35.8	19.4	4.5	16.5
	10	54.2	28.4	13.6	30.4	52.0	27.3	10.4	18.9	49.4	26.2	8.2	12.5	43.4	23.5	5.4	5.9
	12	67.6	35.8	16.9	45.1	64.5	34.4	12.9	27.8	60.9	32.7	10.1	18.1	53.0	29.4	6.6	8.5
82°F EDB 66.5°F EWB	02	10.4	7.1	2.6	16.9	9.8	6.8	2.0	10.3	9.1	6.5	1.5	6.6	7.7	5.9	1.0	3.0
	03	14.3	9.7	3.6	37.2	13.6	9.3	2.7	23.0	12.7	8.9	2.1	14.8	10.9	8.1	1.4	6.9
	04	18.8	12.7	4.7	50.4	17.9	12.3	3.6	31.2	16.6	11.7	2.8	20.0	14.2	10.6	1.8	9.2
	06	27.5	18.6	6.9	27.9	26.1	17.9	5.2	17.6	24.3	17.1	4.0	11.5	20.8	15.5	2.6	5.4
	08	36.9	24.9	9.2	55.1	35.0	24.0	7.0	34.9	32.6	22.9	5.4	22.9	28.0	20.8	3.5	11.0
	10	45.0	30.3	11.3	21.8	42.7	29.2	8.5	13.3	39.8	27.9	6.6	8.5	34.2	25.4	4.3	3.9
	12	55.8	38.3	14.0	32.1	52.6	36.8	10.5	19.3	48.9	35.2	8.1	12.3	41.8	32.1	5.2	5.5
82°F EDB 69°F EWB	02	11.9	7.0	3.0	21.5	11.3	6.8	2.3	13.3	10.6	6.5	1.8	8.7	9.1	5.8	1.1	4.0
	03	16.4	9.6	4.1	46.9	15.6	9.3	3.1	29.4	14.8	8.9	2.5	19.5	12.9	8.0	1.6	9.3
	04	21.6	12.6	5.4	63.7	20.6	12.2	4.1	39.9	19.4	11.6	3.2	26.3	16.9	10.5	2.1	12.4
	06	31.5	18.4	7.9	34.9	30.1	17.8	6.0	22.3	28.4	17.0	4.7	14.9	24.7	15.4	3.1	7.3
	08	42.2	24.7	10.5	68.9	40.3	23.8	8.1	44.1	38.3	22.9	6.4	29.9	33.3	20.7	4.2	14.7
	10	51.5	30.1	12.9	27.7	49.2	29.0	9.8	17.2	46.5	27.8	7.8	11.2	40.4	25.1	5.1	5.2
	12	64.1	38.0	16.0	41.0	61.0	36.6	12.2	25.2	57.3	35.0	9.6	16.3	49.3	31.5	6.2	7.4
82°F EDB 71.5°F EWB	02	13.6	7.0	3.4	26.9	13.0	6.7	2.6	16.9	12.3	6.4	2.1	11.2	10.8	5.8	1.4	5.4
	03	18.6	9.6	4.6	58.5	17.9	9.2	3.6	37.0	17.1	8.9	2.8	24.9	15.2	8.1	1.9	12.4
	04	24.5	12.6	6.1	79.5	23.5	12.1	4.7	50.2	22.4	11.6	3.7	33.7	20.0	10.5	2.5	16.7
	06	35.8	18.3	8.9	43.2	34.3	17.7	6.9	27.8	32.8	17.0	5.5	18.9	29.2	15.4	3.7	9.6
	08	47.9	24.6	12.0	85.0	46.0	23.7	9.2	54.9	44.0	22.8	7.3	37.6	39.3	20.8	4.9	19.3
	10	58.4	30.0	14.6	34.8	56.2	28.9	11.2	21.8	53.6	27.7	8.9	14.4	47.8	25.2	6.0	7.0
	12	72.9	37.8	18.2	51.7	69.8	36.3	14.0	32.1	66.4	34.8	11.1	21.2	58.4	31.4	7.3	10.1
85°F EDB 67°F EWB	02	10.7	7.7	2.7	17.8	10.0	7.4	2.0	10.8	9.4	7.1	1.6	6.9	8.1	6.5	1.0	3.3
	03	14.7	10.5	3.7	39.1	14.0	10.1	2.8	24.1	13.1	9.7	2.2	15.7	11.4	9.0	1.4	7.5
	04	19.4	13.8	4.8	53.0	18.3	13.2	3.7	32.4	17.1	12.7	2.8	21.0	14.9	11.7	1.9	10.0
	06	28.3	20.1	7.1	29.2	26.7	19.4	5.3	18.3	25.0	18.6	4.2	12.0	21.8	17.2	2.7	5.9
	08	38.0	26.9	9.5	57.8	35.9	25.9	7.2	36.3	33.6	24.9	5.6	24.0	29.3	23.0	3.7	11.8
	10	46.3	32.8	11.6	23.0	43.9	31.6	8.8	14.0	41.1	30.4	6.9	9.0	36.0	28.1	4.5	4.2
	12	57.5	41.6	14.4	33.8	54.1	40.0	10.8	20.3	50.6	38.4	8.4	13.0	44.1	35.6	5.5	6.1
85°F EDB 71°F EWB	02	13.2	7.6	3.3	25.7	12.6	7.3	2.5	16.1	11.9	7.0	2.0	10.6	10.4	6.4	1.3	5.1
	03	18.1	10.3	4.5	56.0	17.4	10.0	3.5	35.3	16.6	9.6	2.8	23.7	14.7	8.8	1.8	11.7
	04	23.9	13.6	6.0	76.0	22.9	13.2	4.6	47.9	21.8	12.7	3.6	32.1	19.3	11.6	2.4	15.7
	06	34.9	19.9	8.7	41.4	33.4	19.2	6.7	26.6	31.9	18.5	5.3	18.1	28.3	16.9	3.5	9.1
	08	46.7	26.6	11.7	81.5	44.8	25.8	9.0	52.6	42.8	24.8	7.1	35.9	38.1	22.8	4.8	18.3
	10	57.0	32.5	14.2	33.2	54.7	31.4	10.9	20.8	52.1	30.2	8.7	13.7	46.2	27.6	5.8	6.6
	12	71.1	41.0	17.8	49.3	67.9	39.6	13.6	30.6	64.3	38.0	10.7	20.0	56.5	34.6	7.1	9.5
85°F EDB 74°F EWB	02	15.3	7.6	3.8	33.1	14.7	7.3	2.9	20.9	14.0	7.0	2.3	14.1	12.6	6.4	1.6	7.1
	03	20.9	10.3	5.2	71.9	20.2	10.0	4.0	45.8	19.4	9.6	3.2	31.0	17.6	8.8	2.2	16.0
	04	27.6	13.5	6.9	97.6	26.6	13.1	5.3	62.2	25.5	12.6	4.2	42.1	23.1	11.6	2.9	21.5
	06	40.3	19.8	10.1	52.7	38.8	19.1	7.8	34.1	37.2	18.4	6.2	23.4	33.8	16.9	4.2	12.3
	08	53.9	26.5	13.5	103.5	52.0	25.6	10.4	67.3	49.9	24.7	8.3	46.4	45.5	22.7	5.7	24.6
	10	65.8	32.3	16.4	43.0	63.5	31.3	12.7	27.1	60.9	30.1	10.1	18.1	55.3	27.6	6.9	9.2
	12	82.3	40.7	20.6	64.0	79.1	39.3	15.8	40.1	75.6	37.7	12.6	26.7	67.9	34.5	8.5	13.2

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

CHILLED WATER COOLING CAPACITIES HIGH SPEED COIL NO. 2 45° F ENTERING WATER TEMPERATURE																	
Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
75°F EDB 61°F EWB	02	5.3	4.9	1.3	5.3	4.9	4.7	1.0	3.1	4.5	4.5	.7	1.9	3.8	3.8	.5	.9
	03	7.5	6.8	1.9	12.0	6.9	6.5	1.4	7.0	6.4	6.3	1.1	4.5	5.4	5.4	.7	2.1
	04	9.6	8.8	2.4	15.7	8.9	8.5	1.8	9.2	8.2	8.2	1.4	5.8	6.9	6.9	.9	2.7
	06	14.2	12.9	3.5	9.1	13.0	13.0	2.6	5.5	12.0	12.0	2.0	3.5	10.2	10.2	1.3	1.7
	08	18.9	17.2	4.7	18.1	17.4	17.4	3.5	10.8	16.1	15.9	2.7	7.0	13.7	13.7	1.7	3.3
	10	23.6	21.3	5.9	6.9	21.8	21.8	4.4	4.0	20.1	19.8	3.4	2.5	17.1	17.1	2.1	1.1
	12	29.0	27.0	7.3	10.0	26.8	26.0	5.4	5.8	24.8	24.8	4.1	3.6	21.1	21.1	2.6	1.6
75°F EDB 63°F EWB	02	6.2	4.8	1.5	6.9	5.6	4.5	1.1	3.9	5.0	4.3	.8	2.3	4.0	3.9	.5	1.3
	03	8.7	6.6	2.2	15.6	7.9	6.2	1.6	8.9	7.1	5.9	1.2	5.4	5.8	5.3	.7	2.3
	04	11.3	8.6	2.8	20.8	10.2	8.1	2.0	11.8	9.2	7.7	1.5	7.1	7.4	7.0	.9	3.0
	06	16.6	12.6	4.1	11.9	15.0	11.9	3.0	6.9	13.5	11.3	2.2	4.3	10.9	10.2	1.4	1.9
	08	22.1	16.8	5.5	23.6	20.1	15.9	4.0	13.8	18.1	15.0	3.0	8.5	14.7	13.6	1.8	3.7
	10	27.4	20.7	6.9	9.0	24.8	19.5	5.0	5.1	22.3	18.5	3.7	3.0	18.1	16.7	2.3	1.2
	12	33.3	26.0	8.3	12.7	30.2	24.7	6.0	7.2	27.2	23.4	4.5	4.3	22.2	21.3	2.8	1.8
75°F EDB 64°F EWB	02	6.7	4.8	1.7	7.9	6.1	4.5	1.2	4.5	5.4	4.2	.9	2.6	4.2	3.7	.5	1.1
	03	9.5	6.6	2.4	18.2	8.6	6.2	1.7	10.3	7.7	5.8	1.3	6.2	6.1	5.2	.8	2.5
	04	12.4	8.6	3.1	24.2	11.1	8.1	2.2	13.7	9.9	7.6	1.7	8.2	7.9	6.7	1.0	3.3
	06	18.0	12.5	4.5	13.7	16.3	11.8	3.3	8.0	14.6	11.1	2.4	4.9	11.6	9.9	1.4	2.0
	08	24.3	16.8	6.1	27.5	22.0	15.8	4.4	16.0	19.6	14.8	3.3	9.8	15.6	13.2	1.9	4.1
	10	29.7	20.5	7.4	10.4	27.0	19.4	5.4	5.9	24.1	18.1	4.0	3.5	19.1	16.1	2.4	1.4
	12	36.3	25.9	9.1	14.9	32.8	24.4	6.6	8.3	29.2	22.9	4.9	4.9	23.3	20.4	2.9	1.9
78°F EDB 64°F EWB	02	6.7	5.4	1.7	7.9	6.2	5.1	1.2	4.6	5.6	4.9	.9	2.9	4.6	4.5	.6	1.2
	03	9.5	7.4	2.4	18.1	8.7	7.0	1.7	10.5	7.9	6.7	1.3	6.6	6.6	6.2	.8	2.9
	04	12.3	9.6	3.1	23.9	11.3	9.2	2.3	14.0	10.3	8.8	1.7	8.7	8.6	8.1	1.1	3.8
	06	18.0	14.1	4.5	13.7	16.5	13.5	3.3	8.1	15.1	12.9	2.5	5.2	12.6	11.8	1.6	2.4
	08	24.1	18.8	6.0	27.1	22.1	18.0	4.4	16.2	20.2	17.1	3.4	.3	16.9	15.8	2.1	4.7
	10	29.7	23.1	7.4	10.4	27.4	22.1	5.5	6.0	25.1	21.1	4.2	3.7	20.9	19.4	2.6	1.6
	12	36.5	29.3	9.1	15.0	33.5	28.0	6.7	8.6	30.6	26.8	5.1	5.3	25.6	24.7	3.2	2.3
78°F EDB 65°F EWB	02	7.3	5.3	1.8	9.2	6.7	5.1	1.3	5.3	6.0	4.8	1.0	3.2	4.9	4.3	.6	1.3
	03	10.2	7.3	2.6	20.7	9.4	7.0	1.9	12.0	8.5	6.6	1.4	7.4	7.0	6.0	.9	3.2
	04	13.4	9.6	3.3	27.7	12.2	9.1	2.4	16.0	11.0	8.6	1.8	9.8	9.0	7.8	1.1	4.2
	06	19.5	14.1	4.9	15.7	17.9	13.3	3.6	9.3	16.2	12.6	2.7	5.8	13.2	11.4	1.7	2.6
	08	26.2	18.8	6.6	31.2	24.0	17.8	4.8	18.6	21.8	16.9	3.6	11.7	17.8	15.3	2.2	5.2
	10	32.2	23.0	8.0	12.0	29.5	21.9	5.9	6.9	26.9	20.7	4.5	4.2	21.9	18.7	2.7	1.8
	12	39.4	29.0	9.8	17.2	36.0	27.6	7.2	9.8	32.7	26.2	5.5	6.0	26.8	23.8	3.3	2.5
78°F EDB 68°F EWB	02	9.2	5.3	2.3	13.6	8.5	5.0	1.7	8.1	7.7	4.7	1.3	5.0	6.0	4.0	.8	2.0
	03	12.7	7.3	3.2	30.1	11.9	6.9	2.4	18.2	10.9	6.5	1.8	11.5	8.7	5.7	1.1	4.7
	04	16.7	9.6	4.2	40.8	15.6	9.1	3.1	24.5	14.3	8.6	2.4	15.4	11.3	7.4	1.4	6.2
	06	24.4	14.0	6.1	22.7	22.8	13.3	4.6	13.9	20.9	12.5	3.5	8.9	16.6	10.8	2.1	3.7
	08	32.7	18.7	8.2	45.1	30.6	17.8	6.1	27.8	28.2	16.8	4.7	17.9	22.4	14.5	2.8	7.6
	10	40.0	22.9	10.0	17.7	37.3	21.7	7.5	10.5	34.3	20.4	5.7	6.5	27.2	17.6	3.4	2.6
	12	49.3	28.8	12.3	25.6	45.7	27.3	9.1	15.1	41.7	25.6	7.0	9.2	33.0	22.2	4.1	3.6
80°F EDB 63.5°F EWB	02	6.6	5.8	1.6	7.6	6.1	5.6	1.2	4.5	5.7	5.4	.9	2.9	4.9	4.9	.6	1.4
	03	9.2	8.0	2.3	17.2	8.6	7.7	1.7	10.3	8.0	7.5	1.3	6.6	7.0	7.0	.9	3.2
	04	11.9	10.4	3.0	22.7	11.1	10.1	2.2	13.6	10.3	9.7	1.7	8.7	8.9	8.9	1.1	4.1
	06	17.5	15.3	4.4	13.0	16.2	14.8	3.2	7.9	15.1	14.3	2.5	5.2	13.2	13.2	1.6	2.5
	08	23.3	20.3	5.8	25.7	21.7	19.6	4.3	15.7	20.2	19.0	3.4	10.3	17.6	17.6	2.2	5.1
	10	29.1	25.2	7.3	10.0	27.1	24.3	5.4	5.9	25.2	23.5	4.2	3.8	21.9	21.9	2.7	1.8
	12	35.7	31.9	8.9	14.4	33.3	30.9	6.7	8.6	31.1	29.9	5.2	5.5	27.1	27.1	3.4	2.6
80°F EDB 67°F EWB	02	8.6	5.7	2.1	12.1	7.8	5.4	1.6	7.0	7.1	5.1	1.2	4.3	5.7	4.6	.7	1.8
	03	11.9	7.8	3.0	26.8	11.0	7.5	2.2	15.9	10.0	7.1	1.7	9.9	8.2	6.3	1.0	4.2
	04	15.6	10.3	3.9	36.3	14.4	9.8	3.0	21.3	13.0	9.2	2.2	13.1	10.6	8.3	1.3	5.6
	06	22.8	15.1	5.7	20.3	21.0	14.3	4.3	12.2	19.2	13.5	3.2	7.7	15.6	12.1	2.0	3.4
	08	30.6	20.2	7.7	40.4	28.3	19.2	5.8	24.4	25.8	18.1	4.3	15.4	21.0	16.2	2.6	6.8
	10	37.4	24.6	9.4	15.7	34.6	23.4	7.0	9.1	31.6	22.1	5.3	5.6	25.8	19.8	3.2	2.3
	12	46.0	31.1	11.5	22.7	42.3	29.5	8.7	13.1	38.5	27.9	6.4	6.4	31.4	25.1	3.9	3.3

