



## 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 18 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 18 SEER /12.5 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.

#### Reliability

- Puron® refrigerant - environmentally sound, won't deplete the ozone layer and low lifetime service cost.
- 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).



ISO 9001  
QMI-SAI Global



## STANDARD FEATURES

FEATURES	Unit Size – Voltage, Series				
	024A–A 024B–A	025–A	036–A	048–A	060–A
Puron Refrigerant	X	X	X	X	X
Variable Speed Rotary Compressor	X	X	X	X	X
Air–Cooled Integrated Inverter Drive	X	X	X	X	X
Louvered Coil Guard	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X
Internal Pressure and Temperature Protection	X	X	X	X	X
Suction Pressure Transducer	X	X	X	X	X
High Pressure Switch	X	X	X	X	X
Internal Crankcase Heater	X	X	X	X	X
Utility Interface Connections	X	X	X	X	X
Enhanced Diagnostics with Evolution® Connex™ Control with version 11 software or newer	X	X	X	X	X
Deluxe Sound Blanket	X	X	X	X	X
Outdoor Air Temperature Sensor	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)
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.)	288BNV Cooling Capacity Loss (%)				
		Total Equivalent Line Length (ft)				
		25	50	75	80	100
24B-A	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>
24A-A 25-A	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	0.1	0.4	0.6	0.7	0.8
36-A	<b>7/8</b>	0.0	0.1	0.3	0.3	0.4
	5/8	1.1	2.4	3.7	4.0	5.0
	3/4	0.3	0.8	1.3	1.4	1.8
48-A	<b>7/8</b>	0.0	0.3	0.5	0.6	0.8
	3/4	0.7	1.6	2.4	2.6	3.2
	7/8	0.3	0.7	1.1	1.2	1.6
60-A	<b>1 1/8</b>	0.0	0.1	0.2	0.3	0.4
	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*
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 airflows can be adjusted from these numbers in the Evolution® Connex™ Control Heat Pump Setup screen.

Cooling – Comfort Mode			Minimum Cooling (Dehum or Zoning)
Size	Max Capacity Airflow	Highest Min Capacity Airflow	
2–Ton	739	263	222
3–Ton	990	289	236
4–Ton	1389	542	457
5–Ton	1600	700	600

Cooling – Efficiency Mode		
Size	Max Capacity Airflow	Highest Min Capacity Airflow
2–Ton	825	585
3–Ton	1050	600
4–Ton	1400	875
5–Ton	1800	975

Heating – Comfort Mode		
Size	Max Capacity Airflow	Highest Min Capacity Airflow
2–Ton	819	270
3–Ton	1014	226
4–Ton	1550	429
5–Ton	1600	500

Heating – Efficiency Mode		
Size	Max Capacity Airflow	Highest Min Capacity Airflow
2–Ton	825	585
3–Ton	1200	700
4–Ton	1600	1000
5–Ton	1600	900

### 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	024B-A	024A-A	025-A	036-A	048-A	060-A
Operating Weight lb (kg)	139 (63.0)	164 (74.4)	164 (74.4)	164 (74.4)	218 (99)	245 (111)
Shipping Weight lb (kg)	162 (73.5)	190 (86)	190 (86)	190 (86)	257 (117)	286 (130)
Compressor Type	Variable Speed Rotary					
REFRIGERANT	Puron® (R-410A)					
Control	TXV (Puron® Hard Shutoff)					
Charge lb (kg)	5.40 (2.45)	6.38 (2.89)	6.38 (2.89)	6.38 (2.89)	8.30 (3.76)	8.60 (3.90)
Outdoor Htg Exp. Device	EXV					
COND FAN	Forward Swept Propeller Type, Direct Drive					
Air Discharge	Vertical	Vertical	Vertical			Vertical
Air Qty (CFM)	2080	2500	2500	2500	4500	4500
Motor HP	1/5	1/3	1/3	1/3	1/3	1/3
Motor RPM	825	1050	1050	1050	850	900
COND COIL						
Face Area (Sq ft)	11.12	13.90	13.90	13.90	21.50	23.65
Fins per In.	20	20	20	20	20	20
Rows	1	1	1	1	1	1
Circuits	5	6	6	6	8	8
VALVE CONNECT. (In. ID)						
Vapor	5/8	3/4	3/4	3/4	7/8	7/8
Liquid	3/8					
REFRIGERANT TUBES (In. OD)						
Rated Vapor*	3/4	7/8	7/8	7/8	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		
024B-A	208-230-1	253	197	N/A	10.32	0.58	13.5	20
024A-A				N/A	17.70	1.20	23.6	40
025-A				N/A	17.70	1.20	23.6	40
036-A				N/A	18.30	1.20	24.4	40
048-A				N/A	23.90	1.20	31.4	50
060-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	
024-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
025-A	
036-A	
048-A	
060-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
024B – A	Freq (Hz)	1500 RPM	4700 RPM	5400 RPM
	125	40.5	44.0	45.5
	250	45.5	49.5	53.5
	500	41.5	53.0	56.0
	1000	44.0	52.5	54.0
	2000	39.0	50.5	53.0
	4000	34.5	53.0	56.5
	8000	31.0	45.0	45.5
	Sound Rating (dBA)	55	67	68
024A – A	Freq (Hz)	1200 RPM	3300 RPM	4800 RPM
	125	43.0	53.0	51.5
	250	47.0	59.5	61.5
	500	51.0	62.5	62.5
	1000	49.5	63.5	63.5
	2000	42.5	63.0	61.5
	4000	35.5	63.5	62.0
	8000	46.0	54.0	54.5
	Sound Rating (dBA)	55	72	71
025 – A	Freq (Hz)	1200 RPM	3300 RPM	4800 RPM
	125	43.0	52.0	52.5
	250	47.0	59.5	59.0
	500	51.0	64.5	61.5
	1000	49.5	63.0	62.0
	2000	42.5	60.0	60.0
	4000	35.5	59.5	64.0
	8000	46.0	50.5	54.5
	Sound Rating (dBA)	55	69	71
036 – A	Freq (Hz)	1200 RPM	4800 RPM	5400 RPM
	125	43.0	53.0	51.5
	250	47.0	59.5	61.5
	500	51.0	62.5	62.5
	1000	49.5	63.5	63.5
	2000	42.5	63.0	61.5
	4000	35.5	63.5	62.0
	8000	46.0	54.0	54.5
	Sound Rating (dBA)	55	72	71
048 – A	Freq (Hz)	1500 RPM	4320 RPM	5400 RPM
	125	49.5	59.0	52.5
	250	54.5	64.0	60.0
	500	54.0	66.0	63.5
	1000	54.5	64.5	64.0
	2000	52.0	63.5	63.0
	4000	54.5	63.5	65.5
	8000	46.5	53.0	59.0
	Sound Rating (dBA)	64	72	73
060 – A	Freq (Hz)	1200 RPM	4140 RPM	5400 RPM
	125	39	49.5	46
	250	48	59.5	59
	500	46.5	62	60
	1000	45.5	60	57
	2000	39.5	58.5	56.5
	4000	36.5	55	56.5
	8000	35.5	48	54.5
	Sound Rating (dBA)	57	72	71

NOTE: Tested in compliance with AHRI 270–2008 but not listed with AHRI.

# RPM-CAPACITY-SOUND (dBA)\*

STAGE #	COMP RPM	CAPACITY %	SOUND (dBA)
<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>288BNV024A</b>			
<b>COOLING</b>			
1	1200	38%	55
2	1900	58%	61
3	2400	73%	64
4	2600	79%	68
5	3300	100%	72
<b>HEATING</b>			
1	1200	25%	55
2	2400	50%	60
3	3300	69%	62
4	4200	88%	68
5	4800	100%	71
<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>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>SYSTXBECN01-A</b>	Evolution Connex Control (non-Wi-Fi) version 11 or newer
<b>SYSTXBEC01-A</b>	Evolution Connex Control (Wi-Fi)
<b>SYSTXBECW01-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

## 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	24B-A	24A-A 25-A	36-A	48-A	60-A
<b>HK70EZ015</b>	MODEL PLUG FOR FV4(A,B), FK, 40FK	X				
<b>HK70EZ016</b>	MODEL PLUG FOR FV4(A,B), FK, 40FK		X			
<b>HK70EZ017</b>	MODEL PLUG FOR FV4(A,B), FK, 40FK			X		
<b>HK70EZ018</b>	MODEL PLUG FOR FV4(A,B), FK, 40FK				X	
<b>HK70EZ019</b>	MODEL PLUG FOR FV4(A,B), FK, 40FK					X
<b>KHASS0606MPK</b>	SNOW STAND KIT					X
<b>KSASF0101AAA</b>	SPRT FEET KIT				X	X
<b>KSASF0201AAA</b>	SPRT FEET KIT	X	X	X		
<b>KSATX0201PUR</b>	TXV KIT	X	X			
<b>KSATX0301PUR</b>	TXV KIT			X		
<b>KSATX0401PUR</b>	TXV KIT				X	
<b>KSATX0501PUR</b>	TXV KIT					X
<b>KSBTX0201PUR</b>	TXV KIT		X			
<b>KSBTX0301PUR</b>	TXV KIT			X		
<b>KSBTX0401PUR</b>	TXV KIT				X	
<b>LM10KK003</b>	VAPOR LINE MUFFLER	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.

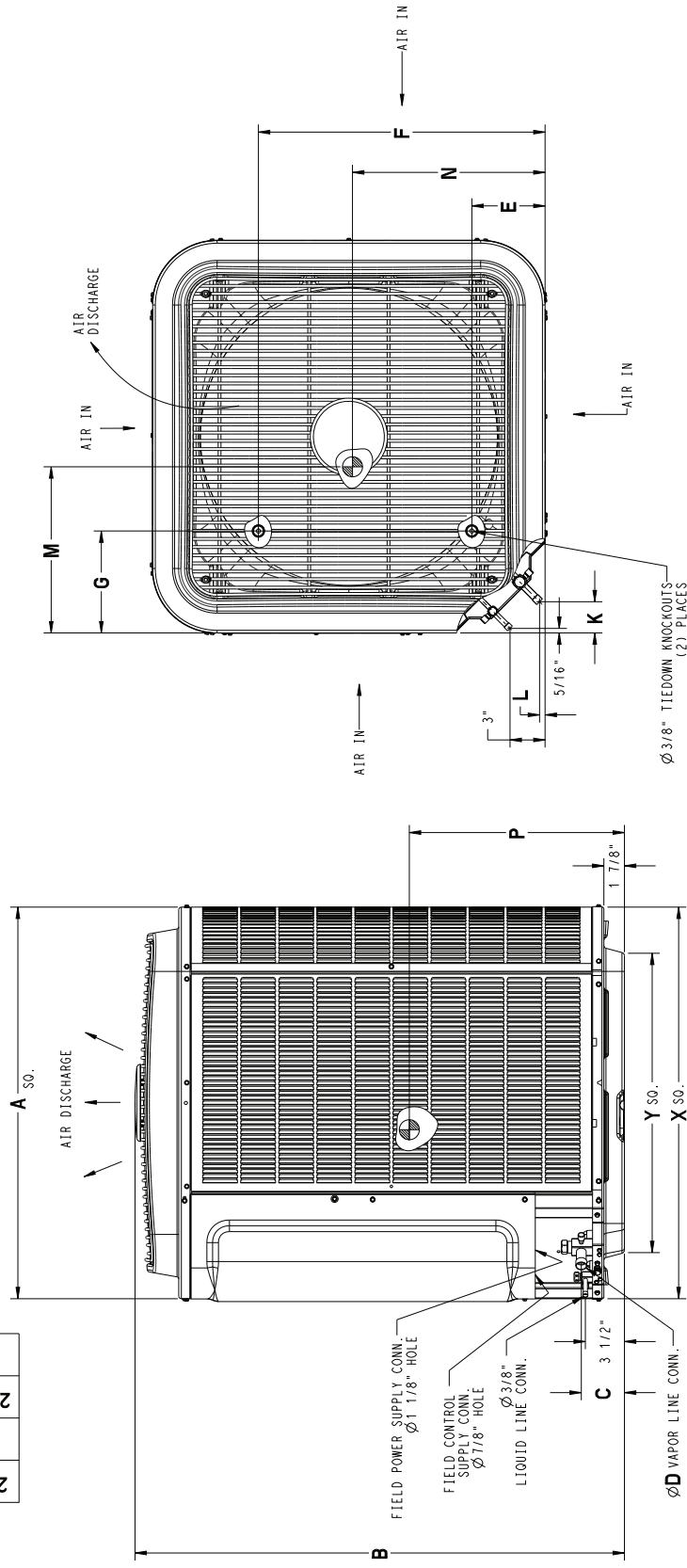


# DIMENSIONS - ENGLISH

UNIT	SERIES	ELECTRICAL CHARACTERISTICS		A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (lbs)	SHIPPING WEIGHT (lbs)	SHIPPING DIMENSIONS (L x W x H)
28880240	A	X	0	0	23 1/8"	38 1/2"	3 3/4"	3/4"	4 7/16"	7 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	164	190	25 1/4" X 25 1/4" X 43 3/8"
28880248	A	X	0	0	23 1/8"	31 13/16"	3 3/4"	3/4"	4 7/16"	7 13/16"	2 13/16"	1/2"	11 1/4"	11 1/4"	14 1/2"	139	162	25 1/4" X 25 1/4" X 35 5/8"
28880250	A	X	0	0	23 1/8"	38 1/2"	3 3/4"	3/4"	4 7/16"	7 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	164	190	25 1/4" X 25 1/4" X 43 3/8"
28880360	A	X	0	0	23 1/8"	38 1/2"	3 3/4"	3/4"	4 7/16"	7 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	164	190	25 1/4" X 25 1/4" X 43 3/8"
28880480	A	X	0	0	31 3/16"	38 15/16"	3 7/8"	7/8"	6 9/16"	9 1/8"	2 15/16"	5/8"	14 1/2"	14 5/8"	18 3/4"	218	257	33 3/8" X 33 3/8" X 46 1/8"
28880600	A	X	0	0	31 3/16"	42 5/16"	3 7/8"	7/8"	6 9/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	15"	20"	245	286	33 3/8" X 33 3/8" X 49 9/16"

X = YES  
0 = NO

460-3-60	208/230-3-60	230-160	208/230-160
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UNIT SIZE	X* MIN GROUND MOUNTING PAD APPLICATION DIMENSIONS	Y* MIN ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS
24, 25, 36	23 1/8"	17 3/4"
48, 60	25 3/4"	20 7/16"
	31 3/16"	23"
	35"	26 3/4"

When installing, allow sufficient space for airflow clearance, wiring, refrigerant piping, and service. Allow 24 in. (609.6 mm) clearance to service end of unit and 48 in. (1219.2 mm) (above unit. For proper airflow, a 6-in. (152.4 mm) clearance on 1 side of unit and 12-in. (304.8 mm) on all remaining sides must be maintained. Maintain a distance of 24 in. (609.6 mm) between units or 18 in. (457.2 mm) if no overhang within 12 ft. (3.66 m) Position so water, snow, or ice from roof or eaves cannot fall directly on unit.

**NOTE:** 18" (457.2 mm) clearance option described above is approved for outdoor units with wire grille coil guard only. Units with lower panels require 24" (609.6 mm) between units.

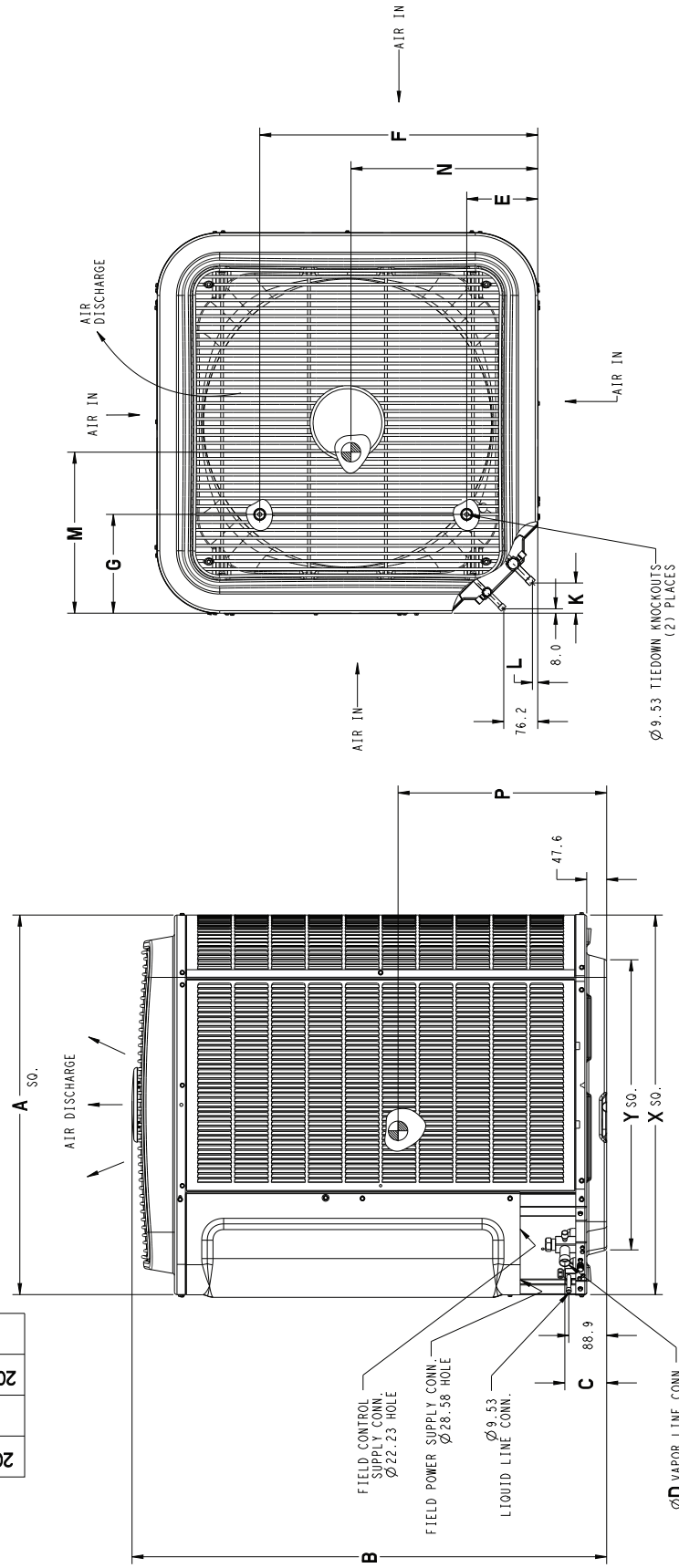
On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.

# DIMENSIONS - SI

UNIT	SERIES	ELECTRICAL CHARACTERISTICS	A	B	C	D	E	F	G	K	L	M	N	P	OPERATING WEIGHT (Kgs)	SHIPPING WEIGHT (Kgs)	SHIPPING DIMENSIONS (L x W x H)
28880240	A	X 0 0 0	587.3	980.1	96.1	19.1	112.7	458.8	198.4	71.4	12.7	273.1	273.1	463.6	74.4	86.2	641.5 X 641.5 X 1102.2
28880248	A	X 0 0 0	587.3	807.3	96.1	19.1	112.7	458.8	198.4	71.4	12.7	285.8	285.8	388.3	63.0	73.5	641.5 X 641.5 X 905.2
28880250	A	X 0 0 0	587.3	980.1	96.1	19.1	112.7	458.8	198.4	71.4	12.7	273.1	273.1	463.6	74.4	86.2	641.5 X 641.5 X 1102.2
28880360	A	X 0 0 0	587.3	980.1	96.1	19.1	112.7	458.8	198.4	71.4	12.7	273.1	273.1	463.6	74.4	86.2	641.5 X 641.5 X 1102.2
28880480	A	X 0 0 0	792.2	988.5	98.4	22.2	166.7	627.1	231.8	74.6	15.9	368.3	371.5	476.3	98.9	116.6	846.6 X 846.6 X 1172.2
28880600	A	X 0 0 0	792.2	1074.9	98.4	22.2	166.7	627.1	231.8	74.6	15.9	419.1	381.0	508.0	111.1	129.7	846.6 X 846.6 X 1258.6

X = YES  
0 = NO

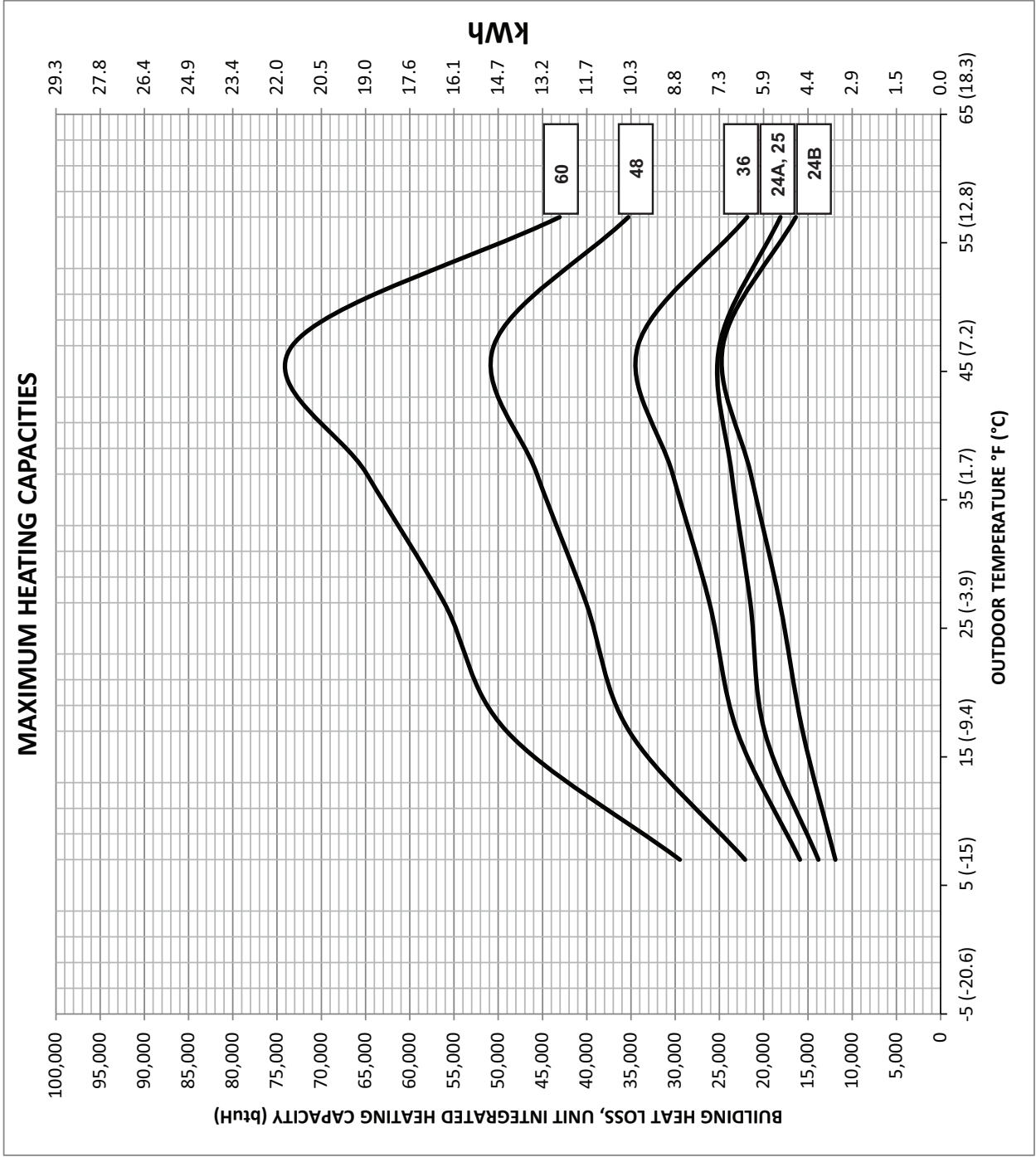
460-3-60	208/230-3-60	230-160	208/230-160
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UNIT SIZE	"Y" MIN. GROUND MOUNTING PAD APPLICATION DIMENSIONS	"Y" MIN. ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS
24, 25, 36	587.4	451.3
-	654.0	518.5
48, 60	792.2	583.2
-	889.0	679.7

When installing, allow sufficient space for airflow clearance, wiring, refrigerant piping, and service. Allow 24 in. (609.6 mm) clearance to service end of unit and 48 in. (1219.2 mm) above unit. For proper airflow, a 6-in. (152.4 mm) clearance on 1 side of unit and 12-in. (304.8 mm) on all remaining sides must be maintained. Maintain a distance of 24 in. (609.6 mm) between units or 18 in. (457.2 mm) if no overhang within 12 ft. (3.66 m) position so water, snow, or ice from roof or eaves cannot fall directly on unit.  
**NOTE:** 18" (457.2 mm) clearance option described above is approved for outdoor units with wire grille coil guard only. Units with lower panels require 24" (609.6 mm) between units.  
 On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.

**288BNV 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)

For performance data at specific application &/or design conditions with various indoor unit combinations, the equipment performance calculator can be accessed at : <http://rpmobrv.wrightsoft.com/>

Outdoor Model	Indoor Model	Furnace Model	Cooling			Heating					
			Cooling Cap.	SEER	EER	ID CFM	HSPF	High Temp Capacity 47°F (8°C)	COP	Low Temp Capacity 17°F (-8°C)	COP
288BNV024B-A	FE4ANF002L+UI		24,000	17.5	11.0	825	10.0	24,400	3.62	15,800	2.60
288BNV024B-A	FV4CNF002L		23,200	15.0	10.5	700	9.0	23,800	3.42	15,600	2.52
288BNV024A-A	FE4AN(B,F)005L+UI		24,000	17.0	11.0	825	10.0	25,000	3.32	19,900	2.01
288BNV024A-A	FV4CN(B,F)003L		23,000	15.5	11.0	700	8.0	25,000	2.97	19,900	2.00
288BNV025-A	FE4AN(B,F)005L+UI		24,000	18.0	12.5	825	10.0	26,800	3.56	19,900	2.58
288BNV025-A	FV4CN(B,F)003L		23,200	16.5	12.0	700	8.2	30,200	3.04	19,900	2.38
288BNV036-A	FE4AN(B,F)005+UI		34,200	17.5	10.5	1,050	10.5	34,200	3.56	23,000	2.58
288BNV036-A	FV4CN(B,F)005L		34,600	15.5	10.0	1,050	9.0	34,000	3.58	22,400	2.58
288BNV048-A	FE4AN(B,F)005L+UI		46,000	18.0	11.0	1,400	11.0	50,500	3.44	35,200	2.66
288BNV060-A	FE4AN(B,F)006L+UI		57,000	17.0	10.0	1,600	10.0	60,000	3.10	44,500	2.48
288BNV060-A	FV4CNB006L		57,000	15.0	10.0	1,750	9.0	60,000	3.05	44,000	2.45

\* 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

EVB AIR		388BNV024A_1FE4NF005 Efficiency Needs 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**	ID SCFM	Capacity MBTuh Total	Sens†	Total Sys. KW**	ID SCFM	Capacity MBTuh Total	Sens†	Total Sys. KW**			ID SCFM	Capacity MBTuh Total	Sens†
<b>75</b> (23.9)	72 (22.2)	23.61	9.88	3.38	25.24	10.47	2.76	28.18	11.54	1.71	29.87	12.09	1.31	31.12	12.64	0.96		
	67 (19.4)	21.33	13.74	3.34	22.80	14.32	2.75	25.46	15.46	1.72	26.82	16.05	1.32	28.12	16.59	0.98		
	63 (17.2)	19.66	16.76	3.31	21.01	17.35	2.73	23.46	18.51	1.73	24.71	19.11	1.33	25.92	19.72	1.00		
	57 (13.9)	18.72	18.72	3.30	19.79	19.79	2.72	21.71	21.71	1.73	22.87	22.67	1.34	23.60	23.80	1.01		
	72 (22.2)	23.53	13.78	3.38	25.17	14.37	2.76	28.10	15.50	1.71	29.80	16.09	1.31	31.02	16.63	0.96		
<b>80</b> (26.7)	67 (19.4)	21.28	17.58	3.34	22.75	18.19	2.75	25.40	19.35	1.72	26.74	19.96	1.32	28.05	20.56	0.98		
	63 (17.2)	20.03	20.03	3.32	21.17	21.09	2.74	23.54	22.94	1.73	24.78	22.95	1.33	25.96	23.61	1.00		
	57 (13.9)	19.99	19.99	3.32	21.10	21.10	2.73	23.08	23.08	1.73	24.09	24.09	1.33	25.06	25.06	1.00		
	72 (22.2)	15.43	6.56	1.86	16.55	6.96	1.57	18.52	7.59	0.99	19.58	8.06	0.78	20.65	8.45	0.60		
	67 (19.4)	13.88	9.30	1.86	14.90	9.71	1.58	16.69	10.46	1.01	17.67	10.87	0.81	18.63	11.27	0.63		
<b>75</b> (23.9)	63 (17.2)	12.80	11.44	1.85	13.73	11.87	1.59	15.39	12.85	1.02	16.27	13.10	0.83	17.17	13.48	0.65		
	57 (13.9)	12.38	12.38	1.85	13.13	13.13	1.59	14.44	14.44	1.03	15.14	15.14	0.84	15.81	15.81	0.67		
	72 (22.2)	15.37	9.34	1.86	16.49	9.75	1.57	18.42	10.48	0.99	19.51	10.89	0.78	20.58	11.27	0.60		
	67 (19.4)	13.87	12.03	1.86	14.88	12.46	1.58	16.66	13.25	1.01	17.62	13.69	0.81	18.59	14.08	0.63		
	63 (17.2)	13.28	13.28	1.86	14.07	14.07	1.59	15.58	15.21	1.02	16.44	15.74	0.83	17.23	16.25	0.65		
57 (13.9)	13.26	13.26	1.86	14.04	14.04	1.59	15.42	15.42	1.02	16.14	16.14	0.83	16.85	16.85	0.66			
<b>75</b> (23.9)	72 (22.2)	11.91	5.24	1.08	12.82	5.56	1.00	10.38	4.52	0.57	11.92	5.07	0.40	12.67	5.34	0.30		
	67 (19.4)	10.68	7.75	1.09	11.52	8.07	1.01	9.32	6.80	0.59	10.68	7.16	0.44	11.35	7.44	0.35		
	63 (17.2)	9.85	9.85	1.09	10.61	10.02	1.02	8.58	8.20	0.60	9.81	8.79	0.47	10.41	9.08	0.38		
	57 (13.9)	9.79	9.79	1.09	10.43	10.43	1.02	8.47	8.47	0.60	9.48	9.48	0.48	9.96	9.96	0.40		
	72 (22.2)	11.85	7.79	1.08	12.79	8.13	1.00	11.10	6.91	0.49	11.86	7.20	0.40	12.62	7.48	0.30		
<b>80</b> (26.7)	67 (19.4)	10.87	9.78	1.09	11.51	10.58	1.01	10.00	8.96	0.52	10.67	9.26	0.44	11.33	9.56	0.35		
	63 (17.2)	10.56	10.56	1.09	11.24	11.24	1.02	9.67	9.67	0.52	10.20	10.20	0.45	10.72	10.72	0.37		
	57 (13.9)	10.54	10.54	1.09	11.22	11.22	1.02	9.65	9.65	0.52	10.18	10.18	0.45	10.69	10.69	0.37		
	72 (22.2)	11.91	5.24	1.08	12.82	5.56	1.00	10.38	4.52	0.57	11.92	5.07	0.40	12.67	5.34	0.30		
	67 (19.4)	10.68	7.75	1.09	11.52	8.07	1.01	9.32	6.80	0.59	10.68	7.16	0.44	11.35	7.44	0.35		

