

SUBMITTAL DATA

Affinity Advanced Series



R-454B
60Hz

SDW5-0016Y



Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Nomenclature

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

Brand
Y – York

Model
5 – Affinity

Type
A – Water to Air

Cabinet Configuration
V – Vertical Package
H – Horizontal Package

Unit Capacity
018,024,030,036,042,
048,060 and 072

Refrigerant
B – R454B

Compressor Type
D – Dual Capacity

Voltage
1 – 208-230/60/1

Vintage
* – Factory Use Only

Hot Water Generation
0 – None
1 – Hot Water Generation with Factory Installed Pump

Blower
2 – Variable Speed ECM

Water Coil
C – Copper
N – CuproNickel

IntelliStart
0 – None
1 – Yes

Mitigation
0 – None
1 – Sensor Mitigation*

Controls
B – Aurora Advanced Control
(Energy Monitoring)
with EEV
D – Aurora Premium Control
(Performance and Refrigeration
Monitoring) with EEV

Filter Option
2 – 2" Filter Rack with
2" MERV11 Filter

Return Air Configuration
L – Left
R – Right

Discharge Air Configuration
T – Top (Vertical)
B – Bottom (Vertical) 024-072
S – Side (Horizontal)
E – End (Horizontal)

Rev.: 4/19/24

* Sensor mitigation required on 048
horizontal models and all 060 and 072
models.

Contractor: _____ P.O.: _____

Engineer: _____

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Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**AHRI/ISO 13256-1 Performance Ratings****Variable Speed ECM motor**

AHRI/ASHRAE/ISO 13256-1

English (IP) Units

Model	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
018	5	600	20,800	27.00	18,900	5.00	18,700	19.80	14,700	4.20
	4	500	15,200	29.50	14,200	5.10	14,700	24.80	12,400	4.70
024	8	950	26,400	25.20	23,300	4.90	25,000	19.20	19,400	4.10
	7	750	19,700	31.80	16,900	5.20	19,600	26.60	15,800	4.60
030	8	1000	35,200	27.50	31,100	4.80	32,300	20.30	24,600	4.00
	7	800	26,100	35.90	21,800	4.90	24,800	28.70	19,400	4.30
036	9	1300	41,800	28.40	36,000	5.30	38,500	20.80	29,600	4.50
	8	1150	31,000	35.60	25,900	5.50	30,300	30.00	23,600	5.00
042	11	1300	46,200	26.60	41,700	5.20	41,700	19.20	33,700	4.40
	10	1200	34,400	32.70	29,700	5.50	33,100	26.90	26,600	4.90
048	12	1600	53,100	24.90	49,300	5.10	50,500	18.9	40,100	4.40
	11	1400	39,900	32.70	35,500	5.50	39,200	27.30	32,000	5.00
060	16	1800	68,400	24.20	56,100	4.70	66,000	19.30	47,600	4.10
	14	1500	49,400	31.40	38,700	4.90	49,100	26.50	35,500	4.40
072	18	2000	78,100	23.10	71,400	4.60	73,400	18.30	57,900	4.00
	16	1500	58,900	29.70	52,600	4.60	56,300	25.10	47,600	4.20

Cooling capacities based upon 80.6°F DB, 66.2°F WB entering air temperature

8/05/24

Heating capacities based upon 68°F DB, 59°F WB entering air temperature

All ratings based upon 208V operation

Contractor: _____ P.O.: _____
Engineer: _____
Project Name: _____ Unit Tag: _____



AHRI/ISO 13256-1 Performance Ratings

Energy Star Compliance Table

Model	Tier 3	
	Ground Water	Ground Loop
018	YES	YES
024	YES	YES
030	YES	YES
036	YES	YES
042	YES	YES
048	YES	YES
060	YES	YES
072	YES	YES

01/25/24

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 represents the current minimum efficiency water source heat pumps must have in order to be Energy Star rated.

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

Water-to-Air	EER	COP
Ground Loop	17.1	3.6
Ground Water	21.1	4.1
Water-to-Water		
Ground Loop	16.1	3.1
Ground Water	20.1	3.5



Contractor:_____ P.O.: _____

Engineer:_____

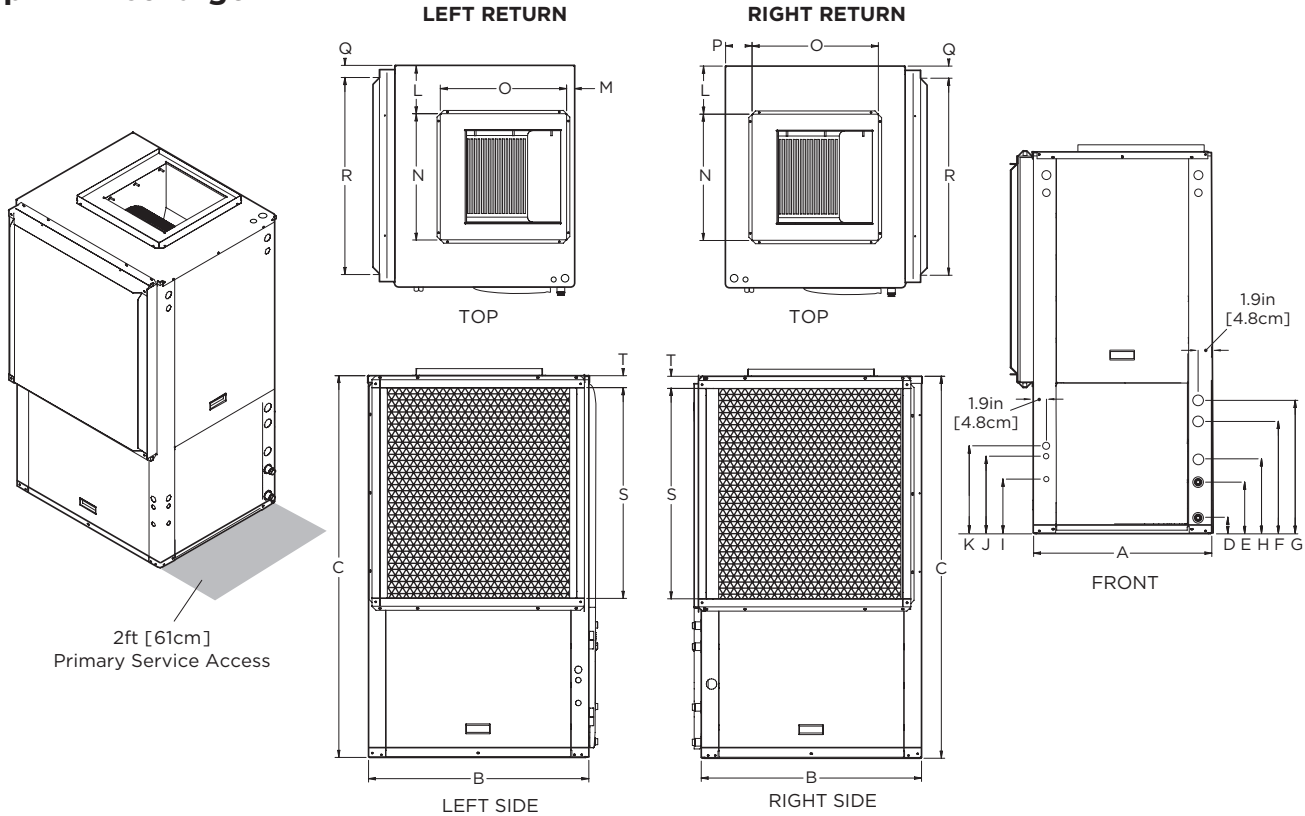
Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Dimensional Data - Vertical

Top Air Discharge



Vertical Top Flow Model		Overall Cabinet			Water Connections							Electrical Connections			Discharge Connection duct flange installed (±0.10 in)					Return Connection using std deluxe filter rack (±0.10 in)			
												I 3/4" cond	J 1/2" cond	K 1/2" cond									
		A	B	C	D	E	F	G	H	Loop Water FPT	HWG (O.D.)	Power Supply	Ext Pump	Low Votage	L	M	N	O	P	Q	R	S	T
		Width	Depth	Height	Loop In	Loop Out	HWG In	HWG Out	Cond- ensate								Supply Width	Supply Depth			Return Depth	Return Height	
018	in.	22.5	26.5	39.4	2.3	5.3	13.4	16.4	9.6	1" Swivel	1/2" Stub	6.9	9.4	11.7	6.3	0.7	14.0	14.0	2.7	2.3	22.0	18.0	2.0
	cm.	57.2	67.3	100.1	5.8	13.5	34.0	41.7	24.4			17.5	23.9	29.7	16.0	1.8	35.6	35.6	6.9	5.8	55.9	45.7	5.1
024-030	in.	22.5	26.5	48.5	2.0	7.0	13.5	16.5	10.2	1" Swivel	1/2" Stub	9.5	12.1	14.3	6.1	0.8	14.0	14.0	4.4	1.7	22.2	26.0	1.7
	cm.	57.2	67.3	123.2	5.1	17.8	34.3	41.9	25.9			24.1	30.7	36.3	15.5	2.0	35.6	35.6	11.2	4.3	56.4	66.0	4.3
036	in.	25.6	31.6	50.4	2.3	7.3	15.9	18.9	10.6	1" Swivel	1/2" Stub	9.5	12.1	14.3	6.9	1.1	18.0	18.0	3.8	1.7	28.1	26.0	1.7
	cm.	65.0	80.3	128.0	5.8	18.5	40.4	48.0	26.9			24.1	30.7	36.3	17.5	2.8	45.7	45.7	9.7	4.3	71.4	66.0	4.3
042-048	in.	25.6	31.6	54.4	2.3	7.3	15.9	18.9	10.6	1" Swivel	1/2" Stub	9.5	12.1	14.3	6.9	1.1	18.0	18.0	3.8	1.7	28.1	30.0	1.7
	cm.	65.0	80.3	138.2	5.8	18.5	40.4	48.0	26.9			24.1	30.7	36.3	17.5	2.8	45.7	45.7	9.7	4.3	71.4	76.2	4.3
060-072	in.	25.6	31.6	58.4	2.3	7.3	15.9	18.9	10.6	1" Swivel	1/2" Stub	9.5	12.1	14.3	6.9	1.1	18.0	18.0	3.8	1.7	28.1	34.0	1.7
	cm.	65.0	80.3	148.3	5.8	18.5	40.4	48.0	26.9			24.1	30.7	36.3	17.5	2.8	45.7	45.7	9.7	4.3	71.4	86.4	4.3

Condensate is 3/4" PVC female glue socket and is switchable from side to front
Unit shipped with deluxe 2" (field adjustable to 1") duct collar/filter rack extending from unit 3.25" and is suitable for duct connection.
Discharge flange is field installed and extends 1" [25.4mm] from cabinet
Decorative molding and/or water connections extend 1.2" [30.5mm] beyond front of cabinet.

1/25/24

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Contractor: _____ P.O.: _____

Engineer: _____

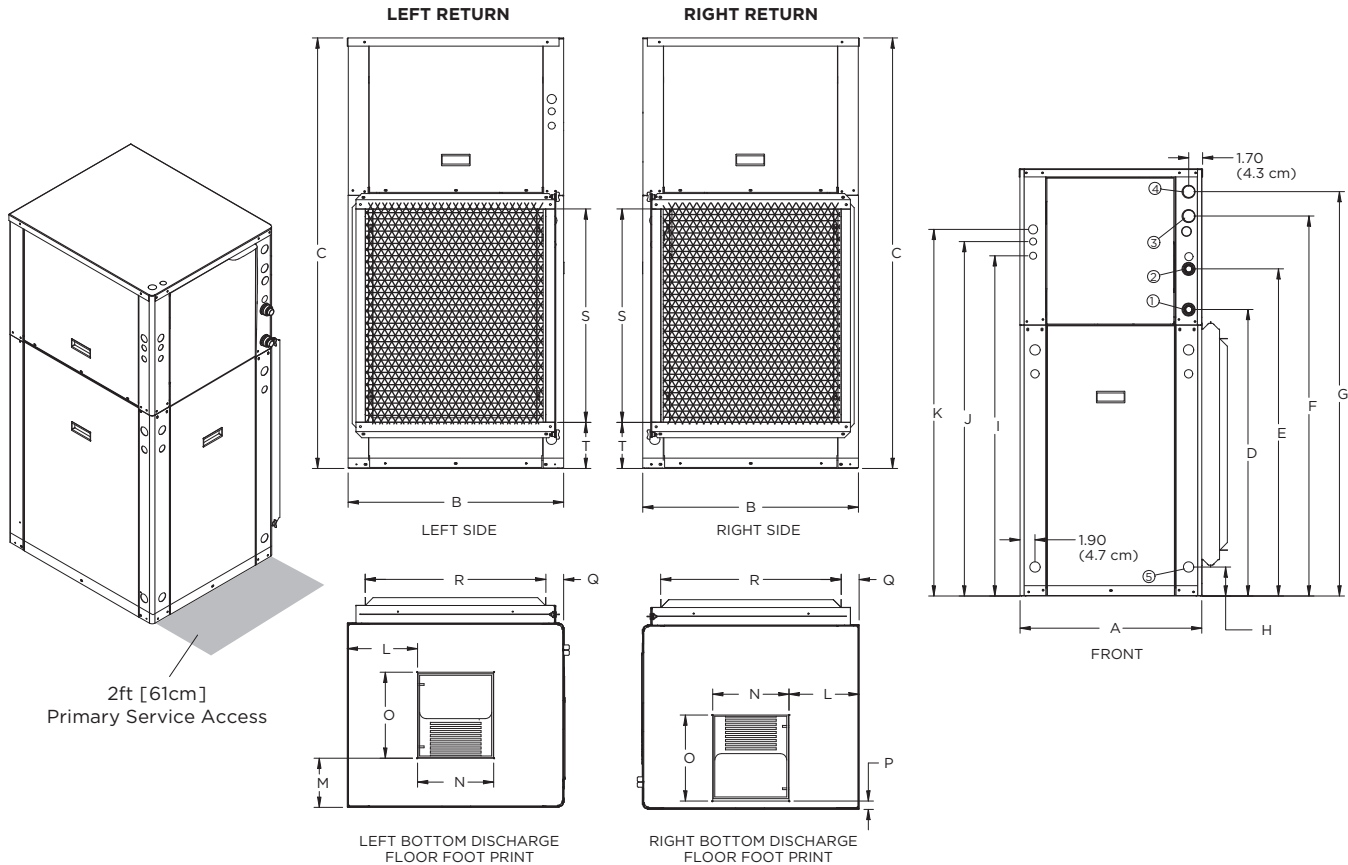
Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Dimensional Data - Vertical cont.

Bottom Air Discharge



Bottom Flow Models	Overall Cabinet			Water Connections							Electrical Knockouts			Discharge Connection duct flange installed (±0.10 in)					Return Connection using std deluxe filter rack (±0.10 in)				
				1	2	3	4	5				I 3/4 in. cond	J 1/2 in. cond										K 1/2 in. cond
	A	B	C	D	E	F	G	H	Loop Water FPT	HWG (O.D.)	Power Supply	Ext Pump	Low Voltage	L	M	N	O	P	Q	R	S	T	
	Width	Depth	Height	In	Out	HWG In	HWG Out	Con- densate								Supply Width	Supply Depth			Return Depth	Return Height		
024- 030	in. cm.	22.5	26.5	52.5	35.3	40.2	46.7	49.7	3.6	1 in.	1/2 in.	41.9	43.6	45.1	8.6	6.0	9.3	10.5	1.0	2.2	22.2	26.0	5.6
		57.2	67.3	133.4	89.7	102.1	118.6	126.2	9.1	Swivel	Stub	106.4	110.7	114.6	21.8	15.2	23.6	26.7	2.5	5.6	56.4	66.0	14.2
036- 072	in. cm.	25.5	31.5	62.5	43.4	48.4	57.0	60.0	3.6	1 in.	1/2 in.	48.9	50.8	52.2	9.1	4.8	13.4	13.6	1.5	1.8	28.1	34.0	5.6
		64.8	80.0	158.8	110.2	122.9	144.8	152.4	9.1	Swivel	Stub	124.2	129.0	132.6	23.1	12.2	34.0	34.5	3.8	4.6	71.4	86.4	14.2

Condensate is 3/4 in. PVC female glue socket and is switchable from side to front
 Vertical bottom flow unit shipped with deluxe 2 in. (field adjustable to 1 in.) duct collar/filter rack extending from unit 3.25 in. and is suitable for duct connection.
 Water connections extend 1.2 in. (30.5mm) beyond front of cabinet.
 Top panel has 1.375 in. and 1.125 in. knockouts for electrical connections.

7/11/12

Contractor: _____ P.O.: _____

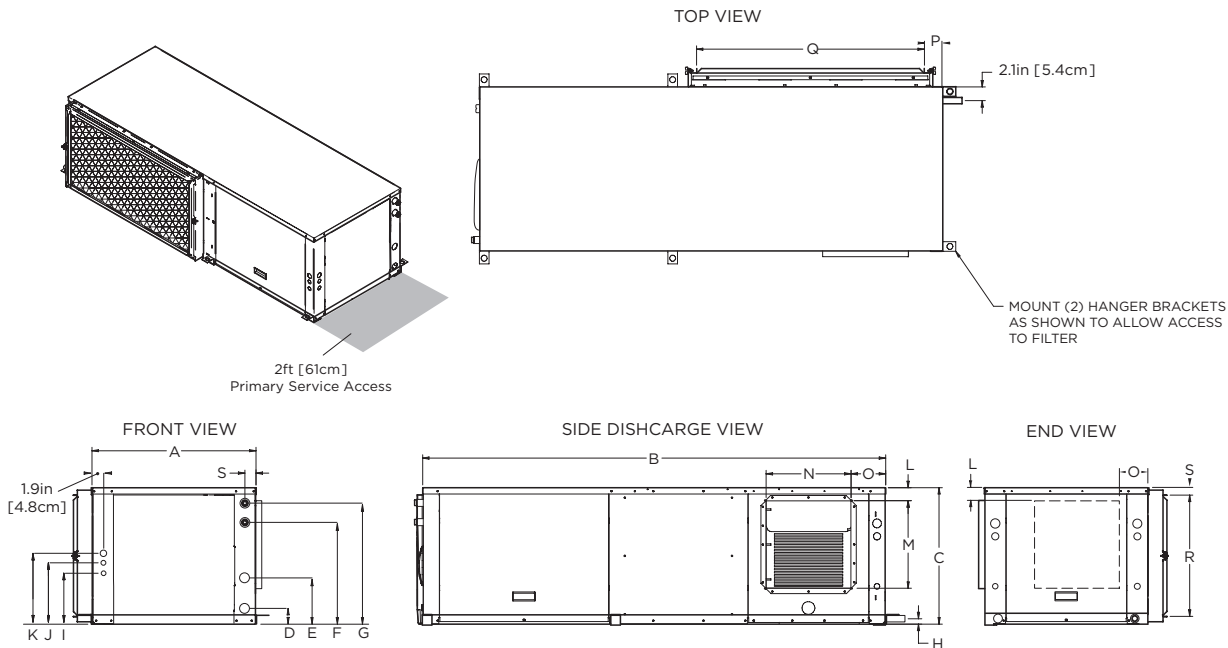
Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Dimensional Data - Horizontal



AS SHOWN LR UNIT (RR UNIT ON OPPOSITE SIDE—SAME DIMENSIONS)

Horizontal Model		Overall Cabinet			Water Connections							Electrical Connections			Discharge Connection duct flange installed (±0.10 in)				Return Connection using std deluxe filter rack (±0.10 in)			
												I 3/4 in. cond	J 1/2 in. cond	K 1/2 in. cond								
		A	B	C	D	E	F	G	H	Loop Water FPT	HWG (O.D.)	Power Supply	Ext Pump	Low Volt- age	L	M	N	O	P	Q	R	S
		Width	Depth	Height	In	Out	HWG In	HWG Out	Cond- ensate			Return Depth	Return Height									
018	in.	22.5	53.0	19.3	2.3	5.3	13.8	16.8	8.0	1 in.	1/2 in.	6.9	9.5	11.7	1.8	10.5	9.5	8.2	2.2	21.8	16.5	1.5
	cm.	57.2	134.6	49.0	5.8	13.5	35.1	42.7	20.3	Swivel	Stub	17.5	24.1	29.7	4.6	26.7	24.1	20.8	5.6	55.4	41.9	3.8
024-030	in.	22.5	63.0	19.3	2.0	7.0	13.5	16.5	0.8	1 in.	1/2 in.	9.5	12.1	14.3	2.3	10.5	9.4	5.8	2.8	30.5	16.9	1.3
	cm.	57.2	160.0	49.0	5.1	17.8	34.3	41.9	2.0	Swivel	Stub	24.1	30.7	36.3	5.8	26.7	23.9	14.7	7.1	77.5	42.9	3.3
036	in.	25.6	72.0	21.3	2.3	7.3	15.9	18.9	0.8	1 in.	1/2 in.	9.5	12.1	14.3	SEE	13.6	13.2	SEE	2.8	35.5	18.9	1.3
	cm.	65.0	182.9	54.1	5.8	18.5	40.4	48.0	2.0	Swivel	Stub	24.1	30.7	36.3	CHART	34.5	33.5	CHART	7.1	90.2	48.0	3.3
042-048	in.	25.6	77.0	21.3	2.3	7.3	15.9	18.9	0.8	1 in.	1/2 in.	9.5	12.1	14.3	SEE	13.6	13.2	SEE	2.8	40.4	18.9	1.3
	cm.	65.0	195.6	54.1	5.8	18.5	40.4	48.0	2.0	Swivel	Stub	24.1	30.7	36.3	CHART	34.5	33.5	CHART	7.1	102.6	48.0	3.3
060-072	in.	25.6	82.0	21.3	2.3	7.3	15.9	18.9	0.8	1 in.	1/2 in.	9.5	12.1	14.3	SEE	13.6	13.2	SEE	2.8	45.4	18.9	1.3
	cm.	65.0	208.3	54.1	5.8	18.5	40.4	48.0	2.0	Swivel	Stub	24.1	30.7	36.3	CHART	34.5	33.5	CHART	7.1	115.3	48.0	3.3

Condensate is 3/4 in. PVC female glue socket and is switchable from side to front

Rev: 1/25/24

Unit shipped with deluxe 2 in. (field adjustable to 1 in.) duct collar/filter rack extending from unit 3.25 in. and is suitable for duct connection.