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

COIL NO. 2

CHILLED WATER COOLING CAPACITIES HIGH SPEED COIL NO. 2 45° F ENTERING WATER TEMPERATURE																	
Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
80°F EDB 70°F EWB	02	10.4	5.7	2.6	17.0	9.8	5.4	2.0	10.3	9.0	5.1	1.5	6.5	7.2	4.4	.9	2.7
	03	14.4	7.8	3.6	37.5	13.6	7.4	2.7	23.0	12.7	7.0	2.1	14.8	10.4	6.2	1.3	6.4
	04	18.9	10.2	4.7	50.8	17.8	9.7	3.6	31.0	16.6	9.2	2.8	19.9	13.6	8.0	1.7	8.5
	06	27.7	14.9	6.9	28.1	26.1	14.2	5.2	17.5	24.3	13.5	4.0	11.4	19.9	11.8	2.5	5.1
	08	37.1	20.0	9.3	55.5	35.0	19.1	7.0	34.8	32.6	18.1	5.4	22.8	26.9	15.8	3.4	10.3
	10	45.3	24.4	11.3	22.1	42.7	23.3	8.5	13.3	39.8	22.0	6.6	8.5	32.6	19.2	4.1	3.6
	12	56.1	30.7	14.0	32.3	52.5	29.2	10.5	19.3	48.6	27.6	8.1	12.1	39.4	24.1	4.9	5.0
82°F EDB 66.5°F EWB	02	8.2	6.1	2.1	11.2	7.5	5.8	1.5	6.6	6.9	5.6	1.2	4.1	5.8	5.1	.7	1.8
	03	11.4	8.4	2.9	25.1	10.6	8.0	2.1	14.9	9.7	7.7	1.6	9.4	8.2	7.0	1.0	4.2
	04	14.9	11.0	3.7	33.6	13.8	10.5	2.8	19.9	12.7	10.0	2.1	12.5	10.6	9.2	1.3	5.6
	06	21.9	16.1	5.5	19.0	20.2	15.4	4.0	11.4	18.6	14.7	3.1	7.3	15.6	13.5	2.0	3.4
	08	29.3	21.5	7.3	37.6	27.1	20.5	5.4	22.7	24.9	19.6	4.2	14.6	21.0	18.0	2.6	6.8
	10	35.9	26.3	9.0	14.6	33.4	25.2	6.7	8.6	30.8	24.1	5.1	5.4	25.9	22.1	3.2	2.4
	12	44.2	33.3	11.1	21.1	40.8	31.8	8.2	12.3	37.6	30.5	6.3	7.7	31.7	28.1	4.0	3.4
82°F EDB 69°F EWB	02	9.8	6.1	2.5	15.3	9.1	5.8	1.8	9.1	8.3	5.5	1.4	5.7	6.7	4.9	.8	2.4
	03	13.5	8.3	3.4	33.6	12.7	8.0	2.5	20.5	11.7	7.6	2.0	13.0	9.7	6.7	1.2	5.6
	04	17.8	10.9	4.4	45.6	16.7	10.5	3.3	27.6	15.3	9.9	2.6	17.4	12.5	8.8	1.6	7.4
	06	26.0	16.0	6.5	25.3	24.4	15.3	4.9	15.7	22.5	14.5	3.7	10.1	18.4	12.9	2.3	4.5
	08	34.9	21.4	8.7	50.2	32.7	20.5	6.5	31.2	30.2	19.4	5.0	20.1	24.8	17.3	3.1	9.0
	10	42.7	26.1	10.7	19.8	40.0	25.0	8.0	11.9	36.9	23.7	6.1	7.4	30.4	21.1	3.8	3.1
	12	52.6	33.0	13.2	28.8	49.1	31.5	9.8	17.1	45.0	29.8	7.5	10.6	36.8	26.6	4.6	4.4
82°F EDB 71.5°F EWB	02	11.4	6.1	2.9	15.3	9.1	5.8	1.8	9.1	8.3	5.5	1.4	5.7	6.7	4.9	.8	2.4
	03	15.7	8.3	3.9	33.6	12.7	8.0	2.5	20.5	11.7	7.6	2.0	13.0	9.7	6.7	1.2	5.6
	04	20.7	10.8	5.2	45.6	16.7	10.5	3.3	27.6	15.3	9.9	2.6	17.4	12.5	8.8	1.6	7.4
	06	30.2	15.9	7.6	25.3	24.4	15.3	4.9	15.7	22.5	14.5	3.7	10.1	18.4	12.9	2.3	4.5
	08	40.5	21.2	10.1	50.2	32.7	20.5	6.5	31.2	30.2	19.4	5.0	20.1	24.8	17.3	3.1	9.0
	10	49.5	25.9	12.4	19.8	40.0	25.0	8.0	11.9	36.9	23.7	6.1	7.4	30.4	21.1	3.8	3.1
	12	61.3	32.7	15.3	28.8	49.1	31.5	9.8	17.1	45.0	29.8	7.5	10.6	36.8	26.6	4.6	4.4
85°F EDB 67°F EWB	02	8.5	6.7	2.1	11.9	7.9	6.5	1.6	7.1	7.3	6.2	1.2	4.5	6.3	5.8	.8	2.1
	03	11.8	9.2	3.0	26.6	11.0	8.8	2.2	16.0	10.3	8.5	1.7	10.3	8.9	8.0	1.1	4.9
	04	15.4	12.0	3.9	35.5	14.4	11.6	2.9	21.3	13.3	11.1	2.2	13.6	11.5	10.4	1.4	6.4
	06	22.6	17.6	5.7	20.0	21.0	16.9	4.2	12.2	19.6	16.3	3.3	8.0	16.9	15.2	2.1	3.9
	08	30.3	23.5	7.6	39.7	28.2	22.6	5.6	24.3	26.2	21.7	4.4	15.9	22.7	20.3	2.8	7.7
	10	37.3	28.8	9.3	15.6	34.9	27.8	7.0	9.3	32.4	26.7	5.4	5.9	28.1	25.0	3.5	2.7
	12	45.9	36.5	11.5	22.6	42.8	35.2	8.6	13.4	39.8	34.0	6.6	8.5	34.5	31.8	4.3	3.9
85°F EDB 71°F EWB	02	11.1	6.7	2.8	18.9	10.4	6.4	2.1	11.5	9.7	6.1	1.6	7.3	8.0	5.4	1.0	3.2
	03	15.3	9.1	3.8	41.6	14.5	8.7	2.9	25.7	13.5	8.3	2.3	16.6	11.4	7.5	1.4	7.5
	04	20.1	11.9	5.0	56.3	19.0	11.4	3.8	34.6	17.7	10.9	3.0	22.4	14.8	9.8	1.8	9.9
	06	29.3	17.4	7.3	31.0	27.7	16.7	5.5	19.4	26.0	16.0	4.3	12.8	21.7	14.3	2.7	5.9
	08	39.3	23.3	9.8	61.3	37.3	22.5	7.5	38.7	34.9	21.4	5.8	25.6	29.3	19.2	3.7	11.8
	10	48.1	28.5	12.0	24.6	45.6	27.4	9.1	15.0	42.5	26.1	7.1	9.6	35.7	23.4	4.5	4.2
	12	59.5	36.0	14.9	36.0	56.0	34.5	11.2	21.6	52.1	32.9	8.7	13.7	43.4	29.5	5.4	5.9
85°F EDB 74°F EWB	02	13.1	6.6	3.3	25.4	12.5	6.3	2.5	15.8	11.7	6.0	2.0	10.3	10.1	5.4	1.3	4.8
	03	18.0	9.0	4.5	55.5	17.2	8.7	3.4	34.8	16.3	8.3	2.7	23.1	14.3	7.5	1.8	11.1
	04	23.7	11.8	5.9	75.2	22.7	11.4	4.5	47.1	21.4	10.9	3.6	31.1	18.6	9.8	2.3	14.8
	06	34.7	17.3	8.7	41.0	33.1	16.6	6.6	26.1	31.3	15.9	5.2	17.5	27.3	14.3	3.4	8.6
	08	46.4	23.1	11.6	80.7	44.4	22.3	8.9	51.7	42.2	21.4	7.0	35.0	36.8	19.2	4.6	17.3
	10	56.8	28.3	14.2	33.1	54.3	27.2	10.9	20.5	51.4	26.0	8.6	13.4	44.7	23.4	5.6	6.3
	12	70.6	35.6	17.6	48.7	67.2	34.2	13.4	29.9	63.2	32.6	10.5	19.4	54.4	29.2	6.8	8.9

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

CHILLED WATER COOLING CAPACITIES HIGH SPEED
COIL NO. 2
50° F ENTERING WATER TEMPERATURE

Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
75°F EDB 61°F EWB	02	4.0	4.0	1.0	3.2	3.7	3.7	.7	1.9	3.5	3.5	.6	1.2	2.8	2.8	.4	.5
	03	5.6	5.6	1.4	7.2	5.2	5.2	1.0	4.4	4.9	4.9	.8	2.8	4.1	4.1	.5	1.2
	04	7.1	7.1	1.8	9.3	6.7	6.7	1.3	5.6	6.2	6.2	1.0	3.6	5.1	5.1	.6	1.6
	06	10.5	10.5	2.6	5.5	9.8	9.8	2.0	3.4	9.1	9.1	1.5	2.2	7.6	7.6	.9	1.0
	08	13.8	13.8	3.5	10.8	13.0	13.0	2.6	6.7	12.1	12.1	2.0	4.4	10.1	10.1	1.3	2.0
	10	17.8	17.8	4.4	4.1	16.7	16.7	3.3	2.5	15.6	15.6	2.6	1.6	12.9	12.9	1.6	.7
	12	22.1	22.1	5.5	6.1	20.7	20.7	4.1	3.7	19.2	19.2	3.2	2.3	15.8	15.8	2.0	1.0
75°F EDB 63°F EWB	02	4.2	4.0	1.1	3.5	3.8	3.8	.8	2.0	3.4	3.4	.6	1.2	2.8	2.8	.3	.5
	03	6.0	5.5	1.5	8.1	5.4	5.3	1.1	4.6	4.9	4.9	.8	2.8	4.0	4.0	.5	1.2
	04	7.7	7.1	1.9	10.5	6.9	6.8	1.4	6.0	6.3	6.3	1.0	3.7	5.1	5.1	.6	1.5
	06	11.3	10.5	2.8	6.2	10.2	10.0	2.0	3.6	9.3	9.3	1.5	2.3	7.5	7.5	.9	1.0
	08	15.0	13.9	3.8	12.3	13.6	13.3	2.7	7.2	12.3	12.3	2.1	4.5	10.0	10.0	1.2	2.0
	10	18.9	17.3	4.7	4.6	17.1	16.6	3.4	2.6	15.5	15.5	2.6	1.6	12.5	12.5	1.6	.6
	12	23.1	21.9	5.8	6.6	21.0	21.0	4.2	3.7	19.1	19.1	3.2	2.3	15.4	15.4	1.9	.9
75°F EDB 64°F EWB	02	4.6	3.9	1.1	4.0	4.0	3.7	.8	2.2	3.6	3.5	.6	1.3	2.8	2.8	.3	.5
	03	6.4	5.3	1.6	9.3	5.7	5.1	1.1	5.1	5.1	4.8	.9	3.0	4.1	4.1	.5	1.2
	04	8.3	7.0	2.1	12.2	7.4	6.6	1.5	6.7	6.6	6.3	1.1	4.0	5.2	5.2	.6	1.6
	06	12.2	10.2	3.1	7.1	10.9	9.6	2.2	4.0	9.6	9.2	1.6	2.4	7.6	7.6	1.0	1.0
	08	16.3	13.6	4.1	14.2	14.5	12.8	2.9	8.0	12.9	12.2	2.2	4.9	10.2	10.2	1.3	2.1
	10	20.4	16.8	5.1	5.3	18.1	15.9	3.6	2.9	16.1	15.1	2.7	1.7	12.8	12.8	1.6	.7
	12	24.8	21.2	6.2	7.5	22.1	20.1	4.4	4.1	19.7	19.2	3.3	2.4	15.6	15.6	1.9	1.0
78°F EDB 64°F EWB	02	4.8	4.6	1.2	4.5	4.4	4.4	.9	2.6	4.1	4.1	.7	1.6	3.4	3.4	.4	.7
	03	6.8	6.3	1.7	10.1	6.2	6.1	1.2	5.9	5.8	5.8	1.0	3.7	4.9	4.9	.6	1.7
	04	8.7	8.2	2.2	13.2	8.0	7.9	1.6	7.7	7.4	7.4	1.2	4.9	6.2	6.2	.8	2.2
	06	12.8	12.0	3.2	7.7	11.8	11.6	2.4	4.6	10.8	10.8	1.8	3.0	9.1	9.1	1.1	1.4
	08	17.1	16.0	4.3	15.3	15.7	15.4	3.1	9.1	14.4	14.4	2.4	5.9	12.2	12.2	1.5	2.7
	10	21.5	19.9	5.4	5.8	19.8	19.2	4.0	3.4	18.2	18.2	3.0	2.1	15.4	15.4	1.9	.9
	12	26.4	25.3	6.6	8.4	24.3	24.3	4.9	4.9	22.4	22.4	3.7	3.1	18.9	18.9	2.4	1.3
78°F EDB 65°F EWB	02	5.2	4.5	1.3	5.0	4.7	4.3	.9	2.8	4.2	4.1	.7	1.7	3.4	3.4	.4	.7
	03	7.3	6.2	1.8	11.4	6.6	5.9	1.3	6.5	6.0	5.6	1.0	4.0	4.9	4.9	.6	1.7
	04	9.4	8.0	2.3	15.0	8.5	7.7	1.7	8.5	7.7	7.4	1.3	5.3	6.3	6.3	.8	2.3
	06	13.8	11.8	3.4	8.8	12.5	11.2	2.5	5.1	11.3	10.8	1.9	3.2	9.3	9.3	1.2	1.4
	08	18.4	15.6	4.6	17.4	16.7	14.9	3.3	10.1	15.1	14.3	2.5	6.4	12.5	12.5	1.6	2.8
	10	23.0	19.4	5.8	6.6	20.8	18.5	4.2	3.7	18.9	17.7	3.2	2.3	15.5	15.5	1.9	.9
	12	28.1	24.5	7.0	9.4	25.5	23.5	5.1	5.3	23.2	22.6	3.9	3.2	19.1	19.1	2.4	1.4
78°F EDB 68°F EWB	02	6.8	4.4	1.7	8.1	6.0	4.1	1.2	4.4	5.2	3.8	.9	2.5	3.9	3.3	.5	.9
	03	9.6	6.0	2.4	18.5	8.5	5.6	1.7	10.2	7.5	5.2	1.2	5.9	5.7	4.6	.7	2.2
	04	12.5	7.9	3.1	24.6	11.1	7.3	2.2	13.5	9.7	6.8	1.6	7.8	7.3	5.9	.9	2.9
	06	18.3	11.5	4.6	14.0	16.2	10.7	3.2	7.9	14.2	9.9	2.4	4.7	10.8	8.7	1.3	1.8
	08	24.6	15.4	6.1	28.0	21.8	14.3	4.4	15.9	19.1	13.3	3.2	9.4	14.5	11.6	1.8	3.7
	10	30.0	18.8	7.5	10.6	26.9	17.6	5.4	5.8	23.5	16.3	3.9	3.3	17.8	14.2	2.2	1.2
	12	36.5	23.7	9.1	15.0	32.4	22.1	6.5	8.1	28.4	20.6	4.7	4.6	21.6	18.0	2.7	1.7
80°F EDB 63.5°F EWB	02	5.0	5.0	1.2	4.7	4.7	4.7	.9	2.9	4.4	4.4	.7	1.9	3.9	3.9	.5	.9
	03	7.0	7.0	1.7	10.6	6.6	6.6	1.3	6.5	6.2	6.2	1.0	4.3	5.5	5.5	.7	2.1
	04	8.9	8.9	2.2	13.7	8.4	8.4	1.7	8.4	8.0	8.0	1.3	5.6	7.0	7.0	.9	2.7
	06	13.1	13.1	3.3	8.0	12.3	12.3	2.5	5.0	11.7	11.7	2.0	3.4	10.3	10.3	1.3	1.7
	08	17.3	17.3	4.3	15.7	16.4	16.4	3.3	9.8	15.5	15.5	2.6	6.6	13.7	13.7	1.7	3.3
	10	22.2	22.2	5.5	6.2	20.9	20.9	4.2	3.7	19.7	19.7	3.3	2.4	17.5	17.5	2.2	1.2
	12	27.5	27.5	6.9	9.1	26.0	26.0	5.2	5.5	24.5	24.5	4.1	3.6	21.5	21.5	2.7	1.7
80°F EDB 67°F EWB	02	6.2	4.8	1.5	6.9	5.6	4.5	1.1	3.9	5.0	4.3	.8	2.3	4.0	3.9	.5	1.0
	03	8.7	6.6	2.2	15.7	7.9	6.2	1.6	8.9	7.1	5.9	1.2	5.4	5.8	5.4	.7	2.3
	04	11.3	8.6	2.8	20.8	10.2	8.1	2.0	11.7	9.1	7.7	1.5	7.1	7.4	7.1	.9	3.0
	06	16.6	12.6	4.1	11.9	14.9	11.9	3.0	6.9	13.4	11.3	2.2	4.2	10.9	10.4	1.4	1.9
	08	22.1	16.7	5.5	23.5	20.0	15.9	4.0	13.7	18.0	15.1	3.0	8.5	14.6	13.9	1.8	3.7
	10	27.5	20.6	6.9	9.1	24.8	19.6	5.0	5.1	22.3	18.6	3.7	3.0	18.1	17.0	2.3	1.2
	12	33.3	26.0	8.3	12.7	30.2	24.8	6.0	7.2	27.2	23.6	4.5	4.3	22.2	21.7	2.8	1.8