STAGE 5

STAGE 3

STAGE 1 - FE4NF005 ONLY

STAGE 1 - FE4NF005 ONLY

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 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

28BNV024A

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANI(B)F005L	1.00	1.00	
FE4ANI(B)F003	1.01	1.06	
FE4ANF002L	1.01	1.06	
CAP**3614AL*	1.01	1.06	315(A,J)AV036070
CSPH*3612AL*	1.03	1.13	315(A,J)AV036070
CSPH*4212AL*	1.03	1.13	315(A,J)AV036070
CAP**3617AL*	1.01	1.06	315(A,J)AV048090
CNPV*3617AL*	1.01	1.06	315(A,J)AV048090
CNPV*4212AL*	1.03	1.13	315(A,J)AV048090
CSPH*4212AL*	1.03	1.13	315(A,J)AV048090
CAP**3617AL*	1.00	1.05	98(6*B,7*A)42060V17
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42060V17
CNPV*4212AL*	1.02	1.07	98(6*B,7*A)42060V17
CSPH*4212AL*	1.02	1.12	98(6*B,7*A)42060V17
CAP**3617AL*	1.03	1.13	98(6*B,7*A)42060V17
CNPV*3617AL*	1.01	1.06	98(6*B,7*A)42060V17
CNPV*4212AL*	1.00	1.05	98(6*B,7*A)42080V17
CNPV*3617AL*	1.02	1.07	98(6*B,7*A)42080V17
CSPH*3612AL*	1.02	1.12	98(6*B,7*A)42080V17
CSPH*4212AL*	1.03	1.13	98(6*B,7*A)42080V17
CNPV*3621AL*	1.01	1.06	98(6*B,7*A)60080V21
CAP**3621AL*	1.01	1.06	98(6*B,7*A)60080V21
CNPV*3621AL*	1.00	1.05	98(6*B,7*A)60060V21
CSPH*4212AL*	1.01	1.06	98(6*B,7*A)60060V21
CSPH*3612AL*	1.02	1.12	98(6*B,7*A)60060V21
CSPH*4212AL*	1.03	1.13	98(6*B,7*A)60060V21

2-STAGE (Hi-Stage 5, Lo-Stage 2)						
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
FV4CN(B)F003	0.93	1.06	0.97	1.03		
FV4CNF002L	0.92	1.09	0.98	1.05		
CAP**2414AL*	0.93	1.11	0.98	1.09	313*AV024045	
CAP**3014AL*	0.95	1.08	0.98	1.09	313*AV024045	
CAP**3614AL*	0.95	1.08	0.98	1.08	313*AV024045	
CSPH*2412AL*	0.93	1.11	0.98	1.08	313*AV024045	
CSPH*3012AL*	0.95	1.08	0.99	1.08	313*AV024045	
CSPH*3612AL*	0.97	1.10	0.99	1.07	313*AV024045	
CAP**2414AL*	0.93	1.08	0.96	1.10	922*AS0040E14	
CAP**3014AL*	0.94	1.12	0.96	1.09	922*AS0040E14	
CAP**3614AL*	0.94	1.12	0.96	1.09	922*AS0040E14	
CNPV*3014AL*	0.95	1.13	0.96	1.09	922*AS0040E14	
CSPH*2412AL*	0.93	1.11	0.96	1.09	922*AS0040E14	
CSPH*3012AL*	0.95	1.13	0.98	1.08	922*AS0040E14	
CSPH*3612AL*	0.97	1.10	0.98	1.08	922*AS0040E14	
CAP**2417AL*	0.93	1.11	0.96	1.09	922*AS6040E17	
CAP**3017AL*	0.94	1.12	0.96	1.09	922*AS6040E17	
CAP**3617AL*	0.95	1.13	0.97	1.09	922*AS6040E17	
CNPV*3017AL*	0.94	1.12	0.96	1.09	922*AS6040E17	
CNPV*3617AL*	0.94	1.12	0.96	1.09	922*AS6040E17	
CNPV*4217AL*	0.96	1.09	0.97	1.08	922*AS6040E17	
CSPH*2412AL*	0.93	1.11	0.96	1.10	922*AS6040E17	
CSPH*3012AL*	0.94	1.12	0.97	1.08	922*AS6040E17	
CSPH*3612AL*	0.96	1.09	0.98	1.07	922*AS6040E17	
CAP**2414AL*	0.93	1.06	0.98	1.07	922*AS6060E14	
CAP**3014AL*	0.96	1.09	0.99	1.07	922*AS6060E14	
CNPV*3014AL*	0.97	1.15	0.98	1.07	922*AS6060E14	
CSPH*2412AL*	0.93	1.06	0.98	1.07	922*AS6060E14	
CSPH*3012AL*	0.96	1.09	0.99	1.05	922*AS6060E14	
CSPH*3612AL*	0.97	1.10	1.00	1.05	922*AS6060E14	
CAP**2414AL*	0.93	1.11	0.96	1.13	925*AS0040E14	
CAP**3014AL*	0.94	1.12	0.96	1.12	925*AS0040E14	
CAP**3614AL*	0.95	1.13	0.96	1.11	925*AS0040E14	
CNPV*3014AL*	0.94	1.12	0.96	1.13	925*AS0040E14	
CNPV*2412AL*	0.93	1.11	0.96	1.12	925*AS0040E14	
CSPH*3012AL*	0.95	1.13	0.97	1.11	925*AS0040E14	
CSPH*3612AL*	0.96	1.14	0.97	1.10	925*AS0040E14	
CAP**2417AL*	0.93	1.10	0.96	1.11	925*AS6040E17	
CAP**3017AL*	0.93	1.11	0.96	1.10	925*AS6040E17	
CAP**3617AL*	0.94	1.12	0.96	1.09	925*AS6040E17	
CNPV*3017AL*	0.93	1.11	0.96	1.10	925*AS6040E17	
CNPV*3617AL*	0.93	1.11	0.97	1.09	925*AS6040E17	
CNPV*4217AL*	0.93	1.10	0.96	1.11	925*AS6040E17	
CSPH*2412AL*	0.93	1.11	0.97	1.09	925*AS6040E17	
CSPH*3012AL*	0.93	1.11	0.97	1.09	925*AS6040E17	
CSPH*3612AL*	0.95	1.08	0.97	1.09	925*AS6040E17	

See notes on page 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAR AIR	286BNV024B / FE4ANF002L 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 Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**		
<b>75</b> (23.9)	72 (22.2)	<b>825</b>	23.99	9.99	3.08	<b>825</b>	25.38	10.48	2.68	<b>825</b>	26.51	10.88	2.31	<b>825</b>	27.76	11.32	1.97	<b>825</b>	28.92	11.74	1.65
	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
	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
	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
	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
<b>80</b> (26.7)	67 (19.4)	<b>825</b>	21.71	18.07	3.03	<b>825</b>	22.96	18.50	2.64	<b>825</b>	24.00	18.85	2.29	<b>825</b>	25.12	19.23	1.95	<b>825</b>	26.16	19.59	1.65
	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
	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
	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
	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
<b>75</b> (23.9)	63 (17.2)	<b>650</b>	12.21	11.32	1.52	<b>650</b>	13.33	11.93	1.40	<b>650</b>	14.34	12.51	1.25	<b>650</b>	15.50	13.13	1.12	<b>650</b>	16.65	13.77	0.98
	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
	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
	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
	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
<b>80</b> (26.7)	57 (13.9)	<b>650</b>	12.78	12.78	1.52	<b>650</b>	13.78	13.78	1.40	<b>650</b>	14.68	14.68	1.25	<b>650</b>	15.69	15.69	1.12	<b>650</b>	16.69	16.69	0.98
	72 (22.2)		10.98	4.91	1.02		12.29	5.41	1.00		13.32	3.62	0.42		14.41	4.06	0.40		15.44	4.54	0.36
	67 (19.4)		9.86	7.42	1.02		11.05	8.01	1.00		12.14	5.94	0.43		13.23	6.56	0.42		14.32	7.19	0.38
	63 (17.2)		9.15	9.15	1.02		10.29	9.90	1.00		11.44	6.40	0.43		12.58	7.27	0.42		13.77	8.18	0.39
	57 (13.9)		9.13	9.13	1.02		10.15	10.15	1.00		11.32	6.40	0.43		12.58	7.27	0.42		13.77	8.17	0.39
<b>75</b> (23.9)	72 (22.2)	<b>650</b>	10.93	7.45	1.02	<b>650</b>	12.27	8.08	1.00	<b>650</b>	13.56	5.99	0.42	<b>650</b>	14.85	6.61	0.40	<b>650</b>	16.14	7.26	0.36
	67 (19.4)		9.88	9.86	1.02		11.12	10.63	1.00		12.41	6.97	0.43		13.70	7.91	0.41		14.99	8.89	0.37
	63 (17.2)		9.88	9.86	1.02		10.95	10.95	1.00		12.14	6.96	0.43		13.43	7.90	0.41		14.96	8.88	0.37
	57 (13.9)		9.85	9.85	1.02		10.94	10.94	1.00		12.13	6.95	0.43		13.42	7.89	0.41		14.95	8.87	0.37
	72 (22.2)		10.98	4.91	1.02		12.29	5.41	1.00		13.32	3.62	0.42		14.41	4.06	0.40		15.44	4.54	0.36
<b>80</b> (26.7)	67 (19.4)	<b>585</b>	9.86	7.42	1.02	<b>585</b>	11.05	8.01	1.00	<b>585</b>	12.14	5.94	0.43	<b>585</b>	13.23	6.56	0.42	<b>585</b>	14.32	7.19	0.38
	63 (17.2)		9.15	9.15	1.02		10.29	9.90	1.00		11.44	6.40	0.43		12.58	7.27	0.42		13.77	8.18	0.39
	57 (13.9)		9.13	9.13	1.02		10.15	10.15	1.00		11.32	6.40	0.43		12.58	7.27	0.42		13.77	8.17	0.39
	72 (22.2)		10.93	7.45	1.02		12.27	8.08	1.00		13.56	5.99	0.42		14.85	6.61	0.40		16.14	7.26	0.36
	67 (19.4)		9.88	9.86	1.02		11.12	10.63	1.00		12.41	6.97	0.43		13.70	7.91	0.41		14.99	8.89	0.37
<b>80</b> (26.7)	63 (17.2)	<b>585</b>	9.88	9.86	1.02	<b>585</b>	10.95	10.95	1.00	<b>585</b>	12.14	6.96	0.43	<b>585</b>	13.43	7.90	0.41	<b>585</b>	14.72	8.88	0.37
	57 (13.9)		9.85	9.85	1.02		10.94	10.94	1.00		12.13	6.95	0.43		13.42	7.89	0.41		14.95	8.87	0.37
	72 (22.2)		10.98	4.91	1.02		12.29	5.41	1.00		13.32	3.62	0.42		14.41	4.06	0.40		15.44	4.54	0.36
	67 (19.4)		9.86	7.42	1.02		11.05	8.01	1.00		12.14	5.94	0.43		13.23	6.56	0.42		14.32	7.19	0.38
	63 (17.2)		9.15	9.15	1.02		10.29	9.90	1.00		11.44	6.40	0.43		12.58	7.27	0.42		13.77	8.18	0.39

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 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

288BNV024B

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi-Stage 5, Lo-Stage 2)					
				Cooling Indoor Model	High Spd Cap.	Power	Low Spd Cap.	Power	Furnace Model
*FE4ANF002L	1.00	1.00		*FV4CNF002L	1.00	1.00	1.00	1.00	
FE4AN(F)003L	1.01	1.01		FV4CN(B,F)003L	0.98	0.84	0.97	0.96	
CAP**3614AL*	1.00	1.05	315(A,J)AV036070	FV4CN(B,F)003L	0.97	0.84	0.99	0.99	
CAP**3617AL*	1.00	1.05	98(6*B,7*A)42060V17***	FV4CN(B,F)003L	0.95	0.85	0.97	1.05	922*A30040E14***
CAP**3617AL*	1.01	1.01	315(A,J)AV036070	CAP**2414AL*	0.97	0.83	0.99	1.03	922*A36060E14***
CAP**3617AL*	1.01	1.01	315(A,J)AV048090	CAP**2414AL*	0.96	0.91	0.96	1.07	925*A30040E14***
CAP**3621AL*	1.00	1.05	98(6*B,7*A)42060V17***	CAP**2414AL*	0.96	0.82	0.98	1.05	313*AV024045
CAP**3621AL*	1.00	1.05	98(6*B,7*A)42060V17***	CAP**2417AL*	0.96	0.86	0.97	1.04	922*A36040E17***
CAP**3621AL*	1.01	1.01	98(6*B,7*MA)60060V21***	CAP**2417AL*	0.95	0.85	0.97	1.06	925*A36040E17***
CAP**3621AL*	1.01	1.01	98(6*B,7*A)60060V21***	CAP**3014AL*	0.97	0.87	0.97	1.04	922*A30040E14***
CAP**4221AL*	1.01	1.06	98(6*B,7*A)42060V17***	CAP**3014AL*	0.98	0.84	0.99	1.03	922*A36060E14***
CAP**4221AL*	1.01	1.06	98(6*B,7*A)42060V17***	CAP**3014AL*	0.97	0.84	0.97	1.04	925*A30040E14***
CAP**4221AL*	1.02	1.02	98(6*B,7*MA)60060V21***	CAP**3017AL*	0.97	0.83	0.97	1.04	313*AV024045
CAP**4224AL*	1.01	1.06	98(6*B,7*MA)60060V21***	CAP**3017AL*	0.96	0.86	0.97	1.06	925*A36040E17***
CAP**4817AL*	1.02	1.07	98(6*B,7*A)42060V17***	CAP**3614AL*	0.97	0.83	0.97	1.04	922*A30040E14***
CAP**4817AL*	1.03	1.03	98(6*B,7*A)42060V17***	CAP**3614AL*	0.98	0.84	0.99	1.02	922*A36060E14***
CAP**4817AL*	1.03	1.03	315(A,J)AV036070	CAP**3614AL*	0.97	0.92	0.97	1.07	925*A30040E14***
CAP**4817AL*	1.03	1.03	315(A,J)AV048090	CAP**3614AL*	0.97	0.84	0.98	1.04	313*AV024045
CAP**4821AL*	1.02	1.07	98(6*B,7*A)42060V17***	CAP**3617AL*	0.97	0.84	0.97	1.04	922*A36040E17***
CAP**4821AL*	1.02	1.02	98(6*B,7*A)42060V17***	CAP**3617AL*	0.97	0.84	0.98	1.04	925*A36040E17***
CAP**4821AL*	1.03	1.03	315(A,J)AV048090	CNPV*3014AL*	0.97	0.83	0.97	1.05	925*A36040E17***
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42060V17***	CNPV*3014AL*	0.99	0.89	0.99	1.03	922*A30040E14***
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42060V17***	CNPV*3014AL*	0.97	0.92	0.96	1.07	925*A30040E14***
CNPV*3621AL*	1.00	1.05	98(6*B,7*A)42060V17***	CNPV*3017AL*	0.97	0.87	0.97	1.05	922*A36040E17***
CNPV*3621AL*	1.00	1.05	98(6*B,7*A)42060V17***	CNPV*3017AL*	0.96	0.86	0.96	1.05	925*A36040E17***
CNPV*4217AL*	1.01	1.06	98(6*B,7*A)42060V17***	CNPV*3617AL*	0.97	0.87	0.97	1.04	922*A36040E17***
CNPV*4217AL*	1.02	1.07	98(6*B,7*A)42060V17***	CNPV*3617AL*	0.96	0.86	0.96	1.05	925*A36040E17***
CNPV*4217AL*	1.02	1.02	315(A,J)AV036070	CNPV*4217AL*	0.98	0.84	0.97	1.04	922*A36040E17***
CNPV*4221AL*	1.01	1.06	98(6*B,7*A)42060V17***	CNPV*4217AL*	0.97	0.83	0.97	1.05	925*A36040E17***
CNPV*4221AL*	1.01	1.06	98(6*B,7*A)42060V17***	CSPH*2412AL*	0.96	0.86	0.97	1.05	922*A30040E14***
CNPV*4221AL*	1.02	1.02	315(A,J)AV048090	CSPH*2412AL*	0.96	0.86	0.97	1.05	922*A36040E17***
CNPV*4821AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*2412AL*	0.97	0.84	0.99	1.03	922*A36060E14***
CNPV*4821AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*2412AL*	0.97	0.84	0.99	1.03	925*A30040E14***
CNPV*4821AL*	1.02	1.02	98(6*B,7*A)42060V17***	CSPH*2412AL*	0.95	0.85	0.97	1.06	925*A36040E17***
CNPV*4821AL*	1.03	1.03	315(A,J)AV048090	CSPH*2412AL*	0.97	0.87	0.98	1.04	313*AV024045
CSPH*3612AL*	1.02	1.07	98(6*B,7*A)42060V17***	CSPH*3012AL*	0.97	0.87	0.98	1.04	922*A30040E14***
CSPH*3612AL*	1.02	1.07	98(6*B,7*A)42060V17***	CSPH*3012AL*	0.97	0.87	0.97	1.04	922*A36040E17***
CSPH*3612AL*	1.02	1.07	315(A,J)AV036070	CSPH*3012AL*	0.98	0.84	1.00	1.02	922*A36060E14***
CSPH*3612AL*	1.03	1.07	315(A,J)AV048090	CSPH*3012AL*	0.97	0.92	0.97	1.07	925*A30040E14***
CSPH*4212AL*	1.02	1.07	98(6*B,7*A)42060V17***	CSPH*3012AL*	0.96	0.86	0.97	1.05	925*A36040E17***
CSPH*4212AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*3012AL*	0.97	0.84	0.99	1.04	313*AV024045
CSPH*4212AL*	1.03	1.07	315(A,J)AV036070	CSPH*3612AL*	0.99	0.85	0.97	1.03	922*A30040E14***
CSPH*4212AL*	1.03	1.03	315(A,J)AV048090	CSPH*3612AL*	0.98	0.84	0.97	1.03	922*A36040E17***
CSPH*4812AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*3612AL*	1.00	0.86	0.99	1.01	922*A36060E14***
CSPH*4812AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*3612AL*	0.99	0.84	0.97	1.06	925*A30040E14***
CSPH*4812AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*3612AL*	0.97	0.88	0.97	1.04	925*A36040E17***
CSPH*4812AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*3612AL*	1.00	0.86	0.99	1.03	313*AV024045

See notes on page 36



# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAIR AIR	288BNV025 / FEZANF005 Efficiency Mode Condenser Entering Air Temperature °F (°C)										75 (23.9)										65 (18.3)									
		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**	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)		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	16.63	1.18	31.02	16.63	1.18	31.02	16.63	1.18					
	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	28.05	20.56	1.21	28.05	20.56	1.21	28.05	20.56	1.21					
	63 (17.2)		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	25.92	19.72	1.23	25.92	19.72	1.23	25.92	19.72	1.23					
	57 (13.9)		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	23.60	23.60	1.24	23.60	23.60	1.24					
	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	28.05	20.56	1.21	28.05	20.56	1.21					
80 (26.7)	72 (22.2)		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	31.02	16.63	1.18	31.02	16.63	1.18					
	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	28.05	20.56	1.21	28.05	20.56	1.21					
	63 (17.2)		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	25.96	23.61	1.23	25.96	23.61	1.23					
	57 (13.9)		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	25.06	25.06	1.23	25.06	25.06	1.23					
	67 (19.4)	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	20.65	8.45	0.67	20.65	8.45	0.67					
75 (23.9)	72 (22.2)		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	18.63	11.27	0.71	18.63	11.27	0.71					
	67 (19.4)	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	17.17	13.48	0.73	17.17	13.48	0.73					
	63 (17.2)		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	15.81	15.81	0.76	15.81	15.81	0.76					
	57 (13.9)		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	20.58	11.27	0.67	20.58	11.27	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	18.59	14.08	0.71	18.59	14.08	0.71					
80 (26.7)	72 (22.2)		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	17.23	16.25	0.73	17.23	16.25	0.73					
	67 (19.4)	650	13.26	13.26	1.50	14.04	14.04	1.37	14.66	14.66	1.14	15.42	15.42	1.00	16.14	16.14	0.87	16.85	16.85	0.74	16.85	16.85	0.74	16.85	16.85	0.74					
	63 (17.2)		11.91	5.24	1.08	12.82	5.56	1.00	13.38	4.52	0.57	14.66	5.11	0.49	15.42	5.07	0.40	16.14	5.34	0.30	16.14	5.34	0.30	16.14	5.34	0.30					
	57 (13.9)		10.68	7.75	1.09	11.52	8.07	1.01	12.00	6.60	0.59	13.00	6.88	0.52	13.68	7.16	0.44	14.35	7.44	0.35	14.35	7.44	0.35	14.35	7.44	0.35					
	67 (19.4)	585	9.85	9.65	1.09	10.61	10.02	1.02	11.00	8.20	0.60	11.88	8.49	0.54	12.48	8.79	0.47	13.16	9.08	0.38	13.16	9.08	0.38	13.16	9.08	0.38					
75 (23.9)	72 (22.2)		9.79	9.79	1.09	10.43	10.43	1.02	10.87	8.47	0.60	11.40	8.98	0.54	12.00	9.48	0.48	12.62	9.96	0.40	12.62	9.96	0.40	12.62	9.96	0.40					
	67 (19.4)		11.85	7.79	1.08	12.79	8.13	1.00	13.33	6.64	0.57	14.10	6.91	0.49	14.86	7.20	0.40	15.62	7.48	0.30	15.62	7.48	0.30	15.62	7.48	0.30					
	63 (17.2)	650	10.87	9.78	1.09	11.51	10.58	1.01	12.00	8.66	0.58	12.66	8.96	0.52	13.33	9.26	0.44	14.08	9.56	0.35	14.08	9.56	0.35	14.08	9.56	0.35					
	57 (13.9)		10.56	10.56	1.09	11.24	11.24	1.02	11.72	9.12	0.59	12.48	9.67	0.52	13.20	10.20	0.45	13.92	10.72	0.37	13.92	10.72	0.37	13.92	10.72	0.37					
	67 (19.4)	585	10.54	10.54	1.09	11.22	11.22	1.02	11.72	9.11	0.59	12.48	9.65	0.52	13.18	10.18	0.45	13.88	10.69	0.37	13.88	10.69	0.37	13.88	10.69	0.37					

STAGE 5

STAGE 3

STAGE 1 - FEZANF005 ONLY

STAGE 1 - FEZANF005 ONLY

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 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

288ENV025

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANI(B)F005L	1.00	1.00	
FE4ANI(B)F003	1.01	1.05	
FE4ANF002L	1.01	1.10	
CAP**3614AL*	1.01	1.05	315(A,J)AV036070
CSPH*3612AL*	1.03	1.11	315(A,J)AV036070
CSPH*4212AL*	1.03	1.11	315(A,J)AV036070
CAP**3617AL*	1.01	1.05	315(A,J)AV048090
CNPV*3617AL*	1.01	1.05	315(A,J)AV048090
CSPH*3612AL*	1.03	1.11	315(A,J)AV048090
CSPH*4212AL*	1.03	1.12	315(A,J)AV048090
CAP**3617AL*	1.00	1.09	98(6*B,7*A)42060V17
CNPV*3617AL*	1.00	1.09	98(6*B,7*A)42060V17
CSPH*3612AL*	1.02	1.11	98(6*B,7*A)42060V17
CSPH*4212AL*	1.02	1.16	98(6*B,7*A)42060V17
CAP**3617AL*	1.03	1.11	98(6*B,7*A)42060V17
CNPV*3617AL*	1.01	1.05	98(6*B,7*A)42080V17
CSPH*3612AL*	1.00	1.09	98(6*B,7*A)42080V17
CSPH*4212AL*	1.02	1.11	98(6*B,7*A)42080V17
CAP**3621AL*	1.03	1.11	98(6*B,7*A)42080V17
CNPV*3621AL*	1.01	1.05	98(6*B,7*MA)60060V21
CSPH*3612AL*	1.00	1.09	98(6*B,7*MA)60060V21
CSPH*4212AL*	1.01	1.05	98(6*B,7*MA)60060V21
CAP**4212AL*	1.02	1.11	98(6*B,7*MA)60060V21
CNPV*4212AL*	1.03	1.11	98(6*B,7*MA)60060V21

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
FV4CN(B)F003	0.94	0.98	0.97	1.00	
FV4CNF002L	0.94	0.98	0.98	1.02	
CAP**2414AL*	0.94	1.03	0.98	1.10	313*AV024045
CAP**3014AL*	0.95	0.99	0.98	1.09	313*AV024045
CAP**3614AL*	0.96	1.00	0.98	1.09	313*AV024045
CSPH*2412AL*	0.95	1.08	0.98	1.10	313*AV024045
CSPH*3012AL*	0.96	1.04	0.99	1.08	313*AV024045
CSPH*3612AL*	0.98	1.02	0.99	1.08	313*AV024045
CAP**2414AL*	0.93	1.02	0.96	1.11	922*A30040E14
CAP**3014AL*	0.94	1.03	0.96	1.10	922*A30040E14
CAP**3614AL*	0.95	1.03	0.97	1.10	922*A30040E14
CNPV*3014AL*	0.96	1.04	0.96	1.10	922*A30040E14
CSPH*2412AL*	0.94	1.03	0.97	1.11	922*A30040E14
CSPH*3012AL*	0.95	1.03	0.98	1.09	922*A30040E14
CSPH*3612AL*	0.97	1.05	0.98	1.08	922*A30040E14
CAP**2417AL*	0.93	1.02	0.97	1.11	922*A36040E17
CAP**3017AL*	0.95	1.03	0.97	1.10	922*A36040E17
CAP**3617AL*	0.95	0.99	0.97	1.09	922*A36040E17
CNPV*3017AL*	0.94	1.03	0.96	1.11	922*A36040E17
CNPV*3617AL*	0.94	1.03	0.98	1.10	922*A36040E17
CNPV*4217AL*	0.96	1.00	0.98	1.09	922*A36040E17
CSPH*2412AL*	0.94	1.07	0.96	1.11	922*A36040E17
CSPH*3012AL*	0.95	1.03	0.98	1.10	922*A36040E17
CSPH*3612AL*	0.97	1.05	0.99	1.09	922*A36040E17
CAP**2414AL*	0.95	0.99	0.99	1.08	922*A36060E14
CAP**3014AL*	0.96	1.00	0.99	1.08	922*A36060E14
CAP**3614AL*	0.97	1.01	0.99	1.08	922*A36060E14
CNPV*3014AL*	0.98	1.06	0.99	1.08	922*A36060E14
CSPH*2412AL*	0.95	1.03	0.99	1.08	922*A36060E14
CSPH*3012AL*	0.97	1.05	1.00	1.07	922*A36060E14
CSPH*3612AL*	0.98	1.02	1.01	1.06	922*A36060E14
CAP**2414AL*	0.93	1.06	0.96	1.14	925*A30040E14
CAP**3014AL*	0.95	1.08	0.96	1.13	925*A30040E14
CAP**3614AL*	0.95	1.08	0.96	1.13	925*A30040E14
CNPV*3014AL*	0.94	1.07	0.96	1.13	925*A30040E14
CSPH*2412AL*	0.94	1.12	0.96	1.14	925*A30040E14
CSPH*3012AL*	0.95	1.08	0.97	1.12	925*A30040E14
CSPH*3612AL*	0.97	1.10	0.98	1.12	925*A30040E14
CAP**2417AL*	0.93	1.01	0.96	1.12	925*A36040E17
CAP**3017AL*	0.94	1.03	0.96	1.11	925*A36040E17
CAP**3617AL*	0.94	1.03	0.97	1.11	925*A36040E17
CNPV*3017AL*	0.93	1.02	0.96	1.12	925*A36040E17
CNPV*3617AL*	0.93	1.02	0.96	1.12	925*A36040E17
CNPV*4217AL*	0.95	1.03	0.98	1.11	925*A36040E17
CSPH*2412AL*	0.93	1.06	0.96	1.12	925*A36040E17
CSPH*3012AL*	0.94	1.03	0.98	1.11	925*A36040E17
CSPH*3612AL*	0.96	1.04	0.98	1.10	925*A36040E17