Discharge flange is field installed and extends 1 in. [25.4mm] from cabinet

Decorative molding and/or water connections extend 1.2 in. [30.5mm] beyond front of cabinet.

The 018 model is not field convertible changing from end to side discharge. It requires an additional discharge panel (not supplied).

Units Not Shown Above		L	O
Right Return End Discharge	in	2.8	4.6
	cm	7.1	11.8
Right Return Side Discharge	in	4.9	6.9
	cm	12.4	17.5
Left Return End Discharge	in	4.9	7.6
	cm	12.4	19.4
Left Return Side Discharge	in	2.8	6.9
	cm	7.1	17.5

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Physical Data**

Model		018	024	030	036	042	048	060	072
		Dual Capacity Scroll							
Compressor (1 each)		Dual Capacity Scroll							
Factory Charge R-454B, oz [kg]	Vertical	32 [0.91]	50 [1.42]	56 [1.59]	54 [1.53]	56 [1.59]	62 [1.76]	76 [2.15]	104 [2.95]
Factory Charge R-454B, oz [kg]	Horizontal	36 [0.93]	48 [1.36]	54 [1.53]	54 [1.53]	62 [1.76]	72 [2.04]	84 [2.38]	104 [2.95]
Blower Motor & Blower									
Blower Motor Type/Speeds	VS ECM	Variable Speed ECM							
Blower Motor- hp [W]	VS ECM	1/2 [373]	1/2 [373]	1/2 [373]	1/2 [373]	1/2 [373]	1/2 [373]	1 [746]	1 [746]
Blower Wheel Size (Dia x W), in. [mm]	VS ECM	9 x 7 [229 x 178]	9 x 7 [229 x 178]	9 x 7 [229 x 178]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]	11 x 10 [279 x 254]
Coax and Water Piping									
Water Connections Size - Swivel - in [mm]		1" [25.4]	1" [25.4]	1" [25.4]	1" [25.4]	1" [25.4]	1" [25.4]	1" [25.4]	1" [25.4]
HWG Connection Size - Stub - in [mm]		1/2" [12.7]	1/2" [12.7]	1/2" [12.7]	1/2" [12.7]	1/2" [12.7]	1/2" [12.7]	1/2" [12.7]	1/2" [12.7]
Coax & Piping Water Volume - gal [l]		0.40 [1.5]	0.7 [2.6]	1.0 [3.8]	1.3 [4.9]	1.3 [4.9]	1.6 [6.1]	1.6 [6.1]	2.3 [8.7]
Vertical									
Air Coil Dimensions (H x W), in. [mm]		19 x 20 [483 x 508]	24 x 20 [610 x 542]	28 x 20 [711 x 542]	28 x 25 [711 x 635]	32 x 25 [813 x 635]	32 x 25 [813 x 635]	36 x 25 [914 x 635]	36 x 25 [914 x 635]
Air Coil Total Face Area, ft2 [m2]		2.6 [0.242]	3.3 [0.310]	3.9 [0.362]	4.9 [0.451]	5.6 [0.570]	5.6 [0.570]	6.3 [0.641]	6.3 [0.641]
Air Coil Tube Size, in [mm]		3/8 [9.5]	3/8 [9.5]	3/8 [9.5]	3/8 [9.5]	5/16 [7.9]	5/16 [7.9]	3/8 [9.5]	3/8 [9.5]
Air Coil Number of rows		3	3	3	3	4	4	4	4
Filter Standard - 2" [51mm] Pleated MERV11 Throwaway, in [mm]		20 x 24 [508 x 610]	28 x 24 [712 x 610]	28 x 24 [712 x 610]	28 x 30 [712 x 762]	32 x 30 [813 x 762]	32 x 30 [813 x 762]	36 x 30 [914 x 762]	36 x 30 [914 x 762]
Weight - Operating, lb [kg]		200 [91]	293 [133]	308 [140]	353 [160]	368 [167]	408 [185]	443 [201]	468 [212]
Weight - Packaged, lb [kg]		220 [100]	313 [142]	328 [149]	373 [169]	388 [176]	428 [194]	463 [210]	488 [221]
Horizontal									
Air Coil Dimensions (H x W), in. [mm]		18 x 21 [457 x 533]	18 x 27 [457 x 686]	18 x 30 [457 x 762]	20 x 35 [508 x 889]	20 x 40 [508 x 1016]	20 x 40 [508 x 1016]	20 x 45 [508 x 1143]	20 x 45 [508 x 1143]
Air Coil Total Face Area, ft2 [m2]		2.6 [0.242]	3.4 [0.316]	3.9 [0.362]	4.9 [0.451]	5.6 [0.570]	5.6 [0.570]	6.3 [0.641]	6.3 [0.641]
Air Coil Tube Size, in [mm]		5/16 [7.9]	3/8 [9.5]	3/8 [9.5]	3/8 [9.5]	3/8 [9.5]	3/8 [9.5]	3/8 [9.5]	3/8 [9.5]
Air Coil Number of rows		3	3	3	3	3	3	4	4
Filter Standard - 2" [51mm] Pleated MERV11 Throwaway, in [mm]		1 - 18 x 24 [457 x 610]	1 - 18 x 32 [457 x 813]	1 - 18 x 32 [457 x 813]	1 - 20 x 37 [686 x 940]	1 - 20 x 20 [508 x 508] 1 - 20 x 22 [508 x 559]	1 - 20 x 20 [508 x 508] 1 - 20 x 22 [508 x 559]	1 - 20 x 25 [508 x 635] 1 - 20 x 22 [508 x 559]	1 - 20 x 25 [508 x 635] 1 - 20 x 22 [508 x 559]
Weight - Operating, lb [kg]		210 [95]	305 [138]	320 [145]	373 [169]	403 [183]	423 [191]	468 [212]	483 [219]
Weight - Packaged, lb [kg]		230 [104]	325 [152]	340 [154]	393 [178]	423 [192]	443 [191]	488 [221]	503 [228]

7/24/24

Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz

Auxiliary Heat Ratings

Model	KW		Stages	BTU/H		Min CFM				
	208V	230V		208V	230V		018	024 - 030	036 - 042	048 - 072
EAM(H)5	3.6	4.8	1	12,300	16,300	450	•	•		
EAM(H)8	5.7	7.6	2	19,400	25,900	550	•	•		
EAM(H)10	7.2	9.6	2	24,600	32,700	650		•		
EAL(H)10	7.2	9.6	2	24,600	32,700	1100			•	•
EAL(H)15	10.8	14.4	2	36,900	49,100	1250			•	•
EAL(H)20	14.4	19.2	2	49,200	65,500	1500				•

Order the "H" part number when installed on horizontal and vertical rear discharge units

01/25/24

Air flow level for auxiliary heat (Aux) must be equal to or above the minimum CFM in this table

Auxiliary Heat Electrical Data

Model	Supply Circuit	Heater Amps		Min Circuit Amp		Fuse (USA)		Fuse (CAN)		CKT BRK	
		208 V	240 V	208 V	240 V	208 V	240 V	208 V	240 V	208 V	240 V
EAM(H)5*	Single	17.3	20.0	26.7	30.0	30	30	30	30	30	30
EAM(H)8*	Single	27.5	31.7	39.3	44.6	40	45	40	45	40	45
EAM(H)10*	Single	34.7	40.0	48.3	55.0	50	60	50	60	50	60
EAL(H)10*	Single	34.7	40.0	53.3	60.0	60	60	60	60	60	60
EAL(H)15*	Single	52.0	60.0	75.0	85.0	80	90	80	90	70	100
	L1/L2	34.7	40.0	53.3	60.0	60	60	60	60	60	60
	L3/L4	17.3	20.0	21.7	25.0	25	25	25	25	20	30
EAL(H)20*	Single	69.3	80.0	96.7	110.0	100	110	100	110	100	100
	L1/L2	34.7	40.0	53.3	60.0	60	60	60	60	60	60
	L3/L4	34.7	40.0	43.3	50.0	45	50	45	50	40	50

All heaters rated single phase 60 cycle and include unit fan load

All fuses type "D" time delay (or HACR circuit breaker in USA)

Supply wire size to be determined by local codes

01/25/24

Contractor: _____ P.O.: _____
Engineer: _____
Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Electrical Data

Model	Rated Voltage	Voltage Min/Max	Compressor				HWG Pump FLA	Ext Loop FLA	Blower Motor FLA	Total Unit FLA	Min Circ Amp	Max Fuse/ HACR
			MCC	RLA	LRA	LRA*						
018	208-230/60/1	187/253	15.0	9.6	52.0	18.2	0.4	5.4	4.0	19.4	21.8	35
024	208-230/60/1	187/253	16.0	10.2	62.0	21.7	0.4	5.4	4.0	20.0	22.6	35
030	208-230/60/1	187/253	22.7	14.5	82.0	28.7	0.4	5.4	4.0	24.3	28.0	40
036	208-230/60/1	187/253	22.7	14.5	90.0	32.4	0.4	5.4	4.0	24.3	28.0	40
042	208-230/60/1	187/253	28.4	18.2	106.0	37.1	0.4	5.4	4.0	28.0	32.5	50
048	208-230/60/1	187/253	28.6	18.3	138.0	49.7	0.4	5.4	4.0	28.1	32.7	50
060	208-230/60/1	187/253	39.3	25.2	147.3	51.5	0.4	5.4	7.0	38.0	44.2	70
072	208-230/60/1	187/253	43.7	28.0	160.0	56.0	0.4	5.4	7.0	40.8	47.8	70

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

1/30/24

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Blower Performance Data

MODEL	MAX ESP	AIR FLOW SPEED SETTINGS											
		1	2	3	4	5	6	7	8	9	10	11	12
018	0.50	300	400 G	500	600 L	700 H	800	875	950	1025	1125 Aux		
024	0.50		400	500 G	600	700 L	800	900 H	1000	1100	1200 Aux		
030	0.50		400	500 G	600	700 L	800	900 H	1000	1100	1200 Aux		
036	0.50	650	750 G	850	1000	1100 L	1200	1300 H	1400	1500	1550 Aux		
042	0.50	650	800	900 G	1050	1150 L	1250	1350 H	1450	1550	1600 Aux		
048	0.50	650	800 G	900	1050	1150	1250	1350 L	1450	1550 H	1575 Aux		
060	0.75	800	950 G	1100	1300	1500 L	1750	1950 H	2100	2300	2325 Aux		
072	0.75	800	950	1100 G	1300	1500	1750 L	1950	2100 H	2300	2325 Aux		

1/25/24

Factory settings are at recommended G-L-H-Aux speed settings

L-H settings MUST be located within boldface CFM range

"Aux" is factory setting for auxiliary heat and must be equal to or above the "H" setting as well as at least the minimum required for the auxiliary heat package

"G" may be located anywhere within the airflow table

CFM is controlled within ±5% up to the maximum ESP

Max ESP includes allowance for wet coil and standard filter

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____



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 dependent 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

Reference Calculations

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

Notes to Performance Data Tables

The following notes apply to all performance data tables:

- Performance ratings are based on 80°F DB/67°F WB EAT for cooling and 70°F DB EAT for heating.
- Three flow rates are shown for each unit. The lowest flow rate shown is used for geothermal open loop/well water systems with a minimum of 50°F EWT. The middle flow rate shown is the minimum geothermal closed loop flow rate. The highest flow rate shown is optimum for geothermal closed loop systems and the suggested flow rate for boiler/tower applications.
- The hot water generator numbers are based on a flow rate of 0.4 gpm/ton of rated capacity with an EWT of 90°F.
- Entering water temperatures below 40°F assumes 15% antifreeze solution.
- For non-standard EAT conditions, apply the appropriate Correction Factor tables.
- Interpolation between EWT, gpm, and cfm data is permissible, extrapolation is not.

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



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

5/30/06

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

5/30/06

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.

3/28/12

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

11/10/09

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz

Antifreeze Corrections

Catalog performance can be corrected for antifreeze use. Please use the following table and note the example given.

Antifreeze Type	Antifreeze % by wt	Heating	Cooling	Pressure Drop
EWT - °F [°C]		30 [-1.1]	90 [32.2]	30 [-1.1]
Water	0	1.000	1.000	1.000
Ethylene Glycol	10	0.973	0.991	1.075
	20	0.943	0.979	1.163
	30	0.917	0.965	1.225
	40	0.890	0.955	1.324
	50	0.865	0.943	1.419
Propylene Glycol	10	0.958	0.981	1.130
	20	0.913	0.969	1.270
	30	0.854	0.950	1.433
	40	0.813	0.937	1.614
	50	0.770	0.922	1.816
Ethanol	10	0.927	0.991	1.242
	20	0.887	0.972	1.343
	30	0.856	0.947	1.383
	40	0.815	0.930	1.523
	50	0.779	0.911	1.639
Methanol	10	0.957	0.986	1.127
	20	0.924	0.970	1.197
	30	0.895	0.951	1.235
	40	0.863	0.936	1.323
	50	0.833	0.920	1.399



WARNING: Gray area represents antifreeze concentrations greater than 35% by weight and should be avoided due to the extreme performance penalty they represent.

Antifreeze Correction Example

Antifreeze solution is Propylene Glycol 20% by weight. Determine the corrected heating and cooling performance at 30°F and 90°F respectively as well as pressure drop at 30°F for a Q24-ECM.

The corrected cooling capacity at 90°F would be: 22,900 MBtu/h x 0.969 = 22,190 MBtu/h

The corrected heating capacity at 30°F would be: 18,900 MBtu/h x 0.913 = 17,255 MBtu/h

The corrected pressure drop at 30°F and 6 gpm would be: 7.4 feet of head x 1.270 = 9.39 feet of head

Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz



Pressure Drop

Model	GPM	Pressure Drop (psi)					Model	GPM	Pressure Drop (psi)				
		30°F	50°F	70°F	90°F	110°F			30°F	50°F	70°F	90°F	110°F
018 full load	3	1.8	1.7	1.6	1.5	1.4	042 full load	5	1.5	1.4	1.3	1.2	1.1
	4	3.3	3.1	2.9	2.7	2.5		8	3.5	3.3	3.1	2.9	2.7
	5	4.8	4.5	4.2	3.9	3.6		11	5.6	5.2	4.9	4.6	4.2
	6	6.0	5.8	5.5	5.3	5.2		14	7.5	7.1	6.7	6.3	5.7
018 part load	2	1.8	1.7	1.6	1.5	1.4	042 part load	4	0.9	0.9	0.8	0.7	0.7
	3	3.3	3.1	2.9	2.7	2.5		6	2.0	1.9	1.8	1.7	1.6
	4	4.8	4.5	4.2	3.9	3.6		8	3.2	3.0	2.8	2.6	2.4
	5	4.2	4.2	4.1	4.0	3.9		9	4.2	4.1	3.8	3.5	3.2
024 full load	4	1.4	1.3	1.2	1.1	1.0	048 full load	6	1.4	1.3	1.2	1.1	1.0
	6	3.2	3.0	2.8	2.6	2.4		9	2.7	2.6	2.4	2.3	2.1
	8	5.1	4.8	4.5	4.2	3.9		12	4.1	3.8	3.6	3.5	3.1
	10	7.0	6.6	6.2	5.8	5.3		15	5.3	4.9	4.5	4.3	4.1
024 part load	3	0.8	0.7	0.7	0.7	0.6	048 part load	5	1.1	1.1	0.9	0.8	0.7
	5	2.4	2.2	2.0	2.1	1.8		8	2.3	2.1	2.1	1.9	1.7
	7	4.0	3.7	3.3	3.2	3.0		11	3.5	3.3	3.1	2.9	2.7
	9	5.8	5.5	5.1	4.8	4.4		14	4.7	4.5	4.1	3.9	3.7
030 full load	4	1.3	1.2	1.2	1.1	1.0	060 full load	8	2.6	2.5	2.3	2.1	2.0
	6	2.6	2.5	2.3	2.1	2.0		12	4.8	4.5	4.2	3.9	3.6
	8	4.2	4.0	3.7	3.4	2.9		16	7.0	6.6	6.2	5.8	5.4
	10	6.8	6.3	5.4	5.4	5.0		20	9.2	8.5	8.0	7.7	7.2
030 part load	4	1.3	1.2	1.2	1.1	1.0	060 part load	6	1.8	1.7	1.6	1.5	1.4
	6	2.6	2.5	2.3	2.1	2.0		10	3.6	3.4	3.2	3.0	2.8
	7	3.4	3.2	3.0	2.8	2.6		14	5.6	5.2	4.9	4.6	4.2
	8	4.2	4.0	3.7	3.4	2.9		18	8.6	8.0	7.6	7.2	6.6
036 full load	5	1.2	1.2	1.1	1.0	1.0	072 full load	12	3.2	3.0	2.8	2.6	2.4
	7	2.7	3.6	2.4	2.2	2.1		15	4.5	4.2	4.0	3.7	3.4
	9	3.9	3.6	3.4	3.2	2.9		18	6.0	5.7	5.3	4.9	4.6
	11	5.2	4.9	4.7	4.5	4.2		21	7.8	7.3	6.8	6.4	5.9
036 part load	4	1.1	1.1	1.0	0.9	0.9	072 part load	10	2.3	2.1	2.0	1.9	1.7
	6	2.4	2.2	2.1	2.0	1.8		13	3.4	3.2	3.0	2.8	2.6
	8	3.7	3.5	3.2	3.0	2.8		16	4.9	4.6	4.3	4.0	3.7
	10	5.0	4.8	4.5	4.3	3.9		19	6.4	6.2	5.8	5.4	5.0