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

COIL NO. 2

CHILLED WATER COOLING CAPACITIES HIGH SPEED COIL NO. 2 50° F ENTERING WATER TEMPERATURE																	
Entering Air	Unit Size	WATER TEMPERATURE RISE															
		6° F				10° F				12° F				16° F			
		TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD	TH	SH	GPM	PD
80°F EDB 70°F EWB	02	8.1	4.7	2.0	11.0	7.3	4.4	1.5	6.2	6.4	4.1	1.1	3.6	4.8	3.5	.6	1.3
	03	11.3	6.5	2.8	24.5	10.3	6.1	2.1	14.3	9.2	5.7	1.5	8.4	7.0	4.9	.9	3.2
	04	14.8	8.5	3.7	32.9	13.5	8.0	2.7	19.2	11.9	7.4	2.0	11.2	9.1	6.4	1.1	4.2
	06	21.6	12.5	5.4	18.6	19.8	11.8	4.0	11.0	17.5	10.9	2.9	6.6	13.3	9.4	1.7	2.6
	08	29.0	16.7	7.3	36.9	26.6	15.8	5.3	22.1	23.6	14.6	3.9	13.3	18.0	12.6	2.2	5.3
	10	35.6	20.4	8.9	14.3	32.5	19.2	6.5	8.2	28.8	17.8	4.8	4.8	22.0	15.4	2.7	1.8
	12	43.5	25.7	10.9	20.5	39.5	24.1	7.9	11.6	34.8	22.4	5.8	6.7	26.5	19.4	3.3	2.5
82°F EDB 66.5°F EWB	02	6.1	5.3	1.5	6.6	5.5	5.1	1.1	3.8	5.1	4.9	.8	2.4	4.3	4.3	.5	1.1
	03	8.5	7.2	2.1	14.9	7.8	6.9	1.6	8.7	7.2	6.7	1.2	5.5	6.1	6.1	.8	2.5
	04	11.0	9.4	2.7	19.7	10.0	9.0	2.0	11.4	9.2	8.7	1.5	7.2	7.9	7.9	1.0	3.3
	06	16.1	13.8	4.0	11.3	14.7	13.2	2.9	6.7	13.6	12.8	2.3	4.3	11.6	11.6	1.4	2.0
	08	21.5	18.3	5.4	22.4	19.7	17.6	3.9	13.4	18.2	17.0	3.0	8.6	15.5	15.5	1.9	4.1
	10	26.9	22.7	6.7	8.7	24.7	21.8	4.9	5.0	22.7	21.1	3.8	3.1	19.3	19.3	2.4	1.4
	12	32.8	28.8	8.2	12.4	30.2	27.7	6.0	7.2	27.9	26.8	4.6	4.5	23.8	23.8	3.0	2.0
82°F EDB 69°F EWB	02	7.4	5.1	1.8	9.3	6.7	4.9	1.3	5.3	5.9	4.6	1.0	3.1	4.7	4.1	.6	1.3
	03	10.4	7.0	2.6	21.1	9.4	6.7	1.9	12.1	8.4	6.3	1.4	7.3	6.8	5.7	.9	3.1
	04	13.5	9.2	3.4	28.3	12.2	8.7	2.4	16.1	10.9	8.2	1.8	9.7	8.8	7.4	1.1	4.0
	06	19.8	13.5	4.9	16.0	17.9	12.8	3.6	9.4	16.1	12.1	2.7	5.7	12.9	10.9	1.6	2.4
	08	26.5	18.0	6.6	31.8	24.1	17.1	4.8	18.7	21.6	16.1	3.6	11.5	17.3	14.5	2.2	4.9
	10	32.6	22.1	8.2	12.3	29.7	20.9	5.9	7.0	26.6	19.8	4.4	4.1	21.4	17.8	2.7	1.7
	12	39.8	27.9	9.9	17.5	36.1	26.4	7.2	9.9	32.3	25.0	5.4	5.9	26.0	22.7	3.2	2.4
82°F EDB 71.5°F EWB	02	9.1	5.1	2.3	13.4	8.3	4.8	1.7	7.8	7.4	4.5	1.2	4.6	5.7	3.9	.7	1.8
	03	12.6	7.0	3.1	29.7	11.7	6.6	2.3	17.7	10.6	6.2	1.8	10.8	8.2	5.4	1.0	4.2
	04	16.5	9.2	4.1	40.2	15.3	8.7	3.1	23.8	13.8	8.1	2.3	14.4	10.6	7.0	1.3	5.6
	06	24.2	13.4	6.0	22.4	22.4	12.7	4.5	13.5	20.2	11.9	3.4	8.4	15.6	10.3	2.0	3.4
	08	32.4	18.0	8.1	44.4	30.1	17.1	6.0	27.0	27.2	16.0	4.5	16.9	21.1	13.8	2.6	6.9
	10	39.8	22.0	9.9	17.5	36.8	20.8	7.4	10.2	33.2	19.5	5.5	6.1	25.8	16.8	3.2	2.3
	12	48.7	27.7	12.2	25.2	44.8	26.2	9.0	14.5	40.1	24.4	6.7	8.6	31.1	21.2	3.9	3.3
85°F EDB 67°F EWB	02	6.4	5.9	1.6	7.3	6.0	5.7	1.2	4.4	5.6	5.6	.9	2.8	4.9	4.9	.6	1.4
	03	9.0	8.1	2.3	16.6	8.4	7.8	1.7	9.9	7.9	7.6	1.3	6.5	6.9	6.9	.9	3.1
	04	11.6	10.5	2.9	21.8	10.8	10.2	2.2	13.0	10.1	9.9	1.7	8.4	8.9	8.9	1.1	4.1
	06	17.0	15.4	4.3	12.5	15.9	15.0	3.2	7.6	14.9	14.6	2.5	5.0	13.1	13.1	1.6	2.5
	08	22.7	20.5	5.7	24.5	21.2	19.9	4.2	15.1	19.8	19.3	3.3	10.0	17.4	17.4	2.2	5.0
	10	28.5	25.4	7.1	9.6	26.6	24.7	5.3	5.7	24.9	24.0	4.2	3.7	21.9	21.9	2.7	1.7
	12	35.0	32.4	8.8	14.0	32.8	31.4	6.6	8.3	30.7	30.6	5.1	5.3	27.1	27.1	3.4	2.6
85°F EDB 71°F EWB	02	8.7	5.7	2.2	12.5	7.9	5.4	1.6	7.2	7.1	5.1	1.2	4.3	5.7	4.6	.7	1.8
	03	12.1	7.8	3.0	27.9	11.2	7.4	2.2	16.4	10.1	7.0	1.7	10.1	8.2	6.3	1.0	4.2
	04	15.9	10.3	4.0	37.7	14.6	9.7	2.9	21.9	13.1	9.2	2.2	13.3	10.6	8.3	1.3	5.6
	06	23.3	15.0	5.8	21.1	21.3	14.2	4.3	12.5	19.3	13.5	3.2	7.8	15.6	12.1	2.0	3.4
	08	31.3	20.1	7.8	41.9	28.7	19.0	5.7	25.0	25.9	18.0	4.3	15.6	21.1	16.2	2.6	6.8
	10	38.3	24.5	9.6	16.4	35.2	23.3	7.0	9.4	32.0	22.1	5.3	5.8	25.9	19.9	3.2	2.4
	12	46.9	31.0	11.7	23.5	42.8	29.4	8.6	13.4	38.8	27.9	6.5	8.1	31.5	25.3	3.9	3.3
85°F EDB 74°F EWB	02	10.8	5.7	2.7	18.0	10.1	5.4	2.0	10.8	9.2	5.1	1.5	6.8	7.3	4.4	.9	2.7
	03	14.9	7.7	3.7	39.9	14.0	7.4	2.8	24.2	13.0	7.0	2.2	15.5	10.5	6.1	1.3	6.5
	04	19.6	10.1	4.9	53.8	18.3	9.7	3.7	32.6	17.0	9.2	2.8	20.8	13.6	8.0	1.7	8.5
	06	28.6	14.8	7.2	29.7	26.8	14.1	5.4	18.4	24.8	13.4	4.1	11.9	19.9	11.7	2.5	5.1
	08	38.3	19.8	9.6	58.7	36.0	19.0	7.2	36.5	33.4	18.0	5.6	23.8	27.0	15.7	3.4	10.3
	10	47.0	24.3	11.8	23.6	44.1	23.2	8.8	14.1	40.8	21.9	6.8	8.9	32.8	19.0	4.1	3.6
	12	57.9	30.6	14.5	34.2	54.0	29.1	10.8	20.3	49.7	27.5	8.3	12.6	39.6	24.0	5.0	5.0

TH = Total Cooling (MBH) SH = Sensible Cooling (MBH) GPM = Gallons Per Minute

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

Heating Capacities

NO. 1 STANDARD COIL
Heating Capacity = Base Rating x Initial Temperature Difference (Entering Water-Entering Air)

UNIT SIZE	FAN SPEED	BASE RATINGS - STANDARD COIL (3-ROW) WATER FLOW RATE - GPM													
	PD	.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0
02	High	124	151	162	167	174	177	179	180	181	*	*	*	*	*
	Low	108	126	133	136	140	142	143	144	145	*	*	*	*	*
	P.D.	.1	.5	.9	1.5	2.9	4.7	6.8	9.2	11.8	*	*	*	*	*
03	High	153	194	210	219	229	233	236	239	240	*	*	*	*	*
	Low	134	160	170	176	181	184	185	186	187	*	*	*	*	*
	P.D.	.2	.6	1.1	1.8	3.6	5.8	8.4	11.3	14.6	*	*	*	*	*
04	High	174	230	254	267	282	289	293	297	299	*	*	*	*	*
	Low	152	193	207	215	223	227	230	231	233	*	*	*	*	*
	P.D.	.2	.7	1.3	2.1	4.2	6.7	9.7	13.1	16.9	*	*	*	*	*
06	High	*	289	334	363	394	410	421	428	433	437	440	44.3	447	450
	Low	*	252	284	302	320	330	336	340	343	345	347	349	351	352
	P.D.	*	.2	.4	.6	1.2	1.9	2.8	3.8	4.9	6.1	7.4	8.8	12.0	15.4
08	High	*	344	413	455	503	529	546	557	566	572	577	581	587	592
	Low	*	306	354	381	411	426	436	442	447	450	453	455	459	461
	P.D.	*	.3	.5	.8	1.5	2.4	3.5	4.7	6.0	7.5	9.0	10.7	14.4	18.6
10	High	*	398	496	559	631	672	697	715	727	737	744	750	760	766
	Low	*	362	433	474	519	542	557	566	573	579	583	586	591	594
	P.D.	*	.3	.6	.9	1.8	2.9	4.2	5.7	7.3	9.1	11.0	13.1	17.7	22.7
12	High	*	415	523	594	679	727	758	779	795	807	816	824	835	843
	Low	*	378	458	506	559	587	605	617	625	632	637	641	647	651
	P.D.	*	.3	.6	.9	1.8	2.9	4.2	5.7	7.3	9.1	11.0	13.1	17.7	22.7