See notes on page 36

# 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 Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**	ID SCFM	Capacity MBtuh Total	Total Syst. KW**					
75 (23.9)	72 (22.2)	1050	33.66	13.76	3.92	1050	35.83	14.56	3.82	1050	37.64	15.24	3.33	1050	41.70	16.78	2.74	1050	43.66	17.64	2.45			
	67 (19.4)		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
80 (26.7)	67 (19.4)	1050	30.58	23.31	3.83	1050	32.54	24.17	3.55	1050	34.20	24.92	3.26	1050	37.87	26.55	2.70	1050	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)		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
75 (23.9)	63 (17.2)	900	17.85	15.69	2.47	900	19.07	16.26	2.18	900	20.03	16.73	1.83	900	22.42	17.89	1.34	900	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)		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
75 (23.9)	57 (13.9)	800	11.94	11.94	1.82	800	12.73	12.73	1.55	800	8.69	8.69	0.71	800	9.81	9.81	0.40	800	10.36	10.36	0.28			
	72 (22.2)		14.41	9.47	1.82		15.54	9.92	1.52		16.64	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)		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
80 (26.7)	72 (22.2)	900	14.47	6.38	1.82	900	15.58	6.77	1.53	900	10.69	4.69	0.66	900	12.34	5.28	0.34	900	13.17	5.58	0.22			
	67 (19.4)		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
	72 (22.2)		14.41	9.47	1.82		15.54	9.92	1.52		16.64	6.90	0.71		11.46	7.22	0.54		12.29	7.55	0.40	13.12	7.88	0.28

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 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

288BNV036

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005	1.00	1.00	
FE4AN(B,F)003	0.96	1.06	
FE4ANF002	0.95	1.05	
CAP**3614AL*	0.95	1.05	315(A,J)AV036070
CSPH**3612AL*	0.97	1.07	315(A,J)AV036070
CSPH**4212AL*	0.98	1.08	315(A,J)AV036070
CSPH**4812AL*	0.98	1.09	315(A,J)AV036070
CAP**3617AL*	0.96	1.06	315(A,J)AV048090
CAP**4817AL*	0.98	1.03	315(A,J)AV048090
CNPV**3617AL*	0.95	1.05	315(A,J)AV048090
CNPV**4217AL*	0.97	1.07	315(A,J)AV048090
CSPH**3612AL*	0.98	1.08	315(A,J)AV048090
CSPH**4212AL*	0.98	1.09	315(A,J)AV048090
CSPH**4812AL*	0.98	1.09	315(A,J)AV048090
CAP**3621AL*	0.96	1.06	315(A,J)AV060110
CAP**4221AL*	0.96	1.07	315(A,J)AV060110
CNPV**4221AL*	0.98	1.03	315(A,J)AV060110
CSPH**3612AL*	0.98	1.08	315(A,J)AV060110
CSPH**4212AL*	0.95	1.05	315(A,J)AV060110
CNPV**4221AL*	0.96	1.07	315(A,J)AV060110
CNPV**4821AL*	0.98	1.03	315(A,J)AV060110
CSPH**3612AL*	0.98	1.08	315(A,J)AV060110
CSPH**4212AL*	0.98	1.09	315(A,J)AV060110
CAP**4224AL*	0.96	1.07	315(A,J)AV066135
CNPV**4224AL*	0.98	1.03	315(A,J)AV066135
CNPV**3612AL*	0.98	1.08	315(A,J)AV066135
CSPH**4812AL*	0.99	1.09	315(A,J)AV066135
CAP**4224AL*	0.96	1.07	315(A,J)AV066155
CNPV**4224AL*	0.98	1.03	315(A,J)AV066155
CNPV**3612AL*	0.98	1.09	315(A,J)AV066155
CSPH**4212AL*	0.98	1.08	315(A,J)AV066155
CAP**3617AL*	0.95	1.11	98(6*B,7*A)42060V17
CAP**4817AL*	0.97	1.07	98(6*B,7*A)42060V17
CNPV**4217AL*	0.96	1.11	98(6*B,7*A)42060V17
CSPH**4217AL*	0.96	1.07	98(6*B,7*A)42060V17
CSPH**3612AL*	0.96	1.13	98(6*B,7*A)42060V17
CSPH**4212AL*	0.97	1.13	98(6*B,7*A)42060V17
CSPH**4812AL*	0.98	1.14	98(6*B,7*A)42060V17
CAP**3617AL*	0.95	1.05	98(6*B,7*A)42080V17
CAP**4817AL*	0.98	1.08	98(6*B,7*A)42080V17
CNPV**4217AL*	0.95	1.11	98(6*B,7*A)42080V17
CSPH**4217AL*	0.96	1.11	98(6*B,7*A)42080V17
CSPH**3612AL*	0.97	1.13	98(6*B,7*A)42080V17
CSPH**4212AL*	0.97	1.13	98(6*B,7*A)42080V17
CSPH**4812AL*	0.98	1.14	98(6*B,7*A)42080V17
CAP**3621AL*	0.96	1.06	98(6*B,7*A)60080V21
CAP**4221AL*	0.98	1.08	98(6*B,7*A)60080V21
CNPV**4221AL*	0.95	1.05	98(6*B,7*A)60080V21
CNPV**4821AL*	0.96	1.07	98(6*B,7*A)60080V21

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPV**4821AL*	0.98	1.08	98(6*B,7*A)60080V21
CSPH**3612AL*	0.98	1.08	98(6*B,7*A)60080V21
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)60080V21
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)60080V21
CAP**3621AL*	0.96	1.06	98(6*B,7*A)66100V21
CAP**4221AL*	0.98	1.03	98(6*B,7*A)66100V21
CNPV**4221AL*	0.95	1.05	98(6*B,7*A)66100V21
CNPV**4821AL*	0.96	1.07	98(6*B,7*A)66100V21
CSPH**3612AL*	0.98	1.08	98(6*B,7*A)66100V21
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)66100V21
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)66100V21
CAP**4224AL*	0.96	1.07	98(6*B,7*A)66120V24
CAP**4824AL*	0.98	1.03	98(6*B,7*A)66120V24
CNPV**4224AL*	0.98	1.14	98(6*B,7*A)66120V24
CNPV**4824AL*	0.98	1.14	98(6*B,7*A)66120V24
CSPH**3612AL*	0.98	1.09	98(6*B,7*A)66120V24
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)66120V24
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)66120V24
CAP**3621AL*	0.95	1.05	98(6*B,7MA)60060V21
CAP**4221AL*	0.96	1.06	98(6*B,7MA)60060V21
CNPV**4221AL*	0.96	1.07	98(6*B,7MA)60060V21
CNPV**4821AL*	0.95	1.11	98(6*B,7MA)60060V21
CSPH**4221AL*	0.96	1.06	98(6*B,7MA)60060V21
CNPV**4221AL*	0.96	1.08	98(6*B,7MA)60060V21
CNPV**4821AL*	0.97	1.13	98(6*B,7MA)60060V21
CSPH**4212AL*	0.98	1.08	98(6*B,7MA)60060V21
CSPH**4812AL*	0.98	1.09	98(6*B,7MA)60060V21

2-STAGE (Hi-Stage 5, Lo-Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003	0.97	0.97	1.09	1.13	
FV4CNF002L	0.95	1.00	1.08	1.18	313*AV024045
CAP**3614AL*	0.94	1.05	1.06	1.19	313*AV024045
CSPH**3612AL*	0.97	1.08	1.08	1.18	313*AV024045
CSPH**4212AL*	0.98	1.09	1.08	1.17	313*AV024045
CSPH**4812AL*	0.98	1.09	1.09	1.17	313*AV024045
CNPV**4217AL*	0.97	1.02	1.08	1.14	314AAV048070
CNPV**3617AL*	0.94	1.05	1.07	1.34	922*AS6040E17
CAP**4817AL*	0.98	1.09	1.05	1.19	922*AS6040E17
CNPV**3617AL*	0.94	1.04	1.05	1.22	922*AS6040E17
CNPV**4217AL*	0.96	1.07	1.07	1.21	922*AS6040E17
CSPH**3612AL*	0.97	1.07	1.07	1.21	922*AS6040E17
CSPH**4212AL*	0.97	1.08	1.07	1.20	922*AS6040E17
CAP**3614AL*	0.95	1.00	1.07	1.18	922*AS6060E14
CSPH**3612AL*	0.98	1.03	1.09	1.17	922*AS6060E14
CSPH**4212AL*	0.98	1.03	1.09	1.15	922*AS6060E14
CSPH**4812AL*	0.99	1.04	1.09	1.15	922*AS6060E14
CAP**3617AL*	0.95	1.00	1.07	1.14	922*AA2060E17
CAP**4817AL*	0.99	0.99	1.08	1.11	922*AA2060E17
CNPV**3617AL*	0.95	1.00	1.06	1.14	922*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	1.13	922*AA2060E17
CSPH**3612AL*	0.98	1.03	1.08	1.13	922*AA2060E17
CSPH**4212AL*	0.98	1.03	1.09	1.13	922*AA2060E17
CSPH**4812AL*	0.99	1.04	1.09	1.12	922*AA2060E17
CAP**3617AL*	0.95	1.00	1.07	1.14	922*AA8080E17
CAP**4817AL*	0.99	0.99	1.09	1.12	922*AA8080E17
CNPV**3617AL*	0.95	1.00	1.06	1.14	922*AA8080E17
CNPV**4217AL*	0.97	1.02	1.08	1.13	922*AA8080E17
CSPH**3612AL*	0.98	1.03	1.08	1.13	922*AA8080E17
CSPH**4212AL*	0.98	1.03	1.09	1.13	922*AA8080E17
CSPH**4812AL*	0.99	1.04	1.09	1.12	922*AA8080E17
CAP**3617AL*	0.95	1.00	1.07	1.16	925*AS6040E17
CAP**4817AL*	0.99	1.03	1.08	1.14	925*AS6040E17
CNPV**3617AL*	0.95	1.00	1.06	1.14	925*AS6060E14
CNPV**4217AL*	0.97	1.02	1.08	1.15	925*AS6060E14
CSPH**3612AL*	0.97	1.02	1.07	1.15	925*AS6060E14
CSPH**4212AL*	0.98	1.03	1.08	1.15	925*AS6060E14
CSPH**4812AL*	0.98	1.03	1.08	1.15	925*AS6060E14

See notes on page 36

# 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	54.03	29.27	3.28	59.36	23.64	2.90	
	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	50.09	35.81	2.86	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	44.94	43.50	2.83	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	59.24	30.40	2.90	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	53.94	37.15	2.88	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	50.04	42.41	2.86	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	46.95	46.95	2.84	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	39.94	16.25	1.53	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	36.25	21.92	1.56	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	33.46	26.36	1.58	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	1.60	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	21.91	1.53	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	1.56	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	1.58	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	1.58	32.90	32.90	1.58	
	72 (22.2)	1100	25.37	10.73	2.67	27.27	11.42	2.37	29.54	8.42	1.06	31.96	9.47	0.89	34.13	9.47	0.72	1100	23.78	10.00	0.56	23.78	10.00	0.56	
	67 (19.4)	1100	22.95	15.36	2.66	24.75	16.20	2.37	27.66	12.16	1.09	30.81	12.78	0.92	33.99	13.39	0.76	1100	21.49	14.00	0.61	21.49	14.00	0.61	
	63 (17.2)	1100	21.20	18.93	2.65	22.84	19.87	2.38	25.63	15.07	1.11	28.70	15.80	0.95	31.60	16.45	0.79	1100	19.87	17.13	0.65	19.87	17.13	0.65	
	57 (13.9)	1100	20.51	20.51	2.65	21.90	21.90	2.38	23.39	16.01	1.11	25.32	17.02	0.96	28.04	18.02	0.81	1100	19.01	19.01	0.67	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	29.46	12.19	1.06	32.63	12.80	0.89	35.82	13.41	0.72	1100	23.69	14.03	0.56	23.69	14.03	0.56	
	67 (19.4)	1100	22.91	19.93	2.66	24.69	20.87	2.37	27.66	15.85	1.09	30.81	16.56	0.92	33.99	17.27	0.76	1100	21.46	17.97	0.61	21.46	17.97	0.61	
	63 (17.2)	1100	21.96	21.96	2.66	23.43	23.43	2.38	25.92	17.13	1.10	28.40	18.21	0.93	31.85	19.27	0.78	1100	20.33	20.33	0.64	20.33	20.33	0.64	
	57 (13.9)	1100	21.92	21.92	2.66	23.39	23.39	2.38	25.92	17.10	1.10	28.39	18.18	0.93	31.85	19.24	0.78	1100	20.29	20.29	0.64	20.29	20.29	0.64	
	72 (22.2)	1100	25.37	10.73	2.67	27.27	11.42	2.37	29.54	8.42	1.06	31.96	9.47	0.89	34.13	9.47	0.72	1100	23.78	10.00	0.56	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 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

288BNV048

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(BF)005L	1.00	1.00	
FE4ANR006	1.01	1.01	
CAP**4817AL*	0.98	1.08	315(A,J)AV048090
CSPH*4812AL*	0.99	1.15	315(A,J)AV048090
CSPH*6012AL*	1.00	1.10	315(A,J)AV048090
CAP**4821AL*	0.98	1.02	315(A,J)AV060110
CAP**6021AL*	1.00	1.05	315(A,J)AV060110
CNPV*4821AL*	0.98	1.02	315(A,J)AV060110
CSPH*4812AL*	0.99	1.09	315(A,J)AV060110
CSPH*6012AL*	1.00	1.10	315(A,J)AV060110
CAP**4824AL*	0.98	1.02	315(A,J)AV066135
CAP**6024AL*	1.00	1.05	315(A,J)AV066135
CNPV*4824AL*	0.98	1.02	315(A,J)AV066135
CNPV*6024AL*	1.00	1.00	315(A,J)AV066135
CSPH*4812AL*	0.99	1.09	315(A,J)AV066135
CSPH*6012AL*	1.01	1.11	315(A,J)AV066135
CAP**4824AL*	0.98	1.02	315(A,J)AV066155
CAP**6024AL*	1.00	1.00	315(A,J)AV066155
CNPV*4824AL*	0.99	1.04	315(A,J)AV066155
CNPV*6024AL*	0.99	0.99	315(A,J)AV066155
CSPH*4812AL*	0.99	1.09	315(A,J)AV066155
CSPH*6012AL*	1.01	1.06	315(A,J)AV066155
CAP**4821AL*	0.98	1.08	98(6*B,7*A)60080V21
CAP**6021AL*	1.00	1.05	98(6*B,7*A)60080V21
CNPV*4821AL*	0.98	1.02	98(6*B,7*A)60080V21
CSPH*4812AL*	0.99	1.15	98(6*B,7*A)60080V21
CSPH*6012AL*	1.00	1.16	98(6*B,7*A)60080V21
CAP**4821AL*	0.98	1.02	98(6*B,7*A)66100V21
CAP**6021AL*	1.00	1.05	98(6*B,7*A)66100V21
CNPV*4821AL*	0.98	1.02	98(6*B,7*A)66100V21
CSPH*4812AL*	0.99	1.09	98(6*B,7*A)66100V21
CSPH*6012AL*	1.00	1.10	98(6*B,7*A)66100V21
CAP**4824AL*	0.98	1.02	98(6*B,7*A)66120V24
CAP**6024AL*	1.00	1.05	98(6*B,7*A)66120V24
CNPV*4824AL*	0.98	1.02	98(6*B,7*A)66120V24
CNPV*6024AL*	1.00	1.00	98(6*B,7*A)66120V24
CSPH*4812AL*	0.99	1.15	98(6*B,7*A)66120V24
CSPH*6012AL*	1.00	1.10	98(6*B,7*A)66120V24
CAP**4821AL*	0.97	1.06	98(6*B,7MA)60060V21
CAP**6021AL*	0.99	1.09	98(6*B,7MA)60060V21
CNPV*4821AL*	0.97	1.05	98(6*B,7MA)60060V21
CSPH*4812AL*	0.99	1.15	98(6*B,7MA)60060V21
CSPH*6012AL*	0.99	1.15	98(6*B,7MA)60060V21

2-STAGE (Hi-Stage 5, Lo-Stage 2)						
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
FV4CN(B,F)005L	1.00	1.00	1.00	1.00		
FV4CNB006	1.02	1.02	1.01	0.97		
CAP**4817AL*	0.97	1.12	0.98	1.10	313*AV048070	
CSPH*4812AL*	0.97	1.12	0.98	1.09	313*AV048070	
CSPH*6012AL*	0.99	1.15	0.99	1.09	313*AV048070	
CAP**4821AL*	0.97	1.01	0.98	1.03	313*AV048090	
CAP**6021AL*	0.99	1.04	0.99	1.02	313*AV048090	
CNPV*4821AL*	0.97	1.01	0.99	1.02	313*AV048090	
CSPH*4812AL*	0.98	1.08	0.99	1.03	313*AV048090	
CSPH*6012AL*	1.00	1.05	1.01	1.02	313*AV048090	
CAP**4821AL*	0.97	1.01	0.99	1.03	313*AV060110	
CAP**6021AL*	1.00	1.00	1.00	1.02	313*AV060110	
CNPV*4821AL*	0.98	1.02	0.99	1.03	313*AV060110	
CSPH*4812AL*	0.98	1.05	1.00	1.03	313*AV060110	
CSPH*6012AL*	1.00	1.03	1.01	1.02	313*AV060110	
CAP**4817AL*	0.97	1.06	0.98	1.06	314AAV048070	
CSPH*4812AL*	0.98	1.08	0.99	1.07	314AAV048070	
CSPH*6012AL*	0.99	1.09	1.00	1.06	314AAV048070	
CAP**4821AL*	0.97	1.01	0.98	1.02	314AAV048090	
CAP**6021AL*	0.99	1.04	0.99	1.01	314AAV048090	
CNPV*4821AL*	0.98	1.02	0.99	1.02	314AAV048090	
CSPH*4812AL*	0.98	1.08	0.99	1.02	314AAV048090	
CSPH*6012AL*	1.00	1.05	1.00	1.01	314AAV048090	
CAP**4821AL*	0.97	1.01	0.98	1.00	314AAV066110	
CAP**6021AL*	1.00	1.00	0.99	1.00	314AAV066110	
CNPV*4821AL*	0.98	1.02	0.99	1.00	314AAV066110	
CSPH*4812AL*	0.98	1.02	0.99	1.01	314AAV066110	
CSPH*6012AL*	1.00	1.05	1.01	1.00	314AAV066110	
CAP**4824AL*	0.97	1.01	0.98	1.00	314AAV066135	
CAP**6024AL*	1.00	1.00	0.99	1.00	314AAV066135	
CNPV*4824AL*	0.98	1.02	0.99	1.00	314AAV066135	
CNPV*6024AL*	1.00	1.00	1.00	1.00	314AAV066135	
CSPH*4812AL*	0.98	1.02	0.99	1.00	314AAV066135	
CSPH*6012AL*	1.00	1.05	1.00	0.99	314AAV066135	
CAP**4817AL*	0.97	1.06	0.99	1.04	922*A48080E17	
CSPH*4812AL*	0.98	1.08	0.99	1.04	922*A48080E17	
CSPH*6012AL*	1.00	1.10	1.00	1.03	922*A48080E17	
CAP**4821AL*	0.98	1.02	0.98	1.01	922*A60080E21	
CAP**6021AL*	1.00	1.05	0.99	1.01	922*A60080E21	
CNPV*4821AL*	0.98	1.02	0.99	1.01	922*A60080E21	
CSPH*4812AL*	0.99	1.09	0.99	1.01	922*A60080E21	
CSPH*6012AL*	1.01	1.06	1.01	1.00	922*A60080E21	
CAP**4821AL*	0.98	1.02	0.98	1.01	922*A60100E21	
CAP**6021AL*	1.00	1.05	0.99	1.01	922*A60100E21	
CNPV*4821AL*	0.98	1.02	0.99	1.01	922*A60100E21	
CSPH*4812AL*	0.99	1.09	0.99	1.01	922*A60100E21	
CSPH*6012AL*	1.01	1.08	1.01	1.01	922*A60100E21	
CAP**4824AL*	0.98	1.02	0.99	1.02	922*A60120E24	
CAP**6024AL*	1.00	1.05	0.99	1.01	922*A60120E24	
CNPV*4824AL*	0.98	1.02	0.99	1.01	922*A60120E24	
CNPV*6024AL*	1.00	1.05	1.00	1.01	922*A60120E24	
CSPH*4812AL*	0.98	1.08	0.99	1.02	922*A60120E24	

See notes on page 36

2-STAGE (Hi-Stage 5, Lo-Stage 2)						
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
CSPH*6012AL*	1.01	1.06	1.01	1.01	922*A60120E24	
CAP**4817AL*	0.97	1.06	0.98	1.06	925*A48080E17	
CSPH*4812AL*	0.97	1.12	0.98	1.06	925*A48080E17	
CSPH*6012AL*	0.99	1.09	0.99	1.05	925*A48080E17	
CAP**4821AL*	0.97	1.01	0.99	1.01	925*A60100E21	
CAP**6021AL*	0.99	1.04	1.00	1.07	925*A60100E21	
CNPV*4821AL*	0.97	1.01	0.99	1.01	925*A60100E21	
CSPH*4812AL*	0.98	1.08	1.00	1.08	925*A60100E21	

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAR 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)		29.79	29.79	3.46		31.90	31.19	3.11		33.89	32.31	2.73		36.06	33.48	2.45		38.22	34.66	2.19		40.34	35.78	1.96						
75 (23.9)	72 (22.2)		26.64	11.15	2.26		28.72	11.89	2.04		30.26	12.29	1.72		32.03	13.03	1.44		33.78	13.78	1.18		35.50	14.50	1.95						
	67 (19.4)		23.82	15.66	2.25		25.70	16.41	2.04		27.44	17.29	1.72		29.16	18.16	1.44		30.82	18.92	1.18		32.50	19.75	1.95						
	63 (17.2)	1200	21.78	19.18	2.24		23.51	19.96	2.03	1200	25.10	20.65	1.72		26.73	21.43	1.44	1200	28.22	21.43	1.18		30.34	21.43	1.95						
	57 (13.9)		20.87	20.87	2.23		22.22	22.22	2.03		23.67	23.67	1.72		25.10	25.10	1.44		26.55	26.55	1.18		28.00	28.00	1.95						
	72 (22.2)		26.55	15.78	2.26		28.63	16.54	2.04		30.10	17.43	1.72		31.66	18.31	1.44		33.12	19.16	1.18		34.63	20.01	1.95						
80 (26.7)	67 (19.4)		23.75	20.23	2.25		25.64	21.01	2.04		27.50	21.80	1.72		29.35	22.65	1.44		31.20	23.50	1.18		32.95	24.35	1.95						
	63 (17.2)	1200	22.48	22.48	2.24		23.92	23.92	2.03	1200	25.37	24.80	1.72		26.82	26.70	1.44	1200	28.71	28.60	1.18		30.60	30.50	1.95						
	57 (13.9)		22.45	22.45	2.24		23.87	23.87	2.03		24.77	24.77	1.72		25.66	25.66	1.44		26.55	26.55	1.18		27.44	27.44	1.95						
	72 (22.2)		26.64	11.15	2.26		28.72	11.89	2.04		30.26	12.29	1.72		32.03	13.03	1.44		33.78	13.78	1.18		35.50	14.50	1.95						
	67 (19.4)	1200	23.82	15.66	2.25		25.70	16.41	2.04	1200	27.44	17.29	1.72		29.16	18.16	1.44	1200	30.82	19.00	1.18		32.50	20.00	1.95						

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 36

# DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

288BNV060

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)				Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	Power	
*FV4CNB006L	1.00	1.00	1.00	1.00	
CAP**6021AL*	1.00	1.11	0.99	1.06	922*AG0080E21***
CAP**6024AL*	1.00	1.11	0.99	1.06	922*AG0100E21***
CNPV*6024AL*	1.01	1.12	0.99	1.05	313*AV060110
CSPH*6012AL*	1.01	1.12	0.99	1.05	314AAV066110
CAP**6024AL*	1.00	1.11	0.99	1.06	922*AG0120E24***
CNPV*6024AL*	1.00	1.11	0.99	1.06	314AAV066135
CNPV*6024AL*	1.00	1.11	0.99	1.04	922*AG0120E24***
CNPV*6024AL*	1.01	1.12	0.99	1.05	313*AV060135
CNPV*6024AL*	1.00	1.11	1.00	1.09	314AAV066135
CSPH*6012AL*	1.01	1.12	1.00	1.06	OVLARB060154
CSPH*6012AL*	1.01	1.12	1.00	1.05	313*AV060110
CSPH*6012AL*	1.01	1.12	1.00	1.05	313*AV060135
CSPH*6012AL*	1.01	1.12	1.00	1.05	314AAV066110
CSPH*6012AL*	1.01	1.12	1.00	1.05	314AAV066135

See notes on page 36

Cooling Indoor Model	Capacity	Power	Furnace Model
*FE4ANB006L	1.00	1.00	
CAP**6021AL*	0.97	1.02	315(A,J)AV060110
CAP**6024AL*	0.97	1.02	315(A,J)AV060110
CNPV*6024AL*	0.97	0.97	315(A,J)AV060110
CSPH*6012AL*	0.98	1.03	315(A,J)AV060110
CAP**6024AL*	0.97	0.97	315(A,J)AV066135
CNPV*6024AL*	0.97	0.97	315(A,J)AV066135
CSPH*6012AL*	0.98	1.03	315(A,J)AV066135
CNPV*6024AL*	0.98	0.98	315(A,J)AV066155
CNPV*6024AL*	0.98	0.98	315(A,J)AV066155
CSPH*6012AL*	0.98	1.03	315(A,J)AV066155
CAP**6021AL*	0.97	1.02	98(G*E*7*A)60080V21***
CAP**6024AL*	0.97	1.02	98(G*E*7*A)60080V21***
CNPV*6024AL*	0.97	1.02	98(G*E*7*A)60080V21***
CSPH*6012AL*	0.97	1.02	98(G*E*7*A)60080V21***
CSPH*6012AL*	0.97	1.02	98(G*E*7*A)60080V21***
CAP**6021AL*	0.97	1.02	98(G*E*7*A)66100V21***
CAP**6024AL*	0.97	1.02	98(G*E*7*A)66100V21***
CNPV*6024AL*	0.97	1.02	98(G*E*7*A)66100V21***
CSPH*6012AL*	0.98	1.03	98(G*E*7*A)66100V21***
CAP**6024AL*	0.97	1.02	98(G*E*7*A)66120V24***
CNPV*6024AL*	0.97	1.02	98(G*E*7*A)66120V24***
CSPH*6012AL*	0.97	1.02	98(G*E*7*A)66120V24***
CAP**6021AL*	0.96	1.07	98(G*E*7*MA)60060V21***
CAP**6024AL*	0.96	1.07	98(G*E*7*MA)60060V21***
CNPV*6024AL*	0.96	1.07	98(G*E*7*MA)60060V21***
CSPH*6012AL*	0.96	1.07	98(G*E*7*MA)60060V21***



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

288BNV024A / FEANF005 Comfort + Dehumidify Mode  
Condenser Entering Air Temperature - F (°C)

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)	608	24.05	9.74	2.72	608	25.31	10.23	2.15	608	26.93	10.87	1.69	663	28.53	11.51	1.30	708	30.24	12.20	0.96	
	67 (19.4)		21.69	12.60	2.71		22.84	13.11	2.15		24.30	13.88	1.70		25.76	14.68	1.31		27.35	15.63	0.98	
	63 (17.2)		19.98	14.84	2.69		21.05	15.36	2.14		22.40	16.25	1.70		23.76	17.17	1.32		25.20	18.29	0.99	
	57 (13.9)		17.96	17.96	2.67		18.83	18.68	2.12		20.01	19.72	1.70		21.32	20.70	1.33		22.50	22.16	1.01	
	72 (22.2)		23.98	12.65	2.72		25.25	13.15	2.15		26.85	13.94	1.69		28.46	14.73	1.30		30.15	15.64	0.96	
80 (26.7)	67 (19.4)	608	21.63	15.47	2.71	608	22.79	15.99	2.15	634	24.25	16.90	1.70	663	25.71	17.85	1.31	708	27.28	19.03	0.98	
	63 (17.2)		19.98	17.70	2.69		21.04	18.23	2.14		22.39	19.25	1.70		23.75	20.31	1.32		25.21	21.65	0.99	
	57 (13.9)		19.08	19.08	2.68		19.91	19.91	2.13		21.11	21.11	1.70		22.34	22.34	1.32		23.76	23.76	1.00	
	72 (22.2)		15.55	6.31	1.56		16.33	6.61	1.21		17.39	7.04	0.98		18.54	7.49	0.78		19.78	8.00	0.60	
	67 (19.4)		13.98	8.14	1.57		14.70	8.46	1.22		15.68	8.96	1.00		16.71	9.53	0.80		17.84	10.19	0.63	
75 (23.9)	63 (17.2)	437	12.85	9.59	1.57	437	13.82	9.91	1.22	452	14.42	10.48	1.01	475	15.37	11.12	0.82	510	16.42	11.92	0.65	
	57 (13.9)		11.51	11.51	1.57		12.02	12.02	1.22		12.80	12.70	1.02		13.64	13.47	0.84		14.57	14.45	0.68	
	72 (22.2)		15.51	8.19	1.56		16.26	8.49	1.21		17.34	9.02	0.98		18.49	9.57	0.78		19.72	10.27	0.60	
	67 (19.4)		13.96	10.01	1.57		14.86	10.33	1.22		15.64	10.92	1.00		16.67	11.56	0.80		17.81	12.41	0.63	
	63 (17.2)		12.84	11.44	1.57		13.51	11.79	1.22		14.41	12.41	1.01		15.36	13.18	0.82		16.40	14.13	0.65	
80 (26.7)	57 (13.9)	437	12.26	12.26	1.57	12.79	12.79	1.22	13.57	13.57	1.02	14.43	14.43	0.83	15.44	15.44	0.66					
	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					
	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					
	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					
	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					
75 (23.9)	72 (22.2)	342	11.57	6.04	1.00	342	8.90	4.49	0.58	250	9.45	4.72	0.52	250	9.98	4.95	0.45	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	
	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	
	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	
	72 (22.2)		11.60	4.69	1.00		8.64	3.49	0.58		9.30	3.76	0.52		9.74	3.95	0.45		10.45	4.23	0.32	
80 (26.7)	67 (19.4)	342	10.38	6.01	1.01	222	7.72	4.24	0.59	234	8.31	4.55	0.54	229	8.69	4.72	0.48	245	9.32	5.06	0.41	
	63 (17.2)		9.51	7.00	1.01		7.04	4.82	0.60		7.58	5.17	0.56		8.03	5.31	0.51		8.50	5.70	0.45	
	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	
	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	
	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	
75 (23.9)	63 (17.2)	342	9.50	8.34	1.01	222	7.03	5.61	0.60	234	7.57	6.01	0.56	229	7.92	6.14	0.51	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	6.01	0.56		7.49	6.59	0.45	
	72 (22.2)		11.60	4.69	1.00		8.64	3.49	0.58		9.30	3.76	0.52		9.74	3.95	0.45		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	
	63 (17.2)		9.51	7.00	1.01		7.04	4.82	0.60		7.58	5.17	0.56		8.03	5.31	0.51		8.50	5.70	0.45	
80 (26.7)	57 (13.9)	342	8.42	8.42	1.02	222	6.16	5.65	0.61	234	6.61	6.07	0.58	229	6.92	6.18	0.54	245	7.42	6.65	0.49	
	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	
	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	
	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	
	57 (13.9)		8.99	8.99	1.02		6.30	6.30	0.61		6.76	6.76	0.57		7.03	6.01	0.56		7.49	6.59	0.45	