5/15/24

Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz

Performance Data

018 - Dual Capacity with Variable Speed ECM High Speed (600 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h		
20	3.0	1.9	4.3	Operation not recommended							Operation not recommended							
	4.0	3.4	7.8															
	5.0	4.9	11.4	500 600	11.5 12.1	0.97 1.06	8.1 8.5	91.2 88.7	3.45 3.35	1.6 1.5								
30	3.0	1.8	4.2	Operation not recommended							Operation not recommended							
	4.0	3.3	7.6															
	5.0	4.8	11.0	500 600	14.1 14.9	1.01 1.10	10.7 11.1	96.1 93.0	4.09 3.97	1.7 1.6	500 600	20.8 21.3	13.5 14.7	0.65 0.69	0.58 0.61	23.2 23.4	35.8 34.9	- -
40	3.0	1.8	4.1	Operation not recommended							Operation not recommended							
	4.0	3.2	7.4															
	5.0	4.6	10.7	500 600	16.3 16.9	1.11 1.14	12.5 13.0	100.2 96.0	4.31 4.35	1.8 1.7	500 600	20.5 21.0	13.4 14.7	0.65 0.70	0.66 0.69	22.7 23.3	31.3 30.6	- -
50	3.0	1.7	3.9	500 600	17.2 17.7	1.12 1.13	13.4 13.8	101.9 97.3	4.51 4.58	1.9	500 600	19.0 20.0	12.2 13.5	0.64 0.68	0.79 0.83	21.7 22.8	24.1 24.1	0.9 1.0
	4.0	3.1	7.2	500 600	17.8 18.4	1.14 1.16	13.9 14.4	103.0 98.4	4.57 4.65	1.9	500 600	19.4 20.4	12.3 13.7	0.64 0.67	0.74 0.78	21.9 23.0	26.1 26.2	0.8 0.9
	5.0	4.5	10.4	500 600	18.2 18.8	1.15 1.17	14.3 14.8	103.8 99.0	4.63 4.71	1.9	500 600	19.6 20.6	13.1 14.6	0.67 0.71	0.72 0.76	22.0 23.2	27.0 27.1	0.8 0.9
60	3.0	1.7	3.8	500 600	19.0 19.6	1.15 1.16	15.1 15.6	105.2 100.3	4.82 4.94	2.1	500 600	18.5 19.4	12.3 13.6	0.66 0.70	0.87 0.91	21.5 22.5	21.2 21.3	1.0 1.1
	4.0	3.0	6.9	500 600	19.8 20.5	1.19 1.19	15.8 16.4	106.8 101.6	4.90 5.03	2.1	500 600	19.0 19.9	12.4 13.8	0.65 0.69	0.83 0.86	21.8 22.8	22.9 23.0	1.0 1.1
	5.0	4.3	10.0	500 600	20.3 21.0	1.20 1.21	16.2 16.9	107.6 102.4	4.97 5.11	2.2	500 600	19.2 20.1	13.1 14.5	0.68 0.72	0.81 0.85	21.9 23.0	23.7 23.8	9.0 1.0
70	3.0	1.6	3.7	500 600	20.8 22.3	1.19 1.22	16.7 18.1	108.5 104.4	5.12 5.36	2.4	500 600	18.1 19.4	12.4 14.3	0.68 0.74	0.96 0.91	21.4 22.5	18.5 21.3	1.2 1.3
	4.0	2.9	6.7	500 600	21.9 22.6	1.23 1.23	17.7 18.4	110.5 104.9	5.21 5.38	2.4	500 600	18.6 19.4	12.5 13.9	0.67 0.72	0.92 0.95	21.7 22.6	20.3 20.4	1.1 1.3
	5.0	4.2	9.7	500 600	22.4 23.2	1.24 1.24	18.2 19.0	111.5 105.8	5.28 5.48	2.4	500 600	18.8 19.6	13.0 14.4	0.69 0.73	0.89 0.93	21.8 22.8	21.0 21.1	1.1 1.2
80	3.0	1.5	3.6	500 600	22.5 23.3	1.23 1.22	18.3 19.1	111.6 105.9	5.34 5.57	2.7	500 600	17.6 18.3	12.3 13.7	0.70 0.75	1.08 1.11	21.3 22.1	16.3 16.5	1.6 1.7
	4.0	2.8	6.5	500 600	23.8 24.6	1.28 1.27	19.4 20.3	114.0 107.9	5.43 5.67	2.7	500 600	18.1 18.8	12.5 13.8	0.69 0.73	1.04 1.07	21.7 22.5	17.4 17.6	1.5 1.6
	5.0	4.1	9.4	500 600	24.5 25.3	1.30 1.28	20.0 20.9	115.3 109.0	5.52 5.79	2.7	500 600	18.3 19.1	12.8 14.2	0.70 0.74	1.02 1.05	21.8 22.6	18.0 18.1	1.4 1.5
90	3.0	1.5	3.4	500 600	24.2 25.0	1.28 1.26	19.8 20.7	114.7 108.6	5.55 5.83	3.0	500 600	17.1 17.7	12.3 13.6	0.72 0.77	1.20 1.23	21.2 21.9	14.3 14.4	1.9 2.1
	4.0	2.7	6.2	500 600	25.7 26.6	1.33 1.31	21.1 22.1	117.6 111.0	5.64 5.95	3.0	500 600	17.6 18.3	12.4 13.8	0.71 0.75	1.17 1.19	21.6 22.4	15.1 15.3	1.8 2.0
	5.0	3.9	9.0	500 600	26.5 27.4	1.35 1.32	21.9 22.9	119.1 112.3	5.74 6.08	3.1	500 600	18.1 18.5	13.4 13.9	0.74 0.75	1.14 1.17	22.0 22.5	15.9 15.8	1.7 1.9
100	3.0	1.4	3.3	Operation not recommended							Operation not recommended							
	4.0	2.6	6.0															
	5.0	3.8	8.7	500 600	16.6 17.1	12.2 13.6	0.74 0.79	1.32 1.34	2.11 2.17	12.5 12.7	2.2 2.4							
110	3.0	1.4	3.2	Operation not recommended							Operation not recommended							
	4.0	2.5	5.8															
	5.0	3.6	8.4	500 600	15.7 16.1	11.9 13.1	0.76 0.81	1.45 1.47	20.6 21.1	10.5 11.0	2.9 3.0							
120	3.0	1.3	3.1	Operation not recommended							Operation not recommended							
	4.0	2.4	5.6															
	5.0	3.5	8.1	500 600	13.4 13.8	11.6 12.6	0.86 0.91	1.61 1.66	19.0 19.5	8.4 8.3	3.1 3.5							

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****018 - Dual Capacity with Variable Speed ECM Low Speed (600 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT/HD	Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h
20	2.0	0.9	2.0	Operation not recommended							Operation not recommended							
	3.0	2.0	4.6															
	4.0	3.1	7.3	300 400	8.0 8.7	0.85 0.87	5.1 5.7	94.6 90.2	2.77 2.93	1.4 1.3								
30	2.0	0.8	1.9	Operation not recommended							Operation not recommended							
	3.0	1.9	4.5															
	4.0	3.1	7.1	300 400	10.3 10.6	0.88 0.91	7.3 7.5	101.8 94.5	3.43 3.42	1.4 1.4	300 400	15.2 15.5	9.7 10.6	0.64 0.68	0.35 0.37	16.5 16.8	43.1 41.6	- -
40	2.0	0.8	1.9	Operation not recommended							Operation not recommended							
	3.0	1.9	4.3															
	4.0	3.0	6.9	300 400	12.1 12.5	0.91 0.93	8.9 9.3	107.2 98.8	3.87 3.91	1.6 1.5	300 400	15.2 15.5	9.6 10.5	0.63 0.67	0.41 0.43	16.5 17.0	37.3 36.5	- -
50	2.0	0.8	1.8	300 400	12.9 13.3	0.91 0.92	9.8 10.1	109.8 100.8	4.16 4.22	1.7 1.5	300 400	14.1 14.8	8.6 9.5	0.61 0.64	0.51 0.53	15.8 16.7	27.8 27.8	0.7 0.8
	3.0	1.8	4.2	300 400	13.4 13.8	0.93 0.94	10.2 10.6	111.3 101.9	4.21 4.29	1.7 1.6	300 400	14.4 15.1	8.7 9.6	0.60 0.64	0.48 0.50	16.0 16.8	30.1 30.2	0.6 0.7
	4.0	2.9	6.6	300 400	13.7 14.1	0.94 0.95	10.5 10.9	112.2 102.6	4.27 4.35	1.7 1.7	300 400	14.5 15.3	9.3 10.3	0.64 0.67	0.47 0.49	16.1 17.0	31.1 31.2	0.6 0.7
60	2.0	0.8	1.7	300 400	14.2 14.7	0.93 0.93	11.1 11.5	114.0 104.0	4.51 4.63	1.9 1.8	300 400	14.0 14.7	8.7 9.7	0.62 0.66	0.59 0.61	16.0 16.8	23.8 23.9	0.8 0.9
	3.0	1.8	4.1	300 400	14.9 15.4	0.95 0.96	11.6 12.1	115.9 105.6	4.59 4.70	1.9 1.8	300 400	14.3 15.0	8.8 9.8	0.61 0.65	0.56 0.58	16.3 17.0	25.7 25.8	0.8 0.9
	4.0	2.8	6.4	300 400	15.2 15.8	0.96 0.97	12.0 12.5	117.1 106.5	4.65 4.78	2.0 1.8	300 400	14.5 15.2	9.3 10.3	0.64 0.68	0.55 0.57	16.3 17.1	26.6 26.7	0.7 0.8
70	2.0	0.7	1.7	300 400	15.6 16.4	0.94 0.98	12.4 13.0	118.2 107.9	4.86 4.89	2.2 2.0	300 400	13.9 14.8	8.8 10.2	0.63 0.69	0.67 0.73	16.2 17.2	20.8 20.3	1.0 1.1
	3.0	1.7	3.9	300 400	16.4 16.9	0.97 0.97	13.1 13.6	120.6 109.2	4.95 5.11	2.2 2.0	300 400	14.3 14.9	8.9 9.9	0.63 0.66	0.64 0.66	16.5 17.3	22.3 22.5	0.9 1.1
	4.0	2.7	6.2	300 400	16.8 17.4	0.98 0.98	13.5 14.1	121.9 110.3	5.01 5.20	2.2 2.0	300 400	14.4 15.1	9.3 10.3	0.64 0.68	0.62 0.65	16.6 17.4	23.1 23.2	0.9 1.0
80	2.0	0.7	1.6	300 400	16.7 17.3	0.95 0.94	13.5 14.1	121.6 110.0	5.15 5.38	2.5 2.3	300 400	13.1 13.6	8.7 9.7	0.66 0.71	0.78 0.80	15.7 16.4	16.8 16.9	1.4 1.5
	3.0	1.6	3.8	300 400	17.7 18.3	0.99 0.98	14.3 14.9	124.5 112.3	5.24 5.48	2.5 2.3	300 400	13.4 14.0	8.8 9.8	0.66 0.70	0.75 0.78	16.0 16.6	17.9 18.0	1.3 1.4
	4.0	2.6	6.0	300 400	18.2 18.8	1.00 0.99	14.8 15.4	126.1 113.5	5.32 5.59	2.2 2.5	300 400	13.6 14.2	9.0 10.0	0.66 0.71	0.74 0.76	16.1 16.7	18.4 18.6	1.3 1.7
90	2.0	0.7	1.6	300 400	17.8 18.4	0.96 0.94	14.5 15.2	125.0 112.7	5.45 5.73	2.3 2.8	300 400	12.2 12.7	8.6 9.5	0.70 0.75	0.89 0.91	15.3 15.8	13.7 13.9	1.9 1.6
	3.0	1.6	3.7	300 400	18.9 19.6	1.00 0.98	15.5 16.2	128.4 115.4	5.54 5.84	2.6 2.8	300 400	12.6 13.1	8.7 9.6	0.69 0.74	0.87 0.89	15.5 16.1	14.5 14.7	1.8 1.5
	4.0	2.5	5.8	300 400	19.5 20.2	1.02 0.99	16.1 16.8	130.3 116.8	5.63 5.97	2.6 2.9	300 400	12.5 13.2	9.1 9.7	0.73 0.73	0.86 0.87	15.4 16.2	14.5 15.2	1.7 1.4
100	2.0	0.7	1.5	Operation not recommended							Operation not recommended							
	3.0	1.5	3.5															
	4.0	2.4	5.6	300 400	11.7 12.1	8.5 9.5	0.73 0.78	1.01 1.03	15.2 15.6	11.6 11.8	2.0 2.2	300 400	11.9 12.3	8.5 9.4	0.72 0.77	15.3 15.7	11.9 12.1	1.8 2.1
110	2.0	0.6	1.5	Operation not recommended							Operation not recommended							
	3.0	1.5	3.4															
	4.0	2.3	5.4	300 400	10.9 11.2	8.4 9.3	0.77 0.83	1.16 1.17	14.8 15.2	9.4 9.6	2.7 3.0	300 400	11.0 11.3	8.2 9.1	0.75 0.81	14.9 15.2	9.7 9.8	2.4 2.8
120	2.0	0.6	1.4	Operation not recommended							Operation not recommended							
	3.0	1.4	3.3															
	4.0	2.2	5.2	300 400	9.9 10.1	8.2 8.9	0.83 0.88	1.32 1.36	14.4 14.7	7.5 7.4	3.3 3.8	300 400	10.0 10.2	8.2 8.9	0.82 0.87	14.4 14.7	7.8 7.7	2.9 3.3

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data

024 - Dual Capacity with Variable Speed ECM High Speed (900 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F								COOLING - EAT 80/67 °F							
				Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC Mbtu/h	Airflow CFM	TC Mbtu/h	SC Mbtu/h	S/T Ratio	Power kW	HR Mbtu/h	EER	HWC Mbtu/h	
		PSI	FT/HD	Operation not recommended								Operation not recommended							
20	4.0	1.4	3.2	Operation not recommended								Operation not recommended							
	6.0	3.3	7.6	Operation not recommended								Operation not recommended							
	8.0	5.3	12.2	700 900	16.5 16.8	1.46 1.45	11.6 11.9	91.9 87.3	3.32 3.40	2.1 2.0									
30	4.0	1.4	3.2	Operation not recommended								Operation not recommended							
	6.0	3.2	7.4	700 900	18.0 18.5	1.47 1.51	13.0 13.4	93.8 89.1	3.59 3.58	2.3 2.1	700 900	24.5 24.9	15.6 17.0	0.64 0.68	0.91 0.96	27.6 28.2	26.8 25.9	- -	
	8.0	5.1	11.8	700 900	18.6 18.9	1.54 1.53	13.3 13.7	94.6 89.4	3.54 3.62	2.3 2.2	700 900	24.6 25.2	15.6 17.0	0.63 0.67	0.89 0.93	27.6 28.4	27.8 27.1	- -	
40	4.0	1.3	3.1	Operation not recommended								Operation not recommended							
	6.0	3.1	7.1	700 900	20.0 20.6	1.52 1.55	14.8 15.3	96.4 91.2	3.85 3.89	2.5 2.3	700 900	24.9 25.4	16.2 17.7	0.65 0.70	1.02 1.07	28.4 29.1	24.5 23.8	- -	
	8.0	5.0	11.5	700 900	20.4 21.0	1.53 1.57	15.1 15.7	96.9 91.6	3.89 3.93	2.6 2.4	700 900	25.1 25.7	16.2 17.7	0.65 0.69	0.99 1.04	28.5 29.2	25.4 24.8	- -	
50	4.0	1.3	3.0	700 900	21.1 21.8	1.53 1.55	15.9 16.5	98.0 92.4	4.05 4.11	2.7 2.5	700 900	24.1 25.4	15.3 17.1	0.64 0.67	1.18 1.24	28.2 29.6	20.4 20.4	1.3 1.4	
	6.0	3.0	6.9	700 900	21.9 22.6	1.56 1.59	16.6 17.2	99.0 93.3	4.10 4.18	2.8 2.6	700 900	24.6 25.9	15.5 17.2	0.63 0.67	1.11 1.17	28.4 29.9	22.1 22.2	1.3 1.4	
	8.0	4.8	11.1	700 900	22.4 23.1	1.58 1.60	17.0 17.6	99.6 93.8	4.16 4.23	2.9 2.7	700 900	24.9 26.2	16.6 18.4	0.67 0.70	1.09 1.14	28.6 30.1	22.9 23.0	1.2 1.3	
60	4.0	1.2	2.9	700 900	23.0 23.8	1.57 1.58	17.7 18.4	100.4 94.4	4.29 4.40	3.1 2.9	700 900	23.7 24.8	15.4 17.1	0.65 0.69	1.30 1.36	28.1 29.4	18.2 18.3	1.6 1.7	
	6.0	2.9	6.7	700 900	24.1 24.8	1.62 1.63	18.5 19.3	101.8 95.5	4.36 4.48	3.2 2.9	700 900	24.2 25.4	15.6 17.3	0.64 0.68	1.24 1.29	28.4 29.7	19.6 19.7	1.5 1.6	
	8.0	4.7	10.8	700 900	24.6 25.5	1.63 1.64	19.1 19.9	102.6 96.2	4.42 4.55	3.3 3.0	700 900	24.4 25.7	16.4 18.2	0.67 0.71	1.21 1.26	28.6 29.9	20.3 20.4	1.4 1.6	
70	4.0	1.2	2.8	700 900	24.9 23.5	1.61 1.62	19.4 18.0	103.0 94.2	4.53 4.25	3.5 3.2	700 900	23.2 24.8	15.4 17.9	0.67 0.72	1.37 1.48	27.9 29.6	18.5 16.8	2.0 2.1	
	6.0	2.8	6.5	700 900	26.2 27.1	1.67 1.67	20.5 21.4	104.7 97.8	4.61 4.76	3.6 3.3	700 900	23.8 24.8	15.6 17.3	0.66 0.70	1.36 1.41	28.4 29.7	17.5 17.6	1.9 2.0	
	8.0	4.5	10.4	700 900	26.9 27.8	1.69 1.68	21.1 22.1	105.6 98.6	4.67 4.85	3.7 3.4	700 900	24.0 25.1	16.3 18.0	0.68 0.72	1.33 1.38	28.5 29.8	18.1 18.2	1.7 1.9	
80	4.0	1.2	2.7	700 900	26.6 27.5	1.66 1.65	20.9 21.9	105.2 98.3	4.69 4.89	3.9 3.6	700 900	22.2 23.1	15.2 16.9	0.68 0.73	1.59 1.64	27.6 28.7	13.9 14.1	2.5 2.7	
	6.0	2.7	6.3	700 900	28.1 29.1	1.73 1.71	22.2 23.3	107.2 99.9	4.77 4.98	4.0 3.7	700 900	22.8 23.7	15.4 17.0	0.67 0.72	1.54 1.58	28.0 29.1	14.8 15.0	2.3 2.5	
	8.0	4.3	10.0	700 900	29.0 30.0	1.75 1.73	23.0 24.1	108.3 100.8	4.85 5.09	4.1 3.8	700 900	23.1 24.0	15.7 17.5	0.68 0.73	1.50 1.55	28.2 29.3	15.3 15.5	2.2 2.4	
90	4.0	1.1	2.6	700 900	28.3 29.3	1.71 1.69	22.5 23.6	107.4 100.2	4.85 5.09	4.3 4.0	700 900	21.2 22.0	14.9 16.6	0.70 0.76	1.76 1.81	27.2 28.1	12.0 12.2	3.1 3.3	
	6.0	2.6	6.0	700 900	30.1 31.2	1.79 1.76	24.0 25.2	109.8 102.0	4.93 5.20	4.5 4.1	700 900	21.8 22.6	15.1 16.8	0.69 0.74	1.71 1.76	27.7 28.6	12.7 12.9	2.9 3.2	
	8.0	4.2	9.7	700 900	31.0 32.1	1.82 1.77	24.8 26.1	111.0 103.0	5.01 5.32	4.6 4.3	700 900	22.0 22.9	15.3 16.9	0.70 0.74	1.62 1.72	27.5 28.8	13.6 13.3	2.7 3.0	
100	4.0	1.1	2.5	Operation not recommended								Operation not recommended							
	6.0	2.5	5.8									700 900	20.6 21.3	14.6 16.2	0.71 0.76	1.94 1.97	27.2 28.0	10.6 10.8	3.6 3.9
	8.0	4.0	9.3									700 900	20.8 21.5	14.6 16.2	0.70 0.75	1.91 1.94	27.3 28.1	10.9 11.1	3.3 3.7
110	4.0	1.0	2.4	Operation not recommended								Operation not recommended							
	6.0	2.4	5.6									700 900	19.4 19.9	14.1 15.7	0.73 0.79	2.18 2.19	26.8 27.4	8.9 9.1	4.4 4.7
	8.0	3.9	9.0									700 900	19.6 20.1	14.0 15.4	0.71 0.77	2.14 2.16	26.9 27.5	9.2 9.3	4.1 4.5
120	4.0	1.0	2.3	Operation not recommended								Operation not recommended							
	6.0	2.3	5.4									700 900	18.1 18.5	13.5 14.7	0.75 0.80	2.43 2.50	26.5 27.0	7.5 7.4	5.3 5.7
	8.0	3.7	8.6									700 900	18.3 18.7	13.5 14.7	0.74 0.79	2.36 2.43	26.3 27.0	7.8 7.7	4.9 5.4

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data cont.