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

*** = Not recommended for operation at these water flow rates.**

NO. 2 HIGH CAPACITY COIL
Heating Capacity = Base Rating x Initial Temperature Difference (Entering Water-Entering Air)

UNIT SIZE	FAN SPEED	BASE RATINGS - HIGH CAPACITY COIL (3-ROW) WATER FLOW RATE - GPM													
	PD	.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0	12.0	14.0
02	High	140	168	179	184	190	193	195	*	*	*	*	*	*	*
	Low	117	133	139	142	145	147	148	*	*	*	*	*	*	*
	P.D.	.7	2.5	5.0	8.2	16.7	27.6	40.6	*	*	*	*	*	*	*
03	High	167	210	227	236	244	249	252	*	*	*	*	*	*	*
	Low	140	165	174	179	183	186	187	*	*	*	*	*	*	*
	P.D.	.9	3.1	6.3	10.4	21.0	34.7	51.2	*	*	*	*	*	*	*
04	High	187	250	276	290	304	311	316	*	*	*	*	*	*	*
	Low	161	199	213	220	228	231	234	*	*	*	*	*	*	*
	P.D.	.8	2.6	5.3	8.8	17.7	29.2	43.1	*	*	*	*	*	*	*
06	High	217	322	372	401	431	447	457	463	468	*	*	*	*	*
	Low	197	269	299	315	332	340	345	348	351	*	*	*	*	*
	P.D.	.3	.8	1.7	2.7	5.3	8.6	12.6	17.1	22.1	*	*	*	*	*
08	High	234	374	451	496	547	573	590	601	609	*	*	*	*	*
	Low	218	321	369	395	423	437	445	451	455	*	*	*	*	*
	P.D.	.3	1.0	2.1	3.3	6.5	10.6	15.3	20.7	26.8	*	*	*	*	*
10	High	*	418	531	604	691	738	768	788	802	813	822	829	839	847
	Low	*	383	465	512	564	590	606	616	624	629	633	637	642	646
	P.D.	*	.2	.5	.8	1.6	2.7	3.9	5.5	7.2	9.1	11.3	13.6	18.8	24.8
12	High	*	443	577	669	784	850	892	921	942	959	972	982	998	1009
	Low	*	405	490	535	590	622	645	665	672	690	695	700	708	710
	P.D.	*	.2	.5	.8	1.6	2.7	3.9	5.5	7.2	9.1	11.3	13.6	18.8	24.8

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

*** = Not recommended for operation at these water flow rates.**

Heating Capacities

1-ROW AUXILIARY HEATING COIL Heating Capacity = Base Rating x Initial Temperature Difference (Entering Water-Entering Air)									
UNIT SIZE	FAN SPEED P.D.	BASE RATINGS - AUXILIARY HEATING COIL (1-ROW) WATER FLOW RATE - GPM							
		.5	1.0	1.5	2.0	3.0	4.0	5.0	6.0
02	High	76	89	94	97	100	102	103	104
	Low	70	80	85	87	89	91	92	92
	P.D.	.3	.9	1.7	2.8	5.6	9.2	13.5	18.5
03	High	99	119	128	133	138	141	143	144
	Low	89	105	111	114	118	120	122	123
	P.D.	.3	1.0	2.1	3.4	6.9	11.4	16.8	23.1
04	High	118	145	158	164	172	176	178	180
	Low	106	127	135	140	145	148	150	151
	P.D.	.3	1.2	2.3	3.9	7.8	12.9	18.9	26.0
06	High	*	177	201	216	234	244	250	255
	Low	*	159	178	189	202	209	214	217
	P.D.	*	.1	.2	.4	.7	1.1	1.6	2.2
08	High	*	220	254	276	302.	316	326	333
	Low	*	198	225	241	260	270	277	282
	P.D.	*	.2	.3	.5	.9	1.4	2.0	2.7
10	High	*	270	319	350	387	409	423	433
	Low	*	247	286	309	337	352	362	369
	P.D.	*	.2	.4	.6	1.1	1.8	2.6	3.6
12	High	*	288	344	380	424	450	468	480
	Low	*	255	293	320	350	365	377	378
	P.D.	*	.2	.4	.6	1.1	1.8	2.6	3.6

PD = Coil Pressure Drop (Feet of Water). Does not include valves.

*** = Not recommended for operation at these water flow rates.**

STEAM HEATING CAPACITIES MBH at 2 PSI Steam - 70°F Entering Air							
UNIT SIZE	02	03	04	06	08	10	12
CAPACITY	15.4	21.3	26.6	38.6	50.9	66.7	74.5

CORRECTION FACTORS FOR OTHER STEAM PRESSURES AND ENTERING AIR TEMPERATURES										
STEAM PRESSURE PSIG	SATURATED STEAM TEMPERATURE	STEAM LATENT HEAT BTU PER POUND	ENTERING AIR							
			40	45	50	55	60	65	70	75
2	218.5	966.2	1.21	1.17	1.14	1.10	1.07	1.04	1.00	.97
5	227.1	960.6	1.26	1.23	1.20	1.16	1.13	1.10	1.06	1.03
10	239.4	952.6	1.35	1.31	1.28	1.25	1.21	1.18	1.14	1.11
15	249.7	945.7	1.41	1.38	1.35	1.31	1.28	1.25	1.21	1.18

To obtain capacities at conditions other than 2 PSI steam, 70°F entering air, multiply MBH from the Steam Heating Capacities table by appropriate correction factor.

EXAMPLE:
Determine capacity of size 04 Unitaire at 5 PSI steam, 70°F entering air.

SOLUTION:
Capacity of size 04 at 2 PSI steam, 70°F entering air is 26.6 MBH.
Correction factor for 5 PSI steam, 70°F entering air from the Correction Factor Table is 1.06.

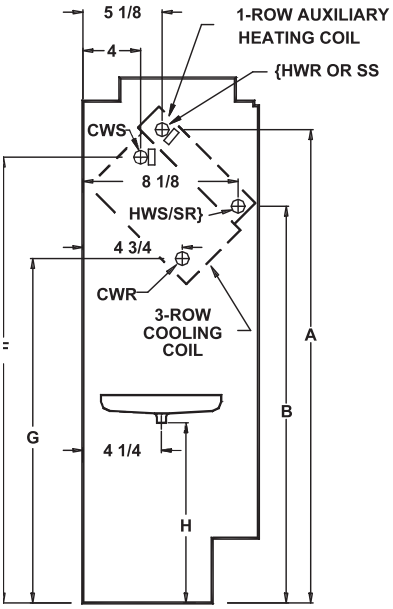
26.6 x 1.06 = 28.2 MBH at 5 PSI steam, 70°F entering air.

Electric Heating Capacities

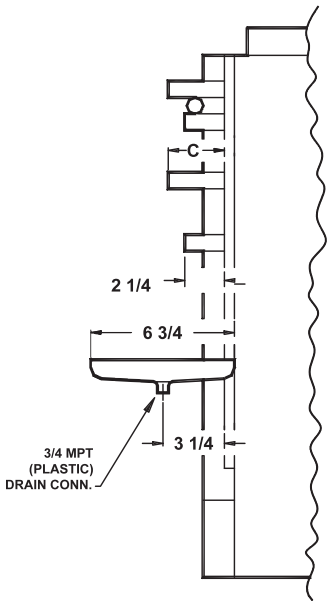
UNIT SIZE	ELECTRICAL SERVICE (amp value includes motor current)							
	120/60/1				208/60/1			
	NO. OF ELEMENTS	KW	MBH	AMPS	NO. OF ELEMENTS	KW	MBH	AMPS
02	1	1.0	3.41	8.8	1	1.0	3.41	5.2
	1	2.0	6.82	17.2	—	—	—	—
03	1	1.0	3.41	8.8	1	1.0	3.41	5.2
	1	2.0	6.82	17.2	—	—	—	—
	—	—	—	—	1	3.0	10.24	14.8
04	1	1.0	3.41	8.8	1	1.0	3.41	5.2
	2	2.0	6.82	17.2	2	2.0	6.82	10.2
	—	—	—	—	—	—	—	—
06	1	1.0	3.41	8.8	1	1.0	3.41	5.2
	2	2.0	6.82	17.2	2	2.0	6.82	10.2
	—	—	—	—	2	6.0	20.47	29.4
08	1	1.0	3.41	8.8	1	1.0	3.41	5.2
	2	2.0	6.82	17.2	2	2.0	6.82	10.2
	—	—	—	—	3	3.0	10.24	15.4
	—	—	—	—	3	9.0	30.71	44.3
10	1	1.0	3.41	8.8	1	1.0	3.41	5.2
	2	2.0	6.82	17.2	2	2.0	6.82	10.2
	—	—	—	—	4	4.0	13.65	20.4

UNIT SIZE	ELECTRICAL SERVICE (amp value includes motor current)							
	240/60/1				277/60/1			
	NO OF ELEMENTS	KW	MBH	AMPS	NO OF ELEMENTS	KW	MBH	AMPS
02	1	1.0	3.41	4.7	1	1.0	3.41	4.0
	1	2.0	6.82	8.8	1	2.0	6.82	7.6
03	1	1.0	3.41	4.7	1	1.0	3.41	4.0
	1	2.0	6.82	8.8	1	2.0	6.82	7.6
04	1	1.0	3.41	4.7	1	1.0	3.41	4.0
	2	2.0	6.82	9.0	2	2.0	6.82	7.6
	2	4.0	13.65	17.4	2	4.0	13.65	14.8
06	1	1.0	3.41	4.7	1	1.0	3.41	4.0
	2	2.0	6.82	9.0	2	2.0	6.82	7.6
	2	4.0	13.65	17.4	2	4.0	13.65	14.8
08	1	1.0	3.41	4.7	1	1.0	3.41	4.0
	2	2.0	6.82	9.0	2	2.0	6.82	7.6
	3	3.0	10.24	13.6	3	3.0	10.24	11.6
	2	4.0	13.65	17.4	2	4.0	13.65	14.8
	3	6.0	20.47	26.1	3	6.0	20.47	22.5
10	1	1.0	3.41	4.7	1	1.0	3.41	4.0
	2	2.0	6.82	9.0	2	2.0	6.82	7.6
	4	4.0	13.65	18.0	4	4.0	13.65	19.0
	4	8.0	27.30	34.6	4	8.0	27.30	29.7

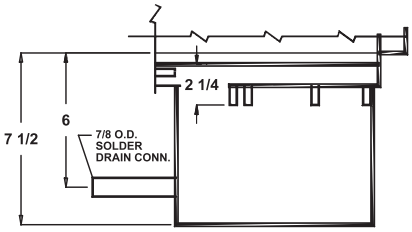
1-Row Auxiliary Heating Coil



Left Hand View

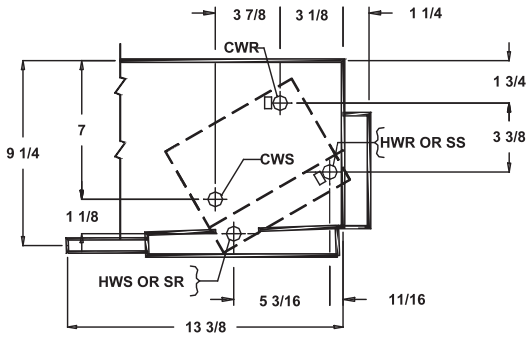


Front View



Top View

Coil connecions are 5/8" O.D. sweat.



Left Hand View

VERTICAL MODEL DIMENSIONS							
UNIT SIZE	MODEL	DIMENSIONS					
		A	B	C	F	G	H
02 03 04	FETF FEFF FDTF SETF FCTF	23	17-13/16	2	21-7/8	15-3/8	8-3/8
06 Thru 12		22-7/8	17-15/16	3	21-7/8	15-3/8	8-3/8
02 03 04	WETB WEFB	19-1/2	14-5/16	2	18-3/8	11-7/8	4-7/8
06 Thru 12		19-3/8	14-7/16	3	18-3/8	11-7/8	4-7/8
02 03 04	FRFF WRFF FSFF WSFF	25-1/2	20-5/16	2	24-3/8	17-7/8	10-7/8
06 Thru 12		25-3/8	25-3/8	3	24-3/8	17-7/8	10-7/8

Coil Connections are 5/8" O.D. Sweat
Connection size will vary with Valve Package

LEGEND

CWS - CWR: Chilled Water Supply and Chilled Water Return
HWS - HWR: Hot Water Supply and Hot Water Return
SS - SR: Steam Supply and Steam Return

SPECIAL NOTES

VERTICAL MODELS
(Except RETF, REFF, LETF, LEFF)

1-row auxiliary steam or water coil piping may be located on the same side or opposite the cooling coil piping. If opposite the cooling coil is selected, the fan speed control must be located either on the cooling coil side or located remote from the unit.

VERTICAL MODELS
(RETF, REFF, LETF, LEFF)

Due to height limitations, the 1-row auxiliary steam or water coil is not available in these units.

HORIZONTAL MODELS (Except CRFR, CRFB)

1-row auxiliary water coil piping may be located on the same side or opposite the cooling coil piping. 1-row auxiliary steam coil piping **MUST ALWAYS** be opposite the cooling coil piping. Steam piping requires careful consideration of clearances on each model type. Models with external cabinet require the installer to provide openings for auxiliary coil connections.

HORIZONTAL MODELS (CRFR, CRFB)

1-row auxiliary water connections for Models CRFR and CRFB are **ALWAYS** located on the same end as the cooling coil piping.

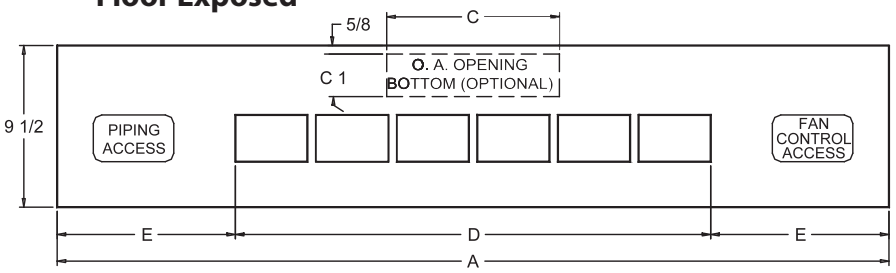
1-row auxiliary steam connections for models CRFR and CRFB must be opposite the cooling coil piping. Space for installation of steam pipe is limited. Steam piping package requires external location. CONSULT FACTORY.

