SUBMITTAL DATA

Aston Series
Indoor Split

R-454B / 60HZ

SDW5-0021G

PROUD MEMBER

Intertek

AHRI CERTIFIED
www.ahridirectory.org
Water Source HP
ANSI/AHRI/ASHRAE/ISO13256-1

ENERGY STAR PARTNER

Contractor: _____ P.O.: _____

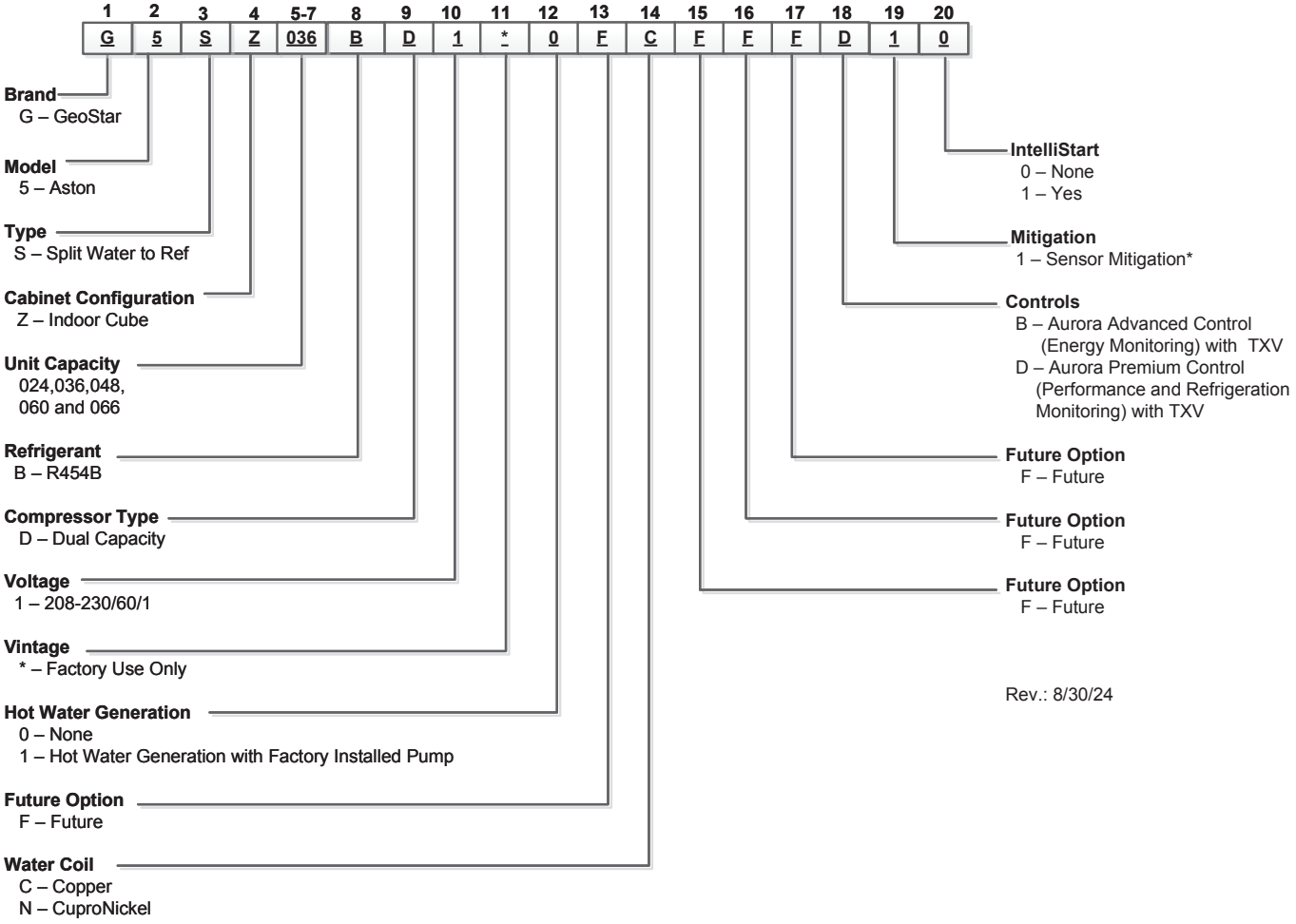
Engineer: _____

Project Name: _____ Unit Tag: _____

Aston Series - Indoor Split
2 - 6 Tons 60Hz

GEOSTAR

Model Nomenclature



Rev.: 8/30/24

* Unit equipped with single ASB board to support compressor section and air handler's refrigeration detection sensors

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Aston Series - Indoor Split
2 - 6 Tons 60Hz

GEOSTAR

Model Nomenclature - Air Handler

1	2	3	4	5-7	8	9	10	11	12	13	14-15	16	17	18	19	20
*	5	B	M	036	B	N	1	*	0	2	00	F	3	D	1	F

Brand
*

Model
5

Type
B – Air Handler

Cabinet Configuration
M – Multi Positional

Unit Capacity
024,036,048,
060 and 066

Refrigerant
B – R454B

Compressor Type
N – None

Voltage
1 – 208-230/60/1

Vintage
* – Factory Use Only

Refrigeration Option
0 – None

Blower
2 – Variable Speed ECM

Future Option
F – Future

Mitigation
1 – Sensor Mitigation*

Controls
D – Aurora Premium Control
with TXV

Filter
3 – 1" Filter Rack. No Filter

Future Option
F – Future

Electric Heat
00 – None
05 – 5kW (024-036 only) no Breakers
10 – 10kW (036-066 only) no Breakers
15 – 15kW (048-066 only) with Breakers
20 – 20kW (060-066 only) with Breakers

Rev.: 11/13/24

* Unit equipped with single refrigeration detection sensor only. ASB board is located in the compressor section.

Note: To field convert the air handler to bottom flow air discharge, the SAHBCK kit must be ordered.

Note: Air flow on the 060 and 066 units in the horizontal configurations should be limited to 1900 cfm in cooling mode, or condensate blow off may occur.

Model Nomenclature - A5D Coil

1	2	3	4	5-7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	5	D	C	036	B	N	F	*	0	F	F	F	F	F	F	1	F

Brand
A

Model
5

Type
D – DX Coil

Cabinet Configuration
C – Cased Multi Positional
U – UnCased w/ Vertical Drain Pan

Unit Capacity
024,036,048,060

Refrigerant
B – R454B

Compressor Type
N – None

Future Option
F – Future

Vintage
* – Factory Use Only

Refrigeration Option
0 – None

Future Option
F – Future

Future Option
F – Future

Mitigation
1 – Sensor Mitigation*

Future Option
F – Future

Future Option
F – Future

Future Option
F – Future

Future Option
F – Future

Future Option
F – Future

Rev.: 11/06/24

* Unit equipped with single refrigeration detection sensor only. ASB board is located in the compressor section.

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

GEOSTAR

AHRI/ISO 13256-1 Performance Ratings

Model	Capacity Modulation	Flow Rate		Ground Water Heat Pump				Ground Loop Heat Pump			
				Cooling EWT 59°F		Heating EWT 50°F		Cooling Brine Full Load 77°F Part Load 68°F		Heating Brine Full Load 32°F Part Load 41°F	
		gpm	cfm	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP	Capacity Btuh	EER Btuh/W	Capacity Btuh	COP
024	Full	8	850	25,800	23.8	22,700	4.6	23,800	18.4	18,800	3.9
	Part	7	750	19,100	30.0	16,400	5.0	18,800	25.2	15,100	4.3
036	Full	9	1200	38,100	25.2	35,000	5.0	37,000	19.8	28,400	4.2
	Part	8	800	29,100	33.8	25,200	5.1	28,000	27.8	22,600	4.5
048	Full	12	1500	50,900	24.3	47,300	4.8	47,100	18.2	37,900	4.2
	Part	11	1300	38,100	30.9	34,200	5.1	37,200	25.8	30,200	4.6
060	Full	16	1800	63,900	23.7	55,700	4.4	59,900	18.2	46,700	3.9
	Part	14	1500	48,900	30.5	38,100	4.7	46,300	25.4	34,500	4.2
066	Full	18	2000	70,100	22.1	66,100	4.2	63,700	16.9	53,900	3.7
	Part	16	1600	54,700	28.1	50,000	4.4	52,300	23.5	44,800	4.0

Notes: Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature. 8/13/24
Heating capacities based upon 68°F DB, 59°F WB entering air temperature.
All ratings based upon operation at the lower voltage of dual voltage rated models.
Refer to the air handler compatability table for matching air handler.

AHRI/ISO 13256-1 Performance Ratings

Energy Star Compliance Table

Model	Tier 3	
	Ground Water	Ground Loop
024	Yes	Yes
036	Yes	Yes
048	Yes	Yes
060	Yes	Yes
066	No	Yes

9/20/24

Energy Star Rating Criteria
In order for water-source heat pumps to be Energy Star rated they must meet or exceed the minimum efficiency requirements listed below.

Tier 3: 1/1/2012 – No Effective End Date Published

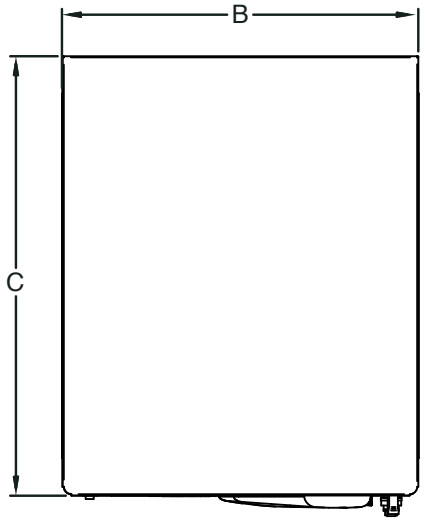
	EER	COP
Closed loop water-to-air	17.1	3.6
Open loop water-to-air	21.1	4.1
Closed loop water-to-water	16.1	3.1
Open loop water-to-water	20.1	3.5

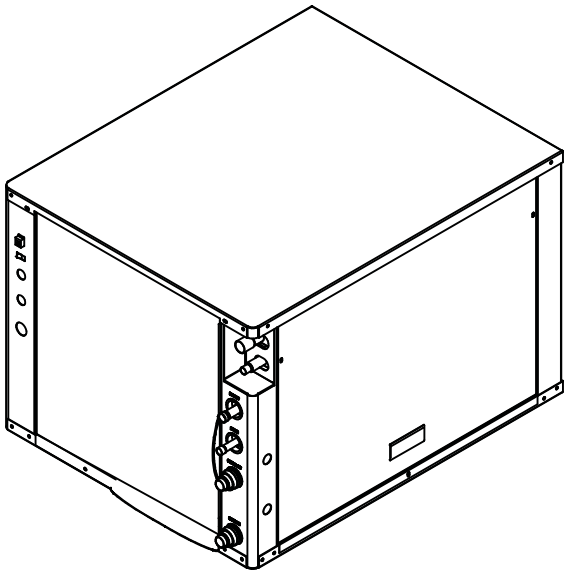
ENERGY STAR

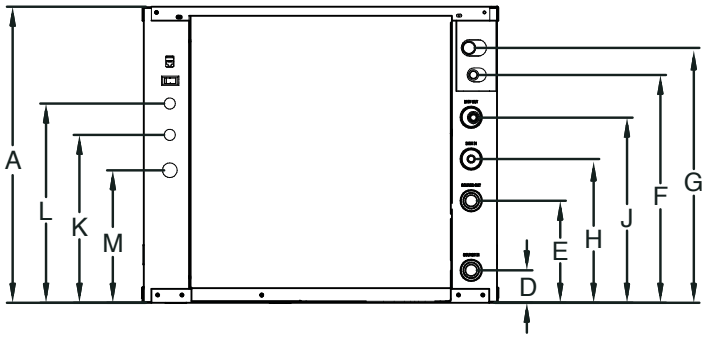
AHRI CERTIFIED™ www.ahridirectory.org
Water Source HP
ANSI/AHRI/ASHRAE/ISO13256-1

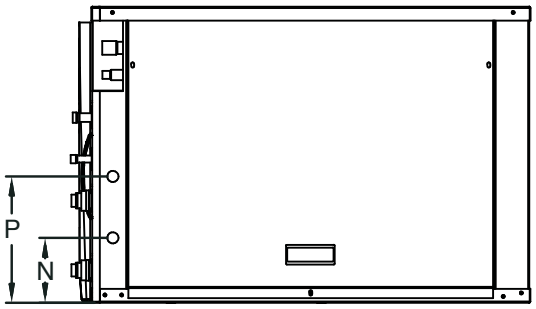
Dimensional Data

Cabinet Dimensions and Refrigerant Piping Connections









Models		Height	Width	Depth	Water In	Water Out	Service Valve		HWG In	HWG Out	Low Voltage	External Pump	Line Voltage	Knock Out	Knock Out
							Liquid	Gas							
		A	B	C	D	E	F	G	H	J	K	L	M	N	P
024	in.	19.30	22.50	26.50	1.93	6.93	15.20	16.80	9.40	11.90	12.10	14.30	9.50	4.60	8.20
	cm.	49.00	57.10	67.30	4.90	17.60	38.60	42.70	23.90	30.20	30.70	36.30	24.10	11.70	20.80
036-066	in.	21.25	25.62	31.60	2.30	7.21	16.40	18.30	10.30	13.30	12.10	14.30	9.50	4.70	9.10
	cm.	54.00	65.10	80.30	5.80	18.50	41.70	46.50	26.20	33.80	30.70	36.30	24.10	11.90	23.10

Dimensions are in inches.
Decorative molding and water connections extend 1.2 in. [30.5 mm] beyond the front of the cabinet.

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

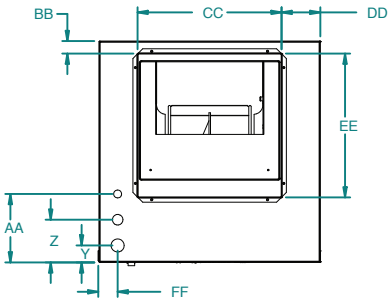
Aston Series - Indoor Split
2 - 6 Tons 60Hz

