

**288BNV EVOLUTION® V  
VARIABLE SPEED HEAT PUMP  
WITH PURON® REFRIGERANT  
1-5 TON**



## Product Data



The Evolution® V heat pump offers high-efficiency variable speed performance in a remarkably small cabinet and provides up to 11 HSPF heating efficiency and up to 19 SEER cooling efficiency. The variable speed inverter capacity control delivers up to 5 stages of operation for exceptional load matching, dehumidification and zoning performance.

This product has been designed and manufactured to provide flexible system matching and work with a wide variety of indoor units and controls.

**NOTE:** Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory ([www.ahridirectory.org](http://www.ahridirectory.org)) for the most up-to-date ratings information.

### INDUSTRY LEADING FEATURES / BENEFITS

#### Energy Efficiency

- Up to 19 SEER /13 EER / 11 HSPF
- Microtube Technology™ refrigeration system

#### Sound

- Sound level as low as 55 dBA in low speed (Silencer System II).
- Soft start and smooth ramp to operating speeds

#### Comfort

- Variable speed compressor operates at 5 stages with capacity range from as wide as 25-100%
- Air cooled Inverter variable speed drive
  - System requires Evolution® Connex™ Control with version 11 software or newer for 5-stage operation.
  - Ratings provided with 2-stage thermostats and suitable non-communicating indoor products for 2-stage operation.
- Energy Tracking capability with the Evolution® Connex™ Control w/software version 13 or later (Energy Tracking has the ability to monitor and estimate the energy consumption of your Evolution® system.)

#### Reliability

- Non-ozone depleting Puron® refrigerant
- Front-seating service valves
- Inverter control drives compressor and fan motor
- No control module attached to fan motor
- Evolution intelligence monitors critical system parameters
- Pressure equalizer valve for easy compressor starting
- High pressure switch
- Suction pressure transducer
- Electronic expansion valve (EXV) for heating, TXV for cooling
- Compressor discharge temperature sensor
- Suction temperature sensor
- Filter drier (field installed)
- Internal crankcase heater standard

#### Flexibility and installation:

- 2 control wires to outdoor unit in complete Evolution® system and Connex™ Control
- Smaller and lighter than 2-stage units
- Minimum and Maximum adjustments with Evolution® Connex™ Control
- Hybrid Heat™ dual fuel capable
- Compatible with non-communicating thermostats

#### Durability

DuraGuard™ protection package:

- Solid, Durable sheet metal construction
- Steel louver coil guard
- Baked-on, complete outer coverage, powder paint

#### Applications

- Line sets up to 100 ft (30.5 m) equivalent length
- No long-line accessories required.

## MODEL NUMBER NOMENCLATURE

1	2	3	4	5	6	7	8	9	10	11	12	14
N	N	N	A	A/N	N	N	N	N	A/N	A/N	N	A
2	8	8	B	N	V	0	3	6	0	0	0	A
Product Family 2=HP	Tier 8= Evolution Series	SEER 8 = 18 SEER	Major Series B=Puron	Voltage N= 208–230–1 or 208/230–1	Variations V = Variable Speed	Cooling Capacity			0= Not Defined B = Design Variation	Open 0=Not Defined	Open 0=Not Defined	Series A = Original Series



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to [www.ahridirectory.org](http://www.ahridirectory.org).



## STANDARD FEATURES

FEATURES	Unit Size 288BNV						
	13	24B	25	36	37	48	60
Puron Refrigerant	X	X	X	X	X	X	X
Variable Speed Rotary Compressor	X	X	X	X	X	X	X
Air-Cooled Integrated Inverter Drive	X	X	X	X	X	X	X
Louvered Coil Guard	X	X	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X	X	X
Internal Pressure and Temperature Protection	X	X	X	X	X	X	X
Suction Pressure Transducer	X	X	X	X	X	X	X
High Pressure Switch	X	X	X	X	X	X	X
Internal Crankcase Heater	X	X	X	X	X	X	X
Utility Interface Connections	X	X	X	X	X	X	X
Enhanced Diagnostics with Evolution® Connex™ Control with version 11 software or newer on sizes 24 - 60 and version 12 software or newer on size 13.	X	X	X	X	X	X	X
Energy Tracking Capability with the Evolution® Connex™ Wall Control (requires software version 11 or later)	X	X	X	X	X	X	X
Deluxe Sound Blanket	X	X	X	X	X	X	X
Outdoor Air Temperature Sensor	X	X	X	X	X	X	X

X = Standard

# REFRIGERANT PIPING LENGTH LIMITATIONS

## Maximum Line Lengths:

The maximum allowable total equivalent length for heat pumps can vary depending on the vertical separation. See the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the indoor unit.

### Maximum Line Lengths for Heat Pump Applications

	MAXIMUM ACTUAL LENGTH ft (m)	MAXIMUM EQUIVALENT LENGTH† ft (m)	MAXIMUM VERTICAL SEPARATION ft (m)
Units on equal level	100 (30.5)	100 (30.5)	N/A
Outdoor unit ABOVE indoor unit	100 (30.5)	100 (30.5)	100 (30.5)
Outdoor unit BELOW indoor unit	See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit'		

† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

### Maximum Total Equivalent Length† - Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Diameter w/ TXV	HP with Puron® Refrigerant – Maximum Total Equivalent Length† Vertical Separation ft (m) Outdoor unit BELOW indoor unit;						
		0–20 (0 – 6.1)	21–30 (6.4 – 9.1)	31–40 (9.4 – 12.2)	41–50 (12.5 – 15.2)	51–60 (15.5 – 18.3)	61–70 (18.6 – 21.3)	71–80 (21.6 – 24.4)
1–Ton	3/8	100*	100*	100*	100*	100*	100*	100*
2–Ton	3/8	100*	100*	100*	100*	100*	100*	100*
3–Ton	3/8	100*	100*	100*	100*	100*	100*	100*
4–Ton	3/8	100*	100*	100*	100*	100	100	--
5–Ton	3/8	100*	100*	100*	100*	100	100	--

\* Maximum actual length not to exceed 100 ft (30.5 m)

† Total equivalent length accounts for losses due to elbows or fitting.

-- = outside acceptable range

## LONG LINE APPLICATIONS

Unit is approved for up to 100 ft (30.5 m) equivalent length and vertical separations shown above with no additional accessories.

Longer line set applications are not permitted.

## COOLING CAPACITY LOSS TABLE

Nominal Size (Btuh)	Line OD (in.)	288BNV0 Cooling Capacity Loss (%)				
		Total Equivalent Line Length (ft)				
		25	50	75	80	100
13	5/8	0.5	1.2	1.8	1.9	2.4
	<b>3/4</b>	<b>0.1</b>	<b>0.4</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>
24B	5/8	0.5	1.2	1.8	1.9	2.4
	<b>3/4</b>	<b>0.1</b>	<b>0.4</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>
25	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	0.1	0.4	0.6	0.7	0.8
	<b>7/8</b>	0.0	0.1	0.3	0.3	0.4
36	5/8	1.1	2.4	3.7	4.0	5.0
	3/4	0.3	0.8	1.3	1.4	1.8
	<b>7/8</b>	0.0	0.3	0.5	0.6	0.8
37 48	3/4	0.7	1.6	2.4	2.6	3.2
	7/8	0.3	0.7	1.1	1.2	1.6
	<b>1 1/8</b>	0.0	0.1	0.2	0.3	0.4
60	3/4	1.0	2.3	3.5	3.8	4.8
	7/8	0.4	1.0	1.7	1.8	2.3
	<b>1 1/8</b>	0.0	0.1	0.3	0.4	0.5

Rating Line Size in **BOLD**

# EQUIPMENT SIZING GUIDELINES

If primary load is cooling, size the same as any other air conditioning system. If primary load is heating, use the chart below for maximum size for heating.

## MAXIMUM RECOMMENDED EQUIPMENT SIZE - HEATING

COOLING LOAD (tons)	MAXIMUM RECOMMENDED EQUIPMENT SIZE FOR HEATING*
1	24
1.5	24
2	36
2.5	36
3	48
3.5	60
4	60
5	60

\* Make sure duct work is capable of delivering required airflow . Make sure combination rating exists for desired indoor and outdoor combination.

## MIN/MAX AIRFLOW TABLES

The indoor airflow delivered by this system varies significantly based on outdoor temperature, indoor unit combination, and system demand. The airflows on these tables are for duct design considerations.

Duct systems capable of these ranges will ensure the system will

deliver full capacity at all outdoor temperatures.

Minimum and maximum compressor stage can be adjusted from these numbers in the Evolution® Connex™ Heat Pump Setup screen.

Cooling – Comfort Mode			Minimum Cooling (Dehum or Zoning)
Size	Max Stage 5 Airflow	Max Stage 1 Airflow	
1 –Ton	420	300	300
2 –Ton	739	300	300
3 –Ton	990	300	300
4 –Ton	1389	542	457
5 –Ton	1600	700	600

Cooling – Efficiency Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1 –Ton	420	300
2 –Ton	825	585
3 –Ton	1050	600
4 –Ton	1400	875
5 –Ton	1800	975

Heating – Comfort Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1 –Ton	409	300
2 –Ton	819	300
3 –Ton	1014	300
4 –Ton	1550	429
5 –Ton	1600	500

Heating – Efficiency Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1 –Ton	600	300
2 –Ton	825	585
3 –Ton	1200	700
4 –Ton	1600	1000
5 –Ton	1600	900

Cooling Max Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1 –Ton (550 cfm/ delivered ton)	780	434
2 –Ton (24)	850	585
2 –Ton (25) (550 cfm/ delivered ton)*	1350	510
3 –Ton	1200	600
4 –Ton	1600	875
4 –Ton –49	1450	875
5 –Ton	2000	975

Heating Max Mode		
Size	Max Stage 5 Airflow	Max Stage 1 Airflow
1 –Ton (550 cfm/ delivered ton)	600	300
2 –Ton (24)	850	585
2 –Ton (25) (550 cfm/ delivered ton)*	850	585
3 –Ton	1200	700
4 –Ton	1600	1000
5 –Ton	2000	900

\* Serial number beginning with 0115E and newer

### LEGEND::

**Max Capacity Airflow** – Stage 5 airflow varies depending on conditions. This is the highest airflow the system will attempt to deliver in this particular mode. Ductwork for non-zoned systems should be sized for this airflow to ensure the system can deliver full capacity when needed. Improper duct design may result in excessive airflow noise and/or cutback occurrences at max airflow conditions.

**Highest Min. Capacity Airflow** – Stage 1 airflow also varies depending on conditions. In zoned systems, each zone must be capable of delivering this airflow for the system to deliver full capacity into the zone. Otherwise, airflow may be diverted to other zones or cutback may occur.

**Min Cooling (Dehum or Zoning)** – Lowest airflow the system will deliver. May operate down to this airflow in dehumidification mode or in zoning applications where ductwork restrictions have caused the blower to cut-back.

## PHYSICAL DATA

UNIT SIZE SERIES	13-A	24B-A	25-B	36-B	37-A	48-A	60-A
<b>Compressor Type</b>	Variable Speed Rotary						
<b>REFRIGERANT</b>	Puron® (R-410A)						
Control	TXV (Puron® Hard Shutoff)						
Charge lb (kg)	5.00 (2.27)	5.40 (2.45)	6.38 (2.89)	6.38 (2.89)	7.5 (3.40)	8.30 (3.76)	8.60 (3.90)
Outdoor Htg Exp. Device	EXV						
<b>COND FAN</b>	Forward Swept Propeller Type, Direct Drive						
Air Discharge	Vertical						
Air Qty (CFM)	1600	2080	2500	2500	3800	4500	4500
Motor HP	1/5	1/5	1/3	1/3	1/3	1/3	1/3
Motor RPM	650	825	1050	1050	750	850	900
<b>COND COIL</b>							
Face Area (Sq ft)	11.12	11.12	13.90	13.90	21.50	21.50	23.65
Fins per In.	20	20	20	20	20	20	20
Rows	1	1	1	1	1	1	1
Circuits	5	5	6	6	8	8	8
<b>VALVE CONNECT. (In. ID)</b>							
Vapor	5/8	5/8	3/4	3/4	7/8	7/8	7/8
Liquid	3/8						
<b>REFRIGERANT TUBES (In. OD)</b>							
Rated Vapor*	3/4	3/4	7/8	7/8	1-1/8	1-1/8	1-1/8
Max Liquid Line	3/8						

\* Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.

**Note:** See unit Installation Instruction for proper installation.

## ELECTRICAL DATA

UNIT SIZE - VOLTAGE, SERIES	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE ** or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
13-A	208-230-1	253	197	N/A	10.32	0.58	13.5	20
24B-A				N/A	10.32	0.58	13.5	20
25-B				N/A	17.70	1.20	23.6	40
36-B				N/A	18.30	1.20	24.4	40
37-A				N/A	19.60	1.20	26.0	40
48-A				N/A	23.90	1.20	31.4	50
60-A				N/A	31.30	1.40	40.8	60

\* Permissible limits of the voltage range at which the unit will operate satisfactorily

\*\* Time-Delay fuse.

**FLA** - Full Load Amps

**LRA** - Locked Rotor Amps

**MCA** - Minimum Circuit Amps

**RLA** - Rated Load Amps

**NOTE:** Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit.

All motors/compressors contain internal overload protection.

Complies with 2010 requirements of ASHRAE Standards 90.1

## CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

UNIT SIZE - VOLTAGE, SERIES	
13-A	If a Touch Control is installed, subcooling recommendation displayed in Charging Mode must be followed. If not, subcooling chart shown on the charging label must be followed
24-B	
25-B	
36-B	
37-A	
48-A	
60-A	

# SOUND POWER LEVEL (dBA)

Unit Size – Voltage, Series	Typical Octave Band Spectrum (without tone adjustment)	Min Speed Cooling	Max Speed Cooling	Max Speed Heating
013-A	Freq (Hz)	1500 RPM	2600 RPM	3900 RPM
	125	62.0	64.0	72.0
	250	61.0	59.5	66.0
	500	54.0	55.0	63.5
	1000	53.0	57.0	59.5
	2000	49.0	50.0	56.0
	4000	42.0	49.5	55.0
	8000	47.5	49.5	55.0
	Sound Rating (dBA)	59	63	67
024B-A	Freq (Hz)	1500 RPM	4700 RPM	5400 RPM
	125	63.0	67.5	73.5
	250	57.0	66.5	66.5
	500	51.5	61.5	66.0
	1000	47.5	58.0	59.0
	2000	41.5	54.5	56.5
	4000	38.0	57.5	59.5
	8000	45.5	53.5	55.0
	Sound Rating (dBA)	55	67	68
025-B	Freq (Hz)	1200 RPM	3300 RPM	4800 RPM
	125	59.5	70.0	68.5
	250	56.0	67.5	67.0
	500	54.0	67.5	65.0
	1000	50.0	63.5	62.0
	2000	41.5	59.0	59.0
	4000	35.0	58.0	63.0
	8000	48.0	51.5	55.0
	Sound Rating (dBA)	55	69	71
036-B	Freq (Hz)	1200 RPM	4800 RPM	5400 RPM
	125	59.5	70.0	69.0
	250	56.0	68.0	70.0
	500	54.0	66.0	66.0
	1000	50.0	64.0	64.0
	2000	41.5	61.5	60.5
	4000	35.0	62.0	61.0
	8000	48.0	55.5	56.0
	Sound Rating (dBA)	55	72	71
037-A	Freq (Hz)	1200 RPM	3000 RPM	4800 RPM
	125	64.0	74.0	75.5
	250	61.0	68.0	70.5
	500	57.5	66.5	68.0
	1000	53.5	61.5	63.5
	2000	49.0	59.5	61.0
	4000	42.0	57.5	63.5
	8000	44.0	51.0	55.5
	Sound Rating (dBA)	60	69	72
048-A	Freq (Hz)	1500 RPM	4320 RPM	5400 RPM
	125	67.0	73.5	69.0
	250	63.0	71.5	68.5
	500	57.0	69.5	66.5
	1000	54.5	64.5	64.0
	2000	51.0	62.5	61.5
	4000	54.0	62.5	64.5
	8000	47.5	54.5	60.0
	Sound Rating (dBA)	64	72	73
060-A	Freq (Hz)	1200 RPM	4140 RPM	5400 RPM
	125	61.5	71.5	70.5
	250	59.5	73.0	71.5
	500	54.5	70.0	68.0
	1000	50.5	65.0	62.5
	2000	44.0	62.0	60.0
	4000	41.5	60.5	62.0
	8000	49.0	58.0	61.5
	Sound Rating (dBA)	57	72	71

NOTE: Tested in compliance with AHRI 270-1995 but not listed with AHRI.

# RPM-CAPACITY-SOUND (dBA)\*

STAGE #	COMP RPM	CAPACITY %	SOUND (dBA)
<b>288BNV013</b>			
<b>COOLING</b>			
1	1500	58%	59
2	1867	72%	60
3	2100	81%	61
4	2350	90%	62
5	2600	100%	63
<b>HEATING</b>			
1	1500	38%	55
2	2300	59%	60
3	2450	63%	64
4	2600	67%	65
5	3900	100%	67
<b>288BNV024B</b>			
<b>COOLING</b>			
1	1500	35%	55
2	2566	56%	60
3	3150	69%	65
4	3950	87%	66
5	4700	100%	67
<b>HEATING</b>			
1	1500	29%	55
2	2800	53%	59
3	3150	59%	62
4	4700	88%	65
5	5400	100%	68
<b>288BNV025</b>			
<b>COOLING</b>			
1	1200	38%	55
2	1900	58%	60
3	2400	73%	62
4	2600	79%	66
5	3300	100%	69
<b>HEATING</b>			
1	1200	25%	55
2	2400	50%	60
3	3300	69%	62
4	4200	88%	68
5	4800	100%	71
<b>288BNV036</b>			
<b>COOLING</b>			
1	1200	25%	55
2	2400	50%	61
3	3300	69%	65
4	4200	88%	69
5	4800	100%	72
<b>HEATING</b>			
1	1200	22%	55
2	2600	48%	60
3	3400	63%	63
4	4800	89%	69
5	5400	100%	71
<b>288BNV037</b>			
<b>COOLING</b>			
1	1200	25%	60
2	1800	60%	61
3	2200	73%	67
4	2600	87%	67
5	3000	100%	69
<b>HEATING</b>			
1	1200	25%	60
2	2400	50%	67
3	2700	56%	68
4	3000	63%	69
5	4800	100%	72

\*Estimated sound for stages 2, 3, and 4

\*For 2-stage operation: Cooling Low = Stage 2, Heating low = Stage 3; both cooling and heating High = Stage 5

## RPM-CAPACITY-SOUND (dBA)\* continued

STAGE #	COMP RPM	CAPACITY %	SOUND (dBA)
<b>288BNV048</b>			
<b>COOLING</b>			
1	1500	35%	64
2	2460	57%	67
3	2800	65%	68
4	3650	84%	70
5	4320	100%	72
<b>HEATING</b>			
1	1500	28%	64
2	2800	52%	67
3	3300	61%	68
4	4320	80%	71
5	5400	100%	73
<b>288BNV060</b>			
<b>COOLING</b>			
1	1200	32%	57
2	2180	55%	61
3	2850	70%	65
4	3700	90%	68
5	4140	100%	72
<b>HEATING</b>			
1	1200	25%	57
2	2600	50%	51
3	3200	61%	65
4	4140	88%	69
5	5400	100%	71

\*Estimated sound for stages 2, 3, and 4

\*For 2-stage operation: Cooling Low = Stage 2, Heating low = Stage 3; both cooling and heating High = Stage 5

## CONTROLS

<b>SYSTXBBECN01-A*</b>	Evolution Connex Control (non-Wi-Fi)
<b>SYSTXBBECC01-A*</b>	Evolution Connex Control (Wi-Fi)
<b>SYSTXBBECW01-A*</b>	Evolution Connex Control with Wi-Fi & Wireless Access Point
<b>SYSTXBBNIM01</b>	Evolution Network Interface Module (Connects Heat Recovery and Energy Recovery Ventilators on non-zoning applications.)
<b>SYSTXBB4ZC01</b>	Evolution 4-Zone Damper Control Module
<b>SYSTXBBSMS01-E</b>	Evolution Smart Sensor

\* Requires version 11 software or newer on sizes 24 – 60 and version 12 software or newer on size 13.