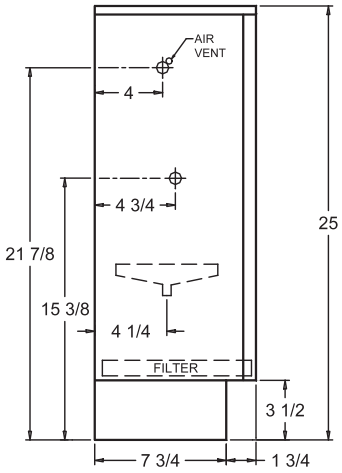
CONTROL PACKAGES

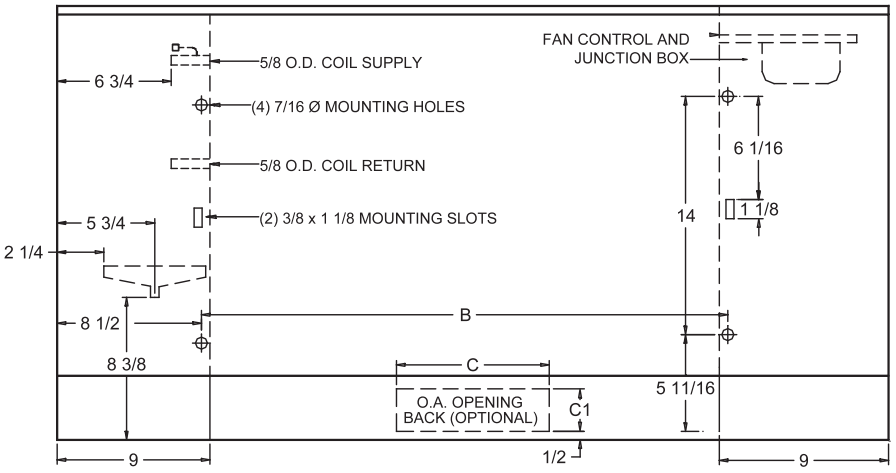
Control packages require Engineering investigation for confirmation of adequate space allowance.

Dimensions are approximate and subject to change without notice. Certified drawings for roughing in will be furnished upon request.

FETF & FEFF
Floor Exposed







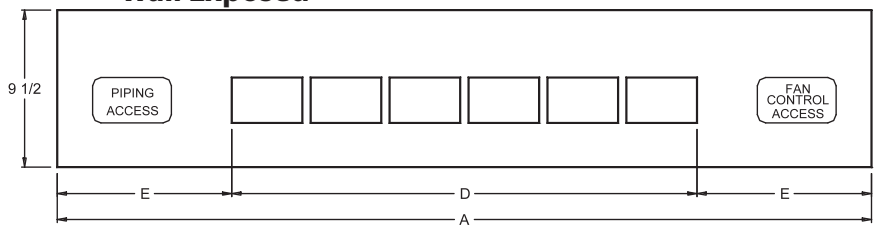
(Standard End Pocket Dimensions)

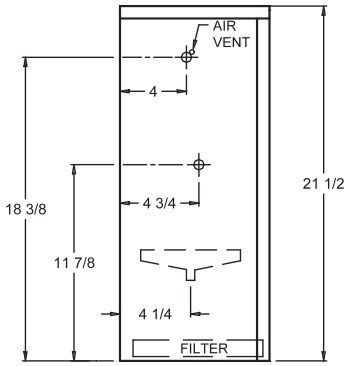
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet.
Electric junction box location may vary depending on control requirements. Contact Factory.
Model FETF is shown. Model FEFF is furnished with air outlet, piping access and fan control access located in the front panel.

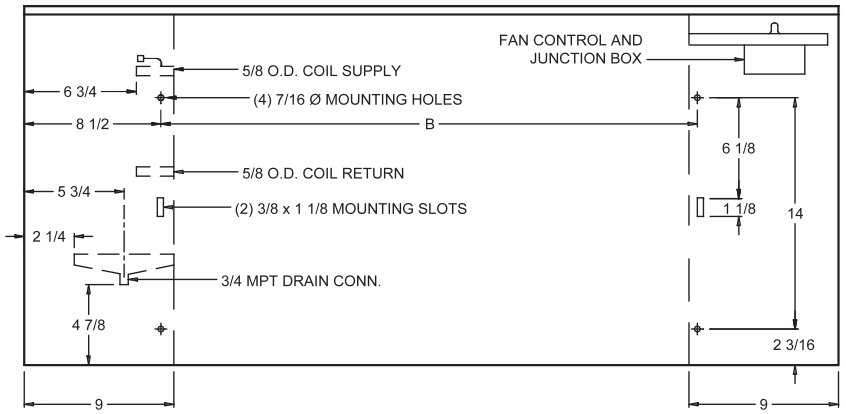
UNIT SIZE	DIMENSIONS							
	A	B	25% OA INTAKE		100% OA INTAKE		D	E
			C	C1	C	C1		
02	39	22	9	2-1/2	21	3	19-3/4	9-5/8
03	45	28	9	2-1/2	27	3	23-3/4	10-5/8
04	49	32	15	2-1/2	31	3	27-3/4	10-5/8
06	63	46	15	2-1/2	45	3	43-3/4	9-5/8
08	75	58	27	2-1/2	—	—	55-3/4	9-5/8
10/12	95	78	27	2-1/2	—	—	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

WETB & WEFB
Wall Exposed







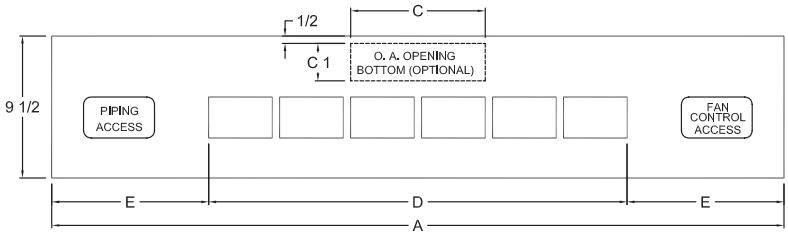
(Standard End Pocket Dimensions)

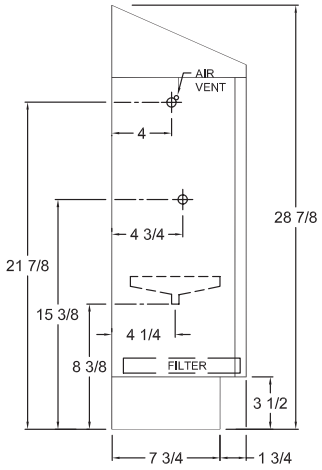
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet.
Electric junction box location may vary depending on control requirements. Contact Factory.
Model WETB is shown. Model WEFB is furnished with air outlet, piping access, and fan control access located in the front panel.

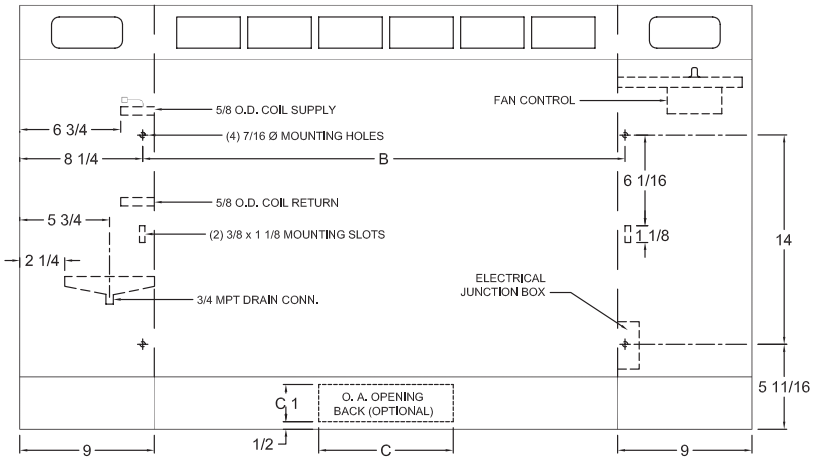
UNIT SIZE	DIMENSIONS			
	A	B	D	E
02	39	22	19-3/4	9-5/8
03	45	28	23-3/4	10-5/8
04	49	32	27-3/4	10-5/8
06	63	46	43-3/4	9-5/8
08	75	58	55-3/4	9-5/8
10/12	95	78	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

SETF
Sloped Top Exposed







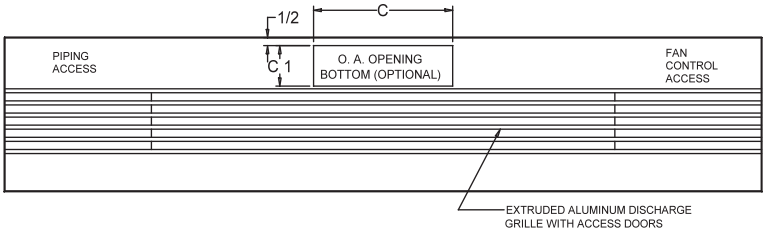
(Standard End Pocket Dimensions)

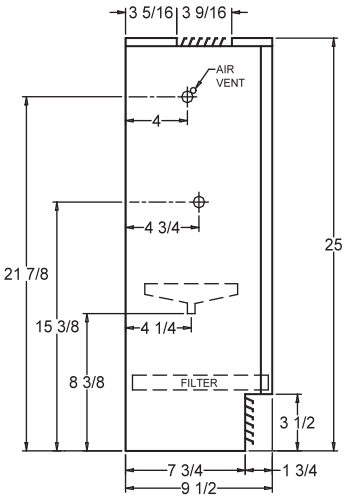
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet.
Electric junction box location may vary depending on control requirements. Contact Factory.

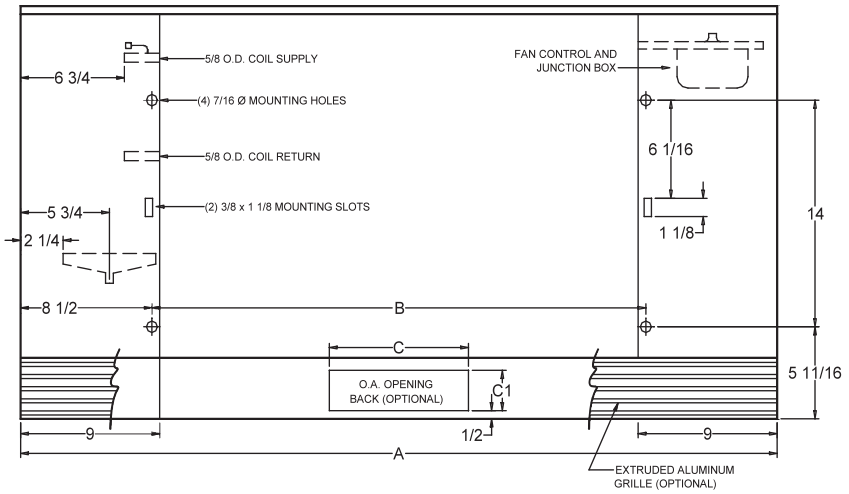
UNIT SIZE	DIMENSIONS							
	A	B	25% OA INTAKE		100% OA INTAKE		D	E
			C	C1	C	C1		
02	39	22	9	2-1/2	21	3	19-3/4	9-5/8
03	45	28	9	2-1/2	27	3	23-3/4	10-5/8
04	49	32	15	2-1/2	31	3	27-3/4	10-5/8
06	63	46	15	2-1/2	45	3	43-3/4	9-5/8
08	75	58	27	2-1/2	—	—	55-3/4	9-5/8
10/12	95	78	27	2-1/2	—	—	75-3/4	9-5/8

End pocket modifications limited to next size Unit A dimension.
Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

FDTF
Floor Deluxe







(Standard End Pocket Dimensions)

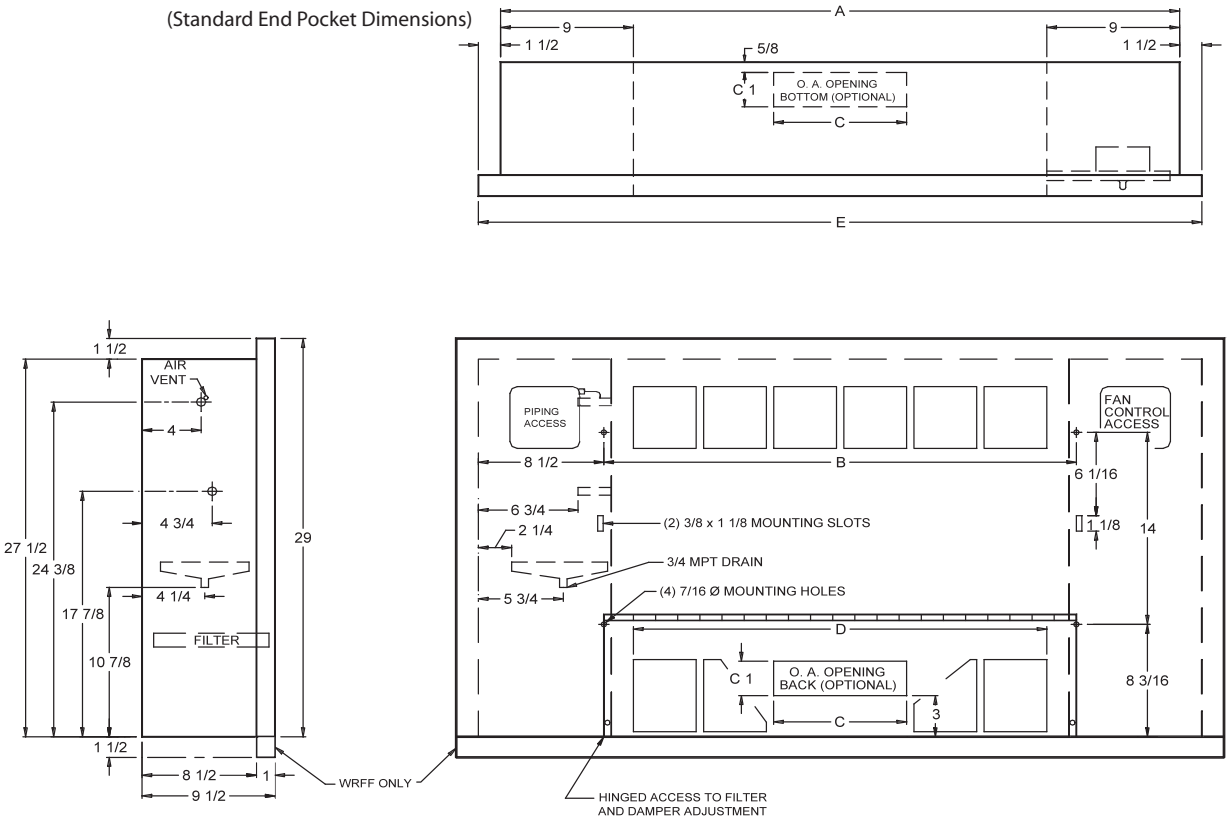
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Electric junction box location may vary depending on control requirements. Contact Factory.

