

CH17NA

2-Stage Heat Pump with Puron® Refrigerant 2 To 5 Nominal Tons



Product Data

Industry leading Features / Benefits



This CH17NA heat pump with Puron® refrigerant provides a collection of features unmatched by any other family of equipment. The CH17NA has been designed utilizing Carrier's non-ozone depleting Puron® refrigerant.

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. Refer to the combination ratings in the AHRI Directory for system combinations that meet Energy Star® guidelines.

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

Efficiency

- Up to 17 SEER/ Up to 13 EER/Up to 8.4 HSPF
- Microtube Technology™ refrigeration system
- Indoor air quality accessories available

Sound

- Sound level as low as 70 dBA

Reliability

- Non-ozone depleting Puron® refrigerant
- Scroll compressor
- Non-ozone depleting Puron® Refrigerant
- Front-seating service valves
- 2-stage scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Low Pressure switch
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

WeatherArmor™ Protection package:

- Solid, durable sheet metal construction
- Steel dense wire coil guard

Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient (down to -10°F/-23°C) with accessory kit

Model Number Nomenclature

1	2	3	4	5	6	7	8	9	10	11	12	14
C	H	17		N	A	0	1	8	0	0	A	A
Product Series	Product Type	SEER		Voltage	Major Series		Cooling Capacity		Variations	Open	Grille Options	Minor Series
C=Sentry	H=Heat Pump	17 = 17 SEER		N=208-230-1	A=Original		1,000 Nominal Btuh		0=Not Defined P=No High Pressure Switch	0=Not Defined	0=Standard G = Dense Grille	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.



This product has been designed and manufactured to meet Energy Star criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**

Standard Features

Feature	24	36	48	60
Puron Refrigerant	X	X	X	X
Maximum SEER Rating*	17.0	17.0	16.0	16.0
2-Stage Scroll Compressor	X	X	X	X
Low Ambient capability with Approved Kits	X	X	X	X
Field Installed Filter Drier	X	X	X	X
Front-Seating Service Valves	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X
Internal Thermal Overload	X	X	X	X
Long Line capability	X	X	X	X
Low Pressure Switch	X	X	X	X
Crankcase Heater w/Temperature Switch	X	X	X	X

*With approved combinations

X = Standard

Physical Data

UNIT SIZE SERIES	024-B	036-B	048-B	060-B
Compressor Type	Ultratech® Scroll			
REFRIGERANT	Puron® (R-410A)			
Outdoor Heating Piston #	46	55	61	67
Control	TXV (Puron Hard Shutoff)			
Charge lb (kg)	13.07 (5.93)	13.70 (6.21)	13.73 (6.23)	14.78 (6.70)
COND FAN	Propeller Type, Direct Drive			
Air Discharge	Vertical			
Air Qty (CFM)	3200	3200	4350	5000
Motor HP	1/12	1/12	1/4	1/4
Motor RPM	800	800	825	825
COND COIL				
Face Area (Sq ft)	25.15	25.15	25.15	30.18
Fins per In.	20	20	20	20
Rows	2	2	2	2
Circuits	8	8	8	10
VALVE CONNECT. (In. ID)				
Vapor	3/4	7/8	1-1/8	1-1/8
Liquid	3/8"			
REFRIGERANT TUBES* (In. OD)				
Rated ^Vapor (0-80 Ft Tube Length)	5/8	3/4	7/8	1 1/8
Max Liquid Line†				

*. 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.

†. See *Liquid Line Sizing For Cooling Only Systems with Puron Refrigerant* tables.

Note: See unit Installation Instruction for proper installation.

Vapor Line Sizing and Cooling Capacity Loss

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for HP systems with Puron refrigerant:

Unit Nominal Size (Btuh)	Maximum Liquid Line Diameters (In. OD)	Vapor Line Diameters (In.) OD	Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m)								
			Standard Application		Long Line Application Requires Accessories						
			26-50 (7.9-15.2)	51-80 (15.5-24.4)	81-100 (24.7-30.5)	101-125 (30.8-38.1)	126-150 (38.4-45.7)	151-175 (46.0-50.3)	176-200 (53.6-60.0)	201-225 (61.3-68.6)	226-250 (68.9-76.2)
24,000 2-Stage HP with Puron	3/8	5/8	0	1	1	2	3	3	4	4	5
		3/4	0	1	1	1	1	1	1	1	1
36,000 2-Stage HP with Puron	3/8	5/8	1	2	4	5	6	7	9	10	11
		3/4	0	0	1	1	2	2	3	3	4
		7/8	0	0	—	—	—	—	—	—	—
48,000 2-Stage HP with Puron	3/8	3/4	1	2	2	3	4	5	6	7	7
		7/8	0	1	1	2	2	2	3	3	4
		1-1/8	0	0	—	—	—	—	—	—	—
60,000 2-Stage HP with Puron	3/8	3/4	1	2	4	5	6	8	9	10	11
		7/8	0	1	2	2	3	4	4	5	5
		1-1/8	0	0	—	—	—	—	—	—	—

Standard Length = 80 ft. (24.4 m) or less total equivalent length

Applications in this area are long line. Accessories are required as shown recommended on Long Line Application Guidelines

Applications in this area may have height restrictions that limit allowable total equivalent length, when outdoor unit is below indoor unit.

— Applications in this area are not recommended due to insufficient oil return.

Refrigerant Piping Length Limitations

Maximum Line Lengths: The maximum allowable total equivalent length for heat pumps varies 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 outdoor 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	200 (61)	250 (76.2)	N/A
Outdoor unit ABOVE indoor unit	200 (61)	250 (76.2)	200 (61)
Outdoor unit BELOW indoor unit	See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit'		

*. Maximum actual length not to exceed 200 ft (61 m)

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)
024 HP with Puron	3/8	250*	250*	250*	250*	250*	250*	250*
036 HP with Puron	3/8	250*	250*	250*	250*	250*	250*	250*
048 HP with Puron	3/8	250*	250*	250*	250*	230	160	--
060 HP with Puron	3/8	250*	225*	190	150	110	--	--

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

-- = outside acceptable range

Long Line Applications

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Heat Pump systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

HP with Puron Refrigerant Long Line Description ft (m) Beyond these lengths, long line accessories are required

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
3/8	80 (24.4)	20 (6.1) vertical or 80 (24.4) total	80 (24.4)

Note: See Long Line Guideline for details

Electrical Data

UNIT SIZE - SERIES	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE† or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
024-B	208-230/1	253	197	58.3	12.50	0.60	16.2	25
036-B				83.0	18.50	0.60	23.7	40
048-B				104.0	22.80	1.30	29.8	50
060-B				152.9	28.80	1.30	37.5	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 24V 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

A-Weighted Sound Power Level (dBA)

Unit Size	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
024-B	73 - High Stage	51.5	55.0	63.5	69.0	62.0	58.5	56.0
	70 - Low Stage	51.5	55.5	63.0	66.0	62.0	59.0	54.0
036-B	74 - High Stage	54.5	57.5	65.0	70.5	62.5	60.0	57.0
	71 - Low Stage	54.0	57.5	63.5	66.0	61.0	60.5	55.0
048-B	75 - High Stage	53.5	59.5	66.0	70.5	64.0	61.5	55.0
	71 - Low Stage	54.0	59.5	66.0	66.0	63.0	61.5	55.5
060-B	74 - High Stage	51.5	58.0	66.0	68.0	64.5	63.0	61.5
	73 - Low Stage	53.0	58.5	66.5	68.0	64.5	63.0	58.5

NOTE: Tested in accordance with AHRI Standard 270-2008. (Not listed with AHRI).

A-Weighted Sound Power Level (dBA) with Sound Shield

Unit Size	Standard Rating (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
024-B	71 - High Stage	50.0	55.0	63.0	68.0	61.5	57.5	52.0
	70 - Low Stage	50.5	56.0	63.0	66.0	61.5	58.0	51.5
036-B	72 - High Stage	54.5	57.0	64.5	69.0	61.5	58.5	53.0
	70 - Low Stage	55.5	56.5	63.0	65.0	60.5	59.0	52.0
048-B	74 - High Stage	54.0	59.5	66.0	70.0	63.0	59.0	51.5
	70 - Low Stage	53.5	59.0	65.5	65.0	62.5	60.5	54.0
060-B	73 - High Stage	52.0	58.5	66.0	68.0	64.0	60.5	56.5
	72 - Low Stage	54.0	58.0	66.0	67.5	64.0	61.0	55.0

NOTE: Tested in accordance with AHRI Standard 270-2008. (Not listed with AHRI).

Charging Subcooling (TXV-Type Expansion Device)

UNIT SIZE-VOLTAGE, SERIES	REQUIRED SUBCOOLING °F (°C)
24-B	10 (5.6)
36-B	13 (7.2)
48-B	12 (6.7)
60-B	11 (6.1)

Accessories

Accessory Number	Description	Unit Size	
		24, 36	48, 60
KHAIR0201AAA	ISOLATION RELAY	X	X
KHALS0401LLS	SOLENOID VALVE	X	X
KHASS0606MPK	SNOW STAND	X	X
KSAFT0101AAA	FREEZE THERMOSTAT	X	X
KSASH2301COP	SOUND BLANKET	X	
KSAHI0401PUR	HIGH PRESSURE SWITCH	X	X
KSAHS2801AAA	HARD START KIT		X
KSALA0301410	LOW AMBIENT KIT	X	X
KSASF0201AAA	SUPPORT FEET	X	X
KSASH2301COP	SOUND BLANKET	X	
KSASH2401COP	SOUND BLANKET		X

Accessory Usage Guideline

Accessory	Required for Low Ambient Cooling Applications (Below 55°F / 12.8°C)	Required for Long Line Applications	Required for Sea Coast Applications (within 2 miles/3.2 km)
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes (standard)	Yes (standard)	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shutoff TXV	Yes (standard w/factory approved indoor unit)	Yes (standard w/factory approved indoor unit)	Yes (standard w/factory approved indoor unit)
Isolation Relay	Yes	No	No
Liquid Line Solenoid Valve	No	See Residential Piping and Long Line Guideline	No
Low-Ambient Pressure Switch	Yes	No	No
Support Feet	Recommended	No	Recommended

*. For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Piping and Longline Guideline.

Accessory Description and Usage (Listed Alphabetically)

1. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a “hard” boost to compressor motor at each start up.

Usage Guideline:

Required for 2-stage non-communicating units in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

2. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

3. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

4. Isolation Relay

An SPDT relay which switches the low ambient controller out of the outdoor fan motor circuit when the heat pump switches to heating mode.

Usage Guideline:

Required in all heat pumps where low ambient kit has been added.

5. Low-Ambient Pressure Switch

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits. The control will maintain working head pressure at low-ambient temperatures down to -10°F (-23°C) when properly installed.