## THERMOSTATS

PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT PUMP	HYBRID HEAT	HEAT	COOL
T6-PRH01-A	7-Day	√	√	√	√	3	2
T6-PHP01	7-Day		√	√		3	2
T6-NRH01-A	NP	√	√	√	√	3	2
T6-NHP01	NP		√	√		3	2



## ACCESSORIES

Accessory Number	Description	13	24B	25	36	37	48	60
HK70EZ015	MODEL PLUG FOR FV4(A,B), FK, 40FK	N/A	X					
HK70EZ016	MODEL PLUG FOR FV4(A,B), FK, 40FK			X				
HK70EZ017	MODEL PLUG FOR FV4(A,B), FK, 40FK				X	N/A		
HK70EZ018	MODEL PLUG FOR FV4(A,B), FK, 40FK						X	
HK70EZ019	MODEL PLUG FOR FV4(A,B), FK, 40FK							X
KHASS0606MPK	SNOW STAND Kit							X
KSASF0201AAA	SPRT FEET KIT	X	X	X	X	X	X	X
KSATX0201PUR	TXV KIT COPPER COIL	X	X	X				
KSATX0301PUR	TXV KIT COPPER COIL			X	X	X		
KSATX0401PUR	TXV KIT COPPER COIL						X	
KSATX0501PUR	TXV KIT COPPER COIL							X
KSBTX0201PUR	TXV KIT ALUMINUM COIL							
KSBTX0301PUR	TXV KIT ALUMINUM COIL			X	X	X		
KSBTX0401PUR	TXV KIT ALUMINUM COIL						X	
KSBTX0501PUR	TXV KIT ALUMINUM COIL						X	
LM10KK003	VAPOR LINE MUFFLER	X	X	X	X	X	X	X

x = Accessory

### Accessory Description and Usage

#### Model Plug - FV4(A,B), FK, 40FK

Replaces production model plug in outdoor unit and adjusts compressor speed in heating mode to match indoor airflow.

Usage Guideline:

Required when using heat pump in replacement applications with FV4(A,B), FK4, 40FK fan coil indoor unit.

#### Support Feet

Raises unit above base pad. 2 and 3 ton kit contains 5 feet for stable installation with small base. 4 and 5 ton kit contains 4 feet.

Usage Guideline:

Recommended in cold climates where snow can accumulate around unit. Allows improved base pan drainage.

Recommended for rooftop applications.

#### Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Usage Guideline:

Required if indoor unit does not already contain Puron refrigerant TXV

#### Vapor Line Muffler

An external muffler installed in the vapor line to minimize vibration transmitted through refrigerant lines

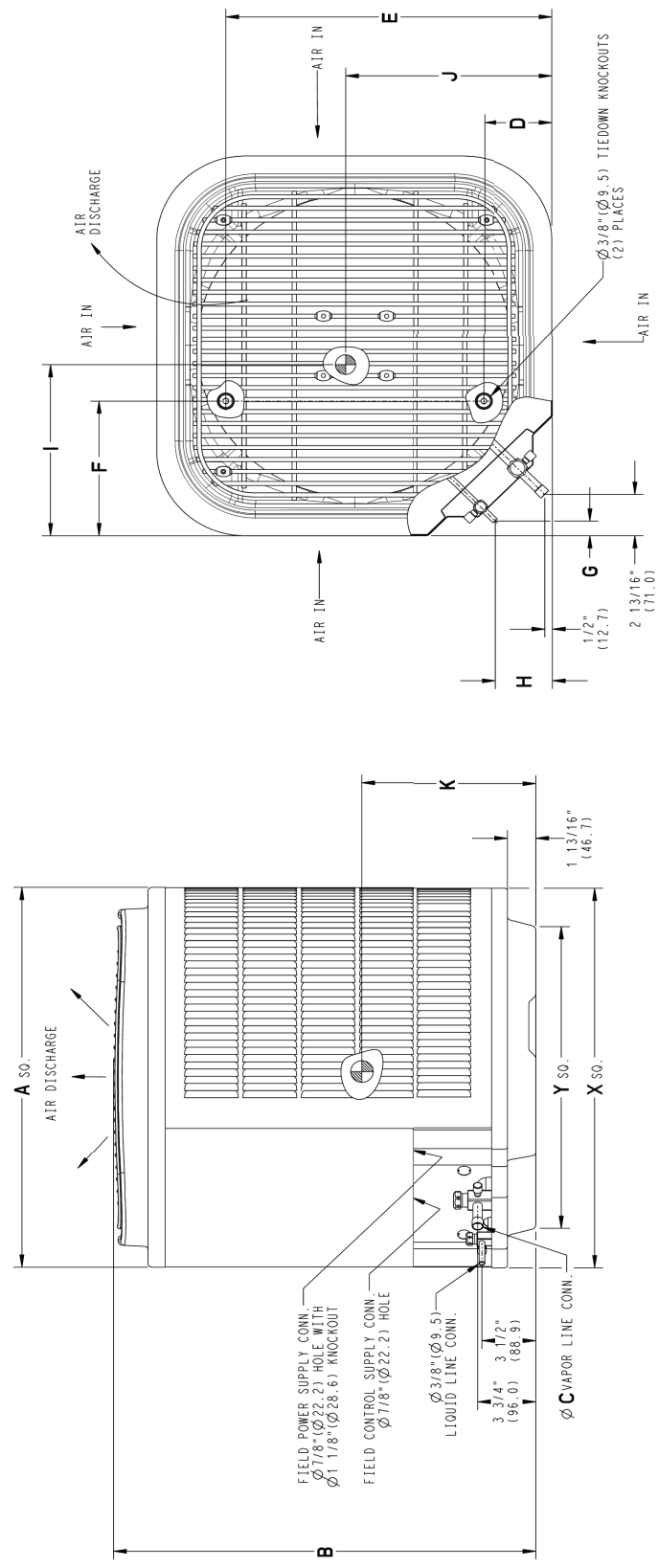
Usage Guideline:

Recommended if vapor line is not installed per recommendations in the installation instructions and vibration may be transmitted into the structure.

# DIMENSIONS

UNIT	SERIES	ELECTRICAL CHARACTERISTICS		A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (S <sub>0</sub> )		SHIPPING HEIGHT															
		INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM														
288BNV013000FAAA	A	Y	N	N	N	23	1/8	587.3	32	1/8	815.6	3/4	19.1	4	7/16	113.0	18	1/16	459.0	7	13/16	197.9	1	1/8	28.2	3	13/16	97.4	11	1/4	285.8	11	1/4	285.8	14	1/2	368.3	139	63.0	162	73.5	25	1/4	641.5	36	5/8	929.5
288BNV024000FAAA	A	Y	N	N	N	23	1/8	587.3	32	1/8	815.6	3/4	19.1	4	7/16	113.0	18	1/16	459.0	7	13/16	197.9	1	1/8	28.2	3	13/16	97.4	11	1/4	285.8	11	1/4	285.8	14	1/2	368.3	139	63.0	162	73.5	25	1/4	641.5	36	5/8	929.5
288BNV025000FBAA	B	Y	N	N	N	23	1/8	587.3	38	15/16	988.4	3/4	19.1	4	7/16	113.0	18	1/16	459.0	7	13/16	197.9	1	1/8	28.2	3	13/16	97.4	10	3/4	273.1	18	1/4	463.6	164	74.4	190	86.2	25	1/4	641.5	43	3/8	1102.2			
288BNV030000FAAA	A	Y	N	N	N	31	3/16	792.5	38	15/16	988.4	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	1	1/8	28.2	3	13/16	97.4	14	1/2	368.3	14	5/8	371.5	18	3/4	476.3	218	98.9	257	116.6	33	5/16	846.6	43	3/8	1102.2
288BNV040000FAAA	A	Y	N	N	N	31	3/16	792.5	38	15/16	988.4	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	1	1/8	28.2	3	13/16	97.4	14	1/2	368.3	14	5/8	371.5	18	3/4	476.3	218	98.9	257	116.6	33	5/16	846.6	43	3/8	1102.2
288BNV060000FAAA	A	Y	N	N	N	31	3/16	792.5	42	5/16	1074.7	7/8	22.2	6	9/16	166.1	24	11/16	626.3	9	1/8	231.3	1	1/8	28.2	3	13/16	97.4	16	1/2	419.1	15	381.0	20	508.0	245	111.1	286	129.7	33	5/16	846.6	48	1/4	1224.8		

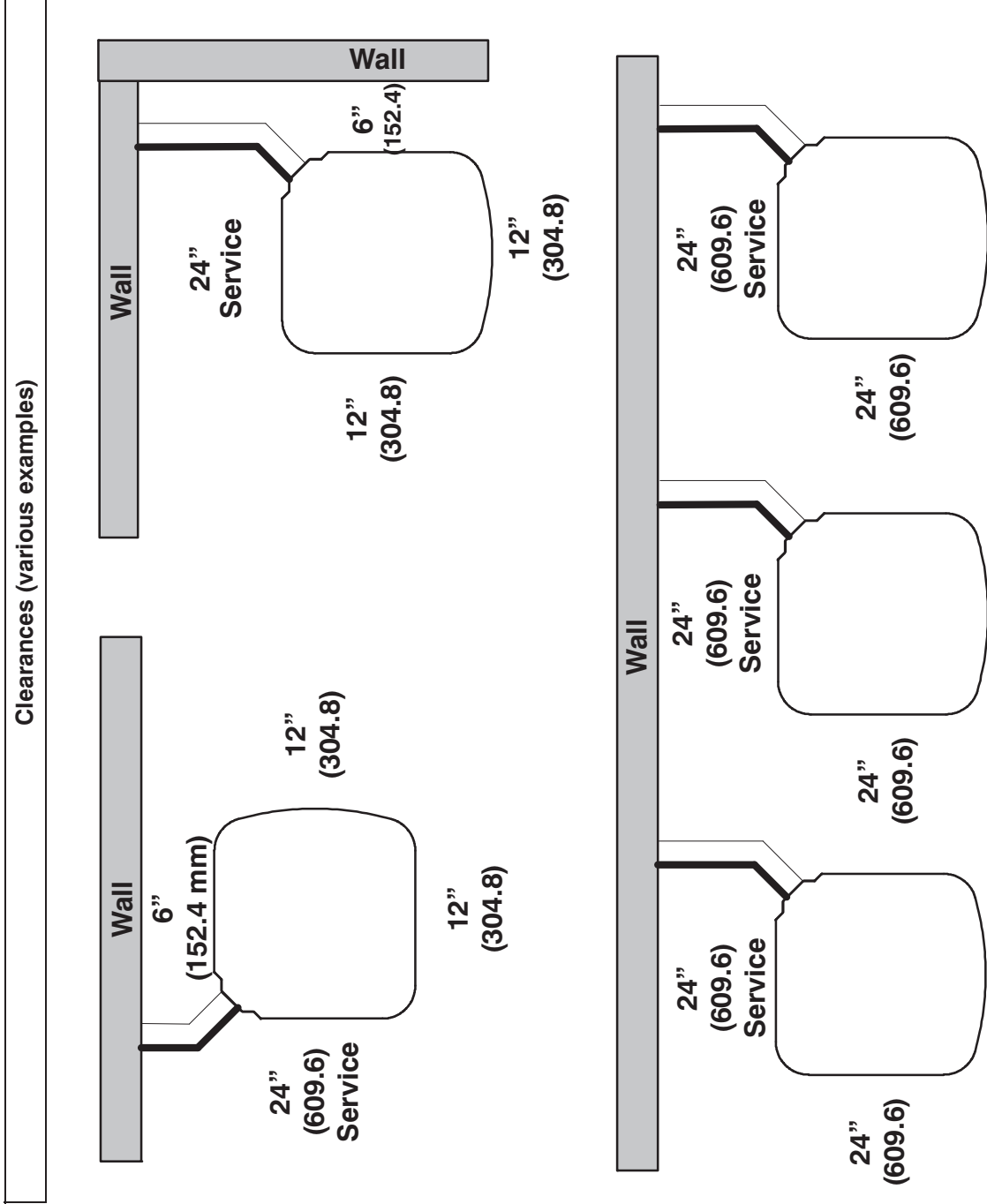
NOTES:  
1. CENTER OF GRAVITY



UNIT SIZE	"X" MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		"Y" MINIMUM ROOF TOP MOUNTING PAD APPLICATION DIMENSIONS			
	INCH	MM	INCH	MM		
13,24,25,36	23	1/8	587.3	17	7/8	454.6
-	25	3/4	654.0	20	7/16	518.5
37,48,60	31	3/16	792.5	22	15/16	583.2
-	35		889.0	26	3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)  
U.S. ECCN: Not Subject to Regulation (N.S.R.)

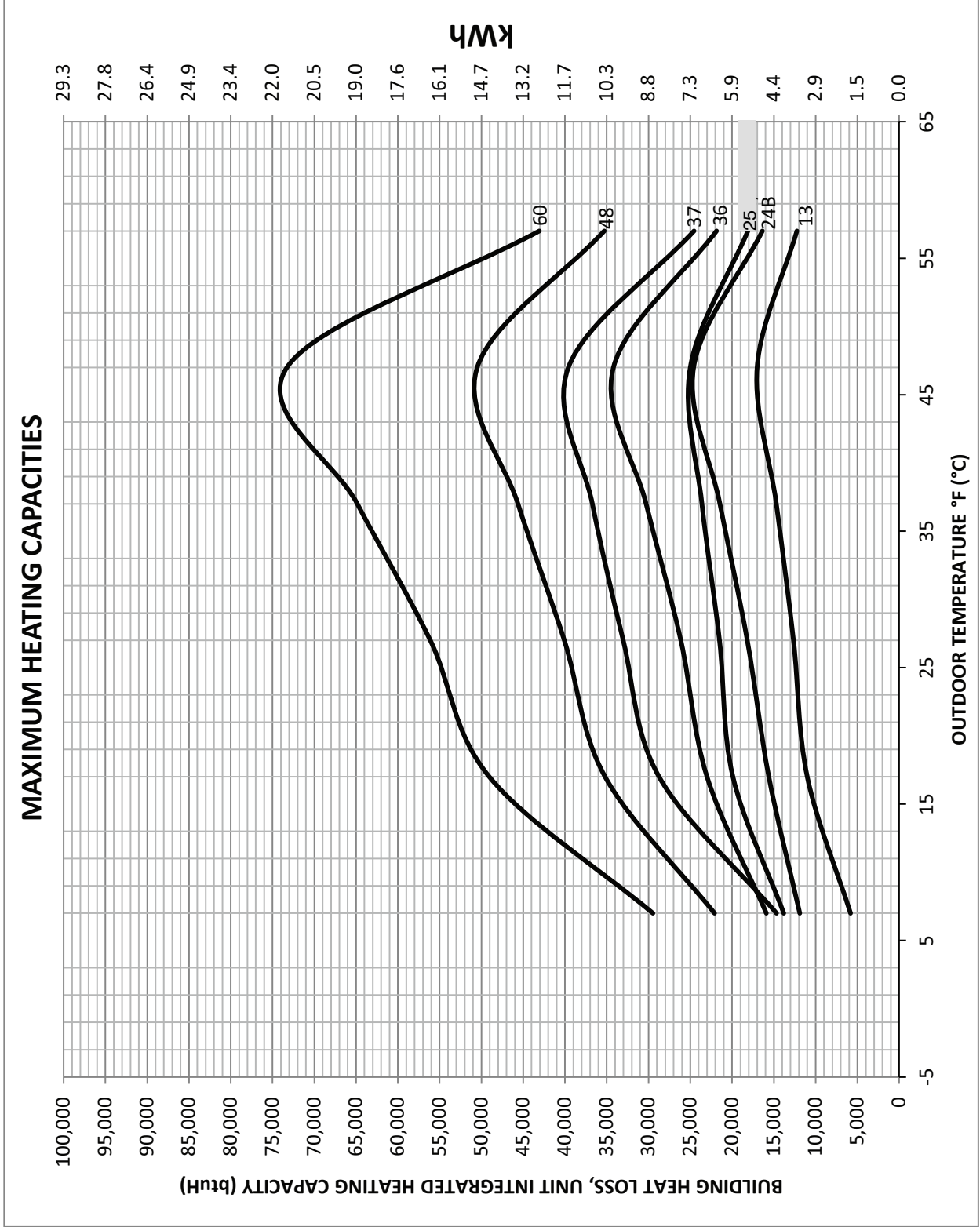
# CLEARANCES



**Note: Numbers in ( ) = mm**

**IMPORTANT:** When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

**BALANCE POINT WORKSHEET**



## TESTED AHRI COMBINATION RATINGS\*

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory [www.ahridirectory.org](http://www.ahridirectory.org)  
 Additional ratings and system combinations can be accessed via the Bryant database at: [www.MyBryantRatings.com](http://www.MyBryantRatings.com)

Outdoor Model	Indoor Model	Furnace Model	Cooling			ID CFM	HSPF	Heating			
			Cooling Cap.	SEER	EER			High Temp Capacity 47°F (8°C)	COP	Low Temp Capacity 17°F (-8°C)	COP
288BNNV013*0**A*	FE4ANF002L+UI		13,000	17.0	13.0	420	9.5	17,000	3.68	11,000	2.70
288BNNV024B0**A*	FE4ANF002L+UI		24,000	17.5	11.0	825	9.4	24,400	3.62	15,600	2.58
288BNNV025*0**B*	FE4AN(B,F)005L+UI		24,000	18.0	12.5	825	10.0	26,800	3.56	19,900	2.58
288BNNV036*0**B*	FE4AN(B,F)005L+UI		34,200	17.5	10.0	1,050	10.0	34,200	3.56	23,000	2.58
288BNNV037*0**A*	FE4ANB006L+UI		33,600	19.0	13.0	1,050	10.0	40,000	3.50	30,400	2.66
288BNNV048*0**A*	FE4AN(B,F)005L+UI		46,000	18.0	11.0	1,400	11.0	50,500	3.44	35,200	2.66
288BNNV060*0**A*	FE4ANB006L+UI		57,000	17.0	10.0	1,600	9.0	60,000	3.10	44,500	2.48

\* Ratings are net values reflecting the effects of circulating fan heat. Supplemental electric heat is not included. Ratings are based on:

**Cooling Standard:** 80°F (27°C) db 67°F (19°C) wb indoor entering air temperature and 95°F (35°C) db air entering outdoor unit.

**High-Temp Heating Standard:** 70°F (21°C) db indoor entering air temperature and 47°F (8°C) db 43°F (6°C) wb air entering outdoor unit.

**Low-Temp Heating Standard:** 70°F (21°C) db indoor entering air temperature and 17°F (-8°C) db 15°F (-9°C) wb air entering outdoor unit.

**COP** — Coefficient of Performance

**EER** — Energy Efficiency Ratio

**HSPF** — Heating Seasonal Performance Factor

**SEER** — Seasonal Energy Efficiency Ratio

**UI** — User Interface

NOTE: Ratings contained in this document are subject to change at any time.