UNIT SIZE	DIMENSIONS							
	A	B	25% OA INTAKE		100% OA INTAKE		D	E
			C	C1	C	C1		
02	39	22	9	2-1/2	21	3	19-3/4	9-5/8
03	45	28	9	2-1/2	27	3	23-3/4	10-5/8
04	49	32	15	2-1/2	31	3	27-3/4	10-5/8
06	63	46	15	2-1/2	45	3	43-3/4	9-5/8
08	75	58	27	2-1/2	—	—	55-3/4	9-5/8
10/12	95	78	27	2-1/2	—	—	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

FRFF & WRFF
Floor & Wall Recessed

(Standard End Pocket Dimensions)



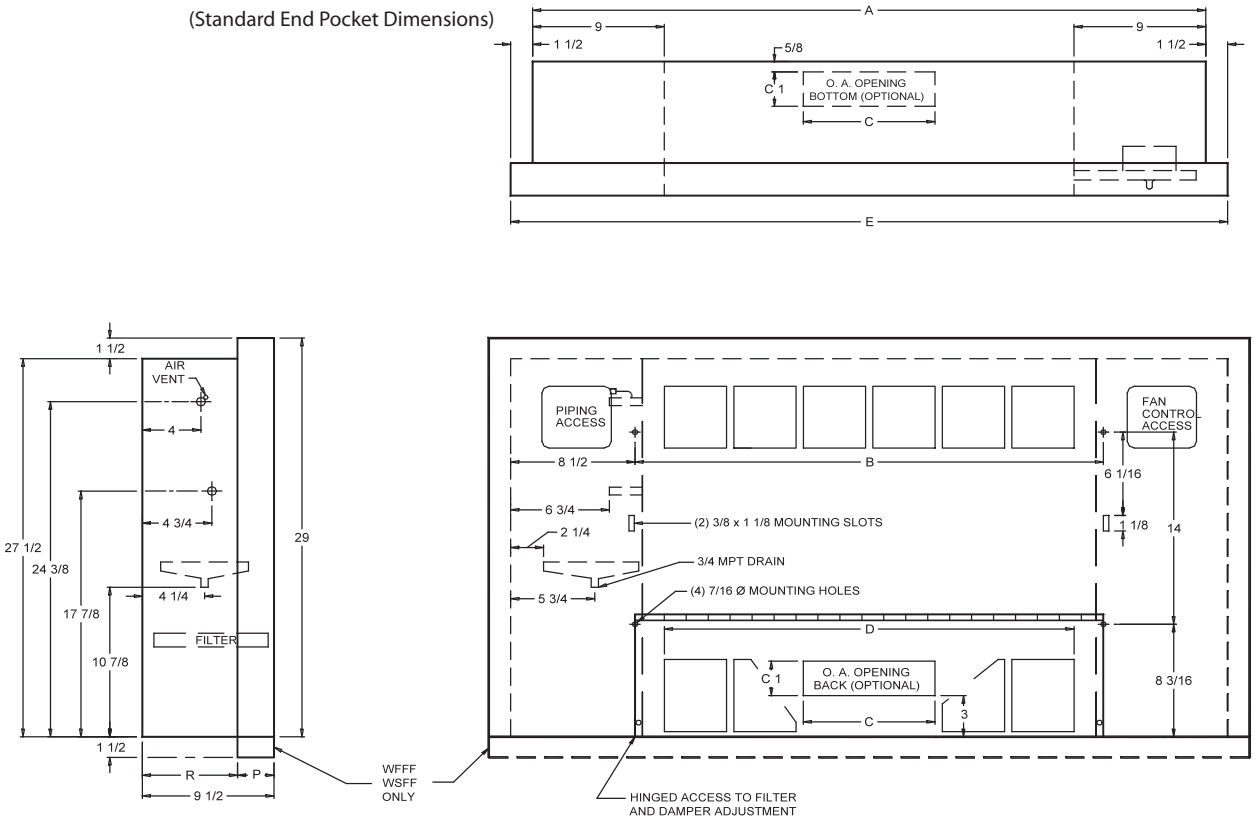
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Electric junction box location may vary depending on control requirements. Contact Factory.

UNIT SIZE	DIMENSIONS					
	A	B	25% OA INTAKE		D	E
			C	C1		
02	39	22	9	2-1/2	19-3/4	42
03	45	28	9	2-1/2	23-3/4	48
04	49	32	15	2-1/2	27-3/4	52
06	63	46	15	2-1/2	43-3/4	66
08	75	58	27	2-1/2	55-3/4	78
10/12	95	78	27	2-1/2	75-3/4	98

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

FTFF, FFFF, FSFF, WTFF, WFFF & WSFF
Floor & Wall Semi-Recessed

(Standard End Pocket Dimensions)

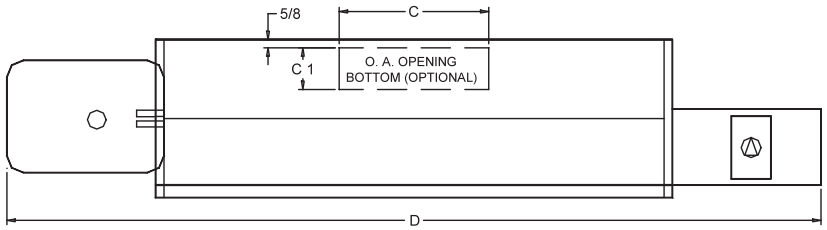


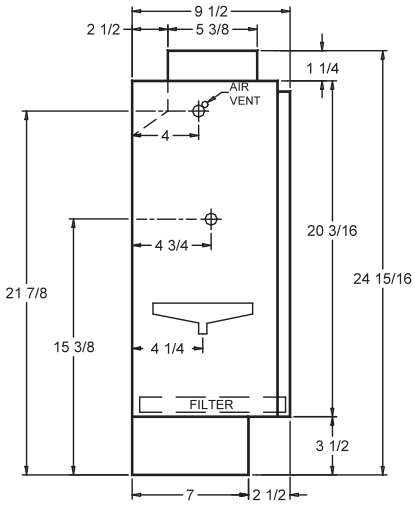
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Electric junction box location may vary depending on control requirements. Contact Factory.

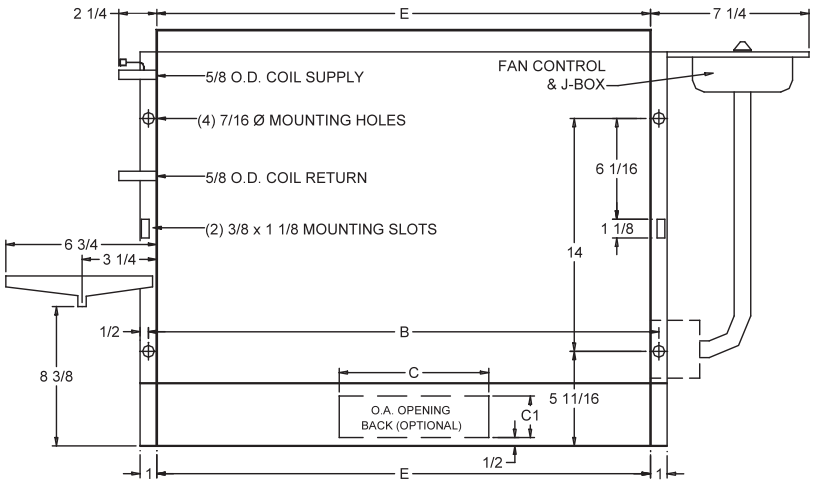
UNIT SIZE	DIMENSIONS											
	A	B	25% OA INTAKE		D	E	FTFF WTFF		FFFF WFFF		FSFF WSFF	
			C	C1			P	R	P	R	P	R
02	39	22	9	2-1/2	19-3/4	42	6-1/2	3	4-1/2	5	2-1/2	7
03	45	28	9	2-1/2	23-3/4	48	6-1/2	3	4-1/2	5	2-1/2	7
04	49	32	15	2-1/2	27-3/4	52	6-1/2	3	4-1/2	5	2-1/2	7
06	63	46	15	2-1/2	43-3/4	66	6-1/2	3	4-1/2	5	2-1/2	7
08	75	58	27	2-1/2	55-3/4	78	6-1/2	3	4-1/2	5	2-1/2	7
10/12	95	78	27	2-1/2	75-3/4	98	6-1/2	3	4-1/2	5	2-1/2	7

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

FCTF
Floor Concealed





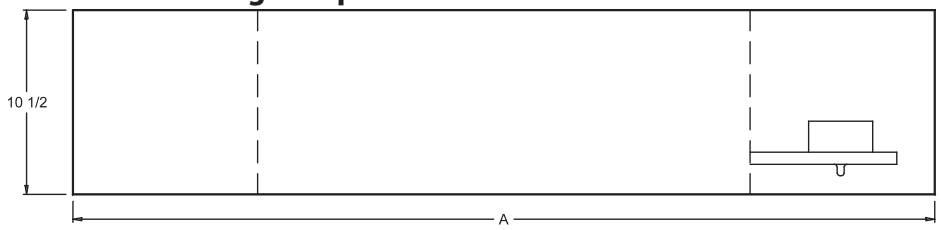


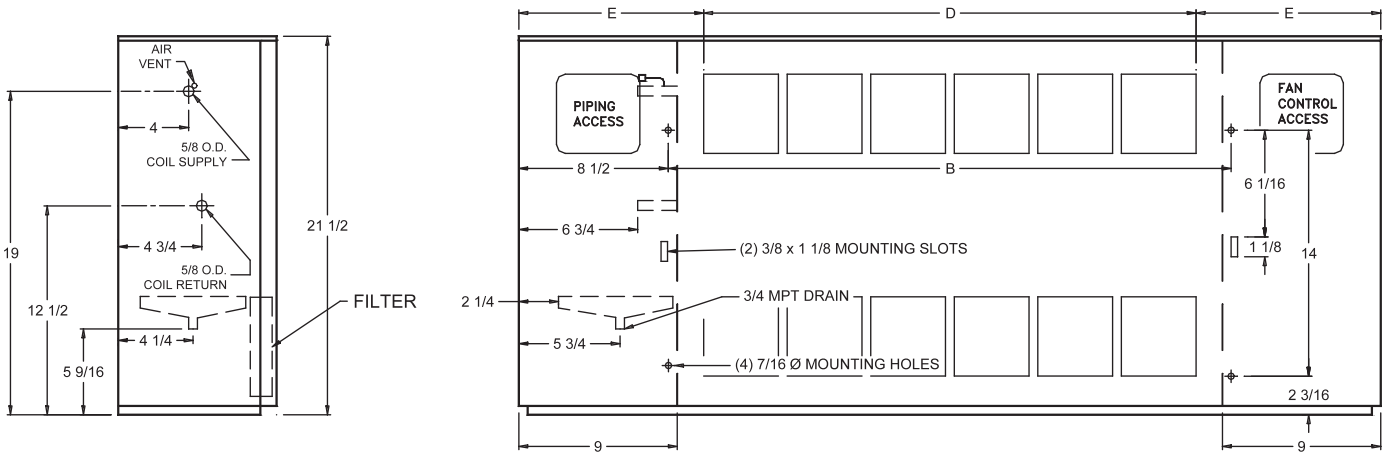
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Electric junction box location may vary depending on control requirements. Contact Factory.

UNIT SIZE	DIMENSIONS				
	B	25% OA INTAKE		D	E
		C	C1		
02	22	9	2-1/2	35	21
03	28	9	2-1/2	41	27
04	32	15	2-1/2	45	31
06	46	15	2-1/2	59	45
08	58	27	2-1/2	71	57
10/12	78	27	2-1/2	91	77

Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

RETF & REFF
Reduced Height Exposed





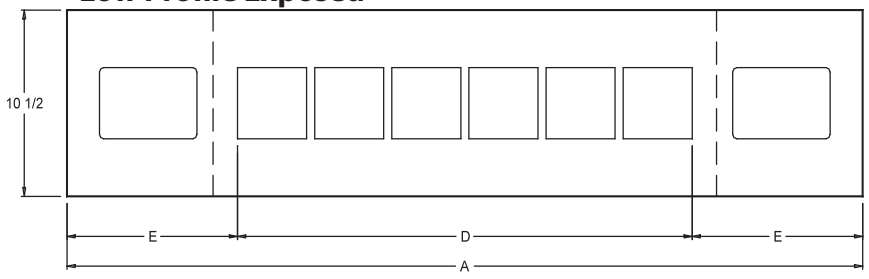
(Standard End Pocket Dimensions)

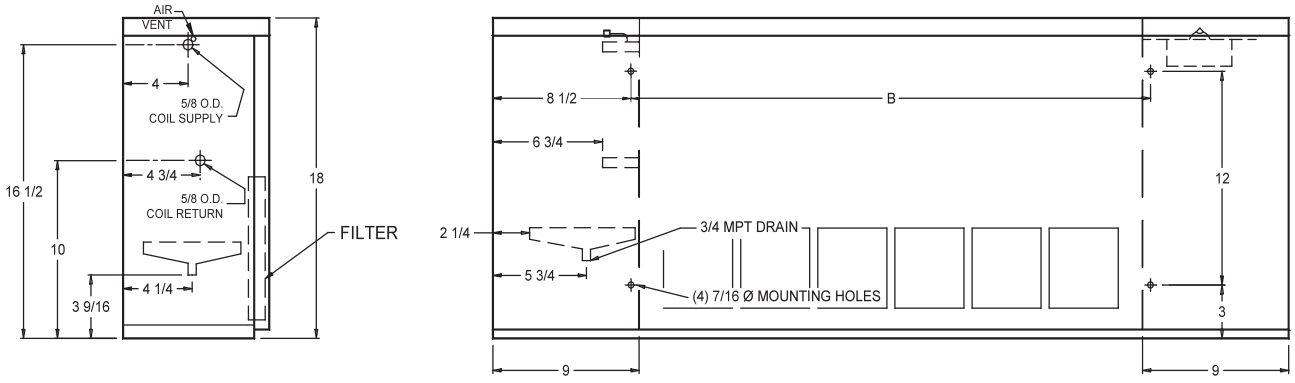
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet.
Electric junction box location may vary depending on control requirements. Contact Factory.
Model RETF is shown. Model REFF is furnished with air outlet, piping access and fan control access located in the front panel.

UNIT SIZE	DIMENSIONS			
	A	B	D	E
02	39	22	19-3/4	9-5/8
03	45	28	23-3/4	10-5/8
04	49	32	27-3/4	10-5/8
06	63	46	43-3/4	9-5/8
08	75	58	55-3/4	9-5/8
10/12	95	78	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

LETF & LEFF
Low Profile Exposed





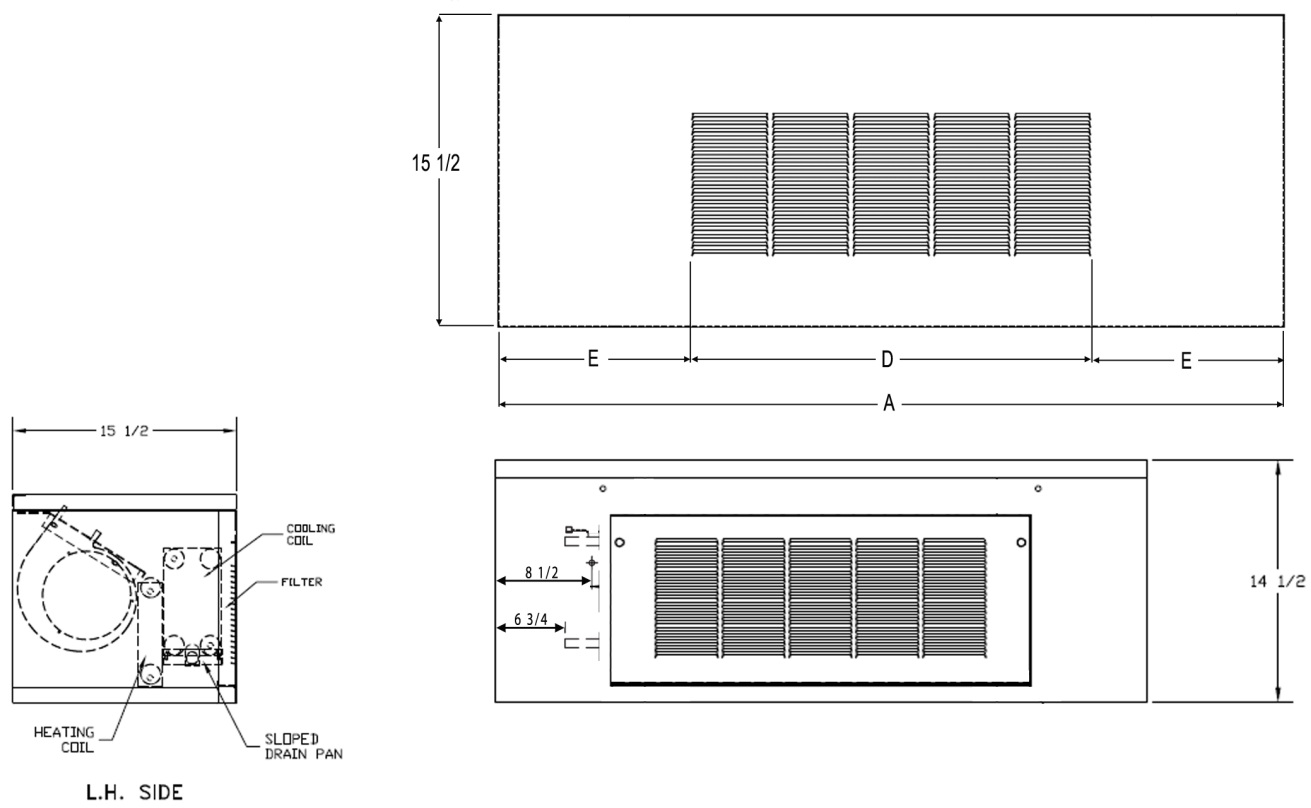
(Standard End Pocket Dimensions)

Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet.
Electric junction box location may vary depending on control requirements. Contact Factory.
Model LETF is shown. Model LEFF is furnished with air outlet, piping access and fan control access doors located in the front panel. Discharge grilles not available. Not available with electric heat.