GEOSTAR

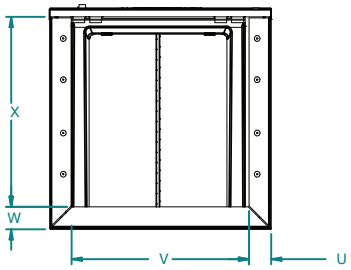
Dimensional Data - Air Handler

Top Flow/Horizontal Unit Configuration

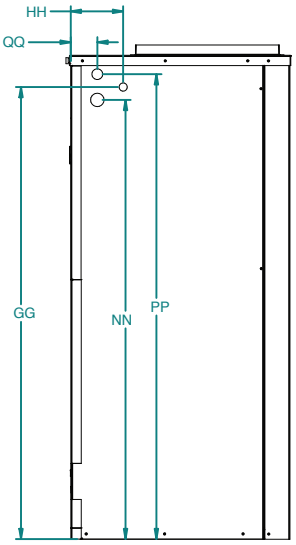
TOP VIEW 3-6 TON



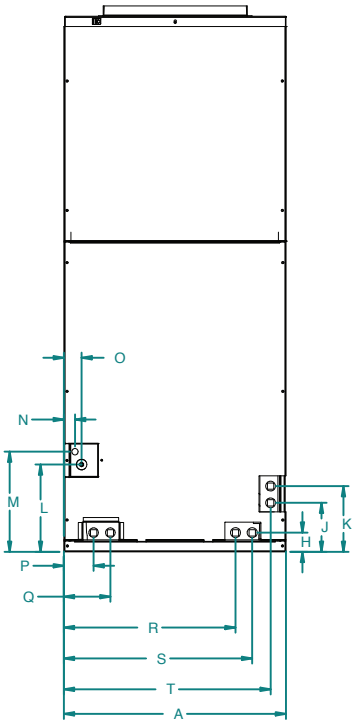
BOTTOM VIEW



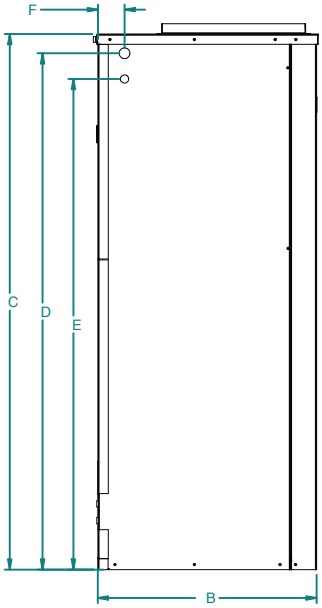
R.SIDE VIEW 2 TON



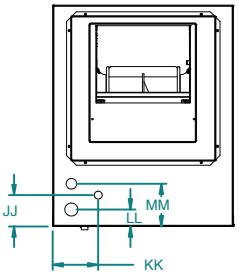
FRONT VIEW



RIGHT SIDE VIEW
3-6 TON



TOP VIEW 2 TON



***5BM Air Handler - Topflow/Horizontal**

Topflow/ Horizontal Configuration		Overall Cabinet			D	E					Refrigerant Connections																					024 CABINET DIMENSIONS ONLY								
		A	B	C	3/4" cond	1/2" cond	F	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	GG	HH	JJ	KK	LL	MM	NN	PP	QQ
		Width	Depth	Height	Power Supply	Low Voltage					Suction	Liquid												Power Supply		Low Voltage						POWER SUPPLY								
024	in.	17.5	21.2	47.0	42.6	45.1	2.5	1.9	4.8	6.4	8.8	10.1	1.1	1.7	2.9	4.5	13.0	14.6	16.2	2.1	13.3	2.1	18.4	1.7	3.1	4.1	1.1	14.0	1.8	14.0	1.8	43.9	5.1	3.0	4.4	1.7	4.2	42.6	45.1	2.5
	cm.	44.5	53.8	119.4	108.2	114.6	6.4	4.8	12.2	16.3	22.4	25.7	2.8	4.3	7.4	11.4	33.0	37.1	41.1	5.3	33.8	5.3	46.7	4.3	7.9	10.4	2.8	35.6	4.6	35.6	4.6	111.5	13.0	7.6	11.2	4.2	10.5	108.2	114.6	6.4
036	in.	21.6	21.2	52.0	50.1	47.6	2.6	1.9	4.8	6.4	8.5	9.7	1.1	1.7	2.9	4.5	16.7	18.3	20.1	2.2	17.2	2.2	18.5	1.6	4.2	6.7	1.2	14.0	3.8	14.0	1.9									
	cm.	54.9	53.8	132.1	127.3	120.9	6.6	4.7	12.1	16.3	21.6	24.6	2.8	4.4	7.3	11.4	42.4	46.5	51.1	5.5	43.8	5.6	46.9	4.1	10.5	16.9	3.0	35.5	9.6	35.5	4.8									
048-066	in.	24.9	21.2	58.0	56.1	53.2	2.6	1.9	4.8	6.4	9.6	10.8	1.1	1.7	2.9	4.5	20.3	21.9	23.5	2.2	20.6	2.2	18.4	1.7	4.2	6.7	1.5	18.0	3.4	18.0	1.8									
	cm.	63.2	53.8	147.3	142.5	135.1	6.6	4.8	12.2	16.3	24.4	27.4	2.8	4.3	7.4	11.4	51.6	55.6	59.7	5.6	52.3	5.6	46.7	4.3	10.7	17.0	3.8	45.7	8.6	45.7	4.6									

Condensate is plastic 3/4" FPT

Discharge flange is field installed and extends 1" (25.4 mm) from cabinet

"Y" IS 1 3/8 KNOCKOUT HIGH VOLTAGE
"Z" IS 1 1/8 KNOCKOUT HIGH VOLTAGE
"AA" IS 7/8 KNOCKOUT LOW VOLTAGE

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

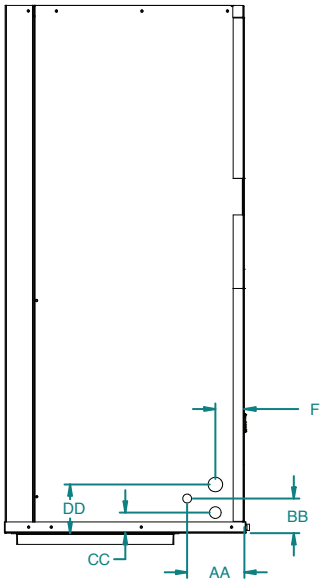
Aston Series - Indoor Split
2 - 6 Tons 60Hz

GEOSTAR

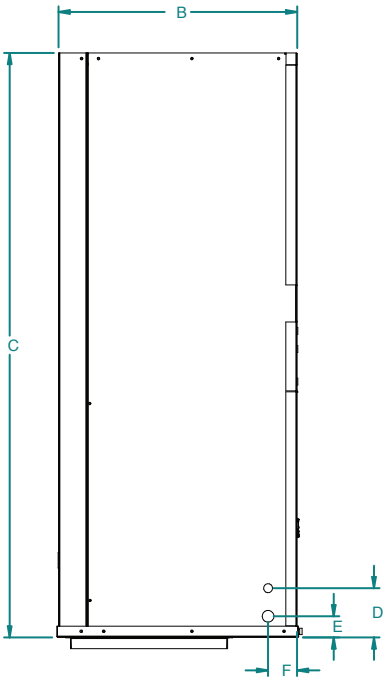
Dimensional Data - Air Handler

Bottom Flow Unit Configuration

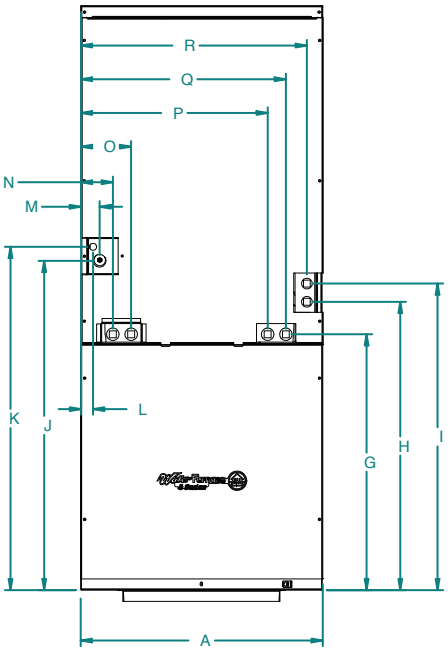
LEFT SIDE VIEW
2 TON UNIT



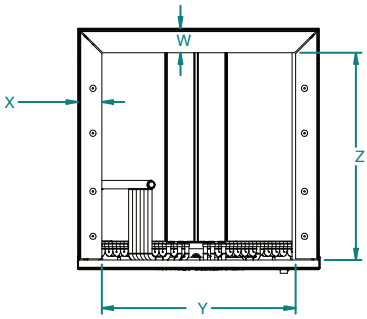
LEFT SIDE VIEW
3-6 TON



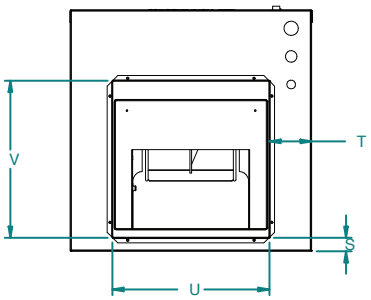
FRONT VIEW



TOP VIEW



BOTTOM VIEW



SAH Air Handler - Bottom flow

Bottomflow Configuration		Overall Cabinet										Refrigerant Connections																				POWER SUPPLY 024 ONLY			
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD
		Width	Depth	Height	1/2" cond Low Voltage	3/4" cond Power Supply	Power Supply				Suction	Liquid																			
024	in.	17.5	21.2	47.0	4.4	1.9	2.5	22.8	25.7	27.3	29.5	30.8	1.1	1.7	2.8	4.5	13.0	14.5	16.2	1.1	1.8	14.0	18.0	2.2	2.2	13.7	18.5	5.0	3.1	1.8	4.3
	cm.	44.5	53.8	119.4	11.2	4.8	6.4	57.9	65.3	69.3	74.9	78.2	2.8	4.3	7.1	11.4	33.0	36.8	41.1	2.8	4.6	35.6	45.7	5.6	5.6	34.8	47.0	12.7	7.9	4.6	11.0
036	in.	21.5	21.2	52.0	4.4	1.9	2.6	22.8	25.7	27.3	29.3	30.6	1.1	1.7	2.8	4.5	16.6	18.2	20.1	1.2	3.8	14.0	14.0	2.2	2.2	17.3	18.5				
	cm.	54.6	53.8	132.1	11.2	4.8	6.6	57.9	65.3	69.3	74.5	77.7	2.7	4.3	7.2	11.4	42.2	46.3	51.1	3.0	9.7	35.6	35.6	5.6	5.6	43.8	46.9				
048-060	in.	24.9	21.2	58.0	4.4	1.9	2.6	24.0	27.0	28.5	31.3	32.8	1.1	1.7	2.8	4.5	20.2	21.9	23.5	1.2	3.4	18.0	18.0	2.1	2.2	20.5	18.5				
	cm.	63.2	53.8	147.3	11.2	4.8	6.6	61.0	68.6	72.4	79.5	83.3	2.8	4.3	7.1	11.4	51.3	55.6	59.7	3.0	8.6	45.7	45.7	5.3	5.6	52.1	47.0				

Condensate is plastic 3/4" FPT
Discharge flange is field installed and extends 1" (25.4 mm) from cabinet

Contractor: _____ P.O.: _____

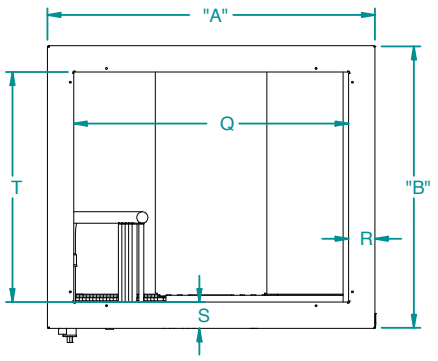
Engineer: _____

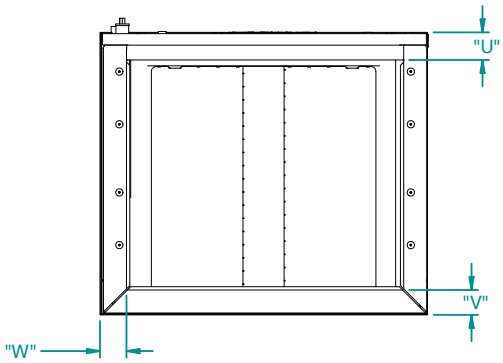
Project Name: _____ Unit Tag: _____

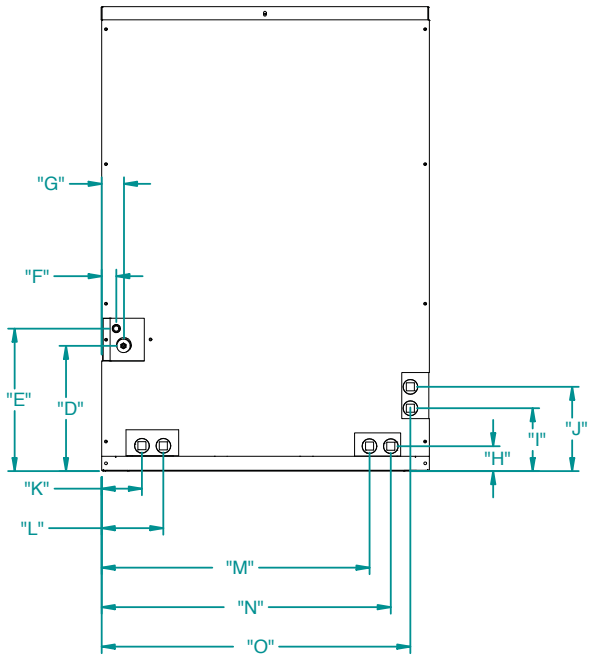
Aston Series - Indoor Split
2 - 6 Tons 60Hz

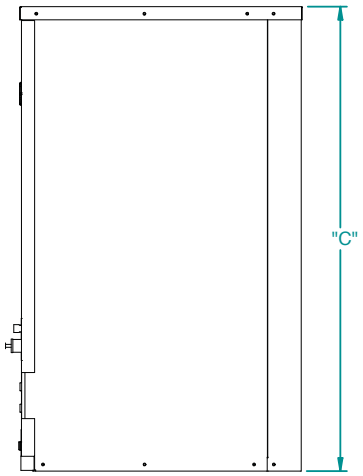
GEOSTAR

Dimensional Data - A5D Cased Coil









A5D CASED AIR COIL

Topflow & Horizontal Configuration		Overall Cabinet			Refrigerant Connections				Condensate Connections								Duct Connections						
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Q	R	S	T	U	V	W
		Width	Depth	Height	Suction	Liquid	Suction	Liquid															
024	in.	17.8	21.5	26.3	8.8	10.1	1.0	1.6	1.9	4.8	6.4	2.7	4.4	13.0	14.6	16.2	13.9	2.0	2.0	17.6	2.0	2.0	2.0
	cm.	45.2	54.6	66.8	22.4	25.7	2.5	4.1	4.8	12.2	16.3	6.9	11.2	33.0	37.1	41.1	35.3	5.1	5.1	44.7	5.1	5.1	5.1
036	in.	21.5	21.5	31.1	8.5	9.8	1.1	1.7	1.7	4.6	6.3	3.0	4.6	16.8	18.4	20.2	17.6	2.0	2.0	17.6	2.0	2.0	2.0
	cm.	54.6	54.6	79.0	21.6	24.8	2.8	4.3	4.3	11.7	16.0	7.6	11.7	42.5	46.7	51.3	44.8	5.1	5.1	44.7	5.1	5.1	5.1
048-060	in.	24.9	21.4	35.3	9.5	10.8	1.1	1.7	1.9	4.8	6.4	3.0	4.7	20.3	22.0	23.5	21.0	2.0	2.0	17.6	2.0	2.0	2.0
	cm.	63.2	54.4	89.6	24.1	27.4	2.8	4.3	4.8	12.1	16.3	7.6	11.9	51.6	55.9	59.7	53.3	5.1	5.1	44.7	5.1	5.1	5.1

Contractor: _____ P.O.: _____

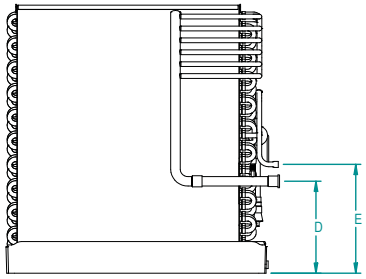
Engineer: _____

Project Name: _____ Unit Tag: _____

Aston Series - Indoor Split
2 - 6 Tons 60Hz

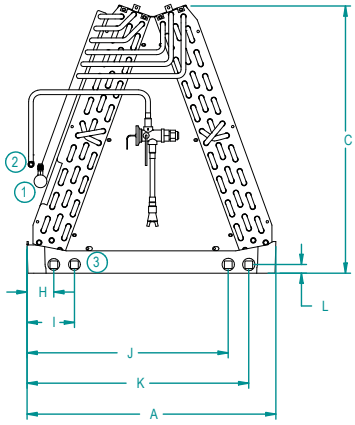
GEOSTAR

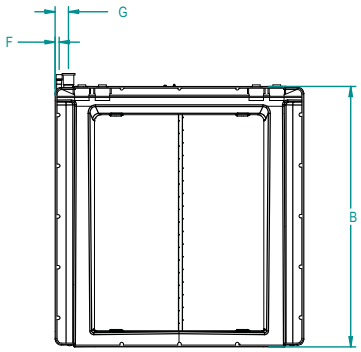
Dimensional Data - A5D Uncased Coil



LEFT SIDE

FRONT





BOTTOM

A5D UNCASED AIR COIL

Uncased Models		Overall Dimensions			Connections			Refrigerant Connections				Condensate Connections				
					1	2	3									
		A Width	B Depth	C Height*	Suction Sweat	Liquid Sweat	Condensate NPT	D	E	F	G	H	I	J	K	L
024	in.	16.1	20.7	17.5	5/8	3/8	3/4	7.7	8.9	0.3	0.8	2.0	3.6	12.3	13.9	0.7
	cm.	40.8	52.6	44.5	1.6	1.0	1.9	19.4	22.5	0.8	1.9	5.1	9.1	31.2	35.3	1.8
036	in.	19.7	20.7	21.1	3/4	3/8	3/4	7.2	8.6	0.3	1.1	2.1	3.8	15.9	17.5	0.7
	cm.	50.0	52.6	53.6	1.9	1.0	1.9	18.2	21.8	0.8	2.7	5.4	9.5	40.4	44.5	1.8
048	in.	23.2	20.7	24.9	3/4	3/8	3/4	8.4	9.6	0.2	0.9	2.1	3.8	19.5	21.0	0.7
	cm.	58.9	52.6	63.2	1.9	1.0	1.9	21.3	24.4	0.4	2.3	5.3	9.7	49.5	53.3	1.8
060	in.	23.2	20.7	29.4	7/8	1/2	3/4	8.5	9.8	0.3	0.9	2.1	3.8	19.5	21.0	0.7
	cm.	58.9	52.6	74.6	2.2	1.3	1.9	21.6	24.9	0.8	2.2	5.3	9.7	49.5	53.3	1.8

*NOTE: All refrigerant coils feature factory installed TXV.