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE

EDB °F (°C)	EVAP. AIR °F (°C)	2888NV013 / FE2ANF002L Efficiency Mode Condenser Entering Air Temperature °F (°C)										65 (18.3)														
		115 (46.1)					105 (40.5)					95 (35)					85 (29.4)					75 (23.9)				
		ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**
75 (23.9)	72 (22.2)		12.74	5.30	1.38	13.71	5.65	1.19	1.19	14.50	5.94	1.00	1.00	15.45	6.29	0.83	0.83	16.38	6.64	0.67	0.67	17.29	6.99	0.52	0.52	
	67 (19.4)	420	11.44	7.29	1.37	12.31	7.66	1.19	1.00	13.04	7.97	1.00	1.00	13.89	8.33	0.84	0.84	14.79	8.69	0.68	0.68	15.54	9.05	0.54	0.54	
	63 (17.2)	420	10.49	8.85	1.36	11.29	9.22	1.18	1.00	11.96	9.55	1.00	1.00	12.75	9.92	0.84	0.84	13.51	10.29	0.70	0.70	14.25	10.65	0.56	0.56	
	57 (13.9)		9.91	9.91	1.35	10.53	10.53	1.18	1.00	11.06	11.06	1.00	1.00	11.65	11.65	0.85	0.85	12.22	12.22	0.71	0.71	12.76	12.76	0.59	0.59	
	72 (22.2)		12.69	7.35	1.38	13.66	7.70	1.19	1.19	14.45	8.02	1.00	1.00	15.39	8.38	0.83	0.83	16.32	8.75	0.67	0.67	17.23	9.10	0.52	0.52	
80 (26.7)	67 (19.4)	420	11.41	9.30	1.37	12.28	9.68	1.19	1.00	13.00	10.01	1.00	1.00	13.85	10.38	0.84	0.84	14.69	10.76	0.68	0.68	15.50	11.13	0.54	0.54	
	63 (17.2)	420	10.64	10.64	1.36	11.32	11.22	1.18	1.00	11.99	11.57	1.00	1.00	12.76	11.96	0.84	0.84	13.51	12.35	0.70	0.70	14.25	12.72	0.56	0.56	
	57 (13.9)		10.62	10.62	1.36	11.26	11.26	1.18	1.00	11.82	11.82	1.00	1.00	12.44	12.44	0.84	0.84	13.04	13.04	0.70	0.70	13.61	13.61	0.57	0.57	
	72 (22.2)		9.96	4.09	1.02	10.76	4.39	0.91	0.91	12.08	5.08	0.78	0.78	12.96	5.39	0.66	0.66	13.82	5.71	0.55	0.55	14.66	6.02	0.43	0.43	
	67 (19.4)	300	8.90	5.49	1.02	9.61	5.79	0.92	0.92	10.82	7.08	0.79	0.79	11.60	7.40	0.68	0.68	12.37	7.75	0.57	0.57	13.11	8.08	0.47	0.47	
75 (23.9)	63 (17.2)	300	8.15	6.80	1.02	8.80	6.90	0.92	0.92	9.92	8.66	0.80	0.80	10.62	9.00	0.69	0.69	11.31	9.34	0.59	0.59	11.98	9.68	0.49	0.49	
	57 (13.9)		7.57	7.57	1.01	8.06	8.06	0.92	0.92	9.50	9.50	0.80	0.80	10.06	10.06	0.70	0.70	10.60	10.60	0.61	0.61	11.12	11.12	0.52	0.52	
	72 (22.2)		9.93	5.54	1.02	10.72	5.85	0.91	0.91	12.03	7.15	0.78	0.78	12.90	7.49	0.66	0.66	13.76	7.82	0.55	0.55	14.61	8.15	0.43	0.43	
	67 (19.4)	300	8.87	6.93	1.02	9.58	7.25	0.92	0.92	10.79	9.12	0.79	0.79	11.57	9.48	0.68	0.68	12.33	9.83	0.57	0.57	13.08	10.18	0.47	0.47	
	57 (13.9)		8.17	8.02	1.02	8.82	8.35	0.92	0.92	10.21	10.21	0.80	0.80	10.81	10.81	0.69	0.69	11.39	11.37	0.59	0.59	12.04	11.75	0.49	0.49	
75 (23.9)	72 (22.2)		8.10	8.10	1.02	8.82	8.62	0.92	0.92	10.19	10.19	0.80	0.80	10.79	10.79	0.69	0.69	11.36	11.36	0.59	0.59	11.91	11.91	0.49	0.49	
	67 (19.4)	200	7.31	4.21	0.83	7.89	4.47	0.77	0.77	8.08	3.43	0.51	0.51	8.77	3.68	0.44	0.44	9.45	3.93	0.36	0.36	10.13	4.19	0.28	0.28	
	63 (17.2)	200	6.67	4.93	0.83	7.20	5.20	0.77	0.77	7.22	4.87	0.51	0.51	7.84	5.14	0.45	0.45	8.45	5.41	0.38	0.38	9.04	5.68	0.31	0.31	
	57 (13.9)		5.91	5.91	0.82	6.30	6.26	0.77	0.77	6.61	6.00	0.51	0.51	7.17	6.29	0.46	0.46	7.71	6.57	0.40	0.40	8.24	6.84	0.33	0.33	
	72 (22.2)		8.17	4.23	0.84	8.82	4.52	0.77	0.77	8.03	4.91	0.51	0.51	8.72	5.18	0.44	0.44	9.41	5.45	0.36	0.36	10.09	5.73	0.28	0.28	
80 (26.7)	67 (19.4)	200	7.29	5.16	0.83	7.87	5.44	0.77	0.77	7.21	6.33	0.51	0.51	7.82	6.63	0.45	0.45	8.43	6.92	0.38	0.38	9.02	7.21	0.31	0.31	
	63 (17.2)	200	6.68	5.85	0.83	7.19	6.16	0.77	0.77	6.92	6.92	0.51	0.51	7.41	7.41	0.46	0.46	7.87	7.87	0.39	0.39	8.31	8.31	0.33	0.33	
	57 (13.9)		6.31	6.31	0.82	6.71	6.71	0.77	0.77	6.91	6.91	0.51	0.51	7.40	7.40	0.46	0.46	7.85	7.85	0.40	0.40	8.31	8.31	0.33	0.33	
	72 (22.2)		8.18	3.29	0.84	8.84	3.55	0.77	0.77	8.08	3.43	0.51	0.51	8.77	3.68	0.44	0.44	9.45	3.93	0.36	0.36	10.13	4.19	0.28	0.28	
	67 (19.4)	300	7.31	4.21	0.83	7.89	4.47	0.77	0.77	7.22	4.87	0.51	0.51	7.84	5.14	0.45	0.45	8.45	5.41	0.38	0.38	9.04	5.68	0.31	0.31	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See notes on page 27

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)		EVAR AIR		286BNV024B / FE4ANF02L Efficiency Mode Condenser Entering Air Temperature °F (°C)																		
				115 (46.1)			105 (40.5)			95 (35)			85 (29.4)			75 (23.9)			65 (18.3)			
				ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	
<b>75</b> (23.9)		72 (22.2)	23.99	9.99	3.08	25.38	10.48	2.68	26.51	10.88	2.31	27.76	11.32	1.97	28.92	11.74	1.65	30.00	12.14	1.37		
		67 (19.4)	21.78	14.06	3.03	23.03	14.51	2.64	24.07	14.89	2.29	25.19	15.30	1.95	26.23	15.68	1.65	27.21	16.06	1.38		
		63 (17.2)	20.14	17.25	2.99	21.29	17.68	2.61	22.25	18.03	2.26	23.28	18.42	1.94	24.25	18.78	1.65	25.14	19.13	1.38		
		57 (13.9)	19.20	19.20	2.96	20.07	20.07	2.59	20.78	20.78	2.25	21.53	21.53	1.93	22.23	22.23	1.65	22.88	22.88	1.39		
		72 (22.2)	23.92	14.05	3.08	25.31	14.51	2.68	26.44	14.88	2.31	27.69	15.29	1.97	28.85	15.69	1.65	29.93	16.06	1.36		
<b>80</b> (26.7)		67 (19.4)	21.71	18.07	3.03	22.96	18.50	2.64	24.00	18.85	2.29	25.12	19.23	1.95	26.16	19.59	1.65	27.14	19.94	1.38		
		63 (17.2)	20.49	20.49	3.00	21.42	21.42	2.62	22.32	21.83	2.27	23.31	22.27	1.94	24.26	22.63	1.65	25.15	22.94	1.38		
		57 (13.9)	20.46	20.46	3.00	21.38	21.38	2.62	22.11	22.11	2.26	22.90	22.90	1.94	23.62	23.62	1.65	24.28	24.28	1.39		
		<b>75</b> (23.9)		72 (22.2)	14.71	6.31	1.53	16.06	6.81	1.40	17.24	7.25	1.24	18.61	7.76	1.10	20.01	8.28	0.95	21.40	8.82	0.80
				67 (19.4)	13.26	9.12	1.52	14.47	9.68	1.40	15.56	10.19	1.25	16.82	10.77	1.11	18.08	11.35	0.97	19.33	11.95	0.83
63 (17.2)	12.21			11.32	1.52	13.33	11.93	1.40	14.34	12.51	1.25	15.50	13.13	1.12	16.65	13.77	0.98	17.80	14.40	0.85		
57 (13.9)	11.92			11.92	1.51	12.87	12.87	1.40	13.73	13.73	1.25	14.68	14.68	1.12	15.62	15.62	0.99	16.56	16.56	0.87		
72 (22.2)	14.65			9.16	1.53	16.00	9.72	1.40	17.18	10.22	1.24	18.55	10.80	1.10	19.95	11.38	0.95	21.35	11.99	0.79		
<b>80</b> (26.7)		67 (19.4)	13.23	11.93	1.52	14.43	12.55	1.40	15.52	13.13	1.25	16.77	13.77	1.11	18.02	14.42	0.97	19.28	15.07	0.83		
		63 (17.2)	12.80	12.80	1.52	13.80	13.80	1.40	14.71	14.71	1.25	15.72	15.72	1.11	16.74	16.71	0.98	17.88	17.42	0.85		
		57 (13.9)	12.78	12.78	1.52	13.78	13.78	1.40	14.68	14.68	1.25	15.69	15.69	1.12	16.69	16.69	0.98	17.68	17.68	0.85		
		<b>75</b> (23.9)		72 (22.2)	10.98	4.91	1.02	12.29	5.41	1.00	13.32	6.02	0.82	14.41	6.61	0.72	15.51	7.21	0.62	16.61	7.81	0.52
				67 (19.4)	9.86	7.42	1.02	11.05	8.01	1.00	12.04	8.61	0.82	13.04	9.21	0.72	14.04	9.81	0.62	15.04	10.41	0.52
63 (17.2)	9.15			9.15	1.02	10.29	9.90	1.00	11.28	10.40	0.82	12.28	10.90	0.72	13.28	11.40	0.62	14.28	12.00	0.52		
57 (13.9)	9.13			9.13	1.02	10.15	10.15	1.00	11.04	10.15	0.82	12.04	10.90	0.72	13.04	11.40	0.62	14.04	12.00	0.52		
72 (22.2)	10.93			7.45	1.02	12.27	8.08	1.00	13.26	8.68	0.82	14.26	9.28	0.72	15.26	9.88	0.62	16.26	10.48	0.52		
<b>80</b> (26.7)		67 (19.4)	9.88	9.86	1.02	11.12	10.63	1.00	12.01	10.63	0.82	13.01	11.21	0.72	14.01	12.01	0.62	15.01	13.01	0.52		
		63 (17.2)	9.88	9.86	1.02	10.95	10.95	1.00	11.84	10.95	0.82	12.84	11.44	0.72	13.84	12.44	0.62	14.44	13.44	0.52		
		57 (13.9)	9.85	9.85	1.02	10.94	10.94	1.00	11.83	10.94	0.82	12.83	11.43	0.72	13.83	12.43	0.62	14.43	13.43	0.52		
		<b>75</b> (23.9)		72 (22.2)	10.98	4.91	1.02	12.29	5.41	1.00	13.32	6.02	0.82	14.41	6.61	0.72	15.51	7.21	0.62	16.61	7.81	0.52
				67 (19.4)	9.86	7.42	1.02	11.05	8.01	1.00	12.04	8.61	0.82	13.04	9.21	0.72	14.04	9.81	0.62	15.04	10.41	0.52
63 (17.2)	9.15			9.15	1.02	10.29	9.90	1.00	11.28	10.40	0.82	12.28	10.90	0.72	13.28	11.40	0.62	14.28	12.00	0.52		
57 (13.9)	9.13			9.13	1.02	10.15	10.15	1.00	11.04	10.15	0.82	12.04	10.90	0.72	13.04	11.40	0.62	14.04	12.00	0.52		
72 (22.2)	10.93			7.45	1.02	12.27	8.08	1.00	13.26	8.68	0.82	14.26	9.28	0.72	15.26	9.88	0.62	16.26	10.48	0.52		
<b>80</b> (26.7)		67 (19.4)	9.88	9.86	1.02	11.12	10.63	1.00	12.01	10.63	0.82	13.01	11.21	0.72	14.01	12.01	0.62	15.01	13.01	0.52		
		63 (17.2)	9.88	9.86	1.02	10.95	10.95	1.00	11.84	10.95	0.82	12.84	11.44	0.72	13.84	12.44	0.62	14.44	13.44	0.52		
		57 (13.9)	9.85	9.85	1.02	10.94	10.94	1.00	11.83	10.94	0.82	12.83	11.43	0.72	13.83	12.43	0.62	14.43	13.43	0.52		

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See notes on page 27

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAIR AIR	288BNV025 / FEZANF005 Efficiency Mode Condenser Entering Air Temperature °F (°C)												65 (18.3)									
		115 (46.1)				105 (40.5)				95 (35)				75 (23.9)			55 (13.3)						
		ID SCFM	Capacity MBtuh	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh	Total Sys. KW**	Total Sys. KW**		
75 (23.9)	72 (22.2)	825	23.61	9.88	2.53	25.24	10.47	2.23	26.64	10.98	1.92	28.18	11.54	1.66	29.67	12.09	1.41	31.02	12.64	1.18	32.51	13.19	0.97
	67 (19.4)	825	21.33	13.74	2.50	22.80	14.32	2.22	24.06	14.87	1.92	25.46	15.46	1.67	26.92	16.05	1.43	28.38	16.69	1.21	29.85	17.32	1.00
	63 (17.2)	825	19.66	16.76	2.48	21.01	17.35	2.21	22.17	17.92	1.92	23.46	18.51	1.67	24.71	19.11	1.44	26.06	19.72	1.23	27.05	20.36	1.00
	57 (13.9)	825	18.72	18.72	2.47	19.79	19.79	2.20	20.71	20.71	1.91	21.71	21.71	1.67	22.67	22.67	1.45	23.60	23.60	1.24	24.56	24.56	1.00
	72 (22.2)	825	23.53	13.78	2.53	25.17	14.37	2.23	26.56	14.92	1.92	28.10	15.50	1.66	29.60	16.09	1.41	31.02	16.63	1.18	32.45	17.28	1.00
80 (26.7)	67 (19.4)	825	21.28	17.58	2.50	22.75	18.19	2.22	24.00	18.75	1.92	25.40	19.35	1.67	26.74	19.96	1.43	28.05	20.56	1.21	29.45	21.17	1.00
	63 (17.2)	825	20.03	20.03	2.49	21.17	21.09	2.21	22.29	21.72	1.92	23.54	22.34	1.67	24.78	22.95	1.44	25.96	23.61	1.23	27.05	24.29	1.00
	57 (13.9)	825	19.99	19.99	2.49	21.10	21.10	2.21	22.06	22.06	1.91	23.08	23.08	1.67	24.09	24.09	1.44	25.06	25.06	1.23	26.03	26.03	1.00
	72 (22.2)	650	15.43	6.56	1.50	16.55	6.96	1.36	17.40	7.27	1.13	18.52	7.59	0.97	19.58	8.06	0.82	20.65	8.45	0.67	21.72	8.84	0.67
	67 (19.4)	650	13.88	9.30	1.50	14.90	9.71	1.36	15.70	10.04	1.14	16.69	10.46	0.99	17.67	10.87	0.85	18.63	11.27	0.71	19.60	11.68	0.71
80 (26.7)	63 (17.2)	650	12.80	11.44	1.50	13.73	11.87	1.37	14.47	12.22	1.14	15.39	12.65	1.00	16.27	13.10	0.87	17.17	13.48	0.73	18.04	13.89	0.73
	57 (13.9)	650	12.38	12.38	1.50	13.13	13.13	1.37	13.73	13.73	1.14	14.44	14.44	1.01	15.14	15.14	0.88	15.81	15.81	0.76	16.52	16.52	0.76
	72 (22.2)	650	15.37	9.34	1.50	16.49	9.75	1.36	17.33	10.09	1.13	18.42	10.48	0.97	19.51	10.89	0.82	20.58	11.27	0.67	21.65	11.68	0.67
	67 (19.4)	650	13.87	12.03	1.50	14.88	12.46	1.36	15.67	12.80	1.14	16.66	13.25	0.99	17.62	13.69	0.85	18.59	14.08	0.71	19.56	14.49	0.71
	57 (13.9)	650	13.28	13.28	1.50	14.07	14.07	1.37	14.69	14.69	1.14	15.58	15.21	1.00	16.44	15.74	0.87	17.23	16.25	0.73	18.00	16.66	0.73
75 (23.9)	72 (22.2)	585	11.91	5.24	1.08	12.82	5.56	1.00	13.38	4.52	0.57	14.66	4.66	1.14	15.42	4.42	1.00	16.14	4.14	0.87	17.01	3.87	0.87
	67 (19.4)	585	10.68	7.75	1.09	11.52	8.07	1.01	9.32	6.60	0.59	10.00	6.88	0.52	10.68	7.16	0.44	11.35	7.44	0.35	12.04	6.89	0.35
	63 (17.2)	585	9.85	9.65	1.09	10.61	10.02	1.02	8.58	8.20	0.60	9.20	8.49	0.54	9.81	8.79	0.47	10.41	9.08	0.38	11.18	8.50	0.38
	57 (13.9)	585	9.79	9.79	1.09	10.43	10.43	1.02	8.47	8.47	0.60	8.98	8.98	0.54	9.48	9.48	0.48	9.96	9.96	0.40	10.43	9.48	0.40
	72 (22.2)	585	11.85	7.79	1.08	12.79	8.13	1.00	10.33	6.64	0.57	11.10	6.91	0.49	11.86	7.20	0.40	12.62	7.48	0.30	13.39	6.99	0.30
80 (26.7)	67 (19.4)	585	10.87	9.78	1.09	11.51	10.58	1.01	9.33	8.66	0.58	10.00	8.96	0.52	10.67	9.26	0.44	11.33	9.56	0.35	12.00	8.87	0.35
	63 (17.2)	585	10.56	10.56	1.09	11.24	11.24	1.02	9.12	9.12	0.59	9.67	9.67	0.52	10.20	10.20	0.45	10.72	10.72	0.37	11.18	9.87	0.37
	57 (13.9)	585	10.54	10.54	1.09	11.22	11.22	1.02	9.11	9.11	0.59	9.65	9.65	0.52	10.18	10.18	0.45	10.69	10.69	0.37	11.15	9.84	0.37
	72 (22.2)	585	11.91	5.24	1.08	12.82	5.56	1.00	13.38	4.52	0.57	14.66	4.66	1.14	15.42	4.42	1.00	16.14	4.14	0.87	17.01	3.87	0.87
	67 (19.4)	585	10.68	7.75	1.09	11.52	8.07	1.01	9.32	6.60	0.59	10.00	6.88	0.52	10.68	7.16	0.44	11.35	7.44	0.35	12.04	6.89	0.35

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 27



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAR. AIR	288BNV036 / FE4ANF005 Efficiency Mode Condenser Entering Air Temperature F (°C)																		
		115 (46.1)			105 (40.5)			95 (35)			85 (29.4)			75 (23.9)			65 (18.3)			
		ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Total Sys. KW**	
<b>75</b> (23.9)	72 (22.2)		33.66	13.76	3.92	35.83	14.56	3.82	37.64	15.24	3.33	39.71	16.02	3.03	41.70	16.78	2.74	43.66	17.54	2.45
	67 (19.4)	1050	30.67	18.58	3.83	32.83	19.41	3.55	34.28	20.14	3.26	36.14	20.93	2.98	37.96	21.76	2.70	39.71	22.50	2.42
	63 (17.2)		28.43	22.37	3.76	30.25	23.22	3.49	31.80	23.97	3.20	33.50	24.78	2.93	35.17	25.58	2.67	36.77	26.36	2.41
	57 (13.9)		26.29	26.29	3.70	27.67	27.67	3.42	28.85	28.85	3.14	30.12	30.12	2.88	31.51	31.06	2.63	32.87	31.93	2.38
	72 (22.2)		33.58	18.53	3.92	35.75	19.37	3.82	37.55	20.09	3.33	39.61	20.91	3.03	41.61	21.68	2.74	43.56	22.44	2.45
<b>80</b> (26.7)	67 (19.4)	1050	30.58	23.31	3.83	32.94	24.17	3.55	34.20	24.92	3.26	36.06	25.73	2.98	37.87	26.55	2.70	39.64	27.35	2.42
	63 (17.2)		28.45	27.05	3.77	30.25	27.93	3.49	31.78	28.71	3.20	33.48	29.54	2.93	35.15	30.40	2.67	36.73	31.18	2.41
	57 (13.9)		27.92	27.92	3.75	29.37	29.37	3.47	30.60	30.60	3.18	31.93	31.93	2.91	33.21	33.21	2.65	34.45	34.45	2.39
	72 (22.2)		21.50	9.09	2.51	22.99	9.62	2.19	24.00	9.99	1.85	25.46	10.52	1.58	26.89	11.04	1.32	28.22	11.54	1.09
	67 (19.4)	900	19.38	12.78	2.49	20.72	13.34	2.18	21.71	13.77	1.84	23.03	14.33	1.57	24.32	14.88	1.33	25.58	15.44	1.11
<b>75</b> (23.9)	63 (17.2)		17.85	15.69	2.47	19.07	16.26	2.18	20.03	16.73	1.83	21.24	17.32	1.57	22.42	17.89	1.34	23.59	18.46	1.12
	57 (13.9)		17.16	17.16	2.47	18.15	18.15	2.17	18.94	18.94	1.82	19.90	19.90	1.57	20.84	20.84	1.34	21.76	21.76	1.13
	72 (22.2)		21.43	12.83	2.51	22.91	13.39	2.19	23.93	13.80	1.85	25.39	14.36	1.58	26.81	14.92	1.32	28.20	15.48	1.09
	67 (19.4)	900	19.34	16.49	2.49	20.87	17.07	2.18	21.66	17.54	1.84	22.97	18.13	1.57	24.25	18.71	1.33	25.52	19.29	1.11
	63 (17.2)		18.40	18.40	2.48	19.44	19.44	2.18	20.23	20.23	1.83	21.35	21.04	1.57	22.50	21.67	1.34	23.66	22.27	1.12
<b>80</b> (26.7)	57 (13.9)		18.36	18.36	2.48	19.40	19.40	2.18	20.20	20.20	1.83	21.20	21.20	1.57	22.18	22.18	1.34	23.13	23.13	1.12
	72 (22.2)		14.47	6.38	1.82	15.58	6.77	1.53	16.69	4.69	0.66	11.51	4.98	0.49	12.34	5.28	0.34	13.17	5.58	0.22
	67 (19.4)	800	13.00	9.42	1.82	14.02	9.86	1.54	9.54	6.85	0.69	10.28	7.17	0.52	11.02	7.49	0.37	11.76	7.81	0.25
	63 (17.2)		12.02	11.77	1.82	12.97	12.18	1.55	8.78	8.53	0.70	9.43	8.87	0.54	10.10	9.21	0.39	10.77	9.55	0.27
	57 (13.9)		11.94	11.94	1.82	12.73	12.73	1.55	8.69	8.69	0.71	9.25	9.25	0.54	9.81	9.81	0.40	10.36	10.36	0.28
<b>80</b> (26.7)	72 (22.2)		14.41	9.47	1.82	15.54	9.92	1.52	10.64	6.90	0.71	11.46	7.22	0.54	12.29	7.55	0.40	13.12	7.88	0.28
	67 (19.4)	800	13.03	12.45	1.82	14.03	12.93	1.54	9.56	9.02	0.71	10.28	9.37	0.54	11.01	9.72	0.40	11.75	10.07	0.28
	63 (17.2)		12.86	12.86	1.82	13.70	13.70	1.54	9.40	9.40	0.69	9.99	9.99	0.52	10.58	10.58	0.38	11.17	11.17	0.26
	57 (13.9)		12.84	12.84	1.82	13.67	13.67	1.54	9.38	9.38	0.69	9.97	9.97	0.52	10.56	10.56	0.38	11.15	11.15	0.26
	72 (22.2)		14.47	6.38	1.82	15.58	6.77	1.53	16.69	4.69	0.66	11.51	4.98	0.49	12.34	5.28	0.34	13.17	5.58	0.22