Usage Guideline:

A Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

6. Liquid-Line Solenoid Valve (LLS)

An electrically operated shutoff valve which stops and starts refrigerant liquid flow in response to compressor operation. It is to be installed at the outdoor unit to control refrigerant off cycle migration in the heating mode.

Usage Guideline:

An LLS is required in all long line heat pump applications to control refrigerant off cycle migration in the heating mode. See Long Line Guideline.

Suggested for all commercial applications.

7. Outdoor Thermostat

An SPDT temperature-actuated switch which turns on supplemental electric heaters when outdoor air temperature drops below a user-selected set point.

Usage Guideline:

Electric supplemental heat applications in non-variable speed indoor units when electric heat staging is desired.

Accessory Description and Usage (continued)

8.Secondary Outdoor Thermostat

An SPDT temperature-actuated switch which turns on third-stage of supplemental electric heaters when outdoor air temperature drops below the second-stage set point.

Usage Guideline:

Outdoor thermostat applications where electric heater is capable of three-stage operation.

9.Snow Stand

Coated wire rack which supports unit 18 in. (457.2 mm) above mounting pad to allow for drainage from unit base.

Usage Guideline:

Suggested in the following applications:

Heat pump installations in heavy snowfall areas.

Heat pump installations in snow drift locations.

Heat pump installations in areas of prolonged subfreezing temperatures.

All commercial installations.

10. Support Feet

Four stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

Coastal installations.

Windy areas or where debris is normally circulating.

Rooftop installations.

11.Thermostatic Expansion Valve (TXV) Bi-Flow

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:

Accessory required to meet AHRI rating and system reliability, where indoor not equipped.

Required in all heat pump applications designed with Puron refrigerant.

Dimensions

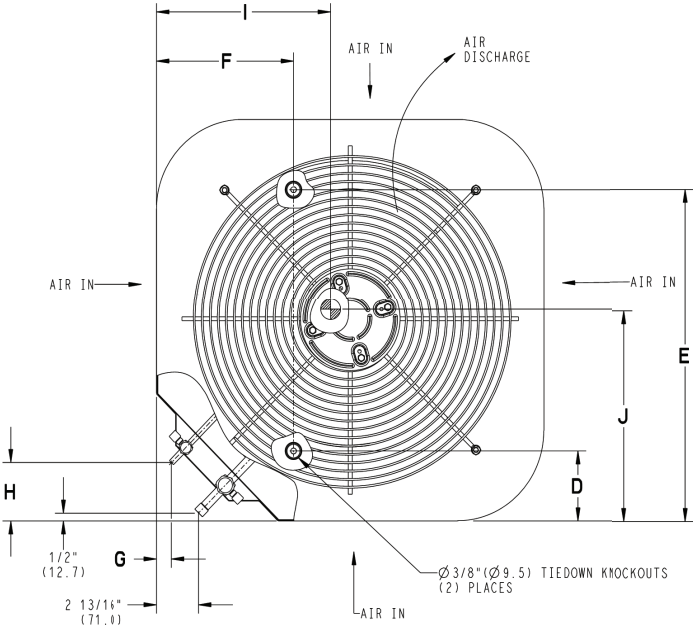
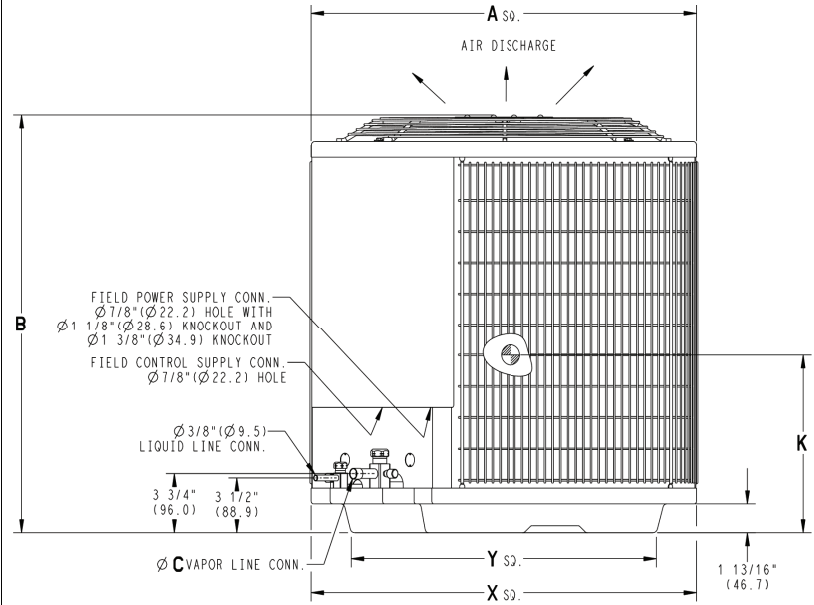
UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
						INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM
CH17NA024P0GABAA	B	Y	N	N	N	35	889.0	38 7/8	987.8	3/4	19.1	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	17	431.8	16	406.4	19	482.6	233	105.7	256	116.1	36	914.9	40 9/16	1030.4
CH17NA036P0GABAA	B	Y	N	N	N	35	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	17 1/4	438.2	16	406.4	17 1/4	438.2	245	111.1	270	122.5	36	914.9	40 9/16	1030.4
CH17NA048P0GABAA	B	Y	N	N	N	35	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	17 1/4	438.2	16 3/4	425.5	17 1/2	444.5	271	122.9	298	135.2	36	914.9	40 9/16	1030.4
CH17NA060P0GABAA	B	Y	N	N	N	35	889.0	45 11/16	1160.5	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	18 3/4	476.3	18 1/4	463.6	19	482.6	294	133.4	323	146.5	36	914.9	47 3/8	1203.2

208-230-1-60
208/230-3-60
460-3-60
575-3-60

Y=YES
N=NO

NOTES:

1. CENTER OF GRAVITY

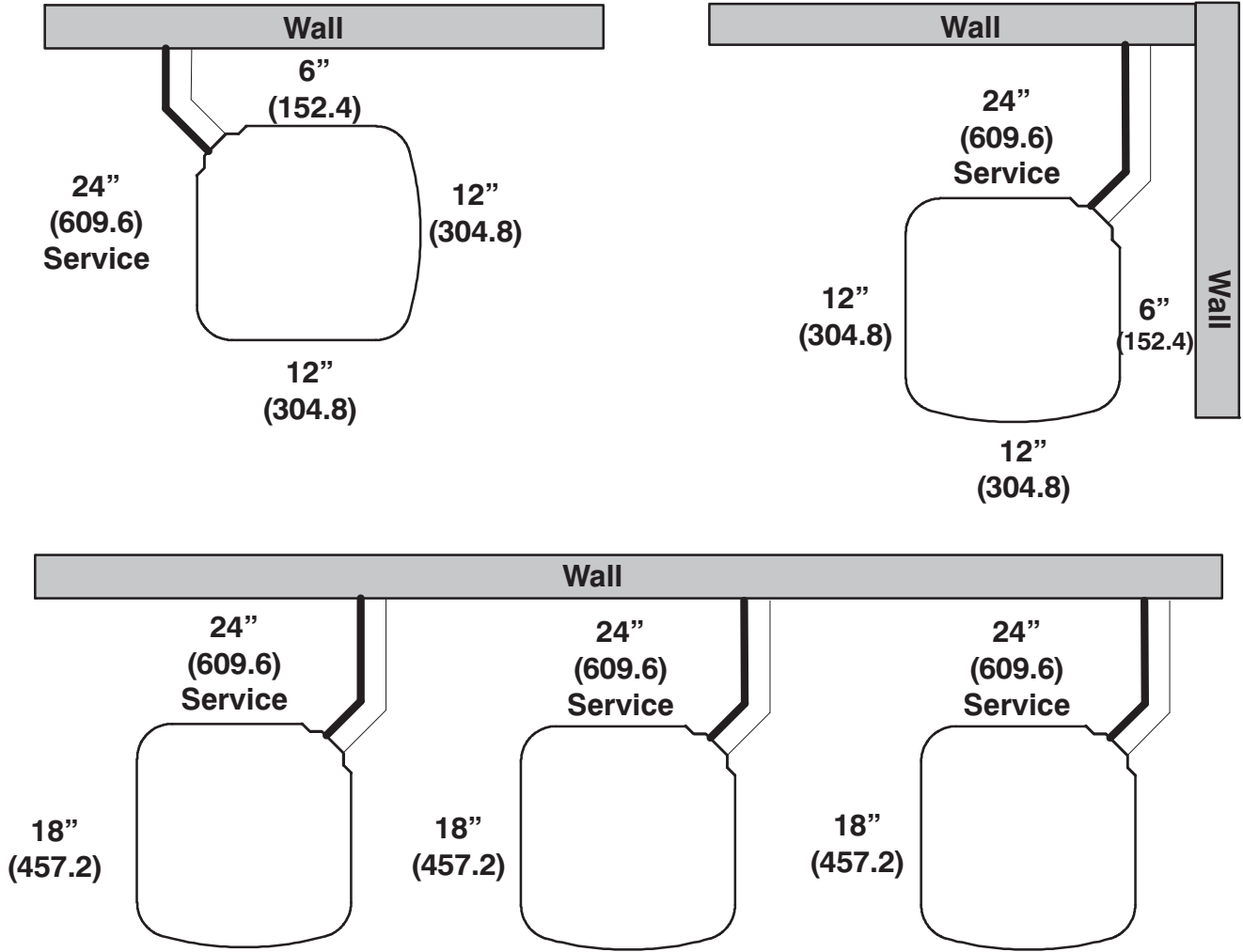


UNIT SIZE	"X"		"Y"	
	MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
-	23 1/8	587.3	17 7/8	454.6
-	25 3/4	654.0	20 7/16	518.5
-	31 3/16	792.5	22 15/16	583.2
24,36,48,60	35	889.0	26 3/4	679.7

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

Clearances

Clearances (various examples)