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 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

28BNV024A

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi-Stage 5, Lo-Stage 2)					
				Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FE4AN(B,F)005L	1.00	1.00		FV4CN(B,F)003	0.93	1.06	0.97	1.03	
FE4AN(B,F)003L	1.01	1.06		FV4CNF002L	0.92	1.09	0.98	1.05	
FE4ANF002L	1.01	1.06		CAP**2414AL*	0.93	1.11	0.98	1.09	313*AV024045
CAP**3614AL*	1.01	1.06	315(A,J)AV036070	CAP**3014AL*	0.95	1.08	0.98	1.09	313*AV024045
CSPH*3612AL*	1.03	1.13	315(A,J)AV036070	CAP**3614AL*	0.95	1.08	0.98	1.08	313*AV024045
CSPH*4212AL*	1.03	1.13	315(A,J)AV048090	CSPH*2412AL*	0.93	1.11	0.98	1.08	313*AV024045
CAP**3617AL*	1.01	1.06	315(A,J)AV048090	CSPH*3012AL*	0.95	1.08	0.99	1.08	313*AV024045
CNPV*3617AL*	1.01	1.06	315(A,J)AV048090	CSPH*3612AL*	0.97	1.10	0.99	1.07	313*AV024045
CNPV*4217AL*	1.03	1.07	315(A,J)AV048090	CAP**2414AL*	0.93	1.08	0.96	1.10	922*A30040E14
CSPH*3612AL*	1.03	1.13	315(A,J)AV048090	CAP**3014AL*	0.94	1.12	0.96	1.09	922*A30040E14
CSPH*4212AL*	1.03	1.14	315(A,J)AV048090	CAP**3614AL*	0.94	1.12	0.96	1.09	922*A30040E14
CAP**3617AL*	1.00	1.05	98(6*B,7*A)42060V17	CNPV*3014AL*	0.95	1.13	0.96	1.09	922*A30040E14
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42060V17	CSPH*2412AL*	0.93	1.11	0.96	1.09	922*A30040E14
CNPV*4217AL*	1.02	1.07	98(6*B,7*A)42060V17	CSPH*3012AL*	0.95	1.13	0.98	1.08	922*A30040E14
CSPH*3612AL*	1.02	1.12	98(6*B,7*A)42060V17	CSPH*3612AL*	0.95	1.13	0.98	1.08	922*A30040E14
CSPH*4212AL*	1.03	1.13	98(6*B,7*A)42060V17	CAP**2417AL*	0.93	1.11	0.96	1.09	922*A36040E17
CAP**3617AL*	1.01	1.06	98(6*B,7*A)42060V17	CAP**3017AL*	0.94	1.12	0.96	1.09	922*A36040E17
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42060V17	CAP**3617AL*	0.95	1.13	0.97	1.09	922*A36040E17
CNPV*4217AL*	1.02	1.07	98(6*B,7*A)42060V17	CNPV*3017AL*	0.94	1.12	0.96	1.09	922*A36040E17
CSPH*3612AL*	1.02	1.12	98(6*B,7*A)42060V17	CNPV*3617AL*	0.94	1.12	0.96	1.09	922*A36040E17
CSPH*4212AL*	1.03	1.13	98(6*B,7*A)42060V17	CNPV*4217AL*	0.96	1.09	0.97	1.08	922*A36040E17
CNPV*3621AL*	1.01	1.06	98(6*B,7MA)60060V21	CSPH*2412AL*	0.93	1.11	0.96	1.10	922*A36040E17
CNPV*3621AL*	1.01	1.06	98(6*B,7MA)60060V21	CSPH*3012AL*	0.94	1.12	0.97	1.08	922*A36040E17
CNPV*3621AL*	1.00	1.05	98(6*B,7MA)60060V21	CSPH*3612AL*	0.96	1.09	0.98	1.08	922*A36040E17
CNPV*4221AL*	1.01	1.06	98(6*B,7MA)60060V21	CAP**2414AL*	0.93	1.06	0.98	1.07	922*A36060E14
CSPH*3612AL*	1.02	1.12	98(6*B,7MA)60060V21	CAP**3014AL*	0.96	1.09	0.98	1.07	922*A36060E14
CSPH*4212AL*	1.03	1.13	98(6*B,7MA)60060V21	CAP**3614AL*	0.96	1.09	0.98	1.06	922*A36060E14
				CNPV*3014AL*	0.97	1.15	0.98	1.07	922*A36060E14
				CNPV*2412AL*	0.93	1.06	0.98	1.07	922*A36060E14
				CSPH*3012AL*	0.96	1.09	0.99	1.05	922*A36060E14
				CSPH*3612AL*	0.97	1.10	1.00	1.05	922*A36060E14
				CAP**2414AL*	0.93	1.11	0.96	1.13	925*A30040E14
				CAP**3014AL*	0.94	1.12	0.96	1.12	925*A30040E14
				CAP**3614AL*	0.95	1.13	0.96	1.11	925*A30040E14
				CNPV*3014AL*	0.94	1.12	0.96	1.13	925*A30040E14
				CNPV*2412AL*	0.93	1.11	0.96	1.12	925*A30040E14
				CNPV*3612AL*	0.95	1.13	0.97	1.11	925*A30040E14
				CSPH*3612AL*	0.96	1.14	0.97	1.10	925*A30040E14
				CAP**2417AL*	0.93	1.10	0.96	1.11	925*A36040E17
				CAP**3017AL*	0.93	1.11	0.96	1.10	925*A36040E17
				CAP**3617AL*	0.94	1.12	0.96	1.09	925*A36040E17
				CNPV*3017AL*	0.93	1.11	0.96	1.10	925*A36040E17
				CNPV*3617AL*	0.93	1.11	0.97	1.09	925*A36040E17
				CNPV*4217AL*	0.93	1.10	0.96	1.11	925*A36040E17
				CSPH*2412AL*	0.93	1.11	0.97	1.09	925*A36040E17
				CSPH*3012AL*	0.93	1.11	0.97	1.09	925*A36040E17
				CSPH*3612AL*	0.95	1.08	0.97	1.09	925*A36040E17

See notes on page 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

288BIN024B / FE4ANF002L Comfort + Dehumidify Mode  
Condenser Entering Air Temperature F (°C)

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 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

288BNV024B

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi--Stage 5, Lo--Stage 2)					
				Cooling Indoor Model	High Spd Cap.	Power	Low Spd Cap.	Power	Furnace Model
*FE4ANF002L	1.00	1.00		*FV4CNF002L	1.00	1.00	1.00	1.00	
FE4AN(F)003L	1.01	1.01		FV4CN(B,F)003L	0.98	0.84	0.97	0.96	
CAP**3614AL*	1.00	1.05	315(A,J)AV036070	FV4CN(B,F)003L	0.97	0.84	0.99	0.99	
CAP**3617AL*	1.00	1.05	98(6*B,7*A)42060V17***	FV4CN(B,F)003L	0.95	0.85	0.97	1.05	922*A30040E14***
CAP**3617AL*	1.01	1.01	98(6*B,7*A)42080V17***	CAP**2414AL*	0.97	0.83	0.99	1.03	922*A36060E14***
CAP**3617AL*	1.01	1.01	315(A,J)AV036070	CAP**2414AL*	0.96	0.91	0.96	1.07	925*A30040E14***
CAP**3621AL*	1.00	1.05	98(6*B,7*A)42060V17***	CAP**2414AL*	0.96	0.82	0.98	1.05	313*AV024045
CAP**3621AL*	1.00	1.05	98(6*B,7*A)42080V17***	CAP**2417AL*	0.96	0.86	0.97	1.04	922*A36040E17***
CAP**3621AL*	1.01	1.01	98(6*B,7*MA)60060V21***	CAP**2417AL*	0.95	0.85	0.97	1.06	925*A36040E17***
CAP**3621AL*	1.01	1.01	98(6*B,7*A)60060V21***	CAP**3014AL*	0.97	0.87	0.97	1.04	922*A30040E14***
CAP**4221AL*	1.01	1.06	98(6*B,7*A)42060V17***	CAP**3014AL*	0.98	0.84	0.99	1.03	922*A36060E14***
CAP**4221AL*	1.01	1.06	98(6*B,7*A)42080V17***	CAP**3014AL*	0.97	0.84	0.97	1.04	925*A30040E14***
CAP**4221AL*	1.02	1.02	98(6*B,7*MA)60060V21***	CAP**3017AL*	0.97	0.83	0.97	1.04	313*AV024045
CAP**4221AL*	1.01	1.06	98(6*B,7*MA)60060V21***	CAP**3017AL*	0.96	0.86	0.97	1.06	925*A36040E17***
CAP**4817AL*	1.02	1.07	98(6*B,7*A)42060V17***	CAP**3614AL*	0.97	0.83	0.97	1.04	922*A30040E14***
CAP**4817AL*	1.03	1.03	98(6*B,7*A)42080V17***	CAP**3614AL*	0.98	0.84	0.99	1.02	922*A36060E14***
CAP**4817AL*	1.03	1.03	315(A,J)AV036070	CAP**3614AL*	0.97	0.92	0.97	1.07	925*A30040E14***
CAP**4821AL*	1.03	1.03	315(A,J)AV048090	CAP**3614AL*	0.97	0.84	0.98	1.04	313*AV024045
CAP**4821AL*	1.02	1.07	98(6*B,7*A)42060V17***	CAP**3617AL*	0.97	0.84	0.97	1.04	922*A36040E17***
CAP**4821AL*	1.02	1.02	98(6*B,7*A)42080V17***	CAP**3617AL*	0.97	0.84	0.98	1.04	925*A36040E17***
CAP**4821AL*	1.03	1.03	315(A,J)AV048090	CNPV*3014AL*	0.97	0.83	0.97	1.05	925*A36040E17***
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42060V17***	CNPV*3014AL*	0.99	0.89	0.99	1.03	922*A30040E14***
CNPV*3617AL*	1.00	1.05	98(6*B,7*A)42080V17***	CNPV*3014AL*	0.97	0.92	0.96	1.07	925*A30040E14***
CNPV*3621AL*	1.00	1.05	98(6*B,7*A)42060V17***	CNPV*3017AL*	0.97	0.87	0.97	1.05	922*A36040E17***
CNPV*3621AL*	1.00	1.05	98(6*B,7*A)42080V17***	CNPV*3017AL*	0.96	0.86	0.96	1.05	925*A36040E17***
CNPV*4217AL*	1.01	1.06	98(6*B,7*A)42060V17***	CNPV*3617AL*	0.97	0.87	0.97	1.04	922*A36040E17***
CNPV*4217AL*	1.02	1.07	98(6*B,7*A)42080V17***	CNPV*3617AL*	0.96	0.86	0.96	1.05	925*A36040E17***
CNPV*4217AL*	1.02	1.02	315(A,J)AV036070	CNPV*4217AL*	0.98	0.84	0.97	1.04	922*A36040E17***
CNPV*4221AL*	1.01	1.06	98(6*B,7*A)42060V17***	CNPV*4217AL*	0.97	0.83	0.97	1.05	925*A36040E17***
CNPV*4221AL*	1.01	1.06	98(6*B,7*A)42080V17***	CSPH*2412AL*	0.96	0.86	0.97	1.05	922*A30040E14***
CNPV*4221AL*	1.02	1.02	315(A,J)AV048090	CSPH*2412AL*	0.96	0.86	0.97	1.05	922*A36040E17***
CNPV*4821AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*2412AL*	0.97	0.84	0.99	1.03	922*A36060E14***
CNPV*4821AL*	1.03	1.07	98(6*B,7*A)42080V17***	CSPH*2412AL*	0.97	0.84	0.96	1.07	925*A30040E14***
CNPV*4821AL*	1.02	1.02	315(A,J)AV036070	CSPH*2412AL*	0.95	0.85	0.97	1.06	925*A36040E17***
CNPV*4821AL*	1.03	1.03	315(A,J)AV048090	CSPH*2412AL*	0.97	0.87	0.98	1.04	313*AV024045
CSPH*3612AL*	1.02	1.07	98(6*B,7*A)42060V17***	CSPH*3012AL*	0.97	0.87	0.98	1.04	922*A30040E14***
CSPH*3612AL*	1.02	1.07	98(6*B,7*A)42080V17***	CSPH*3012AL*	0.97	0.87	0.97	1.04	922*A36040E17***
CSPH*3612AL*	1.03	1.07	315(A,J)AV036070	CSPH*3012AL*	0.98	0.84	1.00	1.02	922*A36060E14***
CSPH*3612AL*	1.03	1.07	315(A,J)AV048090	CSPH*3012AL*	0.97	0.92	0.97	1.07	925*A30040E14***
CSPH*4212AL*	1.02	1.07	98(6*B,7*A)42060V17***	CSPH*3012AL*	0.96	0.86	0.97	1.05	925*A36040E17***
CSPH*4212AL*	1.03	1.07	98(6*B,7*A)42080V17***	CSPH*3012AL*	0.97	0.84	0.99	1.04	313*AV024045
CSPH*4212AL*	1.03	1.03	315(A,J)AV036070	CSPH*3612AL*	0.99	0.85	0.97	1.03	922*A30040E14***
CSPH*4212AL*	1.03	1.03	315(A,J)AV048090	CSPH*3612AL*	0.98	0.84	0.97	1.03	922*A36040E17***
CSPH*4812AL*	1.03	1.07	98(6*B,7*A)42060V17***	CSPH*3612AL*	1.00	0.86	0.99	1.01	922*A36060E14***
CSPH*4812AL*	1.03	1.07	98(6*B,7*A)42080V17***	CSPH*3612AL*	0.99	0.84	0.97	1.06	925*A30040E14***
				CSPH*3612AL*	0.97	0.88	0.97	1.04	925*A36040E17***
				CSPH*3612AL*	1.00	0.86	0.99	1.03	313*AV024045

See notes on page 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	288BN1005 / FEAN1005 Comfort + Dehumidify Mode Condenser Entering Air Temperature = F (°C)										STAGE 1 - FEAN1005 ONLY										STAGE 1 - ALL OTHER INDOOR COMBINATIONS									
	105 (40.5)					95 (35)					85 (29.4)					75 (23.9)					65 (18.3)									
	EVAP. AIR	ID SCFM	Capacity MBtuh Total	Sensit	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Sensit	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Sensit	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Sensit	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Sensit	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Sensit	Total Sys. KW					
<b>75 (23.9)</b>	72 (22.2)	<b>608</b>	24.05	9.74	2.20	<b>608</b>	25.31	10.23	1.90	<b>608</b>	26.93	10.87	1.64	<b>663</b>	28.53	11.51	1.40	<b>708</b>	30.24	12.20	1.18	<b>708</b>	32.00	12.90	0.96	<b>708</b>	33.80	13.60	0.72	
	67 (19.4)		21.69	12.60	2.19		22.84	13.11	1.89		24.30	13.68	1.65		25.76	14.08	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									
67 (19.4)	21.63	15.47	2.19	22.79	15.99	1.89	24.25	16.90	1.65	25.71	17.85	1.42	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															
<b>75 (23.9)</b>	72 (22.2)	<b>437</b>	15.55	6.31	1.34	<b>437</b>	16.33	6.61	1.11	<b>482</b>	17.39	7.04	0.97	<b>475</b>	18.54	7.49	0.82	<b>510</b>	19.76	8.00	0.67	<b>510</b>	21.00	8.50	0.52	<b>510</b>	22.25	8.90	0.37	
	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									
	63 (17.2)		12.85	9.59	1.35		13.82	9.91	1.12		14.42	10.48	0.99		15.37	11.12	0.86		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															
57 (13.9)	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															
<b>75 (23.9)</b>	72 (22.2)	<b>342</b>	11.60	4.69	1.00	<b>342</b>	8.92	3.59	0.58	<b>250</b>	9.47	3.82	0.52	<b>250</b>	10.00	4.04	0.45	<b>250</b>	10.52	4.25	0.32	<b>250</b>	11.00	4.40	0.27	<b>250</b>	11.50	4.55	0.22	
	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									
	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									
	57 (13.9)		10.39	5.98	1.01		6.96	6.09	0.62		6.74	6.31	0.58		6.74	6.31	0.54		6.74	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									
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															
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															
57 (13.9)	8.99	8.99	1.02	6.65	6.65	0.61	6.66	6.66	0.58	6.66	6.66	0.53	6.66	6.66	0.48															
<b>75 (23.9)</b>	72 (22.2)	<b>342</b>	11.60	4.69	1.00	<b>342</b>	8.64	3.49	0.58	<b>222</b>	9.30	3.76	0.52	<b>229</b>	9.74	3.95	0.45	<b>245</b>	10.45	4.23	0.32	<b>245</b>	11.10	4.45	0.27	<b>245</b>	11.75	4.60	0.22	
	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									
	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									
	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									
	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									
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															
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															
57 (13.9)	8.99	8.99	1.02	6.30	6.30	0.61	6.30	6.76	0.57	6.76	6.98	0.53	7.49	7.49	0.48															

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 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

288ENV025

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi--Stage 5, Lo--Stage 2)					
				Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FE4AN(B/F)005L	1.00	1.00		FV4CN(B/F)003	0.94	0.98	0.97	1.00	
FE4AN(B/F)003	1.01	1.05		FV4CNF002L	0.94	0.98	0.98	1.02	
FE4ANF002L	1.01	1.10		CAP**2414AL*	0.94	1.03	0.98	1.10	313*AV024045
CAP**3614AL*	1.01	1.05	315(A,J)AV036070	CAP**3014AL*	0.95	0.99	0.98	1.09	313*AV024045
CSPH*3612AL*	1.03	1.11	315(A,J)AV036070	CAP**3614AL*	0.96	1.00	0.98	1.09	313*AV024045
CSPH*4212AL*	1.03	1.11	315(A,J)AV036070	CSPH*2412AL*	0.95	1.08	0.98	1.10	313*AV024045
CAP**3617AL*	1.01	1.05	315(A,J)AV048090	CSPH*3012AL*	0.96	1.04	0.99	1.08	313*AV024045
CNPV**3617AL*	1.01	1.05	315(A,J)AV048090	CSPH*3612AL*	0.98	1.02	0.99	1.08	313*AV024045
CSPH*3612AL*	1.03	1.11	315(A,J)AV048090	CAP**2414AL*	0.93	1.02	0.96	1.11	922*AV024045
CSPH*4212AL*	1.03	1.12	315(A,J)AV048090	CAP**3014AL*	0.93	1.03	0.96	1.10	922*AV024045
CAP**3617AL*	1.00	1.09	98(6*B,7*A)42060V17	CAP**3014AL*	0.95	1.03	0.97	1.10	922*AV024045
CNPV**3617AL*	1.02	1.11	98(6*B,7*A)42060V17	CNPV**3014AL*	0.96	1.04	0.96	1.10	922*AV024045
CSPH*3612AL*	1.02	1.16	98(6*B,7*A)42060V17	CSPH*2412AL*	0.94	1.03	0.97	1.11	922*AV024045
CSPH*4212AL*	1.03	1.11	98(6*B,7*A)42060V17	CSPH*3012AL*	0.95	1.03	0.98	1.09	922*AV024045
CAP**3617AL*	1.01	1.05	98(6*B,7*A)42080V17	CSPH*3612AL*	0.97	1.05	0.98	1.08	922*AV024045
CNPV**3617AL*	1.00	1.09	98(6*B,7*A)42080V17	CAP**2414AL*	0.93	1.02	0.96	1.13	925*AV024045
CSPH*3612AL*	1.02	1.06	98(6*B,7*A)42080V17	CAP**3014AL*	0.95	1.03	0.97	1.11	925*AV024045
CSPH*4212AL*	1.03	1.11	98(6*B,7*A)42080V17	CNPV**3014AL*	0.95	1.03	0.97	1.10	925*AV024045
CNPV**3621AL*	1.01	1.05	98(6*B,7*A)60080V21	CAP**3617AL*	0.95	0.99	0.97	1.09	925*AV024045
CNPV**3621AL*	1.01	1.10	98(6*B,7*MA)60060V21	CNPV**3017AL*	0.94	1.03	0.96	1.11	925*AV024045
CNPV**3621AL*	1.00	1.09	98(6*B,7*MA)60060V21	CNPV**3617AL*	0.94	1.03	0.98	1.10	925*AV024045
CNPV**3612AL*	1.01	1.05	98(6*B,7*MA)60060V21	CNPV*4217AL*	0.96	1.00	0.98	1.09	925*AV024045
CSPH*3612AL*	1.02	1.11	98(6*B,7*MA)60060V21	CSPH*2412AL*	0.94	1.07	0.96	1.11	925*AV024045
CSPH*4212AL*	1.03	1.11	98(6*B,7*MA)60060V21	CSPH*3012AL*	0.95	1.03	0.98	1.10	925*AV024045
				CSPH*3612AL*	0.97	1.05	0.99	1.08	925*AV024045
				CAP**2414AL*	0.96	1.00	0.99	1.08	925*AV024045
				CAP**3014AL*	0.97	1.01	0.99	1.08	925*AV024045
				CNPV**3014AL*	0.98	1.06	0.99	1.08	925*AV024045
				CNPV*3014AL*	0.98	1.06	0.99	1.08	925*AV024045
				CSPH*2412AL*	0.95	1.03	0.99	1.08	925*AV024045
				CSPH*3012AL*	0.97	1.05	1.00	1.07	925*AV024045
				CSPH*3612AL*	0.98	1.02	1.01	1.06	925*AV024045
				CAP**2414AL*	0.93	1.06	0.96	1.14	925*AV024045
				CAP**3014AL*	0.95	1.08	0.96	1.13	925*AV024045
				CNPV**3014AL*	0.95	1.08	0.96	1.13	925*AV024045
				CNPV*3014AL*	0.94	1.07	0.96	1.13	925*AV024045
				CSPH*2412AL*	0.94	1.12	0.96	1.14	925*AV024045
				CSPH*3012AL*	0.95	1.08	0.97	1.12	925*AV024045
				CSPH*3612AL*	0.97	1.10	0.98	1.12	925*AV024045
				CAP**2417AL*	0.93	1.01	0.96	1.12	925*AV024045
				CAP**3017AL*	0.94	1.03	0.96	1.11	925*AV024045
				CNPV**3017AL*	0.94	1.03	0.97	1.11	925*AV024045
				CNPV*3017AL*	0.93	1.02	0.96	1.12	925*AV024045
				CNPV**3617AL*	0.95	1.03	0.98	1.11	925*AV024045
				CNPV*4217AL*	0.95	1.03	0.98	1.11	925*AV024045
				CSPH*2412AL*	0.93	1.06	0.96	1.12	925*AV024045
				CSPH*3012AL*	0.94	1.03	0.98	1.11	925*AV024045
				CSPH*3612AL*	0.95	1.03	0.98	1.11	925*AV024045
				CAP**2412AL*	0.94	1.03	0.98	1.11	925*AV024045
				CAP**3012AL*	0.96	1.04	0.98	1.10	925*AV024045

See notes on page 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

288BNV036 / FEANF005 Comfort + Dehumidify Mode  
Condenser Entering Air Temperature = F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
		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		
75 (23.9)	72 (22.2)	34.41	13.87	3.52	3.23	36.07	14.52	3.23	38.26	15.40	2.95	848	40.48	16.29	2.67	948	42.89	17.25	2.40		
	67 (19.4)	31.28	17.06	3.45	3.16	32.82	18.35	3.16	34.81	19.41	2.89	887	36.83	20.49	2.83	948	39.01	21.75	2.38		
	63 (17.2)	28.96	20.61	3.39	3.10	30.39	21.30	3.10	32.22	22.51	2.85	887	34.07	23.75	2.80	948	30.74	18.23	4.07		
	57 (13.9)	25.84	24.91	3.30	3.03	27.09	25.64	3.03	28.72	27.04	2.79	887	30.37	28.48	2.56	948	28.52	21.76	3.99		
	72 (22.2)	34.33	17.65	3.52	3.23	35.98	18.32	3.23	38.18	19.39	2.95	848	40.34	20.45	2.67	948	42.89	17.25	2.40		
80 (26.7)	67 (19.4)	31.22	21.37	3.45	3.16	32.75	22.08	3.16	34.75	23.33	2.89	848	36.76	24.61	2.63	948	33.65	18.17	4.17		
	63 (17.2)	28.92	24.31	3.39	3.10	30.34	25.03	3.10	32.18	26.41	2.85	848	34.02	27.82	2.80	948	30.66	22.60	4.07		
	57 (13.9)	26.99	26.99	3.34	3.05	28.06	28.06	3.05	29.68	29.68	2.81	848	31.34	31.34	2.57	948	28.51	26.12	3.99		
	72 (22.2)	21.33	8.62	2.14	1.80	22.26	8.99	1.80	23.79	9.60	1.53	600	25.26	10.19	1.29	664	26.82	10.82	1.07		
	67 (19.4)	19.21	10.97	2.13	1.78	20.08	11.37	1.78	21.48	12.15	1.53	600	22.80	12.86	1.30	664	24.22	13.70	1.08		
75 (23.9)	63 (17.2)	17.88	12.82	2.12	1.77	18.82	13.25	1.77	19.80	14.15	1.53	600	21.03	14.96	1.30	664	22.34	15.92	1.09		
	57 (13.9)	15.76	15.54	2.10	1.75	16.50	16.02	1.75	17.65	17.11	1.52	600	18.74	18.07	1.31	664	19.91	19.23	1.11		
	72 (22.2)	21.30	11.04	2.14	1.80	22.20	11.42	1.80	23.73	12.20	1.53	600	25.20	12.92	1.29	664	26.77	13.74	1.07		
	67 (19.4)	19.17	13.36	2.13	1.78	20.04	13.77	1.78	21.43	14.71	1.53	600	22.75	15.55	1.30	664	24.18	16.55	1.08		
	63 (17.2)	17.67	15.20	2.12	1.77	18.51	15.64	1.77	19.79	16.70	1.53	600	21.01	17.64	1.30	664	22.33	18.78	1.09		
80 (26.7)	57 (13.9)	16.63	16.63	2.11	1.76	17.30	17.30	1.76	18.49	18.49	1.52	600	19.59	19.59	1.30	664	20.84	20.84	1.10		
	72 (22.2)	14.17	5.74	1.50	0.68	9.11	3.68	0.68	9.70	3.92	0.52	250	10.29	4.16	0.38	267	11.09	4.48	0.26		
	67 (19.4)	12.71	7.33	1.51	0.70	8.12	4.54	0.70	8.64	4.78	0.54	250	9.16	5.03	0.40	267	9.89	5.42	0.28		
	63 (17.2)	11.65	8.59	1.51	0.71	7.40	5.21	0.71	7.88	5.46	0.56	250	8.35	5.71	0.42	267	9.01	6.16	0.30		
	57 (13.9)	10.35	10.35	1.51	0.72	6.44	6.21	0.72	6.86	6.46	0.57	250	7.27	6.71	0.44	267	7.86	7.24	0.32		
75 (23.9)	72 (22.2)	14.11	7.38	1.50	0.68	9.09	4.60	0.68	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	0.70	8.10	5.46	0.70	8.62	5.71	0.54	250	9.14	5.97	0.40	267	9.86	6.44	0.28		
	63 (17.2)	11.65	10.21	1.51	0.71	7.38	6.13	0.71	7.86	6.39	0.56	250	8.34	6.85	0.42	267	9.00	7.18	0.30		
	57 (13.9)	11.03	11.03	1.51	0.72	6.76	6.76	0.72	7.12	7.12	0.57	250	7.46	7.46	0.44	267	8.06	8.06	0.32		
	72 (22.2)	14.17	5.74	1.50	0.69	8.96	3.62	0.69	9.48	3.83	0.52	232	10.23	4.13	0.38	246	11.09	4.48	0.26		
80 (26.7)	67 (19.4)	14.17	5.74	1.50	0.71	7.98	4.42	0.71	8.44	4.62	0.55	232	9.11	4.99	0.41	246	9.88	5.42	0.28		
	63 (17.2)	14.17	5.74	1.50	0.72	7.27	5.05	0.72	7.69	5.25	0.56	232	8.30	5.65	0.42	246	9.01	6.16	0.30		
	57 (13.9)	14.17	5.74	1.50	0.73	6.32	5.98	0.73	6.69	6.17	0.58	232	7.23	6.64	0.44	246	7.85	7.24	0.33		
	72 (22.2)	14.17	5.74	1.50	0.69	8.94	4.49	0.69	9.43	4.69	0.52	232	10.20	5.06	0.38	246	11.06	5.50	0.26		
	67 (19.4)	14.17	5.74	1.50	0.71	7.96	5.29	0.71	8.42	5.49	0.55	232	9.09	5.91	0.41	246	9.86	6.43	0.28		
75 (23.9)	63 (17.2)	14.17	5.74	1.50	0.72	7.26	5.92	0.72	7.67	6.11	0.56	232	8.29	6.58	0.42	246	8.99	7.17	0.30		
	57 (13.9)	14.17	5.74	1.50	0.72	6.58	6.58	0.72	6.86	6.86	0.57	232	7.40	7.40	0.44	246	8.06	8.06	0.32		
	72 (22.2)	14.17	5.74	1.50	0.69	8.96	3.62	0.69	9.48	3.83	0.52	232	10.23	4.13	0.38	246	11.09	4.48	0.26		
	67 (19.4)	14.17	5.74	1.50	0.71	7.98	4.42	0.71	8.44	4.62	0.55	232	9.11	4.99	0.41	246	9.88	5.42	0.28		
	63 (17.2)	14.17	5.74	1.50	0.72	7.27	5.05	0.72	7.69	5.25	0.56	232	8.30	5.65	0.42	246	9.01	6.16	0.30		
80 (26.7)	57 (13.9)	14.17	5.74	1.50	0.73	6.32	5.98	0.73	6.69	6.17	0.58	232	7.23	6.64	0.44	246	7.85	7.24	0.33		
	72 (22.2)	14.17	5.74	1.50	0.69	8.94	4.49	0.69	9.43	4.69	0.52	232	10.20	5.06	0.38	246	11.06	5.50	0.26		
	67 (19.4)	14.17	5.74	1.50	0.71	7.96	5.29	0.71	8.42	5.49	0.55	232	9.09	5.91	0.41	246	9.86	6.43	0.28		
	63 (17.2)	14.17	5.74	1.50	0.72	7.26	5.92	0.72	7.67	6.11	0.56	232	8.29	6.58	0.42	246	8.99	7.17	0.30		
	57 (13.9)	14.17	5.74	1.50	0.72	6.58	6.58	0.72	6.86	6.86	0.57	232	7.40	7.40	0.44	246	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 36

**DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED**

288BNV036

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005	1.00	1.00	
FE4AN(B,F)003	0.96	1.06	
FE4ANF002	0.95	1.05	
CAP**3614AL*	0.95	1.05	315(A,J)AV036070
CSPH**3612AL*	0.97	1.07	315(A,J)AV036070
CSPH**4212AL*	0.98	1.08	315(A,J)AV036070
CSPH**4812AL*	0.98	1.09	315(A,J)AV036070
CAP**3617AL*	0.96	1.06	315(A,J)AV048090
CAP**4817AL*	0.98	1.03	315(A,J)AV048090
CNPV**3617AL*	0.95	1.05	315(A,J)AV048090
CNPV**4217AL*	0.97	1.07	315(A,J)AV048090
CSPH**3612AL*	0.98	1.08	315(A,J)AV048090
CSPH**4212AL*	0.98	1.09	315(A,J)AV048090
CSPH**4812AL*	0.98	1.09	315(A,J)AV048090
CAP**3621AL*	0.96	1.06	315(A,J)AV060110
CAP**4221AL*	0.96	1.07	315(A,J)AV060110
CNPV**4221AL*	0.98	1.03	315(A,J)AV060110
CSPH**3621AL*	0.98	1.08	315(A,J)AV060110
CSPH**4221AL*	0.95	1.05	315(A,J)AV060110
CNPV**4221AL*	0.96	1.07	315(A,J)AV060110
CNPV**4821AL*	0.98	1.03	315(A,J)AV060110
CSPH**3612AL*	0.98	1.08	315(A,J)AV060110
CSPH**4212AL*	0.98	1.09	315(A,J)AV060110
CAP**4224AL*	0.96	1.06	315(A,J)AV066135
CNPV**4224AL*	0.98	1.03	315(A,J)AV066135
CNPV**4824AL*	0.98	1.03	315(A,J)AV066135
CSPH**3612AL*	0.98	1.08	315(A,J)AV066135
CSPH**4212AL*	0.98	1.09	315(A,J)AV066135
CSPH**4812AL*	0.99	1.09	315(A,J)AV066135
CAP**4224AL*	0.96	1.01	315(A,J)AV066155
CNPV**4224AL*	0.98	1.03	315(A,J)AV066155
CNPV**4824AL*	0.98	1.03	315(A,J)AV066155
CSPH**3612AL*	0.98	1.09	315(A,J)AV066155
CSPH**4212AL*	0.98	1.09	315(A,J)AV066155
CAP**3617AL*	0.95	1.11	98(6*B,7*A)42060V17
CAP**4817AL*	0.97	1.07	98(6*B,7*A)42060V17
CNPV**4217AL*	0.96	1.11	98(6*B,7*A)42060V17
CNPV**3612AL*	0.96	1.07	98(6*B,7*A)42060V17
CNPV**4212AL*	0.96	1.13	98(6*B,7*A)42060V17
CSPH**4212AL*	0.98	1.14	98(6*B,7*A)42060V17
CAP**3617AL*	0.95	1.05	98(6*B,7*A)42080V17
CAP**4817AL*	0.98	1.08	98(6*B,7*A)42080V17
CNPV**4217AL*	0.95	1.11	98(6*B,7*A)42080V17
CNPV**3612AL*	0.96	1.11	98(6*B,7*A)42080V17
CNPV**4212AL*	0.96	1.13	98(6*B,7*A)42080V17
CSPH**4212AL*	0.97	1.13	98(6*B,7*A)42080V17
CSPH**4812AL*	0.98	1.08	98(6*B,7*A)42080V17
CSPH**4212AL*	0.98	1.14	98(6*B,7*A)42080V17
CAP**3621AL*	0.96	1.06	98(6*B,7*A)60080V21
CAP**4221AL*	0.98	1.07	98(6*B,7*A)60080V21
CNPV**4221AL*	0.98	1.08	98(6*B,7*A)60080V21
CNPV**3621AL*	0.95	1.05	98(6*B,7*A)60080V21
CNPV**4221AL*	0.96	1.07	98(6*B,7*A)60080V21

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPV**4821AL*	0.98	1.08	98(6*B,7*A)60080V21
CSPH**3612AL*	0.98	1.08	98(6*B,7*A)60080V21
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)60080V21
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)60080V21
CAP**3621AL*	0.96	1.07	98(6*B,7*A)66100V21
CAP**4221AL*	0.96	1.03	98(6*B,7*A)66100V21
CNPV**4221AL*	0.98	1.03	98(6*B,7*A)66100V21
CSPH**4821AL*	0.98	1.08	98(6*B,7*A)66100V21
CSPH**3612AL*	0.98	1.09	98(6*B,7*A)66100V21
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)66100V21
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)66100V21
CAP**4224AL*	0.96	1.07	98(6*B,7*A)66120V24
CAP**4824AL*	0.98	1.03	98(6*B,7*A)66120V24
CNPV**4824AL*	0.98	1.08	98(6*B,7*A)66120V24
CNPV**3612AL*	0.98	1.14	98(6*B,7*A)66120V24
CNPV**4212AL*	0.98	1.09	98(6*B,7*A)66120V24
CNPV**4812AL*	0.98	1.09	98(6*B,7*A)66120V24
CAP**3621AL*	0.95	1.05	98(6*B,7MA)60060V21
CAP**4221AL*	0.96	1.06	98(6*B,7MA)60060V21
CNPV**4221AL*	0.97	1.07	98(6*B,7MA)60060V21
CNPV**4821AL*	0.95	1.11	98(6*B,7MA)60060V21
CNPV**4221AL*	0.96	1.06	98(6*B,7MA)60060V21
CNPV**4812AL*	0.98	1.08	98(6*B,7MA)60060V21
CSPH**3612AL*	0.97	1.13	98(6*B,7MA)60060V21
CSPH**4212AL*	0.98	1.08	98(6*B,7MA)60060V21
CSPH**4812AL*	0.98	1.08	98(6*B,7MA)60060V21

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)			Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	
FV4CN(B,F)005L	0.97	1.00	1.00	922*AA2060E17
FV4CN(B,F)003	0.97	0.97	1.09	922*AA2060E17
FV4CNF002L	0.95	1.00	1.08	922*AA2060E17
CAP**3614AL*	0.94	1.05	1.19	922*AA2060E17
CSPH**3612AL*	0.97	1.08	1.18	922*AA2060E17
CSPH**4212AL*	0.98	1.09	1.17	922*AA2060E17
CSPH**4812AL*	0.98	1.09	1.17	922*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	922*AA2060E17
CNPV**4817AL*	0.94	1.05	1.07	922*AA2060E17
CAP**4817AL*	0.98	1.09	1.19	922*AA2060E17
CNPV**3617AL*	0.94	1.04	1.12	922*AA2060E17
CNPV**4217AL*	0.96	1.07	1.21	922*AA2060E17
CSPH**3612AL*	0.97	1.07	1.21	922*AA2060E17
CSPH**4212AL*	0.97	1.08	1.20	922*AA2060E17
CSPH**4812AL*	0.98	1.09	1.20	922*AA2060E17
CAP**3614AL*	0.95	1.00	1.07	922*AA2060E17
CSPH**3612AL*	0.98	1.03	1.17	922*AA2060E17
CSPH**4212AL*	0.98	1.03	1.15	922*AA2060E17
CSPH**4812AL*	0.99	1.04	1.15	922*AA2060E17
CAP**3617AL*	0.95	1.00	1.07	922*AA2060E17
CNPV**4817AL*	0.99	1.09	1.11	922*AA2060E17
CNPV**3617AL*	0.95	1.00	1.14	922*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	922*AA2060E17
CSPH**3612AL*	0.98	1.03	1.13	922*AA2060E17
CSPH**4212AL*	0.98	1.03	1.13	922*AA2060E17
CSPH**4812AL*	0.99	1.04	1.12	922*AA2060E17
CAP**3617AL*	0.95	1.00	1.07	922*AA2060E17
CAP**4817AL*	0.99	1.09	1.12	922*AA2060E17
CNPV**3617AL*	0.95	1.00	1.14	922*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	922*AA2060E17
CSPH**3612AL*	0.98	1.03	1.13	922*AA2060E17
CSPH**4212AL*	0.98	1.03	1.13	922*AA2060E17
CSPH**4812AL*	0.99	1.04	1.12	922*AA2060E17
CAP**3617AL*	0.95	1.00	1.06	925*AA2060E17
CAP**4817AL*	0.99	1.09	1.14	925*AA2060E17
CNPV**3617AL*	0.95	1.00	1.14	925*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	925*AA2060E17
CSPH**3612AL*	0.98	1.03	1.13	925*AA2060E17
CSPH**4212AL*	0.98	1.03	1.13	925*AA2060E17
CSPH**4812AL*	0.99	1.04	1.12	925*AA2060E17
CAP**3617AL*	0.95	1.00	1.06	925*AA2060E17
CAP**4817AL*	0.99	1.09	1.14	925*AA2060E17
CNPV**3617AL*	0.95	1.00	1.14	925*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	925*AA2060E17
CSPH**3612AL*	0.98	1.03	1.13	925*AA2060E17
CSPH**4212AL*	0.98	1.03	1.13	925*AA2060E17
CSPH**4812AL*	0.99	1.04	1.12	925*AA2060E17
CAP**3617AL*	0.95	1.00	1.06	925*AA2060E17
CAP**4817AL*	0.99	1.09	1.14	925*AA2060E17
CNPV**3617AL*	0.95	1.00	1.14	925*AA2060E17
CNPV**4217AL*	0.97	1.02	1.08	925*AA2060E17
CSPH**3612AL*	0.98	1.03	1.13	925*AA2060E17
CSPH**4212AL*	0.98	1.03	1.13	925*AA2060E17
CSPH**4812AL*	0.99	1.04	1.12	925*AA2060E17

See notes on page 36



# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

288BNV048 / FEANFN005 Comfort + Dehumidify Mode  
Condenser Entering Air Temperature °F (°C)

EDB °F (°C)	EVAP. AIR EWB °F (°C)	105 (40.5)			95 (35)			85 (29.4)			75 (23.9)			65 (18.3)		
		Capacity MBtuh		Total Sys. KW	Capacity MBtuh		Total Sys. KW	Capacity MBtuh		Total Sys. KW	Capacity MBtuh		Total Sys. KW	Capacity MBtuh		Total Sys. KW
		Total	Sensit		Total	Sensit		Total	Sensit		Total	Sensit		Total	Sensit	
75 (23.9)	72 (22.2)	46.15	18.51	4.57	49.48	19.81	4.11	52.80	21.11	3.68	56.10	22.38	3.28	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	29.88	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
	52 (11.1)	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)	41.97	28.88	4.47	45.00	30.96	4.03	48.01	33.04	3.62	50.99	35.10	3.24	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
	52 (11.1)	29.64	11.97	2.58	31.86	12.87	2.24	34.06	13.75	1.96	36.31	14.65	1.69	38.02	15.76	1.45
	47 (11.1)	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)	67 (19.4)	24.74	17.92	2.56	26.64	19.39	2.23	28.46	20.78	1.97	30.37	22.07	1.72	32.64	24.25	1.50
	63 (17.2)	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
	57 (13.9)	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
	52 (11.1)	26.77	18.85	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
	47 (11.1)	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)	67 (19.4)	21.20	18.29	2.25	23.28	23.28	2.55	25.15	25.15	2.23	26.88	26.88	1.97	28.66	28.66	1.73
	63 (17.2)	25.50	10.32	2.25	27.80	7.20	1.03	29.19	7.76	0.86	30.61	8.34	0.70	32.05	8.92	0.55
	57 (13.9)	23.02	13.19	2.25	25.09	9.17	1.06	26.94	9.88	0.90	28.62	10.62	0.74	30.19	11.37	0.60
	52 (11.1)	21.21	15.43	2.25	23.83	10.71	1.07	25.98	11.55	0.92	27.16	12.41	0.77	28.35	13.29	0.64
	47 (11.1)	18.95	18.71	2.24	21.20	12.99	1.09	23.20	14.01	0.95	25.29	15.05	0.81	26.35	16.12	0.68
75 (23.9)	72 (22.2)	25.43	13.24	2.25	27.75	9.19	1.03	29.14	9.91	0.86	30.56	10.65	0.70	31.99	11.40	0.55
	67 (19.4)	22.97	16.07	2.25	25.05	11.14	1.06	26.90	12.01	0.90	28.57	12.91	0.74	30.06	13.83	0.60
	63 (17.2)	21.20	18.29	2.25	23.82	12.68	1.07	25.97	13.68	0.92	27.15	14.70	0.77	28.34	15.74	0.63
	57 (13.9)	20.00	20.00	2.25	21.83	13.93	1.08	23.83	15.01	0.94	25.81	16.13	0.79	27.26	17.26	0.66
	52 (11.1)	25.50	10.32	2.25	27.80	7.20	1.03	29.19	7.76	0.86	30.61	8.34	0.70	32.05	8.92	0.55

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 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

288BNV048

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005	1.00	1.00	
FE4AN(B,F)003	0.96	1.06	
FE4ANF002	0.95	1.05	
CAP**3614AL*	0.95	1.05	315(A,J)AV036070
CSPH**3612AL*	0.97	1.07	315(A,J)AV036070
CSPH**4212AL*	0.98	1.08	315(A,J)AV036070
CSPH**4812AL*	0.98	1.09	315(A,J)AV036070
CAP**3617AL*	0.96	1.06	315(A,J)AV048090
CAP**4817AL*	0.98	1.03	315(A,J)AV048090
CNPV**3617AL*	0.95	1.05	315(A,J)AV048090
CNPV**4217AL*	0.97	1.07	315(A,J)AV048090
CSPH**3612AL*	0.98	1.08	315(A,J)AV048090
CSPH**4212AL*	0.98	1.09	315(A,J)AV048090
CSPH**4812AL*	0.98	1.09	315(A,J)AV048090
CAP**3621AL*	0.96	1.06	315(A,J)AV060110
CAP**4221AL*	0.96	1.07	315(A,J)AV060110
CNPV**4221AL*	0.98	1.03	315(A,J)AV060110
CSPH**3612AL*	0.98	1.08	315(A,J)AV060110
CSPH**4212AL*	0.95	1.05	315(A,J)AV060110
CNPV**4221AL*	0.96	1.07	315(A,J)AV060110
CNPV**4821AL*	0.98	1.03	315(A,J)AV060110
CSPH**3612AL*	0.98	1.08	315(A,J)AV060110
CSPH**4212AL*	0.98	1.09	315(A,J)AV060110
CAP**4224AL*	0.96	1.06	315(A,J)AV066135
CNPV**4224AL*	0.98	1.03	315(A,J)AV066135
CNPV**4824AL*	0.98	1.03	315(A,J)AV066135
CSPH**3612AL*	0.98	1.08	315(A,J)AV066135
CSPH**4212AL*	0.98	1.09	315(A,J)AV066135
CSPH**4812AL*	0.99	1.09	315(A,J)AV066135
CAP**4224AL*	0.96	1.06	315(A,J)AV066155
CNPV**4224AL*	0.98	1.03	315(A,J)AV066155
CNPV**4824AL*	0.98	1.03	315(A,J)AV066155
CSPH**3612AL*	0.98	1.08	315(A,J)AV066155
CSPH**4212AL*	0.98	1.09	315(A,J)AV066155
CSPH**4812AL*	0.99	1.09	315(A,J)AV066155
CAP**3617AL*	0.95	1.11	98(6*B,7*A)H2060V17
CAP**4817AL*	0.97	1.07	98(6*B,7*A)H2060V17
CNPV**4217AL*	0.96	1.11	98(6*B,7*A)H2060V17
CNPV**4817AL*	0.96	1.07	98(6*B,7*A)H2060V17
CSPH**4217AL*	0.96	1.13	98(6*B,7*A)H2060V17
CSPH**4817AL*	0.98	1.14	98(6*B,7*A)H2060V17
CAP**3617AL*	0.95	1.05	98(6*B,7*A)H2080V17
CAP**4817AL*	0.98	1.08	98(6*B,7*A)H2080V17
CNPV**4217AL*	0.95	1.11	98(6*B,7*A)H2080V17
CNPV**4817AL*	0.96	1.07	98(6*B,7*A)H2080V17
CSPH**4217AL*	0.97	1.13	98(6*B,7*A)H2080V17
CSPH**4817AL*	0.98	1.14	98(6*B,7*A)H2080V17
CAP**3621AL*	0.96	1.06	98(6*B,7*A)G0080V21
CAP**4821AL*	0.98	1.08	98(6*B,7*A)G0080V21
CNPV**3621AL*	0.95	1.05	98(6*B,7*A)G0080V21
CNPV**4821AL*	0.96	1.07	98(6*B,7*A)G0080V21
CSPH**3621AL*	0.98	1.08	98(6*B,7*A)G0080V21
CSPH**4821AL*	0.98	1.09	98(6*B,7*A)G0080V21

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPV**4821AL*	0.98	1.08	98(6*B,7*A)G0080V21
CSPH**3612AL*	0.98	1.08	98(6*B,7*A)G0080V21
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)G0080V21
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)G0080V21
CAP**3621AL*	0.96	1.07	98(6*B,7*A)G66100V21
CAP**4221AL*	0.96	1.03	98(6*B,7*A)G66100V21
CNPV**4221AL*	0.98	1.03	98(6*B,7*A)G66100V21
CSPH**3612AL*	0.98	1.08	98(6*B,7*A)G66100V21
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)G66100V21
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)G66100V21
CAP**4224AL*	0.96	1.07	98(6*B,7*A)G66120V24
CAP**4824AL*	0.98	1.03	98(6*B,7*A)G66120V24
CNPV**4824AL*	0.98	1.08	98(6*B,7*A)G66120V24
CSPH**3612AL*	0.98	1.14	98(6*B,7*A)G66120V24
CSPH**4212AL*	0.98	1.09	98(6*B,7*A)G66120V24
CSPH**4812AL*	0.98	1.09	98(6*B,7*A)G66120V24
CAP**3621AL*	0.95	1.05	98(6*B,7MA)G0060V21
CAP**4221AL*	0.96	1.06	98(6*B,7MA)G0060V21
CNPV**4221AL*	0.97	1.07	98(6*B,7MA)G0060V21
CNPV**4821AL*	0.95	1.11	98(6*B,7MA)G0060V21
CNPV**4221AL*	0.96	1.06	98(6*B,7MA)G0060V21
CNPV**4821AL*	0.98	1.08	98(6*B,7MA)G0060V21
CSPH**4212AL*	0.97	1.13	98(6*B,7MA)G0060V21
CSPH**4812AL*	0.98	1.08	98(6*B,7MA)G0060V21
CSPH**4212AL*	0.98	1.09	98(6*B,7MA)G0060V21

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)			Furnace Model
	High Speed Cap.	Power	Low Speed Cap.	
FV4CN(B,F)005L	0.97	1.00	1.00	1.00
FV4CN(B,F)003	0.97	0.97	1.09	1.13
FV4CN(F)002L	0.95	1.00	1.08	1.18
CAP**3614AL*	0.94	1.05	1.06	1.19
CSPH**3612AL*	0.97	1.08	1.08	1.18
CSPH**4212AL*	0.98	1.09	1.08	1.17
CSPH**4812AL*	0.98	1.09	1.09	1.17
CNPV**4217AL*	0.97	1.02	1.08	1.14
CNPV**4817AL*	0.94	1.05	1.07	1.34
CAP**4817AL*	0.98	1.09	1.05	1.19
CNPV**3617AL*	0.94	1.04	1.05	1.22
CNPV**4217AL*	0.96	1.07	1.07	1.21
CSPH**3612AL*	0.97	1.07	1.07	1.21
CSPH**4212AL*	0.97	1.08	1.07	1.20
CSPH**4812AL*	0.98	1.09	1.08	1.20
CAP**3614AL*	0.95	1.00	1.07	1.18
CSPH**3612AL*	0.98	1.03	1.09	1.17
CSPH**4212AL*	0.98	1.03	1.09	1.15
CSPH**4812AL*	0.99	1.04	1.09	1.15
CAP**3617AL*	0.95	1.00	1.07	1.14
CNPV**3617AL*	0.99	0.99	1.08	1.11
CNPV**4217AL*	0.95	1.00	1.06	1.14
CNPV**4817AL*	0.97	1.02	1.08	1.13
CSPH**3612AL*	0.98	1.03	1.08	1.13
CSPH**4212AL*	0.98	1.03	1.09	1.13
CSPH**4812AL*	0.99	1.04	1.09	1.12
CAP**4817AL*	0.95	1.00	1.07	1.14
CNPV**4817AL*	0.99	0.99	1.09	1.12
CNPV**3617AL*	0.95	1.00	1.06	1.14
CNPV**4217AL*	0.97	0.97	1.08	1.13
CSPH**3612AL*	0.98	1.03	1.08	1.13
CSPH**4212AL*	0.98	1.03	1.09	1.13
CSPH**4812AL*	0.99	1.04	1.09	1.12
CAP**3617AL*	0.95	1.00	1.07	1.14
CNPV**4817AL*	0.99	1.07	1.08	1.36
CNPV**3617AL*	0.95	1.00	1.06	1.14
CNPV**4217AL*	0.97	0.97	1.08	1.13
CSPH**3612AL*	0.98	1.03	1.08	1.13
CSPH**4212AL*	0.97	1.14	1.07	1.21
CSPH**4812AL*	0.97	1.14	1.08	1.21
CAP**3617AL*	0.95	1.00	1.06	1.16
CAP**4817AL*	0.98	1.03	1.08	1.14
CNPV**3617AL*	0.95	1.00	1.06	1.17
CNPV**4217AL*	0.97	1.02	1.07	1.15
CSPH**3612AL*	0.97	1.02	1.07	1.15
CSPH**4212AL*	0.98	1.03	1.08	1.15
CSPH**4812AL*	0.98	1.03	1.08	1.15
CSPH**4212AL*	0.98	1.03	1.08	1.14
CSPH**4812AL*	0.98	1.03	1.08	1.14
CAP**3617AL*	0.95	1.00	1.06	1.16
CAP**4817AL*	0.98	1.03	1.08	1.14
CNPV**3617AL*	0.95	1.00	1.06	1.17
CNPV**4217AL*	0.97	1.02	1.07	1.15
CSPH**3612AL*	0.97	1.02	1.07	1.15
CSPH**4212AL*	0.98	1.03	1.08	1.15
CSPH**4812AL*	0.98	1.03	1.08	1.15

See notes on page 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

288BNV060 / FEANB006L Comfort + Dehumidify Mode  
Condenser Entering Air Temperature F (°C)

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)	1367	56.98	22.75	6.30	1440	61.18	24.39	5.69	1514	65.39	26.02	5.16	1566	69.54	27.67	4.85	1488	72.77	28.99	4.11	
	67 (19.4)		57.22	39.64	4.45		52.98	29.89	5.92		58.86	32.03	5.32		60.74	34.16	4.81		64.57	36.23	4.32	
	63 (17.2)		50.09	48.04	4.68		52.36	48.62	4.14		50.15	35.79	5.59		53.79	38.31	5.01		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	
80 (26.7)	67 (19.4)	1367	48.26	40.83	5.99	1440	51.80	43.73	5.39	1514	55.34	46.67	4.87	1566	58.85	49.38	4.37	1488	61.43	50.01	3.85	
	63 (17.2)		48.26	40.83	5.99		46.16	46.16	5.69		49.48	49.48	5.10		52.81	52.81	4.60		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)		32.79	18.66	3.00		35.72	19.95	2.63		37.63	21.32	2.37		40.17	22.70	2.13		42.96	24.35	1.93	
75 (23.9)	63 (17.2)	959	30.18	21.81	2.97	1013	32.38	23.34	2.61	1066	34.71	24.92	2.34	1120	37.06	26.53	2.10	1210	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)		32.71	22.72	3.00		35.04	24.28	2.63		37.54	25.92	2.37		40.08	27.58	2.13		42.87	29.65	1.93	
	63 (17.2)		30.13	25.85	2.97		32.33	27.65	2.61		34.66	29.50	2.34		37.01	31.38	2.10		39.60	33.79	1.91	
80 (26.7)	57 (13.9)	748	28.27	28.27	2.96	1013	30.32	30.32	2.59	1066	32.44	32.44	2.32	1120	34.59	34.59	2.08	1210	37.14	37.14	1.89	
	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)		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		15.49	11.27	1.06		16.55	11.74	0.93		17.93	12.67	0.79		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	
75 (23.9)	72 (22.2)	748	26.42	13.61	1.96	600	19.25	9.91	1.08	600	20.51	10.39	0.94	647	22.16	11.21	0.78	700	23.84	12.06	0.61	
	67 (19.4)		23.63	16.38	1.96		17.06	11.86	1.07		18.20	12.32	0.93		19.69	13.29	0.79		21.24	14.31	0.63	
	63 (17.2)		21.58	18.54	1.95		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	
	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	

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 36

# DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

288BNV060

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB006L	1.00	1.00	
CAP**6021AL*	0.97	1.02	315(A,J)AV060110
CAP**6024AL*	0.97	1.02	315(A,J)AV060110
CNPV*6024AL*	0.97	0.97	315(A,J)AV060110
CSPH*6012AL*	0.98	1.03	315(A,J)AV060110
CAP**6024AL*	0.97	0.97	315(A,J)AV066135
CNPV*6024AL*	0.97	0.97	315(A,J)AV066135
CSPH*6012AL*	0.98	1.03	315(A,J)AV066135
CAP**6024AL*	0.98	0.98	315(A,J)AV066155
CNPV*6024AL*	0.98	0.98	315(A,J)AV066155
CSPH*6012AL*	0.98	1.03	315(A,J)AV066155
CAP**6021AL*	0.97	1.02	98(6*B,7*A)60080V21***
CAP**6024AL*	0.97	1.02	98(6*B,7*A)60080V21***
CNPV*6024AL*	0.97	1.02	98(6*B,7*A)60080V21***
CSPH*6012AL*	0.97	1.02	98(6*B,7*A)60080V21***
CAP**6021AL*	0.97	1.02	98(6*B,7*A)66100V21***
CAP**6024AL*	0.97	1.02	98(6*B,7*A)66100V21***
CNPV*6024AL*	0.97	1.02	98(6*B,7*A)66100V21***
CSPH*6012AL*	0.98	1.03	98(6*B,7*A)66100V21***
CAP**6024AL*	0.97	1.02	98(6*B,7*A)66120V24***
CNPV*6024AL*	0.97	1.02	98(6*B,7*A)66120V24***
CSPH*6012AL*	0.97	1.02	98(6*B,7*A)66120V24***
CAP**6021AL*	0.96	1.07	98(6*B,7*MA)60060V21***
CAP**6024AL*	0.96	1.07	98(6*B,7*MA)60060V21***
CNPV*6024AL*	0.96	1.07	98(6*B,7*MA)60060V21***
CSPH*6012AL*	0.96	1.07	98(6*B,7*MA)60060V21***

Cooling Indoor Model	2-STAGE (Hi-Stage 5, Lo-Stage 2)		Power	Furnace Model
	High Speed Cap.	Low Speed Cap.		
*FV4CNB006L	1.00	1.00	1.00	
CAP**6021AL*	1.00	0.99	1.06	922*AG0080E21***
CAP**6021AL*	1.00	0.99	1.06	922*AG0100E21***
CAP**6021AL*	1.01	0.99	1.05	313*AV060110
CAP**6021AL*	1.01	0.99	1.05	314AAV066110
CAP**6024AL*	1.00	0.99	1.06	922*AG0120E24***
CAP**6024AL*	1.01	0.99	1.05	314AAV066135
CNPV*6024AL*	1.00	0.99	1.06	922*AG0120E24***
CNPV*6024AL*	1.00	0.99	1.04	313*AV060135
CNPV*6024AL*	1.01	0.99	1.05	314AAV066135
CNPV*6024AL*	1.00	1.00	1.09	OVLAA060154
CSPH*6012AL*	1.01	1.00	1.06	313*AV060110
CSPH*6012AL*	1.01	1.00	1.05	313*AV060135
CSPH*6012AL*	1.01	1.00	1.05	314AAV066110
CSPH*6012AL*	1.01	1.00	1.05	314AAV066135

**NOTES:**

- \* Tested combination.
- † 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 Btu/h (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below reference temperature, or add 835 Btu/h (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.