UNIT SIZE	DIMENSIONS			
	A	B	D	E
02	39	22	19-3/4	9-5/8
03	45	28	23-3/4	10-5/8
04	49	32	27-3/4	10-5/8
06	63	46	43-3/4	9-5/8
08	75	58	55-3/4	9-5/8
10/12	95	78	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

LWTF
Windowsill

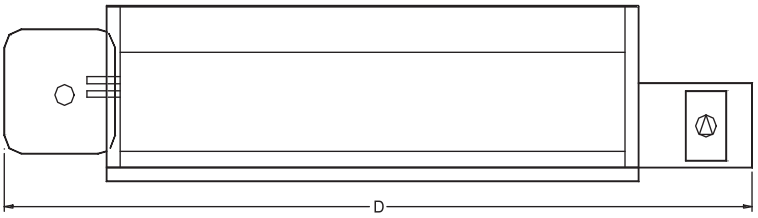


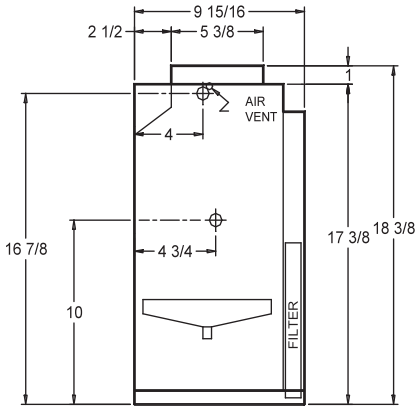
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Electric junction box location may vary depending upon control requirements. Contact Factory.

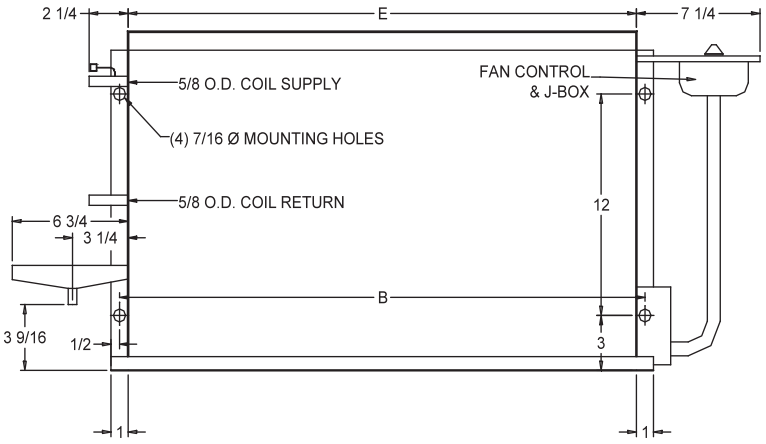
UNIT SIZE	DIMENSIONS			
	A	B	D	E
02	39	22	19-3/4	9-5/8
03	45	28	25-3/4	10-5/8
04	49	32	29-3/4	10-5/8
06	63	46	43-3/4	9-5/8
08	75	58	55-3/4	9-5/8
10/12	95	78	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

LCTF
Low Profile Concealed





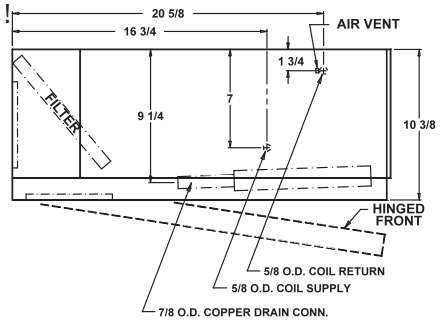


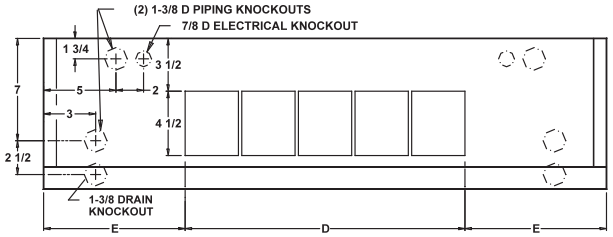
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Electric junction box location may vary depending on control requirements. Contact Factory. Not available with electric heat.

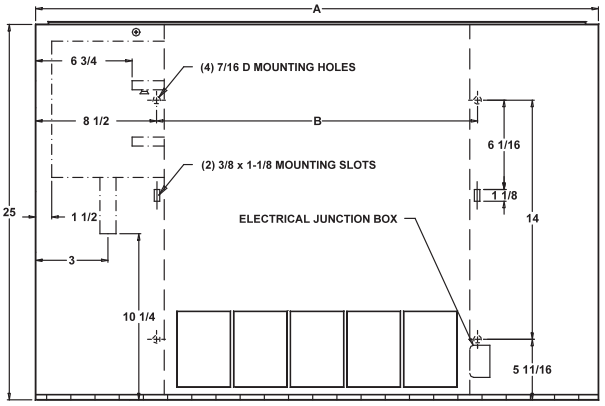
UNIT SIZE	DIMENSIONS		
	B	D	E
02	22	35	21
03	28	41	27
04	32	45	31
06	46	59	45
08	58	71	57
10/12	78	91	77

Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

CEFR & CEFB
Ceiling Exposed





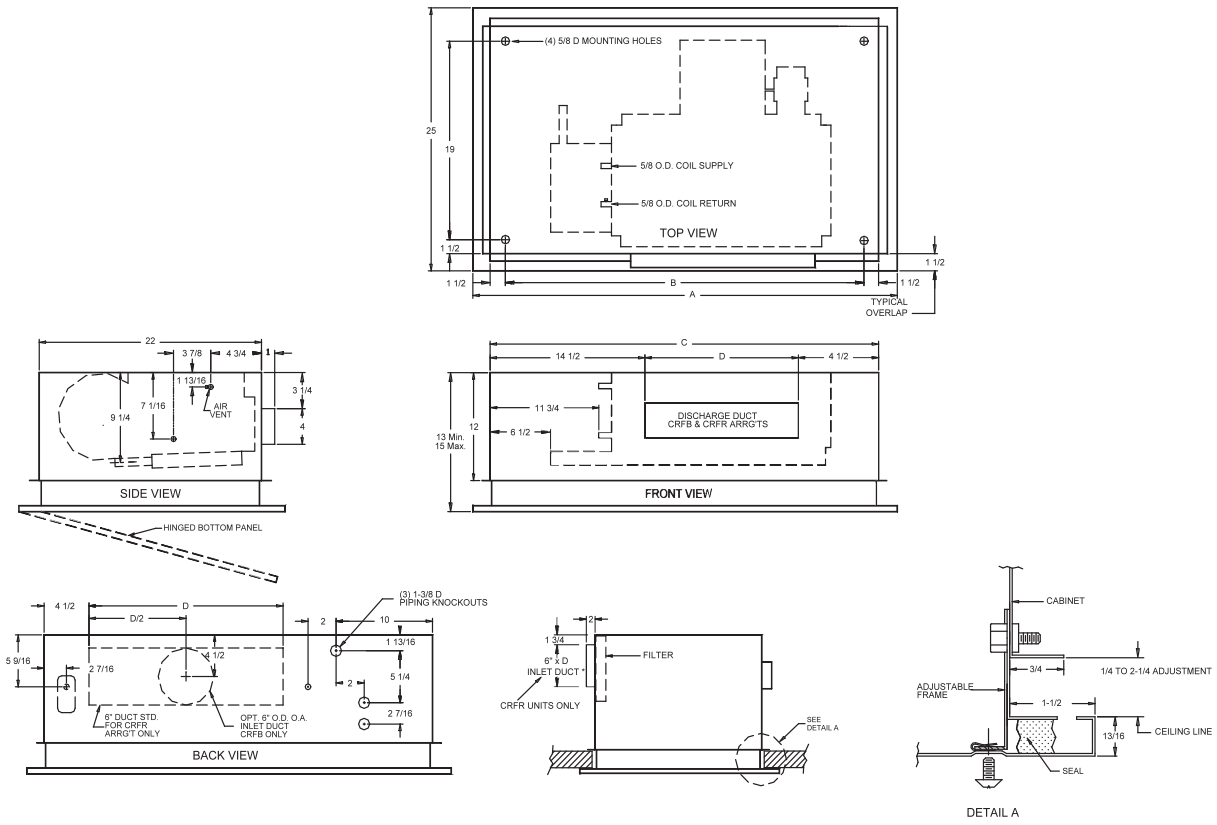


Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Standard location of the electrical junction box is opposite the side of piping. The junction box location will vary when factory mounted controls are required. Contact Factory.

UNIT SIZE	DIMENSIONS			
	A	B	D	E
02	39	22	19-3/4	9-5/8
03	45	28	23-3/4	10-5/8
04	49	32	27-3/4	10-5/8
06	63	46	43-3/4	9-5/8
08	75	58	55-3/4	9-5/8
10/12	95	78	75-3/4	9-5/8

Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

CRFR & CRFB
Ceiling Recessed



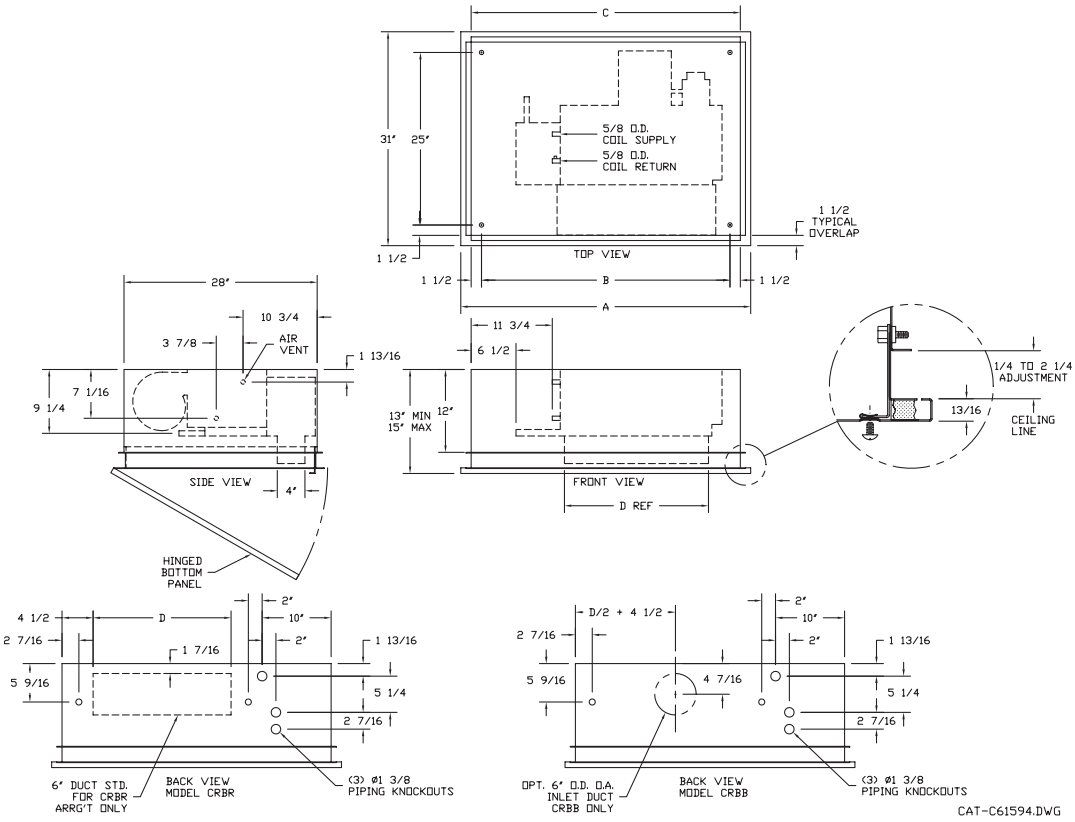
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Standard location of the electrical junction box is on the same side as the piping.

UNIT SIZE	DIMENSIONS			
	A*	B	C	D
02	42	36	39	20
03	48	42	45	26
04	52	46	49	30
06	66	60	63	44
08	78	72	75	56
10/12	98	92	95	76

*** = When units are furnished with electric heat, add 4" to "A" dimension**

Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

CRBR & CRBB
Ceiling Recessed, Bottom Discharge



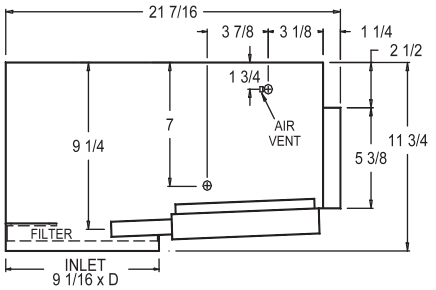
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Standard location of the electrical junction box is on the same side as the piping. Not available with electric heat.