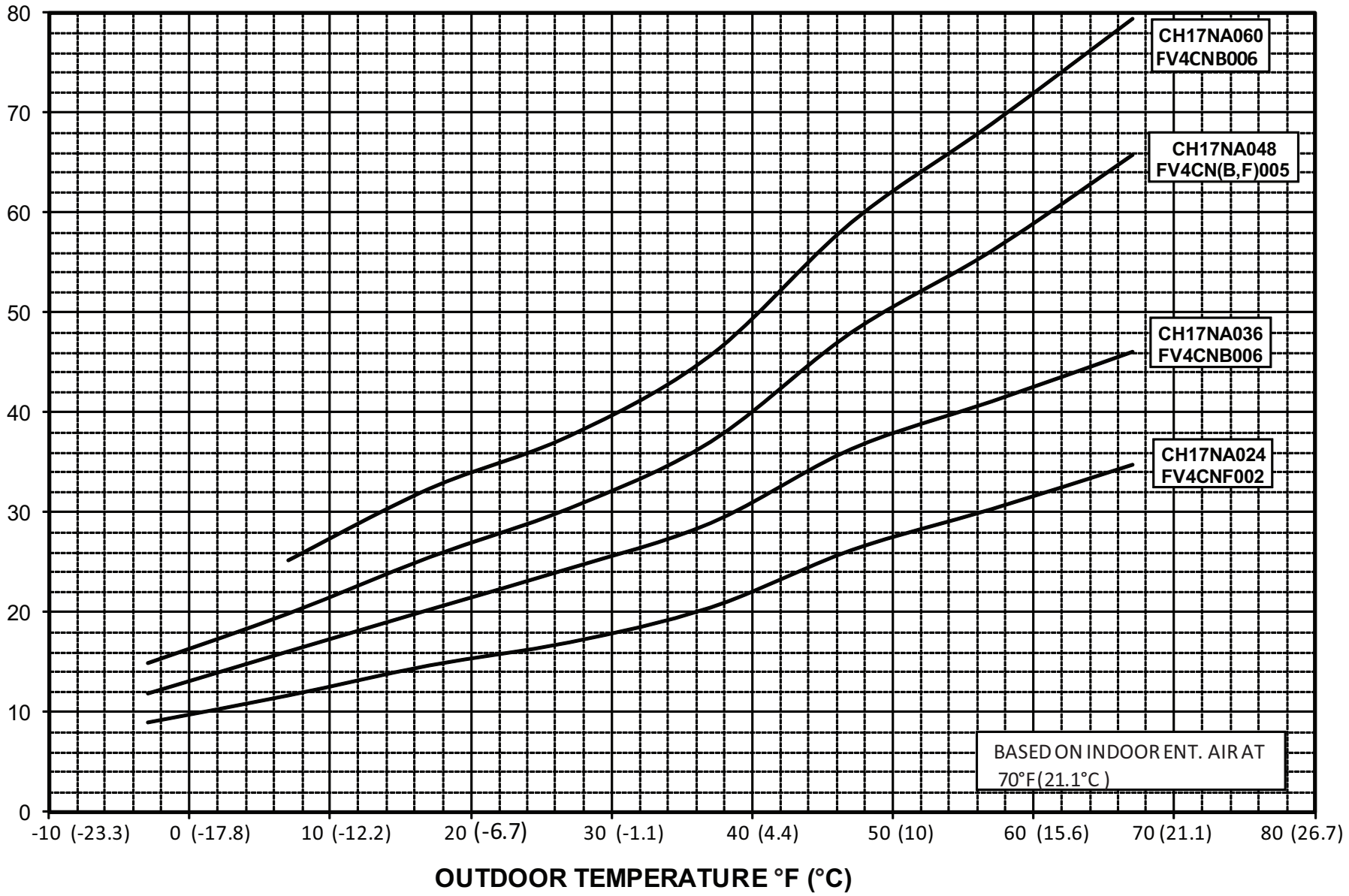


Note: Numbers in () = mm

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

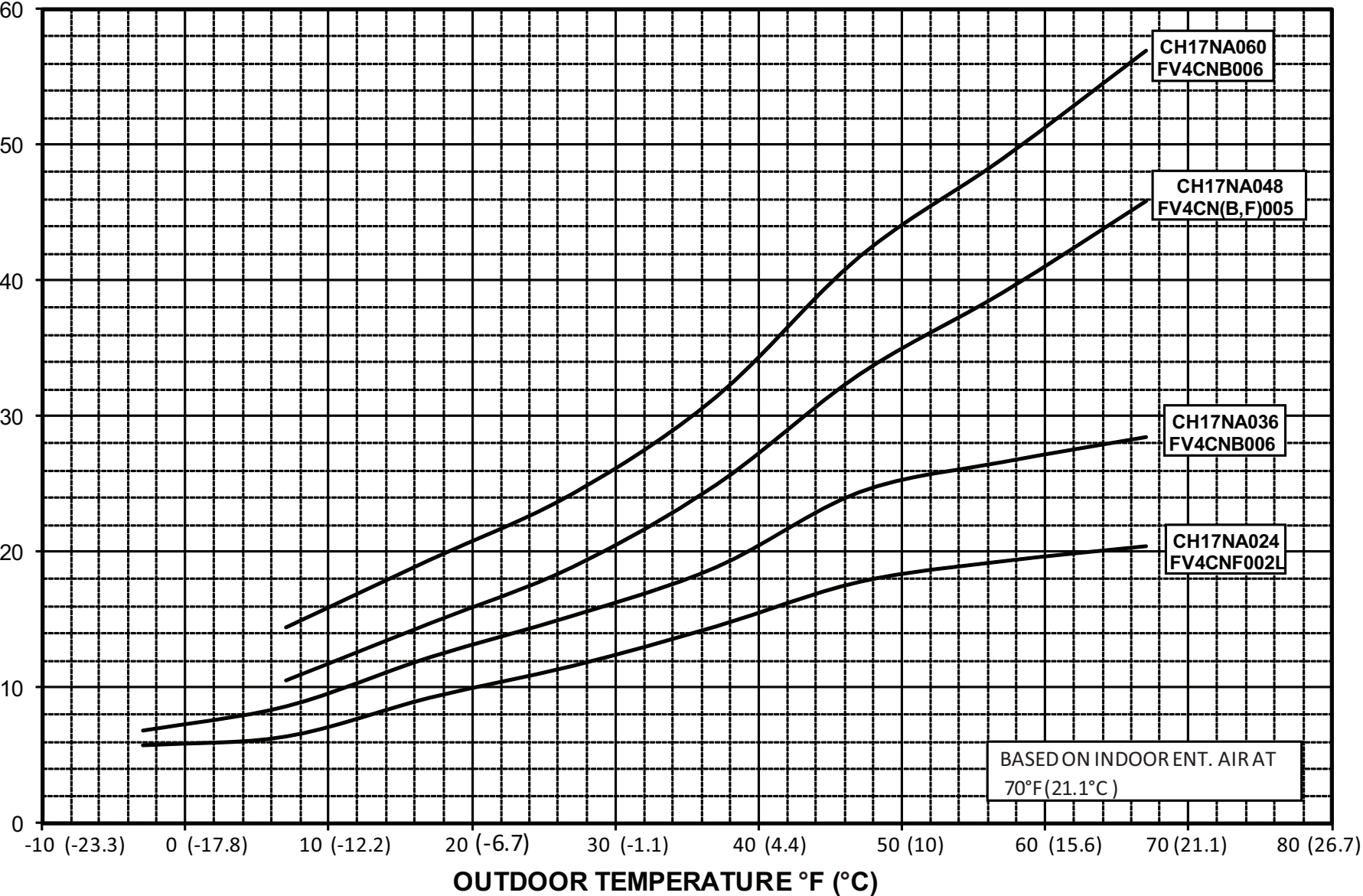
Balance Point Worksheet - High Stage

BUILDING HEAT LOSS, UNIT INTEGRATED
HEATING CAPACITY, MBTUH



Balance Point Worksheet - Low Stage

BUILDING HEAT LOSS, UNIT INTEGRATED
HEATING CAPACITY, MBTUH



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

Additional ratings and system combinations can be accessed via the Carrier database at: www.MyCarrierRatings.com

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

Model Number	Indoor Model	Cooling Capacity	COOLING				HEATING				
			EER	SEER	ID SCFM		HIGH TEMP		HSPF	LOW TEMP	
					HIGH	LOW	Capacity 47°F (8°C)	COP		Capacity 17°F (-8°C)	COP
CH17NA024P-B	FV4CNF002L	24,000	13.0	17	700	560	25,000	3.90	7.60	15,300	2.74
CH17NA036P-B	FV4CNB006	36,400	13.0	17	1050	840	35,400	4.06	8.40	22,600	3.00
CH17NA048P-B	FV4CN(B,F)005	47,000	12.5	16	1400	1120	46,500	3.67	7.65	29,200	2.72
CH17NA060P-B	FV4CNB006	56,500	12.5	16	1750	1400	57,000	3.72	7.80	36,000	2.76

AHRI=Air Conditioning, Heating & Refrigeration Institute

EER = Energy Efficiency Ratio - 80°F (26.6°C) indoor db/67°F (19.4°C) indoor wb & 95°F (35°C) outdoor wb.

SEER = Seasonal Energy Efficiency Ratio

NOTES:

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.
4. Do not apply with capillary tube coils as performance and reliability are affected.