**EWB** — Entering Wet Bulb

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE

INDOOR AIR		288BNV024A / 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	Integrt			Total	Integrt			Total	Integrt			Total	Integrt	
<b>STAGE 5</b>																
65 (18.3)	450	13.88	12.75	1.96	825	20.11	18.34	2.16	825	21.74	19.31	2.03	825	21.50	19.10	2.13
70 (21.1)		13.81	12.69	2.04		19.90	18.14	2.26		21.50	19.10	2.13				
75 (23.3)		13.72	12.61	2.12		19.71	17.97	2.36		21.27	18.89	2.22				
<b>STAGE 3</b>																
65 (18.3)	340	9.32	8.57	1.42	500	11.26	10.27	1.36	650	13.17	11.70	1.22	650	12.99	11.54	1.29
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 1</b>																
65 (18.3)	342	9.32	8.56	1.42	500	11.23	10.24	1.35	650	13.17	11.70	1.22	650	12.99	11.54	1.29
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		288BNV024A / 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	Integrt			Total	Integrt			Total	Integrt			Total	Integrt	
<b>STAGE 5</b>																
65 (18.3)	825	23.91	21.76	2.02	825	25.34	25.34	1.97	650	18.08	18.08	1.21	650	18.11	18.11	1.28
70 (21.1)		23.61	21.48	2.11		25.00	25.00	2.06		18.11	18.11	1.28				
75 (23.3)		23.30	21.20	2.21		24.63	24.63	2.15		17.37	17.37	1.34				
<b>STAGE 3</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	18.78	18.78	1.35
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 1</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	8.83	8.83	0.47
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				

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 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

288BNV024A

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANIB.FI005L	1.00	1.00	
FE4ANIB.FI003	1.00	1.02	
FE4ANF002L	1.04	1.06	
CAP**3614AL*	1.03	1.06	315(A,J)AV036070
CSPH*3612AL*	1.02	1.02	315(A,J)AV036070
CSPH*4212AL*	1.01	1.01	315(A,J)AV036070
CAP**3617AL*	1.02	1.05	315(A,J)AV048090
CNPV*3617AL*	1.03	1.06	315(A,J)AV048090
CNPV*4217AL*	1.02	1.02	315(A,J)AV048090
CSPH*3612AL*	1.02	1.02	315(A,J)AV048090
CSPH*4212AL*	1.01	1.00	315(A,J)AV048090
CAP**3617AL*	1.03	1.07	98(6*B,7*A)42060V17
CNPV*3617AL*	1.04	1.08	98(6*B,7*A)42060V17
CNPV*4217AL*	1.02	1.04	98(6*B,7*A)42060V17
CSPH*3612AL*	1.02	1.04	98(6*B,7*A)42060V17
CSPH*4212AL*	1.03	1.03	98(6*B,7*A)42060V17
CAP**3617AL*	1.02	1.06	98(6*B,7*A)42060V17
CNPV*3617AL*	1.04	1.08	98(6*B,7*A)42060V17
CNPV*4217AL*	1.02	1.04	98(6*B,7*A)42060V17
CSPH*3612AL*	1.02	1.02	98(6*B,7*A)42060V21
CSPH*4212AL*	1.04	1.07	98(6*B,7*A)60060V21
CAP**3621AL*	1.03	1.08	98(6*B,7MA)60060V21
CNPV*4221AL*	1.03	1.06	98(6*B,7MA)60060V21
CSPH*3612AL*	1.02	1.04	98(6*B,7MA)60060V21
CSPH*4212AL*	1.02	1.02	98(6*B,7MA)60060V21

2-STAGE (HI-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
FV4CN(B.FI003	0.84	0.92	0.77	0.82		
FV4CNF002L	0.84	0.90	0.77	0.81		
CAP**2414AL*	0.84	0.92	1.05	1.12	313*AV024045	
CAP**3014AL*	0.84	0.92	1.03	1.09	313*AV024045	
CAP**3614AL*	0.84	0.91	1.02	1.07	313*AV024045	
CSPH*2412AL*	0.84	0.91	1.04	1.11	313*AV024045	
CSPH*3012AL*	0.84	0.88	1.04	1.08	313*AV024045	
CSPH*3612AL*	0.84	0.88	1.02	1.05	313*AV024045	
CAP**2414AL*	0.84	0.93	1.05	1.15	922*AS0040E14	
CAP**3014AL*	0.84	0.93	1.02	1.11	922*AS0040E14	
CAP**3614AL*	0.84	0.92	1.02	1.10	922*AS0040E14	
CNPV*3014AL*	0.84	0.90	1.02	1.11	922*AS0040E14	
CSPH*2412AL*	0.84	0.92	1.04	1.13	922*AS0040E14	
CSPH*3012AL*	0.84	0.90	1.04	1.11	922*AS0040E14	
CSPH*3612AL*	0.84	0.89	1.02	1.08	922*AS0040E14	
CAP**2417AL*	0.84	0.92	1.05	1.14	922*AS6040E17	
CAP**3017AL*	0.84	0.92	1.02	1.11	922*AS6040E17	
CAP**3617AL*	0.84	0.92	1.02	1.10	922*AS6040E17	
CNPV*3017AL*	0.84	0.93	1.02	1.11	922*AS6040E17	
CNPV*4217AL*	0.84	0.90	1.02	1.09	922*AS6040E17	
CSPH*4217AL*	0.84	0.91	1.05	1.10	922*AS6040E17	
CNPV*3014AL*	0.84	0.90	1.03	1.07	922*AS6060E14	
CAP**3614AL*	0.84	0.89	1.02	1.05	922*AS6060E14	
CNPV*3014AL*	0.84	0.88	1.03	1.07	922*AS6060E14	
CSPH*2412AL*	0.84	0.89	1.04	1.09	922*AS6060E14	
CSPH*3012AL*	0.84	0.87	1.04	1.06	922*AS6060E14	
CSPH*3612AL*	0.84	0.87	1.02	1.03	922*AS6060E14	
CAP**2414AL*	0.84	0.92	1.05	1.16	925*AS0040E14	
CAP**3014AL*	0.84	0.92	1.02	1.12	925*AS0040E14	
CAP**3614AL*	0.84	0.92	1.02	1.11	925*AS0040E14	
CNPV*3014AL*	0.84	0.93	1.02	1.12	925*AS0040E14	
CSPH*2412AL*	0.84	0.91	1.04	1.15	925*AS0040E14	
CSPH*3012AL*	0.84	0.89	1.04	1.13	925*AS0040E14	
CSPH*3612AL*	0.84	0.89	1.02	1.10	925*AS0040E14	
CAP**2417AL*	0.84	0.95	1.05	1.15	925*AS6040E17	
CAP**3017AL*	0.84	0.94	1.02	1.11	925*AS6040E17	
CAP**3617AL*	0.84	0.93	1.02	1.10	925*AS6040E17	
CNPV*3017AL*	0.84	0.95	1.02	1.11	925*AS6040E17	
CNPV*3617AL*	0.84	0.95	1.02	1.11	925*AS6040E17	
CNPV*4217AL*	0.84	0.92	1.02	1.09	925*AS6040E17	
CSPH*2412AL*	0.84	0.94	1.04	1.15	925*AS6040E17	
CSPH*3012AL*	0.84	0.92	1.04	1.12	925*AS6040E17	
CSPH*3612AL*	0.84	0.92	1.02	1.09	925*AS6040E17	

See notes on page 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE

INDOOR AIR		288BNV024B / 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	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<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	825	18.18	16.15	1.83
70 (21.1)		11.90	10.93	1.45		15.80	14.22	1.77		18.18	16.15					
75 (23.3)		11.70	10.75	1.50		15.44	14.07	1.86		17.99	15.98					
<b>STAGE 3</b>																
65 (18.3)	300	8.37	7.89	0.89	500	10.11	9.21	0.88	500	11.81	10.49	0.90	500	11.61	10.31	0.96
70 (21.1)		8.22	7.56	0.94		9.93	9.05	0.93		11.61	10.31					
75 (23.3)		8.07	7.42	0.98		9.75	8.89	0.99		11.41	10.13					
<b>STAGE 1</b>																
65 (18.3)	300	8.37	7.89	0.89	500	10.10	9.21	0.88	500	10.55	9.37	0.81	500	10.36	9.20	0.84
70 (21.1)		8.22	7.56	0.94		9.93	9.05	0.93		10.36	9.20					
75 (23.3)		8.07	7.42	0.98		9.75	8.89	0.99		10.17	9.03					

INDOOR AIR		288BNV024B / 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	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	825	21.73	19.77	1.82	825	24.94	24.94	1.89	825	16.71	16.71	1.01	825	16.37	16.37	1.08
70 (21.1)		21.46	19.52	1.92		24.60	24.60	1.99		16.37	16.37					
75 (23.3)		21.18	19.27	2.02		24.26	24.26	2.10		16.03	16.03					
<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	650	16.38	16.38	1.09
70 (21.1)		13.21	12.02	1.01		14.83	14.83	1.06		16.38	16.38					
75 (23.3)		12.98	11.81	1.07		14.56	14.56	1.13		16.07	16.07					
<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	585	7.74	7.74	0.42
70 (21.1)		11.62	10.58	0.87		7.20	7.20	0.42		7.74	7.74					
75 (23.3)		11.38	10.35	0.93		6.99	6.99	0.46		7.52	7.52					

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 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE - CONTINUED

28BBNV024B

2-STAGE (HI-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	Furnace Model
*FV4CNF002L	1.00	1.00	1.00	1.00		
FV4CN(B,F)003L	0.96	1.03	0.98	1.02		
FV4CN(B,F)003L	0.98	1.04	0.99	1.03		
CAP**2414AL*	1.01	1.09	1.01	1.09	922*A30040E14***	922*A30040E14***
CAP**2414AL*	1.01	1.06	1.01	1.05	922*A36060E14***	922*A36060E14***
CAP**2414AL*	1.02	1.09	1.01	1.11	925*A30040E14***	925*A30040E14***
CAP**2414AL*	1.01	1.08	1.01	1.06	313*AV024045	313*AV024045
CAP**2417AL*	1.01	1.09	1.01	1.09	922*A36040E17***	922*A36040E17***
CAP**2417AL*	1.00	1.10	1.01	1.09	925*A36040E17***	925*A36040E17***
CAP**3014AL*	0.99	1.08	0.99	1.07	922*A30040E14***	922*A30040E14***
CAP**3014AL*	0.99	1.04	1.00	1.02	922*A36060E14***	922*A36060E14***
CAP**3014AL*	0.99	1.07	1.00	1.09	925*A30040E14***	925*A30040E14***
CAP**3017AL*	0.98	1.07	0.99	1.06	922*A36040E17***	922*A36040E17***
CAP**3017AL*	0.98	1.08	0.99	1.07	925*A36040E17***	925*A36040E17***
CAP**3614AL*	0.99	1.04	1.00	1.01	922*A36060E14***	922*A36060E14***
CAP**3614AL*	1.00	1.07	0.99	1.08	925*A30040E14***	925*A30040E14***
CAP**3614AL*	0.99	1.05	1.00	1.04	313*AV024045	313*AV024045
CAP**3617AL*	0.99	1.06	0.99	1.06	922*A36040E17***	922*A36040E17***
CAP**3617AL*	0.98	1.08	0.99	1.06	925*A36040E17***	925*A36040E17***
CNPV*3014AL*	1.00	1.05	0.99	1.06	922*A30040E14***	922*A30040E14***
CNPV*3014AL*	1.00	1.02	1.00	1.02	922*A36060E14***	922*A36060E14***
CNPV*3014AL*	1.00	1.08	0.99	1.08	925*A30040E14***	925*A30040E14***
CNPV*3017AL*	0.99	1.08	0.99	1.07	922*A36040E17***	922*A36040E17***
CNPV*3017AL*	0.98	1.09	0.99	1.07	925*A36040E17***	925*A36040E17***
CNPV*3617AL*	0.99	1.08	0.99	1.07	922*A36040E17***	922*A36040E17***
CNPV*3617AL*	0.98	1.09	0.99	1.07	925*A36040E17***	925*A36040E17***
CNPV*4217AL*	0.98	1.04	0.99	1.05	922*A36040E17***	922*A36040E17***
CNPV*4217AL*	0.98	1.07	0.99	1.06	925*A36040E17***	925*A36040E17***
CSPH*2412AL*	1.00	1.08	1.00	1.09	922*A30040E14***	922*A30040E14***
CSPH*2412AL*	1.00	1.08	1.00	1.09	922*A36060E14***	922*A36060E14***
CSPH*2412AL*	1.00	1.05	1.01	1.05	922*A36060E14***	922*A36060E14***
CSPH*2412AL*	1.02	1.07	1.00	1.10	925*A30040E14***	925*A30040E14***
CSPH*2412AL*	1.00	1.10	1.00	1.10	925*A36040E17***	925*A36040E17***
CSPH*2412AL*	1.00	1.06	1.01	1.07	313*AV024045	313*AV024045
CSPH*3012AL*	1.00	1.06	1.00	1.06	922*A30040E14***	922*A30040E14***
CSPH*3012AL*	1.00	1.06	1.00	1.07	922*A36040E17***	922*A36040E17***
CSPH*3012AL*	1.00	1.02	1.01	1.02	922*A36060E14***	922*A36060E14***
CSPH*3012AL*	1.01	1.05	1.00	1.08	925*A30040E14***	925*A30040E14***
CSPH*3012AL*	0.99	1.08	1.00	1.08	925*A36040E17***	925*A36040E17***
CSPH*3612AL*	1.00	1.04	0.99	1.04	313*AV024045	313*AV024045
CSPH*3612AL*	0.98	1.04	0.99	1.05	922*A30040E14***	922*A30040E14***
CSPH*3612AL*	0.98	1.04	0.99	1.05	922*A36040E17***	922*A36040E17***
CSPH*3612AL*	0.99	1.01	1.00	1.00	922*A36060E14***	922*A36060E14***
CSPH*3612AL*	1.00	1.04	0.99	1.07	925*A30040E14***	925*A30040E14***
CSPH*3612AL*	0.98	1.06	0.99	1.06	925*A36040E17***	925*A36040E17***
CSPH*3612AL*	0.98	1.02	0.99	1.02	313*AV024045	313*AV024045

See notes on page 60

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANF002L	1.00	1.00	
FE4AN(B,F)003L	0.99	0.99	
CAP**3614AL*	1.00	1.01	315(A,J)AV036070
CAP**3617AL*	1.01	1.03	98(6*7*A)42060V17***
CAP**3617AL*	1.00	1.01	98(6*7*A)42080V17***
CAP**3617AL*	1.00	1.01	315(A,J)AV036070
CAP**3617AL*	1.00	1.00	315(A,J)AV048090
CAP**3621AL*	1.01	1.03	98(6*7*A)42060V17***
CAP**3621AL*	1.00	1.01	98(6*7*A)42080V17***
CAP**3621AL*	1.00	1.01	98(6*7*MA)60060V21***
CAP**3621AL*	1.00	1.00	98(6*7*A)60080V21***
CAP**3621AL*	1.00	1.00	98(6*7*A)66100V21***
CAP**4221AL*	1.00	1.01	98(6*7*A)42060V17***
CAP**4221AL*	1.00	1.01	98(6*7*A)42080V17***
CAP**4221AL*	1.00	1.01	98(6*7*MA)60060V21***
CAP**4221AL*	0.99	0.98	315(A,J)AV048090
CAP**4224AL*	1.00	1.01	98(6*7*MA)60060V21***
CAP**4817AL*	0.97	0.97	98(6*7*A)42060V17***
CAP**4817AL*	0.97	0.97	98(6*7*A)42080V17***
CAP**4817AL*	0.96	0.95	315(A,J)AV036070
CAP**4817AL*	0.96	0.94	315(A,J)AV048090
CAP**4821AL*	0.98	0.98	98(6*7*A)42060V17***
CAP**4821AL*	0.98	0.98	98(6*7*A)42080V17***
CAP**4821AL*	0.97	0.97	98(6*7*A)42060V17***
CAP**4821AL*	0.97	0.95	315(A,J)AV048090
CNPV*3617AL*	1.01	1.04	98(6*7*A)42060V17***
CNPV*3617AL*	1.01	1.03	98(6*7*A)42080V17***
CNPV*3621AL*	0.94	0.97	98(6*7*A)42060V17***
CNPV*3621AL*	1.01	1.03	98(6*7*A)42080V17***
CNPV*4217AL*	1.00	1.01	98(6*7*A)42060V17***
CNPV*4217AL*	1.00	1.00	98(6*7*A)42080V17***
CNPV*4217AL*	0.99	0.98	315(A,J)AV036070
CNPV*4217AL*	0.99	0.97	315(A,J)AV048090
CNPV*4221AL*	1.01	1.02	98(6*7*A)42060V17***
CNPV*4221AL*	1.00	1.01	98(6*7*A)42080V17***
CNPV*4221AL*	1.00	0.99	315(A,J)AV048090
CNPV*4221AL*	0.99	0.99	98(6*7*A)42060V17***
CNPV*4221AL*	0.99	0.98	98(6*7*A)42080V17***
CNPV*4821AL*	0.98	0.96	315(A,J)AV048090
CNPV*4821AL*	1.00	1.01	98(6*7*A)42060V17***
CSPH*3612AL*	1.00	1.00	98(6*7*A)42060V17***
CSPH*3612AL*	0.99	0.98	315(A,J)AV036070
CSPH*3612AL*	0.99	0.98	315(A,J)AV048090
CSPH*4212AL*	0.99	0.99	98(6*7*A)42060V17***
CSPH*4212AL*	0.99	0.99	98(6*7*A)42080V17***
CSPH*4212AL*	0.98	0.98	315(A,J)AV036070
CSPH*4212AL*	0.98	0.96	315(A,J)AV048090
CSPH*4812AL*	0.99	0.99	98(6*7*A)42060V17***
CSPH*4812AL*	0.98	0.97	98(6*7*A)42080V17***



# 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 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

288BNV025

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi-Stage 5, Lo-Stage 3)					Furnace Model
				Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	
*FE4ANI(B)F005L	1.00	1.00		FVACN(B)F003	1.01	1.09	1.01	1.00	
FE4ANI(B)F003	1.04	1.07		FV4CNF002L	1.03	1.09	1.01	1.05	
FE4ANF002L	1.08	1.10		CAP**24144L*	1.05	1.14	1.05	1.10	313*AV024045
CAP**36144L*	1.07	1.11	315(A,J)AV036070	CAP**30144L*	1.03	1.12	1.03	1.07	313*AV024045
CSPH*3612AL*	1.06	1.07	315(A,J)AV036070	CAP**36144L*	1.03	1.10	1.02	1.05	313*AV024045
CSPH*4212AL*	1.05	1.05	315(A,J)AV036070	CSPH*2412AL*	1.05	1.12	1.04	1.09	313*AV024045
CAP**3617AL*	1.07	1.09	315(A,J)AV048090	CSPH*3012AL*	1.05	1.09	1.04	1.07	313*AV024045
CNPV*3617AL*	1.07	1.10	315(A,J)AV048090	CSPH*3612AL*	1.03	1.06	1.02	1.04	313*AV024045
CSPH*3612AL*	1.06	1.06	315(A,J)AV048090	CAP**24144L*	1.05	1.15	1.05	1.13	922*A30040E14
CSPH*4212AL*	1.05	1.05	315(A,J)AV048090	CAP**30144L*	1.03	1.13	1.02	1.09	922*A30040E14
CAP**3617AL*	1.07	1.11	98(6*B,7*A)42060V17	CAP**36144L*	1.03	1.12	1.02	1.08	922*A30040E14
CNPV*3617AL*	1.08	1.13	98(6*B,7*A)42060V17	CNPV*3014AL*	1.05	1.11	1.02	1.09	922*A30040E14
CNPV*4217AL*	1.07	1.09	98(6*B,7*A)42060V17	CSPH*2412AL*	1.05	1.13	1.04	1.11	922*A30040E14
CSPH*3612AL*	1.07	1.09	98(6*B,7*A)42060V17	CSPH*3012AL*	1.04	1.10	1.04	1.09	922*A30040E14
CSPH*4212AL*	1.06	1.07	98(6*B,7*A)42060V17	CAP**2417AL*	1.05	1.14	1.05	1.13	922*A36040E17
CAP**3617AL*	1.07	1.11	98(6*B,7*A)42060V17	CAP**3017AL*	1.03	1.12	1.02	1.09	922*A36040E17
CNPV*3617AL*	1.08	1.12	98(6*B,7*A)42060V17	CAP**3617AL*	1.03	1.12	1.02	1.08	922*A36040E17
CNPV*4217AL*	1.07	1.08	98(6*B,7*A)42060V17	CNPV*3017AL*	1.03	1.14	1.02	1.09	922*A36040E17
CSPH*3612AL*	1.07	1.08	98(6*B,7*A)42060V17	CNPV*3617AL*	1.03	1.14	1.02	1.09	922*A36040E17
CSPH*4212AL*	1.06	1.07	98(6*B,7*A)42060V17	CNPV*4217AL*	1.03	1.09	1.02	1.06	922*A36040E17
CNPV*3621AL*	1.07	1.11	98(6*B,7*MA)60060V21	CSPH*2412AL*	1.05	1.14	1.04	1.13	922*A36040E17
CNPV*3621AL*	1.08	1.12	98(6*B,7*MA)60060V21	CSPH*3012AL*	1.04	1.10	1.03	1.09	922*A36040E17
CNPV*4221AL*	1.07	1.10	98(6*B,7*MA)60060V21	CSPH*3612AL*	1.03	1.09	1.02	1.07	922*A36040E17
CSPH*3612AL*	1.07	1.08	98(6*B,7*MA)60060V21	CAP**2414AL*	1.05	1.12	1.05	1.08	922*A36060E14
CSPH*4212AL*	1.06	1.07	98(6*B,7*MA)60060V21	CAP**3014AL*	1.03	1.10	1.03	1.05	922*A36060E14
				CAP**3614AL*	1.03	1.09	1.02	1.03	922*A36060E14
				CNPV*3014AL*	1.05	1.08	1.03	1.05	922*A36060E14
				CSPH*2412AL*	1.05	1.10	1.04	1.07	922*A36060E14
				CSPH*3012AL*	1.05	1.08	1.04	1.05	922*A36060E14
				CSPH*3612AL*	1.03	1.06	1.02	1.01	922*A36060E14
				CAP**2414AL*	1.07	1.16	1.05	1.14	925*A30040E14
				CAP**3014AL*	1.05	1.14	1.02	1.11	925*A30040E14
				CNPV*3014AL*	1.04	1.12	1.02	1.09	925*A30040E14
				CNPV*3614AL*	1.05	1.14	1.02	1.11	925*A30040E14
				CSPH*2412AL*	1.06	1.13	1.04	1.13	925*A30040E14
				CSPH*3012AL*	1.05	1.10	1.04	1.11	925*A30040E14
				CSPH*3612AL*	1.04	1.09	1.02	1.08	925*A30040E14
				CAP**2417AL*	1.05	1.17	1.05	1.13	925*A36040E17
				CAP**3017AL*	1.03	1.14	1.02	1.09	925*A36040E17
				CNPV*3017AL*	1.03	1.14	1.02	1.08	925*A36040E17
				CNPV*3617AL*	1.03	1.16	1.02	1.09	925*A36040E17
				CNPV*4217AL*	1.03	1.16	1.02	1.09	925*A36040E17
				CSPH*2412AL*	1.05	1.16	1.04	1.13	925*A36040E17
				CSPH*3012AL*	1.04	1.13	1.04	1.10	925*A36040E17
				CSPH*3612AL*	1.03	1.11	1.02	1.07	925*A36040E17
				CAP**2414AL*	1.03	1.11	1.02	1.07	925*A36040E17
				CAP**3014AL*	1.04	1.13	1.04	1.10	925*A36040E17
				CNPV*3014AL*	1.03	1.11	1.02	1.07	925*A36040E17
				CNPV*3614AL*	1.03	1.11	1.02	1.07	925*A36040E17

See notes on page 60

# 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				
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	500	14.64	13.01	1.31	500	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				
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	500	10.13	9.00	0.92	500	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				
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				
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				
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				
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 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

288BNV036

HEATING INDOOR MODEL		CAPACITY	POWER	FURNACE MODEL
CNPV*4821AL*	1.02	1.03	98(6°B,7°A)60060V21	
CSPH*3612AL*	1.02	1.05	98(6°B,7°A)60080V21	
CSPH*4212AL*	1.02	1.04	98(6°B,7°A)60080V21	
CSPH*4812AL*	1.02	1.03	98(6°B,7°A)60080V21	
CAP**3621AL*	1.04	1.08	98(6°B,7°A)66100V21	
CAP**4212AL*	1.04	1.07	98(6°B,7°A)66100V21	
CAP**4821AL*	1.01	1.02	98(6°B,7°A)66100V21	
CNPV*3621AL*	1.05	1.11	98(6°B,7°A)66100V21	
CNPV*4212AL*	1.02	1.07	98(6°B,7°A)66100V21	
CNPV*4821AL*	1.02	1.03	98(6°B,7°A)66100V21	
CSPH*3612AL*	1.02	1.04	98(6°B,7°A)66100V21	
CSPH*4212AL*	1.02	1.03	98(6°B,7°A)66100V21	
CSPH*4812AL*	1.02	1.02	98(6°B,7°A)66100V21	
CAP**4224AL*	1.04	1.07	98(6°B,7°A)66120V24	
CAP**4824AL*	1.02	1.03	98(6°B,7°A)66120V24	
CNPV*4824AL*	1.02	1.03	98(6°B,7°A)66120V24	
CSPH*3612AL*	1.02	1.05	98(6°B,7°A)66120V24	
CSPH*4212AL*	1.02	1.04	98(6°B,7°A)66120V24	
CSPH*4812AL*	1.02	1.03	98(6°B,7°A)66120V24	
CAP**3621AL*	1.04	1.10	98(6°B,7°A)60060V21	
CAP**4221AL*	1.04	1.09	98(6°B,7°A)60060V21	
CAP**4821AL*	1.02	1.05	98(6°B,7°A)60060V21	
CNPV*3621AL*	1.05	1.13	98(6°B,7°A)60060V21	
CNPV*4221AL*	1.05	1.10	98(6°B,7°A)60060V21	
CNPV*4821AL*	1.02	1.05	98(6°B,7°A)60060V21	
CSPH*3612AL*	1.04	1.07	98(6°B,7°A)60060V21	
CSPH*4212AL*	1.02	1.05	98(6°B,7°A)60060V21	
CSPH*4812AL*	1.02	1.05	98(6°B,7°A)60060V21	

2-STAGE (Hi-Stage 5, Lo-Stage 3)					
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FVACN(B,F)005L	1.00	1.00	1.00	1.00	
FVACN(B,F)003	1.01	1.06	1.01	1.05	
FV4CNF002L	1.04	1.08	1.04	1.08	
CAP**3614AL*	1.04	1.13	1.03	1.12	313*AV024045
CSPH*3612AL*	1.04	1.08	1.03	1.09	313*AV024045
CSPH*4212AL*	1.04	1.07	1.02	1.07	313*AV024045
CSPH*4812AL*	1.04	1.07	1.02	1.06	313*AV024045
CNPV*4217AL*	1.03	1.06	1.02	1.06	314AAV048070
CAP**3617AL*	1.04	1.13	1.05	1.13	922*A36040E17
CAP**4817AL*	1.02	1.07	1.01	1.07	922*A36040E17
CNPV*3617AL*	1.04	1.14	1.03	1.13	922*A36040E17
CNPV*4217AL*	1.04	1.10	1.03	1.10	922*A36040E17
CSPH*3612AL*	1.04	1.08	1.03	1.10	922*A36040E17
CSPH*4212AL*	1.04	1.08	1.03	1.10	922*A36040E17
CSPH*4812AL*	1.04	1.08	1.02	1.08	922*A36040E17
CAP**3614AL*	1.03	1.10	1.02	1.10	922*A36060E14
CSPH*3612AL*	1.03	1.06	1.03	1.07	922*A36060E14
CSPH*4212AL*	1.03	1.05	1.03	1.06	922*A36060E14
CSPH*4812AL*	1.03	1.05	1.02	1.04	922*A36060E14
CAP**3617AL*	1.03	1.08	1.02	1.08	922*A42060E17
CAP**4817AL*	1.01	1.02	1.00	1.03	922*A42060E17
CNPV*3617AL*	1.03	1.10	1.02	1.09	922*A42060E17
CNPV*4217AL*	1.02	1.05	1.02	1.06	922*A42060E17
CSPH*3612AL*	1.03	1.05	1.02	1.06	922*A42060E17
CSPH*4212AL*	1.02	1.04	1.02	1.05	922*A42060E17
CSPH*4812AL*	1.02	1.03	1.02	1.04	922*A42060E17
CAP**3617AL*	1.02	1.08	1.02	1.08	922*A48080E17
CAP**4817AL*	1.01	1.01	1.00	1.03	922*A48080E17
CNPV*3617AL*	1.03	1.10	1.02	1.09	922*A48080E17
CNPV*4217AL*	1.02	1.05	1.02	1.06	922*A48080E17
CSPH*3612AL*	1.03	1.05	1.02	1.06	922*A48080E17
CSPH*4212AL*	1.02	1.04	1.02	1.05	922*A48080E17
CSPH*4812AL*	1.02	1.03	1.02	1.04	922*A48080E17
CNPV*4217AL*	1.05	1.13	1.05	1.12	925*A36040E17
CSPH*3612AL*	1.05	1.12	1.05	1.12	925*A36040E17
CAP**3614AL*	1.05	1.16	1.03	1.13	925*A36060E14
CSPH*3612AL*	1.05	1.12	1.03	1.11	925*A36060E14
CSPH*4212AL*	1.05	1.11	1.03	1.10	925*A36060E14
CSPH*4812AL*	1.04	1.10	1.03	1.09	925*A36060E14
CAP**3617AL*	1.04	1.11	1.02	1.10	925*A42060E17
CAP**4817AL*	1.01	1.04	1.00	1.05	925*A42060E17
CNPV*3617AL*	1.04	1.12	1.03	1.12	925*A42060E17
CNPV*4217AL*	1.03	1.08	1.02	1.08	925*A42060E17
CSPH*3612AL*	1.03	1.07	1.02	1.08	925*A42060E17
CSPH*4212AL*	1.03	1.06	1.02	1.07	925*A42060E17
CSPH*4812AL*	1.03	1.05	1.02	1.06	925*A42060E17

See notes on page 60

# 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	1275	24.10	21.40	2.18	1275	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	1275	20.26	17.99	1.88	1275	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	1275	35.74	35.74	2.39	1275	35.74	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 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE - CONTINUED