A5D Cased Coil Pressure Drop (inches of WC)

Model	Airflow (CFM)	Dry Coil
A5D*024	600	0.08
	800	0.14
	1000	0.20
A5D*036	1000	0.11
	1200	0.14
	1400	0.18
A5D*048	1200	0.12
	1400	0.15
	1600	0.19
	1800	0.25
A5D*060	1600	0.21
	1800	0.27
	2000	0.33
	2200	0.38

11/11/24

Physical Data

Model	024	036	048	060	066
Compressor (1 each)	**Dual Capacity Scroll**				
Factory Charge R-454B, oz [kg]	34 [0.96]	44 [1.25]	60 [1.70]	62 [1.76]	62 [1.76]
Coax and Water Piping					
Water Connections Size - Swivel- in [mm]	1 [25.4]				
HWG Connection Size - Stub - in [mm]	1/2" [12.7]				
Brass Service Valve - Liquid Line - in [mm]	3/8" [9.525]			1/2" [12.7]	
Brass Service Valve - Suction Line - in [mm]	5/8" [15.875]	3/4" [19.05]		7/8" [22.225]	
Coax & Piping Water Volume - gal [l]	0.7 [2.6]	1.3 [4.9]	1.6 [6.1]	1.6 [6.1]	2.3 [8.7]
Weight - Operating, lb [kg]	189 [186]	236 [107]	250 [113]	271 [123]	290 [132]
Weight - Packaged, lb [kg]	209 [95]	256 [116]	270 [122]	291 [132]	310 [141]

Notes: 9/23/24
All units have TXV expansion devices, and 1/2" [12.2mm] & 3/4" [19.1mm] electrical knockouts.
Brass service valves are sweat type valves.

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Aston Series - Indoor Split
2 - 6 Tons 60Hz

GEOSTAR

Physical Data - Air Handler

Air Handler Model Number (Refrigerant)		024	036	048	060	066
Evaporator Coil	Air Coil Total Face Area, ft2 [m2]	3.89 [0.36]	4.86 [0.45]	5.83 [0.54]	6.81 [0.63]	
	Tube outside diameter - in. [mm]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]	3/8 [9.52]
	Number of rows	3				
	Fins per inch	12				
	Suction line connection - in. [mm] sweat	5/8 [15.87]	3/4 [19.05]	3/4 [19.05]	7/8 [22.23]	
	Liquid line connection - in. [mm] sweat	3/8 [9.52]			1/2 [12.7]	
Refrigerant		R-454B				
Nominal cooling capacity - tons [kW]		2.1 [7.59]	3 [10.55]	4 [14.06]	5 [17.58]	5.5 [19.33]
Condensate drain connection - (FPT) in. [mm]		3/4 [19.05]				
Blower Wheel Size (Dia x W), in. [mm]		9 X 7 [229 x 178]	10 X 8 [254 x 203]	11 x 10 [279 x 254]		
Blower motor type/speeds		Variable Speed ECM				
Blower motor output - hp [W]		1/2 [373]		1 [746]		
Filter Standard - 1" [51mm] Field Supplied.		16 X 20 [406 X 508]	20 X 20 [508 x 508]	22 X 20 [559 x 508]		
Electrical characteristics (60hz)		208/230 - 1ph				
Shipping weight - lbs. [kg]		147 [66.7]	168 [76.2]	198 [89.6]	206 [93.4]	
Operating weight - lbs. [kg]		139 [63.0]	150 [68.0]	180 [81.6]	188 [85.3]	

9/23/24

Physical Data - A5D

Air Handler Model Number (Refrigerant)		024			036	048		060	
Evaporator Coil	Air Coil Total Face Area, ft2 [m2]	3.89 [0.36]			4.86 [0.45]	5.83 [0.54]		6.81 [0.63]	
	Tube outside diameter - in. [mm]	3/8 [9.52]							
	Number of rows	3							
	Fins per inch	12							
	Suction line connection - in. [mm] sweat	5/8 [15.87]			3/4 [19.05]			7/8 [22.23]	
	Liquid line connection - in. [mm] sweat	3/8 [9.52]						1/2 [12.7]	
Refrigerant		R-454B							
Nominal cooling capacity - tons [kW]		1.8 [6.44]	2.1 [7.59]	2.5 [8.79]	3 [10.55]	3.5 [12.30]	4 [14.06]	5 [17.58]	5.5 [19.33]
Condensate drain connection - (FPT) in. [mm]		3/4 [19.05]							
Filter Standard - 1" [51mm] Field Supplied.		16 X 20 [406 X 508]			20 X 20 [508 x 508]	22 X 20 [559 x 508]			

11/11/24

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Refrigerant Coil Compatibility - Air Handler

Air Handler	Indoor Split Model	Outdoor Split Model	Rated Airflow (CFM)	Electric Heat (kW)
*5BM024	024	024	850	5
*5BM036	036	036	1200	5, 10
*5BM048	048	048	1500	10, 15
*5BM060	060	060	1800	10, 15, 20
*5BM066	066	066	2000	10, 15, 20

8/9/24

Refrigerant Coil Compatibility - Coil

Encased/Uncased Coil	**Indoor Split Model**	**Outdoor Split Model**	**Recommended Airflow (CFM)**
A5D*024	024	024	850
A5D*036	036	036	1200
A5D*048	048	048	1500
A5D*060	060	060	1800
A5D*060	066	066	2000

11/111/24

Line Set Sizes

Unit Size	Air Handler	20 feet		40 feet		60 feet		80 feet		Compressor Section Factory Charge (oz.)	*Charge Amount with Air Handler (oz.)
		Suction	Liquid	Suction	Liquid	Suction	Liquid	Suction	Liquid		
024	024	5/8" OD	3/8" OD	3/4" OD	3/8" OD	3/4" OD	1/2" OD	3/4" OD	1/2" OD	34	54
036	036	5/8" OD	3/8" OD	3/4" OD	3/8" OD	3/4" OD	1/2" OD	3/4" OD	1/2" OD	44	68
048	048	3/4" OD	3/8" OD	7/8" OD	3/8" OD	7/8" OD	1/2" OD	7/8" OD	1/2" OD	60	82
060	060	7/8" OD	1/2" OD	7/8" OD	1/2" OD	1-1/8" OD	1/2" OD	1-1/8" OD	1/2" OD	62	91
066	066	7/8" OD	1/2" OD	7/8" OD	1/2" OD	1-1/8" OD	1/2" OD	1-1/8" OD	1/2" OD	62	107
CAPACITY MULTIPLIER		1.00		0.985		0.97		0.955			

10/18/24

Notes: *The "Charge Amount with Air Handler" column is based on the charge amount for a Air Handler + Compressor Section/Split.
Additional charge will need to be added accordingly for line set length.
After charge is added, additional adjustments can be made to get appropriate subcooling and superheat measurements.
Additional charge for R-454B is 0.50 oz. per ft. for 3/8" and 1.0 oz. per ft. for 1/2" tube.
Longer line sets will significantly reduce capacity and efficiency of the system as well as adversely effect the system reliability due to poor oil return.
Vertical separation between compressor section and air handler is limited to 20 feet. This distance is part of the 80 feet maximum distance.

Electrical Data

Model	Rated Voltage	Voltage Min/Max	Compressor				HWG Pump FLA	Ext Loop FLA	Total Unit FLA	Min Circ Amp	Max Fuse/ HACR
			MCC	RLA	LRA	LRA*					
024	208-230/60/1	187/253	16.0	10.2	62.0	21.7	0.4	5.4	16.0	18.6	30
036	208-230/60/1	187/253	22.7	14.5	90.0	32.4	0.4	5.4	20.3	24.0	40
048	208-230/60/1	187/253	28.6	18.3	138.0	49.7	0.4	5.4	24.1	28.7	50
060	208-230/60/1	187/253	39.3	25.2	147.3	51.5	0.4	5.4	31.0	37.2	70
066	208-230/60/1	187/253	43.7	28.0	160.0	56.0	0.4	5.4	33.8	40.8	70

*With optional IntelliStart
Rated Voltage of 208/230/60/1
HACR circuit breaker in USA only
All fuses Class RK-5

Electrical Data - Air Handler

Model	Electric Heat Capacity		Supply Circuit	Aux. Heat Minimum CFM	Rated Voltage	Voltage Min/Max	Fan Motor FLA	Heater Ampacity		Total Unit FLA		Minimum Circuit Ampacity		Maximum Fuse/ HACR	
	KW	BTUH													
	240v	240v						208v	240v	208v	240v	208v	240v	208v	240v
024	0	0	-				4.0	-	-	4.0	4.0	5.0	5.0	10	10
	4.8	16,382	single	1,000			4.0	17.3	20.0	21.3	24.0	26.6	30.0	30	30
036	0	0	-				4.0	-	-	4.0	4.0	5.0	5.0	10	10
	4.8	16,382	single	1,000			4.0	17.3	20.0	21.3	24.0	26.6	30.0	30	30
	9.6	32,765	single	1,300			4.0	34.7	40.0	38.7	44.0	48.4	55.0	50	60
048	0	0	-				7.0	-	-	7.0	7.0	8.8	8.8	15	15
	9.6	32,765	single	1,300			7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
	14.4	49,147	single	1,700			7.0	52.0	60.0	59.0	67.0	73.8	83.8	80	90
	14.4	49,147	L1/L2				7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
			L3/L4				-	17.3	20.0	17.3	20.0	21.6	25.0	25	25
060	0	0	-				7.0	-	-	7.0	7.0	8.8	8.8	15	15
	9.6	32,765	single	1,300			7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
	14.4	49,147	single	1,700			7.0	52.0	60.0	59.0	67.0	73.8	83.8	80	90
	14.4	49,147	L1/L2				7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
			L3/L4				-	17.3	20.0	17.3	20.0	21.6	25.0	25	25
	19.2	65,530	single	2,000			7.0	69.3	80.0	76.3	87.0	95.4	108.8	100	110
	19.2	65,530	L1/L2				7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
			L3/L4				-	34.7	40.0	34.7	40.0	43.4	50.0	50	50
066	0	0	-				7.0	-	-	7.0	7.0	8.8	8.8	15	15
	9.6	32,765	single	1,300			7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
	14.4	49,147	single	1,700			7.0	52.0	60.0	59.0	67.0	73.8	83.8	80	90
	14.4	49,147	L1/L2				7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
			L3/L4				-	17.3	20.0	17.3	20.0	21.6	25.0	25	25
	19.2	65,530	single	2,000			7.0	69.3	80.0	76.3	87.0	95.4	108.8	100	110
	19.2	65,530	L1/L2				7.0	34.7	40.0	41.7	47.0	52.1	58.8	60	60
			L3/L4				-	34.7	40.0	34.7	40.0	43.4	50.0	50	50

Rated Voltage of 208/230/60/1
HACR circuit breaker in USA only

Rev. 8/9/24

Operating Limits

Operating Limits	Cooling		Heating	
	(°F)	(°C)	(°F)	(°C)
Air Limits				
Min. Ambient Air	45	7.2	45	7.2
Rated Ambient Air	80	26.7	70	21.1
Max. Ambient Air	100	37.8	85	29.4
Min. Entering Air	50	10.0	40	4.4
Rated Entering Air db/wb	80.6/66.2	27/19	68	20.0
Max. Entering Air db/wb	110/83	43/28.3	80	26.7
Water Limits				
Min. Entering Water	30	-1.1	20	-6.7
Normal Entering Water	50-110	10-43.3	30-70	-1.1
Max. Entering Water	120	48.9	90	32.2

NOTE: Minimum/maximum limits are only for start-up conditions, and are meant for bringing the space up to occupancy temperature. Units are not designed to operate at the minimum/maximum conditions on a regular basis. The operating limits are dependant upon three primary factors: 1) water temperature, 2) return air temperature, and 3) ambient temperature. When any of the factors are at the minimum or maximum levels, the other two factors must be at the normal level for proper and reliable unit operation.

Definitions

Abbreviations and Definitions

cfm = airflow, cubic feet/minute
EWT = entering water temperature, Fahrenheit
gpm = water flow in gallons/minute
WPD = water pressure drop, psi and feet of water
EAT = entering air temperature, Fahrenheit (dry bulb/wet bulb)
HC = air heating capacity, MBtu/h
TC = total cooling capacity, MBtu/h
SC = sensible cooling capacity, MBtu/h
kW = total power unit input, kilowatts
HR = total heat of rejection, MBtu/h
HE = total heat of extraction, MBtu/h
HWC = hot water generator capacity, MBtu/h
EER = Energy Efficient Ratio
= Btu output/Watt input
COP = Coefficient of Performance
= Btu output/Btu input
LWT = leaving water temperature, °F
LAT = leaving air temperature, °F
TH = total heating capacity, MBtu/h
LC = latent cooling capacity, MBtu/h
S/T = sensible to total cooling ratio

Hot water generator capacity based on 0.4 gpm flow per nominal unit ton at 90°F entering hot water temperature. Performance Data tables do not include water pumping watts and are based upon 15% (by volume) methanol antifreeze solution. Multiple Flow Rates (for EWT) are shown in the Performance Data tables. The lowest flow rate shown is used for geothermal open loop/well water systems with a minimum 50° F. The second flow rate shown is the minimum geothermal closed loop flow rate. The third flow rate shown is optimum for geothermal closed loop and the suggested flow rate for boiler tower applications. Interpolation between EWT, gpm and cfm data is permissible. Extrapolation for heating data down to 25°F is permissible. Catalog illustrations cover the general appearance of products at time of publication. We reserve the right to make changes in design and construction at any time without notice.

Reference Calculations

Heating Calculations:	Cooling Calculations:
$LWT = EWT - \frac{HE}{gpm \times 500}$	$LWT = EWT + \frac{HR}{gpm \times 500}$
$LAT = EAT + \frac{HC}{cfm \times 1.08}$	$LAT\ (DB) = EAT\ (DB) - \frac{SC}{cfm \times 1.08}$
$TH = HC + HW$	$LC = TC - SC$
	$S/T = \frac{SC}{TC}$

Correction Factor Tables

Air Flow Corrections (Dual Capacity Part Load)

Airflow		Cooling				Heating		
cfm Per Ton of Clg	% of Nominal	Total Cap	Sens Cap	Power	Heat of Rej	Htg Cap	Power	Heat of Ext
240	60	0.922	0.778	0.956	0.924	0.943	1.239	0.879
275	69	0.944	0.830	0.962	0.944	0.958	1.161	0.914
300	75	0.957	0.866	0.968	0.958	0.968	1.115	0.937
325	81	0.970	0.900	0.974	0.970	0.977	1.075	0.956
350	88	0.982	0.933	0.981	0.980	0.985	1.042	0.972
375	94	0.991	0.968	0.991	0.991	0.993	1.018	0.988
400	**100**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**
425	106	1.007	1.033	1.011	1.008	1.007	0.990	1.010
450	113	1.013	1.065	1.023	1.015	1.012	0.987	1.018
475	119	1.017	1.099	1.037	1.022	1.018	0.984	1.025
500	125	1.020	1.132	1.052	1.027	1.022	0.982	1.031
520	130	1.022	1.159	1.064	1.030	1.025	0.979	1.034

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Air Flow Corrections (Dual Capacity Full Load and Single Speed)

Airflow		Cooling				Heating		
cfm Per Ton of Clg	% of Nominal	Total Cap	Sens Cap	Power	Heat of Rej	Htg Cap	Power	Heat of Ext
240	60	0.922	0.786	0.910	0.920	0.943	1.150	0.893
275	69	0.944	0.827	0.924	0.940	0.958	1.105	0.922
300	75	0.959	0.860	0.937	0.955	0.968	1.078	0.942
325	81	0.971	0.894	0.950	0.967	0.977	1.053	0.959
350	88	0.982	0.929	0.964	0.978	0.985	1.031	0.973
375	94	0.992	0.965	0.982	0.990	0.993	1.014	0.988
400	**100**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**	**1.000**
425	106	1.007	1.034	1.020	1.010	1.007	0.990	1.011
450	113	1.012	1.065	1.042	1.018	1.013	0.983	1.020
475	119	1.017	1.093	1.066	1.026	1.018	0.980	1.028
500	125	1.019	1.117	1.092	1.033	1.023	0.978	1.034
520	130	1.020	1.132	1.113	1.038	1.026	0.975	1.038

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Cooling Capacity Corrections

Entering Air WB °F	Total Clg Cap	Sensible Cooling Capacity Multipliers - Entering DB °F										Power Input	Heat of Rejection
		60	65	70	75	80	80.6	85	90	95	100		
55	0.898	0.723	0.866	1.048	1.185	*	*	*	*	*	*	0.985	0.913
60	0.912		0.632	0.880	1.078	1.244	1.260	*	*	*	*	0.994	0.927
63	0.945			0.768	0.960	1.150	1.175	*	*	*	*	0.996	0.954
65	0.976			0.694	0.881	1.079	1.085	1.270	*	*	*	0.997	0.972
66.2	0.983			0.655	0.842	1.040	1.060	1.232	*	*	*	0.999	0.986
67	**1.000**			0.616	0.806	**1.000**	1.023	1.193	1.330	1.480	*	**1.000**	**1.000**
70	1.053				0.693	0.879	0.900	1.075	1.205	1.404	*	1.003	1.044
75	1.168					0.687	0.715	0.875	1.040	1.261	1.476	1.007	1.141

NOTE: * Sensible capacity equals total capacity at conditions shown.