Detailed Cooling Capacities#

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
CFM	EWB °F (°C)	75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		Capacity MBtuh†	Total Sens‡	Total Sys KW**	Capacity MBtuh†	Total Sens‡	Total Sys KW**	Capacity MBtuh†	Total Sens‡	Total Sys KW**	Capacity MBtuh†	Total Sens‡	Total Sys KW**	Capacity MBtuh†	Total Sens‡	Total Sys KW**	Capacity MBtuh†	Total Sens‡	Total Sys KW**
		Total			Total			Total			Total			Total			Total		
CH17NA024P-B Outdoor Section With FV4CNF002 Indoor Section - HI																			
600	57 (13.9)	22.47	22.47	1.42	21.26	21.26	1.60	20.00	20.00	1.81	18.69	18.69	2.06	17.34	17.34	2.35	15.96	15.96	2.72
	62 (16.7)	24.04	20.32	1.43	22.54	19.39	1.61	20.99	18.43	1.82	19.39	17.45	2.06	17.77	16.44	2.36	16.14	15.39	2.72
	63 (17.2)††	24.52	16.88	1.43	22.99	16.03	1.61	21.40	15.16	1.82	19.77	14.27	2.06	18.10	13.37	2.36	16.39	12.47	2.72
	67 (19.4)	26.60	17.58	1.44	24.94	16.71	1.62	23.23	15.82	1.83	21.47	14.92	2.07	19.68	14.02	2.37	17.86	13.10	2.73
	72 (22.2)	29.45	14.67	1.46	27.62	13.88	1.64	25.73	13.07	1.84	23.80	12.26	2.09	21.84	11.45	2.38	19.84	10.63	2.74
650	57 (13.9)	23.20	23.20	1.43	21.94	21.94	1.61	20.62	20.62	1.82	19.26	19.26	2.07	17.86	17.86	2.36	16.42	16.42	2.73
	62 (16.7)	24.52	21.24	1.44	22.98	20.27	1.62	21.39	19.27	1.82	19.75	18.25	2.07	18.11	17.18	2.37	16.46	16.46	2.73
	63 (17.2)††	25.01	17.53	1.44	23.43	16.66	1.62	21.79	15.76	1.83	20.11	14.85	2.07	18.40	13.93	2.37	16.65	13.00	2.73
	67 (19.4)	27.11	18.28	1.45	25.41	17.38	1.63	23.64	16.47	1.84	21.83	15.54	2.08	20.00	14.61	2.38	18.13	13.67	2.74
	72 (22.2)	30.01	15.16	1.47	28.12	14.35	1.65	26.17	13.52	1.85	24.19	12.70	2.10	22.17	11.86	2.39	20.13	11.01	2.74
700	57 (13.9)	23.88	23.88	1.44	22.56	22.56	1.62	21.20	21.20	1.83	19.78	19.78	2.08	18.33	18.33	2.37	16.84	16.84	2.74
	62 (16.7)	24.95	22.13	1.45	23.38	21.12	1.63	21.74	20.08	1.83	20.08	19.01	2.08	18.42	18.27	2.37	16.87	16.87	2.74
	63 (17.2)††	25.44	18.16	1.45	23.82	17.27	1.63	22.14	16.35	1.84	20.41	15.41	2.08	18.65	14.47	2.38	16.87	13.52	2.74
	67 (19.4)	27.57	18.95	1.46	25.81	18.03	1.64	24.00	17.09	1.85	22.15	16.14	2.09	20.27	15.19	2.39	18.36	14.23	2.74
	72 (22.2)	30.50	15.64	1.48	28.55	14.80	1.65	26.55	13.96	1.86	24.52	13.11	2.10	22.46	12.24	2.40	20.38	11.37	2.75
800	57 (13.9)	25.06	25.06	1.46	23.66	23.66	1.64	22.20	22.20	1.85	20.69	20.69	2.09	19.15	19.15	2.39	17.57	17.57	2.75
	62 (16.7)	25.69	23.81	1.46	24.06	22.72	1.64	22.38	21.57	1.85	20.73	20.73	2.10	19.18	19.18	2.39	17.60	17.60	2.75
	63 (17.2)††	26.15	19.37	1.47	24.45	18.44	1.65	22.69	17.47	1.85	20.90	16.49	2.10	19.08	15.51	2.39	17.23	14.51	2.75
	67 (19.4)	28.31	20.24	1.48	26.48	19.28	1.66	24.59	18.30	1.86	22.66	17.31	2.11	20.71	16.31	2.40	18.74	15.30	2.76
	72 (22.2)	31.29	16.52	1.49	29.26	15.64	1.67	27.18	14.75	1.87	25.08	13.85	2.12	22.94	12.95	2.41	20.79	12.04	2.77
CH17NA024P-B Outdoor Section With FV4CNF002 Indoor Section - LO																			
480	57 (13.9)	17.40	17.40	1.02	16.19	16.19	1.19	14.92	14.92	1.39	13.64	13.64	1.62	12.37	12.37	1.89	11.13	11.13	2.20
	62 (16.7)	18.34	16.19	1.02	16.89	15.05	1.19	15.38	13.92	1.39	13.87	12.77	1.62	12.43	12.34	1.89	11.15	11.15	2.20
	63 (17.2)††	18.71	13.35	1.01	17.22	12.36	1.18	15.67	11.36	1.38	14.11	10.38	1.62	12.58	9.42	1.89	11.11	8.51	2.20
	67 (19.4)	20.36	13.94	1.00	18.74	12.92	1.17	17.07	11.90	1.37	15.40	10.90	1.60	13.77	9.91	1.88	12.20	8.98	2.19
	72 (22.2)	22.60	11.57	0.98	20.80	10.66	1.15	18.96	9.76	1.35	17.13	8.89	1.59	15.35	8.03	1.86	13.64	7.21	2.19
520	57 (13.9)	17.97	17.97	1.02	16.71	16.71	1.19	15.39	15.39	1.39	14.05	14.05	1.62	12.74	12.74	1.89	11.45	11.45	2.20
	62 (16.7)	18.72	16.93	1.02	17.22	15.75	1.19	15.68	14.56	1.39	14.15	13.34	1.62	12.76	12.76	1.89	11.47	11.47	2.20
	63 (17.2)††	19.08	13.89	1.01	17.54	12.86	1.19	15.95	11.83	1.39	14.35	10.82	1.62	12.79	9.83	1.89	11.28	8.88	2.20
	67 (19.4)	20.75	14.52	1.00	19.07	13.46	1.17	17.36	12.41	1.37	15.65	11.37	1.61	13.98	10.37	1.88	12.37	9.39	2.20
	72 (22.2)	23.02	11.97	0.98	21.16	11.04	1.15	19.27	10.11	1.35	17.40	9.21	1.59	15.58	8.32	1.87	13.83	7.48	2.19
560	57 (13.9)	18.49	18.49	1.02	17.17	17.17	1.19	15.81	15.81	1.39	14.43	14.43	1.62	13.07	13.07	1.89	11.74	11.74	2.21
	62 (16.7)	19.05	17.65	1.02	17.51	16.42	1.19	15.96	15.15	1.39	14.46	14.46	1.62	13.09	13.09	1.89	11.76	11.76	2.21
	63 (17.2)††	19.40	14.41	1.02	17.81	13.35	1.19	16.19	12.29	1.39	14.55	11.24	1.62	12.96	10.23	1.89	11.43	9.24	2.21
	67 (19.4)	21.08	15.07	1.00	19.37	13.99	1.17	17.61	12.90	1.37	15.87	11.83	1.61	14.16	10.80	1.88	12.52	9.80	2.20
	72 (22.2)	23.38	12.35	0.98	21.47	11.41	1.15	19.54	10.45	1.35	17.63	9.50	1.59	15.78	8.60	1.87	14.00	7.73	2.20
640	57 (13.9)	19.40	19.40	1.03	18.00	18.00	1.20	16.55	16.55	1.40	15.08	15.08	1.63	13.64	13.64	1.90	12.24	12.24	2.22
	62 (16.7)	19.63	18.98	1.03	18.07	17.96	1.20	16.57	16.57	1.40	15.11	15.11	1.63	13.67	13.67	1.90	12.26	12.26	2.22
	63 (17.2)††	19.92	15.40	1.03	18.26	14.29	1.20	16.58	13.16	1.40	14.89	12.06	1.63	13.25	10.97	1.91	11.67	9.93	2.22
	67 (19.4)	21.63	16.14	1.01	19.84	14.99	1.18	18.02	13.84	1.38	16.21	12.71	1.62	14.45	11.61	1.90	12.77	10.55	2.22
	72 (22.2)	23.96	13.07	0.99	21.98	12.06	1.16	19.98	11.05	1.36	18.01	10.06	1.60	16.09	9.12	1.88	14.25	8.22	2.21

See notes on page 15

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Detailed Cooling Capacities# continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
		Capacity MBtuh†	Total Sys KW**	Sens‡	Capacity MBtuh†	Total Sys KW**	Sens‡	Capacity MBtuh†	Total Sys KW**	Sens‡	Capacity MBtuh†	Total Sys KW**	Sens‡	Capacity MBtuh†	Total Sys KW**	Sens‡	Capacity MBtuh†	Total Sys KW**	Sens‡
CFM	EWB °F (°C)	Total			Total			Total			Total			Total			Total		
CH17NA036P-B Outdoor Section With FV4CNB006 Indoor Section - HI																			
900	57 (13.9)	33.59	33.59	2.10	32.13	32.13	2.36	30.60	30.60	2.67	28.98	28.98	3.03	27.24	27.24	3.44	25.34	25.34	3.90
	62 (16.7)	35.79	30.52	2.13	33.92	29.55	2.38	31.98	28.55	2.68	29.95	27.51	3.03	27.78	26.41	3.44	25.47	25.23	3.91
	63 (17.2)††	36.56	25.27	2.13	34.65	24.34	2.39	32.68	23.39	2.69	30.59	22.40	3.04	28.37	21.35	3.44	25.95	20.24	3.91
	67 (19.4)	39.56	26.24	2.16	37.50	25.30	2.41	35.38	24.34	2.71	33.12	23.34	3.06	30.72	22.28	3.47	28.13	21.16	3.93
	72 (22.2)	43.66	21.83	2.21	41.43	20.94	2.45	39.09	20.03	2.74	36.62	19.09	3.09	34.00	18.05	3.50	31.17	16.98	3.96
975	57 (13.9)	34.66	34.66	2.12	33.12	33.12	2.38	31.53	31.53	2.69	29.83	29.83	3.04	28.02	28.02	3.45	26.04	26.04	3.92
	62 (16.7)	36.45	31.93	2.14	34.52	30.93	2.39	32.54	29.91	2.69	30.44	28.83	3.05	28.25	27.68	3.45	26.08	26.08	3.92
	63 (17.2)††	37.23	26.25	2.15	35.26	25.31	2.40	33.22	24.33	2.70	31.07	23.32	3.05	28.78	22.25	3.46	26.30	21.12	3.92
	67 (19.4)	40.24	27.28	2.18	38.13	26.33	2.43	35.92	25.34	2.72	33.61	24.32	3.07	31.14	23.24	3.48	28.48	22.10	3.95
	72 (22.2)	44.40	22.51	2.22	42.08	21.60	2.46	39.68	20.67	2.76	37.15	19.70	3.10	34.44	18.66	3.51	31.56	17.58	3.98
1050	57 (13.9)	35.64	35.64	2.14	34.03	34.03	2.40	32.38	32.38	2.70	30.61	30.61	3.06	28.73	28.73	3.47	26.66	26.66	3.94
	62 (16.7)	37.04	33.31	2.16	35.06	32.28	2.41	33.03	31.22	2.71	30.91	30.11	3.06	28.77	28.77	3.47	26.70	26.70	3.94
	63 (17.2)††	37.80	27.21	2.16	35.78	26.24	2.41	33.69	25.26	2.71	31.48	24.22	3.07	29.13	23.13	3.47	26.60	21.97	3.94
	67 (19.4)	40.84	28.30	2.20	38.66	27.32	2.44	36.40	26.32	2.74	34.03	25.28	3.09	31.49	24.18	3.49	28.79	23.03	3.96
	72 (22.2)	45.03	23.16	2.24	42.65	22.24	2.48	40.20	21.29	2.77	37.60	20.30	3.12	34.83	19.26	3.52	31.88	18.16	3.99
1200	57 (13.9)	37.35	37.35	2.18	35.63	35.63	2.43	33.86	33.86	2.74	31.97	31.97	3.09	29.94	29.94	3.50	27.74	27.74	3.97
	62 (16.7)	38.04	35.95	2.19	36.01	34.85	2.44	33.95	33.86	2.74	32.02	32.02	3.09	29.98	29.98	3.50	27.78	27.78	3.97
	63 (17.2)††	38.75	29.06	2.19	36.63	28.06	2.44	34.43	27.03	2.74	32.13	25.96	3.09	29.69	24.84	3.50	27.07	23.64	3.96
	67 (19.4)	41.80	30.27	2.23	39.53	29.26	2.47	37.17	28.23	2.76	34.71	27.15	3.11	32.08	26.02	3.52	29.28	24.82	3.99
	72 (22.2)	46.06	24.41	2.27	43.58	23.47	2.51	41.01	22.49	2.80	38.32	21.48	3.15	35.44	20.41	3.55	32.39	19.28	4.02
CH17NA036P-B Outdoor Section With FV4CNB006 Indoor Section - LO																			
720	57 (13.9)	25.97	25.97	1.44	24.13	24.13	1.73	22.32	22.32	2.06	20.47	20.47	2.46	18.58	18.58	2.93	16.64	16.64	3.49
	62 (16.7)	27.04	24.32	1.44	24.89	22.65	1.72	22.77	21.00	2.06	20.65	19.36	2.46	18.62	18.62	2.93	16.67	16.67	3.49
	63 (17.2)††	27.62	19.90	1.43	25.41	18.43	1.72	23.23	17.00	2.05	21.04	15.58	2.46	18.80	14.16	2.93	16.53	12.76	3.49
	67 (19.4)	30.03	20.80	1.41	27.65	19.26	1.70	25.29	17.79	2.04	22.92	16.32	2.44	20.50	14.87	2.91	18.05	13.43	3.47
	72 (22.2)	33.45	17.17	1.38	30.80	15.82	1.67	28.18	14.50	2.01	25.56	13.21	2.41	22.91	11.93	2.88	20.21	10.66	3.44
780	57 (13.9)	26.78	26.78	1.44	24.87	24.87	1.72	22.98	22.98	2.06	21.07	21.07	2.46	19.11	19.11	2.93	17.10	17.10	3.49
	62 (16.7)	27.53	25.51	1.44	25.33	23.77	1.72	23.18	22.04	2.06	21.11	21.11	2.46	19.14	19.14	2.93	17.13	17.13	3.49
	63 (17.2)††	28.09	20.73	1.43	25.83	19.21	1.72	23.59	17.73	2.06	21.34	16.26	2.46	19.06	14.80	2.94	16.73	13.35	3.50
	67 (19.4)	30.55	21.66	1.41	28.10	20.10	1.70	25.67	18.57	2.04	23.25	17.06	2.44	20.78	15.56	2.91	18.28	14.07	3.47
	72 (22.2)	34.02	17.75	1.39	31.29	16.36	1.68	28.60	15.01	2.02	25.92	13.69	2.42	23.21	12.37	2.89	20.45	11.08	3.44
840	57 (13.9)	27.53	27.53	1.44	25.56	25.56	1.72	23.60	23.60	2.06	21.61	21.61	2.46	19.59	19.59	2.93	17.51	17.51	3.49
	62 (16.7)	27.98	26.67	1.44	25.76	24.84	1.72	23.64	23.64	2.06	21.65	21.65	2.46	19.63	19.63	2.93	17.54	17.54	3.49
	63 (17.2)††	28.51	21.54	1.43	26.20	19.98	1.72	23.91	18.45	2.06	21.61	16.93	2.46	19.29	15.43	2.94	16.92	13.93	3.50
	67 (19.4)	31.00	22.53	1.41	28.48	20.92	1.70	26.01	19.34	2.04	23.53	17.78	2.44	21.02	16.24	2.92	18.47	14.70	3.47
	72 (22.2)	34.49	18.31	1.39	31.71	16.89	1.68	28.96	15.51	2.02	26.22	14.15	2.42	23.45	12.81	2.89	20.65	11.48	3.44
960	57 (13.9)	28.86	28.86	1.44	26.76	26.76	1.73	24.68	24.68	2.06	22.57	22.57	2.46	20.43	20.43	2.94	18.24	18.24	3.49
	62 (16.7)	28.91	28.91	1.44	26.80	26.80	1.73	24.72	24.72	2.06	22.61	22.61	2.46	20.47	20.47	2.94	18.27	18.27	3.49
	63 (17.2)††	29.20	23.11	1.44	26.80	21.46	1.73	24.44	19.85	2.07	22.06	18.24	2.47	19.67	16.65	2.95	17.25	15.06	3.51
	67 (19.4)	31.73	24.22	1.42	29.12	22.52	1.71	26.56	20.85	2.05	23.99	19.19	2.45	21.42	17.56	2.92	18.80	15.93	3.48
	72 (22.2)	35.28	19.40	1.39	32.39	17.92	1.68	29.55	16.47	2.02	26.71	15.05	2.42	23.87	13.65	2.90	20.98	12.26	3.45