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAIR AIR	288BNV037 FEANB06L Efficiency Mode Condenser Entering Air Temperature °F (°C)												55 (16.3)											
		115 (46.1)				105 (40.5)				95 (35)				85 (29.4)				75 (23.9)							
		ID SCFM	Capacity MBtuh Total	Sens†	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Syst. KW**				
75 (23.9)	72 (22.2)		33.34	13.66	3.38		35.36	14.43	2.99		37.11	15.07	2.60		39.00	15.77	2.25		40.82	16.46	1.93		42.56	17.12	1.64
	67 (19.4)		30.28	18.76	3.34		32.11	19.52	2.97		33.70	20.19	2.58		35.41	20.92	2.26		37.04	21.61	1.95		38.64	22.90	1.66
	63 (17.2)	1050	28.02	22.76	3.31		29.71	23.52	2.95		31.19	24.21	2.57		32.77	24.95	2.25		34.29	25.67	1.95		35.77	26.37	1.67
	57 (13.9)		26.22	26.22	3.28		27.53	27.53	2.93		28.66	28.66	2.56		29.86	29.86	2.25		31.00	31.00	1.96		32.09	32.09	1.69
	72 (22.2)		33.22	18.74	3.38		35.26	19.50	2.99		36.99	20.17	2.60		38.88	20.89	2.25		40.70	21.60	1.93		42.44	22.28	1.64
80 (26.7)	67 (19.4)		30.18	23.76	3.34		32.01	24.54	2.97		33.60	25.23	2.58		35.31	25.97	2.26		36.94	26.69	1.95		38.54	27.40	1.66
	63 (17.2)	1050	28.06	27.66	3.31		29.73	28.49	2.95		31.18	29.21	2.57		32.75	29.98	2.25		34.26	30.72	1.95		35.73	31.44	1.67
	57 (13.9)		27.88	27.88	3.31		29.25	29.25	2.95		30.44	30.44	2.57		31.68	31.68	2.25		32.88	32.88	1.96		34.02	34.02	1.68
	72 (22.2)		22.97	9.60	3.06		24.68	10.23	2.52		26.27	10.83	1.97		27.96	11.46	1.55		29.61	12.08	1.19		31.25	12.70	0.88
	67 (19.4)	900	20.76	13.46	3.06		22.31	14.15	2.53		23.77	14.82	1.99		25.28	15.50	1.58		26.77	16.18	1.23		28.24	16.87	0.92
75 (23.9)	63 (17.2)		19.15	16.49	3.06		20.58	17.23	2.54		21.93	17.94	2.00		23.33	18.68	1.60		24.69	19.40	1.25		26.04	20.13	0.95
	57 (13.9)		18.30	18.30	3.06		19.47	19.47	2.54		20.57	20.57	2.01		21.69	21.69	1.61		22.78	22.78	1.27		23.85	23.85	0.98
	72 (22.2)		22.86	13.49	3.06		24.58	14.18	2.52		26.17	14.84	1.97		27.85	15.54	1.55		29.51	16.22	1.19		31.14	16.90	0.88
	67 (19.4)	900	20.69	17.29	3.06		22.23	18.04	2.53		23.70	18.76	1.99		25.20	19.52	1.58		26.69	20.27	1.23		28.16	21.01	0.92
	57 (13.9)		19.52	19.52	3.06		20.79	20.79	2.54		22.01	21.83	2.00		23.37	22.86	1.60		24.72	23.46	1.25		26.05	24.25	0.95
75 (23.9)	72 (22.2)		17.86	7.53	2.92		19.41	8.11	2.31		21.91	21.91	2.00		23.09	23.09	1.60		24.24	24.24	1.26		25.37	25.37	0.96
	67 (19.4)		16.10	10.65	2.94		17.51	11.32	2.34		19.42	6.15	1.11		21.14	6.65	0.76		22.78	7.17	0.48		24.24	7.63	0.26
	63 (17.2)	800	14.87	13.08	2.95		16.15	13.82	2.36		18.38	10.26	1.18		20.66	9.03	0.80		22.69	9.63	0.52		24.67	10.24	0.30
	57 (13.9)		14.32	14.32	2.95		15.40	15.40	2.37		16.67	11.67	1.20		18.04	10.91	0.83		20.37	11.57	0.55		22.44	12.24	0.33
	72 (22.2)		17.78	10.67	2.92		19.33	11.35	2.31		21.46	8.44	1.11		23.69	9.04	0.76		25.91	9.64	0.48		28.14	10.26	0.26
80 (26.7)	67 (19.4)		16.07	13.74	2.94		17.46	14.50	2.34		19.37	10.73	1.15		21.55	11.41	0.80		23.74	12.09	0.52		26.04	12.78	0.30
	63 (17.2)	800	15.31	15.31	2.94		16.47	16.47	2.35		17.84	12.45	1.17		19.49	13.26	0.82		21.68	14.02	0.54		24.02	14.78	0.33
	57 (13.9)		15.28	15.28	2.94		16.44	16.44	2.35		17.43	12.43	1.18		19.39	13.39	0.83		21.36	14.36	0.55		23.33	15.33	0.33
	72 (22.2)		17.86	7.53	2.92		19.41	8.11	2.31		21.91	21.91	2.00		23.09	23.09	1.60		24.24	24.24	1.26		25.37	25.37	0.96
	67 (19.4)	800	20.76	13.46	3.06		22.31	14.15	2.53		23.77	14.82	1.99		25.28	15.50	1.58		26.77	16.18	1.23		28.24	16.87	0.92

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAR AIR	286BNV048 / FE4ANF005 Efficiency Mode Condenser Entering Air Temperature F (°C)																							
		115 (46.1)				105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
		ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**
<b>75</b> (23.9)	72 (22.2)	1400	44.46	17.96	5.30	47.55	19.13	4.76	50.59	20.28	4.26	53.58	21.41	3.78	56.49	22.53	3.33	1400	54.03	29.27	3.28	59.36	23.64	2.90	
	67 (19.4)	1400	40.53	24.37	5.19	43.36	25.62	4.67	46.12	26.85	4.18	48.81	28.07	3.72	51.44	29.27	3.28	1400	50.09	34.55	3.25	54.03	30.47	2.88	
	63 (17.2)	1400	37.62	29.42	5.09	40.24	30.72	4.59	42.79	32.02	4.12	45.28	33.30	3.67	47.70	34.55	3.25	1400	44.94	42.14	3.21	50.09	35.81	2.86	
	57 (13.9)	1400	34.79	34.79	4.99	36.84	36.84	4.50	38.82	38.82	4.04	40.75	40.75	3.61	42.87	42.14	3.21	1400	59.24	48.06	3.23	44.94	43.50	2.83	
	72 (22.2)	1400	44.36	24.28	5.30	47.46	25.53	4.77	50.50	26.76	4.26	53.48	27.99	3.78	56.39	29.19	3.33	1400	53.94	35.85	3.28	59.24	30.40	2.90	
<b>80</b> (26.7)	67 (19.4)	1400	40.43	30.64	5.19	43.26	31.96	4.67	46.02	33.28	4.18	48.71	34.57	3.72	51.35	35.85	3.28	1400	50.04	41.09	3.25	53.94	37.15	2.88	
	63 (17.2)	1400	37.66	35.55	5.10	40.25	36.99	4.59	42.77	38.38	4.12	45.25	39.75	3.67	47.66	41.09	3.25	1400	46.95	45.06	3.23	50.04	42.41	2.86	
	57 (13.9)	1400	36.88	36.88	5.07	39.04	39.04	4.56	41.10	41.10	4.09	43.11	43.11	3.64	45.06	45.06	3.23	1400	39.94	15.46	1.79	46.95	46.95	2.84	
	72 (22.2)	1200	29.36	12.30	3.08	31.57	13.11	2.74	33.60	13.87	2.38	35.73	14.86	2.08	37.85	15.46	1.79	1200	36.25	21.05	1.82	39.94	16.25	1.53	
	67 (19.4)	1200	26.65	17.55	3.05	28.66	18.45	2.73	30.51	19.30	2.38	32.44	20.17	2.09	34.35	21.05	1.82	1200	33.46	25.42	1.83	36.25	21.92	1.56	
<b>80</b> (26.7)	63 (17.2)	1200	24.64	21.63	3.04	26.47	22.60	2.72	28.19	23.52	2.38	29.95	24.47	2.10	31.72	25.42	1.83	1200	30.92	29.52	1.84	33.46	26.36	1.58	
	57 (13.9)	1200	23.69	23.69	3.03	25.21	25.21	2.71	26.63	26.63	2.37	28.09	28.09	2.10	29.52	29.52	1.84	1200	30.92	30.92	1.84	30.92	30.92	1.60	
	72 (22.2)	1200	29.26	17.54	3.08	31.47	18.44	2.74	33.50	19.28	2.38	35.64	20.16	2.08	37.75	21.04	1.79	1200	39.84	21.04	1.79	39.84	21.91	1.53	
	67 (19.4)	1200	26.58	22.70	3.06	28.58	23.70	2.73	30.43	24.64	2.38	32.35	25.61	2.09	34.25	26.57	1.82	1200	36.15	27.54	1.82	36.15	27.54	1.56	
	63 (17.2)	1200	25.33	25.33	3.04	26.94	26.94	2.72	28.40	28.38	2.38	30.14	29.65	2.10	31.85	30.76	1.83	1200	33.56	31.83	1.83	33.56	31.83	1.58	
<b>75</b> (23.9)	57 (13.9)	1100	25.29	25.29	3.04	26.90	26.90	2.72	28.39	28.39	2.38	29.92	29.92	2.10	31.42	31.42	1.83	1100	32.90	32.90	1.83	32.90	32.90	1.58	
	72 (22.2)	1100	25.37	10.73	2.67	27.27	11.42	2.37	19.54	8.42	1.06	20.95	8.94	0.89	22.36	9.47	0.72	1100	23.78	10.00	0.72	23.78	10.00	0.56	
	67 (19.4)	1100	22.95	15.36	2.66	24.75	16.20	2.37	17.66	12.16	1.09	18.94	12.78	0.92	20.22	13.39	0.76	1100	21.49	14.00	0.76	21.49	14.00	0.61	
	63 (17.2)	1100	21.20	18.93	2.65	22.84	19.87	2.38	16.38	15.07	1.11	17.54	15.80	0.95	18.70	16.45	0.79	1100	19.87	17.13	0.79	19.87	17.13	0.65	
	57 (13.9)	1100	20.51	20.51	2.65	21.90	21.90	2.38	16.01	16.01	1.11	17.02	17.02	0.96	18.02	18.02	0.81	1100	19.01	19.01	0.81	19.01	19.01	0.67	
<b>80</b> (26.7)	72 (22.2)	1100	25.29	15.39	2.67	27.28	16.22	2.37	19.46	12.19	1.06	20.87	12.80	0.89	22.28	13.41	0.72	1100	23.69	14.03	0.72	23.69	14.03	0.56	
	67 (19.4)	1100	22.91	19.93	2.66	24.69	20.87	2.37	17.66	15.85	1.09	18.93	16.56	0.92	20.19	17.27	0.76	1100	21.46	17.97	0.76	21.46	17.97	0.61	
	63 (17.2)	1100	21.96	21.96	2.66	23.43	23.43	2.38	17.13	17.13	1.10	18.21	18.21	0.93	19.27	19.27	0.78	1100	20.33	20.33	0.78	20.33	20.33	0.64	
	57 (13.9)	1100	21.92	21.92	2.66	23.39	23.39	2.38	17.10	17.10	1.10	18.18	18.18	0.93	19.24	19.24	0.78	1100	20.29	20.29	0.78	20.29	20.29	0.64	
	72 (22.2)	1100	25.37	10.73	2.67	27.27	11.42	2.37	19.54	8.42	1.06	20.95	8.94	0.89	22.36	9.47	0.72	1100	23.78	10.00	0.72	23.78	10.00	0.56	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAP AIR °F (°C)	288BNV0607 FEZANB0601 Efficiency Mode Condenser Entering Air Temperature °F (°C)										75 (23.9)										65 (18.3)									
		115 (46.1)					105 (40.5)					95 (35)					85 (28.4)					75 (23.9)					65 (18.3)				
		ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**	ID SCFM	Capacity MBtuh Total	Sens†	Total Sys. KW**	Total Sys. KW**					
75 (23.9)	72 (22.2)		54.16	21.71	7.27		58.13	23.22	6.50		62.05	24.71	5.83		65.88	26.19	5.23		69.70	27.67	4.89		73.51	29.16	4.22						
	67 (19.4)		49.48	29.16	7.08		53.10	30.83	6.32		56.62	32.47	5.65		60.10	34.10	5.06		63.54	35.73	4.54		66.97	37.96	4.08						
	63 (17.2)	1600	46.01	35.04	6.94		49.36	36.81	6.19	1600	52.62	38.56	5.52		55.84	40.30	4.93	1600	59.02	42.03	4.42		62.18	43.77	3.96						
	57 (13.9)		42.15	42.15	6.80		44.79	44.79	6.03		47.47	47.22	5.36		50.24	49.26	4.76		53.01	51.19	4.27		55.79	53.12	3.82						
	72 (22.2)		54.02	29.01	7.27		57.99	30.66	6.51		61.91	32.31	5.83		65.73	33.94	5.23		69.54	35.58	4.89		73.38	37.25	4.22						
80 (26.7)	67 (19.4)		49.35	36.40	7.08		52.97	38.20	6.32		56.50	39.99	5.65		59.97	41.75	5.06		63.42	43.53	4.54		66.85	45.31	4.08						
	63 (17.2)	1600	45.98	42.19	6.95		49.31	44.12	6.19	1600	52.56	46.03	5.52		55.76	47.91	4.94	1600	58.94	49.79	4.42		62.09	51.68	3.96						
	57 (13.9)		44.59	44.59	6.89		47.37	47.37	6.12		50.06	50.06	5.44		52.70	52.70	4.85		55.28	55.28	4.33		57.84	57.84	3.87						
	72 (22.2)		35.59	14.62	3.53		38.22	15.60	3.17		40.53	16.44	2.81		43.15	17.42	2.52		45.75	18.40	2.26		48.31	19.37	2.03						
	67 (19.4)	1350	32.14	20.20	3.49		34.58	21.25	3.13	1350	36.71	22.19	2.76		39.08	23.23	2.48		41.41	24.27	2.22		43.72	25.33	1.99						
80 (26.7)	63 (17.2)		29.59	24.58	3.46		31.84	25.69	3.11		33.86	26.69	2.73		36.06	27.78	2.44		38.24	28.87	2.19		40.37	29.94	1.96						
	57 (13.9)		27.84	27.84	3.44		29.82	29.82	3.09		31.23	31.23	2.70		32.94	32.94	2.42		34.60	34.60	2.16		36.29	36.29	1.94						
	72 (22.2)		35.48	20.25	3.53		38.16	21.30	3.17		40.41	22.20	2.81		43.03	23.25	2.52		45.63	24.29	2.26		48.16	25.95	2.03						
	67 (19.4)	1350	32.03	25.76	3.49		34.46	26.87	3.13	1350	36.60	27.89	2.76		38.97	28.99	2.48		41.31	30.09	2.22		43.64	31.19	1.99						
	57 (13.9)		29.73	29.73	3.46		31.58	31.58	3.11		33.26	33.26	2.72		35.03	35.03	2.44		36.78	36.78	2.18		38.50	38.50	1.95						
75 (23.9)	72 (22.2)		26.64	11.15	2.26		28.72	11.89	2.04		31.20	12.44	1.81		33.84	13.28	1.64		36.46	14.16	1.47		39.08	15.04	1.30						
	67 (19.4)		23.82	15.66	2.25		25.70	16.41	2.04		28.14	17.26	1.81		30.76	18.11	1.64		33.38	18.96	1.47		36.00	19.81	1.30						
	63 (17.2)	1200	21.78	19.18	2.24		23.51	19.96	2.03	1200	25.70	21.25	1.81		28.14	23.23	1.64	1200	32.24	28.87	2.19		34.37	30.94	1.99						
	57 (13.9)		20.87	20.87	2.23		22.22	22.22	2.03		23.67	23.67	1.81		25.12	25.12	1.64		26.57	26.57	1.47		28.02	28.02	1.30						
	72 (22.2)		26.55	15.78	2.26		28.63	16.54	2.04		31.10	17.29	1.81		33.62	18.07	1.64		36.11	18.94	1.47		38.60	19.81	1.30						
80 (26.7)	67 (19.4)		23.75	20.23	2.25		25.64	21.01	2.04		28.19	15.49	1.11		30.68	16.36	0.97		33.17	17.23	0.83		35.66	18.09	0.68						
	63 (17.2)	1200	22.48	22.48	2.24		23.92	23.92	2.03	1200	25.82	25.82	1.81		27.71	27.71	1.64	1200	30.60	30.60	2.19		33.08	33.08	1.99						
	57 (13.9)		22.45	22.45	2.24		23.87	23.87	2.03		25.72	25.72	1.81		27.57	27.57	1.64		29.32	29.32	1.47		31.07	31.07	1.30						
	72 (22.2)		26.64	11.15	2.26		28.72	11.89	2.04		31.20	12.44	1.81		33.84	13.28	1.64		36.46	14.16	1.47		39.08	15.04	1.30						
	67 (19.4)	975	23.82	15.66	2.25		25.70	16.41	2.04	975	28.14	17.26	1.81		30.76	18.11	1.64	975	33.38	18.96	1.47		36.00	19.81	1.30						