024 - Dual Capacity with Variable Speed ECM Low Speed (700 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
				Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC Mbtu/h	Airflow CFM	TC Mbtu/h	SC Mbtu/h	S/T Ratio	Power kW	HR Mbtu/h	EER	HWC Mbtu/h
20	3.0	0.9	2.0	Operation not recommended							Operation not recommended							
	5.0	2.5	5.7															
	7.0	4.1	9.5	500 700	11.2 11.5	1.07 1.05	7.6 7.9	90.8 85.2	3.09 3.21	1.8 1.6								
30	3.0	0.8	1.9	Operation not recommended							Operation not recommended							
	5.0	2.4	5.5	500 700	13.0 13.3	1.11 1.15	9.2 9.4	94.0 87.6	3.41 3.40	1.8 1.6	500 700	18.5 18.8	11.9 13.0	0.64 0.69	0.53 0.56	20.3 20.7	34.8 33.6	- -
	7.0	4.0	9.2	500 700	13.3 13.6	1.18 1.16	9.3 9.6	94.6 88.0	3.30 3.44	1.8 1.6	500 700	18.5 19.0	11.9 13.0	0.64 0.68	0.51 0.54	20.3 20.8	36.1 35.2	- -
40	3.0	0.8	1.9	Operation not recommended							Operation not recommended							
	5.0	2.3	5.3	500 700	14.4 14.8	1.13 1.15	10.6 10.9	96.7 89.6	3.75 3.78	1.8 1.7	500 700	18.6 18.9	12.2 13.4	0.66 0.71	0.62 0.65	20.7 21.1	30.2 29.3	- -
	7.0	3.9	8.9	500 700	14.7 15.2	1.14 1.16	10.8 11.2	97.2 90.0	3.79 3.83	1.9 1.7	500 700	18.7 19.2	12.2 13.4	0.65 0.70	0.60 0.63	20.8 21.3	31.3 30.6	- -
50	3.0	0.8	1.8	500 700	15.3 15.7	1.11 1.12	11.5 11.9	98.3 90.8	4.04 4.10	1.9 1.7	500 700	17.8 18.7	11.4 12.7	0.64 0.68	0.74 0.77	20.3 21.3	24.2 24.2	0.7 0.8
	5.0	2.2	5.2	500 700	15.8 16.3	1.13 1.15	12.0 12.4	99.3 91.6	4.09 4.17	1.9 1.8	500 700	18.2 19.1	11.6 12.8	0.64 0.67	0.69 0.73	20.5 21.6	26.2 26.3	0.7 0.7
	7.0	3.7	8.6	500 700	16.2 16.7	1.14 1.16	12.3 12.7	100.0 92.1	4.15 4.22	2.0 1.8	500 700	18.3 19.3	12.3 13.7	0.67 0.71	0.68 0.71	20.6 21.7	27.1 27.2	0.6 0.7
60	3.0	0.8	1.8	500 700	16.6 17.2	1.12 1.12	12.8 13.3	100.8 92.7	4.37 4.48	2.1 1.9	500 700	17.2 18.1	11.4 12.7	0.66 0.70	0.85 0.89	20.1 21.1	20.2 20.3	1.0 1.0
	5.0	2.2	5.0	500 700	17.4 18.0	1.15 1.16	13.5 14.0	102.2 93.7	4.44 4.55	2.0 2.2	500 700	17.7 18.5	11.5 12.8	0.65 0.69	0.81 0.84	20.4 21.4	21.8 21.9	0.9 1.0
	7.0	3.6	8.4	500 700	17.8 18.4	1.16 1.17	13.9 14.4	103.0 94.3	4.50 4.63	2.0 2.3	500 700	17.8 18.7	12.2 13.5	0.68 0.72	0.79 0.83	20.5 21.5	22.6 22.7	0.8 0.9
70	3.0	0.7	1.7	500 700	18.0 20.2	1.12 1.70	14.2 15.4	103.4 109.9	4.70 5.21	2.1 2.4	500 700	16.7 18.0	11.4 13.2	0.68 0.73	0.97 1.05	20.0 21.2	17.3 17.1	1.3 1.4
	5.0	2.1	4.9	500 700	19.0 19.6	1.16 1.16	15.0 15.6	105.1 95.9	4.79 4.94	2.2 2.4	500 700	17.1 17.9	11.5 12.8	0.67 0.72	0.93 0.96	20.3 21.3	18.5 18.7	1.3 1.2
	7.0	3.5	8.1	500 700	19.0 20.1	1.16 1.17	15.0 16.1	105.2 96.6	4.80 5.04	2.2 2.6	500 700	17.3 18.1	12.0 13.3	0.69 0.73	0.90 0.94	20.4 21.6	19.2 19.3	1.3 1.8
80	3.0	0.7	1.7	500 700	19.3 20.0	1.13 1.12	15.5 16.2	105.8 96.5	5.00 5.22	2.4 2.6	500 700	16.0 16.6	11.4 12.6	0.71 0.76	1.11 1.15	19.8 20.5	14.3 14.4	1.9 1.7
	5.0	2.0	4.7	500 700	20.4 21.1	1.18 1.17	16.4 17.2	107.9 98.0	5.09 5.31	2.4 2.7	500 700	16.4 17.1	11.5 12.7	0.70 0.75	1.08 1.11	20.1 20.8	15.2 15.4	1.9 1.6
	7.0	3.4	7.8	500 700	21.0 21.8	1.19 1.18	17.0 17.7	108.9 98.8	5.17 5.43	2.6 2.5	500 700	16.6 17.3	11.8 13.1	0.71 0.76	1.05 1.09	20.2 21.0	15.7 15.9	1.8 2.4
90	3.0	0.7	1.6	500 700	20.6 21.4	1.14 1.12	16.7 17.5	108.2 98.3	5.30 5.57	2.9 2.7	500 700	15.2 15.7	11.3 12.6	0.74 0.80	1.26 1.29	19.5 20.1	12.0 12.2	2.6 2.3
	5.0	2.0	4.5	500 700	21.9 22.7	1.19 1.17	17.9 18.7	110.6 100.0	5.39 5.68	3.0 2.8	500 700	15.6 16.2	11.5 12.7	0.73 0.78	1.22 1.26	19.8 20.5	12.8 12.9	2.5 2.1
	7.0	3.3	7.5	500 700	22.6 23.4	1.21 1.18	18.5 19.4	111.9 101.0	5.48 5.81	3.1 2.8	500 700	15.6 16.4	11.0 12.8	0.71 0.78	1.18 1.23	19.6 20.6	13.2 13.3	2.4 3.1
100	3.0	0.7	1.5	Operation not recommended							Operation not recommended							
	5.0	1.9	4.4								500 700	14.9 15.3	11.1 12.3	0.75 0.80	1.41 1.43	19.7 20.2	10.5 10.7	3.0 3.2
	7.0	3.1	7.3								500 700	15.0 15.5	11.1 12.3	0.74 0.79	1.39 1.41	19.7 20.3	10.8 11.0	2.8 3.1
110	3.0	0.6	1.5	Operation not recommended							Operation not recommended							
	5.0	1.8	4.2								500 700	14.1 14.5	10.7 11.9	0.76 0.83	1.60 1.61	19.5 20.0	8.8 9.0	3.8 4.1
	7.0	3.0	7.0								500 700	14.2 14.6	10.6 11.7	0.75 0.80	1.57 1.59	19.6 20.1	9.0 9.2	3.5 3.9
120	3.0	0.6	1.4	Operation not recommended							Operation not recommended							
	5.0	1.7	4.0								500 700	12.7 12.9	10.0 10.9	0.79 0.84	1.80 1.85	18.9 19.3	7.0 7.0	4.7 5.1
	7.0	2.9	6.7								500 700	12.8 13.1	10.0 10.9	0.78 0.83	1.75 1.80	18.8 19.2	7.4 7.3	4.3 4.8

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****030 - Dual Capacity with Variable Speed ECM High Speed (900 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h		
20	6.0	2.7	6.2	Operation not recommended							Operation not recommended							
	7.0	3.5	8.1															
	8.0	4.3	10.0	850 1000	20.6 21.3	1.92 1.90	14.1 14.8	92.5 89.7	3.15 3.29	2.2 2.0								
30	6.0	2.6	6.0	Operation not recommended							Operation not recommended							
	7.0	3.4	7.9	850 1000	23.9 24.6	1.88 1.94	17.5 18.0	96.1 92.8	3.72 3.72	2.4 2.2	850 1000	34.4 34.9	23.2 25.3	0.67 0.72	1.07 1.13	38.0 38.8	32.1 31.0	- -
	8.0	4.2	9.7	850 1000	24.3 25.1	1.98 1.96	17.5 18.4	96.5 93.2	3.60 3.75	2.4 2.2	850 1000	34.6 35.4	23.2 25.3	0.67 0.71	1.04 1.09	38.1 39.1	33.3 32.5	- -
40	6.0	2.5	5.9	Operation not recommended							Operation not recommended							
	7.0	3.3	7.6	850 1000	27.3 28.2	1.97 2.02	20.6 21.3	99.8 96.1	4.06 4.09	2.6 2.4	850 1000	35.3 36.0	23.6 25.8	0.67 0.72	1.19 1.25	39.4 40.3	29.6 28.8	- -
	8.0	4.1	9.4	850 1000	27.9 28.8	1.99 2.04	21.1 21.8	100.4 96.6	4.10 4.14	2.7 2.5	850 1000	35.6 36.4	23.6 25.8	0.66 0.71	1.16 1.21	39.6 40.5	30.8 30.1	- -
50	6.0	2.5	5.7	850 1000	29.6 30.5	2.02 2.05	22.8 23.6	102.3 98.3	4.31 4.37	2.8 2.6	850 1000	34.4 36.2	21.8 24.3	0.63 0.67	1.38 1.45	39.1 41.2	25.0 25.0	1.4 1.5
	7.0	3.2	7.4	850 1000	30.7 31.7	2.06 2.09	23.7 24.6	103.5 99.4	4.36 4.44	2.9 2.7	850 1000	35.2 37.0	22.1 24.5	0.63 0.66	1.30 1.36	39.6 41.6	27.1 27.2	1.3 1.4
	8.0	4.0	9.1	850 1000	31.4 32.4	2.08 2.11	24.3 25.2	104.2 100.0	4.42 4.50	3.0 2.8	850 1000	35.5 37.4	23.6 26.2	0.66 0.70	1.27 1.33	39.8 41.9	28.0 28.1	1.2 1.4
60	6.0	2.4	5.5	850 1000	33.2 34.3	2.11 2.12	26.0 27.1	106.2 101.8	4.62 4.74	3.2 3.0	850 1000	33.1 34.8	21.6 24.1	0.65 0.69	1.53 1.60	38.4 40.2	21.7 21.8	1.7 1.8
	7.0	3.1	7.2	850 1000	34.7 35.9	2.17 2.18	27.3 28.4	107.8 103.2	4.70 4.82	3.3 3.0	850 1000	33.9 35.5	21.9 24.3	0.65 0.68	1.45 1.51	38.9 40.7	23.4 23.5	1.6 1.7
	8.0	3.8	8.8	850 1000	35.6 36.8	2.19 2.20	28.1 29.2	108.8 104.0	4.76 4.90	3.4 3.1	850 1000	34.3 36.0	23.1 25.6	0.67 0.71	1.42 1.48	39.1 41.0	24.2 24.3	1.5 1.6
70	6.0	2.3	5.3	850 1000	36.9 40.5	2.20 2.26	29.4 32.3	110.1 107.5	4.91 5.25	3.6 3.3	850 1000	31.9 37.4	21.4 24.8	0.67 0.66	1.68 1.67	37.6 39.8	18.5 22.4	2.1 2.2
	7.0	3.0	6.9	850 1000	38.8 40.0	2.27 2.27	31.0 32.8	112.2 107.1	5.00 5.16	3.7 3.4	850 1000	32.7 34.1	21.7 24.0	0.66 0.71	1.61 1.66	38.2 40.1	20.4 20.5	2.0 2.1
	8.0	3.7	8.6	850 1000	39.7 41.1	2.30 2.29	31.9 33.3	113.3 108.1	5.07 5.26	3.8 3.5	850 1000	33.0 34.5	22.6 25.0	0.68 0.72	1.57 1.63	38.4 43.1	21.1 21.2	1.8 2.0
80	6.0	2.2	5.1	850 1000	41.1 42.5	2.33 2.31	33.1 34.6	114.7 109.3	5.16 5.38	4.0 3.7	850 1000	30.5 31.7	21.2 23.6	0.69 0.74	1.86 1.92	36.9 38.3	16.4 16.5	2.6 2.8
	7.0	2.9	6.7	850 1000	43.4 44.9	2.42 2.40	35.1 36.7	117.3 111.6	5.25 5.48	4.1 3.8	850 1000	31.4 32.6	21.4 23.8	0.68 0.73	1.80 1.85	37.5 38.9	17.4 17.6	2.5 2.7
	8.0	3.6	8.3	850 1000	44.7 46.2	2.46 2.42	36.3 37.9	118.7 112.8	5.33 5.60	4.3 3.9	850 1000	31.7 33.0	22.0 24.4	0.69 0.74	1.76 1.82	37.7 39.2	18.0 18.2	2.3 2.5
90	6.0	2.1	5.0	850 1000	45.2 46.8	2.47 2.43	36.8 38.6	119.3 113.4	5.37 5.65	4.5 4.2	850 1000	29.2 30.2	20.9 23.3	0.72 0.77	2.05 2.10	36.2 37.4	14.2 14.4	3.3 3.5
	7.0	2.8	6.5	850 1000	48.1 49.8	2.58 2.53	39.3 41.1	122.4 116.1	5.47 5.76	4.6 4.3	850 1000	30.0 31.2	21.2 23.5	0.71 0.75	1.99 2.04	36.8 38.1	15.1 15.3	3.1 3.3
	8.0	3.4	8.0	850 1000	49.6 51.3	2.61 2.55	40.7 42.6	124.0 117.5	5.56 5.90	4.8 4.4	850 1000	30.9 31.5	21.9 23.7	0.71 0.75	1.95 2.00	37.6 38.3	15.8 15.8	2.8 3.2
100	6.0	2.1	4.8	Operation not recommended							Operation not recommended							
	7.0	2.7	6.2															
	8.0	3.3	7.7	850 1000	28.7 29.7	20.8 23.1	0.72 0.78	2.25 2.28	36.4 37.5	12.8 13.0	3.8 4.1	850 1000	29.1 30.0	20.8 23.0	0.72 0.77	2.21 2.25	36.6 37.7	13.1 13.4
110	6.0	2.0	4.6	Operation not recommended							Operation not recommended							
	7.0	2.6	6.0															
	8.0	3.2	7.4	850 1000	27.5 28.2	20.5 22.8	0.75 0.81	2.51 2.53	36.0 36.8	11.0 11.2	4.6 5.0	850 1000	27.7 28.5	20.2 22.3	0.73 0.78	2.46 2.49	36.2 37.0	11.3 11.4
120	6.0	1.9	4.4	Operation not recommended							Operation not recommended							
	7.0	2.5	5.8															
	8.0	3.1	7.1	850 1000	27.0 27.5	20.4 22.1	0.75 0.80	2.80 2.87	36.5 37.3	9.7 9.6	5.5 6.0	850 1000	27.2 27.8	20.4 22.1	0.75 0.79	2.70 2.79	36.4 37.3	10.1 10.0