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Detailed Cooling Capacities# continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM	EWB °F (°C)	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**	Capacity MBtuh†		Total Sys KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
CH17NA048P-B Outdoor Section With FV4CN(B,F)005 Indoor Section - HI																			
1200	57 (13.9)	42.70	42.70	2.91	41.39	41.39	3.26	39.86	39.86	3.66	38.17	38.17	4.13	36.35	36.35	4.69	34.44	34.44	5.34
	62 (16.7)	45.46	39.41	2.92	43.68	38.56	3.27	41.63	37.58	3.67	39.40	36.53	4.14	37.07	35.41	4.69	34.69	34.21	5.35
	63 (17.2)††	46.41	32.56	2.93	44.59	31.70	3.28	42.48	30.72	3.68	40.18	29.67	4.15	37.76	28.58	4.70	35.25	27.48	5.35
	67 (19.4)	50.09	33.77	2.95	48.12	32.90	3.30	45.85	31.92	3.70	43.40	30.88	4.18	40.80	29.80	4.74	38.11	28.70	5.40
	72 (22.2)	55.10	27.96	2.98	52.90	27.06	3.33	50.43	26.08	3.74	47.76	25.04	4.22	44.93	23.95	4.78	41.99	22.85	5.45
1300	57 (13.9)	43.94	43.94	2.94	42.57	42.57	3.29	40.96	40.96	3.69	39.18	39.18	4.16	37.28	37.28	4.72	35.28	35.28	5.38
	62 (16.7)	46.21	41.13	2.95	44.38	40.25	3.30	42.26	39.25	3.70	39.98	38.15	4.17	37.61	36.96	4.72	35.34	35.34	5.38
	63 (17.2)††	47.15	33.75	2.96	45.26	32.87	3.31	43.09	31.87	3.71	40.71	30.81	4.18	38.22	29.71	4.73	35.64	28.59	5.38
	67 (19.4)	50.86	35.03	2.98	48.81	34.14	3.33	46.48	33.15	3.73	43.94	32.10	4.21	41.27	31.01	4.77	38.51	29.90	5.43
	72 (22.2)	55.89	28.74	3.00	53.62	27.84	3.36	51.07	26.84	3.77	48.32	25.79	4.25	45.41	24.70	4.81	42.39	23.58	5.48
1400	57 (13.9)	45.06	45.06	2.97	43.63	43.63	3.32	41.94	41.94	3.72	40.09	40.09	4.19	38.12	38.12	4.75	36.04	36.04	5.42
	62 (16.7)	46.88	42.78	2.98	44.98	41.87	3.33	42.83	40.84	3.73	40.51	39.67	4.20	38.18	38.18	4.75	36.09	36.09	5.42
	63 (17.2)††	47.79	34.89	2.98	45.84	34.00	3.33	43.60	32.99	3.73	41.16	31.92	4.20	38.61	30.81	4.76	35.98	29.67	5.41
	67 (19.4)	51.52	36.24	3.00	49.40	35.35	3.35	47.00	34.35	3.76	44.39	33.28	4.23	41.67	32.19	4.79	38.84	31.06	5.46
	72 (22.2)	56.57	29.50	3.03	54.24	28.58	3.38	51.61	27.58	3.79	48.79	26.52	4.27	45.81	25.41	4.84	42.73	24.30	5.51
1600	57 (13.9)	47.01	47.01	3.02	45.45	45.45	3.38	43.64	43.64	3.78	41.65	41.65	4.26	39.54	39.54	4.82	37.32	37.32	5.48
	62 (16.7)	48.00	45.88	3.03	46.04	44.90	3.38	43.86	43.45	3.78	41.71	41.71	4.26	39.60	39.60	4.82	37.36	37.36	5.49
	63 (17.2)††	48.82	37.08	3.03	46.76	36.17	3.38	44.42	35.15	3.79	41.88	34.05	4.26	39.24	32.91	4.81	36.51	31.74	5.47
	67 (19.4)	52.57	38.58	3.05	50.34	37.67	3.41	47.82	36.66	3.81	45.12	35.57	4.29	42.28	34.45	4.85	39.37	33.30	5.51
	72 (22.2)	57.65	30.93	3.08	55.20	30.01	3.43	52.47	28.99	3.85	49.53	27.91	4.33	46.44	26.80	4.90	43.25	25.67	5.57
CH17NA048P-B Outdoor Section With FV4CN(B,F)005 Indoor Section - LO																			
960	57 (13.9)	33.65	33.65	1.99	30.83	30.83	2.34	27.95	27.95	2.75	25.05	25.05	3.21	22.16	22.16	3.75	19.33	19.33	4.36
	62 (16.7)	35.08	31.64	1.98	31.83	29.19	2.33	28.52	26.72	2.74	25.24	24.22	3.21	22.20	22.20	3.74	19.36	19.36	4.36
	63 (17.2)††	35.83	25.87	1.98	32.50	23.75	2.33	29.09	21.61	2.74	25.67	19.49	3.20	22.29	17.41	3.74	18.99	15.39	4.37
	67 (19.4)	38.99	27.02	1.95	35.42	24.85	2.30	31.77	22.66	2.71	28.12	20.50	3.18	24.49	18.37	3.72	20.96	16.30	4.34
	72 (22.2)	43.33	22.27	1.92	39.42	20.37	2.27	35.44	18.46	2.68	31.46	16.57	3.15	27.50	14.72	3.69	23.63	12.93	4.31
1040	57 (13.9)	34.67	34.67	2.00	31.75	31.75	2.35	28.77	28.77	2.75	25.77	25.77	3.21	22.79	22.79	3.75	19.87	19.87	4.37
	62 (16.7)	35.69	33.12	1.99	32.38	30.56	2.34	29.03	27.96	2.75	25.82	25.82	3.21	22.83	22.83	3.75	19.90	19.90	4.37
	63 (17.2)††	36.41	26.91	1.98	33.00	24.72	2.34	29.53	22.52	2.74	26.04	20.33	3.21	22.60	18.19	3.75	19.24	16.10	4.38
	67 (19.4)	39.61	28.13	1.96	35.95	25.88	2.31	32.23	23.63	2.72	28.49	21.39	3.19	24.81	19.20	3.73	21.21	17.07	4.35
	72 (22.2)	44.00	22.98	1.93	40.00	21.03	2.28	35.94	19.08	2.69	31.87	17.14	3.16	27.85	15.25	3.70	23.90	13.41	4.32
1120	57 (13.9)	35.59	35.59	2.00	32.58	32.58	2.35	29.51	29.51	2.75	26.43	26.43	3.22	23.36	23.36	3.76	20.35	20.35	4.38
	62 (16.7)	36.25	34.53	2.00	32.90	31.86	2.35	29.57	29.57	2.75	26.47	26.47	3.22	23.40	23.40	3.76	20.38	20.38	4.37
	63 (17.2)††	36.91	27.91	1.99	33.44	25.66	2.35	29.91	23.39	2.75	26.37	21.15	3.22	22.86	18.93	3.76	19.46	16.78	4.39
	67 (19.4)	40.13	29.21	1.97	36.41	26.89	2.32	32.62	24.57	2.73	28.82	22.27	3.20	25.08	20.01	3.74	21.43	17.81	4.36
	72 (22.2)	44.57	23.67	1.93	40.50	21.67	2.29	36.36	19.67	2.70	32.23	17.70	3.17	28.14	15.76	3.71	24.13	13.88	4.33
1280	57 (13.9)	37.21	37.21	2.01	34.04	34.04	2.36	30.81	30.81	2.77	27.57	27.57	3.23	24.35	24.35	3.77	21.18	21.18	4.39
	62 (16.7)	37.28	37.28	2.01	34.09	34.09	2.36	30.86	30.86	2.77	27.62	27.62	3.23	24.38	24.38	3.77	21.21	21.21	4.39
	63 (17.2)††	37.74	29.85	2.01	34.16	27.47	2.36	30.54	25.09	2.77	26.89	22.71	3.24	23.31	20.37	3.78	19.84	18.07	4.41
	67 (19.4)	40.98	31.28	1.98	37.14	28.84	2.34	33.25	26.39	2.75	29.36	23.96	3.22	25.52	21.56	3.76	21.80	19.22	4.38
	72 (22.2)	45.50	24.98	1.95	41.30	22.90	2.31	37.06	20.82	2.72	32.80	18.76	3.19	28.59	16.75	3.73	24.49	14.79	4.35