UNIT SIZE	DIMENSIONS			
	A*	B	C	D
02	42	36	39	20
03	48	42	45	26
04	52	46	49	30
06	66	60	63	44
08	78	72	75	56
10/12	98	92	95	76

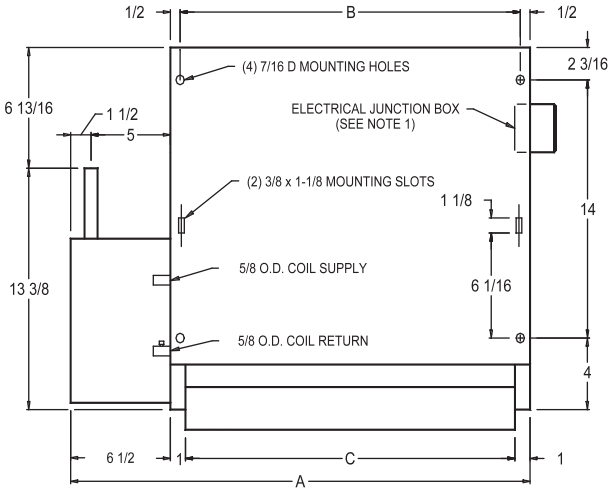
*** = When units are furnished with electric heat, add 4" to "A" dimension**

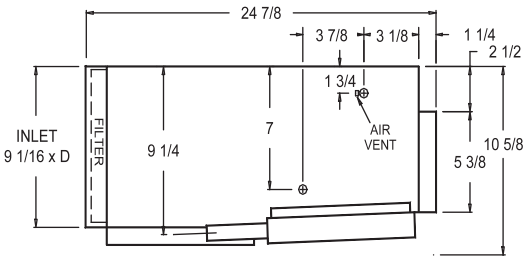
Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

CPFR & CPFB
Ceiling Concealed with Plenum

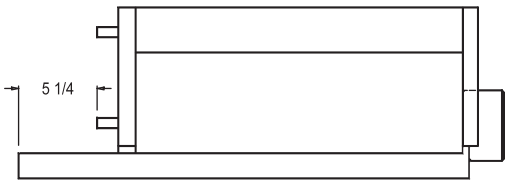


MODEL CPFB (BOTTOM INLET)





MODEL CPFR (REAR INLET)

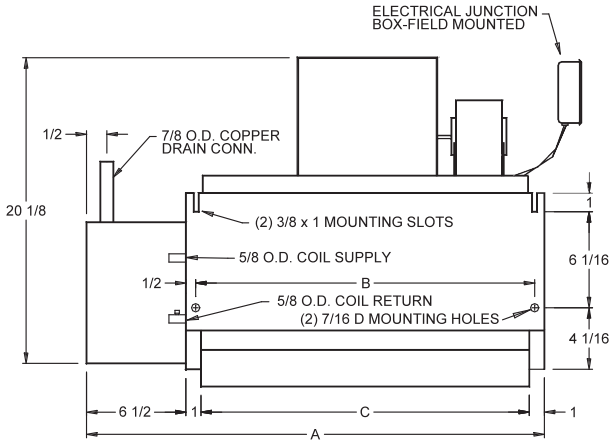


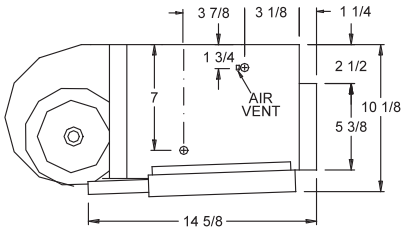
Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Standard location of the electrical junction box is on the side opposite the piping. The junction box location will vary when factory mounted controls are required. Contact Factory.

UNIT SIZE	DIMENSIONS			
	A	B	C	D
02	29-1/2	22	21	21-3/8
03	35-1/2	28	27	27-3/8
04	39-1/2	32	31	31-3/8
06	53-1/2	46	45	45-3/8
08	65-1/2	58	57	57-3/8
10/12	85-1/2	78	77	77-3/8

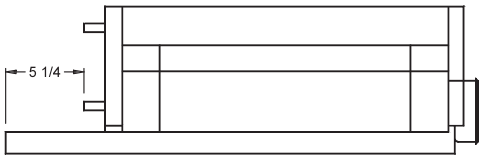
Dimensions are approximate and are subject to change without notice.
Certified drawings for roughing in will be furnished upon request.

CCFR
Ceiling Concealed





LH piping connecctions shown. RH opposite.
Piping hand determined when facing air outlet.

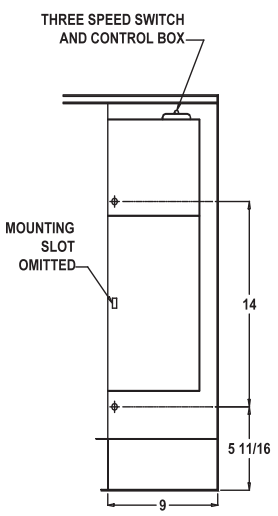


Left hand piping connections shown, right hand opposite. Piping hand determined when facing air outlet. Standard location of the electrical junction box is on the side opposite the piping. The junction box location will vary when factory mounted controls are required. Contact Factory.

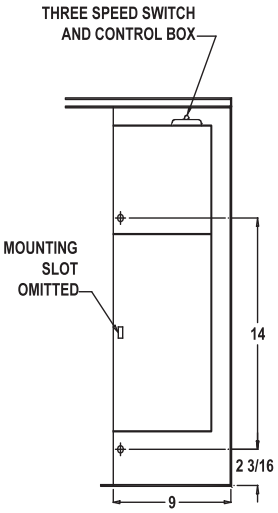
UNIT SIZE	DIMENSIONS		
	A	B	C
02	29-1/2	22	21
03	35-1/2	28	27
04	39-1/2	32	31
06	53-1/2	46	45
08	65-1/2	58	57
10/12	85-1/2	78	77

Dimensions are approximate and are subject to change without notice. Certified drawings for roughing in will be furnished upon request.

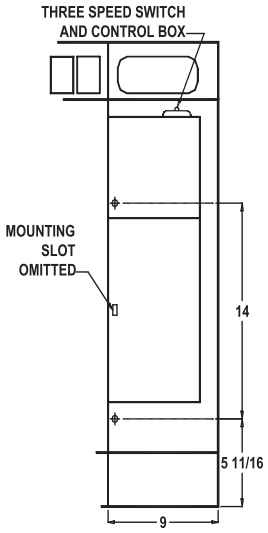
ELECTRIC HEAT CONTROL BOX DETAILS
(RIGHT HAND BOX SHOWN, LEFT HAND OPPOSITE)



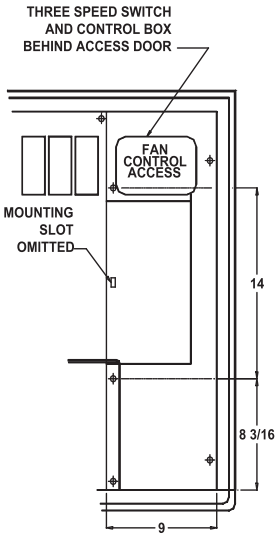
Models
FETF, FEFF, FDTF



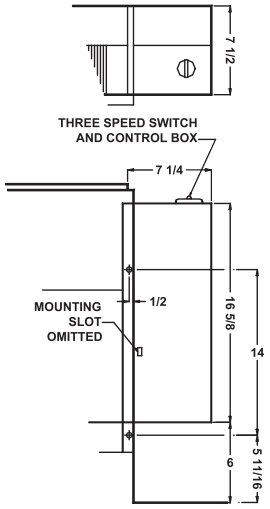
Models
WETB, WEFB



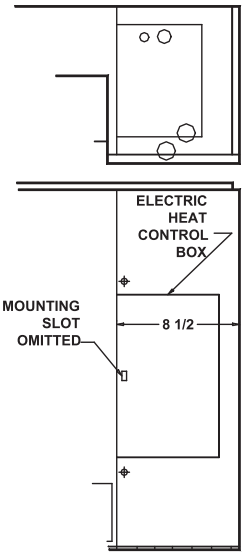
Model
SETF



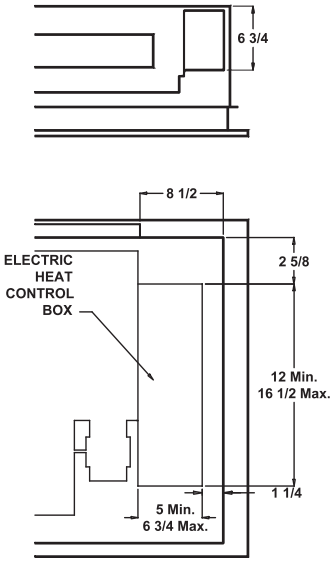
Models
FRFF, WRFF, FFFF
WFFF, FSFF, WSFF



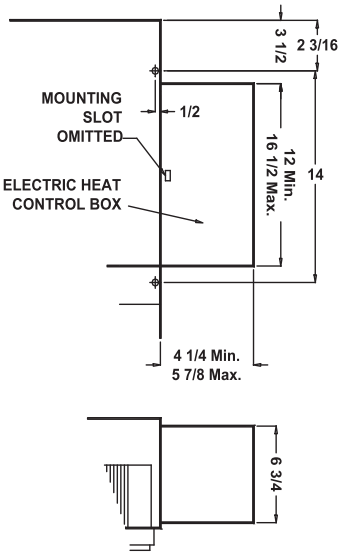
Model
FCTF



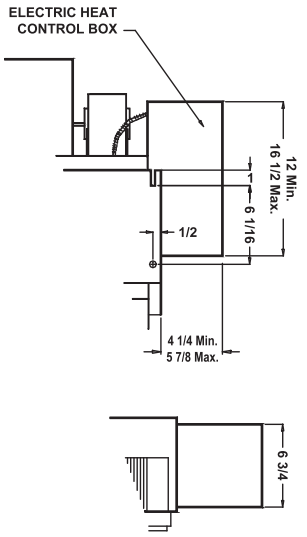
Models
CEFR, CEFB



Models
CRFB, CRFR



Models
CPFR, CPFB



Model
CCFR

Complete piping and dimensional details are given on pages 48-63.

SHIPPING WEIGHTS
Base Units / No Options

UNIT SIZE	APPROXIMATE SHIPPING WEIGHTS - LBS											
	MODEL											
	FETF FEFF FDTF	WETB WEFB	SETF	FRFF WRFF FTFF WTFF FFFF WFFF FSFF WSFF	FCTF	RETF REFF	LETF LEFF	CEFR CEFB	CRFB CRFR	CPFR CPFB	CCFR	CRBR CRBB
02	70	65	75	70	65	80	80	80	90	65	60	115
03	90	85	95	90	80	100	100	100	100	80	70	135
04	105	100	115	105	105	115	115	102	105	110	92	150
06	125	120	135	125	112	135	135	150	130	112	100	170
08	170	165	185	170	152	180	180	180	195	152	135	215
10/12	210	205	230	210	190	220	220	220	210	190	170	305

Room fan coils shall have the capacities shown on the plans. Capacities shall be certified under Industry Room Fan Coil Air Conditioner Certification Program in accordance with AHRI STANDARD 440-89

BASIC UNIT—The basic unit shall be constructed of galvanized steel and insulated to meet the AHRI Fan Coil Industry test standard for insulation efficiency. The coils, motor speed control, electric junction box, primary and auxiliary drain pans, motor board, motor(s) and fan(s) shall be included in the basic unit.

A multi-speed switch shall be furnished for remote mounting with ceiling models. Mounting for vertical models shall be on the side opposite the piping hand, on cooling piping side with four-pipe units subject to control requirements.

Each unit shall be supplied with an electric junction box located on the side opposite the piping hand. This location may vary depending on control requirements.

Exposed wiring shall be in flexible conduit. Unit mounted electrical devices shall be pre-wired to a junction box. Units comply with Underwriters' Laboratories standard No. 883 for Room Fan Coil Units.

Vertical models shall have an externally insulated galvanized steel drip shield mounted beneath the coil surface to direct condensate from the coil to a drain trough. Drain surfaces shall be separate from the motor board assembly, and shall carry condensate directly into a molded plastic auxiliary drain pan.

Horizontal models shall be built with a 1-piece galvanized steel combination primary and auxiliary sloped drain pan insulated with closed cell insulation. The coil and return bends shall be mounted over the primary drain pan.

Motors and fans shall be mounted on a removable galvanized steel motor board assembly.

Fan wheels shall be centrifugal forward curve type, dynamically balanced. Fan housing shall be constructed of galvanized steel with streamlined air inlets.

COILS—Coils shall be constructed of 5/8" O.D. seamless copper tubes mechanically bonded to aluminum fins. The entire coil assembly shall be factory tested with 300 PSIG air pressure under warm water and shall have a maximum working pressure of 200 PSIG. Each coil shall be provided with a manual air vent.

AUXILIARY HEATING COILS—Auxiliary heating coils shall be constructed of 1/2" O.D. seamless copper tubes mechanically bonded to aluminum fins. The coils shall be tested at 300 PSIG air pressure under warm water and shall have a maximum working pressure of 200 PSIG. Each coil shall be provided with a manual air vent. Auxillary heating coils shall be mounted in the re-heat position.

ELECTRIC HEATING ELEMENTS—Electric heating elements shall conform to the requirements of Underwriters' Laboratories, Inc. and the National Electric Code, and shall be U.L. listed for zero clearance to combustible surfaces, and shall be constructed of Nikrothal NXT resistance wire with surface temperatures a minimum of 30% below allowable operating temperature.

Each electric heating element shall be mounted to a continuous heavy gauge galvanized steel plate. The plate shall be independent of the fan deck, and shall be insulated with 1/2", 2 lb. density glass fiber insulation. Each electric heating element shall be located in the pre-heat position. Electric heating elements shall be non-accessible to room occupants. The fan coil unit fan deck shall be removable for access to the electric heating element without disconnecting the element wiring.

Units equipped with electric heating elements shall include as standard a unit mounted linear limit primary safety control and fusible link secondary safety device, control box with solid cover, terminal board and field wiring terminals.

MOTORS—Motors shall be resilient mounted, permanent split capacitor, totally enclosed, tap wound for 3-speed, with integral thermal overload protection and automatic reset, for 115/60/1. Minimum power factor shall be .96. Optional fan motors shall be brushless DC ECM motors with permanently lubricated ball bearings, designed for single-phase 120V 60 Hz input power with 0-10vdc control signal.

CABINETS—Shall be constructed with 18 gauge steel fronts and tops, 16 gauge steel end panels. Front and discharge panels are insulated with 1/2", 2 lb. density glass fiber insulation. Cabinet parts are cleaned and phosphatized before powder coating.

The standard finish shall be Deluxe Beige powder coat that may be field painted.

Cabinets have 9" end pockets on both sides. Vertical non-recessed top panels shall be provided with two die formed flush, hinged access doors.

Vertical model front panels shall be one piece, secured to the unit with fasteners. Horizontal bottom panels shall be provided with a continuous hinge along the width of the unit.

Front panels for models FRFF, WRFF, FFFF, WFFF, FSFF and WSFF shall be provided with a hinged front inlet grille and two die formed flush hinged access doors for fan control and piping access.

Bottom panels for models CRFB, CRFR, CRBR and CRBB shall consist of an adjustable frame with hinged panel that adapts to various types of ceilings.

FILTERS—1" throwaway Merv-7 filters are standard in all models except CCFR. Filter options include 1" aluminum mesh.

LIMITED WARRANTY

Products are guaranteed against defects in material and workmanship to the extent that any product returned, with prior permission, and with transportation prepaid, to the factory and found to be defective, within one year from the date of installation, or 18 months from the date of shipment, will be repaired or replaced, and returned F.O.B. factory.

Under no conditions shall AIRTHERM be held liable for consequential damages or installation or repair costs.

Products of other manufacture, assembled with or accessory to these products, are subject to the warranty of their manufacturer. AIRTHERM reserves the right to make changes in design or dimensions, to add or eliminate products without prior notice.

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