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****030 - Dual Capacity with Variable Speed ECM Low Speed (900 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h		
20	5.0	2.0	4.6	Operation not recommended							Operation not recommended							
	6.0	2.8	6.5															
	7.0	3.5	8.0	600 800	14.2 14.5	1.49 1.42	9.2 9.7	92.0 86.8	2.80 2.99	1.9 1.7								
30	5.0	1.9	4.5	Operation not recommended							Operation not recommended							
	6.0	2.7	6.3	600 800	16.0 16.5	1.39 1.44	11.3 11.6	94.7 89.1	3.37 3.36	2.1 1.9	600 800	24.5 24.9	17.0 18.6	0.70 0.75	0.58 0.61	26.5 27.0	42.2 40.7	- -
	7.0	3.4	7.8	600 800	16.5 16.8	1.52 1.45	11.3 11.9	95.5 89.4	3.18 3.40	2.1 1.9	600 800	24.6 25.2	17.0 18.6	0.69 0.74	0.56 0.59	26.5 27.2	43.8 42.7	- -
40	5.0	1.9	4.3	Operation not recommended							Operation not recommended							
	6.0	2.6	6.1	600 800	19.0 19.6	1.42 1.45	14.2 14.6	99.3 92.7	3.92 3.96	2.3 2.1	600 800	26.0 26.4	17.7 19.3	0.68 0.73	0.66 0.69	28.2 28.8	39.3 38.2	- -
	7.0	3.3	7.5	600 800	19.4 20.0	1.43 1.47	14.5 15.0	99.9 93.1	3.96 4.00	2.4 2.2	600 800	26.2 26.8	17.7 19.3	0.68 0.72	0.64 0.67	28.4 29.0	40.8 39.9	- -
50	5.0	1.8	4.2	600 800	21.2 21.9	1.42 1.43	16.4 17.0	102.8 95.3	4.40 4.47	2.5 2.3	600 800	26.1 27.4	16.7 18.5	0.64 0.68	0.78 0.82	28.7 30.2	33.5 33.6	1.1 1.2
	6.0	2.6	5.9	600 800	22.0 22.7	1.45 1.47	17.1 17.7	104.0 96.3	4.45 4.54	2.6 2.4	600 800	26.6 28.0	16.9 18.7	0.63 0.67	0.73 0.77	29.1 30.6	36.4 36.4	1.0 1.1
	7.0	3.2	7.3	600 800	22.5 23.2	1.46 1.48	17.5 18.2	104.7 96.9	4.51 4.59	2.7 2.5	600 800	26.9 28.3	18.0 20.0	0.67 0.71	0.71 0.75	29.3 30.9	37.6 37.7	0.9 1.1
60	5.0	1.8	4.1	600 800	23.0 23.7	1.44 1.45	18.1 18.8	105.4 97.4	4.68 4.80	2.9 2.7	600 800	24.9 26.2	16.5 18.4	0.66 0.70	0.91 0.95	28.1 29.4	27.3 27.4	1.4 1.5
	6.0	2.5	5.7	600 800	24.0 24.8	1.48 1.49	19.0 19.7	107.0 98.7	4.76 4.88	3.0 2.7	600 800	25.5 26.7	16.7 18.6	0.66 0.69	0.87 0.90	28.5 29.8	29.4 29.6	1.3 1.4
	7.0	3.1	7.1	600 800	24.6 25.4	1.49 1.50	19.5 20.3	107.9 99.4	4.82 4.96	3.1 2.8	600 800	25.8 27.1	17.6 19.6	0.68 0.72	0.85 0.89	28.7 30.1	30.4 30.6	1.2 1.3
70	5.0	1.7	3.9	600 800	24.7 27.5	1.46 1.52	19.8 21.7	108.2 101.8	4.97 5.30	3.3 3.0	600 800	23.8 25.7	16.4 19.0	0.69 0.74	1.05 1.06	27.4 29.0	22.7 24.2	1.8 1.9
	6.0	2.4	5.5	600 800	26.0 26.9	1.51 1.51	20.9 22.3	110.2 101.1	5.06 5.22	3.4 3.1	600 800	24.4 25.5	16.6 18.4	0.68 0.72	1.01 1.04	27.9 29.2	24.3 24.5	1.7 1.8
	7.0	3.0	6.8	600 800	26.7 27.6	1.53 1.52	21.5 22.4	111.2 101.9	5.13 5.32	3.5 3.2	600 800	24.7 25.8	17.2 19.1	0.70 0.74	0.98 1.02	28.0 29.3	25.2 25.3	1.5 1.7
80	5.0	1.6	3.8	600 800	28.0 29.0	1.49 1.48	23.0 24.0	113.3 103.6	5.52 5.76	3.7 3.4	600 800	22.8 23.7	16.1 17.9	0.71 0.76	1.23 1.27	27.0 28.0	18.5 18.7	2.3 2.5
	6.0	2.3	5.4	600 800	29.6 30.7	1.55 1.53	24.4 25.4	115.8 105.5	5.61 5.86	3.8 3.5	600 800	23.4 24.4	16.3 18.1	0.70 0.74	1.19 1.22	27.5 28.5	19.7 19.9	2.2 2.4
	7.0	2.9	6.6	600 800	30.5 31.6	1.57 1.55	25.2 26.3	117.1 106.5	5.70 5.98	4.0 3.6	600 800	23.7 24.7	16.7 18.5	0.71 0.75	1.16 1.20	27.6 28.7	20.3 20.5	2.0 2.2
90	5.0	1.6	3.7	600 800	31.3 32.4	1.52 1.50	26.1 27.3	118.3 107.5	6.04 6.35	4.2 3.9	600 800	21.8 22.5	15.8 17.6	0.73 0.78	1.41 1.45	26.6 27.5	15.4 15.6	3.0 3.2
	6.0	2.2	5.2	600 800	33.3 34.5	1.59 1.56	27.9 29.1	121.3 109.9	6.14 6.48	4.3 4.0	600 800	22.4 23.2	16.0 17.8	0.71 0.76	1.37 1.41	27.1 28.1	16.3 16.5	2.8 3.0
	7.0	2.8	6.4	600 800	34.3 35.5	1.61 1.57	28.8 30.1	123.0 111.1	6.25 6.63	4.5 4.1	600 800	22.2 23.5	15.4 17.9	0.69 0.76	1.34 1.38	26.8 28.2	16.6 17.0	2.5 2.9
100	5.0	1.5	3.5	Operation not recommended							Operation not recommended							
	6.0	2.2	5.0															
	7.0	2.7	6.1	600 800	20.9 21.6	15.4 17.1	0.74 0.79	1.60 1.63	26.4 27.2	13.1 13.3	3.5 3.8							
110	5.0	1.5	3.4	Operation not recommended							Operation not recommended							
	6.0	2.1	4.8															
	7.0	2.6	5.9	600 800	19.5 20.0	14.8 16.4	0.76 0.82	1.83 1.85	25.7 26.3	10.6 10.8	4.3 4.7							
120	5.0	1.4	3.3	Operation not recommended							Operation not recommended							
	6.0	2.0	4.6															
	7.0	2.5	5.7	600 800	18.2 18.6	14.3 15.5	0.78 0.82	2.01 2.07	25.1 25.6	9.1 9.0	5.2 5.7							

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz

Performance Data cont.

036 - Dual Capacity with Variable Speed ECM High Speed (1250 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
				Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h
		PSI	FT/HD															
20	5.0	1.3	3.0	Operation not recommended							Operation not recommended							
	7.0	2.8	6.5															
	9.0	4.0	9.2	1050 1250	24.8 25.4	2.15 2.14	17.5 18.1	91.9 88.8	3.38 3.48	2.8 2.5								
30	5.0	1.2	2.9	Operation not recommended							Operation not recommended							
	7.0	2.7	6.3															
	9.0	3.9	8.9	1050 1250	28.8 29.5	2.22 2.21	21.2 22.0	95.4 91.9	3.80 3.91	3.0 2.8	1050 1250	32.7 33.5	22.4 24.5	0.69 0.73	1.06 1.11	36.3 37.3	30.9 30.2	- -
40	5.0	1.2	2.8	Operation not recommended							Operation not recommended							
	7.0	2.6	6.1															
	9.0	3.7	8.7	1050 1250	32.1 32.5	2.22 2.24	24.6 24.8	98.3 94.1	4.25 4.24	3.5 3.1	1050 1250	38.2 38.7	25.9 28.3	0.68 0.73	1.31 1.41	42.7 43.5	29.3 27.4	- -
50	5.0	1.2	2.7	1050 1250	33.7 34.7	2.22 2.25	26.1 27.0	99.7 95.7	4.45 4.52	3.6 3.3	1050 1250	41.2 43.3	26.7 29.7	0.65 0.68	1.68 1.77	43.8 49.3	24.5 24.5	1.7 1.8
	7.0	2.6	5.9	1050 1250	34.9 36.0	2.27 2.30	27.2 28.2	100.8 96.7	4.51 4.59	3.7 3.4	1050 1250	42.0 44.2	27.0 30.0	0.64 0.68	1.58 1.66	47.4 49.9	26.6 26.7	1.6 1.8
	9.0	3.6	8.4	1050 1250	35.7 36.8	2.29 2.32	27.9 28.9	101.5 97.3	4.57 4.65	3.8 3.5	1050 1250	42.4 44.7	28.8 32.0	0.68 0.72	1.54 1.62	47.7 50.2	27.5 27.6	1.5 1.7
60	5.0	1.1	2.6	1050 1250	37.3 38.5	2.29 2.31	29.4 30.6	102.9 98.5	4.77 4.89	4.1 3.8	1050 1250	39.1 41.0	26.3 29.2	0.67 0.71	1.87 1.96	45.5 47.7	20.9 21.0	2.1 2.2
	7.0	2.5	5.7	1050 1250	38.9 40.2	2.36 2.37	30.9 32.1	104.3 99.8	4.85 4.97	4.2 3.9	1050 1250	40.1 42.0	26.6 29.5	0.66 0.70	1.78 1.85	46.1 48.3	22.5 22.6	2.0 2.1
	9.0	3.5	8.1	1050 1250	39.9 41.2	2.38 2.39	31.8 33.0	105.2 100.5	4.91 5.05	4.3 4.0	1050 1250	40.5 42.5	28.0 31.1	0.69 0.73	1.74 1.82	46.4 48.6	23.3 23.4	1.8 2.0
70	5.0	1.1	2.5	1050 1250	40.9 42.8	2.36 2.42	32.8 34.5	106.1 101.7	5.07 5.18	4.7 4.3	1050 1250	37.1 39.1	25.9 29.7	0.70 2.12	2.07 2.17	44.2 46.5	18.5 18.0	2.6 2.8
	7.0	2.4	5.5	1050 1250	43.0 44.4	2.44 2.44	34.7 36.1	107.9 102.9	5.16 5.33	4.8 4.4	1050 1250	38.1 39.7	26.2 29.0	0.69 0.73	1.98 2.05	44.8 46.7	19.2 19.4	2.4 2.6
	9.0	3.4	7.9	1050 1250	44.1 45.6	2.47 2.46	35.7 37.2	108.9 103.8	5.23 5.43	5.0 5.6	1050 1250	38.5 40.2	27.3 30.2	0.71 0.75	1.93 2.01	45.1 47.1	19.9 20.0	2.3 2.5
80	5.0	1.1	2.5	1050 1250	44.8 46.4	2.46 2.44	36.4 38.0	109.5 104.3	5.34 5.57	5.2 4.8	1050 1250	35.6 37.1	25.7 28.5	0.72 0.77	2.29 2.36	43.4 45.1	15.6 15.7	3.2 3.4
	7.0	2.3	5.4	1050 1250	47.4 49.0	2.55 2.53	38.6 40.3	111.8 106.3	5.43 5.67	5.3 4.9	1050 1250	36.6 38.1	26.0 28.8	0.71 0.76	2.20 2.27	44.2 45.9	16.6 16.8	3.0 3.3
	9.0	3.3	7.6	1050 1250	48.7 50.4	2.59 2.55	39.9 41.7	113.0 107.3	5.52 5.79	5.5 5.1	1050 1250	37.0 38.6	26.6 29.5	0.72 0.77	2.16 2.23	44.4 46.1	17.1 17.3	2.8 3.1
90	5.0	1.0	2.4	1050 1250	48.7 50.4	2.55 2.52	40.0 41.8	112.9 107.3	5.59 5.87	5.9 5.4	1050 1250	34.2 35.4	25.4 28.3	0.74 0.80	2.50 2.56	42.7 44.1	13.7 13.8	4.0 4.3
	7.0	2.2	5.2	1050 1250	51.7 53.6	2.67 2.62	42.6 44.6	115.6 109.7	5.68 5.99	6.0 5.6	1050 1250	35.2 36.5	25.8 28.6	0.73 0.78	2.43 2.49	43.5 45.0	14.5 14.7	3.7 4.1
	9.0	3.2	7.3	1050 1250	53.4 55.2	2.71 2.64	44.1 46.2	117.1 110.9	5.78 6.13	6.2 5.8	1050 1250	35.8 36.9	26.4 28.8	0.74 0.78	2.38 2.44	43.9 45.2	15.0 15.1	3.5 3.9
100	5.0	1.0	2.3	Operation not recommended							Operation not recommended							
	7.0	2.2	5.0															
	9.0	3.1	7.1	1050 1250	33.4 34.5	2.54 2.82	0.76 0.82	2.72 2.76	42.7 44.0	12.3 12.5	4.6 5.0							
110	5.0	1.0	2.2	Operation not recommended							Operation not recommended							
	7.0	2.1	4.8															
	9.0	2.9	6.8	1050 1250	31.7 32.6	2.51 2.79	0.79 0.86	3.01 3.03	42.0 42.9	10.5 10.7	5.6 6.1							
120	5.0	0.9	2.1	Operation not recommended							Operation not recommended							
	7.0	2.0	4.6															
	9.0	2.8	6.5	1050 1250	29.9 30.5	2.45 2.66	0.82 0.87	3.24 3.34	40.9 41.9	9.2 9.1	6.3 7.0							

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****036 - Dual Capacity with Variable Speed ECM Low Speed (1050 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F								
		Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h			
20	4.0	1.2	2.7	Operation not recommended							Operation not recommended								
	6.0	2.5	5.7																
	8.0	3.8	8.8	900	17.2	1.58	11.9	87.7	3.20	2.4									
				1050	17.5	1.60	12.0	85.4	3.21	2.2									
30	4.0	1.1	2.6	Operation not recommended							Operation not recommended								
	6.0	2.4	5.5																
	8.0	3.7	8.5	900	19.7	1.62	14.2	90.3	3.56	2.3	900	28.3	18.1	0.64	0.81	31.0	35.1	-	
				1050	20.3	1.67	14.6	87.9	3.55	2.1	1050	28.7	19.8	0.69	0.85	31.6	33.9	-	
				900	20.4	1.67	14.7	91.0	3.58	2.4	900	28.4	18.1	0.64	0.78	31.1	36.4	-	
				1050	20.7	1.69	14.9	88.3	3.59	2.2	1050	29.1	19.8	0.68	0.82	31.9	35.5	-	
40	4.0	1.1	2.5	Operation not recommended							Operation not recommended								
	6.0	2.3	5.3																
	8.0	3.6	8.3	900	22.6	1.94	15.9	93.2	3.40	2.5	900	30.0	20.4	0.68	0.89	33.1	33.7	-	
				1050	23.3	1.99	16.5	90.5	3.43	2.3	1050	30.6	22.3	0.73	0.94	33.8	32.7	-	
				900	23.0	1.96	16.3	93.7	3.44	2.6	900	30.3	20.4	0.67	0.87	33.2	35.0	-	
				1050	23.8	2.01	16.9	90.9	3.47	2.4	1050	31.0	22.3	0.72	0.91	34.0	34.2	-	
50	4.0	1.1	2.5	900	24.5	2.22	17.0	95.2	3.24	2.6	900	30.2	20.6	0.68	1.03	33.7	29.5	0.9	
				1050	25.3	2.25	17.6	92.3	3.29	2.4	1050	31.8	22.9	0.72	1.08	35.5	29.5	1.0	
	6.0	2.2	5.2	900	25.4	2.27	17.7	96.1	3.28	2.7	900	30.9	20.8	0.68	0.97	34.2	31.9	0.9	
				1050	26.2	2.30	18.4	93.1	3.34	2.5	1050	32.4	23.1	0.71	1.01	35.9	32.0	1.0	
	8.0	3.5	8.0	900	26.0	2.29	18.2	96.7	3.33	2.8	900	31.1	22.2	0.71	0.94	34.4	33.0	0.8	
				1050	26.8	2.32	18.9	93.6	3.39	2.5	1050	32.8	24.7	0.75	0.99	36.2	33.1	0.9	
60	4.0	1.0	2.4	900	26.8	1.88	20.4	97.6	4.17	2.9	900	28.9	20.5	0.71	1.19	33.0	24.3	1.3	
				1050	27.7	1.90	21.2	94.4	4.28	2.6	1050	30.3	22.8	0.75	1.24	34.5	24.4	1.3	
	6.0	2.2	5.0	900	28.0	1.94	21.4	98.8	4.24	3.0	900	29.6	20.7	0.70	1.13	33.4	26.2	1.2	
				1050	28.9	1.95	22.3	95.5	4.35	2.7	1050	31.0	23.0	0.74	1.17	35.0	26.4	1.3	
	8.0	3.4	7.7	900	28.7	1.96	22.0	99.5	4.30	3.0	900	29.9	21.9	0.73	1.10	33.6	27.2	1.1	
				1050	29.7	1.97	22.9	96.1	4.42	2.8	1050	31.4	24.3	0.77	1.15	35.3	27.3	1.2	
70	4.0	1.0	2.3	900	29.1	1.55	23.9	100.0	5.52	3.2	900	27.6	20.4	0.74	1.35	32.2	20.5	1.7	
				1050	30.4	1.67	24.7	96.8	5.34	2.9	1050	29.0	23.4	0.81	1.46	34.0	19.9	1.8	
	6.0	2.1	4.9	900	30.6	1.60	25.2	101.5	5.62	3.3	900	28.3	20.7	0.73	1.29	32.7	21.9	1.6	
				1050	31.6	1.60	26.2	97.9	5.81	3.0	1050	29.5	22.9	0.77	1.34	34.1	22.1	1.8	
	8.0	3.2	7.5	900	31.4	1.62	25.9	102.3	5.70	3.4	900	28.6	21.5	0.75	1.26	32.9	22.7	1.5	
				1050	32.5	1.61	27.0	98.7	5.92	3.1	1050	29.9	23.8	0.80	1.31	34.4	22.8	1.7	
80	4.0	1.0	2.2	900	32.1	1.60	26.7	103.0	5.88	3.6	900	26.2	20.1	0.77	1.56	31.5	16.8	2.4	
				1050	33.2	1.59	27.8	99.3	6.14	3.3	1050	27.2	22.4	0.82	1.61	32.7	16.9	2.6	
	6.0	2.0	4.7	900	34.0	1.66	28.3	105.0	5.99	3.7	900	26.9	20.4	0.76	1.51	32.0	17.9	2.3	
				1050	35.1	1.65	29.5	101.0	6.25	3.4	1050	28.0	22.6	0.81	1.55	33.3	18.0	2.5	
	8.0	3.1	7.2	900	35.0	1.69	29.2	106.0	6.08	3.8	900	27.2	20.9	0.77	1.48	32.2	18.4	2.1	
				1050	36.2	1.66	30.5	101.9	6.38	3.5	1050	28.3	23.2	0.82	1.52	33.5	18.6	2.3	
90	4.0	0.9	2.2	900	35.1	1.65	29.4	106.1	6.22	4.0	900	24.7	19.9	0.80	1.77	30.8	13.9	3.2	
				1050	36.3	1.63	30.8	102.0	6.54	3.7	1050	25.6	22.1	0.86	1.82	31.8	14.1	3.4	
	6.0	2.0	4.5	900	37.3	1.73	31.4	108.4	6.32	4.2	900	25.5	20.1	0.79	1.72	31.3	14.8	3.0	
				1050	38.6	1.70	32.8	104.1	6.67	3.8	1050	26.4	22.3	0.85	1.77	32.4	15.0	3.3	
	8.0	3.0	7.0	900	38.5	1.75	32.5	109.6	6.43	4.3	900	26.1	20.9	0.80	1.71	31.9	15.3	2.8	
				1050	39.8	1.71	34.0	105.1	6.82	4.0	1050	26.7	22.5	0.84	1.73	32.6	15.4	3.1	
100	4.0	0.9	2.1	Operation not recommended							Operation not recommended								
	6.0	1.9	4.4																
	8.0	2.9	6.7	900	24.0	19.6	0.82	1.98	30.8	12.1	4.1	900	24.3	19.6	0.81	1.95	30.9	12.4	0.8
				1050	24.8	21.8	0.88	2.01	31.7	12.3	4.5	1050	25.1	21.7	0.86	1.98	31.8	12.7	4.2
110	4.0	0.9	2.0	Operation not recommended							Operation not recommended								
	6.0	1.8	4.2																
	8.0	2.8	6.5	900	22.6	19.1	0.85	2.25	30.2	10.0	5.2	1050	23.2	21.2	0.92	2.26	30.9	10.2	5.7
				900	22.8	18.8	0.83	2.21	30.3	10.3	4.8	1050	23.4	20.8	0.89	2.23	31.0	10.5	5.4
120	4.0	0.8	1.9	Operation not recommended							Operation not recommended								
	6.0	1.7	4.0																
	8.0	2.7	6.2	900	21.3	18.6	0.88	2.55	29.9	8.4	6.5	1050	21.6	20.2	0.93	2.61	30.6	8.3	7.0
				900	21.4	18.6	0.87	2.46	29.8	8.7	6.0	1050	21.9	20.2	0.92	2.54	30.6	8.6	6.7