See notes on page 15

Detailed Cooling Capacities# continued

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75 (23.9)			85 (29.4)			95 (35)			105 (40.6)			115 (46.1)			125 (51.7)		
CFM	EWB °F (°C)	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**	Capacity MBtuh†		Total Sys KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
CH17NA060P-B Outdoor Section With FV4CNB006 Indoor Section - HI																			
1500	57 (13.9)	51.61	51.61	3.56	49.90	49.90	3.94	48.10	48.10	4.37	46.09	46.09	4.87	43.74	43.74	5.44	40.97	40.97	6.09
	62 (16.7)	54.77	49.03	3.59	52.50	47.37	3.96	50.12	45.69	4.39	47.51	43.92	4.88	44.55	42.00	5.45	41.19	39.81	6.09
	63 (17.2)††	55.96	40.39	3.60	53.60	38.83	3.97	51.15	37.26	4.40	48.45	35.61	4.89	45.37	33.84	5.46	41.83	31.92	6.10
	67 (19.4)	60.55	41.97	3.65	57.92	40.35	4.01	55.18	38.71	4.44	52.18	37.01	4.93	48.79	35.19	5.50	44.94	33.24	6.14
	72 (22.2)	66.85	34.72	3.71	63.83	33.13	4.07	60.69	31.53	4.49	57.28	29.87	4.99	53.46	28.12	5.55	49.17	26.24	6.19
1625	57 (13.9)	53.11	53.11	3.61	51.30	51.30	3.98	49.40	49.40	4.41	47.27	47.27	4.91	44.79	44.79	5.49	41.89	41.89	6.14
	62 (16.7)	55.69	51.18	3.64	53.31	49.45	4.00	50.86	47.70	4.43	48.17	45.86	4.92	45.16	43.80	5.49	41.95	41.95	6.14
	63 (17.2)††	56.85	41.87	3.65	54.40	40.27	4.01	51.85	38.66	4.44	49.04	36.96	4.93	45.87	35.16	5.50	42.23	33.19	6.14
	67 (19.4)	61.48	43.55	3.69	58.74	41.88	4.05	55.90	40.20	4.48	52.79	38.46	4.97	49.30	36.60	5.54	45.33	34.61	6.18
	72 (22.2)	67.83	35.71	3.75	64.70	34.08	4.11	61.44	32.45	4.54	57.91	30.76	5.03	53.98	28.97	5.59	49.57	27.06	6.23
1750	57 (13.9)	54.46	54.46	3.66	52.57	52.57	4.03	50.56	50.56	4.46	48.32	48.32	4.96	45.73	45.73	5.53	42.70	42.70	6.18
	62 (16.7)	56.48	53.25	3.68	54.04	51.45	4.04	51.52	49.63	4.47	48.77	47.65	4.96	45.80	45.80	5.53	42.76	42.76	6.19
	63 (17.2)††	57.62	43.31	3.69	55.08	41.67	4.05	52.43	40.01	4.48	49.55	38.28	4.97	46.29	36.43	5.54	42.57	34.43	6.18
	67 (19.4)	62.27	45.08	3.73	59.45	43.37	4.10	56.50	41.65	4.52	53.30	39.87	5.01	49.72	37.98	5.58	45.66	35.94	6.22
	72 (22.2)	68.68	36.66	3.80	65.44	35.01	4.16	62.06	33.34	4.58	58.44	31.62	5.07	54.40	29.80	5.63	49.90	27.87	6.27
2000	57 (13.9)	56.83	56.83	3.75	54.75	54.75	4.12	52.55	52.55	4.55	50.11	50.11	5.05	47.32	47.32	5.62	44.06	44.06	6.27
	62 (16.7)	57.84	57.13	3.76	55.30	55.14	4.12	52.69	52.60	4.55	50.18	50.18	5.05	47.37	47.37	5.62	44.11	44.11	6.27
	63 (17.2)††	58.85	46.05	3.77	56.15	44.33	4.13	53.37	42.61	4.56	50.34	40.81	5.05	46.95	38.88	5.62	43.11	36.80	6.26
	67 (19.4)	63.55	48.03	3.81	60.55	46.24	4.18	57.45	44.45	4.60	54.09	42.59	5.09	50.35	40.62	5.66	46.16	38.50	6.30
	72 (22.2)	70.02	38.47	3.88	66.60	36.76	4.24	63.06	35.04	4.66	59.25	33.26	5.15	55.05	31.39	5.71	50.39	29.42	6.35
CH17NA060P-B Outdoor Section With FV4CNB006 Indoor Section - LO																			
1200	57 (13.9)	41.27	41.27	2.45	36.79	36.79	2.83	32.29	32.29	3.27	27.87	27.87	3.78	23.62	23.62	4.35	19.59	19.59	5.01
	62 (16.7)	42.97	39.35	2.43	37.92	36.10	2.82	32.87	32.82	3.27	28.01	27.79	3.78	23.66	23.66	4.35	19.62	19.62	5.01
	63 (17.2)††	43.88	32.14	2.43	38.70	29.32	2.82	33.52	26.49	3.26	28.48	23.70	3.77	23.68	21.00	4.35	19.20	18.40	5.02
	67 (19.4)	47.49	33.46	2.40	41.89	30.56	2.79	36.33	27.67	3.24	30.92	24.82	3.75	25.76	22.04	4.33	20.94	19.38	4.99
	72 (22.2)	52.45	27.41	2.36	46.29	24.87	2.75	40.20	22.34	3.20	34.27	19.86	3.71	28.63	17.46	4.29	23.33	15.17	4.95
1300	57 (13.9)	42.46	42.46	2.45	37.83	37.83	2.84	33.17	33.17	3.28	28.61	28.61	3.79	24.22	24.22	4.36	20.06	20.06	5.02
	62 (16.7)	43.67	41.17	2.45	38.51	37.77	2.84	33.41	34.32	3.28	28.66	28.66	3.79	24.26	24.26	4.36	20.09	20.09	5.02
	63 (17.2)††	44.54	33.40	2.44	39.25	30.50	2.83	33.97	27.58	3.28	28.84	24.71	3.79	23.96	21.92	4.37	19.40	19.23	5.03
	67 (19.4)	48.17	34.81	2.41	42.46	31.82	2.80	36.79	28.84	3.25	31.28	25.89	3.76	26.04	23.03	4.34	21.15	20.28	5.00
	72 (22.2)	53.17	28.25	2.37	46.90	25.66	2.76	40.68	23.07	3.21	34.65	20.53	3.72	28.91	18.07	4.30	23.53	15.72	4.97
1400	57 (13.9)	43.54	43.54	2.46	38.76	38.76	2.85	33.97	33.97	3.29	29.28	29.28	3.80	24.76	24.76	4.38	20.49	20.49	5.03
	62 (16.7)	44.29	42.90	2.46	39.07	39.35	2.85	34.02	34.02	3.29	29.32	29.32	3.80	24.80	24.80	4.38	20.52	20.52	5.03
	63 (17.2)††	45.11	34.63	2.45	39.72	31.64	2.84	34.35	28.64	3.29	29.15	25.69	3.80	24.19	22.80	4.38	19.59	20.03	5.05
	67 (19.4)	48.75	36.12	2.42	42.95	33.05	2.81	37.18	29.97	3.26	31.59	26.94	3.77	26.28	24.00	4.36	21.33	21.15	5.02
	72 (22.2)	53.79	29.08	2.38	47.41	26.42	2.77	41.08	23.77	3.22	34.97	21.18	3.74	29.15	18.67	4.32	23.71	16.27	4.98
1600	57 (13.9)	45.41	45.41	2.48	40.37	40.37	2.87	35.34	35.34	3.31	30.42	30.42	3.82	25.69	25.69	4.40	21.22	21.22	5.06
	62 (16.7)	45.49	45.49	2.48	40.43	40.43	2.87	35.39	35.39	3.31	30.46	30.46	3.82	25.72	25.72	4.40	21.24	21.24	5.06
	63 (17.2)††	46.03	37.00	2.48	40.48	33.85	2.87	34.98	30.69	3.32	29.64	27.56	3.83	24.58	24.51	4.42	19.90	21.53	5.08
	67 (19.4)	49.70	38.66	2.45	43.72	35.42	2.84	37.82	32.17	3.29	32.09	28.97	3.80	26.67	25.85	4.39	21.63	22.81	5.05
	72 (22.2)	54.77	30.65	2.41	48.21	27.89	2.80	41.73	25.13	3.25	35.47	22.44	3.76	29.52	19.83	4.35	23.96	17.33	5.01

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.

‡ Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C).

** System kw is total of indoor and outdoor unit kilowatts.

†† At TVA rating indoor condition (75°F edb/63°F ewb). All other indoor air temperatures are at 80°F edb.

Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-08. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

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

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)									
EDB °F (°C)	CFM	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†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†			
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*				
CH17NA024P-B Outdoor Section With FV4CNF002 Indoor Section - HI																									
65 (18.3)	600	9.13	8.40	1.36	12.06	11.08	1.47	15.38	14.02	1.60	18.36	16.30	1.73	21.55	19.61	1.88	24.98	24.98	2.06	28.66	28.66	2.27	32.46	32.46	2.53
	650	9.21	8.47	1.36	12.17	11.18	1.46	15.50	14.13	1.58	18.52	16.45	1.71	21.78	19.82	1.86	25.25	25.25	2.03	28.99	28.99	2.23	32.87	32.87	2.47
	700	9.29	8.54	1.35	12.28	11.29	1.45	15.61	14.23	1.57	18.67	16.58	1.69	21.97	19.99	1.83	25.50	25.50	2.00	29.29	29.29	2.19	33.22	33.22	2.43
	800	9.42	8.67	1.35	12.47	11.46	1.44	15.79	14.40	1.55	18.92	16.80	1.67	22.30	20.29	1.80	25.92	25.92	1.95	29.78	29.78	2.14	33.75	33.75	2.36
70 (21.1)	600	8.73	8.03	1.43	11.61	10.67	1.54	15.05	13.72	1.67	17.97	15.96	1.81	21.11	19.21	1.96	24.49	24.49	2.15	28.12	28.12	2.37	31.91	31.91	2.64
	650	8.81	8.10	1.43	11.73	10.78	1.53	15.18	13.84	1.66	18.14	16.11	1.79	21.33	19.41	1.94	24.76	24.76	2.11	28.44	28.44	2.32	32.28	32.28	2.57
	700	8.89	8.18	1.42	11.85	10.89	1.52	15.29	13.94	1.64	18.29	16.24	1.77	21.53	19.59	1.91	25.00	25.00	2.08	28.74	28.74	2.28	32.62	32.62	2.53
	800	9.04	8.32	1.42	12.04	11.06	1.51	15.48	14.11	1.62	18.54	16.46	1.74	21.85	19.88	1.88	25.40	25.40	2.04	29.21	29.21	2.22	33.15	33.15	2.46
75 (23.9)	600	8.26	7.60	1.50	11.14	10.23	1.61	14.66	13.37	1.75	17.59	15.62	1.89	20.68	18.81	2.05	24.01	24.01	2.24	27.59	27.59	2.46	31.35	31.35	2.75
	650	8.34	7.67	1.49	11.25	10.34	1.60	14.81	13.50	1.73	17.75	15.76	1.86	20.89	19.01	2.02	24.27	24.27	2.20	27.90	27.90	2.41	31.71	31.71	2.68
	700	8.43	7.76	1.49	11.37	10.45	1.59	14.93	13.61	1.72	17.90	15.89	1.85	21.07	19.18	1.99	24.50	24.50	2.17	28.19	28.19	2.37	32.03	32.03	2.63
	800	8.59	7.90	1.49	11.57	10.63	1.58	15.14	13.80	1.70	18.14	16.11	1.82	21.39	19.47	1.96	24.89	24.89	2.12	28.66	28.66	2.31	32.55	32.55	2.56
CH17NA024P-B Outdoor Section With FV4CNF002 Indoor Section - LO																									
65 (18.3)	480	4.29	3.94	1.03	7.46	6.85	1.14	10.33	9.42	1.23	13.01	11.56	1.31	15.75	14.33	1.39	17.90	17.90	1.47	20.02	20.02	1.55	22.13	22.13	1.66
	520	4.33	3.98	1.03	7.54	6.93	1.13	10.48	9.55	1.22	13.24	11.76	1.29	15.95	14.52	1.37	18.14	18.14	1.44	20.30	20.30	1.51	22.46	22.46	1.61
	560	4.38	4.03	1.03	7.66	7.04	1.13	10.61	9.67	1.21	13.47	11.96	1.28	16.13	14.68	1.35	18.36	18.36	1.41	20.57	20.57	1.48	22.77	22.77	1.57
	640	4.48	4.12	1.04	7.82	7.18	1.13	10.81	9.86	1.20	14.03	12.46	1.27	16.42	14.94	1.32	18.73	18.73	1.38	21.02	21.02	1.44	23.29	23.29	1.51
70 (21.1)	480	4.36	4.01	1.11	6.96	6.40	1.20	9.80	8.94	1.29	12.46	11.07	1.37	15.34	13.96	1.46	17.45	17.45	1.54	19.56	19.56	1.63	21.66	21.66	1.74
	520	4.41	4.06	1.11	7.07	6.50	1.20	9.96	9.08	1.28	12.66	11.25	1.36	15.53	14.13	1.44	17.69	17.69	1.51	19.84	19.84	1.59	21.98	21.98	1.69
	560	4.47	4.12	1.11	7.17	6.59	1.19	10.10	9.21	1.27	12.84	11.41	1.35	15.69	14.28	1.42	17.90	17.90	1.48	20.09	20.09	1.56	22.27	22.27	1.65
	640	4.59	4.22	1.12	7.35	6.75	1.19	10.34	9.43	1.27	13.16	11.69	1.33	16.00	14.56	1.40	18.27	18.27	1.45	20.52	20.52	1.51	22.77	22.77	1.59
75 (23.9)	480	4.10	3.77	1.18	6.39	5.87	1.26	9.23	8.41	1.35	11.89	10.56	1.44	14.87	13.53	1.53	17.02	17.02	1.61	19.10	19.10	1.71	21.20	21.20	1.83
	520	4.17	3.84	1.18	6.49	5.96	1.26	9.39	8.56	1.35	12.09	10.73	1.42	15.08	13.72	1.51	17.24	17.24	1.58	19.37	19.37	1.67	21.50	21.50	1.78
	560	4.24	3.90	1.18	6.59	6.06	1.26	9.53	8.69	1.34	12.26	10.89	1.41	15.27	13.89	1.49	17.44	17.44	1.56	19.61	19.61	1.64	21.78	21.78	1.74
	640	4.37	4.02	1.19	6.78	6.23	1.26	9.76	8.90	1.33	12.60	11.19	1.40	15.56	14.16	1.47	17.80	17.80	1.52	20.03	20.03	1.59	22.26	22.26	1.68

See notes on page 19

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Heat pump heating performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		-3 (-19.4)		7 (-13.9)		17 (-8.3)		27 (-2.8)		37 (2.8)		47 (8.3)		57 (13.9)		67 (19.4)									
EDB °F (°C)	CFM	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys m KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†			
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*				
CH17NA036P-B Outdoor Section With FV4CNB006 Indoor Section - HI																									
65 (18.3)	900	13.75	12.65	1.90	17.91	16.46	2.01	22.88	20.87	2.15	26.93	23.92	2.28	31.23	28.42	2.42	35.79	35.79	2.60	40.74	40.74	2.81	46.22	46.22	3.03
	975	13.88	12.77	1.90	18.06	16.60	2.00	23.03	21.00	2.13	27.11	24.08	2.25	31.46	28.63	2.38	36.10	36.10	2.55	41.16	41.16	2.75	46.68	46.68	2.94
	1050	13.99	12.87	1.90	18.20	16.72	1.99	23.16	21.12	2.11	27.27	24.22	2.22	31.66	28.81	2.35	36.37	36.37	2.51	41.52	41.52	2.71	46.97	46.97	2.88
	1200	14.18	13.05	1.89	18.44	16.94	1.98	23.36	21.30	2.09	27.54	24.46	2.19	32.02	29.14	2.31	36.81	36.81	2.46	42.09	42.09	2.61	47.10	47.10	2.79
70 (21.1)	900	13.21	12.15	2.00	17.38	15.97	2.11	21.98	20.04	2.25	26.55	23.58	2.39	30.75	27.99	2.54	35.23	35.23	2.72	40.04	40.04	2.93	45.39	45.39	3.18
	975	13.33	12.26	1.99	17.52	16.10	2.10	22.62	20.63	2.24	26.72	23.73	2.36	30.98	28.19	2.50	35.54	35.54	2.67	40.45	40.45	2.87	45.96	45.96	3.08
	1050	13.44	12.36	1.99	17.66	16.23	2.09	22.76	20.75	2.22	26.87	23.86	2.34	31.18	28.38	2.47	35.80	35.80	2.63	40.80	40.80	2.83	46.28	46.28	3.01
	1200	13.63	12.54	1.99	17.89	16.44	2.08	22.99	20.96	2.20	27.13	24.09	2.30	31.52	28.69	2.42	36.23	36.23	2.57	41.38	41.38	2.73	46.54	46.54	2.92
75 (23.9)	900	12.66	11.65	2.10	16.83	15.47	2.22	21.26	19.38	2.35	26.16	23.24	2.52	30.29	27.56	2.67	34.68	34.68	2.85	39.35	39.35	3.07	44.58	44.58	3.33
	975	12.77	11.75	2.09	16.98	15.60	2.21	21.45	19.56	2.33	26.31	23.37	2.48	30.51	27.76	2.63	34.98	34.98	2.80	39.75	39.75	3.01	45.14	45.14	3.22
	1050	12.88	11.85	2.09	17.11	15.72	2.20	21.63	19.72	2.32	26.46	23.50	2.46	30.70	27.94	2.59	35.24	35.24	2.76	40.09	40.09	2.96	45.55	45.55	3.15
	1200	13.05	12.01	2.09	17.31	15.91	2.19	21.92	19.98	2.30	26.72	23.73	2.42	31.04	28.24	2.55	35.66	35.66	2.70	40.65	40.65	2.88	45.91	45.91	3.05
CH17NA036P-B Outdoor Section With FV4CNB006 Indoor Section - LO																									
65 (18.3)	720	9.56	8.80	1.68	12.50	11.49	1.68	15.65	14.27	1.69	18.88	16.77	1.70	22.67	20.63	1.75	25.24	25.24	1.79	27.66	27.66	1.83	29.86	29.86	1.90
	780	9.69	8.91	1.68	12.65	11.62	1.67	15.82	14.42	1.67	19.08	16.95	1.69	22.85	20.80	1.73	25.45	25.45	1.75	27.93	27.93	1.79	30.18	30.18	1.84
	840	9.80	9.01	1.68	12.78	11.74	1.67	15.97	14.56	1.66	19.26	17.11	1.67	23.02	20.95	1.70	25.64	25.64	1.72	28.16	28.16	1.75	30.46	30.46	1.80
	960	9.97	9.17	1.68	13.00	11.94	1.66	16.23	14.80	1.65	19.57	17.38	1.65	23.28	21.19	1.67	25.95	25.95	1.67	28.55	28.55	1.69	30.92	30.92	1.72
70 (21.1)	720	8.75	8.05	1.75	11.78	10.83	1.75	14.99	13.67	1.76	18.26	16.22	1.79	21.73	19.77	1.83	24.82	24.82	1.88	27.20	27.20	1.94	29.37	29.37	2.00
	780	8.86	8.15	1.75	11.92	10.96	1.74	15.16	13.82	1.75	18.47	16.41	1.77	22.39	20.38	1.82	25.02	25.02	1.85	27.46	27.46	1.89	29.68	29.68	1.95
	840	8.96	8.25	1.75	12.05	11.07	1.74	15.30	13.95	1.74	18.65	16.56	1.75	22.56	20.53	1.79	25.20	25.20	1.81	27.69	27.69	1.85	29.95	29.95	1.90
	960	9.14	8.41	1.75	12.26	11.27	1.73	15.56	14.18	1.73	18.93	16.81	1.73	22.84	20.79	1.76	25.51	25.51	1.77	28.07	28.07	1.79	30.41	30.41	1.82
75 (23.9)	720	7.89	7.26	1.82	11.03	10.14	1.83	14.31	13.05	1.84	17.64	15.67	1.87	20.94	19.06	1.92	24.42	24.42	1.99	26.74	26.74	2.04	28.85	28.85	2.11
	780	7.99	7.35	1.82	11.17	10.26	1.82	14.47	13.20	1.83	17.84	15.84	1.86	21.19	19.29	1.89	24.62	24.62	1.95	26.99	26.99	1.99	29.17	29.17	2.05
	840	8.09	7.44	1.82	11.29	10.37	1.82	14.62	13.33	1.82	18.01	16.00	1.84	21.44	19.51	1.87	24.79	24.79	1.92	27.22	27.22	1.95	29.44	29.44	2.00
	960	8.25	7.59	1.82	11.44	10.51	1.81	14.82	13.51	1.81	18.25	16.21	1.82	21.76	19.80	1.83	25.07	25.07	1.86	27.59	27.59	1.89	29.89	29.89	1.93