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 and 115 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB ° F (° C)	288BNV0137 FEANF002L Comfort + Dehumidify Mode Condenser Entering Air Temperature ° F (° C)																			
	105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	ID SCFM	Capacity Total	Capacity Sensit	Total Sys. KW	ID SCFM	Capacity Total	Capacity Sensit	Total Sys. KW	ID SCFM	Capacity Total	Capacity Sensit	Total Sys. KW	ID SCFM	Capacity Total	Capacity Sensit	Total Sys. KW	ID SCFM	Capacity Total	Capacity Sensit	Total Sys. KW
<b>75</b> (23.9)	<b>STAGE 5</b>																			
	72 (22.2)	13.37	5.44	1.18		14.50	5.94	1.00		15.45	6.29	0.83		16.38	6.64	0.67		17.29	6.99	0.52
	67 (19.4)	14.26	10.65	0.56	420	11.99	7.16	1.18		13.04	7.97	1.00	420	13.89	8.33	0.84		14.73	8.69	0.68
	63 (17.2)	12.22	12.22	0.71		12.76	12.76	0.59		10.99	8.49	1.18		11.96	9.55	1.00		12.75	9.92	0.84
	57 (13.9)	15.41	8.38	0.83		16.33	8.74	0.67		17.24	9.10	0.82		10.01	10.01	1.17		11.06	11.06	1.00
<b>80</b> (26.7)	72 (22.2)	13.00	10.01	1.00		13.85	10.39	0.84		14.69	10.76	0.68		15.50	11.13	0.54		13.33	7.21	1.18
	67 (19.4)	10.99	10.23	1.18	420	12.01	11.57	1.00		12.77	11.97	0.84	420	13.52	12.35	0.70		14.25	12.72	0.56
	63 (17.2)	0.00	0.00	0.00		10.68	10.68	1.17		11.81	11.81	1.00		12.44	12.44	0.84		13.04	13.04	0.70
	57 (13.9)	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00
	<b>STAGE 3</b>																			
<b>75</b> (23.9)	72 (22.2)	10.76	4.39	0.91		11.82	4.87	0.78		12.65	5.18	0.66		13.47	5.49	0.55		14.27	5.79	0.43
	67 (19.4)	11.65	8.92	0.50	360	9.61	5.79	0.92		10.58	6.60	0.79	360	11.32	6.92	0.68		12.05	7.23	0.57
	63 (17.2)	10.06	10.06	0.61		10.54	10.54	0.52		8.80	6.91	0.92		9.69	7.95	0.79		10.37	8.27	0.69
	57 (13.9)	12.61	6.97	0.66		13.43	7.30	0.55		14.21	7.63	0.43		8.06	8.06	0.92		9.06	9.06	0.79
	72 (22.2)	10.55	8.35	0.79		11.29	8.69	0.68		12.01	9.02	0.57		12.72	9.35	0.47		10.72	5.85	0.91
<b>80</b> (26.7)	67 (19.4)	8.81	8.35	0.92	360	9.74	9.67	0.79		10.39	10.04	0.69	360	11.03	10.38	0.59		11.66	10.72	0.49
	63 (17.2)	0.00	0.00	0.00		8.62	8.62	0.92		9.70	9.70	0.79		10.25	10.25	0.69		10.76	10.76	0.60
	57 (13.9)	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00
	<b>STAGE 1</b>																			
	<b>75</b> (23.9)	72 (22.2)	9.57	3.95	0.77		8.06	3.42	0.51		8.75	3.67	0.45		9.44	3.92	0.37		10.12	4.17
67 (19.4)		8.23	6.83	0.34	300	8.56	5.36	0.78		7.20	4.86	0.52	300	7.82	5.13	0.46		8.43	5.40	0.39
63 (17.2)		7.30	7.30	0.41		7.70	7.70	0.36		7.83	6.48	0.78		6.60	5.99	0.52		7.15	6.27	0.46
57 (13.9)		8.71	5.16	0.45		9.40	5.44	0.37		10.08	5.71	0.29		7.34	7.34	0.78		6.41	6.41	0.52
72 (22.2)		7.19	6.32	0.52		7.80	6.61	0.46		8.41	6.91	0.39		9.00	7.19	0.32		9.55	5.41	0.77
<b>80</b> (26.7)	67 (19.4)	7.88	7.88	0.78	300	6.91	6.91	0.52		7.40	7.40	0.46	300	7.85	7.85	0.40		8.30	8.30	0.34
	63 (17.2)	0.00	0.00	0.00		7.86	7.86	0.78		6.89	6.89	0.52		7.38	7.38	0.46		7.83	7.83	0.40
	57 (13.9)	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB °F (°C)	EVAP. AIR		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	
			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit		Total
75 (23.9)	72 (22.2)	642	24.61	9.99	2.60	608	25.43	10.26	2.22	634	26.73	10.77	1.90	663	27.99	11.27	1.60	708	29.29	11.79	1.33	
	67 (19.4)		22.32	13.17	2.56		23.05	13.27	2.20		24.23	13.87	1.99		25.36	14.46	1.60		26.57	15.19	1.34	
	63 (17.2)		20.82	15.67	2.53		21.29	15.62	2.18		22.39	16.30	1.87		23.44	17.00	1.60		24.55	17.84	1.34	
	57 (13.9)		18.73	18.73	2.50		19.03	18.99	2.15		20.00	19.77	1.86		20.94	20.63	1.59		21.98	21.66	1.35	
	72 (22.2)		24.55	13.18	2.60		25.37	13.28	2.23		26.67	13.88	1.90		27.93	14.49	1.60		29.23	15.20	1.33	
80 (26.7)	67 (19.4)	642	22.26	16.33	2.56	608	23.00	16.25	2.20	634	24.17	16.95	1.89	663	25.31	17.67	1.60	708	26.51	18.55	1.34	
	63 (17.2)		20.61	18.80	2.54		21.27	18.58	2.18		22.35	19.35	1.87		23.41	20.17	1.60		24.53	21.19	1.35	
	57 (13.9)		19.90	19.90	2.52		20.17	20.17	2.16		21.12	21.12	1.86		22.06	22.06	1.59		23.16	23.16	1.35	
	72 (22.2)		15.21	6.19	1.37		16.13	6.52	1.21		17.53	7.08	1.07		18.92	7.64	0.93		20.37	8.22	0.78	
	67 (19.4)		13.70	8.14	1.37		14.54	8.44	1.21		15.81	9.12	1.08		17.07	9.81	0.95		18.41	10.80	0.81	
75 (23.9)	63 (17.2)	437	12.58	9.66	1.36	415	13.37	9.90	1.21	437	14.52	10.71	1.08	456	15.68	11.49	0.96	484	16.92	12.42	0.83	
	57 (13.9)		11.42	11.42	1.35		11.92	11.92	1.20		12.92	12.92	1.09		13.91	13.91	0.98		15.03	15.03	0.86	
	72 (22.2)		15.17	8.18	1.37		16.09	8.46	1.21		17.47	9.16	1.07		18.87	9.88	0.93		20.36	10.65	0.78	
	67 (19.4)		13.66	10.10	1.37		14.51	10.33	1.21		15.77	11.18	1.08		17.03	12.00	0.95		18.37	12.96	0.81	
	63 (17.2)		12.58	11.62	1.36		13.35	11.80	1.21		14.51	12.75	1.08		15.66	13.67	0.96		16.91	14.77	0.83	
80 (26.7)	57 (13.9)	362	12.18	12.18	1.36	415	12.69	12.69	1.21	437	13.76	13.76	1.09	456	14.81	14.81	0.97	484	15.99	15.99	0.84	
	72 (22.2)		11.44	4.66	0.97		6.60	2.69	0.40		7.58	3.09	0.38		8.49	3.44	0.35		9.61	3.90	0.30	
	67 (19.4)		10.26	6.13	0.97		5.88	3.57	0.41		6.74	4.08	0.40		7.54	4.46	0.38		8.50	5.05	0.33	
	63 (17.2)		9.39	7.28	0.97		5.34	4.26	0.41		6.12	4.85	0.41		6.85	5.27	0.39		7.75	5.98	0.36	
	57 (13.9)		8.56	8.56	0.97		4.90	4.90	0.42		5.60	5.60	0.42		6.18	6.18	0.41		7.00	7.00	0.38	
75 (23.9)	72 (22.2)	362	11.42	6.18	0.97	222	6.57	3.61	0.40	234	7.55	4.13	0.38	229	8.46	4.53	0.35	245	9.58	5.13	0.30	
	67 (19.4)		10.24	7.63	0.97		5.86	4.48	0.41		6.72	5.11	0.40		7.52	5.54	0.38		8.53	6.25	0.33	
	63 (17.2)		9.40	8.79	0.97		5.34	5.17	0.41		6.12	5.89	0.41		6.85	6.35	0.39		7.75	7.20	0.36	
	57 (13.9)		9.15	9.15	0.97		5.26	5.26	0.42		6.02	6.02	0.41		6.63	6.63	0.40		7.51	7.51	0.37	
	72 (22.2)		11.44	4.66	0.97		6.60	2.69	0.40		7.58	3.09	0.38		8.49	3.44	0.35		9.61	3.90	0.30	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB °F (°C)	EVAP. AIR		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)								
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW						
			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit		Total	Sensit				
75 (23.9)	72 (22.2)	608	24.05	9.74	2.20	608	25.31	10.23	1.90	608	26.93	10.87	1.64	663	28.53	11.51	1.40	708	30.24	12.20	1.18						
	67 (19.4)		21.69	12.60	2.19		22.84	13.11	1.89		24.30	13.68	1.65		25.76	14.68	1.42		27.35	15.63	1.20						
	63 (17.2)		19.98	14.84	2.17		21.05	15.36	1.88		22.40	16.25	1.65		23.76	17.17	1.43		25.20	18.29	1.22						
	57 (13.9)		17.96	17.96	2.15		18.83	18.68	1.87		20.01	19.72	1.64		21.32	20.70	1.43		22.50	22.16	1.24						
	72 (22.2)		23.98	12.65	2.20		25.25	13.15	1.90		26.85	13.94	1.64		28.46	14.73	1.40		30.15	15.64	1.18						
80 (26.7)	67 (19.4)	608	21.63	15.47	2.19	608	22.79	15.99	1.89	634	24.25	16.90	1.65	663	25.71	17.85	1.42	708	27.28	19.03	1.20						
	63 (17.2)		19.98	17.70	2.17		21.04	18.23	1.88		22.39	19.25	1.65		23.75	20.31	1.43		25.21	21.65	1.22						
	57 (13.9)		19.08	19.08	2.16		19.91	19.91	1.88		21.11	21.11	1.65		22.34	22.34	1.43		23.76	23.76	1.23						
	72 (22.2)		15.55	6.31	1.34		16.33	6.61	1.11		17.39	7.04	0.97		18.54	7.49	0.82		19.76	8.00	0.67						
	67 (19.4)		13.99	8.14	1.35		14.70	8.46	1.12		15.68	8.96	0.98		16.71	9.53	0.84		17.84	10.19	0.71						
75 (23.9)	63 (17.2)	437	12.85	9.59	1.35	437	13.92	9.91	1.12	482	14.42	10.48	0.99	475	15.37	11.12	0.86	510	16.42	11.92	0.73						
	57 (13.9)		11.51	11.51	1.35		12.02	12.02	1.12		12.80	12.70	1.00		13.64	13.47	0.88		14.57	14.45	0.77						
	72 (22.2)		15.51	8.19	1.34		16.26	8.49	1.11		17.34	9.02	0.97		18.49	9.57	0.82		19.72	10.27	0.67						
	67 (19.4)		13.96	10.01	1.35		14.86	10.33	1.12		15.64	10.92	0.98		16.67	11.58	0.84		17.81	12.41	0.71						
	63 (17.2)		12.84	11.44	1.35		13.51	11.79	1.12		14.41	12.41	0.99		15.36	13.18	0.86		16.40	14.13	0.73						
80 (26.7)	57 (13.9)	437	12.26	12.26	1.35	12.79	12.79	1.12	13.57	13.57	1.00	14.43	14.43	0.87	15.44	15.44	0.75	510	16.40	14.13	0.73						
	72 (22.2)		11.60	4.69	1.00	8.92	3.59	0.58	9.47	3.82	0.52	10.00	4.04	0.45	10.52	4.25	0.32		250	10.52	4.25	0.32					
	67 (19.4)		10.38	6.01	1.01	7.98	4.45	0.60	8.46	4.67	0.54	8.93	4.88	0.48	9.39	5.10	0.41			250	9.39	5.10	0.41				
	63 (17.2)		9.51	7.00	1.01	7.29	5.10	0.61	7.72	5.33	0.56	8.15	5.55	0.50	8.56	5.76	0.44				250	8.56	5.76	0.44			
	57 (13.9)		10.39	5.98	1.01	6.96	6.09	0.62	6.74	6.31	0.58	7.10	6.52	0.54	7.47	6.73	0.48					250	7.47	6.73	0.48		
72 (22.2)	11.57	6.04	1.00	8.90	4.49	0.58	9.45	4.72	0.52	9.98	4.95	0.45	10.49	5.17	0.37	250	10.49	5.17					0.37				
67 (19.4)	10.36	7.32	1.01	7.96	5.34	0.60	8.44	5.57	0.54	8.91	5.79	0.48	9.37	6.01	0.41		250	9.37	6.01				0.41				
63 (17.2)	9.50	8.34	1.01	7.28	5.99	0.61	7.71	6.23	0.56	8.14	6.45	0.51	8.54	6.67	0.44			250	8.54	6.67			0.44				
57 (13.9)	8.99	8.99	1.02	6.65	6.65	0.61	6.96	6.96	0.58	7.27	7.27	0.53	7.56	7.56	0.48				250	7.56	7.56		0.48				
75 (23.9)	72 (22.2)	342	11.60	4.69	1.00	342	8.64	3.49	0.58	222	9.30	3.76	0.52	229	9.74					3.95	0.45	245	10.45	4.23	0.32		
	67 (19.4)		10.38	6.01	1.01		7.72	4.24	0.59		8.31	4.55	0.54		8.69	4.72				0.48	9.32		5.06	0.41	245	9.32	5.06
	63 (17.2)		9.51	7.00	1.01		7.04	4.82	0.60		7.58	5.17	0.56		7.93	5.31	0.51			8.50	5.70		0.45	245		8.50	5.70
	57 (13.9)		8.42	8.42	1.02		6.16	5.65	0.61		6.61	6.07	0.58		6.92	6.18	0.54	7.42		6.65	0.49		245			7.42	6.65
	72 (22.2)		11.57	6.03	1.00		8.62	4.29	0.58		9.28	4.61	0.52		9.72	4.78	0.45	10.43	5.13	0.37	245					10.43	5.13
67 (19.4)	10.36	7.32	1.01	7.70	5.03	0.59	8.29	5.39	0.54	8.68	5.55	0.48	9.31	5.95	0.41	245	9.31	5.95	0.41								
63 (17.2)	9.50	8.34	1.01	7.03	5.61	0.60	7.57	6.01	0.56	7.92	6.14	0.51	8.49	6.59	0.45		245	8.49	6.59	0.45							
57 (13.9)	8.99	8.99	1.02	6.30	6.30	0.61	6.76	6.76	0.57	7.03	6.30	0.61	7.49	7.49	0.48			245	7.49	7.49		0.48					

STAGE 1 - FEANF005 ONLY

STAGE 1 - ALL OTHER INDOOR COMBINATIONS

STAGE 3

STAGE 5

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 - Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB °F (°C)	EVAP. AIR		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	
			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit		Total
75 (23.9)	72 (22.2)	812	34.41	13.87	3.52	812	36.07	14.52	3.23	848	38.26	15.40	2.95	887	40.48	16.29	2.67	948	42.89	17.25	2.40	
	67 (19.4)		31.28	17.06	3.45		32.82	18.35	3.16		34.81	19.41	2.89		36.83	20.49	2.83		39.01	21.75	2.38	
	63 (17.2)		28.96	20.61	3.39		30.39	21.30	3.10		32.22	22.51	2.85		34.07	23.75	2.60		30.74	18.23	4.07	
	57 (13.9)		25.84	24.91	3.30		27.09	25.64	3.03		28.72	27.04	2.79		30.37	28.48	2.56		28.52	21.76	3.99	
	72 (22.2)		34.33	17.65	3.52		35.98	18.32	3.23		38.18	19.39	2.95		40.34	20.45	2.67		42.89	26.01	3.90	
80 (26.7)	67 (19.4)	812	31.22	21.37	3.45	812	32.75	22.08	3.16	848	34.75	23.33	2.89	887	36.76	24.61	2.63	948	33.65	18.17	4.17	
	63 (17.2)		28.92	24.31	3.39		30.34	25.03	3.10		32.18	26.41	2.85		34.02	27.82	2.60		30.66	22.60	4.07	
	57 (13.9)		26.99	26.99	3.34		28.06	28.06	3.05		29.68	29.68	2.81		31.34	31.34	2.57		28.51	26.12	3.99	
	72 (22.2)		21.33	8.62	2.14		22.26	8.99	1.80		23.79	9.60	1.53		25.26	10.19	1.29		26.82	10.82	1.07	
	67 (19.4)		19.21	10.97	2.13		20.08	11.37	1.78		21.48	12.15	1.53		22.80	12.86	1.30		24.22	13.70	1.08	
75 (23.9)	63 (17.2)	566	17.88	12.82	2.12	566	18.82	13.25	1.77	600	19.80	14.15	1.53	626	21.03	14.96	1.30	664	22.34	15.92	1.09	
	57 (13.9)		15.76	15.54	2.10		16.50	16.02	1.75		17.65	17.11	1.52		18.74	18.07	1.31		19.91	19.23	1.11	
	72 (22.2)		21.30	11.04	2.14		22.20	11.42	1.80		23.73	12.20	1.53		25.20	12.92	1.29		26.77	13.74	1.07	
	67 (19.4)		19.17	13.36	2.13		20.04	13.77	1.78		21.43	14.71	1.53		22.75	15.55	1.30		24.18	16.55	1.08	
	63 (17.2)		17.67	15.20	2.12		18.51	15.64	1.77		19.79	16.70	1.53		21.01	17.64	1.30		22.33	18.78	1.09	
80 (26.7)	57 (13.9)	566	16.63	16.63	2.11	17.30	17.30	1.76	18.49	18.49	1.52	19.59	19.59	1.30	20.84	20.84	1.10	664	22.33	18.78	1.09	
	72 (22.2)		14.17	5.74	1.50	9.11	3.68	0.68	9.70	3.92	0.52	10.29	4.16	0.38	11.09	4.48	0.26					
	67 (19.4)		12.71	7.33	1.51	8.12	4.54	0.70	8.64	4.78	0.54	9.16	5.03	0.40	9.89	5.42	0.28					
	63 (17.2)		11.65	8.59	1.51	7.40	5.21	0.71	7.88	5.46	0.56	8.35	5.71	0.42	9.01	6.16	0.30					
	57 (13.9)		10.35	10.35	1.51	6.44	6.21	0.72	6.86	6.46	0.57	7.27	6.71	0.44	7.86	7.24	0.32					
75 (23.9)	72 (22.2)	417	14.11	7.38	1.50	417	9.09	4.60	0.68	250	9.68	4.85	0.52	250	10.26	5.10	0.38	267	11.06	5.50	0.26	
	67 (19.4)		12.68	8.97	1.51		8.10	5.46	0.70		8.62	5.71	0.54		9.14	5.97	0.40		9.86	6.44	0.28	
	63 (17.2)		11.65	10.21	1.51		7.38	6.13	0.71		7.86	6.39	0.56		8.34	6.65	0.42		9.00	7.18	0.30	
	57 (13.9)		11.03	11.03	1.51		6.76	6.76	0.72		7.12	7.12	0.57		7.46	7.46	0.44		8.06	8.06	0.32	
	72 (22.2)		14.17	5.74	1.50		8.96	3.62	0.69		9.48	3.83	0.52		10.23	4.13	0.38		11.09	4.48	0.26	
80 (26.7)	67 (19.4)	417	14.17	5.74	1.50	417	7.98	4.42	0.71	236	8.44	4.62	0.55	232	9.11	4.99	0.41	267	9.88	5.42	0.28	
	63 (17.2)		14.17	5.74	1.50		7.27	5.05	0.72		7.69	5.25	0.56		8.30	5.65	0.42		9.01	6.16	0.30	
	57 (13.9)		14.17	5.74	1.50		6.32	5.98	0.73		6.69	6.17	0.58		7.23	6.64	0.44		7.85	7.24	0.33	
	72 (22.2)		14.17	5.74	1.50		8.94	4.49	0.69		9.43	4.69	0.52		10.20	5.06	0.38		11.06	5.50	0.26	
	67 (19.4)		14.17	5.74	1.50		7.96	5.29	0.71		8.42	5.49	0.55		9.09	5.91	0.41		9.86	6.43	0.28	
75 (23.9)	63 (17.2)	417	14.17	5.74	1.50	417	7.26	5.92	0.72	236	7.67	6.11	0.56	232	8.29	6.58	0.42	267	8.99	7.17	0.30	
	57 (13.9)		14.17	5.74	1.50		6.58	6.58	0.72		6.86	6.86	0.57		7.40	7.40	0.44		8.06	8.06	0.32	
	72 (22.2)		14.17	5.74	1.50		8.96	3.62	0.69		9.48	3.83	0.52		10.23	4.13	0.38		11.09	4.48	0.26	
	67 (19.4)		14.17	5.74	1.50		7.98	4.42	0.71		8.44	4.62	0.55		9.11	4.99	0.41		9.88	5.42	0.28	
	63 (17.2)		14.17	5.74	1.50		7.27	5.05	0.72		7.69	5.25	0.56		8.30	5.65	0.42		9.01	6.16	0.30	
80 (26.7)	57 (13.9)	417	14.17	5.74	1.50	417	6.32	5.98	0.73	236	6.69	6.17	0.58	232	7.23	6.64	0.44	267	7.85	7.24	0.33	
	72 (22.2)		14.17	5.74	1.50		8.94	4.49	0.69		9.43	4.69	0.52		10.20	5.06	0.38		11.06	5.50	0.26	
	67 (19.4)		14.17	5.74	1.50		7.96	5.29	0.71		8.42	5.49	0.55		9.09	5.91	0.41		9.86	6.43	0.28	
	63 (17.2)		14.17	5.74	1.50		7.26	5.92	0.72		7.67	6.11	0.56		8.29	6.58	0.42		8.99	7.17	0.30	
	57 (13.9)		14.17	5.74	1.50		6.58	6.58	0.72		6.86	6.86	0.57		7.40	7.40	0.44		8.06	8.06	0.32	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 27