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Heating Capacity Corrections

Ent Air DB °F	Heating Corrections		
	Htg Cap	Power	Heat of Ext
45	1.062	0.739	1.158
50	1.050	0.790	1.130
55	1.037	0.842	1.096
60	1.025	0.893	1.064
65	1.012	0.945	1.030
68	1.005	0.976	1.012
70	**1.000**	**1.000**	**1.000**
75	0.987	1.048	0.970
80	0.975	1.099	0.930

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Pressure Drop

Dual Capacity

Model	GPM	Pressure Drop (psi)				
		30°F	50°F	70°F	90°F	110°F
024 full load	4	1.2	1.2	1.1	1.0	1.0
	6	2.5	2.3	2.2	2.0	1.9
	8	4.8	4.6	4.3	4.0	3.7
	10	6.9	6.4	6.0	5.6	5.2
024 part load	3	0.7	0.6	0.6	0.6	0.5
	5	2.3	2.1	2.0	1.9	1.7
	7	3.9	3.6	3.4	3.2	2.9
	9	5.8	5.5	5.1	4.8	4.4
036 full load	5	1.1	1.1	1.0	0.9	0.9
	7	2.4	2.2	2.1	2.0	1.8
	9	3.6	3.4	3.2	3.0	2.8
	11	4.9	4.7	4.5	4.3	4.0
036 part load	4	0.8	0.7	0.7	0.7	0.6
	6	1.9	1.8	1.7	1.6	1.5
	8	3.0	2.8	2.6	2.4	2.2
	10	4.1	4.0	3.8	3.6	3.4
048 full load	6	1.0	1.0	0.9	0.8	0.8
	9	2.0	1.9	1.8	1.7	1.6
	12	3.1	2.9	2.7	2.5	2.3
	15	4.7	4.3	4.1	3.5	3.2
048 part load	5	0.6	0.5	0.4	0.3	0.3
	8	1.5	1.4	1.3	1.2	1.1
	11	2.6	2.5	2.3	2.1	2.0
	14	4.4	4.1	3.8	3.2	3.0
060 full load	8	1.4	1.3	1.2	1.1	1.0
	12	3.7	3.5	3.3	3.1	2.9
	16	6.1	5.8	5.4	5.0	4.7
	20	8.6	7.8	7.4	6.9	6.6
060 part load	6	0.8	0.7	0.5	0.5	0.4
	10	2.6	2.5	2.3	2.1	2.0
	14	4.8	4.5	4.2	3.9	3.6
	18	8.0	7.8	7.1	6.6	6.2
066 full load	12	2.6	2.5	2.3	2.1	2.1
	15	4.3	4.1	3.8	3.5	3.4
	18	6.0	5.7	5.3	4.9	4.8
	21	7.8	7.3	6.8	6.4	5.9
066 part load	10	1.6	1.5	1.4	1.3	1.2
	13	3.1	2.9	2.7	2.5	2.3
	16	4.5	4.3	4.0	3.7	3.5
	19	6.0	5.9	5.5	5.1	4.8

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Performance Data

024 Part Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	3.0	0.7	1.6	**Operation not recommended**							**Operation not recommended**							
	5.0	2.3	5.4															
	7.0	4.0	9.2	500	11.4	1.19	7.4	91.1	2.81	1.4								
				700	11.5	1.10	7.7	85.2	3.06	1.6								
30	3.0	0.7	1.6	**Operation not recommended**							**Operation not recommended**							
	5.0	2.3	5.3	500	12.8	1.05	9.2	93.6	3.57	1.7	500	17.0	11.9	0.70	0.54	18.8	31.5	-
				700	13.1	1.08	9.5	87.4	3.57	1.6	700	17.3	13.0	0.75	0.57	19.2	30.4	-
	7.0	3.9	8.9	500	13.3	1.18	9.3	94.6	3.30	1.8	500	17.1	11.9	0.70	0.52	18.9	32.6	-
				700	13.4	1.09	9.7	87.7	3.60	1.7	700	17.5	13.0	0.74	0.55	19.4	31.8	-
40	3.0	0.7	1.5	**Operation not recommended**							**Operation not recommended**							
	5.0	2.2	5.1	500	14.5	1.10	10.8	96.9	3.89	1.7	500	18.3	13.1	0.72	0.59	20.3	31.3	-
				700	15.0	1.12	11.2	89.8	3.92	1.6	700	18.7	14.4	0.77	0.61	20.8	30.4	-
	7.0	3.7	8.7	500	14.8	1.11	11.1	97.5	3.93	1.8	500	18.5	13.1	0.71	0.57	20.4	32.5	-
				700	15.3	1.13	11.4	90.2	3.97	1.7	700	18.9	14.4	0.76	0.60	20.9	31.8	-
50	3.0	0.6	1.5	500	15.7	1.12	11.9	99.1	4.12	1.8	500	19.9	13.1	0.66	0.66	22.2	30.0	0.7
				700	16.2	1.13	12.3	91.4	4.19	1.7	700	20.9	14.5	0.69	0.70	23.3	30.0	0.8
	5.0	2.1	4.9	500	16.3	1.14	12.4	100.2	4.18	1.8	500	20.3	13.2	0.65	0.62	22.4	32.5	0.7
				700	16.8	1.16	12.9	92.3	4.25	1.8	700	21.4	14.7	0.69	0.66	23.6	32.6	0.7
	7.0	3.6	8.4	500	16.7	1.15	12.7	100.9	4.23	2.0	500	20.5	14.1	0.69	0.61	22.6	33.7	0.6
				700	17.2	1.17	13.2	92.8	4.31	1.8	700	21.6	15.7	0.73	0.64	23.8	33.8	0.7
60	3.0	0.6	1.4	500	17.6	1.15	13.7	102.6	4.48	2.0	500	19.0	12.9	0.68	0.73	21.5	26.0	0.9
				700	18.2	1.16	14.2	94.0	4.60	1.8	700	20.0	14.4	0.72	0.77	22.6	26.1	0.9
	5.0	2.1	4.8	500	18.4	1.18	14.3	104.0	4.56	2.0	500	19.5	13.1	0.67	0.70	21.9	28.0	0.8
				700	19.0	1.19	14.9	95.1	4.67	1.9	700	20.4	14.5	0.71	0.73	22.9	28.1	0.9
	7.0	3.5	8.1	500	18.8	1.20	14.8	104.9	4.62	2.1	500	19.7	13.8	0.70	0.68	22.0	29.0	0.7
				700	19.5	1.20	15.4	95.7	4.75	1.9	700	20.7	15.3	0.74	0.71	23.1	29.1	1.0
70	3.0	0.6	1.4	500	19.5	1.18	15.4	106.0	4.83	2.2	500	18.2	12.8	0.70	0.80	20.9	22.7	1.3
				700	20.4	1.20	16.3	97.0	4.98	2.0	700	19.2	14.8	0.77	0.87	22.2	22.1	1.4
	5.0	2.0	4.6	500	20.5	1.22	16.3	107.9	4.91	2.2	500	18.7	12.9	0.69	0.77	21.3	24.3	1.3
				700	21.1	1.22	17.0	97.9	5.07	2.0	700	19.5	14.3	0.74	0.80	22.2	24.5	1.4
	7.0	3.4	7.9	500	19.0	1.16	15.0	105.2	4.80	2.3	500	18.9	13.5	0.71	0.75	21.4	25.2	1.2
				700	21.7	1.23	17.5	98.7	5.17	2.1	700	19.7	14.9	0.76	0.78	22.4	25.3	1.3
80	3.0	0.6	1.3	500	21.1	1.20	17.0	109.1	5.13	2.4	500	17.3	12.6	0.73	0.95	20.5	18.2	1.8
				700	21.8	1.20	17.8	98.9	5.36	2.2	700	18.0	14.0	0.78	0.98	21.3	18.4	1.9
	5.0	1.9	4.5	500	22.3	1.25	18.0	111.3	5.22	2.4	500	17.8	12.7	0.72	0.92	20.9	19.4	1.8
				700	23.1	1.24	18.8	100.5	5.45	2.3	700	18.5	14.1	0.76	0.94	21.7	19.6	1.9
	7.0	3.3	7.6	500	23.0	1.27	18.6	112.5	5.30	2.6	500	18.0	13.0	0.73	0.90	21.0	20.0	1.7
				700	23.8	1.25	19.5	101.4	5.57	2.4	700	18.7	14.5	0.77	0.93	21.9	20.2	1.9
90	3.0	0.6	1.3	500	22.7	1.23	18.6	112.1	5.43	2.8	500	16.4	12.4	0.75	1.10	20.1	14.9	2.5
				700	23.6	1.21	19.4	101.2	5.71	2.5	700	17.0	13.7	0.81	1.12	20.8	15.1	2.6
	5.0	1.9	4.3	500	24.2	1.28	19.8	114.8	5.52	2.9	500	16.9	12.5	0.74	1.07	20.5	15.8	2.4
				700	25.0	1.26	20.7	103.1	5.82	2.6	700	17.5	13.9	0.79	1.09	21.2	16.0	2.5
	7.0	3.2	7.3	500	24.9	1.30	20.5	116.2	5.61	2.9	500	15.6	11.0	0.71	1.18	19.6	13.2	2.2
				700	25.8	1.27	21.5	104.1	5.95	2.6	700	17.7	14.0	0.79	1.07	21.4	16.5	2.4
100	3.0	0.5	1.2	**Operation not recommended**							**Operation not recommended**							
	5.0	1.8	4.2								500	15.2	11.6	0.76	1.33	19.8	11.4	3.0
											700	15.7	12.9	0.82	1.35	20.4	11.6	3.3
	7.0	3.1	7.1								500	15.4	11.6	0.75	1.31	19.9	11.8	2.9
											700	15.9	12.9	0.81	1.33	20.4	12.0	3.2
110	3.0	0.5	1.2								**Operation not recommended**							
	5.0	1.7	4.0								500	13.6	10.7	0.79	1.60	19.1	8.5	3.9
											700	14.0	11.9	0.86	1.61	19.5	8.7	4.0
	7.0	2.9	6.8								500	13.7	10.6	0.77	1.57	19.1	8.7	3.6
											700	14.1	11.7	0.83	1.59	19.5	8.9	4.1
120	3.0	0.5	1.2								**Operation not recommended**							
	5.0	1.7	3.8								500	12.9	11.0	0.85	1.65	18.5	7.8	4.7
											700	13.1	11.9	0.91	1.70	18.9	7.7	5.1
	7.0	2.8	6.5								500	13.0	11.0	0.84	1.60	18.5	8.1	4.3
											700	13.3	11.9	0.89	1.65	18.9	8.1	4.9

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

024 Full Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	4.0	1.3	3.0	**Operation not recommended**							**Operation not recommended**							
	6.0	2.6	5.9															
	8.0	5.0	11.6	700	16.0	1.42	11.2	91.2	3.31	2.1								
				900	16.3	1.45	11.4	86.8	3.29	2.0								
30	4.0	1.2	2.9	**Operation not recommended**							**Operation not recommended**							
	6.0	2.5	5.8	700	18.0	1.51	12.9	93.8	3.50	2.3	700	24.5	15.6	0.64	1.00	27.9	24.4	-
				900	18.5	1.55	13.2	89.1	3.49	2.1	900	24.9	17.0	0.68	1.06	28.5	23.6	-
	8.0	4.9	11.3	700	18.6	1.54	13.3	94.6	3.54	2.3	700	24.6	15.6	0.63	0.97	27.9	25.3	-
				900	18.9	1.57	13.5	89.4	3.53	2.2	900	25.2	17.0	0.67	1.02	28.7	24.7	-
40	4.0	1.2	2.8	**Operation not recommended**							**Operation not recommended**							
	6.0	2.4	5.6	700	20.4	1.53	15.2	97.0	3.91	2.5	700	25.5	17.1	0.67	1.09	29.2	23.4	-
				900	21.1	1.57	15.7	91.7	3.94	2.3	900	26.0	18.7	0.72	1.14	29.9	22.8	-
	8.0	4.7	11.0	700	20.8	1.55	15.6	97.6	3.95	2.6	700	25.7	17.1	0.67	1.06	29.3	24.3	-
				900	21.5	1.58	16.1	92.1	3.99	2.4	900	26.3	18.7	0.71	1.11	30.1	23.8	-
50	4.0	1.2	2.7	700	22.0	1.52	16.9	99.2	4.25	2.7	700	26.9	17.0	0.63	1.23	31.1	21.8	1.3
				900	22.7	1.54	17.4	93.4	4.32	2.5	900	28.3	18.9	0.67	1.30	32.7	21.8	1.4
	6.0	2.3	5.4	700	22.9	1.56	17.5	100.2	4.31	2.8	700	27.5	17.2	0.63	1.16	31.4	23.6	1.3
				900	23.6	1.58	18.2	94.3	4.39	2.6	900	28.9	19.1	0.66	1.22	33.0	23.7	1.2
	8.0	4.6	10.6	700	23.4	1.57	18.0	100.9	4.36	2.9	700	27.7	18.4	0.66	1.13	31.6	24.5	1.3
				900	24.1	1.59	18.7	94.8	4.44	2.6	900	29.2	20.4	0.70	1.19	33.3	24.5	1.3
60	4.0	1.1	2.6	700	24.6	1.60	19.2	102.6	4.51	3.0	700	26.1	17.1	0.65	1.35	30.7	19.4	1.6
				900	25.4	1.61	19.9	96.2	4.63	2.8	900	27.4	19.0	0.69	1.41	32.2	19.4	1.7
	6.0	2.3	5.3	700	25.8	1.65	20.1	104.1	4.59	3.0	700	26.7	17.3	0.65	1.28	31.1	20.9	1.5
				900	26.6	1.66	20.9	97.4	4.71	2.8	900	28.0	19.2	0.69	1.33	32.5	21.0	1.6
	8.0	4.4	10.3	700	26.4	1.66	20.7	104.9	4.65	3.2	700	27.0	18.2	0.68	1.25	31.2	21.6	1.4
				900	27.3	1.67	21.6	98.0	4.78	2.9	900	28.3	20.2	0.71	1.31	32.8	21.7	1.6
70	4.0	1.1	2.5	700	27.3	1.68	21.5	106.1	4.75	3.2	700	25.3	17.2	0.68	1.37	30.0	18.5	2.0
				900	28.6	1.72	22.7	99.4	4.87	3.0	900	26.9	19.7	0.73	1.44	31.8	18.7	2.1
	6.0	2.2	5.1	700	28.7	1.74	22.7	107.9	4.84	3.4	700	26.0	17.4	0.67	1.40	30.7	18.6	1.9
				900	29.6	1.74	23.7	100.5	5.00	3.1	900	27.1	19.2	0.71	1.45	32.0	18.7	2.0
	8.0	4.3	9.9	700	29.4	1.76	23.4	108.9	4.90	3.5	700	26.2	18.1	0.69	1.36	30.9	19.2	1.7
				900	30.4	1.75	24.4	101.3	5.09	3.2	900	27.4	20.0	0.73	1.42	32.2	19.3	1.9
80	4.0	1.1	2.5	700	29.0	1.73	23.1	108.4	4.91	3.6	700	24.2	16.9	0.70	1.63	29.8	14.9	2.5
				900	30.0	1.72	24.2	100.9	5.13	3.3	900	25.2	18.8	0.74	1.68	30.9	15.0	2.7
	6.0	2.1	4.9	700	30.7	1.80	24.5	110.6	5.00	3.7	700	24.9	17.1	0.69	1.57	30.3	15.9	2.3
				900	31.7	1.78	25.7	102.6	5.22	3.5	900	25.9	18.9	0.73	1.62	31.4	16.0	2.5
	8.0	4.2	9.6	700	31.6	1.82	25.4	111.8	5.08	3.9	700	25.2	17.5	0.70	1.54	30.4	16.4	2.2
				900	32.7	1.80	26.5	103.6	5.33	3.6	900	26.2	19.4	0.74	1.59	31.6	16.5	2.4
90	4.0	1.0	2.4	700	30.8	1.78	24.7	110.7	5.07	3.9	700	23.2	16.6	0.72	1.79	29.3	12.9	2.5
				900	31.9	1.75	25.9	102.8	5.33	3.7	900	24.0	18.4	0.77	1.84	30.2	13.0	2.7
	6.0	2.0	4.7	700	32.7	1.86	26.4	113.3	5.15	4.1	700	23.8	16.8	0.71	1.74	29.8	13.7	2.4
				900	33.9	1.83	27.6	104.8	5.43	3.8	900	24.7	18.7	0.75	1.79	30.8	13.8	2.6
	8.0	4.0	9.3	700	33.7	1.89	27.3	114.6	5.24	4.3	700	22.0	15.3	0.70	1.62	27.5	13.6	2.7
				900	34.9	1.84	28.6	105.9	5.56	4.0	900	25.0	18.8	0.75	1.75	31.0	14.3	3.0
100	4.0	1.0	2.3	**Operation not recommended**							**Operation not recommended**							
	6.0	2.0	4.6								700	21.6	15.5	0.72	1.97	28.3	11.0	3.6
											900	22.3	17.2	0.77	2.00	29.1	11.2	3.9
	8.0	3.9	8.9								700	21.8	15.5	0.71	1.93	28.4	11.3	3.3
											900	22.6	17.1	0.76	1.97	29.3	11.5	3.7
110	4.0	1.0	2.2								**Operation not recommended**							
	6.0	1.9	4.4								700	19.4	14.1	0.73	2.20	26.9	8.8	4.4
											900	19.9	15.7	0.79	2.21	27.4	9.0	4.7
	8.0	3.7	8.6								700	19.6	14.0	0.71	2.16	26.9	9.1	4.1
											900	20.1	15.4	0.77	2.18	27.5	9.2	4.5
120	4.0	0.9	2.1								**Operation not recommended**							
	6.0	1.8	4.2								700	18.7	14.6	0.78	2.38	26.9	7.9	5.3
											900	19.1	15.9	0.83	2.45	27.4	7.8	5.7
	8.0	3.6	8.2								700	18.9	14.6	0.78	2.31	26.8	8.2	4.9
											900	19.3	15.9	0.82	2.38	27.4	8.1	5.6