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****042 - Dual Capacity with Variable Speed ECM High Speed (1350 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h		
20	5.0	1.5	3.5	Operation not recommended							Operation not recommended							
	8.0	3.6	8.4															
	11.0	5.7	13.3	1100 1300	29.3 29.5	2.38 2.33	21.2 21.6	94.7 91.0	3.61 3.71	4.1 3.7								
30	5.0	1.5	3.4	Operation not recommended							Operation not recommended							
	8.0	3.5	8.1	1100 1300	32.7 33.6	2.32 2.39	24.8 25.5	97.5 93.9	4.14 4.13	4.3 3.9	1100 1300	39.5 40.2	27.5 30.1	0.70 0.75	1.41 1.49	44.4 45.2	28.0 27.0	- -
	11.0	5.6	12.9	1100 1300	34.1 34.3	2.46 2.41	25.7 26.1	98.7 94.4	4.06 4.17	4.4 4.0	1100 1300	39.7 40.7	27.5 30.1	0.69 0.74	1.37 1.44	44.4 45.6	29.0 28.3	- -
40	5.0	1.4	3.3	Operation not recommended							Operation not recommended							
	8.0	3.4	7.9	1100 1300	37.1 38.2	2.43 2.49	28.8 29.8	101.2 97.2	4.47 4.51	4.7 4.3	1100 1300	42.7 43.5	28.9 31.6	0.68 0.73	1.59 1.67	48.1 49.1	26.8 26.0	- -
	11.0	5.4	12.5	1100 1300	37.8 39.1	2.46 2.51	29.5 30.5	101.9 97.8	4.51 4.56	4.9 4.4	1100 1300	43.0 44.0	28.9 31.6	0.67 0.72	1.54 1.62	48.3 49.5	27.8 27.2	- -
50	5.0	1.4	3.2	1100 1300	40.1 41.3	2.50 2.53	31.6 32.6	103.7 99.4	4.71 4.78	5.1 4.7	1100 1300	43.5 45.7	27.5 30.6	0.63 0.67	1.85 1.95	49.8 52.4	23.4 23.5	2.5 2.6
	8.0	3.3	7.7	1100 1300	41.5 42.9	2.55 2.59	32.8 34.0	105.0 100.5	4.77 4.86	5.3 4.8	1100 1300	44.4 46.7	27.8 30.9	0.63 0.66	1.75 1.83	50.4 52.9	25.4 25.5	2.3 2.5
	11.0	5.2	12.1	1100 1300	42.5 43.8	2.58 2.61	33.7 34.9	105.7 101.2	4.83 4.92	5.4 5.0	1100 1300	44.8 47.2	29.7 33.0	0.66 0.70	1.70 1.79	50.6 53.3	26.3 26.4	2.1 2.4
60	5.0	1.3	3.1	1100 1300	44.4 45.8	2.57 2.59	35.6 37.0	107.4 102.7	5.06 5.19	5.7 5.3	1100 1300	43.8 45.9	28.2 31.4	0.65 0.68	2.05 2.15	50.8 53.2	21.3 21.4	3.0 3.2
	8.0	3.2	7.4	1100 1300	46.4 47.9	2.65 2.66	37.4 38.8	109.1 104.1	5.14 5.27	5.9 5.4	1100 1300	44.8 46.9	28.6 31.7	0.64 0.68	1.95 2.03	51.4 53.8	22.9 23.1	2.8 3.0
	11.0	5.1	11.7	1100 1300	47.5 49.1	2.67 2.69	38.4 39.9	110.0 105.0	5.21 5.36	6.1 5.6	1100 1300	45.2 47.5	30.1 33.4	0.67 0.70	1.90 1.99	51.7 54.2	23.7 23.8	2.6 2.9
70	5.0	1.3	3.0	1100 1300	35.4 49.2	2.65 2.69	26.4 40.0	99.8 105.0	3.92 5.36	6.4 6.0	1100 1300	44.0 47.0	29.0 33.6	0.66 0.71	2.36 2.43	52.1 54.7	17.5 19.3	3.8 4.0
	8.0	3.1	7.2	1100 1300	51.3 53.0	2.74 2.74	41.9 43.6	113.2 107.7	5.49 5.67	6.6 6.1	1100 1300	45.2 47.1	29.3 32.5	0.65 0.69	2.16 2.23	52.6 55.2	20.9 21.1	3.5 3.8
	11.0	4.9	11.3	1100 1300	52.6 54.4	2.77 2.76	43.2 45.0	114.3 108.7	5.56 5.78	6.8 6.3	1100 1300	45.6 47.7	30.5 33.8	0.67 0.71	2.10 2.19	52.8 55.3	21.7 21.8	3.3 3.6
80	5.0	1.3	2.9	1100 1300	50.0 51.8	2.68 2.66	40.9 42.7	112.1 106.9	5.46 5.70	7.2 6.7	1100 1300	42.4 44.1	28.4 31.5	0.67 0.71	2.52 2.59	51.0 53.0	16.9 17.0	4.8 5.1
	8.0	3.0	6.9	1100 1300	52.9 54.7	2.79 2.76	43.4 45.3	114.5 109.0	5.56 5.80	7.5 6.9	1100 1300	43.6 45.4	28.7 31.8	0.66 0.70	2.43 2.50	51.9 53.9	18.0 18.2	4.5 4.8
	11.0	4.7	10.9	1100 1300	54.4 56.3	2.83 2.79	44.8 46.8	115.8 110.1	5.64 5.92	7.7 7.1	1100 1300	44.1 45.9	29.4 32.6	0.67 0.71	2.38 2.45	52.2 54.3	18.5 18.7	4.1 4.6
90	5.0	1.2	2.8	1100 1300	51.3 53.1	2.72 2.68	42.0 44.0	113.2 107.9	5.53 5.82	88.1 7.5	1100 1300	40.8 42.3	27.7 30.8	0.68 0.73	2.78 2.85	50.3 52.0	14.7 14.9	6.0 6.4
	8.0	2.9	6.7	1100 1300	54.5 56.5	2.84 2.79	44.9 47.0	115.9 110.2	5.63 5.93	8.4 7.8	1100 1300	42.1 43.6	28.1 31.2	0.67 0.71	2.70 2.77	51.3 53.1	15.6 15.8	5.6 6.1
	11.0	4.6	10.5	1100 1300	56.3 58.2	2.88 2.81	46.4 48.6	117.4 111.5	5.72 6.07	8.6 8.0	1100 1300	43.1 44.1	28.7 31.4	0.67 0.71	2.64 2.71	52.1 53.3	16.3 16.3	5.2 5.8
100	5.0	1.2	2.7	Operation not recommended							Operation not recommended							
	8.0	2.8	6.4															
	11.0	4.4	10.2	1100 1300	39.9 41.2	27.6 30.7	0.69 0.75	3.05 3.09	50.3 51.7	13.1 13.3	6.9 7.5	1100 1300	40.3 41.6	27.6 30.5	0.68 0.73	2.99 3.04	50.5 52.0	13.5 13.7
110	5.0	1.1	2.6	Operation not recommended							Operation not recommended							
	8.0	2.7	6.2															
	11.0	4.2	9.8	1100 1300	37.7 38.7	27.2 30.2	0.72 0.78	3.39 3.42	49.3 50.4	11.1 11.3	8.5 9.2	1100 1300	38.1 39.1	26.8 29.6	0.70 0.76	3.33 3.37	49.4 50.6	11.4 11.6
120	5.0	1.1	2.5	Operation not recommended							Operation not recommended							
	8.0	2.6	5.9															
	11.0	4.1	9.4	1100 1300	32.8 33.4	26.0 28.2	0.79 0.84	3.77 3.86	45.7 46.6	8.7 8.6	10.3 11.1	1100 1300	33.1 33.8	26.0 28.2	0.78 0.83	3.65 3.76	46.6 46.6	9.0 9.0

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data cont.

042 - Dual Capacity with Variable Speed ECM Low Speed (1350 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
				Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h
		PSI	FT/HD	Operation not recommended							Operation not recommended							
20	4.0	0.9	2.2	Operation not recommended							Operation not recommended							
	6.0	2.1	4.9	Operation not recommended							Operation not recommended							
	8.0	3.3	7.6	900 1100	19.5 19.9	1.79 1.78	13.4 13.8	90.0 86.8	3.19 3.28	3.7 3.3								
30	4.0	0.9	2.1	Operation not recommended							Operation not recommended							
	6.0	2.0	4.7	900 1100	21.5 22.4	1.72 1.77	15.6 16.3	92.1 88.8	3.66 3.71	3.9 3.4	900 1100	31.2 31.7	22.1 24.2	0.71 0.76	0.86 0.91	34.1 34.8	36.1 34.8	- -
	8.0	3.2	7.4	900 1100	23.3 23.8	1.82 1.81	17.1 17.6	94.0 90.0	3.75 3.85	3.8 3.3	900 1100	31.3 32.1	22.1 24.2	0.71 0.75	0.84 0.88	34.2 35.1	37.4 36.5	- -
40	4.0	0.9	2.0	Operation not recommended							Operation not recommended							
	6.0	2.0	4.6	900 1100	25.0 25.9	1.75 1.78	19.0 19.8	95.7 91.8	4.19 4.25	4.1 3.7	900 1100	33.4 34.0	23.4 25.5	0.70 0.75	0.98 1.03	36.7 37.5	34.1 33.1	- -
	8.0	3.1	7.1	900 1100	26.3 27.3	1.79 1.83	20.2 21.0	97.1 92.9	4.31 4.38	4.2 3.8	900 1100	33.6 34.4	23.4 25.5	0.69 0.74	0.95 1.00	36.9 37.8	35.4 34.6	- -
50	4.0	0.9	2.0	900 1100	27.5 28.4	1.78 1.80	21.5 22.2	98.3 93.9	4.54 4.62	4.3 3.9	900 1100	34.8 35.8	23.5 26.0	0.67 0.73	1.13 1.00	38.7 39.2	30.9 35.8	1.6 1.7
	6.0	1.9	4.4	900 1100	28.5 29.3	1.78 1.80	22.4 23.2	99.3 94.7	4.70 4.78	4.4 4.1	900 1100	35.1 36.1	23.6 26.1	0.67 0.72	1.10 1.12	38.9 39.9	32.0 32.2	1.5 1.6
	8.0	3.0	6.9	900 1100	29.8 30.7	1.82 1.84	23.6 24.4	100.7 95.8	4.81 4.89	4.7 4.2	900 1100	35.7 36.7	24.2 26.8	0.68 0.73	1.09 1.11	39.4 40.5	32.8 33.1	1.4 1.5
60	4.0	0.8	1.9	900 1100	31.5 32.3	1.81 1.83	25.3 26.0	102.4 97.2	5.09 5.18	4.8 4.4	900 1100	33.3 34.3	22.7 25.2	0.68 0.73	1.32 1.34	37.8 38.8	25.3 25.6	2.3 2.4
	6.0	1.9	4.3	900 1100	32.8 33.5	1.81 1.82	26.6 27.3	103.7 98.2	5.30 5.39	5.0 5.1	900 1100	33.6 34.6	22.9 25.3	0.68 0.73	1.28 1.31	38.0 39.0	26.3 26.5	2.1 2.3
	8.0	2.9	6.7	900 1100	33.9 34.7	1.85 1.86	27.6 28.3	104.9 99.2	5.37 5.46	4.7 5.3	900 1100	34.2 35.2	23.4 26.0	0.69 0.74	1.27 1.30	38.5 39.6	26.9 27.1	1.9 2.2
70	4.0	0.8	1.8	900 1100	35.4 35.6	1.85 1.86	29.1 29.3	106.4 100.0	5.61 5.61	5.0 5.5	900 1100	31.9 33.5	22.0 24.9	0.69 0.74	1.50 1.63	37.0 38.2	21.2 20.6	3.0 3.1
	6.0	1.8	4.2	900 1100	37.0 37.7	1.84 1.84	30.7 31.4	108.0 101.7	5.88 5.99	5.0 5.6	900 1100	32.2 33.1	22.1 24.5	0.69 0.74	1.46 1.49	37.2 38.6	22.0 22.1	2.8 3.0
	8.0	2.8	6.5	900 1100	37.9 38.6	1.88 1.88	31.5 32.2	109.0 102.5	5.90 6.02	5.2 6.0	900 1100	32.7 33.6	22.7 25.1	0.69 0.75	1.45 1.48	37.6 39.1	22.5 22.7	2.6 2.8
80	4.0	0.8	1.8	900 1100	39.6 40.2	1.88 1.87	33.2 33.8	110.8 103.8	6.18 6.30	5.5 6.2	900 1100	31.0 31.8	21.8 24.1	0.70 0.76	1.73 1.77	36.9 37.9	17.9 18.0	4.2 4.4
	6.0	1.7	4.0	900 1100	41.5 42.0	1.87 1.85	35.2 35.7	112.7 105.4	6.52 6.64	6.3 5.8	900 1100	31.3 32.1	21.9 24.3	0.70 0.76	1.69 1.72	37.0 38.0	18.5 18.7	3.9 4.2
	8.0	2.7	6.3	900 1100	42.1 42.6	1.91 1.89	35.6 36.1	113.3 105.8	6.47 6.60	6.4 6.0	900 1100	31.8 32.7	22.5 24.9	0.71 0.76	1.67 1.71	37.5 38.5	19.0 19.1	3.6 4.0
90	4.0	0.7	1.7	900 1100	43.8 44.2	1.91 1.89	37.3 37.8	115.1 107.2	6.73 6.87	6.5 6.4	900 1100	30.1 30.9	21.6 23.9	0.72 0.77	1.96 2.00	36.8 37.7	15.3 15.5	5.4 5.7
	6.0	1.7	3.9	900 1100	46.1 46.4	1.89 1.87	39.6 40.0	117.4 109.0	7.14 7.28	6.6 6.9	900 1100	30.3 31.2	21.8 24.1	0.72 0.77	1.91 1.95	36.9 37.8	15.9 16.0	5.0 5.5
	8.0	2.6	6.0	900 1100	46.3 46.5	1.93 1.90	39.7 41.0	117.6 109.1	7.03 7.17	7.0 6.6	900 1100	30.8 31.7	21.9 24.7	0.71 0.78	1.91 1.93	37.3 38.3	16.1 16.4	4.7 5.2
100	4.0	0.7	1.7	Operation not recommended							Operation not recommended							
	6.0	1.6	3.7								900 1100	27.3 28.0	21.0 23.2	0.77 0.83	2.20 2.24	34.8 35.7	12.4 12.5	6.1 6.6
	8.0	2.5	5.8	900 1100	27.7 28.5	21.5 23.8	0.78 0.84	2.18 2.23	35.2 36.1	12.7 12.8	5.8 6.6							
110	4.0	0.7	1.6	Operation not recommended							Operation not recommended							
	6.0	1.6	3.6								900 1100	24.2 24.9	20.2 22.3	0.83 0.90	2.49 2.54	32.7 33.6	9.7 9.8	7.2 8.2
	8.0	2.4	5.6	900 1100	24.6 25.3	20.7 22.9	0.84 0.91	2.47 2.52	33.1 33.9	10.0 10.0	6.9 7.8							
120	4.0	0.7	1.5	Operation not recommended							Operation not recommended							
	6.0	1.5	3.5								900 1100	22.3 22.5	20.4 22.1	0.91 0.98	2.75 2.92	31.7 32.5	8.1 7.7	8.5 9.1
	8.0	2.3	5.4	900 1100	22.8 22.8	20.4 22.1	0.91 0.97	2.75 2.84	31.7 32.5	8.1 8.0	8.5 9.6							

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****048 - Dual Capacity with Variable Speed ECM High Speed (1550 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT/HD	Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h
20	6.0	1.4	3.2	Operation not recommended							Operation not recommended							
	9.0	2.8	6.5															
	12.0	4.2	9.7	1350	33.3	2.92	23.4	92.8	3.35	4.7	1550	33.4	2.85	23.7	90.0	3.43	4.2	
30	6.0	1.4	3.2	Operation not recommended							Operation not recommended							
	9.0	2.7	6.3															
	12.0	4.1	9.5	1350	36.6	2.82	26.9	95.1	3.80	4.9	1550	37.6	2.91	27.7	92.5	3.79	4.5	
40	6.0	1.3	3.1	Operation not recommended							Operation not recommended							
	9.0	2.6	6.1															
	12.0	4.0	9.2	1350	41.8	2.94	31.8	98.7	4.17	5.6	1550	43.1	3.00	32.9	95.7	4.21	5.2	
50	6.0	1.3	3.0	1350	45.4	2.98	35.2	101.1	4.46	6.1	1550	46.7	3.02	36.4	97.9	4.53	5.6	
	9.0	2.6	5.9	1350	47.0	3.05	36.6	102.3	4.52	6.3	1550	48.5	3.09	38.0	99.0	4.60	5.8	
	12.0	3.8	8.9	1350	48.1	3.08	37.6	103.0	4.58	6.5	1550	49.6	3.12	39.0	99.6	4.66	5.9	
60	6.0	1.2	2.9	1350	49.9	3.11	39.3	104.2	4.71	6.9	1550	51.5	3.13	40.8	100.8	4.83	6.4	
	9.0	2.5	5.7	1350	52.1	3.19	41.2	105.8	4.78	7.1	1550	53.8	3.21	42.9	102.1	4.91	6.6	
	12.0	3.7	8.6	1350	53.4	3.23	42.4	106.6	4.85	7.3	1550	54.4	3.23	43.4	107.3	4.94	7.9	
70	6.0	1.2	2.8	1350	54.4	3.23	43.4	107.3	4.94	7.9	1550	55.2	3.24	44.1	107.9	4.99	6.7	
	9.0	2.4	5.5	1350	57.2	3.33	45.9	109.3	5.03	8.1	1550	58.7	3.37	47.2	110.3	5.10	8.4	
	12.0	3.6	8.3	1350	58.7	3.37	47.2	110.3	5.10	8.4	1550	60.7	3.36	49.2	106.3	5.29	7.7	
80	6.0	1.2	2.7	1350	57.4	3.32	46.1	109.4	5.07	8.7	1550	59.1	3.33	47.7	105.3	5.20	7.5	
	9.0	2.3	5.4	1350	60.7	3.45	48.9	111.6	5.15	9.0	1550	62.8	3.42	51.1	107.5	5.38	8.3	
	12.0	3.5	8.0	1350	62.5	3.50	50.5	112.8	5.23	9.3	1550	64.6	3.45	52.8	108.6	5.50	8.6	
90	6.0	1.1	2.6	1350	60.4	3.41	48.7	111.4	5.18	9.7	1550	62.5	3.36	51.1	107.4	5.45	9.0	
	9.0	2.2	5.2	1350	64.2	3.57	52.0	114.0	5.27	10.0	1550	66.5	3.50	54.5	109.7	5.56	9.3	
	12.0	3.4	7.7	1350	66.2	3.62	53.9	115.4	5.36	10.3	1550	68.5	3.53	56.5	110.9	5.69	9.6	
100	6.0	1.1	2.5	Operation not recommended							Operation not recommended							
	9.0	2.2	5.0															
	12.0	3.2	7.5	1350	41.2	3.18	0.77	3.59	53.5	11.5	1550	42.6	3.18	0.83	3.65	55.0	11.7	8.1
110	6.0	1.0	2.4	Operation not recommended							Operation not recommended							
	9.0	2.1	4.8															
	12.0	3.1	7.2	1350	38.5	3.09	0.80	3.97	52.0	9.7	1550	39.5	3.09	0.87	4.00	53.1	9.9	10.1
120	6.0	1.0	2.3	Operation not recommended							Operation not recommended							
	9.0	2.0	4.6															
	12.0	3.0	6.9	1350	37.1	29.3	0.79	4.40	52.1	8.4	1550	37.7	31.8	0.84	4.51	53.1	8.4	12.2
				1350	37.4	29.3	0.78	4.26	51.9	8.8	1550	38.2	31.8	0.83	4.39	53.2	8.7	11.6

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data cont.