288BNV048

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANI(B,F)005L	1.00	1.00	
FE4ANB006	0.99	0.95	
CAP**4817AL*	1.04	1.03	315(A-J)AV048090
CSPH*4812AL*	1.05	1.04	315(A-J)AV048090
CSPH*6012AL*	1.03	1.01	315(A-J)AV048090
CAP**4821AL*	1.04	1.03	315(A-J)AV060110
CAP**6021AL*	1.02	1.02	315(A-J)AV060110
CNPV*4821AL*	1.05	1.04	315(A-J)AV060110
CSPH*4812AL*	1.05	1.04	315(A-J)AV060110
CSPH*6012AL*	1.03	1.01	315(A-J)AV060110
CAP**4824AL*	1.03	1.01	315(A-J)AV066135
CNPV*4824AL*	1.04	1.03	315(A-J)AV066135
CSPH*4812AL*	1.03	1.01	315(A-J)AV066135
CSPH*6012AL*	1.02	0.99	315(A-J)AV066135
CAP**4824AL*	1.01	1.02	315(A-J)AV066155
CNPV*4824AL*	1.04	1.03	315(A-J)AV066155
CSPH*4812AL*	1.03	1.01	315(A-J)AV066155
CSPH*6012AL*	1.02	0.98	315(A-J)AV066155
CAP**4821AL*	1.04	1.05	98(6*B,7*A)60080V21
CAP**6021AL*	1.02	1.03	98(6*B,7*A)60080V21
CNPV*4821AL*	1.05	1.06	98(6*B,7*A)60080V21
CSPH*4812AL*	1.05	1.06	98(6*B,7*A)60080V21
CSPH*6012AL*	1.03	1.01	98(6*B,7*A)60080V21
CAP**4821AL*	1.04	1.04	98(6*B,7*A)66100V21
CNPV*4821AL*	1.05	1.04	98(6*B,7*A)66100V21
CSPH*4812AL*	1.05	1.04	98(6*B,7*A)66100V21
CSPH*6012AL*	1.03	1.01	98(6*B,7*A)66100V21
CAP**4824AL*	1.04	1.04	98(6*B,7*A)66120V24
CAP**6024AL*	1.02	1.05	98(6*B,7*A)66120V24
CNPV*4824AL*	1.05	1.06	98(6*B,7*A)66120V24
CSPH*4812AL*	1.05	1.06	98(6*B,7*A)66120V24
CSPH*6012AL*	1.03	1.03	98(6*B,7*A)66120V24
CSPH*4812AL*	1.05	1.04	98(6*B,7*A)66120V24
CSPH*6012AL*	1.03	1.01	98(6*B,7*A)66120V24
CAP**4821AL*	1.05	1.08	98(6*B,7MA)60060V21
CAP**6021AL*	1.03	1.07	98(6*B,7MA)60060V21
CNPV*4821AL*	1.06	1.09	98(6*B,7MA)60060V21
CSPH*4812AL*	1.06	1.08	98(6*B,7MA)60060V21
CSPH*6012AL*	1.04	1.05	98(6*B,7MA)60060V21

2-STAGE (Hi-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
*FV4CN(B,F)005L	1.00	1.00	1.00	1.00		
FV4CNB006	1.00	0.99	0.98	0.95		
CAP**4817AL*	1.06	1.10	1.02	1.06	313*AV048070	
CSPH*4812AL*	1.07	1.10	1.03	1.07	313*AV048070	
CSPH*6012AL*	1.06	1.08	1.01	1.04	313*AV048070	
CAP**4821AL*	1.05	1.07	1.01	1.03	313*AV048090	
CAP**6021AL*	1.03	1.04	0.99	1.00	313*AV048090	
CNPV*4821AL*	1.06	1.07	1.02	1.03	313*AV048090	
CSPH*4812AL*	1.06	1.06	1.02	1.03	313*AV048090	
CSPH*6012AL*	1.06	1.07	1.02	1.04	313*AV048090	
CAP**4821AL*	1.05	1.04	1.01	1.01	313*AV048090	
CAP**4821AL*	1.05	1.04	1.02	1.03	313*AV060110	
CNPV*4821AL*	1.06	1.07	1.02	1.03	313*AV060110	
CSPH*4812AL*	1.06	1.06	1.02	1.03	313*AV060110	
CSPH*6012AL*	1.04	1.02	1.01	1.00	313*AV060110	
CAP**4817AL*	1.05	1.07	1.01	1.04	314AAV048070	
CSPH*4812AL*	1.06	1.08	1.02	1.05	314AAV048070	
CSPH*6012AL*	1.05	1.05	1.01	1.02	314AAV048070	
CAP**4821AL*	1.05	1.07	1.01	1.04	314AAV048090	
CAP**6021AL*	1.03	1.04	0.99	1.00	314AAV048090	
CNPV*4821AL*	1.06	1.07	1.02	1.03	314AAV048090	
CSPH*4812AL*	1.06	1.06	1.02	1.03	314AAV048090	
CSPH*6012AL*	1.04	1.03	1.00	1.00	314AAV048090	
CAP**4821AL*	1.04	1.05	1.01	1.02	314AAV066110	
CAP**6021AL*	1.03	1.03	0.99	0.99	314AAV066110	
CNPV*4821AL*	1.06	1.06	1.02	1.02	314AAV066110	
CSPH*4812AL*	1.06	1.05	1.02	1.02	314AAV066110	
CSPH*6012AL*	1.04	1.02	1.00	0.99	314AAV066110	
CAP**4824AL*	1.04	1.05	1.01	1.02	314AAV066135	
CAP**6024AL*	1.03	1.03	0.99	0.99	314AAV066135	
CNPV*4824AL*	1.05	1.05	1.02	1.03	314AAV066135	
CSPH*4812AL*	1.04	1.03	1.00	1.00	314AAV066135	
CSPH*6012AL*	1.05	1.04	1.02	1.03	314AAV066135	
CAP**4817AL*	1.05	1.07	1.01	1.03	922*AA8080E17	
CSPH*4812AL*	1.06	1.07	1.02	1.05	922*AA8080E17	
CSPH*6012AL*	1.05	1.05	1.01	1.01	922*AA8080E17	
CAP**4821AL*	1.05	1.06	1.01	1.03	922*AA8080E21	
CAP**6021AL*	1.04	1.04	0.99	1.00	922*AA8080E21	
CNPV*4821AL*	1.06	1.06	1.02	1.04	922*AA8080E21	
CSPH*4812AL*	1.06	1.05	1.02	1.04	922*AA8080E21	
CSPH*6012AL*	1.05	1.03	1.01	1.01	922*AA8080E21	
CAP**4824AL*	1.04	1.04	1.00	1.01	922*AA80120E24	
CNPV*4824AL*	1.06	1.06	1.02	1.04	922*AA80120E24	
CSPH*4812AL*	1.05	1.04	1.01	1.01	922*AA80120E24	
CSPH*6012AL*	1.06	1.06	1.02	1.04	922*AA80120E24	

2-STAGE (Hi-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
CSPH*6012AL*	1.05	1.03	1.01	1.01	922*AA80120E24	
CAP**4817AL*	1.05	1.08	1.01	1.05	925*AA8080E17	
CSPH*4812AL*	1.06	1.09	1.02	1.07	925*AA8080E17	
CSPH*6012AL*	1.05	1.07	1.01	1.04	925*AA8080E17	
CAP**4821AL*	1.05	1.08	1.02	1.04	925*AA80100E21	
CAP**6021AL*	1.03	1.05	1.00	1.01	925*AA80100E21	
CNPV*4821AL*	1.06	1.07	1.03	1.04	925*AA80100E21	
CSPH*4812AL*	1.06	1.07	1.03	1.04	925*AA80100E21	

See notes on page 60

# 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	18.97	18.97	1.06
70 (21.1)		24.31	22.12	1.66		16.40	16.40	0.93		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				

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 60

# HEAT PUMP HEATING PERFORMANCE - EFFICIENCY MODE CONTINUED

288BNV060

HEATING INDOOR MODEL		CAPACITY		POWER		FURNACE MODEL	
*FE4ANB006L		1.00	1.00	1.03			
CAP**6021AL*		1.00	1.03	1.03	315(A,J)AV060110		
CAP**6024AL*		1.00	1.03	1.03	315(A,J)AV060110		
CNPV*6024AL*		1.00	1.03	1.03	315(A,J)AV060110		
CSPH*6012AL*		1.00	1.01	1.01	315(A,J)AV060110		
CAP**6024AL*		1.00	1.02	1.02	315(A,J)AV066135		
CNPV*6024AL*		1.00	1.02	1.02	315(A,J)AV066135		
CSPH*6012AL*		1.00	1.01	1.01	315(A,J)AV066135		
CAP**6024AL*		1.00	1.01	1.01	315(A,J)AV066155		
CNPV*6024AL*		1.00	1.02	1.02	315(A,J)AV066155		
CSPH*6012AL*		1.00	1.01	1.01	315(A,J)AV066155		
CAP**6021AL*		1.00	1.03	1.03	98(6*B,7*A)60080V21***		
CAP**6024AL*		1.00	1.03	1.03	98(6*B,7*A)60080V21***		
CNPV*6024AL*		1.00	1.03	1.03	98(6*B,7*A)60080V21***		
CSPH*6012AL*		1.00	1.01	1.01	98(6*B,7*A)60080V21***		
CAP**6021AL*		1.00	1.03	1.03	98(6*B,7*A)66100V21***		
CAP**6024AL*		1.00	1.03	1.03	98(6*B,7*A)66100V21***		
CNPV*6024AL*		1.00	1.03	1.03	98(6*B,7*A)66100V21***		
CSPH*6012AL*		1.00	1.01	1.01	98(6*B,7*A)66100V21***		
CAP**6021AL*		1.00	1.03	1.03	98(6*B,7*A)66100V21***		
CAP**6024AL*		1.00	1.03	1.03	98(6*B,7*A)66100V21***		
CNPV*6024AL*		1.00	1.03	1.03	98(6*B,7*A)66100V21***		
CSPH*6012AL*		1.00	1.01	1.01	98(6*B,7*A)66100V21***		

2-STAGE (Hi-Stage 5, Lo-Stage 3)		High Speed Cap.		Power		Low Speed Cap.		Power		Furnace Model	
*FV4CNB006L		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
CAP**6021AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.07	1.07	922*AG0080E21***	
CAP**6024AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.07	1.07	922*AG0100E21***	
CNPV*6024AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.06	1.06	313*AV060110	
CSPH*6012AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.07	1.07	314AAV066110	
CAP**6024AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.07	1.07	922*AG0120E24***	
CNPV*6024AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.07	1.07	314AAV066135	
CSPH*6012AL*		1.00	1.03	1.03	1.07	1.03	1.02	1.07	1.07	922*AG0120E24***	
CAP**6024AL*		1.00	1.04	1.04	1.10	1.04	1.04	1.10	1.10	313*AV060135	
CNPV*6024AL*		1.00	1.04	1.04	1.10	1.04	1.04	1.09	1.09	314AAV066135	
CSPH*6012AL*		1.00	1.03	1.03	1.04	1.03	1.04	1.09	1.09	OVLAA8060154	
CAP**6021AL*		1.00	1.04	1.04	1.10	1.04	1.04	1.06	1.06	313*AV060110	
CAP**6012AL*		1.00	1.01	1.01	1.04	1.01	1.04	1.07	1.07	313*AV060135	
CSPH*6012AL*		1.00	1.01	1.01	1.04	1.01	1.04	1.07	1.07	314AAV066110	
CSPH*6012AL*		1.00	1.01	1.01	1.04	1.01	1.04	1.07	1.07	314AAV066135	

See notes on page 60



# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE

INDOOR AIR		288BNV024A / FE4ANF005 Heating Comfort Mode														
		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)	407	13.78	12.67	1.99	523	19.53	17.81	2.40	622	21.30	18.92	2.18	622	21.06	18.71	2.28
70 (21.1)		13.74	12.62	2.08		19.33	17.62	2.49		21.06	18.71	2.28				
75 (23.3)		13.59	12.49	2.16		19.12	17.43	2.59		20.83	18.50	2.38				
<b>STAGE 3</b>																
65 (18.3)	338	9.32	8.56	1.43	384	11.03	10.06	1.45	449	12.77	11.34	1.35	449	12.57	11.17	1.41
70 (21.1)		9.20	8.46	1.48		10.89	9.93	1.51		12.57	11.17	1.41				
75 (23.3)		9.08	8.35	1.54		10.74	9.79	1.58		12.38	10.99	1.48				
<b>STAGE 1 - FE4ANF005 ONLY</b>																
65 (18.3)	338	6.77	6.22	1.21	409	8.49	7.74	1.27	418	7.40	6.57	0.83	418	7.27	6.45	0.87
70 (21.1)		6.68	6.14	1.26		8.38	7.64	1.32		7.40	6.57	0.83				
75 (23.3)		6.60	6.06	1.31		8.27	7.54	1.37		7.14	6.34	0.92				
<b>STAGE 1 - ALL OTHER INDOOR COILS</b>																
65 (18.3)	338	9.32	8.56	1.43	409	11.08	10.10	1.42	418	8.28	7.35	0.89	418	8.14	7.23	0.91
70 (21.1)		9.20	8.45	1.48		10.94	9.97	1.48		8.14	7.23	0.91				
75 (23.3)		9.08	8.35	1.54		10.80	9.84	1.54		7.99	7.10	0.95				
<b>288BNV024A / FE4ANF005 Heating Comfort Mode</b>																
INDOOR AIR		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	ID SCFM	Capacity MBtuh		Total Sys. KWt
		Total	Integ†			Total	Integ†			Total	Integ†			Total	Integ†	
<b>STAGE 5</b>																
65 (18.3)	720	23.60	21.47	2.09	819	25.55	25.55	1.98	605	17.84	17.84	1.24	605	17.51	17.51	1.31
70 (21.1)		23.29	21.20	2.19		25.12	25.12	2.07		17.51	17.51	1.31				
75 (23.3)		22.99	20.92	2.28		24.77	24.77	2.16		17.19	17.19	1.38				
<b>STAGE 3</b>																
65 (18.3)	514	14.76	13.43	1.34	579	16.82	16.82	1.30	605	18.91	18.91	1.31	605	18.59	18.59	1.38
70 (21.1)		14.55	13.24	1.41		16.55	16.55	1.37		18.59	18.59	1.38				
75 (23.3)		14.34	13.05	1.48		16.26	16.26	1.44		18.23	18.23	1.46				
<b>STAGE 1 - FE4ANF005 ONLY</b>																
65 (18.3)	426	8.96	8.15	0.88	250	6.73	6.73	0.61	250	8.01	8.01	0.62	250	7.82	7.82	0.67
70 (21.1)		8.78	7.99	0.93		6.54	6.54	0.64		7.82	7.82	0.67				
75 (23.3)		8.61	7.83	0.98		6.37	6.37	0.68		7.61	7.61	0.71				
<b>STAGE 1 - ALL OTHER INDOOR COILS</b>																
65 (18.3)	426	9.74	8.86	0.89	243	6.67	6.67	0.61	261	8.01	8.01	0.62	261	7.81	7.81	0.67
70 (21.1)		9.58	8.71	0.94		6.50	6.50	0.65		7.81	7.81	0.67				
75 (23.3)		9.38	8.54	0.99		6.32	6.32	0.69		7.60	7.60	0.71				

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 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE - CONTINUED

288BNV024A

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi-Stage 5, Lo-Stage 3)				Furnace Model	
				Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.		Power
*FE4AN(B/F)005L	1.00	1.00		FV4CN(B/F)003	0.84	0.92	0.77	0.82	
FE4AN(B/F)003	1.00	1.02		FV4CNF002L	0.84	0.90	0.77	0.81	
FE4ANF002L	1.04	1.06		CAP**2414AL*	0.84	0.92	1.05	1.12	313*AV024045
CAP**3614AL*	1.03	1.06	315(A,J)AV036070	CAP**3014AL*	0.84	0.92	1.03	1.09	313*AV024045
CSPH*3612AL*	1.02	1.02	315(A,J)AV036070	CAP**3614AL*	0.84	0.91	1.02	1.07	313*AV024045
CSPH*4212AL*	1.01	1.01	315(A,J)AV036070	CSPH*2412AL*	0.84	0.91	1.04	1.11	313*AV024045
CAP**3617AL*	1.02	1.05	315(A,J)AV048090	CSPH*3012AL*	0.84	0.88	1.04	1.08	313*AV024045
CNPV*3617AL*	1.03	1.06	315(A,J)AV048090	CSPH*3612AL*	0.84	0.88	1.02	1.05	313*AV024045
CNPV*4217AL*	1.02	1.02	315(A,J)AV048090	CAP**2414AL*	0.84	0.93	1.05	1.15	922*AS30040E14
CSPH*3612AL*	1.02	1.02	315(A,J)AV048090	CAP**3014AL*	0.84	0.93	1.02	1.11	922*AS30040E14
CSPH*4212AL*	1.01	1.00	315(A,J)AV048090	CAP**3614AL*	0.84	0.92	1.02	1.10	922*AS30040E14
CAP**3617AL*	1.03	1.07	98(6*B,7*A)42060V17	CNPV*3014AL*	0.84	0.90	1.02	1.11	922*AS30040E14
CNPV*3617AL*	1.04	1.08	98(6*B,7*A)42060V17	CSPH*2412AL*	0.84	0.92	1.04	1.13	922*AS30040E14
CNPV*4217AL*	1.02	1.04	98(6*B,7*A)42060V17	CSPH*3012AL*	0.84	0.90	1.04	1.11	922*AS30040E14
CSPH*3612AL*	1.02	1.04	98(6*B,7*A)42060V17	CSPH*3612AL*	0.84	0.89	1.02	1.08	922*AS30040E14
CSPH*4212AL*	1.02	1.03	98(6*B,7*A)42060V17	CAP**2417AL*	0.84	0.92	1.05	1.14	922*AS36040E17
CAP**3621AL*	1.03	1.06	98(6*B,7*A)42060V17	CAP**3017AL*	0.84	0.92	1.02	1.11	922*AS36040E17
CNPV*3617AL*	1.04	1.08	98(6*B,7*A)42060V17	CAP**3617AL*	0.84	0.92	1.02	1.10	922*AS36040E17
CNPV*4217AL*	1.02	1.04	98(6*B,7*A)42060V17	CNPV*3017AL*	0.84	0.93	1.02	1.11	922*AS36040E17
CSPH*3612AL*	1.02	1.02	98(6*B,7*A)42060V17	CNPV*4217AL*	0.84	0.93	1.02	1.09	922*AS36040E17
CSPH*4212AL*	1.04	1.07	98(6*B,7*A)60060V21	CSPH*2412AL*	0.84	0.92	1.04	1.15	922*AS36040E17
CAP**3621AL*	1.03	1.06	98(6*B,7MA)60060V21	CSPH*3012AL*	0.84	0.90	1.03	1.11	922*AS36040E17
CNPV*3621AL*	1.04	1.08	98(6*B,7MA)60060V21	CSPH*3612AL*	0.84	0.90	1.02	1.09	922*AS36040E17
CNPV*4221AL*	1.03	1.06	98(6*B,7MA)60060V21	CAP**2414AL*	0.84	0.91	1.05	1.10	922*AS36060E14
CSPH*3612AL*	1.02	1.04	98(6*B,7MA)60060V21	CAP**3014AL*	0.84	0.90	1.03	1.07	922*AS36060E14
CSPH*4212AL*	1.02	1.02	98(6*B,7MA)60060V21	CAP**3614AL*	0.84	0.89	1.02	1.05	922*AS36060E14
				CNPV*3014AL*	0.84	0.88	1.03	1.07	922*AS36060E14
				CSPH*2412AL*	0.84	0.88	1.04	1.09	922*AS36060E14
				CSPH*3012AL*	0.84	0.89	1.04	1.06	922*AS36060E14
				CSPH*3612AL*	0.84	0.87	1.02	1.03	922*AS36060E14
				CAP**2414AL*	0.84	0.92	1.05	1.16	925*AS30040E14
				CAP**3014AL*	0.84	0.92	1.02	1.12	925*AS30040E14
				CAP**3614AL*	0.84	0.92	1.02	1.11	925*AS30040E14
				CNPV*3014AL*	0.84	0.93	1.02	1.12	925*AS30040E14
				CNPV*4214AL*	0.84	0.91	1.04	1.15	925*AS30040E14
				CSPH*3012AL*	0.84	0.89	1.04	1.13	925*AS30040E14
				CSPH*3612AL*	0.84	0.89	1.02	1.10	925*AS30040E14
				CAP**2417AL*	0.84	0.95	1.05	1.15	925*AS36040E17
				CAP**3017AL*	0.84	0.94	1.02	1.11	925*AS36040E17
				CAP**3617AL*	0.84	0.93	1.02	1.10	925*AS36040E17
				CNPV*3017AL*	0.84	0.95	1.02	1.11	925*AS36040E17
				CNPV*3617AL*	0.84	0.95	1.02	1.11	925*AS36040E17
				CNPV*4217AL*	0.84	0.92	1.02	1.09	925*AS36040E17
				CSPH*2412AL*	0.84	0.94	1.04	1.15	925*AS36040E17
				CSPH*3012AL*	0.84	0.92	1.04	1.12	925*AS36040E17
				CSPH*3612AL*	0.84	0.92	1.02	1.09	925*AS36040E17

See notes on page 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE

INDOOR AIR		288BNV024B / FE4ANF002L Heating Efficiency Mode Outdoor Coil Entering Air Temperature ° F (° C)						27 (-2.8)								
		7 (-13.9)			17 (-8.3)			Total			Capacity MBtuh			Integ†		
EDB ° F (° C)	ID SCFM	Total Sys. KW†	ID SCFM	Total Sys. KW†	ID SCFM	Total Sys. KW†	Total	Capacity MBtuh	Integ†	Total	Capacity MBtuh	Integ†	Total	Capacity MBtuh	Integ†	Total Sys. KW†
<b>STAGE 5</b>																
65 (18.3)	450	1.37	825	1.37	825	1.37	15.76	14.37	15.76	18.37	16.31	18.37	18.37	16.31	18.37	1.74
70 (21.1)	450	1.45	825	1.45	825	1.45	15.80	14.22	15.80	18.18	16.15	18.18	18.18	16.15	18.18	1.83
75 (23.3)	450	1.50	825	1.50	825	1.50	11.70	10.75	11.70	15.44	14.07	15.44	17.99	15.98	17.99	1.92
<b>STAGE 3</b>																
65 (18.3)	300	0.89	500	0.89	500	0.89	10.11	9.21	10.11	11.81	10.49	11.81	11.81	10.49	11.81	0.90
70 (21.1)	300	0.94	500	0.94	500	0.94	9.93	9.05	9.93	11.61	10.31	11.61	11.61	10.31	11.61	0.96
75 (23.3)	300	0.98	500	0.98	500	0.98	9.75	8.89	9.75	11.41	10.13	11.41	11.41	10.13	11.41	1.01
<b>STAGE 1</b>																
65 (18.3)	300	0.89	500	0.89	500	0.89	10.10	9.21	10.10	10.55	9.37	10.55	10.55	9.37	10.55	0.81
70 (21.1)	300	0.94	500	0.94	500	0.94	9.93	9.05	9.93	10.36	9.20	10.36	10.36	9.20	10.36	0.84
75 (23.3)	300	0.98	500	0.98	500	0.98	9.75	8.89	9.75	10.17	9.03	10.17	10.17	9.03	10.17	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)			Total			Capacity MBtuh			Integ†		
EDB ° F (° C)	ID SCFM	Total Sys. KW†	ID SCFM	Total Sys. KW†	ID SCFM	Total Sys. KW†	Total	Capacity MBtuh	Integ†	Total	Capacity MBtuh	Integ†	Total	Capacity MBtuh	Integ†	Total Sys. KW†
<b>STAGE 5</b>																
65 (18.3)	825	1.82	825	1.82	825	1.82	24.94	24.94	24.94	16.71	16.71	16.71	16.71	16.71	16.71	1.01
70 (21.1)	825	1.92	825	1.92	825	1.92	24.60	24.60	24.60	16.37	16.37	16.37	16.37	16.37	16.37	1.08
75 (23.3)	825	2.02	825	2.02	825	2.02	24.26	24.26	24.26	16.03	16.03	16.03	16.03	16.03	16.03	1.16
<b>STAGE 3</b>																
65 (18.3)	650	0.95	650	0.95	650	0.95	15.09	15.09	15.09	16.71	16.71	16.71	16.71	16.71	16.71	1.01
70 (21.1)	650	1.01	650	1.01	650	1.01	14.83	14.83	14.83	16.38	16.38	16.38	16.38	16.38	16.38	1.09
75 (23.3)	650	1.07	650	1.07	650	1.07	14.56	14.56	14.56	16.07	16.07	16.07	16.07	16.07	16.07	1.16
<b>STAGE 1</b>																
65 (18.3)	585	0.81	585	0.81	585	0.81	7.42	7.42	7.42	7.98	7.98	7.98	7.98	7.98	7.98	0.37
70 (21.1)	585	0.87	585	0.87	585	0.87	7.20	7.20	7.20	7.74	7.74	7.74	7.74	7.74	7.74	0.42
75 (23.3)	585	0.93	585	0.93	585	0.93	6.99	6.99	6.99	7.52	7.52	7.52	7.52	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 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

288BNV024B

2-STAGE (Hi-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	Furnace Model
*FV4CNF002L	1.00	1.00	1.00	1.00		
FV4CN(B,F)003L	0.96	1.03	0.98	1.02		
FV4CN(B,F)003L	0.98	1.04	0.99	1.03		
CAP**2414AL*	1.01	1.09	1.01	1.09	922*A30040E14***	
CAP**2414AL*	1.01	1.06	1.01	1.05	922*A36060E14***	
CAP**2414AL*	1.02	1.09	1.01	1.11	925*A30040E14***	
CAP**2414AL*	1.01	1.08	1.01	1.06	313*AV024045	
CAP**2417AL*	1.01	1.09	1.01	1.09	922*A36040E17***	
CAP**2417AL*	1.00	1.10	1.01	1.09	925*A36040E17***	
CAP**3014AL*	0.99	1.08	0.99	1.07	922*A30040E14***	
CAP**3014AL*	0.99	1.04	1.00	1.02	922*A36060E14***	
CAP**3014AL*	1.00	1.07	1.00	1.09	925*A30040E14***	
CAP**3017AL*	0.99	1.07	0.99	1.06	313*AV024045	
CAP**3017AL*	0.98	1.08	0.99	1.07	922*A36040E17***	
CAP**3614AL*	0.98	1.06	0.99	1.06	922*A30040E14***	
CAP**3614AL*	0.99	1.04	1.00	1.01	922*A36060E14***	
CAP**3614AL*	1.00	1.07	0.99	1.08	925*A30040E14***	
CAP**3614AL*	0.99	1.05	1.00	1.04	313*AV024045	
CAP**3617AL*	0.99	1.06	0.99	1.06	922*A36040E17***	
CAP**3617AL*	0.98	1.08	0.99	1.06	925*A36040E17***	
CNPV*3014AL*	1.00	1.05	0.99	1.06	922*A36060E14***	
CNPV*3014AL*	1.00	1.02	1.00	1.02	922*A36060E14***	
CNPV*3014AL*	1.00	1.08	0.99	1.08	925*A30040E14***	
CNPV*3017AL*	0.99	1.08	0.99	1.07	922*A36040E17***	
CNPV*3017AL*	0.98	1.09	0.99	1.07	925*A36040E17***	
CNPV*3617AL*	0.99	1.08	0.99	1.07	922*A36040E17***	
CNPV*3617AL*	0.98	1.09	0.99	1.07	925*A36040E17***	
CNPV*4217AL*	0.98	1.04	0.99	1.05	922*A36040E17***	
CNPV*4217AL*	0.98	1.07	0.99	1.06	925*A36040E17***	
CSPH*2412AL*	1.00	1.08	1.00	1.09	922*A30040E14***	
CSPH*2412AL*	1.00	1.08	1.00	1.09	922*A36040E17***	
CSPH*2412AL*	1.00	1.05	1.01	1.05	922*A36060E14***	
CSPH*2412AL*	1.02	1.07	1.00	1.10	925*A30040E14***	
CSPH*2412AL*	1.00	1.10	1.00	1.10	925*A36040E17***	
CSPH*2412AL*	1.00	1.06	1.01	1.07	313*AV024045	
CSPH*3012AL*	1.00	1.06	1.00	1.06	922*A30040E14***	
CSPH*3012AL*	1.00	1.06	1.00	1.07	922*A36040E17***	
CSPH*3012AL*	1.00	1.02	1.01	1.02	922*A36060E14***	
CSPH*3012AL*	1.01	1.05	1.00	1.08	925*A30040E14***	
CSPH*3012AL*	0.99	1.08	1.00	1.08	925*A36040E17***	
CSPH*3612AL*	1.00	1.04	0.99	1.04	313*AV024045	
CSPH*3612AL*	0.98	1.04	0.99	1.05	922*A30040E14***	
CSPH*3612AL*	0.98	1.04	0.99	1.05	922*A36040E17***	
CSPH*3612AL*	0.99	1.01	1.00	1.00	922*A36060E14***	
CSPH*3612AL*	1.00	1.04	0.99	1.07	925*A30040E14***	
CSPH*3612AL*	0.98	1.06	0.99	1.06	925*A36040E17***	
CSPH*3612AL*	0.98	1.02	0.99	1.02	313*AV024045	