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

036 Part Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	4.0	0.8	1.9	**Operation not recommended**							**Operation not recommended**							
	6.0	2.0	4.6															
	8.0	3.0	7.0	800	17.6	1.56	12.3	90.4	3.31	2.3								
				1000	17.5	1.65	11.9	86.2	3.11	2.1								
30	4.0	0.8	1.8	**Operation not recommended**							**Operation not recommended**							
	6.0	1.9	4.5	800	19.3	1.70	13.5	92.4	3.33	2.4	800	25.8	18.0	0.70	0.89	28.9	28.9	-
				1000	19.9	1.75	13.9	88.4	3.33	2.2	1000	26.3	19.7	0.75	0.94	29.5	27.9	-
	8.0	3.0	6.8	800	20.4	1.67	14.7	93.6	3.58	2.5	800	26.0	18.0	0.69	0.87	28.9	30.0	-
				1000	20.3	1.77	14.3	88.8	3.36	2.3	1000	26.6	19.7	0.74	0.91	29.7	29.2	-
40	4.0	0.8	1.8	**Operation not recommended**							**Operation not recommended**							
	6.0	1.9	4.3	800	22.3	1.73	16.4	95.8	3.79	2.5	800	27.1	18.6	0.69	0.96	30.4	28.2	-
				1000	23.0	1.76	17.0	91.3	3.83	2.3	1000	27.6	20.3	0.73	1.01	31.1	27.4	-
	8.0	2.9	6.6	800	22.8	1.74	16.8	96.4	3.83	2.6	800	27.3	18.6	0.68	0.93	30.5	29.3	-
				1000	23.5	1.78	17.4	91.8	3.87	2.4	1000	28.0	20.3	0.73	0.98	31.3	28.7	-
50	4.0	0.7	1.7	800	24.4	1.71	18.6	98.3	4.18	2.6	800	27.0	17.4	0.65	1.08	30.7	25.0	0.9
				1000	25.2	1.74	19.2	93.3	4.25	2.4	1000	28.4	19.4	0.68	1.13	32.3	25.1	1.0
	6.0	1.8	4.2	800	25.3	1.75	19.3	99.3	4.24	2.7	800	27.6	17.6	0.64	1.02	31.0	27.2	0.9
				1000	26.1	1.77	20.1	94.2	4.32	2.5	1000	29.0	19.6	0.68	1.06	32.6	27.2	0.9
	8.0	2.8	6.4	800	25.9	1.77	19.9	100.0	4.30	2.8	800	27.8	18.8	0.68	0.99	31.2	28.1	0.8
				1000	26.7	1.79	20.6	94.7	4.37	2.5	1000	29.3	20.9	0.71	1.04	32.8	28.2	0.9
60	4.0	0.7	1.7	800	26.9	1.73	20.9	101.1	4.54	2.9	800	27.2	18.6	0.68	1.23	31.5	22.1	1.3
				1000	27.7	1.75	21.8	95.7	4.66	2.7	1000	28.6	20.7	0.72	1.29	33.0	22.2	1.4
	6.0	1.8	4.1	800	28.1	1.78	22.0	102.5	4.61	3.0	800	27.9	18.8	0.67	1.17	31.9	23.8	1.2
				1000	29.0	1.79	22.9	96.8	4.73	2.8	1000	29.2	20.9	0.71	1.22	33.4	23.9	1.3
	8.0	2.7	6.2	800	28.8	1.80	22.6	103.3	4.68	3.1	800	28.2	19.8	0.70	1.14	32.1	24.6	1.1
				1000	29.7	1.81	23.5	97.5	4.81	2.9	1000	29.6	22.0	0.74	1.20	33.6	24.7	1.2
70	4.0	0.7	1.6	800	29.3	1.76	23.3	103.9	4.89	3.3	800	27.5	19.8	0.72	1.39	32.3	19.8	1.9
				1000	30.9	1.81	24.7	98.6	5.00	3.0	1000	29.6	23.0	0.78	1.48	34.1	20.0	2.1
	6.0	1.7	3.9	800	30.8	1.82	24.6	105.7	4.98	3.2	800	28.2	20.1	0.71	1.33	32.8	21.2	1.8
				1000	31.8	1.82	25.6	99.5	5.14	2.9	1000	29.4	22.2	0.75	1.38	34.4	21.4	2.0
	8.0	2.6	6.0	800	31.6	1.84	25.4	106.6	5.04	3.3	800	28.5	20.9	0.73	1.30	32.9	22.0	1.7
				1000	32.7	1.83	26.5	100.3	5.24	3.0	1000	29.8	23.1	0.78	1.35	34.6	22.1	1.9
80	4.0	0.7	1.6	800	30.7	1.78	24.7	105.6	5.05	3.5	800	26.6	19.7	0.74	1.61	32.1	16.5	2.6
				1000	31.8	1.77	25.8	99.5	5.27	3.2	1000	27.6	22.0	0.79	1.66	33.3	16.6	2.8
	6.0	1.6	3.8	800	32.5	1.85	26.2	107.6	5.14	3.6	800	27.3	20.0	0.73	1.56	32.6	17.6	2.5
				1000	33.6	1.84	27.4	101.1	5.37	3.3	1000	28.4	22.2	0.78	1.60	33.9	17.7	2.3
	8.0	2.5	5.8	800	33.5	1.88	27.0	108.7	5.22	3.7	800	27.6	20.5	0.74	1.52	32.8	18.1	3.0
				1000	34.6	1.85	28.3	102.0	5.48	3.4	1000	28.8	22.7	0.79	1.57	34.1	18.3	2.6
90	4.0	0.7	1.5	800	32.2	1.81	26.0	107.2	5.21	3.8	800	25.7	19.7	0.77	1.83	31.9	14.0	3.6
				1000	33.3	1.78	27.3	100.9	5.48	3.5	1000	26.6	21.9	0.82	1.88	33.0	14.1	3.8
	6.0	1.6	3.7	800	34.2	1.89	27.8	109.6	5.30	4.0	800	26.4	20.0	0.76	1.78	32.5	14.8	3.4
				1000	35.4	1.86	29.1	102.8	5.59	3.6	1000	27.4	22.1	0.81	1.83	33.6	15.0	3.6
	8.0	2.4	5.6	800	35.3	1.92	28.7	110.8	5.39	4.1	800	26.1	20.9	0.80	1.71	31.9	15.3	3.2
				1000	36.5	1.87	30.1	103.8	5.72	3.8	1000	27.7	22.3	0.81	1.79	33.8	15.5	3.5
100	4.0	0.6	1.5	**Operation not recommended**							**Operation not recommended**							
	6.0	1.5	3.5								800	24.7	19.6	0.79	1.94	31.4	12.7	4.3
											1000	25.5	21.7	0.85	1.97	32.3	12.9	4.7
	8.0	2.3	5.4								800	25.0	19.5	0.78	1.91	31.5	13.1	4.0
											1000	25.8	21.6	0.84	1.94	32.4	13.3	4.4
110	4.0	0.6	1.4	**Operation not recommended**							**Operation not recommended**							
	6.0	1.5	3.4								800	23.0	19.2	0.83	2.11	30.2	10.9	5.3
											1000	23.7	21.3	0.90	2.12	30.9	11.2	5.8
	8.0	2.2	5.2								800	23.3	18.9	0.81	2.07	30.3	11.3	4.9
											1000	23.9	20.9	0.87	2.09	31.0	11.4	5.5
120	4.0	0.6	1.3								**Operation not recommended**							
	6.0	1.4	3.3								800	21.1	18.9	0.90	2.61	30.0	8.1	6.6
											1000	21.4	20.5	0.96	2.67	30.6	8.0	7.1
	8.0	2.2	5.0								800	21.2	18.9	0.89	2.52	29.8	8.4	6.1
											1000	21.7	20.5	0.94	2.60	30.6	8.3	6.8

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

036 Full Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	5.0	1.2	2.7	**Operation not recommended**							**Operation not recommended**							
	7.0	2.5	5.7															
	9.0	3.7	8.7	1000	25.5	2.13	18.2	93.6	3.50	3.0								
				1200	25.4	2.22	17.8	89.6	3.35	2.8								
30	5.0	1.1	2.6	**Operation not recommended**							**Operation not recommended**							
	7.0	2.4	5.5	1000	27.3	2.22	19.8	95.3	3.61	3.1	1000	32.5	22.4	0.69	1.37	37.2	23.8	-
				1200	28.1	2.29	20.3	91.7	3.61	2.8	1200	33.1	24.5	0.74	1.44	38.0	23.0	-
	9.0	3.6	8.4	1000	28.8	2.22	21.2	96.7	3.80	3.2	1000	32.7	22.4	0.69	1.32	37.2	24.7	-
				1200	28.7	2.31	20.8	92.1	3.64	2.9	1200	33.5	24.5	0.73	1.39	38.2	24.1	-
40	5.0	1.1	2.5	**Operation not recommended**							**Operation not recommended**							
	7.0	2.3	5.3	1000	30.6	2.28	22.9	98.4	3.94	3.3	1000	33.8	21.4	0.63	1.53	39.0	22.1	-
				1200	31.6	2.33	23.6	94.4	3.98	3.0	1200	34.4	23.4	0.68	1.60	39.9	21.5	-
	9.0	3.5	8.2	1000	31.3	2.30	23.4	98.9	3.98	3.4	1000	34.0	21.4	0.63	1.48	39.1	23.0	-
				1200	32.3	2.35	24.2	94.9	4.02	3.1	1200	34.8	23.4	0.67	1.55	40.1	22.5	-
50	5.0	1.1	2.5	1000	32.8	2.29	25.0	100.3	4.20	3.5	1000	33.2	18.6	0.56	1.77	39.3	18.8	1.8
				1200	33.7	2.32	25.8	96.0	4.27	3.2	1200	35.0	20.7	0.59	1.86	41.3	18.8	1.9
	7.0	2.2	5.2	1000	34.0	2.34	26.0	101.4	4.26	3.6	1000	34.0	18.8	0.55	1.67	39.7	20.3	1.7
				1200	35.0	2.37	27.0	97.0	4.33	3.3	1200	35.7	20.9	0.59	1.75	41.7	20.4	1.8
	9.0	3.4	7.9	1000	34.7	2.36	26.7	102.1	4.31	3.7	1000	34.3	20.1	0.59	1.63	39.8	21.1	1.6
				1200	35.8	2.39	27.6	97.6	4.39	3.4	1200	36.1	22.3	0.62	1.71	41.9	21.1	1.7
60	5.0	1.0	2.4	1000	35.6	2.39	27.4	102.9	4.37	4.1	1000	33.8	21.2	0.63	2.01	40.7	16.8	2.1
				1200	36.7	2.40	28.5	98.3	4.48	3.7	1200	35.4	23.6	0.66	2.10	42.6	16.9	2.3
	7.0	2.2	5.0	1000	37.2	2.45	28.8	104.4	4.44	4.2	1000	34.6	21.4	0.62	1.91	41.1	18.1	2.0
				1200	38.4	2.47	30.0	99.6	4.56	3.9	1200	36.2	23.8	0.66	1.99	43.0	18.2	2.2
	9.0	3.3	7.6	1000	38.1	2.48	29.6	105.3	4.50	4.3	1000	34.9	22.6	0.65	1.87	41.3	18.7	1.9
				1200	39.4	2.49	30.9	100.4	4.63	4.0	1200	36.7	25.1	0.68	1.95	43.3	18.8	2.1
70	5.0	1.0	2.3	1000	38.5	2.49	30.0	105.6	4.53	4.6	1000	34.4	23.8	0.69	2.25	42.0	18.5	3.0
				1200	42.0	2.57	33.2	102.4	4.79	4.2	1200	37.1	27.1	2.12	2.08	44.2	17.8	3.1
	7.0	2.1	4.9	1000	40.4	2.57	31.7	107.5	4.61	4.7	1000	35.2	24.1	0.68	2.16	42.6	16.3	2.8
				1200	41.8	2.57	33.0	102.2	4.76	4.3	1200	36.8	26.7	0.73	2.23	44.4	16.5	3.0
	9.0	3.2	7.4	1000	41.5	2.60	32.6	108.4	4.68	4.9	1000	35.6	25.1	0.71	2.10	42.8	16.9	2.6
				1200	42.9	2.59	34.1	103.1	4.85	4.5	1200	37.2	27.8	0.75	2.19	44.7	17.0	2.9
80	5.0	1.0	2.2	1000	39.8	2.55	31.1	106.9	4.57	5.0	1000	33.8	24.5	0.72	2.41	42.1	14.0	3.7
				1200	41.2	2.53	32.6	101.8	4.76	4.6	1200	35.2	27.3	0.78	2.49	43.7	14.1	3.8
	7.0	2.0	4.7	1000	42.1	2.66	33.0	109.0	4.65	5.2	1000	34.8	24.8	0.71	2.33	42.7	14.9	3.4
				1200	43.5	2.63	34.6	103.6	4.85	4.8	1200	36.2	27.5	0.76	2.40	44.4	15.1	3.7
	9.0	3.1	7.1	1000	43.3	2.69	34.1	110.1	4.72	5.4	1000	35.2	25.5	0.72	2.28	42.9	15.4	3.2
				1200	44.8	2.65	35.8	104.6	4.95	4.9	1200	36.6	28.2	0.77	2.35	44.6	15.6	3.5
90	5.0	0.9	2.2	1000	41.2	2.62	32.2	108.1	4.60	5.3	1000	33.3	25.3	0.76	2.57	42.1	13.0	4.4
				1200	42.6	2.58	33.8	102.9	4.84	5.1	1200	34.5	28.1	0.81	2.64	43.5	13.1	4.7
	7.0	2.0	4.5	1000	43.8	2.74	34.4	110.5	4.68	5.7	1000	34.3	25.6	0.75	2.50	42.9	13.7	4.1
				1200	45.3	2.69	36.1	105.0	4.94	5.3	1200	35.6	28.4	0.80	2.56	44.3	13.9	4.5
	9.0	3.0	6.9	1000	45.1	2.78	35.7	111.8	4.76	5.9	1000	35.8	26.4	0.74	2.38	43.9	15.0	3.9
				1200	46.7	2.71	37.5	106.0	5.05	5.5	1200	36.0	28.6	0.79	2.51	44.6	14.3	4.3
100	5.0	0.9	2.1	**Operation not recommended**							**Operation not recommended**							
	7.0	1.9	4.4								1000	33.2	25.6	0.77	2.75	42.5	12.1	5.2
											1200	34.2	28.4	0.83	2.79	43.8	12.3	5.6
	9.0	2.9	6.6								1000	33.5	25.5	0.76	2.70	42.7	12.4	4.9
											1200	34.6	28.2	0.82	2.75	44.0	12.6	5.4
110	5.0	0.9	2.0								**Operation not recommended**							
	7.0	1.8	4.2								1000	32.0	25.5	0.80	3.00	42.2	10.7	6.3
											1200	32.9	28.4	0.86	3.02	43.2	10.9	6.9
	9.0	2.8	6.4								1000	32.3	25.2	0.78	2.95	42.4	11.0	5.9
											1200	33.2	27.8	0.84	2.98	43.4	11.1	6.5
120	5.0	0.8	1.9								**Operation not recommended**							
	7.0	1.7	4.0								1000	30.2	24.2	0.80	3.47	42.0	8.7	7.7
											1200	30.7	26.3	0.86	3.56	42.9	8.6	8.3
	9.0	2.7	6.1								1000	30.5	24.2	0.80	3.35	41.9	9.1	7.2
											1200	31.1	26.3	0.85	3.46	42.9	9.0	7.9