048 - Dual Capacity with Variable Speed ECM Low Speed (1350 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F											
				Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h				
		PSI	FT/HD	Operation not recommended							Operation not recommended											
20	5.0	1.1	2.4	1150 1350	22.0 22.1	2.23 2.22	14.4 14.5	87.7 85.2	2.89 2.92	4.1 3.7												
	8.0	2.3	5.4																			
	11.0	3.6	8.4																			
30	5.0	1.0	2.4	Operation not recommended							Operation not recommended											
	8.0	2.3	5.3	1150 1350	24.4 25.5	2.13 2.19	17.2 18.0	89.7 87.5	3.37 3.41	4.2 3.8	1150 1350	32.9 33.5	25.0 27.3	0.76 0.82	1.07 1.13	36.6 37.3	30.8 29.7	- -				
	11.0	3.5	8.1	1150 1350	27.0 27.1	2.25 2.24	19.3 19.5	91.7 88.6	3.52 3.55	4.3 3.9	1150 1350	33.1 33.9	25.0 27.3	0.75 0.81	1.04 1.09	36.6 37.6	31.9 31.1	- -				
40	5.0	1.0	2.3	Operation not recommended							Operation not recommended											
	8.0	2.2	5.1	1150 1350	29.2 30.2	2.18 2.22	21.7 22.6	93.5 90.7	3.92 3.98	4.5 4.2	1150 1350	36.4 37.1	26.7 29.1	0.73 0.78	1.23 1.29	40.6 41.5	29.6 28.7	- -				
	11.0	3.4	7.9	1150 1350	30.7 31.8	2.23 2.28	23.1 24.0	94.8 91.8	4.04 4.10	4.7 4.2	1150 1350	36.7 37.6	26.7 29.1	0.73 0.77	1.20 1.25	40.8 41.8	30.7 30.0	- -				
50	5.0	1.0	2.2	1150 1350	32.7 33.7	2.23 2.26	25.1 26.0	96.3 93.1	4.30 4.37	4.8 4.4	1150 1350	39.1 40.2	27.1 30.0	0.69 0.75	1.43 1.35	44.0 44.8	27.3 29.8	1.6 1.7				
	8.0	2.1	4.9	1150 1350	33.9 34.9	2.23 2.26	26.3 27.2	97.3 93.9	4.45 4.53	4.9 4.5	1150 1350	39.4 40.5	27.2 30.1	0.69 0.74	1.40 1.42	44.2 45.4	28.3 28.5	1.5 1.6				
	11.0	3.3	7.7	1150 1350	35.5 36.5	2.28 2.31	27.7 28.6	98.5 95.0	4.55 4.63	5.1 4.6	1150 1350	40.1 41.2	27.9 30.9	0.70 0.75	1.38 1.41	44.8 46.0	29.0 29.2	1.4 1.5				
60	5.0	0.9	2.2	1150 1350	37.2 38.1	2.27 2.29	29.4 30.3	99.9 96.1	4.80 4.88	5.2 4.8	1150 1350	38.5 39.6	27.1 30.0	0.70 0.76	1.64 1.67	44.1 45.3	23.5 23.7	2.3 2.4				
	8.0	2.1	4.8	1150 1350	38.7 39.6	2.27 2.28	30.9 31.8	101.1 97.1	5.00 5.08	5.4 5.0	1150 1350	38.9 39.9	27.2 30.1	0.70 0.75	1.60 1.63	44.3 45.5	24.3 24.5	2.1 2.3				
	11.0	3.2	7.4	1150 1350	40.0 40.9	2.32 2.33	32.1 33.0	102.2 98.1	5.06 5.14	5.5 5.1	1150 1350	39.5 40.6	27.9 30.9	0.71 0.76	1.58 1.62	44.9 46.1	24.9 25.1	1.9 2.2				
70	5.0	0.9	2.1	1150 1350	41.6 39.1	2.31 2.20	33.7 31.6	103.5 96.8	5.27 5.21	5.8 5.4	1150 1350	37.9 38.3	27.1 30.6	0.71 0.80	1.85 2.11	44.3 45.5	20.5 18.2	3.0 3.1				
	8.0	2.0	4.6	1150 1350	43.4 44.2	2.30 2.30	35.5 36.3	104.9 100.3	5.52 5.63	6.0 5.5	1150 1350	38.3 39.4	27.2 30.1	0.71 0.77	1.80 1.84	44.4 45.6	21.3 21.4	2.8 3.0				
	11.0	3.1	7.2	1150 1350	41.4 45.3	2.33 2.35	33.5 37.3	103.3 101.1	5.21 5.65	6.1 5.7	1150 1350	38.9 40.0	27.9 30.9	0.72 0.77	1.79 1.82	45.0 46.2	21.8 22.0	2.8 3.1				
80	5.0	0.9	2.0	1150 1350	46.3 47.0	2.35 2.34	38.3 39.0	107.3 102.2	5.77 5.88	6.5 6.0	1150 1350	36.0 37.0	26.6 29.4	0.74 0.80	2.16 2.20	43.4 44.5	16.7 16.8	4.4 4.6				
	8.0	1.9	4.5	1150 1350	48.6 49.1	2.34 2.32	40.6 41.2	109.1 103.7	6.09 6.21	6.7 6.1	1150 1350	36.3 37.3	26.7 29.6	0.74 0.79	2.10 2.14	43.5 44.7	17.3 17.4	4.1 34.4				
	11.0	3.0	6.9	1150 1350	49.2 49.8	2.39 2.37	41.1 41.7	109.6 104.1	6.05 6.17	6.9 6.3	1150 1350	36.9 38.0	27.4 30.4	0.74 0.80	2.08 2.13	44.0 45.2	17.7 17.9	3.8 4.2				
90	5.0	0.8	1.9	1150 1350	51.1 51.5	2.39 2.36	42.9 43.4	111.1 105.3	6.26 6.39	7.2 6.7	1150 1350	34.1 35.0	26.1 28.9	0.77 0.83	2.47 2.52	42.5 43.6	13.8 13.9	5.9 6.2				
	8.0	1.9	4.3	1150 1350	53.7 54.1	2.37 2.34	45.6 46.1	113.3 107.1	6.64 6.78	7.4 6.9	1150 1350	34.4 35.3	26.3 29.1	0.76 0.82	2.41 2.45	42.6 43.7	14.3 14.4	5.5 5.9				
	11.0	2.9	6.7	1150 1350	54.0 54.2	2.42 2.38	45.7 46.2	113.4 107.2	6.54 6.67	7.7 7.1	1150 1350	34.8 35.9	27.3 29.8	0.78 0.83	2.38 2.43	42.9 44.2	14.6 14.8	5.1 5.6				
100	5.0	0.8	1.9	Operation not recommended							Operation not recommended											
	8.0	1.8	4.2								1150 1350	31.5 32.4	25.6 28.4	0.81 0.88	2.77 2.82	40.9 42.0	11.4 11.5	7.1 7.7				
	11.0	2.8	6.4								1150 1350	32.0 32.9	26.3 29.1	0.82 0.88	2.75 2.80	41.4 42.5	11.7 11.8	6.6 7.3				
110	5.0	0.8	1.8	Operation not recommended							Operation not recommended											
	8.0	1.7	4.0								1150 1350	28.6 29.4	25.0 27.7	0.87 0.94	3.14 3.20	39.3 40.3	9.1 9.2	9.0 9.6				
	11.0	2.7	6.2								1150 1350	29.1 29.9	25.7 28.4	0.88 0.95	3.11 3.17	39.7 40.7	9.4 9.4	8.2 8.9				
120	5.0	0.7	1.7	Operation not recommended							Operation not recommended											
	8.0	1.7	3.8								1150 1350	24.7 25.1	22.4 24.3	0.91 0.97	3.59 3.68	36.9 37.7	6.9 6.8	10.5 11.3				
	11.0	2.6	5.9								1150 1350	24.9 25.4	22.4 24.3	0.90 0.96	3.47 3.58	36.7 37.6	7.2 7.1	9.9 11.0				

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data cont.

060 - Dual Capacity with Variable Speed ECM High Speed (1800 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
				Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC Mbtu/h	Airflow CFM	TC Mbtu/h	SC Mbtu/h	S/T Ratio	Power kW	HR Mbtu/h	EER	HWC Mbtu/h
		PSI	FT/HD	Operation not recommended							Operation not recommended							
20	8.0	2.7	6.2															
	12.0	4.9	11.4															
	16.0	7.3	16.8	1500 1800	31.2 32.3	3.44 3.47	19.5 20.5	89.3 86.6	2.66 2.73	5.2 4.7								
30	8.0	2.6	6.0	Operation not recommended							Operation not recommended							
	12.0	4.8	11.0	1500 1800	38.2 39.7	3.65 3.75	25.7 27.0	93.5 90.4	3.06 3.11	5.5 5.1	1500 1800	52.1 52.9	37.7 41.2	0.72 0.78	2.23 2.35	59.7 60.9	23.4 22.5	- -
	16.0	7.0	16.3	1500 1800	40.9 42.3	3.81 3.84	27.9 29.2	95.2 91.8	3.15 3.23	5.8 5.2	1500 1800	52.3 53.6	37.7 41.2	0.72 0.77	2.16 2.27	59.7 61.3	24.2 23.6	- -
40	8.0	2.5	5.9	Operation not recommended							Operation not recommended							
	12.0	4.6	10.7	1500 1800	47.5 49.2	3.89 3.96	34.3 35.7	99.3 95.3	3.58 3.64	6.1 5.7	1500 1800	59.3 60.4	40.4 44.2	0.68 0.73	2.62 2.74	68.2 69.7	22.6 22.0	- -
	16.0	6.8	15.8	1500 1800	50.1 51.8	3.98 4.06	36.5 38.0	100.9 96.6	3.69 3.74	6.6 6.0	1500 1800	59.7 61.1	40.4 44.2	0.68 0.72	2.54 2.66	68.4 70.1	23.5 23.0	- -
50	8.0	2.5	5.7	1500 1800	54.9 56.7	4.12 4.18	40.9 42.4	103.9 99.1	3.91 3.97	6.9 6.4	1500 1800	65.0 66.8	41.3 45.7	0.63 0.68	3.09 1.00	75.5 70.2	21.0 23.3	3.8 4.0
	12.0	4.5	10.4	1500 1800	56.9 58.6	4.12 4.18	42.8 44.3	105.1 100.1	4.04 4.11	7.2 6.6	1500 1800	65.6 67.4	41.5 45.9	0.63 0.68	3.01 3.07	75.8 77.9	21.8 22.0	3.6 3.9
	16.0	6.6	15.3	1500 1800	59.5 61.3	4.22 4.27	45.1 46.7	106.8 101.5	4.14 4.21	7.4 6.8	1500 1800	66.7 68.5	42.6 47.1	0.64 0.69	2.98 3.04	76.8 78.9	22.3 22.5	3.3 3.7
60	8.0	2.4	5.5	1500 1800	65.0 66.6	4.43 4.46	49.9 51.4	110.1 104.3	4.30 4.37	7.8 7.2	1500 1800	62.8 64.5	40.1 44.4	0.64 0.69	3.38 3.45	74.3 76.3	18.5 18.7	4.6 4.9
	12.0	4.3	10.0	1500 1800	67.6 69.2	4.42 4.45	52.5 54.0	111.7 105.6	4.48 4.56	8.1 7.4	1500 1800	63.3 65.1	40.3 44.6	0.64 0.69	3.30 3.36	74.6 76.5	19.2 19.4	4.3 4.7
	16.0	6.4	14.8	1500 1800	70.0 71.6	4.52 4.55	54.5 56.0	113.2 106.8	4.53 4.61	8.5 7.6	1500 1800	64.4 66.2	41.3 45.8	0.64 0.69	3.27 3.33	75.5 77.5	19.7 19.9	4.0 4.4
70	8.0	2.3	5.3	1500 1800	75.1 74.7	4.75 4.61	58.9 59.0	116.3 108.4	4.64 4.75	8.9 8.2	1500 1800	60.5 62.5	38.9 43.5	0.64 0.70	3.68 3.94	73.1 75.2	16.5 15.9	5.6 6.0
	12.0	4.2	9.7	1500 1800	78.4 79.8	4.73 4.72	62.2 63.7	118.4 111.1	4.86 4.95	9.2 8.4	1500 1800	61.1 62.8	39.1 43.3	0.64 0.69	3.58 3.65	73.3 75.9	17.0 17.2	5.3 5.7
	16.0	6.2	14.3	1500 1800	80.4 81.8	4.83 4.82	63.9 65.4	119.6 112.1	4.88 4.97	9.5 8.7	1500 1800	62.1 63.8	40.1 44.4	0.65 0.70	3.55 3.62	74.2 76.2	17.5 17.6	4.9 5.4
80	8.0	2.2	5.1	1500 1800	82.7 83.8	5.04 5.01	65.5 66.7	121.0 113.1	4.81 4.90	9.8 9.1	1500 1800	58.0 59.6	38.5 42.6	0.66 0.71	4.04 4.12	71.8 73.7	14.3 14.5	7.3 7.7
	12.0	4.1	9.4	1500 1800	86.6 87.6	5.01 4.97	69.5 70.7	123.5 115.1	5.07 5.17	10.2 9.4	1500 1800	58.5 60.2	38.7 42.9	0.66 0.71	3.94 4.02	72.0 73.9	14.9 15.0	6.8 7.4
	16.0	6.0	13.8	1500 1800	87.8 88.8	5.11 5.07	70.4 71.5	124.2 115.7	5.04 5.14	10.5 9.6	1500 1800	59.5 61.2	39.7 44.0	0.67 0.72	3.90 3.98	72.8 74.7	15.2 15.4	6.3 7.0
90	8.0	2.1	5.0	1500 1800	90.2 90.9	5.34 5.27	72.0 73.0	125.7 116.8	4.95 5.06	10.9 10.0	1500 1800	55.5 57.0	38.1 42.2	0.69 0.74	4.41 4.49	70.5 72.4	12.6 12.7	9.3 9.8
	12.0	3.9	9.0	1500 1800	94.9 95.5	5.29 5.22	76.8 77.6	128.6 119.1	5.26 5.36	11.2 10.4	1500 1800	56.0 57.6	38.3 42.4	0.68 0.74	4.30 4.38	70.7 72.5	13.0 13.1	8.6 9.4
	16.0	5.8	13.3	1500 1800	95.3 95.7	5.40 5.31	76.9 77.8	128.8 119.2	5.17 5.28	11.6 10.8	1500 1800	58.1 58.5	39.4 43.5	0.68 0.74	4.17 4.34	72.3 73.3	13.9 13.5	8.0 8.9
100	8.0	2.1	4.8	Operation not recommended							Operation not recommended							
	12.0	3.8	8.7															
	16.0	5.6	12.9								1500 1800	53.2 54.7	37.5 41.5	0.70 0.76	4.77 4.86	69.5 71.2	11.1 11.2	10.5 11.4
110	8.0	2.0	4.6	Operation not recommended							Operation not recommended							
	12.0	3.6	8.4															
	16.0	5.4	12.4								1500 1800	50.4 51.7	36.6 40.6	0.73 0.78	5.25 5.35	68.2 70.0	9.6 9.7	13.2 14.5
120	8.0	1.9	4.4	Operation not recommended							Operation not recommended							
	12.0	3.5	8.1															
	16.0	5.1	11.9								1500 1800	48.9 49.3	33.3 36.1	0.68 0.73	5.71 6.05	68.3 70.0	8.6 8.1	14.8 16.5

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series
1 - 6 Tons 60Hz**Performance Data cont.****060 - Dual Capacity with Variable Speed ECM Low Speed (1500 cfm)**