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB ° F (° C)	EVAP. AIR		105 (40.5)				95 (35)				75 (23.9)				65 (18.3)			
	EWB ° F (° C)	ID SCFM	Capacity MBTUH		Total Sys. KW	ID SCFM	Capacity MBTUH		Total Sys. KW	ID SCFM	Capacity MBTUH		Total Sys. KW	ID SCFM	Capacity MBTUH		Total Sys. KW	
			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit		
75 (23.9)	72		34.02	13.71	2.91		35.50	14.33	2.52		37.64	15.13	2.19		39.66	15.93	1.89	
	67	812	30.97	17.74	2.85	812	32.42	18.38	2.47	848	34.27	19.38	2.17	888	36.10	20.40	1.88	
	63		28.74	20.92	2.80		30.10	21.57	2.43		31.81	22.72	2.14		32.83	23.41	2.00	
	57		25.73	25.56	2.73		26.83	26.26	2.37		27.87	27.05	2.26		29.38	28.45	1.98	
	72		34.41	17.92	2.77		35.26	18.16	2.56		37.27	19.15	2.25		39.27	20.16	1.94	
80 (26.7)	67	812	30.67	21.50	2.92	812	32.12	22.15	2.53	848	33.95	23.33	2.22	888	35.78	24.54	1.92	
	63		28.49	24.67	2.87		29.84	25.33	2.49		31.53	26.66	2.19		33.25	28.05	1.90	
	57		27.02	27.02	2.82		28.04	28.04	2.45		29.59	29.59	2.16		31.17	31.17	1.88	
	72		22.84	9.21	2.45		24.22	9.76	1.91		26.00	10.47	1.51		27.69	11.14	1.16	
	67	566	20.96	11.85	2.26	566	22.23	12.44	1.76	600	23.85	13.36	1.39	625	25.39	14.20	1.07	
75 (23.9)	63		19.62	14.03	2.06		20.81	14.66	1.80		22.32	15.74	1.25		21.65	15.23	1.74	
	57		17.72	17.24	1.86		18.79	17.93	1.43		18.37	17.54	2.03		19.57	18.63	1.65	
	72		24.22	12.44	1.66		23.40	11.90	2.24		25.13	12.78	1.80		26.78	13.60	1.41	
	67	566	20.25	13.91	2.65	566	21.49	14.53	2.09	600	23.07	15.61	1.68	625	24.57	16.59	1.32	
	63		18.96	16.11	2.46		20.15	16.72	1.93		21.61	17.97	1.55		23.01	19.07	1.22	
80 (26.7)	57		18.02	18.02	2.26		18.96	18.96	1.77		20.34	20.34	1.42		21.63	21.63	1.11	
	72		17.97	7.25	2.27		14.42	5.88	1.11		15.67	6.37	0.76		16.94	6.86	0.48	
	67	500	15.37	8.76	2.23	500	13.55	8.09	0.95	500	14.69	8.66	0.64	500	15.85	9.23	0.39	
	63		14.72	10.65	1.87		12.96	10.01	0.78		14.03	10.64	0.50		13.42	10.01	0.94	
	57		13.65	13.33	1.50		12.28	12.28	0.60		11.69	11.69	1.18		12.40	12.40	0.90	
80 (26.7)	72		18.97	9.81	1.10		14.74	8.00	1.27		15.86	8.48	0.93		15.67	8.28	0.72	
	67	500	15.73	10.94	2.56	500	13.71	10.22	1.18	500	13.59	9.93	0.96	500	14.70	10.56	0.65	
	63		14.92	12.81	2.31		12.02	11.19	1.17		13.04	11.86	0.82		14.08	12.56	0.55	
	57		13.31	13.31	2.25		12.15	12.15	0.98		13.05	13.05	0.67		13.95	13.95	0.42	
	72		17.21	6.93	2.27		11.89	4.85	1.16		12.71	5.21	0.82		13.90	5.70	0.54	
75 (23.9)	67	417	14.73	8.14	2.23	417	11.15	5.91	0.99	236	11.87	6.32	0.68	246	12.96	6.90	0.43	
	63		14.10	9.74	1.87		10.82	6.89	0.80		11.31	7.28	0.52		10.96	7.06	1.03	
	57		12.97	12.07	1.50		9.73	8.24	0.61		9.18	7.68	1.24		9.95	8.34	0.96	
	72		18.16	9.13	1.10		12.17	5.90	1.33		12.87	6.23	1.01		12.88	6.23	0.81	
	67	417	15.07	9.98	2.56	417	11.27	6.98	1.22	236	11.00	6.75	1.02	246	12.04	7.40	0.72	
80 (26.7)	63		14.28	11.55	2.30		9.83	7.28	1.22		10.51	7.69	0.87		11.50	8.42	0.60	
	57		12.37	12.37	2.25		9.04	8.60	1.02		9.64	9.01	0.72		10.53	9.87	0.47	
	72		17.21	6.93	2.27		11.89	4.85	1.16		12.71	5.21	0.82		13.90	5.70	0.54	
	67	417	14.73	8.14	2.23	417	11.15	5.91	0.99	236	11.87	6.32	0.68	246	12.96	6.90	0.43	
	63		14.10	9.74	1.87		10.82	6.89	0.80		11.31	7.28	0.52		10.96	7.06	1.03	
80 (26.7)	57		12.97	12.07	1.50		9.73	8.24	0.61		9.18	7.68	1.24		9.95	8.34	0.96	
	72		18.16	9.13	1.10		12.17	5.90	1.33		12.87	6.23	1.01		12.88	6.23	0.81	
	67	417	15.07	9.98	2.56	417	11.27	6.98	1.22	236	11.00	6.75	1.02	246	12.04	7.40	0.72	
	63		14.28	11.55	2.30		9.83	7.28	1.22		10.51	7.69	0.87		11.50	8.42	0.60	
	57		12.37	12.37	2.25		9.04	8.60	1.02		9.64	9.01	0.72		10.53	9.87	0.47	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 1 – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB °F (°C)	EVAP. AIR		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	
			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit			Total	Sensit		Total
75 (23.9)	72 (22.2)	1110	46.15	18.51	4.57	1184	49.48	19.81	4.11	1257	52.80	21.11	3.68	1330	56.10	22.38	3.28	1226	58.13	23.21	2.80	
	67 (19.4)		42.05	23.76	4.47		45.08	25.46	4.03		48.10	27.15	3.62		51.08	28.84	3.24		52.88	29.26	2.77	
	63 (17.2)		39.02	27.87	4.39		41.83	28.88	3.97		44.61	31.87	3.57		47.36	33.85	3.20		49.01	33.96	2.76	
	57 (13.9)		35.01	33.85	4.28		37.53	36.29	3.88		40.02	38.72	3.51		42.47	41.16	3.16		43.86	40.86	2.73	
	72 (22.2)		46.07	23.69	4.57		49.40	25.39	4.11		52.71	27.07	3.68		55.99	28.76	3.28		58.04	29.22	2.80	
80 (26.7)	67 (19.4)	1110	41.97	28.88	4.47	1184	45.00	30.96	4.03	1257	48.01	33.04	3.62	1330	50.99	35.10	3.24	1226	52.80	35.16	2.77	
	63 (17.2)		38.97	32.95	4.39		41.78	35.35	3.97		44.56	37.73	3.57		47.31	40.09	3.20		48.95	39.83	2.76	
	57 (13.9)		36.54	36.54	4.32		39.18	39.18	3.92		41.80	41.80	3.53		44.40	44.40	3.17		45.07	45.07	2.73	
	72 (22.2)		29.64	11.97	2.58		31.86	12.87	2.24		34.06	13.75	1.96		36.31	14.65	1.69		38.92	15.76	1.45	
	67 (19.4)		26.82	15.33	2.57		28.87	16.54	2.24		30.87	17.64	1.96		32.91	18.82	1.71		35.37	20.54	1.48	
75 (23.9)	63 (17.2)	744	24.74	17.92	2.56	801	26.64	19.39	2.23	842	28.46	20.78	1.97	887	30.37	22.07	1.72	1001	32.64	24.25	1.50	
	57 (13.9)		22.07	21.73	2.54		23.80	23.54	2.22		25.49	25.08	1.97		27.16	26.77	1.74		29.37	29.37	1.53	
	72 (22.2)		29.56	15.35	2.58		31.78	16.57	2.24		33.99	17.69	1.96		36.22	18.85	1.69		38.92	20.56	1.45	
	67 (19.4)		26.77	18.65	2.57		28.80	20.17	2.24		30.80	21.51	1.96		32.83	22.97	1.71		35.29	25.26	1.48	
	63 (17.2)		24.72	21.24	2.56		26.62	23.01	2.23		28.48	24.54	1.97		30.35	26.20	1.72		32.64	28.94	1.50	
80 (26.7)	57 (13.9)	744	23.28	23.28	2.55	25.15	25.15	2.23	26.88	26.88	1.97	28.66	28.66	1.73	31.18	31.18	1.52	1001	32.64	28.94	1.50	
	72 (22.2)		25.50	10.32	2.25	17.80	7.20	1.03	19.19	7.76	0.86	20.61	8.34	0.70	22.05	8.92	0.55					
	67 (19.4)		23.02	13.19	2.25	16.09	9.17	1.06	17.34	9.88	0.90	18.62	10.62	0.74	19.92	11.37	0.60					
	63 (17.2)		21.21	15.43	2.25	14.83	10.71	1.07	15.98	11.55	0.92	17.16	12.41	0.77	18.35	13.29	0.64					
	57 (13.9)		18.95	18.71	2.24	13.20	12.99	1.09	14.23	14.01	0.95	15.29	15.05	0.81	16.35	16.12	0.68					
75 (23.9)	72 (22.2)	662	25.43	13.24	2.25	457	17.75	9.19	1.03	482	19.14	9.91	0.86	508	20.56	10.65	0.70	534	21.99	11.40	0.55	
	67 (19.4)		22.97	16.07	2.25		16.05	11.14	1.06		17.30	12.01	0.90		18.57	12.91	0.74		19.86	13.83	0.60	
	63 (17.2)		21.20	18.29	2.25		14.82	12.68	1.07		15.97	13.68	0.92		17.15	14.70	0.77		18.34	15.74	0.63	
	57 (13.9)		20.00	20.00	2.25		13.83	13.93	1.08		15.01	15.01	0.94		16.13	16.13	0.79		17.26	17.26	0.66	
	72 (22.2)		23.02	13.19	2.25		16.09	9.17	1.06		17.34	9.88	0.90		18.62	10.62	0.74		19.92	11.37	0.60	
80 (26.7)	67 (19.4)	662	21.21	15.43	2.25	457	14.83	10.71	1.07	482	15.98	11.55	0.92	508	17.16	12.41	0.77	534	18.35	13.29	0.64	
	63 (17.2)		18.95	18.71	2.24		13.20	12.99	1.09		14.23	14.01	0.95		15.29	15.05	0.81		16.35	16.12	0.68	
	57 (13.9)		25.43	13.24	2.25		17.75	9.19	1.03		19.14	9.91	0.86		20.56	10.65	0.70		21.99	11.40	0.55	
	72 (22.2)		22.97	16.07	2.25		16.05	11.14	1.06		17.30	12.01	0.90		18.57	12.91	0.74		19.86	13.83	0.60	
	67 (19.4)		21.20	18.29	2.25		14.82	12.68	1.07		15.97	13.68	0.92		17.15	14.70	0.77		18.34	15.74	0.63	
75 (23.9)	63 (17.2)	662	21.20	18.29	2.25	457	14.82	12.68	1.07	482	15.97	13.68	0.92	508	17.15	14.70	0.77	534	18.34	15.74	0.63	
	57 (13.9)		20.00	20.00	2.25		13.83	13.93	1.08		15.01	15.01	0.94		16.13	16.13	0.79		17.26	17.26	0.66	
	72 (22.2)		25.50	10.32	2.25		17.80	7.20	1.03		19.19	7.76	0.86		20.61	8.34	0.70		22.05	8.92	0.55	
	67 (19.4)		23.02	13.19	2.25		16.09	9.17	1.06		17.34	9.88	0.90		18.62	10.62	0.74		19.92	11.37	0.60	
	63 (17.2)		21.21	15.43	2.25		14.83	10.71	1.07		15.98	11.55	0.92		17.16	12.41	0.77		18.35	13.29	0.64	
80 (26.7)	57 (13.9)	662	18.95	18.71	2.24	457	13.20	12.99	1.09	482	14.23	14.01	0.95	508	15.29	15.05	0.81	534	16.35	16.12	0.68	
	72 (22.2)		25.43	13.24	2.25		17.75	9.19	1.03		19.14	9.91	0.86		20.56	10.65	0.70		21.99	11.40	0.55	
	67 (19.4)		22.97	16.07	2.25		16.05	11.14	1.06		17.30	12.01	0.90		18.57	12.91	0.74		19.86	13.83	0.60	
	63 (17.2)		21.20	18.29	2.25		14.82	12.68	1.07		15.97	13.68	0.92		17.15	14.70	0.77		18.34	15.74	0.63	
	57 (13.9)		20.00	20.00	2.25		13.83	13.93	1.08		15.01	15.01	0.94		16.13	16.13	0.79		17.26	17.26	0.66	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 5 – Compressor speed limited to stage four at 65 outdoor; Stage 1 – Compressor speed limited to stage two at 105 outdoor.

See additional notes on page 27

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

EDB °F (°C)	EVAP. AIR		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	
			Total	Sens†			Total	Sens†			Total	Sens†			Total	Sens†			Total	Sens†		Total
<b>75 (23.9)</b>	72 (22.2)		56.98	22.75	6.30		61.18	24.39	5.69		65.39	26.02	5.16		69.54	27.67	4.85		72.77	28.99	4.11	
	67 (19.4)		57.22	39.64	4.45		52.98	29.89	5.92		56.86	32.03	5.32		60.74	34.16	4.81		64.57	36.23	4.32	
	63 (17.2)	<b>1367</b>	50.09	48.04	4.68	<b>1440</b>	52.36	48.62	4.14	<b>1514</b>	50.15	35.79	5.59	<b>1566</b>	53.79	38.31	5.01	<b>1488</b>	57.43	40.86	4.52	
	57 (13.9)		62.88	32.18	5.53		66.96	34.17	4.99		70.04	35.24	4.44		45.89	44.38	5.24		49.20	47.47	4.68	
	72 (22.2)		54.89	37.56	5.71		58.47	40.09	5.17		62.20	42.47	4.65		64.99	43.29	4.12		61.11	31.39	5.46	
<b>80 (26.7)</b>	67 (19.4)		48.26	40.83	5.99		51.80	43.73	5.39		55.34	46.67	4.87		58.85	49.38	4.37		61.43	50.01	3.85	
	63 (17.2)	<b>1367</b>	48.26	40.83	5.99	<b>1440</b>	46.16	46.16	5.69	<b>1514</b>	49.48	49.48	5.10	<b>1566</b>	52.81	52.81	4.60	<b>1488</b>	56.00	56.00	4.11	
	57 (13.9)		45.30	45.30	5.89		48.58	48.58	5.29		51.87	51.87	4.77		54.71	54.71	4.27		57.84	57.84	3.87	
	72 (22.2)		36.31	14.61	3.03		38.82	15.60	2.68		41.60	16.70	2.41		44.40	17.81	2.17		47.48	19.02	1.97	
	67 (19.4)	<b>959</b>	32.79	18.66	3.00	<b>1013</b>	35.12	19.95	2.63		37.63	21.32	2.37		40.17	22.70	2.13		42.96	24.35	1.93	
<b>75 (23.9)</b>	63 (17.2)		30.18	21.81	2.97		32.38	23.34	2.61		34.71	24.92	2.34		37.06	26.53	2.10	<b>1120</b>	39.65	28.52	1.91	
	57 (13.9)		26.75	26.42	2.95		28.76	28.28	2.57		30.84	30.17	2.31		32.95	32.10	2.07		35.30	34.56	1.88	
	72 (22.2)		36.22	18.72	3.03		38.73	19.96	2.68		41.49	21.36	2.41		44.30	22.74	2.17		47.35	24.41	1.97	
	67 (19.4)	<b>959</b>	32.71	22.72	3.00	<b>1013</b>	35.04	24.28	2.63		37.54	25.92	2.37		40.08	27.56	2.13	<b>1120</b>	42.87	29.65	1.93	
	57 (13.9)		28.27	28.27	2.96		30.32	30.32	2.59		32.44	32.44	2.32		34.59	34.59	2.08		37.14	37.14	1.89	
<b>75 (23.9)</b>	72 (22.2)		26.49	10.68	1.96		19.30	7.79	1.08		20.56	8.28	0.94		22.21	8.94	0.78		23.90	9.62	0.61	
	67 (19.4)	<b>748</b>	23.68	13.47	1.96		17.11	9.75	1.07		18.24	10.22	0.93		19.74	11.04	0.79		21.29	11.89	0.63	
	63 (17.2)		21.61	15.64	1.95	<b>600</b>	15.49	11.27	1.06		16.55	11.74	0.93	<b>647</b>	17.93	12.67	0.79	<b>700</b>	19.36	13.65	0.64	
	57 (13.9)		18.94	18.82	1.95		13.48	13.48	1.05		14.35	13.97	0.93		15.59	15.07	0.80		16.85	16.25	0.66	
	72 (22.2)		26.42	13.61	1.96		19.25	9.91	1.08		20.51	10.39	0.94		22.16	11.21	0.78		23.84	12.06	0.61	
<b>80 (26.7)</b>	67 (19.4)	<b>748</b>	23.63	16.38	1.96		17.06	11.86	1.07		18.20	12.32	0.93	<b>647</b>	19.69	13.29	0.79	<b>700</b>	21.24	14.31	0.63	
	63 (17.2)		21.58	18.54	1.95	<b>600</b>	15.48	13.38	1.06		16.52	13.83	0.93		17.91	14.91	0.79		19.34	16.06	0.64	
	57 (13.9)		20.17	20.17	1.95		14.47	14.47	1.05		15.19	15.19	0.93		16.42	16.42	0.80		17.73	17.73	0.65	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
 Stage 5 – Compressor speed limited to stage four at 65 outdoor; Stage 1 – Compressor speed limited to stage two at 105 outdoor.

**EWB** — Entering Wet Bulb

- NOTES:**
- † Total and sensible capacities are net capacities. Blower motor heat has been subtracted.
  - ‡ Sensible capacities are shown for both 80°F (27°C) and 75°F (24°C) entering air at the indoor coil.
  - # For sensible capacities at other than these, deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor air for each degree below reference temperature, or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree above reference temperature.
  - Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240 – 2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.
  - \*\* System kw is total of indoor and outdoor unit kilowatts.
  - NOTE:** When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE

INDOOR AIR		288BNV013 / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)													
		7 (-13.9)					17 (-8.3)					27 (-2.8)			
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†		Total	Integ†	
<b>STAGE 5</b>															
65 (18.3)	420	5.94	5.46	0.75	600	11.17	10.18	1.13	500	12.84	11.40	1.16	12.84	11.40	1.16
70 (21.1)	420	5.82	5.35	0.79	600	11.00	10.03	1.19	500	12.65	11.24	1.23	12.65	11.24	1.23
75 (23.3)	420	5.70	5.24	0.83	600	10.83	9.88	1.26	500	12.46	11.07	1.29	12.46	11.07	1.29
<b>STAGE 3</b>															
65 (18.3)	300	5.45	5.01	0.77	300	6.69	6.10	0.82	420	8.14	7.23	0.74	8.14	7.23	0.74
70 (21.1)	300	5.33	4.90	0.81	300	6.55	5.97	0.86	420	7.98	7.09	0.79	7.98	7.09	0.79
75 (23.3)	300	5.22	4.79	0.86	300	6.41	5.85	0.91	420	7.83	6.95	0.84	7.83	6.95	0.84
<b>STAGE 1</b>															
65 (18.3)	300	5.45	5.01	0.77	300	6.69	6.10	0.81	420	7.65	6.79	0.76	7.65	6.79	0.76
70 (21.1)	300	5.33	4.90	0.81	300	6.55	5.97	0.86	420	7.50	6.66	0.79	7.50	6.66	0.79
75 (23.3)	300	5.22	4.79	0.86	300	6.42	5.85	0.91	420	7.34	6.52	0.84	7.34	6.52	0.84

INDOOR AIR		288BNV013 / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)													
		37 (2.8)					47 (8.3)					57 (13.9)			
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†		Total	Integ†	
<b>STAGE 5</b>															
65 (18.3)	500	14.93	13.59	1.21	500	17.28	17.28	1.28	420	12.56	12.56	0.75	12.56	12.56	0.75
70 (21.1)	500	14.70	13.37	1.28	500	17.00	17.00	1.35	420	12.24	12.24	0.81	12.24	12.24	0.81
75 (23.3)	500	14.46	13.16	1.35	500	16.71	16.71	1.43	420	11.99	11.99	0.87	11.99	11.99	0.87
<b>STAGE 3</b>															
65 (18.3)	420	9.64	8.77	0.76	420	11.21	11.21	0.78	420	12.56	12.56	0.75	12.56	12.56	0.75
70 (21.1)	420	9.45	8.60	0.82	420	10.97	10.97	0.83	420	12.18	12.18	0.81	12.18	12.18	0.81
75 (23.3)	420	9.26	8.43	0.87	420	10.74	10.74	0.89	420	11.85	11.85	0.87	11.85	11.85	0.87
<b>STAGE 1</b>															
65 (18.3)	420	9.11	8.29	0.76	300	6.27	6.27	0.39	300	7.30	7.30	0.38	7.30	7.30	0.38
70 (21.1)	420	8.93	8.13	0.81	300	6.10	6.10	0.43	300	7.07	7.07	0.43	7.07	7.07	0.43
75 (23.3)	420	8.74	7.96	0.87	300	5.93	5.93	0.47	300	6.86	6.86	0.47	6.86	6.86	0.47

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.