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

048 Part Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	5.0	0.7	1.7	**Operation not recommended**							**Operation not recommended**							
	8.0	1.5	3.5															
	11.0	2.7	6.2	1200	23.0	2.36	15.0	87.8	2.87	4.1								
				1400	22.1	2.22	14.5	84.6	2.92	3.8								
30	5.0	0.6	1.6	**Operation not recommended**							**Operation not recommended**							
	8.0	1.5	3.4	1200	23.4	2.01	16.5	88.0	3.40	4.2	1200	32.9	25.0	0.76	1.10	36.7	29.9	-
				1400	24.3	2.07	17.3	86.1	3.45	3.8	1400	33.5	27.3	0.82	1.16	37.4	28.9	-
	11.0	2.6	6.0	1200	27.0	2.25	19.3	90.8	3.52	4.3	1200	33.1	25.0	0.75	1.07	36.7	31.0	-
				1400	25.9	2.12	18.7	87.1	3.58	3.9	1400	33.9	27.3	0.81	1.12	37.7	30.3	-
40	5.0	0.6	1.6	**Operation not recommended**							**Operation not recommended**							
	8.0	1.4	3.3	1200	28.1	2.04	21.1	91.7	4.03	4.3	1200	35.4	25.6	0.72	1.22	39.6	29.1	-
				1400	29.0	2.08	21.9	89.2	4.09	3.9	1400	36.1	28.0	0.77	1.28	40.4	28.3	-
	11.0	2.5	5.9	1200	29.6	2.09	22.5	92.8	4.15	4.4	1200	35.7	25.6	0.72	1.18	39.7	30.2	-
				1400	30.6	2.13	23.3	90.2	4.21	3.9	1400	36.5	28.0	0.77	1.24	40.7	29.6	-
50	5.0	0.5	1.2	1200	31.6	2.06	24.6	94.4	4.49	4.4	1200	37.1	25.0	0.68	1.37	41.8	27.0	1.5
				1400	32.6	2.09	25.5	91.6	4.57	4.1	1400	38.1	27.7	0.73	1.35	42.7	28.2	1.6
	8.0	1.4	3.2	1200	32.8	2.07	25.7	95.3	4.64	4.6	1200	37.4	25.2	0.67	1.34	42.0	28.0	1.4
				1400	33.7	2.09	26.6	92.3	4.73	4.2	1400	38.5	27.9	0.72	1.36	43.1	28.2	1.6
	11.0	2.5	5.7	1200	34.3	2.11	27.1	96.5	4.75	4.7	1200	38.0	25.8	0.68	1.32	42.6	28.7	1.3
				1400	35.3	2.14	28.0	93.3	4.83	4.3	1400	39.1	28.6	0.73	1.35	43.7	29.0	1.5
60	5.0	0.5	1.2	1200	34.9	2.12	27.7	96.9	4.83	4.9	1200	36.1	24.9	0.69	1.59	41.6	22.7	2.1
				1400	35.8	2.13	28.5	93.6	4.92	4.5	1400	37.1	27.6	0.74	1.62	42.7	22.9	2.3
	8.0	1.3	3.1	1200	36.3	2.11	29.1	98.0	5.04	5.0	1200	36.5	25.1	0.69	1.55	41.8	23.5	2.0
				1400	37.1	2.12	29.9	94.6	5.12	4.6	1400	37.5	27.7	0.74	1.58	42.9	23.7	2.2
	11.0	2.4	5.5	1200	37.6	2.16	30.2	99.0	5.10	5.2	1200	37.1	25.7	0.69	1.54	42.3	24.1	1.9
				1400	38.4	2.17	31.0	95.4	5.19	4.7	1400	38.1	28.5	0.75	1.57	43.4	24.3	2.1
70	5.0	0.4	0.7	1200	38.1	2.17	30.7	99.4	5.15	5.4	1200	35.2	24.8	0.70	1.81	41.4	19.5	3.1
				1400	38.2	2.17	30.8	95.3	5.16	5.0	1400	36.9	28.4	0.77	1.99	42.6	18.5	3.3
	8.0	1.3	3.0	1200	39.8	2.16	32.4	100.7	5.40	5.6	1200	35.5	24.9	0.70	1.76	41.5	20.2	2.9
				1400	40.5	2.16	33.1	96.8	5.50	5.2	1400	36.5	27.6	0.76	1.80	43.2	20.3	3.1
	11.0	2.3	5.3	1200	41.4	2.33	33.5	101.9	5.21	5.8	1200	36.1	25.6	0.71	1.75	42.1	20.7	2.7
				1400	41.5	2.20	34.0	97.4	5.53	5.3	1400	37.1	28.3	0.76	1.78	43.7	20.8	3.0
80	5.0	0.4	0.7	1200	42.0	2.20	34.5	102.4	5.61	6.1	1200	34.0	24.5	0.72	2.06	41.0	16.5	4.5
				1400	42.6	2.19	35.2	98.2	5.71	5.6	1400	34.9	27.1	0.78	2.10	42.1	16.6	4.7
	8.0	1.3	2.9	1200	44.1	2.18	36.6	104.0	5.91	6.3	1200	34.3	24.6	0.72	2.01	41.1	17.1	4.2
				1400	44.6	2.17	37.2	99.5	6.03	5.8	1400	35.2	27.3	0.77	2.05	42.2	17.2	4.5
	11.0	2.2	5.1	1200	44.7	2.23	37.1	104.5	5.87	6.5	1200	34.8	25.3	0.72	1.99	41.6	17.5	3.9
				1400	45.2	2.21	37.6	99.9	5.99	6.0	1400	35.8	28.0	0.78	2.03	42.7	17.6	4.3
90	5.0	0.3	0.6	1200	46.0	2.23	38.4	105.5	6.04	6.8	1200	32.7	24.2	0.74	2.32	40.6	14.1	6.3
				1400	46.4	2.20	38.9	100.7	6.17	6.3	1400	33.6	26.8	0.80	2.36	41.7	14.2	6.6
	8.0	1.2	2.8	1200	48.4	2.21	40.8	107.3	6.41	7.0	1200	33.0	24.3	0.74	2.26	40.7	14.6	5.9
				1400	48.7	2.18	41.2	102.2	6.54	6.5	1400	33.9	26.9	0.79	2.30	41.8	14.8	6.3
	11.0	2.1	5.0	1200	48.6	2.26	40.9	107.5	6.31	7.2	1200	34.8	27.3	0.78	2.38	42.9	14.6	5.5
				1400	48.8	2.22	41.2	102.3	6.44	6.7	1400	34.5	27.6	0.80	2.28	42.3	15.1	6.0
100	5.0	0.3	0.6	**Operation not recommended**							**Operation not recommended**							
	8.0	1.2	2.7								1200	30.7	24.7	0.80	2.72	40.0	11.3	7.3
											1400	31.6	27.3	0.86	2.77	41.0	11.4	8.1
	11.0	2.1	4.8								1200	31.2	25.3	0.81	2.69	40.4	11.6	6.9
											1400	32.1	28.0	0.87	2.75	41.5	11.7	7.6
110	5.0	0.3	0.6								**Operation not recommended**							
	8.0	1.1	2.6	**Operation not recommended**							1200	28.4	25.0	0.88	3.18	39.3	8.9	8.5
											1400	29.2	27.7	0.95	3.24	40.3	9.0	9.2
	11.0	2.0	4.6								1200	28.9	25.7	0.89	3.15	39.6	9.2	7.9
											1400	29.7	28.4	0.96	3.21	40.7	9.3	8.7
120	5.0	0.2	0.6								**Operation not recommended**							
	8.0	1.1	2.5								1200	23.8	21.4	0.90	3.36	35.2	7.1	11.0
											1400	24.2	23.2	0.96	3.44	36.0	7.0	11.7
	11.0	1.9	4.4								1200	24.0	21.4	0.89	3.25	35.1	7.4	10.4
											1400	24.5	23.2	0.95	3.35	35.9	7.3	11.4

Performance capacities shown in thousands of Btuh.

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Aston Series - Indoor Split
2 - 6 Tons 60Hz

GEOSTAR

Performance Data cont.

048 Full Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	6.0	1.1	2.4	**Operation not recommended**							**Operation not recommended**							
	9.0	2.1	4.9															
	12.0	3.2	7.3	1400	34.7	2.93	24.7	92.9	3.47	4.7								
				1600	33.4	2.99	23.2	89.3	3.27	4.2								
30	6.0	1.0	2.4	**Operation not recommended**							**Operation not recommended**							
	9.0	2.0	4.7	1400	35.2	2.95	25.1	93.3	3.49	4.9	1400	45.7	26.7	0.58	1.76	51.7	26.0	-
				1600	36.2	3.04	25.8	90.9	3.49	4.5	1600	46.5	29.2	0.63	1.85	52.8	25.1	-
	12.0	3.1	7.1	1400	38.3	3.01	28.0	95.3	3.73	5.0	1400	46.0	26.7	0.58	1.70	51.8	27.0	-
				1600	36.9	3.07	26.4	91.4	3.52	4.6	1600	47.1	29.2	0.62	1.79	53.2	26.3	-
40	6.0	1.0	2.3	**Operation not recommended**							**Operation not recommended**							
	9.0	2.0	4.6	1400	40.6	3.24	29.5	96.8	3.67	5.6	1400	48.7	30.2	0.62	2.09	55.8	23.2	-
				1600	41.8	3.31	30.5	94.2	3.70	5.2	1600	49.6	33.0	0.66	2.20	57.1	22.6	-
	12.0	3.0	6.9	1400	41.4	3.27	30.2	97.4	3.71	5.8	1400	49.1	30.2	0.62	2.03	56.0	24.1	-
				1600	42.7	3.34	31.3	94.7	3.75	5.3	1600	50.2	33.0	0.66	2.13	57.4	23.6	-
50	6.0	1.0	2.2	1400	44.4	3.45	32.6	99.3	3.77	6.1	1400	49.0	30.6	0.62	2.55	57.7	19.2	3.1
				1600	45.7	3.50	33.8	96.4	3.83	5.6	1600	51.6	34.0	0.66	2.68	60.7	19.2	3.3
	9.0	1.9	4.4	1400	46.0	3.53	33.9	100.4	3.82	6.3	1400	50.0	31.0	0.62	2.40	58.2	20.8	2.9
				1600	47.5	3.58	35.3	97.5	3.89	5.8	1600	52.6	34.4	0.65	2.52	61.2	20.9	3.1
	12.0	2.9	6.7	1400	47.0	3.56	34.9	101.1	3.87	6.5	1400	50.5	33.0	0.65	2.34	58.5	21.6	2.7
				1600	48.5	3.61	36.2	98.1	3.94	5.9	1600	53.2	36.7	0.69	2.46	61.6	21.6	3.0
60	6.0	0.9	2.2	1400	47.3	3.35	35.9	101.3	4.13	6.9	1400	48.2	31.2	0.65	2.74	57.6	17.6	3.8
				1600	48.8	3.38	37.3	98.3	4.24	6.4	1600	50.6	34.8	0.69	2.86	60.3	17.7	4.0
	9.0	1.9	4.3	1400	49.4	3.45	37.7	102.7	4.20	7.1	1400	49.4	31.6	0.64	2.60	58.2	19.0	3.5
				1600	51.0	3.47	39.2	99.5	4.31	6.6	1600	51.7	35.1	0.68	2.71	60.9	19.1	3.8
	12.0	2.8	6.5	1400	50.6	3.49	38.7	103.5	4.26	7.3	1400	49.8	33.3	0.67	2.54	58.5	19.7	3.3
				1600	52.3	3.50	40.4	100.3	4.38	6.7	1600	52.3	37.0	0.71	2.65	61.3	19.7	3.6
70	6.0	0.9	2.1	1400	50.3	3.26	39.2	103.3	4.53	7.9	1400	47.5	31.9	0.67	2.92	57.4	17.5	4.7
				1600	52.9	3.36	41.4	100.6	4.61	7.3	1600	50.6	36.5	0.72	3.12	60.7	16.2	5.0
	9.0	1.8	4.2	1400	52.9	3.36	41.4	105.0	4.61	8.1	1400	48.7	32.3	0.66	2.80	58.2	17.4	4.4
				1600	54.6	3.36	43.1	101.6	4.76	7.5	1600	50.8	35.8	0.70	2.90	61.1	17.5	4.7
	12.0	2.7	6.2	1400	54.3	3.40	42.6	105.9	4.67	8.4	1400	49.2	33.6	0.68	2.73	58.5	18.0	4.1
				1600	56.1	3.39	44.5	102.5	4.85	7.7	1600	51.4	37.2	0.72	2.84	61.2	18.1	4.5
80	6.0	0.9	2.0	1400	53.0	3.36	41.5	105.1	4.62	8.7	1400	46.0	31.8	0.69	3.28	57.2	14.0	5.9
				1600	54.9	3.33	43.5	101.7	4.82	8.1	1600	47.8	35.3	0.74	3.38	59.4	14.1	6.3
	9.0	1.7	4.0	1400	56.1	3.49	44.1	107.1	4.71	9.0	1400	47.3	32.2	0.68	3.17	58.1	14.9	5.5
				1600	58.0	3.46	46.2	103.5	4.91	8.3	1600	49.2	35.6	0.72	3.26	60.3	15.1	6.0
	12.0	2.6	6.0	1400	57.7	3.54	45.6	108.1	4.78	9.3	1400	47.8	32.9	0.69	3.10	58.4	15.4	5.1
				1600	59.7	3.49	47.8	104.5	5.02	8.6	1600	49.8	36.5	0.73	3.20	60.7	15.6	5.7
90	6.0	0.8	1.9	1400	55.7	3.46	43.9	106.9	4.72	9.7	1400	44.6	31.6	0.71	3.64	57.0	12.2	7.3
				1600	57.7	3.41	46.1	103.4	4.96	9.0	1600	46.1	35.1	0.76	3.73	58.8	12.4	7.8
	9.0	1.7	3.9	1400	59.2	3.62	46.9	109.2	4.80	10.0	1400	45.9	32.0	0.70	3.54	57.9	13.0	6.9
				1600	61.3	3.55	49.2	105.5	5.06	9.3	1600	47.6	35.5	0.75	3.62	59.9	13.1	7.5
	12.0	2.5	5.8	1400	61.1	3.67	48.6	110.4	4.88	10.3	1400	45.2	33.3	0.74	3.20	56.1	14.1	6.4
				1600	63.2	3.58	51.0	106.6	5.17	9.6	1600	48.1	35.8	0.74	3.55	60.2	13.5	7.1
100	6.0	0.8	1.9	**Operation not recommended**							**Operation not recommended**							
	9.0	1.6	3.7								1400	42.1	31.3	0.74	3.74	54.9	11.3	8.5
											1600	43.5	34.8	0.80	3.80	56.5	11.4	9.3
	12.0	2.4	5.6								1400	42.6	31.3	0.73	3.68	55.1	11.6	7.9
											1600	44.0	34.6	0.79	3.74	56.7	11.8	8.8
110	6.0	0.8	1.8	**Operation not recommended**							**Operation not recommended**							
	9.0	1.6	3.6								1400	38.4	30.7	0.80	3.95	51.8	9.7	10.4
											1600	39.4	34.1	0.86	3.98	53.0	9.9	11.3
	12.0	2.3	5.4								1400	38.7	30.3	0.78	3.88	52.0	10.0	9.7
											1600	39.8	33.4	0.84	3.92	55.2	10.2	10.8
120	6.0	0.7	1.7								**Operation not recommended**							
	9.0	1.5	3.5								1400	36.8	28.9	0.79	4.77	53.1	7.7	12.7
											1600	37.5	31.4	0.84	4.89	54.1	7.7	13.7
	12.0	2.2	5.2								1400	37.1	28.9	0.78	4.61	52.9	8.0	11.9
											1600	37.9	31.4	0.83	4.76	54.1	8.0	13.1