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT/HD	Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC Mbtu/h	Airflow CFM	TC Mbtu/h	SC Mbtu/h	S/T Ratio	Power kW	HR Mbtu/h	EER	HWC Mbtu/h
20	6.0	1.9	4.3	Operation not recommended							Operation not recommended							
	10.0	3.7	8.7															
	14.0	5.7	13.3	1250 1500	25.2 26.2	2.77 2.76	15.7 16.8	88.6 86.2	2.66 2.78	4.1 3.8								
30	6.0	1.8	4.2	Operation not recommended							Operation not recommended							
	10.0	3.6	8.4															
	14.0	5.6	12.9	1250 1500	31.5 32.8	2.89 2.88	21.6 23.0	93.3 90.2	3.19 3.34	4.2 3.8	1250 1500	44.8 45.5	32.4 35.4	0.72 0.78	1.38 1.46	49.5 50.5	32.3 31.2	- -
40	6.0	1.8	4.1	Operation not recommended							Operation not recommended							
	10.0	3.5	8.2															
	14.0	5.4	12.5	1250 1500	37.4 38.7	2.88 2.94	27.6 28.7	97.7 93.9	3.81 3.86	4.7 4.3	1250 1500	47.2 48.3	32.8 35.8	0.69 0.74	1.50 1.57	52.3 53.6	31.4 30.7	- -
50	6.0	1.7	3.9	1250 1500	40.0 41.2	2.89 2.93	30.1 31.2	99.6 95.4	4.06 4.13	4.8 4.4	1250 1500	47.8 49.1	31.7 35.1	0.66 0.71	1.76 1.74	53.8 55.1	27.2 32.5	1.9 2.0
	10.0	3.4	7.9	1250 1500	41.4 42.6	2.89 2.92	31.5 32.7	100.7 96.3	4.20 4.27	5.0 4.6	1250 1500	48.2 49.6	31.9 35.3	0.66 0.71	1.71 1.75	54.1 55.5	28.2 28.4	1.8 1.9
	14.0	5.2	12.1	1250 1500	43.3 44.6	2.95 2.99	33.2 34.4	102.1 97.5	4.30 4.37	5.2 4.8	1250 1500	49.0 50.4	32.7 36.2	0.67 0.72	1.70 1.73	54.8 56.3	28.9 29.1	1.6 1.8
60	6.0	1.7	3.8	1250 1500	46.0 47.2	2.95 2.97	36.0 37.0	104.1 99.1	4.57 4.65	5.6 5.0	1250 1500	45.9 47.2	31.3 34.6	0.68 0.73	2.03 2.07	52.8 54.3	22.6 22.8	2.6 2.8
	10.0	3.3	7.6	1250 1500	47.9 49.0	2.94 2.96	37.8 38.9	105.5 100.2	4.77 4.85	5.6 5.2	1250 1500	46.3 47.6	31.5 34.8	0.68 0.73	1.98 2.02	53.1 54.5	23.4 23.6	2.5 2.7
	14.0	5.1	11.7	1250 1500	49.5 50.7	3.01 3.03	39.3 40.3	106.7 101.3	4.82 4.91	5.8 5.3	1250 1500	47.1 48.4	32.3 35.7	0.68 0.74	1.96 2.00	53.8 55.2	24.0 24.2	2.3 2.5
70	6.0	1.6	3.7	1250 1500	52.0 53.5	3.01 3.07	41.8 43.0	108.5 103.0	5.06 5.11	6.2 5.7	1250 1500	44.0 44.2	30.8 34.3	0.70 0.78	2.31 2.57	51.9 53.0	19.1 17.2	3.7 3.9
	10.0	3.2	7.4	1250 1500	54.3 55.3	3.00 3.00	44.1 45.1	110.2 104.2	5.31 5.41	6.5 5.9	1250 1500	44.4 45.6	31.0 34.3	0.70 0.75	2.25 2.29	52.1 53.5	19.8 19.9	3.4 3.7
	14.0	4.9	11.3	1250 1500	55.7 56.7	3.07 3.06	45.3 46.3	111.3 105.0	5.33 5.43	6.7 6.1	1250 1500	45.1 46.4	31.8 35.2	0.70 0.76	2.23 2.27	52.7 54.1	20.3 20.4	3.2 3.5
80	6.0	1.5	3.6	1250 1500	58.5 59.3	3.07 3.06	48.0 48.8	113.3 106.6	5.58 5.68	6.9 6.4	1250 1500	41.8 42.9	30.0 33.3	0.72 0.77	2.66 2.71	50.9 52.2	15.7 15.8	5.1 5.4
	10.0	3.1	7.1	1250 1500	61.3 62.0	3.05 3.03	50.9 51.7	115.4 108.3	5.88 6.00	7.2 6.7	1250 1500	42.2 43.3	30.2 33.4	0.72 0.77	2.59 2.64	51.0 52.4	16.3 16.4	4.8 5.2
	14.0	4.7	10.9	1250 1500	62.2 62.8	3.12 3.09	51.5 52.3	116.0 108.8	5.84 5.96	7.4 6.8	1250 1500	42.9 44.1	31.0 34.3	0.72 0.78	2.57 2.62	51.6 53.0	16.7 16.8	4.4 4.9
90	6.0	1.5	3.4	1250 1500	64.9 65.5	3.13 3.10	54.2 54.9	118.1 110.4	6.07 6.19	7.8 7.2	1250 1500	39.6 40.7	29.3 32.4	0.74 0.80	3.02 3.08	49.9 51.2	13.1 13.2	6.8 7.2
	10.0	3.0	6.9	1250 1500	68.3 68.7	3.11 3.06	57.7 57.8	120.6 112.4	6.44 6.57	8.1 7.4	1250 1500	39.9 41.0	29.4 32.6	0.74 0.79	2.94 3.00	49.9 51.4	13.6 13.7	6.4 6.9
	14.0	4.6	10.5	1250 1500	68.6 68.9	3.17 3.12	57.8 58.3	120.8 112.5	6.34 6.47	8.3 7.8	1250 1500	40.6 41.7	30.6 33.4	0.75 0.80	2.88 2.97	50.4 51.8	14.1 14.0	5.9 6.6
100	6.0	1.4	3.3	Operation not recommended							Operation not recommended							
	10.0	2.9	6.6															
	14.0	4.4	10.2	1250 1500	36.9 38.0	28.6 31.6	0.77 0.83	3.36 3.43	48.4 49.7	11.0 11.1	8.3 8.9	1250 1500	37.6 38.6	29.3 32.5	0.78 0.84	3.33 3.40	48.9 50.2	11.3 11.4
110	6.0	1.4	3.2	Operation not recommended							Operation not recommended							
	10.0	2.8	6.4															
	14.0	4.2	9.8	1250 1500	34.0 34.9	27.8 30.7	0.82 0.88	3.78 3.85	46.9 48.1	9.0 9.1	10.4 11.3	1250 1500	34.5 35.5	28.5 31.5	0.82 0.89	3.75 3.82	47.3 48.5	9.2 9.3
120	6.0	1.3	3.1	Operation not recommended							Operation not recommended							
	10.0	2.7	6.1															
	14.0	4.1	9.4	1250 1500	28.0 28.6	25.9 28.1	0.92 0.98	4.25 4.36	42.5 43.4	6.6 6.6	12.6 13.6	1250 1500	28.3 28.9	25.9 28.1	0.91 0.97	4.11 4.24	42.3 43.4	6.9 6.8

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Contractor: _____ P.O.: _____

Engineer: _____

Project Name: _____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data cont.

072 - Dual Capacity with Variable Speed ECM High Speed (2200 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h		
20	12.0	3.3	7.6	Operation not recommended							Operation not recommended							
	15.0	4.7	10.8															
	18.0	6.2	14.3	1850 2200	44.7 45.6	4.47 4.42	29.5 30.5	92.4 89.2	2.93 3.02	7.9 7.1								
30	12.0	3.2	7.4	Operation not recommended							Operation not recommended							
	15.0	4.5	10.5															
	18.0	6.0	13.9	1850 2200	55.6 56.7	4.77 4.72	39.3 40.6	97.8 93.9	3.42 3.52	8.5 7.7	1850 2200	62.3 63.8	42.7 46.7	0.69 0.73	2.89 3.03	72.1 74.1	21.6 21.1	- -
40	12.0	3.1	7.1	Operation not recommended							Operation not recommended							
	15.0	4.4	10.2															
	18.0	5.8	13.5	1850 2200	63.0 65.1	4.76 4.87	46.8 48.5	101.6 97.4	3.88 3.92	9.5 8.6	1850 2200	69.0 70.5	46.7 51.0	0.68 0.72	3.21 3.36	79.9 82.0	21.5 21.0	- -
50	12.0	3.0	6.9	1850 2200	67.2 69.2	4.79 4.86	50.8 52.6	103.6 99.1	4.11 4.17	9.9 9.2	1850 2200	71.1 74.8	46.1 51.2	0.65 0.68	3.82 4.02	84.1 88.5	18.6 18.6	4.3 4.5
	15.0	4.3	9.9	1850 2200	69.6 71.8	4.90 4.97	52.9 54.9	104.8 100.2	4.16 4.24	10.2 9.4	1850 2200	72.6 76.4	46.6 51.8	0.64 0.68	3.60 3.78	84.9 89.2	20.2 20.2	4.0 4.3
	18.0	5.7	13.1	1850 2200	71.2 73.4	4.94 5.01	54.3 56.3	105.6 100.9	4.22 4.29	10.5 9.6	1850 2200	73.3 77.2	49.8 55.3	0.68 0.72	3.51 3.69	85.3 89.8	20.9 20.9	3.7 4.1
60	12.0	2.9	6.7	1850 2200	75.5 78.0	5.03 5.06	58.3 60.7	107.8 102.8	4.40 4.51	11.1 10.3	1850 2200	70.2 73.6	46.3 51.5	0.66 0.70	4.18 4.37	84.5 88.5	16.8 16.9	5.5 5.5
	15.0	4.1	9.6	1850 2200	78.9 81.5	5.17 5.21	61.3 63.7	109.5 104.3	4.47 4.59	11.5 10.6	1850 2200	71.9 75.3	46.8 52.0	0.65 0.69	3.97 4.14	85.4 89.4	18.1 18.2	4.9 5.3
	18.0	5.5	12.7	1850 2200	80.8 83.5	5.23 5.25	63.0 65.6	110.5 105.1	4.53 4.66	11.8 10.9	1850 2200	72.6 76.2	49.3 54.8	0.68 0.72	3.88 4.05	85.8 90.0	18.7 18.8	4.5 5.0
70	12.0	2.8	6.5	1850 2200	85.4 89.4	5.27 5.38	71.4 71.0	107.7 107.6	1.97 4.87	12.5 11.6	1850 2200	69.4 74.5	46.5 54.4	0.67 0.73	4.54 4.50	84.8 89.5	17.5 16.6	6.6 6.9
	15.0	4.0	9.2	1850 2200	88.3 91.1	5.45 5.45	69.7 72.5	114.2 108.4	4.75 4.90	12.9 11.9	1850 2200	71.1 74.2	47.0 52.1	0.66 0.70	4.35 4.50	86.0 89.9	16.4 16.5	6.1 6.6
	18.0	5.3	12.2	1850 2200	90.5 93.6	5.51 5.49	71.7 74.9	115.3 109.4	4.81 5.00	13.3 12.3	1850 2200	71.9 75.1	48.9 54.2	0.68 0.72	4.24 4.41	86.3 90.1	17.0 17.0	5.7 6.3
80	12.0	2.7	6.3	1850 2200	91.5 94.7	5.51 5.47	72.7 76.1	115.8 109.9	4.86 5.08	13.9 12.8	1850 2200	67.0 69.7	46.1 51.3	0.69 0.74	4.97 5.12	83.9 87.1	13.5 13.6	8.4 8.9
	15.0	3.9	8.9	1850 2200	96.8 100.1	5.73 5.68	77.2 80.7	118.4 112.1	4.95 5.17	14.3 13.2	1850 2200	68.8 71.6	46.7 51.8	0.68 0.72	4.79 4.93	85.2 88.5	14.4 14.5	7.8 8.4
	18.0	5.1	11.8	1850 2200	99.6 103.0	5.81 5.72	79.8 83.5	119.8 113.4	5.03 5.28	14.7 13.6	1850 2200	69.6 72.5	47.8 53.0	0.69 0.73	4.69 4.84	85.6 88.9	14.8 15.0	7.2 8.0
90	12.0	2.6	6.0	1850 2200	99.1 102.6	5.76 5.67	79.5 83.3	119.6 113.2	5.05 5.31	15.4 14.3	1850 2200	64.7 66.9	45.8 50.8	0.71 0.76	5.39 5.52	83.0 85.8	12.0 12.1	10.5 11.1
	15.0	3.7	8.6	1850 2200	105.3 109.1	6.01 5.91	84.8 88.9	122.7 115.9	5.13 5.41	15.9 14.7	1850 2200	66.6 69.0	46.3 51.4	0.70 0.74	5.24 5.37	84.4 87.4	12.7 12.9	9.8 10.6
	18.0	4.9	11.4	1850 2200	108.7 112.4	6.10 5.95	87.8 92.1	124.4 117.3	5.22 5.54	16.4 15.2	1850 2200	68.5 69.8	47.7 51.8	0.70 0.74	4.96 5.26	85.4 87.7	13.8 13.3	9.1 10.1
100	12.0	2.5	5.8	Operation not recommended							Operation not recommended							
	15.0	3.6	8.3															
	18.0	4.8	11.0	1850 2200	63.1 65.2	45.7 50.7	0.72 0.78	5.85 5.94	83.1 85.5	10.8 11.0	12.2 13.2							
110	12.0	2.4	5.6	Operation not recommended							Operation not recommended							
	15.0	3.5	8.0															
	18.0	4.6	10.6	1850 2200	60.4 62.0	44.5 49.1	0.74 0.79	6.35 6.42	82.0 83.9	9.5 9.7	13.8 15.3							
120	12.0	2.3	5.4	Operation not recommended							Operation not recommended							
	15.0	3.3	7.7															
	18.0	4.4	10.2	1850 2200	56.2 57.4	43.7 47.4	0.78 0.83	6.94 7.16	79.9 81.8	8.1 8.0	16.7 18.5							

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Contractor:_____ P.O.: _____

Engineer:_____

Project Name:_____ Unit Tag: _____

Affinity & Affinity Advanced Series

1 - 6 Tons 60Hz



Performance Data cont.

072 - Dual Capacity with Variable Speed ECM Low Speed (1700 cfm)

EWT °F	Flow Rate GPM	WPD		HEATING - EAT 70°F							COOLING - EAT 80/67 °F							
		PSI	FT/HD	Airflow CFM	HC MBtu/h	Power kW	HE MBtu/h	LAT °F	COP	HWC MBtu/h	Airflow CFM	TC MBtu/h	SC MBtu/h	S/T Ratio	Power kW	HR MBtu/h	EER	HWC MBtu/h
20	10.0	2.3	5.4	Operation not recommended							Operation not recommended							
	13.0	3.5	8.1															
	16.0	5.0	11.6	1400 1700	34.5 34.8	3.52 3.48	22.5 22.9	92.8 89.0	2.87 2.93	5.9 5.3								
30	10.0	2.3	5.3	Operation not recommended							Operation not recommended							
	13.0	3.4	7.9	1400 1700	36.8 38.3	3.40 3.49	25.2 26.4	94.3 90.9	3.17 3.22	5.5 4.7	1400 1700	49.8 50.6	34.1 37.3	0.69 0.74	1.73 1.82	55.7 56.8	28.8 27.8	- -
	16.0	4.9	11.3	1400 1700	40.4 40.8	3.62 3.58	28.0 28.6	96.7 92.2	3.27 3.34	5.0 5.7	1400 1700	50.1 51.3	34.1 37.3	0.68 0.73	1.68 1.76	55.8 57.3	29.9 29.1	- -
40	10.0	2.2	5.1	Operation not recommended							Operation not recommended							
	13.0	3.3	7.6	1400 1700	43.7 45.2	3.51 3.57	31.7 33.0	98.9 94.6	3.65 3.71	6.5 5.9	1400 1700	55.3 56.4	37.3 40.7	0.67 0.72	1.94 2.03	61.9 63.3	28.6 27.8	- -
	16.0	4.7	11.0	1400 1700	46.1 47.7	3.59 3.66	33.8 35.2	100.5 96.0	3.76 3.82	6.7 6.1	1400 1700	55.8 57.0	37.3 40.7	0.67 0.71	1.88 1.97	62.2 63.7	29.7 29.0	- -
50	10.0	2.1	4.9	1400 1700	48.8 50.4	3.61 3.66	36.5 37.9	102.3 97.4	3.97 4.03	6.8 6.3	1400 1700	59.5 61.1	38.6 42.8	0.65 0.70	2.20 1.00	67.0 64.5	27.0 28.1	2.3 2.4
	13.0	3.2	7.4	1400 1700	50.6 52.1	3.61 3.66	38.2 39.6	103.4 98.4	4.10 4.17	7.0 6.4	1400 1700	60.0 61.7	38.9 43.0	0.65 0.70	2.15 2.19	67.3 69.2	27.9 28.2	2.1 2.3
	16.0	4.6	10.6	1400 1700	52.9 54.5	3.70 3.74	40.3 41.7	105.0 99.7	4.20 4.27	7.2 6.6	1400 1700	61.0 62.7	39.8 44.1	0.65 0.70	2.13 2.17	68.3 70.1	28.7 28.9	2.0 2.2
60	10.0	2.1	4.8	1400 1700	56.1 57.5	3.73 3.76	43.3 44.6	107.1 101.3	4.40 4.48	7.5 6.9	1400 1700	56.7 58.3	37.7 41.7	0.66 0.71	2.54 2.59	65.4 67.2	22.3 22.5	3.2 3.4
	13.0	3.1	7.2	1400 1700	58.3 59.7	3.73 3.75	45.6 46.9	108.6 102.5	4.58 4.67	7.7 7.1	1400 1700	57.2 58.8	37.9 41.9	0.66 0.71	2.48 2.53	65.7 67.5	23.1 23.3	3.0 3.2
	16.0	4.4	10.3	1400 1700	60.3 61.7	3.81 3.83	47.3 48.6	109.9 103.6	4.64 4.72	7.9 7.3	1400 1700	58.2 59.8	38.8 43.0	0.67 0.72	2.46 2.51	66.6 68.3	23.7 23.9	2.8 3.1
70	10.0	2.0	4.6	1400 1700	63.2 65.6	3.86 3.85	50.1 52.5	111.8 105.7	4.80 4.99	8.3 7.7	1400 1700	54.0 56.0	36.7 41.8	0.68 0.75	2.89 3.00	63.8 65.8	18.7 18.7	4.4 4.6
	13.0	3.0	6.9	1400 1700	66.0 67.2	3.84 3.84	52.9 54.1	113.7 106.6	5.03 5.13	8.5 7.9	1400 1700	54.5 56.0	36.9 40.9	0.68 0.73	2.81 2.87	64.1 66.2	19.4 19.5	4.1 4.4
	16.0	4.3	9.9	1400 1700	67.7 68.9	3.93 3.92	54.3 55.5	114.8 107.5	5.05 5.15	8.8 8.1	1400 1700	55.4 56.9	37.9 41.9	0.68 0.74	2.79 2.84	64.9 66.6	19.9 20.0	3.8 4.2
80	10.0	1.9	4.5	1400 1700	70.9 71.9	3.98 3.96	57.3 58.4	116.9 109.2	5.22 5.32	9.2 8.5	1400 1700	51.6 53.0	35.9 39.7	0.69 0.75	3.29 3.35	62.8 64.5	15.7 15.8	6.2 6.6
	13.0	2.9	6.7	1400 1700	74.3 75.2	3.95 3.92	60.8 61.8	119.2 111.0	5.51 5.62	9.5 8.8	1400 1700	52.1 53.5	36.1 39.9	0.69 0.75	3.20 3.26	63.0 64.7	16.3 16.4	5.8 6.3
	16.0	4.2	9.6	1400 1700	75.4 76.2	4.04 4.00	61.6 62.5	119.8 111.5	5.47 5.58	9.8 9.1	1400 1700	52.9 54.4	37.0 41.0	0.70 0.75	3.17 3.24	63.8 65.4	16.7 16.8	5.4 6.0
90	10.0	1.9	4.3	1400 1700	78.6 79.3	4.10 4.05	64.6 65.4	122.0 113.2	5.62 5.73	10.3 9.5	1400 1700	49.2 50.6	35.0 38.8	0.71 0.77	3.69 3.76	61.8 63.4	13.4 13.5	8.0 8.5
	13.0	2.8	6.5	1400 1700	82.7 83.2	4.06 4.01	68.8 69.5	124.7 115.3	5.96 6.08	10.6 9.8	1400 1700	49.7 51.1	35.2 39.0	0.71 0.76	3.59 3.66	61.9 63.6	13.8 13.9	7.5 8.1
	16.0	4.0	9.3	1400 1700	83.0 83.4	4.15 4.08	68.9 70.1	124.9 115.4	5.87 5.99	11.0 10.2	1400 1700	50.2 51.9	35.9 40.0	0.72 0.77	3.55 3.63	62.3 64.3	14.1 14.3	6.9 7.7
100	10.0	1.8	4.2	Operation not recommended							Operation not recommended							
	13.0	2.7	6.2								1400 1700	46.7 48.0	34.4 38.1	0.74 0.79	4.11 4.19	60.7 62.3	11.4 11.5	10.0 10.9
	16.0	3.9	8.9								1400 1700	47.5 48.8	35.3 39.1	0.74 0.80	4.07 4.15	61.4 63.0	11.7 11.8	9.3 10.4
110	10.0	1.7	4.0	Operation not recommended							Operation not recommended							
	13.0	2.6	6.0								1400 1700	43.7 45.0	33.6 37.2	0.77 0.83	4.62 4.71	59.5 61.0	9.5 9.5	12.7 13.8
	16.0	3.7	8.6								1400 1700	44.5 45.7	34.4 38.1	0.77 0.83	4.58 4.67	60.1 61.6	9.7 9.8	11.8 13.1
120	10.0	1.7	3.8	Operation not recommended							Operation not recommended							
	13.0	2.5	5.8								1400 1700	41.6 42.4	34.2 37.1	0.82 0.88	5.29 5.43	59.7 60.9	7.9 7.8	15.8 17.1
	16.0	3.6	8.2								1400 1700	42.0 42.9	34.2 37.1	0.81 0.86	5.12 5.28	59.5 60.9	8.2 8.1	14.6 16.3

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Contractor: _____ P.O.: _____
Engineer: _____
Project Name: _____ Unit Tag: _____



Revision Guide

Pages:	Description:	Date:	By:
	Guide Creation	June 27, 2024	SW/MA
8	Updated physical data table	24 July 2024	MA
3	Updated 048 rating in AHRI ratings table	05 Aug 2024	MA
7	Update Dimensional Data	23 April 2025	SW
12	Update Definitions	29 April 2025	SW