See notes on page 60

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANF002L	1.00	1.00	
FE4AN(B,F)003L	0.99	0.99	
CAP**3614AL*	1.00	1.01	315(A,J)AV036070
CAP**3617AL*	1.01	1.03	98(6*B,7*A)42060V17***
CAP**3617AL*	1.00	1.01	98(6*B,7*A)42080V17***
CAP**3617AL*	1.00	1.01	315(A,J)AV036070
CAP**3617AL*	1.00	1.00	315(A,J)AV048090
CAP**3621AL*	1.01	1.03	98(6*B,7*A)42060V17***
CAP**3621AL*	1.00	1.01	98(6*B,7*A)42080V17***
CAP**3621AL*	1.00	1.01	98(6*B,7*A)42060V21***
CAP**3621AL*	1.00	1.01	98(6*B,7*A)60080V21***
CAP**3621AL*	1.00	1.01	98(6*B,7*A)60080V21***
CAP**3621AL*	1.00	1.01	98(6*B,7*A)66100V21***
CAP**4221AL*	1.00	1.01	98(6*B,7*A)42060V17***
CAP**4221AL*	1.00	1.01	98(6*B,7*A)42080V17***
CAP**4221AL*	1.00	1.01	98(6*B,7*A)60080V21***
CAP**4221AL*	0.99	0.98	315(A,J)AV048090
CAP**4224AL*	1.00	1.01	98(6*B,7*A)60060V21***
CAP**4817AL*	0.97	0.97	98(6*B,7*A)42060V17***
CAP**4817AL*	0.97	0.97	98(6*B,7*A)42080V17***
CAP**4817AL*	0.96	0.95	315(A,J)AV036070
CAP**4817AL*	0.96	0.94	315(A,J)AV048090
CAP**4821AL*	0.98	0.98	98(6*B,7*A)42060V17***
CAP**4821AL*	0.98	0.98	98(6*B,7*A)42080V17***
CAP**4821AL*	0.97	0.95	315(A,J)AV048090
CNPV*3617AL*	1.01	1.04	98(6*B,7*A)42060V17***
CNPV*3617AL*	1.01	1.03	98(6*B,7*A)42080V17***
CNPV*3621AL*	0.94	0.97	98(6*B,7*A)42060V17***
CNPV*3621AL*	1.01	1.03	98(6*B,7*A)42080V17***
CNPV*4217AL*	1.00	1.01	98(6*B,7*A)42060V17***
CNPV*4217AL*	1.00	1.00	98(6*B,7*A)42080V17***
CNPV*4217AL*	0.99	0.98	315(A,J)AV036070
CNPV*4217AL*	0.99	0.97	315(A,J)AV048090
CNPV*4221AL*	1.01	1.02	98(6*B,7*A)42060V17***
CNPV*4221AL*	1.00	1.01	98(6*B,7*A)42080V17***
CNPV*4221AL*	1.00	0.99	315(A,J)AV048090
CNPV*4221AL*	0.99	0.99	98(6*B,7*A)42060V17***
CNPV*4221AL*	0.99	0.98	98(6*B,7*A)42080V17***
CNPV*4821AL*	0.98	0.96	315(A,J)AV048090
CSPH*3612AL*	1.00	1.01	98(6*B,7*A)42060V17***
CSPH*3612AL*	1.00	1.00	98(6*B,7*A)42080V17***
CSPH*3612AL*	0.99	0.98	315(A,J)AV036070
CSPH*3612AL*	0.99	0.98	315(A,J)AV048090
CSPH*4212AL*	0.99	0.99	98(6*B,7*A)42060V17***
CSPH*4212AL*	0.99	0.99	98(6*B,7*A)42080V17***
CSPH*4212AL*	0.98	0.98	315(A,J)AV036070
CSPH*4212AL*	0.98	0.96	315(A,J)AV048090
CSPH*4812AL*	0.99	0.99	98(6*B,7*A)42060V17***
CSPH*4812AL*	0.98	0.97	98(6*B,7*A)42080V17***

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE

INDOOR AIR		7 (-13.9)				17 (-8.3)				27 (-2.8)			
		Capacity MBtuh		ID SCFM	Total Sys. KWt	Capacity MBtuh		ID SCFM	Total Sys. KWt	Capacity MBtuh		ID SCFM	Total Sys. KWt
EDB °F (°C)		Total	Integ†			Total	Integ†			Total	Integ†		
65 (18.3)		13.73	12.61	1.94		20.11	18.34	2.16		22.21	19.73	2.08	
70 (21.1)	450	13.57	12.47	2.01	825	19.90	18.14	2.26	825	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)		9.32	8.57	1.42		11.26	10.27	1.36		13.17	11.70	1.22	
70 (21.1)	340	9.21	8.46	1.48	500	11.11	10.13	1.42	650	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 1</b>													
65 (18.3)		9.32	8.56	1.42		11.23	10.24	1.35		8.59	7.63	0.80	
70 (21.1)	340	9.19	8.45	1.48	500	11.07	10.10	1.41	650	8.45	7.50	0.83	
75 (23.3)		9.07	8.34	1.53		10.87	9.91	1.47		8.30	7.37	0.88	

INDOOR AIR		37 (2.8)				47 (8.3)				57 (13.9)			
		Capacity MBtuh		ID SCFM	Total Sys. KWt	Capacity MBtuh		ID SCFM	Total Sys. KWt	Capacity MBtuh		ID SCFM	Total Sys. KWt
EDB °F (°C)		Total	Integ†			Total	Integ†			Total	Integ†		
65 (18.3)		25.00	22.75	2.11		27.16	27.16	2.11		19.19	19.19	1.28	
70 (21.1)	825	24.69	22.46	2.21	825	26.80	26.80	2.21	650	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)		15.11	13.75	1.25		17.04	17.04	1.25		19.10	19.10	1.27	
70 (21.1)	650	14.89	13.55	1.32	650	16.77	16.77	1.32	650	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 1</b>													
65 (18.3)		10.20	9.28	0.80		7.58	7.58	0.44		9.05	9.05	0.42	
70 (21.1)	650	9.99	9.09	0.85	585	7.40	7.40	0.48	585	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	

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 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

288BNV025

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL	2-STAGE (Hi-Stage 5, Lo-Stage 3)					Furnace Model
				Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	
*FE4ANI(B)F005L	1.00	1.00		FVACN(B)F003	1.01	1.09	1.01	1.00	
FE4ANI(B)F003	1.04	1.07		FV4CNF002L	1.03	1.09	1.01	1.05	
FE4ANF002L	1.08	1.10		CAP**2414AL*	1.05	1.14	1.05	1.10	313*AV024045
CAP**3614AL*	1.07	1.11	315(A,J)AV036070	CAP**3014AL*	1.03	1.12	1.03	1.07	313*AV024045
CSPH*3612AL*	1.06	1.07	315(A,J)AV036070	CAP**3614AL*	1.03	1.10	1.02	1.05	313*AV024045
CSPH*4212AL*	1.05	1.05	315(A,J)AV036070	CSPH*2412AL*	1.05	1.12	1.04	1.09	313*AV024045
CAP**3617AL*	1.07	1.09	315(A,J)AV048090	CSPH*3012AL*	1.05	1.09	1.04	1.07	313*AV024045
CNPV*3617AL*	1.07	1.10	315(A,J)AV048090	CSPH*3612AL*	1.03	1.06	1.02	1.04	313*AV024045
CSPH*3612AL*	1.06	1.06	315(A,J)AV048090	CAP**2414AL*	1.05	1.15	1.05	1.13	922*A30040E14
CSPH*4212AL*	1.05	1.05	315(A,J)AV048090	CAP**3014AL*	1.03	1.13	1.02	1.09	922*A30040E14
CAP**3617AL*	1.07	1.11	98(6*B,7*A)42060V17	CAP**3614AL*	1.03	1.12	1.02	1.08	922*A30040E14
CNPV*3617AL*	1.08	1.13	98(6*B,7*A)42060V17	CNPV*3014AL*	1.05	1.11	1.02	1.09	922*A30040E14
CNPV*4217AL*	1.07	1.09	98(6*B,7*A)42060V17	CSPH*2412AL*	1.05	1.13	1.04	1.11	922*A30040E14
CSPH*3612AL*	1.07	1.09	98(6*B,7*A)42060V17	CSPH*3012AL*	1.04	1.10	1.04	1.09	922*A30040E14
CSPH*4212AL*	1.06	1.07	98(6*B,7*A)42060V17	CAP**2417AL*	1.05	1.14	1.05	1.13	922*A36040E17
CAP**3617AL*	1.07	1.11	98(6*B,7*A)42060V17	CAP**3017AL*	1.03	1.12	1.02	1.09	922*A36040E17
CNPV*3617AL*	1.08	1.12	98(6*B,7*A)42060V17	CAP**3617AL*	1.03	1.12	1.02	1.08	922*A36040E17
CNPV*4217AL*	1.07	1.08	98(6*B,7*A)42060V17	CNPV*3017AL*	1.03	1.14	1.02	1.09	922*A36040E17
CSPH*3612AL*	1.07	1.08	98(6*B,7*A)42060V17	CNPV*3617AL*	1.03	1.14	1.02	1.09	922*A36040E17
CSPH*4212AL*	1.06	1.07	98(6*B,7*A)42060V17	CNPV*4217AL*	1.03	1.09	1.02	1.06	922*A36040E17
CNPV*3621AL*	1.08	1.11	98(6*B,7*MA)60060V21	CSPH*2412AL*	1.05	1.14	1.04	1.13	922*A36040E17
CNPV*3621AL*	1.07	1.11	98(6*B,7*MA)60060V21	CSPH*3012AL*	1.04	1.10	1.03	1.09	922*A36040E17
CNPV*3621AL*	1.08	1.12	98(6*B,7*MA)60060V21	CSPH*3612AL*	1.03	1.09	1.02	1.07	922*A36060E14
CNPV*4221AL*	1.07	1.10	98(6*B,7*MA)60060V21	CAP**2414AL*	1.05	1.12	1.05	1.08	922*A36060E14
CSPH*3612AL*	1.07	1.06	98(6*B,7*MA)60060V21	CAP**3014AL*	1.03	1.10	1.03	1.05	922*A36060E14
CSPH*4212AL*	1.06	1.07	98(6*B,7*MA)60060V21	CAP**3614AL*	1.03	1.09	1.02	1.03	922*A36060E14
				CNPV*3014AL*	1.05	1.08	1.03	1.05	922*A36060E14
				CSPH*2412AL*	1.05	1.10	1.04	1.07	922*A36060E14
				CSPH*3012AL*	1.05	1.08	1.04	1.05	922*A36060E14
				CSPH*3612AL*	1.03	1.06	1.02	1.01	922*A36060E14
				CAP**2414AL*	1.07	1.16	1.05	1.14	925*A30040E14
				CAP**3014AL*	1.05	1.14	1.02	1.11	925*A30040E14
				CNPV*3014AL*	1.04	1.12	1.02	1.09	925*A30040E14
				CNPV*3614AL*	1.05	1.14	1.02	1.11	925*A30040E14
				CSPH*2412AL*	1.06	1.13	1.04	1.13	925*A30040E14
				CSPH*3012AL*	1.05	1.10	1.04	1.11	925*A30040E14
				CSPH*3612AL*	1.04	1.09	1.02	1.08	925*A30040E14
				CAP**2417AL*	1.05	1.17	1.05	1.13	925*A36040E17
				CAP**3017AL*	1.03	1.14	1.02	1.09	925*A36040E17
				CNPV*3017AL*	1.03	1.14	1.02	1.08	925*A36040E17
				CNPV*3617AL*	1.03	1.16	1.02	1.09	925*A36040E17
				CNPV*4217AL*	1.03	1.16	1.02	1.09	925*A36040E17
				CSPH*2412AL*	1.05	1.16	1.04	1.13	925*A36040E17
				CSPH*3012AL*	1.04	1.13	1.04	1.10	925*A36040E17
				CSPH*3612AL*	1.03	1.11	1.02	1.07	925*A36040E17
				CAP**2414AL*	1.03	1.11	1.02	1.07	925*A36040E17
				CAP**3014AL*	1.04	1.13	1.04	1.10	925*A36040E17
				CNPV*3014AL*	1.03	1.11	1.02	1.07	925*A36040E17
				CNPV*3614AL*	1.03	1.11	1.02	1.07	925*A36040E17

See notes on page 60

# 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)	528	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 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

288BNV036

2-STAGE (Hi-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
*FVACN(B,F)005L	1.00	1.00	1.00	1.00		
FVACN(B,F)003	1.01	1.06	1.01	1.05		
FV4CN(F)002L	1.04	1.08	1.04	1.08		
CAP**3614AL*	1.04	1.13	1.03	1.12	313*AV024045	
CSPH*3612AL*	1.04	1.08	1.03	1.09	313*AV024045	
CSPH*4212AL*	1.04	1.07	1.02	1.07	313*AV024045	
CSPH*4812AL*	1.04	1.07	1.02	1.06	313*AV024045	
CAP**4217AL*	1.03	1.06	1.02	1.06	314AAV048070	
CAP**3617AL*	1.04	1.13	1.05	1.13	922*A36040E17	
CAP**4817AL*	1.02	1.07	1.01	1.07	922*A36040E17	
CSPH*3612AL*	1.04	1.14	1.03	1.13	922*A36040E17	
CSPH*4212AL*	1.04	1.10	1.03	1.10	922*A36040E17	
CSPH*4812AL*	1.04	1.08	1.03	1.10	922*A36040E17	
CAP**4817AL*	1.03	1.10	1.02	1.08	922*A36040E17	
CSPH*3612AL*	1.03	1.08	1.03	1.07	922*A36060E14	
CSPH*4212AL*	1.03	1.05	1.03	1.06	922*A36060E14	
CSPH*4812AL*	1.03	1.05	1.02	1.04	922*A36060E14	
CAP**3617AL*	1.03	1.08	1.02	1.08	922*A42060E17	
CAP**4817AL*	1.01	1.02	1.00	1.03	922*A42060E17	
CNPV*3617AL*	1.03	1.10	1.02	1.09	922*A42060E17	
CNPV*4217AL*	1.02	1.05	1.02	1.06	922*A42060E17	
CSPH*3612AL*	1.03	1.05	1.02	1.06	922*A42060E17	
CSPH*4212AL*	1.02	1.04	1.02	1.05	922*A42060E17	
CSPH*4812AL*	1.02	1.03	1.02	1.04	922*A42060E17	
CAP**3617AL*	1.02	1.08	1.02	1.08	922*A48080E17	
CAP**4817AL*	1.01	1.01	1.00	1.03	922*A48080E17	
CNPV*3617AL*	1.03	1.10	1.02	1.09	922*A48080E17	
CNPV*4217AL*	1.02	1.05	1.02	1.06	922*A48080E17	
CSPH*3612AL*	1.02	1.05	1.02	1.06	922*A48080E17	
CSPH*4212AL*	1.02	1.03	1.02	1.04	922*A48080E17	
CSPH*4812AL*	1.02	1.03	1.02	1.04	922*A48080E17	
CNPV*4217AL*	1.05	1.13	1.05	1.12	925*A36040E17	
CSPH*3612AL*	1.05	1.12	1.05	1.12	925*A36040E17	
CAP**3614AL*	1.05	1.16	1.03	1.13	925*A36060E14	
CSPH*3612AL*	1.05	1.12	1.03	1.11	925*A36060E14	
CSPH*4212AL*	1.05	1.11	1.03	1.10	925*A36060E14	
CSPH*4812AL*	1.04	1.10	1.03	1.09	925*A36060E14	
CAP**3617AL*	1.04	1.11	1.02	1.10	925*A42060E17	
CAP**4817AL*	1.01	1.04	1.00	1.05	925*A42060E17	
CNPV*3617AL*	1.04	1.12	1.03	1.12	925*A42060E17	
CNPV*4217AL*	1.03	1.08	1.02	1.08	925*A42060E17	
CSPH*3612AL*	1.03	1.07	1.02	1.08	925*A42060E17	
CSPH*4212AL*	1.03	1.06	1.02	1.07	925*A42060E17	
CSPH*4812AL*	1.03	1.05	1.02	1.06	925*A42060E17	

See notes on page 60

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CNPV*4821AL*	1.02	1.03	98(6*B,7*A)60060V21
CSPH*3612AL*	1.02	1.05	98(6*B,7*A)60080V21
CSPH*4212AL*	1.02	1.04	98(6*B,7*A)60080V21
CSPH*4812AL*	1.02	1.03	98(6*B,7*A)60080V21
CAP**3621AL*	1.04	1.08	98(6*B,7*A)66100V21
CAP**4221AL*	1.04	1.07	98(6*B,7*A)66100V21
CAP**4821AL*	1.01	1.02	98(6*B,7*A)66100V21
CNPV*3621AL*	1.05	1.11	98(6*B,7*A)66100V21
CNPV*4221AL*	1.02	1.07	98(6*B,7*A)66100V21
CNPV*4821AL*	1.02	1.03	98(6*B,7*A)66100V21
CSPH*3612AL*	1.02	1.04	98(6*B,7*A)66100V21
CSPH*4212AL*	1.02	1.03	98(6*B,7*A)66100V21
CSPH*4812AL*	1.02	1.02	98(6*B,7*A)66100V21
CAP**4224AL*	1.04	1.07	98(6*B,7*A)66120V24
CAP**4824AL*	1.02	1.03	98(6*B,7*A)66120V24
CNPV*4824AL*	1.02	1.03	98(6*B,7*A)66120V24
CSPH*3612AL*	1.02	1.05	98(6*B,7*A)66120V24
CSPH*4212AL*	1.02	1.04	98(6*B,7*A)66120V24
CSPH*4812AL*	1.02	1.03	98(6*B,7*A)66120V24
CAP**3621AL*	1.04	1.10	98(6*B,7MA)60060V21
CAP**4221AL*	1.04	1.09	98(6*B,7MA)60060V21
CAP**4821AL*	1.02	1.05	98(6*B,7MA)60060V21
CNPV*3621AL*	1.05	1.13	98(6*B,7MA)60060V21
CNPV*4221AL*	1.05	1.10	98(6*B,7MA)60060V21
CNPV*4821AL*	1.02	1.05	98(6*B,7MA)60060V21
CSPH*3612AL*	1.04	1.07	98(6*B,7MA)60060V21
CSPH*4212AL*	1.02	1.05	98(6*B,7MA)60060V21
CSPH*4812AL*	1.02	1.05	98(6*B,7MA)60060V21



# 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					1139			
75 (23.3)		20.34	18.69	2.57		32.54	29.67	3.83		39.62	35.19	4.44				
<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		23.55	20.92	2.43
70 (21.1)	450	15.82	14.54	2.03	633	20.28	18.49	2.36		23.38	20.76	2.56	724			
75 (23.3)		15.13	13.91	2.12		19.73	17.99	2.41								
<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		20.00	17.77	1.98
70 (21.1)	450	16.51	15.17	2.43	569	20.20	18.42	2.41		19.83	17.61	2.09	629			
75 (23.3)		13.93	12.80	2.31		18.49	16.86	2.70								

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	996			
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		34.84	34.84	2.62
70 (21.1)	814	27.16	24.72	2.51	905	30.96	30.96	2.58		34.50	34.50	2.78	996			
75 (23.3)		26.96	24.54	2.66		30.69	30.69	2.73								
<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		16.87	16.87	1.22
70 (21.1)	680	22.56	20.53	2.16	350	14.75	14.75	1.17	403	16.27	16.27	1.20				
75 (23.3)		22.78	20.73	2.16		14.36	14.36	1.23								

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 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE - CONTINUED

288BNV048

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANI(B,F)005L	1.00	1.00	
FE4ANB006	0.99	0.95	
CAP**4817AL*	1.04	1.03	315(A-J)AV048090
CSPH*4812AL*	1.05	1.04	315(A-J)AV048090
CSPH*6012AL*	1.03	1.01	315(A-J)AV048090
CAP**4821AL*	1.04	1.03	315(A-J)AV060110
CAP**6021AL*	1.02	1.02	315(A-J)AV060110
CNPV*4821AL*	1.05	1.04	315(A-J)AV060110
CSPH*4812AL*	1.05	1.04	315(A-J)AV060110
CSPH*6012AL*	1.03	1.01	315(A-J)AV060110
CAP**4824AL*	1.03	1.01	315(A-J)AV066135
CNPV*4824AL*	1.04	1.03	315(A-J)AV066135
CSPH*4812AL*	1.03	1.01	315(A-J)AV066135
CNPV*4824AL*	1.01	0.99	315(A-J)AV066155
CNPV*4824AL*	1.04	1.02	315(A-J)AV066155
CNPV*6024AL*	1.03	1.01	315(A-J)AV066155
CSPH*4812AL*	1.04	1.01	315(A-J)AV066155
CSPH*6012AL*	1.02	0.98	315(A-J)AV066155
CAP**4821AL*	1.04	1.05	98(6*B,7*A)60080V21
CAP**6021AL*	1.02	1.03	98(6*B,7*A)60080V21
CNPV*4821AL*	1.05	1.06	98(6*B,7*A)60080V21
CSPH*4812AL*	1.05	1.06	98(6*B,7*A)60080V21
CSPH*6012AL*	1.03	1.01	98(6*B,7*A)60080V21
CAP**4821AL*	1.04	1.04	98(6*B,7*A)66100V21
CNPV*4821AL*	1.05	1.04	98(6*B,7*A)66100V21
CSPH*4812AL*	1.05	1.04	98(6*B,7*A)66100V21
CSPH*6012AL*	1.03	1.01	98(6*B,7*A)66100V21
CAP**4824AL*	1.04	1.04	98(6*B,7*A)66120V24
CAP**6024AL*	1.02	1.05	98(6*B,7*A)66120V24
CNPV*4824AL*	1.05	1.04	98(6*B,7*A)66120V24
CSPH*4812AL*	1.05	1.03	98(6*B,7*A)66120V24
CSPH*6012AL*	1.03	1.01	98(6*B,7*A)66120V24
CAP**4821AL*	1.03	1.01	98(6*B,7*A)66120V24
CAP**6021AL*	1.03	1.07	98(6*B,7*MA)60060V21
CNPV*4821AL*	1.06	1.09	98(6*B,7*MA)60060V21
CSPH*4812AL*	1.06	1.08	98(6*B,7*MA)60060V21
CSPH*6012AL*	1.04	1.05	98(6*B,7*MA)60060V21

2-STAGE (Hi-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
*FV4CN(B,F)005L	1.00	1.00	1.00	1.00		
FV4CNB006	1.00	0.99	0.98	0.95		
CAP**4817AL*	1.06	1.10	1.02	1.06	313*AV048070	
CSPH*4812AL*	1.07	1.10	1.03	1.07	313*AV048070	
CSPH*6012AL*	1.06	1.08	1.01	1.04	313*AV048070	
CAP**4821AL*	1.05	1.07	1.01	1.03	313*AV048090	
CAP**6021AL*	1.03	1.04	0.99	1.00	313*AV048090	
CNPV*4821AL*	1.06	1.07	1.02	1.03	313*AV048090	
CSPH*4812AL*	1.06	1.06	1.02	1.03	313*AV048090	
CSPH*6012AL*	1.06	1.07	1.02	1.04	313*AV048090	
CAP**4821AL*	1.05	1.04	1.01	1.01	313*AV048090	
CAP**4821AL*	1.05	1.04	1.02	1.03	313*AV060110	
CNPV*4821AL*	1.06	1.07	1.02	1.03	313*AV060110	
CSPH*4812AL*	1.06	1.06	1.02	1.03	313*AV060110	
CSPH*6012AL*	1.04	1.02	1.01	1.00	313*AV060110	
CAP**4817AL*	1.05	1.07	1.01	1.04	314AAV048070	
CSPH*4812AL*	1.06	1.08	1.02	1.05	314AAV048070	
CSPH*6012AL*	1.05	1.05	1.01	1.02	314AAV048070	
CAP**4821AL*	1.05	1.07	1.01	1.04	314AAV048090	
CAP**6021AL*	1.03	1.04	0.99	1.00	314AAV048090	
CNPV*4821AL*	1.06	1.07	1.02	1.03	314AAV048090	
CSPH*4812AL*	1.06	1.06	1.02	1.03	314AAV048090	
CSPH*6012AL*	1.04	1.03	1.00	1.00	314AAV048090	
CAP**4821AL*	1.04	1.05	1.01	1.02	314AAV066110	
CAP**6021AL*	1.03	1.03	0.99	0.99	314AAV066110	
CNPV*4821AL*	1.06	1.06	1.02	1.02	314AAV066110	
CSPH*4812AL*	1.06	1.05	1.02	1.02	314AAV066110	
CSPH*6012AL*	1.04	1.02	1.00	0.99	314AAV066110	
CAP**4824AL*	1.04	1.05	1.01	1.02	314AAV066135	
CAP**6024AL*	1.03	1.03	0.99	0.99	314AAV066135	
CNPV*4824AL*	1.05	1.05	1.02	1.03	314AAV066135	
CNPV*6024AL*	1.04	1.03	1.00	1.00	314AAV066135	
CSPH*4812AL*	1.05	1.04	1.02	1.03	314AAV066135	
CSPH*6012AL*	1.04	1.02	1.00	0.99	314AAV066135	
CAP**4817AL*	1.05	1.07	1.01	1.03	922*AA8080E17	
CSPH*4812AL*	1.06	1.07	1.02	1.05	922*AA8080E17	
CSPH*6012AL*	1.05	1.05	1.01	1.01	922*AA8080E17	
CAP**4821AL*	1.05	1.06	1.01	1.03	922*AA8080E21	
CAP**6021AL*	1.04	1.04	0.99	1.00	922*AA8080E21	
CNPV*4821AL*	1.06	1.06	1.02	1.04	922*AA8080E21	
CSPH*4812AL*	1.06	1.05	1.02	1.04	922*AA8080E21	
CSPH*6012AL*	1.05	1.03	1.01	1.00	922*AA8080E21	
CAP**4821AL*	1.05	1.06	1.01	1.04	922*AA8080E21	
CAP**6021AL*	1.04	1.04	0.99	1.00	922*AA8080E21	
CNPV*4821AL*	1.06	1.06	1.02	1.04	922*AA8080E21	
CSPH*4812AL*	1.06	1.05	1.02	1.04	922*AA8080E21	
CSPH*6012AL*	1.05	1.03	1.01	1.01	922*AA8080E21	
CAP**4824AL*	1.05	1.06	1.01	1.03	922*AA8080E24	
CAP**6024AL*	1.04	1.04	1.00	1.01	922*AA8080E24	
CNPV*4824AL*	1.06	1.06	1.02	1.04	922*AA8080E24	
CNPV*6024AL*	1.05	1.04	1.01	1.01	922*AA8080E24	
CSPH*4812AL*	1.06	1.06	1.02	1.04	922*AA8080E24	

2-STAGE (Hi-Stage 5, Lo-Stage 3)						
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model	
CSPH*6012AL*	1.05	1.03	1.01	1.01	922*AG0120E24	
CAP**4817AL*	1.05	1.08	1.01	1.05	925*AA8080E17	
CSPH*4812AL*	1.06	1.09	1.02	1.07	925*AA8080E17	
CSPH*6012AL*	1.05	1.07	1.01	1.04	925*AA8080E17	
CAP**4821AL*	1.05	1.08	1.02	1.04	925*AA8080E21	
CAP**6021AL*	1.03	1.05	1.00	1.01	925*AA8080E21	
CNPV*4821AL*	1.06	1.07	1.03	1.04	925*AA8080E21	
CSPH*4812AL*	1.06	1.07	1.03	1.04	925*AA8080E21	

See notes on page 60

# 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†	
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		20.88	18.55	1.56				
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		43.06	43.06	2.72				
75 (23.3)		32.29	29.38	2.65		36.91	36.91	2.75		42.35	42.35	2.83				
65 (18.3)	1275	24.69	22.46	1.57	900	16.76	16.76	0.84	900	19.39	19.39	0.96	900	18.97	18.97	1.06
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 60

# HEAT PUMP HEATING PERFORMANCE - COMFORT MODE CONTINUED

288BNV060

HEATING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB006L	1.00	1.00	
CAP**6021AL*	1.00	1.03	315(A,J)AV060110
CAP**6024AL*	1.00	1.03	315(A,J)AV060110
CNPV*6024AL*	1.00	1.03	315(A,J)AV060110
CSPH*6012AL*	1.00	1.01	315(A,J)AV066135
CAP**6024AL*	1.00	1.02	315(A,J)AV066135
CNPV*6024AL*	1.00	1.01	315(A,J)AV066135
CSPH*6012AL*	1.00	1.01	315(A,J)AV066155
CNPV*6024AL*	1.00	1.02	315(A,J)AV066155
CSPH*6012AL*	1.00	1.01	315(A,J)AV066155
CAP**6024AL*	1.00	1.03	98(6*B,7*A)60080V21***
CNPV*6024AL*	1.00	1.03	98(6*B,7*A)60080V21***
CSPH*6012AL*	1.00	1.03	98(6*B,7*A)60080V21***
CNPV*6024AL*	1.00	1.01	98(6*B,7*A)60080V21***
CAP**6021AL*	1.00	1.03	98(6*B,7*A)66100V21***
CNPV*6024AL*	1.00	1.03	98(6*B,7*A)66100V21***
CSPH*6012AL*	1.00	1.03	98(6*B,7*A)66100V21***
CNPV*6024AL*	1.00	1.01	98(6*B,7*A)66100V21***
CSPH*6012AL*	1.00	1.01	98(6*B,7*A)66100V21***
CAP**6024AL*	1.00	1.03	98(6*B,7*MA)60060V21***
CNPV*6024AL*	1.00	1.03	98(6*B,7*MA)60060V21***
CSPH*6012AL*	1.00	1.03	98(6*B,7*MA)60060V21***
CNPV*6024AL*	1.00	1.01	98(6*B,7*MA)60060V21***
CSPH*6012AL*	1.00	1.01	98(6*B,7*MA)60060V21***

2-STAGE (Hi-Stage 5, Lo-Stage 3)					
Heating Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNB006L	1.00	1.00	1.00	1.00	
CAP**6021AL*	1.00	1.03	1.02	1.07	922*AG0080E21***
CAP**6024AL*	1.00	1.03	1.02	1.07	922*AG0100E21***
CNPV*6024AL*	1.00	1.03	1.02	1.06	313*AV060110
CAP**6021AL*	1.00	1.03	1.02	1.07	314AAV066110
CNPV*6024AL*	1.00	1.03	1.02	1.07	922*AG0120E24***
CAP**6024AL*	1.00	1.03	1.02	1.07	314AAV066135
CNPV*6024AL*	1.00	1.04	1.04	1.10	922*AG0120E24***
CNPV*6024AL*	1.00	1.04	1.04	1.10	313*AV060135
CNPV*6024AL*	1.00	1.03	1.04	1.09	314AAV066135
CNPV*6024AL*	1.00	1.04	1.04	1.10	OVLAA060154
CSPH*6012AL*	1.00	1.01	1.04	1.06	313*AV060110
CSPH*6012AL*	1.00	1.01	1.04	1.07	313*AV060135
CSPH*6012AL*	1.00	1.01	1.04	1.07	314AAV066110
CSPH*6012AL*	1.00	1.01	1.04	1.07	314AAV066135

**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.