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

060 Part Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	6.0	0.9	1.4	**Operation not recommended**							**Operation not recommended**							
	10.0	2.7	6.2															
	14.0	4.9	11.4	1200	25.0	2.74	15.6	89.3	2.67	4.8								
				1500	26.9	2.76	17.5	86.6	2.86	4.5								
30	6.0	0.8	1.3	**Operation not recommended**							**Operation not recommended**							
	10.0	2.6	6.0	1200	30.6	2.77	21.1	93.6	3.24	5.0	1200	40.7	33.2	0.82	1.69	46.5	24.1	-
				1500	31.9	2.84	22.2	89.7	3.29	4.6	1500	41.3	36.3	0.88	1.78	47.4	23.2	-
	14.0	4.8	11.0	1200	31.5	2.89	21.6	94.3	3.19	5.1	1200	40.9	33.2	0.81	1.64	46.5	25.0	-
				1500	33.9	2.91	24.0	90.9	3.41	4.7	1500	41.9	36.3	0.87	1.72	47.8	24.4	-
40	6.0	0.7	1.3	**Operation not recommended**							**Operation not recommended**							
	10.0	2.5	5.9	1200	36.0	2.83	26.4	97.8	3.73	5.3	1200	44.5	32.9	0.74	1.76	50.5	25.2	-
				1500	37.3	2.88	27.4	93.0	3.79	4.9	1500	45.3	36.0	0.79	1.85	51.6	24.5	-
	14.0	4.6	10.7	1200	37.9	2.90	28.1	99.3	3.84	5.5	1200	44.8	32.9	0.73	1.71	50.7	26.2	-
				1500	39.3	2.95	29.2	94.2	3.90	5.0	1500	45.9	36.0	0.78	1.79	52.0	25.6	-
50	6.0	0.7	1.2	1200	40.0	2.89	30.1	100.8	4.06	5.7	1200	47.2	31.2	0.66	1.90	53.7	24.9	1.9
				1500	41.2	2.93	31.2	95.4	4.13	5.3	1500	48.6	34.5	0.71	1.74	54.5	32.5	2.0
	10.0	2.5	5.7	1200	41.4	2.89	31.5	101.9	4.20	5.8	1200	47.7	31.4	0.66	1.85	54.0	25.8	1.8
				1500	42.6	2.92	32.7	96.3	4.27	5.4	1500	49.0	34.7	0.71	1.89	55.4	26.0	1.9
	14.0	4.5	10.4	1200	43.3	2.95	33.2	103.4	4.30	6.0	1200	48.5	32.2	0.66	1.83	54.7	26.4	1.6
				1500	44.6	2.99	34.4	97.5	4.37	5.5	1500	49.8	35.6	0.71	1.87	56.2	26.6	1.8
60	6.0	0.5	1.2	1200	44.5	2.95	34.4	104.4	4.42	6.2	1200	45.9	31.0	0.68	2.10	53.1	21.9	2.6
				1500	45.6	2.98	35.5	98.2	4.49	5.8	1500	47.2	34.3	0.73	2.14	54.5	22.1	2.8
	10.0	2.4	5.5	1200	46.3	2.95	36.3	105.7	4.60	6.4	1200	46.3	31.2	0.67	2.04	53.3	22.7	2.5
				1500	47.4	2.97	37.3	99.3	4.68	5.9	1500	47.6	34.5	0.72	2.08	54.7	22.9	2.7
	14.0	4.3	10.0	1200	47.9	3.02	37.6	107.0	4.66	6.6	1200	47.1	32.0	0.68	2.03	54.0	23.2	2.3
				1500	49.0	3.03	38.7	100.2	4.74	6.1	1500	48.4	35.4	0.73	2.07	55.4	23.4	2.5
70	6.0	0.5	1.2	1200	49.0	3.02	38.7	107.8	4.75	6.9	1200	44.6	30.8	0.69	2.30	52.4	19.4	3.7
				1500	49.3	3.04	38.9	100.4	4.75	6.4	1500	45.8	34.4	0.75	2.60	54.0	17.6	3.9
	10.0	2.3	5.3	1200	51.2	3.01	40.9	109.5	4.98	7.1	1200	45.0	31.0	0.69	2.24	52.6	20.1	3.4
				1500	52.1	3.01	41.8	102.2	5.08	6.6	1500	46.2	34.3	0.74	2.28	54.7	20.3	3.7
	14.0	4.2	9.7	1200	52.5	3.08	42.0	110.5	5.00	7.2	1200	45.7	31.8	0.70	2.22	53.3	20.6	3.2
				1500	53.4	3.07	42.9	103.0	5.10	6.6	1500	47.0	35.2	0.75	2.26	54.8	20.8	3.5
80	6.0	0.5	1.1	1200	54.2	3.11	43.6	111.8	5.10	7.7	1200	43.1	30.1	0.70	2.65	52.1	16.3	5.5
				1500	54.9	3.10	44.4	103.9	5.20	7.1	1500	44.3	33.3	0.75	2.70	53.5	16.4	5.9
	10.0	2.2	5.1	1200	56.8	3.09	46.3	113.8	5.38	7.9	1200	43.5	30.3	0.70	2.58	52.3	16.9	5.2
				1500	57.5	3.07	47.0	105.5	5.49	7.3	1500	44.7	33.5	0.75	2.63	53.7	17.0	5.6
	14.0	4.1	9.4	1200	57.6	3.16	46.8	114.4	5.35	8.1	1200	44.2	31.1	0.70	2.56	52.9	17.3	4.9
				1500	58.2	3.13	47.5	105.9	5.45	7.5	1500	45.5	34.4	0.76	2.61	54.3	17.4	5.4
90	6.0	0.5	1.1	1200	59.4	3.21	48.4	115.8	5.43	8.6	1200	41.6	29.4	0.71	3.00	51.9	13.9	7.5
				1500	59.9	3.17	49.1	107.0	5.54	7.9	1500	42.8	32.6	0.76	3.06	53.2	14.0	7.9
	10.0	2.1	5.0	1200	62.4	3.18	51.6	118.2	5.76	8.8	1200	42.0	29.6	0.70	2.92	52.0	14.4	6.9
				1500	62.8	3.13	52.1	108.8	5.88	8.2	1500	43.2	32.8	0.76	2.98	53.3	14.5	7.6
	14.0	3.9	9.0	1200	62.7	3.24	51.7	118.4	5.67	9.1	1200	40.6	30.6	0.75	2.88	50.4	14.1	6.5
				1500	63.0	3.19	52.1	108.9	5.79	8.4	1500	43.9	33.6	0.77	2.95	54.0	14.9	7.2
100	6.0	0.4	1.0	**Operation not recommended**							**Operation not recommended**							
	10.0	2.1	4.8								1200	38.8	29.3	0.75	3.34	50.2	11.6	9.1
											1500	39.9	32.4	0.81	3.40	51.5	11.7	9.8
	14.0	3.8	8.7								1200	39.5	30.0	0.76	3.31	50.7	11.9	8.4
											1500	40.6	33.3	0.82	3.37	52.0	12.0	9.3
110	6.0	0.4	1.0								**Operation not recommended**							
	10.0	2.0	4.6								1200	35.6	29.0	0.81	3.75	48.4	9.5	11.3
											1500	36.6	32.1	0.88	3.82	49.6	9.6	12.4
	14.0	3.6	8.4								1200	36.2	29.7	0.82	3.72	48.9	9.7	10.6
											1500	37.2	32.9	0.88	3.79	50.1	9.8	11.8
120	6.0	0.4	1.0								**Operation not recommended**							
	10.0	1.9	4.4								1200	34.6	28.1	0.81	4.30	49.3	8.1	14.1
											1500	35.3	30.5	0.86	4.41	50.3	8.0	15.3
	14.0	3.5	8.1								1200	35.0	28.1	0.80	4.16	49.1	8.4	13.2
											1500	35.7	30.5	0.85	4.29	50.3	8.3	14.7

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

060 Full Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	8.0	1.4	3.2	**Operation not recommended**							**Operation not recommended**							
	12.0	3.9	8.9															
	16.0	6.3	14.6	1500	37.8	3.67	25.3	93.3	3.02	6.1								
				1800	38.5	3.55	26.4	89.8	3.18	5.6								
30	8.0	1.4	3.2	**Operation not recommended**							**Operation not recommended**							
	12.0	3.7	8.7	1500	44.9	3.85	31.8	97.7	3.42	6.4	1500	53.0	37.7	0.71	2.56	61.8	20.7	-
				1800	46.8	3.95	33.3	94.1	3.47	6.0	1800	53.9	41.2	0.76	2.70	63.1	20.0	-
	16.0	6.1	14.2	1500	48.9	4.19	34.6	100.2	3.42	6.6	1500	53.3	37.7	0.71	2.49	61.8	21.4	-
				1800	49.8	4.05	36.0	95.6	3.60	6.2	1800	54.6	41.2	0.75	2.61	63.5	20.9	-
40	8.0	1.3	3.1	**Operation not recommended**							**Operation not recommended**							
	12.0	3.6	8.4	1500	51.0	3.99	37.4	101.5	3.75	7.3	1500	58.2	38.8	0.67	2.79	67.7	20.8	-
				1800	52.7	4.06	38.9	97.1	3.80	6.7	1800	59.3	42.4	0.71	2.93	69.3	20.2	-
	16.0	6.0	13.8	1500	53.7	4.08	39.8	103.2	3.85	7.4	1500	58.6	38.8	0.66	2.71	67.9	21.6	-
				1800	55.6	4.16	41.4	98.6	3.91	6.8	1800	60.0	42.4	0.71	2.84	69.6	21.1	-
50	8.0	1.3	3.0	1500	54.9	4.12	40.9	103.9	3.91	7.8	1500	61.9	38.1	0.62	3.11	72.6	19.9	4.1
				1800	56.7	4.18	42.4	99.1	3.97	7.3	1800	63.7	42.2	0.66	3.05	74.1	23.3	4.2
	12.0	3.5	8.1	1500	56.9	4.12	42.8	105.1	4.04	8.1	1500	62.5	38.3	0.61	3.03	72.8	20.6	3.7
				1800	58.6	4.18	44.3	100.1	4.11	7.4	1800	64.2	42.4	0.66	3.09	74.8	20.8	4.0
	16.0	5.8	13.3	1500	59.5	4.22	45.1	106.8	4.14	8.2	1500	63.5	39.3	0.62	3.00	73.8	21.2	3.6
				1800	61.3	4.27	46.7	101.5	4.21	7.5	1800	65.3	43.5	0.67	3.06	75.7	21.3	3.9
60	8.0	1.2	2.9	1500	61.6	4.43	46.4	108.0	4.07	8.7	1500	61.2	38.1	0.62	3.38	72.7	18.1	4.9
				1800	63.1	4.46	47.9	102.5	4.14	8.1	1800	62.9	42.2	0.67	3.45	74.7	18.2	5.1
	12.0	3.4	7.9	1500	64.0	4.42	48.9	109.5	4.24	8.9	1500	61.7	38.3	0.62	3.30	73.0	18.7	4.6
				1800	65.5	4.45	50.4	103.7	4.32	8.4	1800	63.5	42.4	0.67	3.36	74.9	18.9	4.9
	16.0	5.6	12.9	1500	66.3	4.52	50.8	110.9	4.29	9.1	1500	62.8	39.3	0.63	3.27	73.9	19.2	4.2
				1800	67.8	4.55	52.2	104.9	4.37	8.5	1800	64.5	43.5	0.67	3.33	75.9	19.4	4.7
70	8.0	1.2	2.8	1500	68.1	4.75	51.9	112.0	4.21	9.8	1500	60.4	38.1	0.63	3.66	72.9	16.5	5.9
				1800	69.7	4.52	54.3	105.9	4.52	9.1	1800	62.3	42.3	0.68	3.83	75.1	16.3	6.2
	12.0	3.3	7.6	1500	71.1	4.73	55.0	113.9	4.41	10.0	1500	61.0	38.3	0.63	3.56	73.1	17.1	5.5
				1800	72.4	4.72	56.3	107.2	4.49	9.3	1800	62.7	42.4	0.68	3.63	75.4	17.3	5.9
	16.0	5.4	12.5	1500	72.9	4.83	56.5	115.0	4.43	10.3	1500	62.0	39.3	0.63	3.53	74.0	17.6	5.2
				1800	74.2	4.82	57.8	108.2	4.51	9.7	1800	63.7	43.5	0.68	3.60	76.0	17.7	5.7
80	8.0	1.2	2.7	1500	73.9	5.01	56.8	115.6	4.32	11.0	1500	58.9	37.7	0.64	4.04	72.6	14.6	7.5
				1800	74.9	4.98	57.9	108.5	4.41	10.3	1800	60.5	41.7	0.69	4.12	74.5	14.7	7.9
	12.0	3.2	7.4	1500	77.5	4.98	60.5	117.8	4.56	11.4	1500	59.4	37.9	0.64	3.93	72.8	15.1	7.0
				1800	78.4	4.94	61.5	110.3	4.65	10.5	1800	61.0	42.0	0.69	4.01	74.7	15.2	7.5
	16.0	5.2	12.1	1500	78.5	5.08	61.2	118.5	4.53	11.7	1500	60.4	38.9	0.64	3.90	73.7	15.5	6.5
				1800	79.4	5.04	62.2	110.8	4.62	10.9	1800	62.1	43.1	0.69	3.98	75.6	15.6	7.2
90	8.0	1.1	2.6	1500	79.6	5.28	61.6	119.2	4.43	12.4	1500	57.3	37.3	0.65	4.42	72.4	13.0	9.6
				1800	80.3	5.21	62.5	111.3	4.52	11.5	1800	58.9	41.3	0.70	4.50	74.3	13.1	10.3
	12.0	3.1	7.1	1500	83.8	5.23	65.9	121.7	4.69	12.8	1500	57.8	37.5	0.65	4.31	72.5	13.4	9.0
				1800	84.3	5.16	66.6	113.4	4.79	11.9	1800	59.4	41.5	0.70	4.39	74.4	13.5	9.7
	16.0	5.0	11.6	1500	84.1	5.33	65.9	121.9	4.62	13.1	1500	58.1	39.4	0.68	4.17	72.3	13.9	8.4
				1800	84.5	5.25	66.7	113.5	4.72	12.5	1800	60.4	42.6	0.71	4.35	75.2	13.9	9.3
100	8.0	1.1	2.5	**Operation not recommended**							**Operation not recommended**							
	12.0	3.0	6.8								1500	54.6	37.1	0.68	4.83	71.1	11.3	10.9
											1800	56.1	41.1	0.73	4.92	72.9	11.4	11.7
	16.0	4.8	11.2								1500	55.5	38.1	0.69	4.79	71.8	11.6	10.2
											1800	57.1	42.2	0.74	4.88	73.7	11.7	11.2
110	8.0	1.0	2.4								**Operation not recommended**							
	12.0	2.9	6.6								1500	51.4	36.7	0.71	5.35	69.7	9.6	13.9
											1800	52.8	40.7	0.77	5.46	71.5	9.7	14.9
	16.0	4.7	10.8								1500	52.3	37.7	0.72	5.31	70.4	9.8	12.9
											1800	53.7	41.7	0.78	5.41	72.2	9.9	14.2
120	8.0	1.0	2.3								**Operation not recommended**							
	12.0	2.7	6.3								1500	50.8	36.7	0.72	5.89	70.9	8.6	16.4
											1800	51.7	39.8	0.77	6.04	72.3	8.6	17.1
	16.0	4.5	10.4								1500	51.2	36.7	0.72	5.70	70.7	9.0	15.6
											1800	52.3	39.8	0.76	5.88	72.4	8.9	17.3

Performance capacities shown in thousands of Btuh.