See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

INDOOR AIR		288BNV024B / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)						27 (-2.8)					
		7 (-13.9)		17 (-8.3)		27 (-2.8)		7 (-13.9)		17 (-8.3)		27 (-2.8)	
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	
		Total	Integ†			Total	Integ†			Total	Integ†		Total
<b>STAGE 5</b>													
65 (18.3)	450	12.00	11.03	1.37	825	15.76	14.37	1.69	825	18.37	16.31	1.74	
70 (21.1)		11.90	10.93	1.45		15.60	14.22	1.77		18.18	16.15	1.83	
75 (23.3)		11.70	10.75	1.50		15.44	14.07	1.86		17.99	15.98	1.92	
<b>STAGE 3</b>													
65 (18.3)	300	8.37	7.69	0.89	500	10.11	9.21	0.88	500	11.81	10.49	0.90	
70 (21.1)		8.22	7.56	0.94		9.93	9.05	0.93		11.61	10.31	0.96	
75 (23.3)		8.07	7.42	0.98		9.75	8.89	0.99		11.41	10.13	1.01	
<b>STAGE 1</b>													
65 (18.3)	300	8.37	7.69	0.89	500	10.10	9.21	0.88	500	10.55	9.37	0.81	
70 (21.1)		8.22	7.56	0.94		9.93	9.05	0.93		10.36	9.20	0.84	
75 (23.3)		8.07	7.42	0.98		9.75	8.89	0.99		10.17	9.03	0.89	

INDOOR AIR		288BNV024B / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)						57 (13.9)					
		37 (2.8)		47 (8.3)		57 (13.9)		37 (2.8)		47 (8.3)		57 (13.9)	
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	
		Total	Integ†			Total	Integ†			Total	Integ†		Total
<b>STAGE 5</b>													
65 (18.3)	825	21.73	19.77	1.82	825	24.94	24.94	1.89	650	16.71	16.71	1.01	
70 (21.1)		21.46	19.52	1.92		24.60	24.60	1.99		16.37	16.37	1.08	
75 (23.3)		21.18	19.27	2.02		24.26	24.26	2.10		16.03	16.03	1.16	
<b>STAGE 3</b>													
65 (18.3)	650	13.45	12.24	0.95	650	15.09	15.09	0.99	650	16.71	16.71	1.01	
70 (21.1)		13.21	12.02	1.01		14.83	14.83	1.06		16.38	16.38	1.09	
75 (23.3)		12.98	11.81	1.07		14.56	14.56	1.13		16.07	16.07	1.16	
<b>STAGE 1</b>													
65 (18.3)	650	11.91	10.84	0.81	585	7.42	7.42	0.37	585	7.98	7.98	0.37	
70 (21.1)		11.62	10.58	0.87		7.20	7.20	0.42		7.74	7.74	0.42	
75 (23.3)		11.38	10.35	0.93		6.99	6.99	0.46		7.52	7.52	0.47	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

INDOOR AIR		288BNV025 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
65 (18.3)	450	13.73	12.61	1.94	825	20.11	18.34	2.16	825	22.21	19.73	2.08	825	22.21	19.73	2.08
70 (21.1)		13.57	12.47	2.01		19.90	18.14	2.26		21.97	19.52	2.17				
75 (23.3)		13.48	12.39	2.08		19.71	17.97	2.36		21.73	19.30	2.27				
<b>STAGE 5</b>																
65 (18.3)	340	9.32	8.57	1.42	500	11.26	10.27	1.36	500	13.17	11.70	1.22	500	13.17	11.70	1.22
70 (21.1)		9.21	8.46	1.48		11.11	10.13	1.42		12.99	11.54	1.29				
75 (23.3)		9.10	8.38	1.54		10.96	10.00	1.48		12.82	11.39	1.35				
<b>STAGE 3</b>																
65 (18.3)	340	9.32	8.56	1.42	500	11.23	10.24	1.35	500	13.17	11.70	1.22	500	13.17	11.70	1.22
70 (21.1)		9.19	8.45	1.48		11.07	10.10	1.41		12.99	11.54	1.29				
75 (23.3)		9.07	8.34	1.53		10.87	9.91	1.47		12.82	11.39	1.35				
<b>STAGE 1</b>																
65 (18.3)	340	9.32	8.56	1.42	500	11.23	10.24	1.35	500	13.17	11.70	1.22	500	13.17	11.70	1.22
70 (21.1)		9.19	8.45	1.48		11.07	10.10	1.41		12.99	11.54	1.29				
75 (23.3)		9.07	8.34	1.53		10.87	9.91	1.47		12.82	11.39	1.35				

INDOOR AIR		288BNV025 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
65 (18.3)	825	25.00	22.75	2.11	825	27.16	27.16	2.11	825	19.19	19.19	1.28	825	19.19	19.19	1.28
70 (21.1)		24.69	22.46	2.21		26.80	26.80	2.21		19.22	19.22	1.36				
75 (23.3)		24.36	22.17	2.31		26.41	26.41	2.31		18.44	18.44	1.42				
<b>STAGE 5</b>																
65 (18.3)	650	15.11	13.75	1.25	650	17.04	17.04	1.25	650	19.10	19.10	1.27	650	19.10	19.10	1.27
70 (21.1)		14.89	13.55	1.32		16.77	16.77	1.32		18.78	18.78	1.35				
75 (23.3)		14.67	13.35	1.39		16.51	16.51	1.40		18.44	18.44	1.42				
<b>STAGE 3</b>																
65 (18.3)	650	10.20	9.28	0.80	585	7.58	7.58	0.44	585	9.05	9.05	0.42	585	9.05	9.05	0.42
70 (21.1)		9.99	9.09	0.85		7.40	7.40	0.48		8.83	8.83	0.47				
75 (23.3)		9.81	8.93	0.90		7.22	7.22	0.52		8.62	8.62	0.52				
<b>STAGE 1</b>																

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

INDOOR AIR		288BNV036 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	450	16.00	14.70	2.35	1200	23.19	21.15	2.51	1200	26.38	23.43	2.48	1200	26.13	23.21	2.60
70 (21.1)		15.90	14.61	2.44		23.00	20.97	2.61		26.13	23.21	2.60		25.87	22.98	2.71
75 (23.3)		15.75	14.48	2.53		22.80	20.79	2.72		25.87	22.98	2.71				
<b>STAGE 3</b>																
65 (18.3)	360	10.11	9.29	1.52	500	12.21	11.13	1.49	900	14.64	13.01	1.31	900	14.47	12.85	1.38
70 (21.1)		9.99	9.18	1.58		12.06	10.99	1.56		14.47	12.85	1.38		14.29	12.69	1.45
75 (23.3)		9.87	9.07	1.64		11.92	10.86	1.63		14.29	12.69	1.45				
<b>STAGE 1</b>																
65 (18.3)	360	10.10	9.28	1.51	500	12.21	11.14	1.49	900	10.13	9.00	0.92	900	9.98	8.86	0.96
70 (21.1)		9.98	9.17	1.57		12.06	11.00	1.56		9.98	8.86	0.96		9.83	8.73	1.01
75 (23.3)		9.85	9.06	1.64		11.92	10.86	1.63		9.83	8.73	1.01				

INDOOR AIR		288BNV036 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	1200	30.62	27.87	2.60	1200	34.60	34.60	2.69	900	22.12	22.12	1.39	900	21.86	21.86	1.48
70 (21.1)		30.29	27.56	2.72		34.20	34.20	2.82		21.86	21.86	1.48		21.51	21.51	1.57
75 (23.3)		29.94	27.24	2.84		33.79	33.79	2.94		21.51	21.51	1.57				
<b>STAGE 3</b>																
65 (18.3)	900	17.02	15.49	1.35	900	19.45	19.45	1.35	900	22.19	22.19	1.38	900	21.81	21.81	1.47
70 (21.1)		16.79	15.28	1.42		19.17	19.17	1.44		21.81	21.81	1.47		21.45	21.45	1.56
75 (23.3)		16.57	15.06	1.50		18.89	18.89	1.52		21.45	21.45	1.56				
<b>STAGE 1</b>																
65 (18.3)	900	11.92	10.84	0.92	700	7.88	7.88	0.44	700	9.16	9.16	0.42	700	8.95	8.95	0.47
70 (21.1)		11.73	10.68	0.98		7.70	7.70	0.49		8.95	8.95	0.47		8.74	8.74	0.52
75 (23.3)		11.55	10.51	1.04		7.52	7.52	0.53		8.74	8.74	0.52				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

INDOOR AIR		288BNV037 / FE4ANB006L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
		ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt			
EDB ° F (° C)		Total	Integ†		Total	Integ†		Total	Integ†	Total	Integ†					
65 (18.3)	500	15.01	13.79	1.95	1200	30.72	28.01	3.22	1200	34.01	30.20	3.21				
70 (21.1)		14.67	13.48	2.00		30.40	27.72	3.35		33.69	29.92	3.35				
75 (23.3)		14.23	13.08	2.04		30.00	27.36	3.47		33.30	29.58	3.48				
65 (18.3)	450	14.91	13.70	1.98	1200	30.72	28.01	3.22	1200	34.01	30.20	3.21				
70 (21.1)		14.50	13.33	2.02		30.40	27.72	3.35		33.69	29.92	3.35				
75 (23.3)		14.00	12.87	2.05		30.00	27.36	3.47		33.30	29.58	3.48				
65 (18.3)	500	12.11	11.13	1.72	500	14.47	13.20	1.82	900	17.03	15.12	1.63				
70 (21.1)		11.88	10.92	1.78		14.26	13.00	1.89		16.82	14.94	1.71				
75 (23.3)		11.58	10.64	1.83		14.02	12.78	1.96		16.60	14.74	1.80				
65 (18.3)	360	11.82	10.86	1.82	500	14.47	13.20	1.82	900	17.03	15.12	1.63				
70 (21.1)		11.45	10.52	1.85		14.26	13.00	1.89		16.82	14.94	1.71				
75 (23.3)		11.00	10.11	1.86		14.02	12.78	1.96		16.60	14.74	1.80				
65 (18.3)	500	12.11	11.13	1.72	500	14.47	13.19	1.82	900	13.77	12.23	1.51				
70 (21.1)		11.88	10.91	1.78		14.25	12.99	1.89		13.60	12.08	1.55				
75 (23.3)		11.58	10.64	1.83		14.01	12.78	1.96		13.41	11.91	1.63				
65 (18.3)	360	11.83	10.87	1.83	500	14.47	13.19	1.82	900	13.77	12.23	1.51				
70 (21.1)		11.45	10.52	1.85		14.25	12.99	1.89		13.60	12.08	1.55				
75 (23.3)		11.00	10.11	1.86		14.01	12.78	1.96		13.41	11.91	1.63				

INDOOR AIR		288BNV037 / FE4ANB006L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (6.3)					57 (13.9)				
		ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt			
EDB ° F (° C)		Total	Integ†		Total	Integ†		Total	Integ†	Total	Integ†					
65 (18.3)	1200	37.61	34.23	3.24	1200	40.49	40.49	3.21	900	25.27	25.27	1.66				
70 (21.1)		37.20	33.85	3.38		40.00	40.00	3.35		24.90	24.90	1.75				
75 (23.3)		36.77	33.46	3.52		39.49	39.49	3.48		24.49	24.49	1.85				
65 (18.3)	1200	37.61	34.23	3.24	1200	40.49	40.49	3.21	900	25.27	25.27	1.66				
70 (21.1)		37.20	33.85	3.38		40.00	40.00	3.35		24.90	24.90	1.75				
75 (23.3)		36.77	33.46	3.52		39.49	39.49	3.48		24.49	24.49	1.85				
65 (18.3)	900	19.68	17.91	1.65	900	22.48	22.48	1.66	900	25.26	25.26	1.66				
70 (21.1)		19.42	17.67	1.74		22.17	22.17	1.75		24.82	24.82	1.75				
75 (23.3)		19.15	17.43	1.83		21.84	21.84	1.84		24.43	24.43	1.85				
65 (18.3)	900	19.68	17.91	1.65	900	22.48	22.48	1.66	900	25.26	25.26	1.66				
70 (21.1)		19.42	17.67	1.74		22.17	22.17	1.75		24.82	24.82	1.75				
75 (23.3)		19.15	17.43	1.83		21.84	21.84	1.84		24.43	24.43	1.85				
65 (18.3)	700	16.65	15.15	1.51	700	11.61	11.61	0.70	700	14.22	14.22	0.88				
70 (21.1)		16.42	14.94	1.60		11.40	11.40	0.76		13.94	13.94	0.81				
75 (23.3)		16.18	14.73	1.68		11.19	11.19	0.82		13.65	13.65	0.84				
65 (18.3)	700	16.65	15.15	1.51	700	11.61	11.61	0.70	700	14.22	14.22	0.88				
70 (21.1)		16.42	14.94	1.60		11.40	11.40	0.76		13.94	13.94	0.74				
75 (23.3)		16.18	14.73	1.68		11.19	11.19	0.82		13.65	13.65	0.81				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage two at 27 and 37 outdoor.



# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

INDOOR AIR		288BNV048 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	700	22.65	20.82	2.72	1600	35.57	32.43	3.74	1600	40.44	35.92	3.87	1600	40.44	35.92	3.87
70 (21.1)		22.10	20.31	2.77		35.20	32.09	3.88		40.08	35.59	4.02				
75 (23.3)		20.89	19.19	2.73		34.73	31.67	4.00		39.66	35.23	4.17				
<b>STAGE 3</b>																
65 (18.3)	600	17.23	15.83	2.08	700	20.52	18.71	2.19	700	24.10	21.40	2.18	700	24.10	21.40	2.18
70 (21.1)		16.82	15.46	2.13		20.25	18.46	2.29		23.86	21.19	2.29				
75 (23.3)		16.32	15.00	2.17		19.94	18.18	2.37		23.61	20.97	2.40				
<b>STAGE 1</b>																
65 (18.3)	600	17.23	15.83	2.08	700	20.51	18.70	2.19	700	20.26	17.99	1.88	700	20.26	17.99	1.88
70 (21.1)		16.82	15.46	2.13		20.24	18.45	2.28		20.03	17.79	1.97				
75 (23.3)		16.32	15.00	2.17		19.93	18.17	2.37		19.81	17.60	2.07				

INDOOR AIR		288BNV048 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	1600	46.06	41.92	4.02	1600	51.02	51.02	4.13	1600	57.74	35.74	2.39	1600	57.74	35.74	2.39
70 (21.1)		45.63	41.52	4.18		50.50	50.50	4.30		35.29	35.29	2.51				
75 (23.3)		45.16	41.10	4.34		49.96	49.96	4.47		34.80	34.80	2.64				
<b>STAGE 3</b>																
65 (18.3)	1275	27.80	25.30	2.26	1275	31.75	31.75	2.33	1275	35.74	35.74	2.39	1275	35.74	35.74	2.39
70 (21.1)		27.51	25.03	2.37		31.38	31.38	2.45		35.28	35.28	2.51				
75 (23.3)		27.20	24.76	2.49		31.01	31.01	2.58		34.80	34.80	2.64				
<b>STAGE 1</b>																
65 (18.3)	1275	23.56	21.44	1.94	1000	16.14	16.14	0.88	1000	18.69	18.69	0.87	1000	18.69	18.69	0.87
70 (21.1)		23.29	21.19	2.04		15.90	15.90	0.95		18.40	18.40	0.94				
75 (23.3)		23.01	20.94	2.15		15.65	15.65	1.02		18.10	18.10	1.02				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

INDOOR AIR		288BNV060 / FE4ANB006L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
65 (18.3)	840	29.44	27.05	3.99	1800	48.43	44.16	6.49	1600	55.69	49.46	6.61	1600	55.69	49.46	6.61
70 (21.1)		29.47	27.09	4.22		49.06	44.73	7.02		49.84	49.84	7.10				
75 (23.3)		29.57	27.17	4.47		49.80	45.40	7.61		50.28	50.28	7.63				
65 (18.3)	700	20.47	18.81	2.46	900	24.06	21.94	2.99	1275	28.38	25.21	2.32	1275	28.38	25.21	2.32
70 (21.1)		20.30	18.66	2.58		23.86	21.75	2.51		24.94	24.94	2.44				
75 (23.3)		20.25	18.60	2.73		23.67	21.58	2.64		24.68	24.68	2.56				
65 (18.3)	700	20.47	18.81	2.46	900	24.06	21.93	2.99	1275	21.17	18.80	1.57	1275	20.88	18.55	1.56
70 (21.1)		20.31	18.66	2.58		23.85	21.75	2.51		20.60	18.30	1.65				
75 (23.3)		20.27	18.62	2.73		23.66	21.57	2.64		20.60	18.30	1.65				

INDOOR AIR		288BNV060 / FE4ANB006L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
65 (18.3)	1600	64.63	58.81	6.84	1600	73.25	73.25	7.06	1400	43.82	43.82	2.61	1400	43.06	43.06	2.72
70 (21.1)		64.85	59.01	7.31		73.27	73.27	7.50		43.06	43.06	2.72				
75 (23.3)		65.13	59.27	7.81		73.33	73.33	7.98		42.35	42.35	2.83				
65 (18.3)	1275	33.13	30.14	2.42	1275	38.00	38.00	2.52	1400	43.82	43.82	2.61	1400	43.06	43.06	2.72
70 (21.1)		32.71	29.76	2.53		37.45	37.45	2.63		42.35	42.35	2.83				
75 (23.3)		32.29	29.38	2.65		36.91	36.91	2.75		19.39	19.39	0.96				
65 (18.3)	1275	24.69	22.46	1.57	900	16.76	16.76	0.84	900	18.97	18.97	1.06	900	18.56	18.56	1.16
70 (21.1)		24.31	22.12	1.66		16.40	16.40	0.93		18.97	18.97	1.06				
75 (23.3)		23.94	21.78	1.76		16.04	16.04	1.02		18.56	18.56	1.16				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE

INDOOR AIR		288BNV013 / FE4ANF002L Heating Comfort Mode Outdoor Coil Entering Air Temperature ° F (° C)											
		7 (-13.9)		17 (-8.3)		27 (-2.8)		ID SCFM		Total Sys. KWt			
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		ID SCFM	Total Sys. KWt		Capacity MBtuh		Total Sys. KWt
		Total	Integ†	Total	Integ†	Total	Integ†		Total	Integ†			
65 (18.3)	204	5.70	5.23	10.64	9.70	1.38	262	311	12.42	11.03	1.34		
70 (21.1)		5.56	5.13	10.48	9.56	1.44			12.23	10.86		1.41	
75 (23.3)		5.46	5.02	10.32	9.41	1.50			12.04	10.70		1.47	
65 (18.3)	205	5.32	4.88	6.48	5.91	0.91	205	233	7.76	6.89	0.88		
70 (21.1)		5.20	4.78	6.35	5.79	0.95			7.61	6.75		0.93	
75 (23.3)		5.09	4.66	6.21	5.67	1.00			7.45	6.62		0.98	
65 (18.3)	205	5.32	4.88	6.49	5.91	0.91	205	209	7.21	6.40	0.96		
70 (21.1)		5.20	4.78	6.35	5.79	0.95			7.05	6.26		0.95	
75 (23.3)		5.09	4.68	6.22	5.67	1.00			6.90	6.13		1.00	

INDOOR AIR		288BNV013 / FE4ANF002L Heating Comfort Mode Outdoor Coil Entering Air Temperature ° F (° C)											
		37 (2.8)		47 (8.3)		57 (13.9)		ID SCFM		Total Sys. KWt			
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Capacity MBtuh		Capacity MBtuh		ID SCFM	Total Sys. KWt		Capacity MBtuh		Total Sys. KWt
		Total	Integ†	Total	Integ†	Total	Integ†		Total	Integ†			
65 (18.3)	360	14.49	13.18	16.89	16.89	1.38	409	302	12.00	12.00	0.87		
70 (21.1)		14.26	12.98	16.61	16.61	1.45			11.59	11.59		0.92	
75 (23.3)		14.03	12.77	16.33	16.33	1.52			11.35	11.35		0.98	
65 (18.3)	261	9.19	8.37	10.73	10.73	0.90	289	302	12.00	12.00	0.87		
70 (21.1)		9.01	8.20	10.49	10.49	0.95			11.56	11.56		0.92	
75 (23.3)		8.82	8.03	10.25	10.25	1.01			11.31	11.31		0.98	
65 (18.3)	213	8.46	7.70	5.63	5.63	0.53	150	150	6.42	6.42	0.56		
70 (21.1)		8.28	7.53	5.47	5.47	0.57			6.24	6.24		0.60	
75 (23.3)		8.09	7.37	5.30	5.30	0.60			6.06	6.06		0.64	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.