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Performance Data cont.

066 Part Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	10.0	1.6	3.8	**Operation not recommended**							**Operation not recommended**							
	13.0	3.2	7.3															
	16.0	4.7	10.8	1400	34.9	3.55	22.8	93.1	2.88	4.2								
				1600	34.1	3.51	22.1	89.7	2.85	4.9								
30	10.0	1.6	3.7	**Operation not recommended**							**Operation not recommended**							
	13.0	3.1	7.1	1400	35.6	3.40	24.0	93.6	3.07	5.3	1400	49.5	34.4	0.69	2.00	56.4	24.7	-
				1600	37.1	3.49	25.2	91.5	3.11	4.5	1600	50.3	37.6	0.75	2.11	57.5	23.9	-
	16.0	4.5	10.5	1400	40.4	3.62	28.0	96.7	3.27	4.8	1400	49.8	34.4	0.69	1.94	56.4	25.6	-
				1600	39.5	3.58	27.3	92.9	3.23	5.5	1600	51.0	37.6	0.74	2.04	58.0	25.0	-
40	10.0	1.5	3.6	**Operation not recommended**							**Operation not recommended**							
	13.0	3.0	6.9	1400	42.6	3.51	30.6	98.2	3.56	6.3	1400	52.0	34.9	0.67	2.08	59.1	24.9	-
				1600	44.1	3.57	31.9	95.5	3.61	5.7	1600	52.9	38.1	0.72	2.19	60.4	24.2	-
	16.0	4.4	10.2	1400	44.9	3.59	32.6	99.7	3.66	6.5	1400	52.4	34.9	0.67	2.02	59.3	25.9	-
				1600	46.5	3.66	34.0	96.9	3.72	5.9	1600	53.6	38.1	0.71	2.12	60.8	25.3	-
50	10.0	1.5	3.5	1400	47.9	3.61	35.5	101.6	3.89	6.6	1400	53.2	33.8	0.64	2.22	60.8	23.9	2.0
				1600	49.4	3.66	36.9	98.6	3.95	6.1	1600	54.7	37.4	0.68	1.00	58.1	28.1	2.1
	13.0	2.9	6.7	1400	49.5	3.61	37.2	102.8	4.02	6.8	1400	53.7	34.0	0.63	2.17	61.1	24.8	1.8
				1600	51.0	3.66	38.6	99.5	4.09	6.2	1600	55.2	37.6	0.68	2.21	62.7	25.0	2.0
	16.0	4.3	9.9	1400	51.9	3.70	39.3	104.3	4.11	7.0	1400	54.6	34.9	0.64	2.15	61.9	25.4	1.7
				1600	53.4	3.74	40.6	100.9	4.18	6.4	1600	56.1	38.6	0.69	2.19	63.6	25.6	1.9
60	10.0	1.4	3.3	1400	53.7	3.73	40.9	105.5	4.22	7.3	1400	51.7	33.7	0.65	2.55	60.4	20.3	2.9
				1600	55.0	3.76	42.2	101.8	4.29	6.7	1600	53.1	37.3	0.70	2.60	62.0	20.4	3.1
	13.0	2.8	6.5	1400	55.8	3.72	43.1	106.9	4.39	7.5	1400	52.1	33.9	0.65	2.48	60.6	21.0	2.7
				1600	57.1	3.74	44.3	103.1	4.47	6.9	1600	53.6	37.5	0.70	2.53	62.2	21.2	2.9
	16.0	4.1	9.6	1400	57.8	3.81	44.8	108.2	4.45	7.7	1400	53.0	34.7	0.66	2.46	61.4	21.5	2.5
				1600	59.1	3.83	46.0	104.2	4.52	7.1	1600	54.5	38.5	0.71	2.51	63.0	21.7	2.8
70	10.0	1.4	3.2	1400	59.4	3.85	46.3	109.3	4.52	8.1	1400	50.1	33.5	0.67	2.88	59.9	17.4	4.1
				1600	61.8	3.83	48.7	105.8	4.73	7.5	1600	52.2	37.9	0.73	2.94	61.7	17.8	4.3
	13.0	2.7	6.2	1400	62.0	3.83	48.9	111.0	4.74	8.3	1400	50.5	33.7	0.67	2.80	60.1	18.0	3.8
				1600	63.1	3.83	50.1	106.5	4.83	7.7	1600	51.9	37.3	0.72	2.86	62.2	18.2	4.1
	16.0	4.0	9.2	1400	63.6	3.92	50.2	112.1	4.76	8.5	1400	51.4	34.6	0.67	2.78	60.8	18.5	3.5
				1600	64.7	3.91	51.4	107.4	4.85	7.9	1600	52.8	38.3	0.73	2.83	62.5	18.7	3.9
80	10.0	1.4	3.1	1400	63.8	3.94	50.4	112.2	4.75	8.0	1400	47.9	33.0	0.69	3.24	58.9	14.8	6.1
				1600	64.7	3.92	51.3	107.4	4.84	8.3	1600	49.2	36.5	0.74	3.30	60.5	14.9	5.9
	13.0	2.6	6.0	1400	66.9	3.91	53.6	114.3	5.01	9.3	1400	48.3	33.2	0.69	3.16	59.1	15.3	5.2
				1600	67.7	3.89	54.4	109.2	5.11	8.6	1600	49.6	36.8	0.74	3.22	60.6	15.4	5.6
	16.0	3.9	8.9	1400	67.8	4.00	54.2	114.9	4.98	9.6	1400	49.1	34.1	0.69	3.13	59.8	15.7	4.8
				1600	68.6	3.96	55.0	109.7	5.07	8.9	1600	50.5	37.7	0.75	3.19	61.3	15.8	5.8
90	10.0	1.3	3.0	1400	68.2	4.03	54.5	115.1	4.96	10.1	1400	45.6	32.5	0.71	3.61	57.9	12.7	8.5
				1600	68.8	3.98	55.2	109.8	5.06	9.3	1600	46.9	36.0	0.77	3.68	59.4	12.8	9.0
	13.0	2.5	5.8	1400	71.8	3.99	58.1	117.5	5.26	10.4	1400	46.0	32.7	0.71	3.51	58.0	13.1	8.0
				1600	72.2	3.94	58.7	111.8	5.37	9.8	1600	47.3	36.2	0.76	3.58	59.5	13.2	8.6
	16.0	3.7	8.6	1400	72.1	4.07	58.2	117.7	5.18	10.8	1400	50.2	35.9	0.72	3.55	62.3	14.1	7.4
				1600	72.4	4.01	58.8	111.9	5.29	10.0	1600	48.1	37.1	0.77	3.55	60.2	13.5	8.2
100	10.0	1.3	2.9	**Operation not recommended**							**Operation not recommended**							
	13.0	2.4	5.6								1400	45.3	33.4	0.74	4.21	59.6	10.8	10.2
											1600	46.5	37.0	0.79	4.29	61.2	10.9	11.3
	16.0	3.6	8.3								1400	46.0	34.2	0.74	4.17	60.2	11.0	9.5
											1600	47.3	37.9	0.80	4.25	61.8	11.1	10.4
110	10.0	1.2	2.8								**Operation not recommended**							
	13.0	2.3	5.4								1400	44.5	34.1	0.77	4.90	61.2	9.1	13.0
											1600	45.7	37.7	0.82	4.99	62.8	9.2	14.1
	16.0	3.5	8.0								1400	45.2	35.0	0.77	4.86	61.8	9.3	12.1
											1600	46.5	38.7	0.83	4.95	63.4	9.4	13.4
120	10.0	1.2	2.7								**Operation not recommended**							
	13.0	2.2	5.2								1400	38.1	30.0	0.79	5.26	56.1	7.3	15.9
											1600	38.8	32.6	0.84	5.40	57.2	7.2	16.9
	16.0	3.3	7.7								1400	38.5	30.0	0.78	5.09	55.8	7.6	14.6
											1600	39.3	32.6	0.83	5.25	57.2	7.5	16.4

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Performance Data cont.

066 Full Load

EWT °F	Flow gpm	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT	Airflow cfm	HC kBtuh	Power kW	HE kBtuh	LAT °F	COP	HWC kBtuh	Airflow cfm	TC kBtuh	SC kBtuh	S/T Ratio	Power kW	HR kBtuh	EER	HWC kBtuh
20	12.0	2.7	6.2	**Operation not recommended**							**Operation not recommended**							
	15.0	4.4	10.3															
	18.0	6.2	14.3	1800	43.9	4.43	28.8	92.6	2.90	7.9								
				2000	43.7	4.49	28.4	90.2	2.85	7.1								
30	12.0	2.6	6.0	**Operation not recommended**							**Operation not recommended**							
	15.0	4.3	10.0	1800	52.7	4.64	36.9	97.1	3.33	8.3	1800	60.5	36.8	0.61	3.13	71.2	19.3	-
				2000	54.2	4.78	37.9	95.1	3.32	7.6	2000	61.5	40.2	0.65	3.30	72.7	18.6	-
	18.0	6.0	13.9	1800	55.6	4.77	39.3	98.6	3.42	8.5	1800	60.8	36.8	0.60	3.04	71.2	20.0	-
				2000	55.3	4.83	38.8	95.6	3.36	7.7	2000	62.3	40.2	0.65	3.19	73.2	19.5	-
40	12.0	2.5	5.9	**Operation not recommended**							**Operation not recommended**							
	15.0	4.2	9.7	1800	59.6	4.76	43.4	100.7	3.67	9.2	1800	65.0	40.2	0.62	3.37	76.5	19.3	-
				2000	61.5	4.86	44.9	98.5	3.71	8.4	2000	66.2	43.9	0.66	3.53	78.2	18.8	-
	18.0	5.8	13.5	1800	60.8	4.80	44.4	101.3	3.71	9.5	1800	65.5	40.2	0.61	3.27	76.6	20.1	-
				2000	62.8	4.91	46.0	99.1	3.75	8.6	2000	67.0	43.9	0.66	3.42	78.6	19.6	-
50	12.0	2.5	5.7	1800	64.2	4.76	48.0	103.0	3.95	9.9	1800	65.9	39.7	0.60	3.77	78.8	17.5	4.3
				2000	66.1	4.83	49.7	100.6	4.02	9.2	2000	69.4	44.1	0.64	3.97	82.9	17.5	4.5
	15.0	4.1	9.4	1800	66.6	4.87	50.0	104.2	4.01	10.2	1800	67.4	40.1	0.60	3.55	79.5	19.0	4.0
				2000	68.7	4.94	51.9	101.8	4.08	9.4	2000	70.8	44.6	0.63	3.73	83.5	19.0	4.3
	18.0	5.7	13.1	1800	68.1	4.91	51.3	105.0	4.06	10.5	1800	68.0	42.8	0.63	3.47	79.8	19.6	3.7
				2000	70.2	4.98	53.2	102.5	4.13	9.6	2000	71.6	47.6	0.66	3.64	84.0	19.7	4.1
60	12.0	2.4	5.5	1800	69.6	5.05	52.4	105.8	4.04	11.1	1800	64.5	40.6	0.63	4.07	78.4	15.9	5.5
				2000	71.8	5.08	54.5	103.3	4.15	10.3	2000	67.6	45.1	0.67	4.25	82.1	15.9	5.5
	15.0	3.9	9.1	1800	72.7	5.19	55.0	107.4	4.11	11.5	1800	66.0	41.1	0.62	3.87	79.2	17.1	4.9
				2000	75.1	5.22	57.3	104.8	4.21	10.6	2000	69.1	45.6	0.66	4.02	82.9	17.2	5.3
	18.0	5.5	12.7	1800	74.5	5.24	56.6	108.3	4.16	11.8	1800	66.7	43.3	0.65	3.77	79.5	17.7	4.5
				2000	77.0	5.27	59.0	105.6	4.28	10.9	2000	70.0	48.0	0.69	3.94	83.4	17.8	5.0
70	12.0	2.3	5.3	1800	75.1	5.33	56.9	108.6	4.13	12.5	1800	63.1	41.5	0.66	4.36	78.0	17.5	6.6
				2000	81.8	5.41	62.7	107.9	4.43	11.6	2000	67.9	48.1	0.71	4.34	82.2	15.6	6.9
	15.0	3.8	8.8	1800	78.9	5.51	60.1	110.6	4.20	12.9	1800	64.7	42.0	0.65	4.18	79.0	15.5	6.1
				2000	81.5	5.51	63.3	107.7	4.34	11.9	2000	67.5	46.6	0.69	4.32	82.7	15.6	6.6
	18.0	5.3	12.2	1800	80.9	5.57	61.9	111.6	4.26	13.3	1800	65.4	43.7	0.67	4.07	79.3	16.0	5.7
				2000	83.7	5.55	64.8	108.8	4.42	12.3	2000	68.3	48.4	0.71	4.24	82.8	16.1	6.3
80	12.0	2.2	5.1	1800	78.1	5.48	59.4	110.2	4.18	13.9	1800	59.9	41.4	0.69	4.74	76.1	12.6	8.4
				2000	80.8	5.43	62.3	107.4	4.36	12.8	2000	62.3	46.0	0.74	4.89	78.9	12.7	8.9
	15.0	3.7	8.5	1800	82.6	5.69	63.1	112.5	4.25	14.3	1800	61.5	41.9	0.68	4.57	77.1	13.5	7.8
				2000	85.4	5.64	66.1	109.5	4.44	13.2	2000	64.0	46.4	0.73	4.71	80.1	13.6	8.4
	18.0	5.1	11.8	1800	84.9	5.77	65.3	113.7	4.32	14.7	1800	62.2	42.9	0.69	4.48	77.5	13.9	7.2
				2000	87.9	5.68	68.5	110.7	4.53	13.6	2000	64.8	47.6	0.73	4.62	80.5	14.0	8.0
90	12.0	2.1	5.0	1800	81.1	5.62	61.9	111.7	4.23	15.4	1800	56.7	41.3	0.73	5.12	74.1	11.1	10.5
				2000	84.0	5.54	65.1	108.9	4.45	14.3	2000	58.7	45.8	0.78	5.24	76.6	11.2	11.1
	15.0	3.5	8.2	1800	86.2	5.87	66.2	114.4	4.30	15.9	1800	58.4	41.8	0.72	4.97	75.3	11.7	9.8
				2000	89.3	5.77	69.6	111.3	4.54	14.7	2000	60.5	46.3	0.77	5.09	77.9	11.9	10.6
	18.0	4.9	11.4	1800	88.9	5.96	68.6	115.8	4.38	16.4	1800	68.5	47.7	0.70	4.96	85.4	13.8	9.1
				2000	92.0	5.81	72.2	112.6	4.64	15.2	2000	61.2	46.7	0.76	4.99	78.2	12.3	10.1
100	12.0	2.1	4.8	**Operation not recommended**							**Operation not recommended**							
	15.0	3.4	7.9								1800	55.0	42.7	0.78	5.39	73.4	10.2	12.2
											2000	56.8	47.4	0.83	5.47	75.5	10.4	13.2
	18.0	4.8	11.0								1800	55.6	42.6	0.77	5.29	73.7	10.5	11.3
											2000	57.5	47.2	0.82	5.38	75.8	10.7	12.5
110	12.0	2.0	4.6								**Operation not recommended**							
	15.0	3.3	7.6								1800	51.8	43.7	0.84	5.80	71.5	8.9	14.9
											2000	53.2	48.6	0.91	5.84	73.1	9.1	16.1
	18.0	4.6	10.6								1800	52.3	43.1	0.82	5.70	71.7	9.2	13.8
											2000	53.7	47.6	0.89	5.76	75.7	9.3	15.3
120	12.0	1.9	4.4								**Operation not recommended**							
	15.0	3.2	7.3								1800	50.3	39.2	0.78	6.75	73.3	7.4	18.0
											2000	51.2	42.6	0.83	6.93	74.8	7.4	19.5
	18.0	4.4	10.2								1800	50.7	39.2	0.77	6.53	73.0	7.8	16.7
											2000	51.8	42.6	0.82	6.74	74.8	7.7	18.5

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