See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

INDOOR AIR		288BNV024B / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)						27 (-2.8)					
		7 (-13.9)		17 (-8.3)		27 (-2.8)		7 (-13.9)		17 (-8.3)		27 (-2.8)	
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	
		Total	Integ†			Total	Integ†			Total	Integ†		Total
<b>STAGE 5</b>													
65 (18.3)	450	12.00	11.03	1.37	825	15.76	14.37	1.69	825	18.37	16.31	1.74	
70 (21.1)		11.90	10.93	1.45		15.60	14.22	1.77		18.18	16.15	1.83	
75 (23.3)		11.70	10.75	1.50		15.44	14.07	1.86		17.99	15.98	1.92	
<b>STAGE 3</b>													
65 (18.3)	300	8.37	7.69	0.89	500	10.11	9.21	0.88	650	11.81	10.49	0.90	
70 (21.1)		8.22	7.56	0.94		9.93	9.05	0.93		11.61	10.31	0.96	
75 (23.3)		8.07	7.42	0.98		9.75	8.89	0.99		11.41	10.13	1.01	
<b>STAGE 1</b>													
65 (18.3)	300	8.37	7.69	0.89	500	10.10	9.21	0.88	650	10.55	9.37	0.81	
70 (21.1)		8.22	7.56	0.94		9.93	9.05	0.93		10.36	9.20	0.84	
75 (23.3)		8.07	7.42	0.98		9.75	8.89	0.99		10.17	9.03	0.89	

INDOOR AIR		288BNV024B / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)						57 (13.9)					
		37 (2.8)		47 (8.3)		57 (13.9)		37 (2.8)		47 (8.3)		57 (13.9)	
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	
		Total	Integ†			Total	Integ†			Total	Integ†		Total
<b>STAGE 5</b>													
65 (18.3)	825	21.73	19.77	1.82	825	24.94	24.94	1.89	650	16.71	16.71	1.01	
70 (21.1)		21.46	19.52	1.92		24.60	24.60	1.99		16.37	16.37	1.08	
75 (23.3)		21.18	19.27	2.02		24.26	24.26	2.10		16.03	16.03	1.16	
<b>STAGE 3</b>													
65 (18.3)	650	13.45	12.24	0.95	650	15.09	15.09	0.99	650	16.71	16.71	1.01	
70 (21.1)		13.21	12.02	1.01		14.83	14.83	1.06		16.38	16.38	1.09	
75 (23.3)		12.98	11.81	1.07		14.56	14.56	1.13		16.07	16.07	1.16	
<b>STAGE 1</b>													
65 (18.3)	650	11.91	10.84	0.81	585	7.42	7.42	0.37	585	7.98	7.98	0.37	
70 (21.1)		11.62	10.58	0.87		7.20	7.20	0.42		7.74	7.74	0.42	
75 (23.3)		11.38	10.35	0.93		6.99	6.99	0.46		7.52	7.52	0.47	

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

INDOOR AIR		288BNV025 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
65 (18.3)	450	13.73	12.61	1.94	825	20.11	18.34	2.16	825	22.21	19.73	2.08	825	21.97	19.52	2.17
70 (21.1)		13.57	12.47	2.01		19.90	18.14	2.26		21.73	19.30	2.27				
75 (23.3)		13.48	12.39	2.08		19.71	17.97	2.36		21.73	19.30	2.27				
65 (18.3)	340	9.32	8.57	1.42	500	11.26	10.27	1.36	500	13.17	11.70	1.22	500	12.99	11.54	1.29
70 (21.1)		9.21	8.46	1.48		11.11	10.13	1.42		12.82	11.39	1.35				
75 (23.3)		9.10	8.38	1.54		10.96	10.00	1.48		12.82	11.39	1.35				
65 (18.3)	340	9.32	8.56	1.42	500	11.23	10.24	1.35	500	13.17	11.70	1.22	500	12.99	11.54	1.29
70 (21.1)		9.19	8.45	1.48		11.07	10.10	1.41		12.82	11.39	1.35				
75 (23.3)		9.07	8.34	1.53		10.87	9.91	1.47		12.82	11.39	1.35				

INDOOR AIR		288BNV025 / FE4ANF005 Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
65 (18.3)	825	25.00	22.75	2.11	825	27.16	27.16	2.11	650	19.19	19.19	1.28	650	19.22	19.22	1.36
70 (21.1)		24.69	22.46	2.21		26.80	26.80	2.21		18.44	18.44	1.42				
75 (23.3)		24.36	22.17	2.31		26.41	26.41	2.31		18.44	18.44	1.42				
65 (18.3)	650	15.11	13.75	1.25	650	17.04	17.04	1.25	650	19.10	19.10	1.27	650	18.78	18.78	1.35
70 (21.1)		14.89	13.55	1.32		16.77	16.77	1.32		18.44	18.44	1.42				
75 (23.3)		14.67	13.35	1.39		16.51	16.51	1.40		18.44	18.44	1.42				
65 (18.3)	650	10.20	9.28	0.80	585	7.58	7.58	0.44	585	9.05	9.05	0.42	585	8.83	8.83	0.47
70 (21.1)		9.99	9.09	0.85		7.40	7.40	0.48		8.62	8.62	0.52				
75 (23.3)		9.81	8.93	0.90		7.22	7.22	0.52		8.62	8.62	0.52				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

INDOOR AIR		288BNV036 / FE4ANF005 Heating Comfort Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	434	16.04	14.74	2.38	595	22.29	20.33	2.79	735	25.50	22.65	2.67	735	25.50	22.65	2.67
70 (21.1)		15.86	14.57	2.46		22.09	20.14	2.90		25.24	22.42	2.79		25.24	22.42	2.79
75 (23.3)		15.74	14.46	2.56		21.88	19.95	3.01		24.99	22.20	2.90		24.99	22.20	2.90
<b>STAGE 3</b>																
65 (18.3)	277	9.92	9.11	1.64	325	11.82	10.78	1.69	425	13.89	12.34	1.55	425	13.89	12.34	1.55
70 (21.1)		9.80	9.01	1.70		11.68	10.65	1.76		13.71	12.18	1.62		13.71	12.18	1.62
75 (23.3)		9.69	8.90	1.76		11.53	10.52	1.83		13.54	12.02	1.69		13.54	12.02	1.69
<b>STAGE 1 - FE4ANF005 ONLY</b>																
65 (18.3)	277	9.90	9.10	1.63	277	11.61	10.59	1.79	341	9.37	8.32	1.09	341	9.37	8.32	1.09
70 (21.1)		9.78	8.99	1.69		11.46	10.45	1.85		9.22	8.19	1.14		9.22	8.19	1.14
75 (23.3)		9.66	8.88	1.75		11.32	10.32	1.92		9.06	8.05	1.20		9.06	8.05	1.20
<b>STAGE 1 - ALL OTHER INDOOR COILS</b>																
65 (18.3)	277	9.90	9.10	1.63	277	11.61	10.59	1.79	341	9.37	8.32	1.09	341	9.37	8.32	1.09
70 (21.1)		9.78	8.99	1.69		11.46	10.45	1.85		9.22	8.19	1.14		9.22	8.19	1.14
75 (23.3)		9.66	8.88	1.75		11.32	10.32	1.92		9.06	8.05	1.20		9.06	8.05	1.20

INDOOR AIR		288BNV036 / FE4ANF005 Heating Comfort Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	874	29.79	27.11	2.72	1014	34.01	34.01	2.75	736	21.71	21.71	1.46	736	21.71	21.71	1.46
70 (21.1)		29.45	26.80	2.84		33.62	33.62	2.88		21.29	21.29	1.55		21.29	21.29	1.55
75 (23.3)		29.09	26.48	2.96		33.20	33.20	3.01		20.98	20.98	1.64		20.98	20.98	1.64
<b>STAGE 3</b>																
65 (18.3)	526	16.28	14.82	1.53	626	18.77	18.77	1.49	737	21.39	21.39	1.46	737	21.39	21.39	1.46
70 (21.1)		16.06	14.61	1.61		18.51	18.51	1.57		21.31	21.31	1.55		21.31	21.31	1.55
75 (23.3)		15.84	14.41	1.69		18.23	18.23	1.65		20.96	20.96	1.64		20.96	20.96	1.64
<b>STAGE 1 - FE4ANF005 ONLY</b>																
65 (18.3)	406	11.08	10.08	1.09	250	6.91	6.91	0.64	250	7.92	7.92	0.67	250	7.92	7.92	0.67
70 (21.1)		10.89	9.91	1.15		6.75	6.75	0.68		7.73	7.73	0.71		7.73	7.73	0.71
75 (23.3)		10.70	9.74	1.21		6.58	6.58	0.72		7.55	7.55	0.76		7.55	7.55	0.76
<b>STAGE 1 - ALL OTHER INDOOR COILS</b>																
65 (18.3)	406	11.09	10.09	1.09	199	6.61	6.61	0.72	217	7.68	7.68	0.73	217	7.68	7.68	0.73
70 (21.1)		10.89	9.91	1.15		6.46	6.46	0.76		7.50	7.50	0.77		7.50	7.50	0.77
75 (23.3)		10.70	9.74	1.21		6.31	6.31	0.80		7.31	7.31	0.82		7.31	7.31	0.82

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage

**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.

See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

INDOOR AIR		288BNV037 / FE4ANB006L Heating Comfort Mode Outdoor Coil Entering Air Temperature °F (°C)											
		7 (-13.9)					17 (-8.3)						
		ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		
EDB °F (°C)	500	Total	Integ†	1.95	595	Total	Integ†	3.54	735	Total	Integ†	3.54	
		15.03	13.81			29.43	26.83			33.56	29.80		
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 5 - FE4ANB006L ONLY</b>										
			14.68	13.49	2.00	26.20	3.60	33.03	29.34	3.65			
			14.23	13.08	2.04	27.40	24.98	32.53	28.89	3.75			
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 5 - OTHER COILS</b>										
			14.85	13.64	1.99	29.43	26.83	33.56	29.80	3.54			
			14.41	13.25	2.03	26.20	3.60	33.03	29.34	3.65			
			13.90	12.78	2.05	27.40	24.98	32.53	28.89	3.75			
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 3 - FE4ANB006L ONLY</b>										
			12.11	11.13	1.72	14.47	13.20	16.81	14.93	1.86			
			11.88	10.91	1.76	14.26	13.00	16.58	14.73	1.94			
			11.58	10.64	1.83	14.01	12.78	16.33	14.51	2.02			
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 3 - OTHER COILS</b>										
			11.00	10.11	1.82	14.13	12.88	16.74	14.87	1.97			
			10.46	9.61	1.81	13.78	12.56	16.49	14.65	2.05			
			10.14	9.32	1.84	13.37	12.19	16.22	14.40	2.12			
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 1 - FE4ANB006L ONLY</b>										
			12.11	11.13	1.72	14.47	13.19	16.81	14.87	1.86			
			11.88	10.91	1.76	14.26	13.00	16.58	14.73	1.94			
			11.58	10.64	1.83	14.01	12.78	16.33	14.51	2.02			
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 1 - ALL OTHER INDOOR COILS</b>										
			11.00	10.11	1.82	13.71	12.50	16.42	14.87	1.92			
			10.47	9.62	1.81	13.27	12.09	16.19	14.65	2.05			
			10.14	9.32	1.84	12.79	11.66	16.05	14.40	2.12			

INDOOR AIR		288BNV037 / FE4ANB006L Heating Comfort Mode Outdoor Coil Entering Air Temperature °F (°C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
		ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt			
EDB °F (°C)	875	Total	Integ†	3.48	1014	Total	Integ†	3.60	737	Total	Integ†	3.60				
		37.18	33.84			40.10	40.10			24.96	24.96					
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 5 - FE4ANB006L ONLY</b>													
			36.72	33.41	3.61	39.59	3.47	47.86	3.86	24.55	24.55	1.86				
			36.23	32.97	3.73	39.05	3.60	47.37	3.79	24.14	24.14	1.95				
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 5 - OTHER COILS</b>													
			37.18	33.84	3.48	40.10	3.84	47.86	3.86	24.96	24.96	1.77				
			36.72	33.41	3.61	39.59	3.47	47.37	3.79	24.55	24.55	1.86				
			36.23	32.97	3.73	39.05	3.60	47.37	3.79	24.14	24.14	1.95				
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 3 - FE4ANB006L ONLY</b>													
			19.31	17.58	1.91	22.06	1.84	24.96	2.02	24.96	24.96	1.77				
			19.04	17.32	1.99	21.73	1.93	24.55	2.02	24.55	24.55	1.86				
			18.75	17.07	2.08	21.39	2.02	24.14	2.02	24.14	24.14	1.95				
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 3 - OTHER COILS</b>													
			19.31	17.58	1.91	22.06	1.84	24.96	2.02	24.96	24.96	1.77				
			19.04	17.32	1.99	21.73	1.93	24.55	2.02	24.55	24.55	1.86				
			18.75	17.07	2.08	21.39	2.02	24.14	2.02	24.14	24.14	1.95				
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 1 - FE4ANB006L ONLY</b>													
			16.30	14.84	1.76	11.40	0.77	13.86	0.77	13.86	13.86	0.77				
			16.06	14.62	1.84	11.19	0.83	13.45	0.83	13.45	13.45	0.83				
			15.81	14.39	1.92	10.97	0.89	13.18	0.89	13.18	13.18	0.89				
65 (18.3)	70 (21.1)	75 (23.3)	<b>STAGE 1 - OTHER COILS</b>													
			16.15	14.70	1.92	10.53	1.24	12.45	1.24	12.45	12.45	1.23				
			15.90	14.47	1.99	10.31	1.28	12.27	1.28	12.27	12.27	1.28				
			15.64	14.24	2.07	10.08	1.33	11.98	1.33	11.98	11.98	1.33				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** - Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** - Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.

See additional notes on page 41

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

INDOOR AIR		288BNV048 / FEANF005 Heating Comfort Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)		22.44	20.62	2.78		34.33	31.30	3.70		39.97	35.50	3.80		40.36	35.85	4.06
70 (21.1)	600	20.06	18.43	2.60	934	33.36	30.42	3.99		39.62	35.19	4.44				
75 (23.3)		20.34	18.69	2.57		32.54	29.67	3.83								
<b>STAGE 3</b>																
65 (18.3)		16.76	15.40	2.15		20.49	18.68	2.24		23.71	21.06	2.29				
70 (21.1)	450	15.82	14.54	2.03	633	20.28	18.49	2.36		23.55	20.92	2.43				
75 (23.3)		15.13	13.91	2.12		19.73	17.99	2.41		23.38	20.76	2.56				
<b>STAGE 1</b>																
65 (18.3)		16.80	15.44	2.16		20.44	18.64	2.30		19.82	17.80	1.98				
70 (21.1)	450	16.51	15.17	2.43	569	20.20	18.42	2.41		20.00	17.77	1.98				
75 (23.3)		13.93	12.80	2.31		18.49	16.86	2.70		19.83	17.61	2.09				

INDOOR AIR		288BNV048 / FEANF005 Heating Comfort Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)		45.25	41.18	4.09		50.80	50.80	4.12		55.14	35.14	2.47		34.47	34.47	2.34
70 (21.1)	1344	45.69	41.58	4.37	1550	51.38	51.38	4.42		34.72	34.72	2.52				
75 (23.3)		46.09	41.94	4.66		51.92	51.92	4.74								
<b>STAGE 3</b>																
65 (18.3)		27.37	24.91	2.37		31.23	31.23	2.43		35.14	35.14	2.47				
70 (21.1)	814	27.16	24.72	2.51	905	30.96	30.96	2.58		34.84	34.84	2.62				
75 (23.3)		26.96	24.54	2.66		30.69	30.69	2.73		34.50	34.50	2.78				
<b>STAGE 1</b>																
65 (18.3)		23.02	20.95	2.06		15.27	15.27	1.19		17.49	17.49	1.15				
70 (21.1)	680	22.56	20.53	2.16	350	14.75	14.75	1.17		16.87	16.87	1.22				
75 (23.3)		22.78	20.73	2.16		14.36	14.36	1.23		16.27	16.27	1.20				

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41



# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

INDOOR AIR		288BNV060 / FE4ANB006L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		7 (-13.9)					17 (-8.3)					27 (-2.8)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)		29.44	27.05	3.99		48.43	44.16	6.49		55.69	49.46	6.61		56.12	49.84	7.10
70 (21.1)	840	29.47	27.09	4.22	1600	49.06	44.73	7.02	1600	49.80	45.40	7.61	1600	56.61	50.28	7.63
75 (23.3)		29.57	27.17	4.47		49.80	45.40	7.61		56.61	50.28	7.63		56.61	50.28	7.63
<b>STAGE 3</b>																
65 (18.3)		20.47	18.81	2.46		24.06	21.94	2.99		28.38	25.21	2.32		28.08	24.94	2.44
70 (21.1)	700	20.30	18.66	2.58	900	23.86	21.75	2.51	1275	26.08	24.94	2.44	1275	27.78	24.68	2.56
75 (23.3)		20.25	18.60	2.73		23.67	21.58	2.64		27.78	24.68	2.56		27.78	24.68	2.56
<b>STAGE 1</b>																
65 (18.3)		20.47	18.81	2.46		24.06	21.93	2.99		21.17	18.80	1.57		20.88	18.55	1.56
70 (21.1)	700	20.31	18.66	2.58	900	23.85	21.75	2.51	1275	20.88	18.55	1.56	1275	20.60	18.30	1.65
75 (23.3)		20.27	18.62	2.73		23.66	21.57	2.64		20.60	18.30	1.65		20.60	18.30	1.65

INDOOR AIR		288BNV060 / FE4ANB006L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)														
		37 (2.8)					47 (8.3)					57 (13.9)				
EDB ° F (° C)	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)		64.63	58.81	6.84		73.25	73.25	7.06		43.82	43.82	2.61		43.06	43.06	2.72
70 (21.1)	1600	64.85	59.01	7.31	1600	73.27	73.27	7.50	1400	43.06	43.06	2.72	1400	42.35	42.35	2.83
75 (23.3)		65.13	59.27	7.81		73.33	73.33	7.98		42.35	42.35	2.83		42.35	42.35	2.83
<b>STAGE 3</b>																
65 (18.3)		33.13	30.14	2.42		38.00	38.00	2.52		43.82	43.82	2.61		43.06	43.06	2.72
70 (21.1)	1275	32.71	29.76	2.53	1275	37.45	37.45	2.63	1400	43.06	43.06	2.72	1400	42.35	42.35	2.83
75 (23.3)		32.29	29.38	2.65		36.91	36.91	2.75		42.35	42.35	2.83		42.35	42.35	2.83
<b>STAGE 1</b>																
65 (18.3)		24.69	22.46	1.57		16.76	16.76	0.84		19.39	19.39	0.96		18.97	18.97	1.06
70 (21.1)	1275	24.31	22.12	1.66	900	16.40	16.40	0.93	900	18.97	18.97	1.06	900	18.56	18.56	1.16
75 (23.3)		23.94	21.78	1.76		16.04	16.04	1.02		18.56	18.56	1.16		18.56	18.56	1.16

Operation in this area is restricted to maintain reliable system operation and customer comfort. The system will default to the next available stage  
**Stage 5** – Compressor speed limited to stage four at 7 and stage three at 57 outdoor; **Stage 1** – Compressor speed limited to stage three at 7 and 17 and to stage two at 27 and 37 outdoor.  
 See additional notes on page 41

**NOTES:**

- \* Tested combination.
  - † The kW values include the compressor, outdoor fan motor, and indoor blower motor. The kW from supplement heaters should be added to these values to obtain total system kilowatts.
  - ‡ The Btuh heating capacity values shown are net integrated values from which the defrost effect has been subtracted. The Btuh heating from supplement heaters should be added to those values to obtain total system capacity.
- NOTE:** When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.
- EDB — Entering Dry Bulb

**GENERAL****System Description**

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, forward-swept blade propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

**Quality Assurance**

- Unit will be rated in accordance with the latest edition of AHRI Standard 240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have C-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils are pressure tested and the outdoor units are leak tested.
- Unit constructed in ISO9001 approved facility.

**Delivery, Storage, and Handling**

- Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

**Warranty (for inclusion by specifying engineer)**

- U.S. and Canada only.

**PRODUCTS****Equipment**

- Factory-assembled, single-piece, air-cooled heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge Puron® (R-410A) refrigerant, and special features required prior to field start-up.

**Unit Cabinet**

- Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

**Fans**

- Condenser fan will be direct-drive propeller type, forward swept blade, discharging air upward.

- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated.
- Shafts will be corrosion resistant.
- Fan blades will be statically and dynamically balanced.
- Condenser fan openings will be equipped with coated steel wire safety guards.

**Compressor**

- Compressor will be hermetically sealed.
- Compressor will be mounted on rubber vibration isolators.
- Compressor will be covered with a sound absorbing blanket.

**Condenser Coil**

- Condenser coil will be air cooled.
- Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

**Refrigeration Components**

- Refrigeration circuit components will include liquid-line front-seating shutoff valve with sweat connections, vapor-line front-seating shutoff valve with sweat connections, system charge of Puron® (R-410A) refrigerant, POE compressor oil, accumulator, charge compensator, electronic expansion valve, and reversing valve.
- Unit will be equipped with high-pressure switch, suction pressure transducer, and filter drier for Puron® refrigerant.

**Operating Characteristics**

- The capacity of the unit will meet or exceed \_\_\_\_\_ Btuh at a suction temperature of \_\_\_\_\_ °F (°C). The power consumption at full load will not exceed \_\_\_\_\_ kW.
- Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of \_\_\_\_\_ Btuh or greater at conditions of \_\_\_\_\_ CFM entering air temperature at the evaporator at \_\_\_\_\_ °F (°C) wet bulb and \_\_\_\_\_ °F (°C) dry bulb, and air entering the unit at \_\_\_\_\_ °F (°C).
- The system will have a SEER of \_\_\_\_\_ Btuh/watt or greater at DOE conditions.

**Electrical Requirements**

- Nominal unit electrical characteristics will be \_\_\_\_\_ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of \_\_\_\_\_ v to \_\_\_\_\_ v.
- Unit electrical power will be single point connection.
- Control circuit will be 24v.
- Compliant with IEC 61000-4-5 Transient Surge Requirement.

**Special Features**

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.
- Evolution® Connex™ control with appropriate software version is required for full featured operation.

## SYSTEM DESIGN SUMMARY

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. This product is not qualified for low ambient cooling operation.  
Minimum cooling outdoor operating temperatures:
  - Communicating systems: 40°F (4.44°C)
  - Non-communicating systems: 55°F (12.8°C)
3. The maximum outdoor operating ambient in cooling mode is 115°F (46.11°C).
4. Minimum outdoor operating air temperature for heating mode is 10°F (-12.2°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. This unit is qualified for up to 100 ft (30.5 m) equivalent length of line set without additional accessories.
8. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Do not apply capillary tube indoor coils to these units.
11. Puron refrigerant TXV required on indoor coil.