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Heat Pump Heating Performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		-3 (-19.4)			7 (-13.9)			17 (-8.3)			27 (-2.8)			37 (2.8)			47 (8.3)			57 (13.9)			67 (19.4)		
EDB °F (°C)	CFM	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†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
CH17NA048P-B Outdoor Section With FV4CN(B,F)005 Indoor Section - HI																									
65 (18.3)	1200	17.97	16.53	2.66	23.15	21.27	2.84	29.65	27.03	3.08	35.05	31.13	3.29	40.86	37.19	3.54	47.00	47.00	3.82	53.46	53.46	4.15	60.50	60.50	4.46
	1300	18.06	16.61	2.65	23.28	21.39	2.83	29.83	27.19	3.06	35.29	31.35	3.27	41.21	37.50	3.50	47.42	47.42	3.77	54.04	54.04	4.07	60.92	60.92	4.37
	1400	18.16	16.70	2.65	23.41	21.51	2.83	29.97	27.33	3.04	35.51	31.53	3.25	41.51	37.77	3.48	47.81	47.81	3.74	54.58	54.58	4.01	61.21	61.21	4.31
	1600	18.34	16.88	2.66	23.67	21.75	2.83	30.22	27.56	3.03	35.87	31.86	3.22	42.01	38.23	3.45	48.45	48.45	3.69	55.23	55.23	3.92	61.47	61.47	4.22
70 (21.1)	1200	17.65	16.24	2.82	22.65	20.81	3.00	29.20	26.63	3.23	34.52	30.66	3.45	40.17	36.56	3.69	46.20	46.20	3.98	52.55	52.55	4.32	59.63	59.63	4.65
	1300	17.75	16.33	2.82	22.80	20.95	2.99	29.41	26.81	3.21	34.77	30.88	3.42	40.52	36.87	3.66	46.62	46.62	3.93	53.06	53.06	4.25	60.01	60.01	4.56
	1400	17.87	16.44	2.82	22.97	21.10	2.99	29.59	26.98	3.20	34.99	31.08	3.40	40.82	37.15	3.63	47.00	47.00	3.90	53.59	53.59	4.18	60.34	60.34	4.49
	1600	18.11	16.66	2.83	23.27	21.38	2.99	29.91	27.27	3.19	35.38	31.42	3.38	41.34	37.62	3.60	47.64	47.64	3.85	54.36	54.36	4.09	60.66	60.66	4.39
75 (23.9)	1200	17.13	15.76	2.99	22.03	20.25	3.16	27.68	25.23	3.36	33.94	30.15	3.61	39.48	35.93	3.86	45.41	45.41	4.16	51.70	51.70	4.51	58.75	58.75	4.85
	1300	17.26	15.88	2.99	22.20	20.40	3.15	27.91	25.45	3.34	34.20	30.37	3.58	39.82	36.23	3.82	45.82	45.82	4.11	52.16	52.16	4.44	59.15	59.15	4.75
	1400	17.40	16.01	2.99	22.38	20.57	3.14	28.16	25.67	3.33	34.43	30.58	3.56	40.12	36.51	3.79	46.19	46.19	4.07	52.61	52.61	4.37	59.46	59.46	4.68
	1600	17.67	16.25	3.00	22.71	20.87	3.15	28.66	26.13	3.33	34.84	30.94	3.54	40.64	36.98	3.76	46.82	46.82	4.01	53.46	53.46	4.27	59.84	59.84	4.58
CH17NA048P-B Outdoor Section With FV4CN(B,F)005 Indoor Section - LO																									
65 (18.3)	960	10.75	9.89	2.21	15.52	14.27	2.28	20.06	18.29	2.35	24.42	21.69	2.42	29.36	26.71	2.53	33.07	33.07	2.61	36.89	36.89	2.72	40.84	40.84	2.87
	1040	10.91	10.03	2.22	15.72	14.45	2.28	20.30	18.50	2.34	24.72	21.96	2.40	29.61	26.94	2.49	33.39	33.39	2.57	37.30	37.30	2.67	41.32	41.32	2.80
	1120	11.03	10.15	2.22	15.89	14.60	2.28	20.50	18.69	2.33	24.98	22.18	2.39	29.85	27.16	2.47	33.67	33.67	2.53	37.64	37.64	2.62	41.76	41.76	2.73
	1280	11.26	10.36	2.23	16.19	14.88	2.28	20.85	19.01	2.32	25.43	22.58	2.36	30.22	27.50	2.43	34.15	34.15	2.48	38.21	38.21	2.55	42.41	42.41	2.62
70 (21.1)	960	9.82	9.03	2.31	14.61	13.43	2.39	19.16	17.47	2.46	23.53	20.89	2.54	28.66	26.08	2.66	32.39	32.39	2.75	36.17	36.17	2.87	40.06	40.06	3.02
	1040	9.96	9.16	2.31	14.79	13.59	2.38	19.39	17.68	2.45	23.82	21.16	2.52	28.96	26.35	2.62	32.72	32.72	2.71	36.57	36.57	2.81	40.53	40.53	2.95
	1120	10.08	9.28	2.32	14.97	13.75	2.38	19.61	17.88	2.44	24.08	21.39	2.50	29.21	26.58	2.60	33.00	33.00	2.67	36.91	36.91	2.76	40.95	40.95	2.89
	1280	10.31	9.48	2.33	15.26	14.02	2.39	19.97	18.21	2.43	24.53	21.78	2.48	29.61	26.95	2.56	33.48	33.48	2.61	37.49	37.49	2.69	41.68	41.68	2.77
75 (23.9)	960	9.86	9.07	2.43	13.59	12.49	2.49	18.18	16.58	2.57	22.58	20.06	2.66	27.03	24.60	2.76	31.72	31.72	2.89	35.43	35.43	3.01	39.28	39.28	3.17
	1040	9.99	9.19	2.44	13.77	12.66	2.49	18.41	16.78	2.56	22.88	20.32	2.64	27.47	25.00	2.73	32.04	32.04	2.85	35.82	35.82	2.96	39.74	39.74	3.10
	1120	9.77	8.99	2.44	13.94	12.81	2.49	18.63	16.99	2.56	23.13	20.55	2.62	27.91	25.40	2.71	32.32	32.32	2.81	36.17	36.17	2.91	40.16	40.16	3.04
	1280	9.98	9.18	2.45	14.24	13.08	2.50	18.99	17.32	2.55	23.58	20.94	2.60	28.92	26.32	2.69	32.79	32.79	2.76	36.74	36.74	2.84	40.87	40.87	2.94

See notes on page 19

Heat Pump Heating Performance continued

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		-3 (-19.4)			7 (-13.9)			17 (-8.3)			27 (-2.8)			37 (2.8)			47 (8.3)			57 (13.9)			67 (19.4)		
EDB °F (°C)	CFM	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†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
CH17NA060P-B Outdoor Section With FV4CNB006 Indoor Section - HI																									
65 (18.3)	1500	23.79	21.88	3.26	29.29	26.92	3.46	36.45	33.23	3.72	42.81	38.02	3.97	50.01	45.51	4.27	57.93	57.93	4.63	66.85	66.85	4.98	75.37	75.37	5.43
	1625	24.02	22.09	3.27	29.54	27.14	3.46	36.69	33.45	3.71	43.07	38.25	3.95	50.33	45.80	4.24	58.31	58.31	4.58	67.16	67.16	4.91	75.53	75.53	5.33
	1750	24.26	22.32	3.28	29.79	27.38	3.47	36.89	33.63	3.70	43.31	38.47	3.94	50.62	46.07	4.22	58.70	58.70	4.53	67.40	67.40	4.86	75.47	75.47	5.25
	2000	24.72	22.74	3.32	30.26	27.80	3.49	37.26	33.97	3.71	43.75	38.86	3.93	51.14	46.53	4.20	59.34	59.34	4.47	67.57	67.57	4.79	72.61	72.61	5.06
70 (21.1)	1500	22.84	21.01	3.40	28.50	26.19	3.61	36.04	32.86	3.88	42.34	37.61	4.15	49.45	45.00	4.46	57.25	57.25	4.83	66.02	66.02	5.19	74.43	74.43	5.65
	1625	23.07	21.22	3.41	28.74	26.41	3.61	36.27	33.07	3.87	42.61	37.84	4.13	49.77	45.29	4.43	57.63	57.63	4.78	66.38	66.38	5.11	74.67	74.67	5.55
	1750	23.30	21.44	3.42	28.99	26.64	3.62	36.48	33.26	3.87	42.85	38.06	4.11	50.06	45.55	4.40	58.00	58.00	4.74	66.64	66.64	5.06	74.68	74.68	5.47
	2000	23.75	21.85	3.46	29.44	27.06	3.64	36.85	33.60	3.88	43.28	38.44	4.11	50.57	46.02	4.38	58.68	58.68	4.67	66.90	66.90	4.99	72.84	72.84	5.30
75 (23.9)	1500	21.87	20.12	3.54	27.71	25.46	3.76	34.56	31.51	4.03	41.89	37.21	4.34	48.89	44.49	4.66	56.55	56.55	5.03	65.16	65.16	5.40	73.45	73.45	5.88
	1625	22.08	20.32	3.55	27.94	25.67	3.77	34.84	31.76	4.02	42.15	37.43	4.31	49.21	44.78	4.62	56.94	56.94	4.98	65.56	65.56	5.33	73.74	73.74	5.78
	1750	22.32	20.53	3.57	28.18	25.90	3.77	35.20	32.09	4.02	42.39	37.65	4.30	49.50	45.05	4.60	57.30	57.30	4.94	65.85	65.85	5.27	73.83	73.83	5.70
	2000	22.75	20.93	3.60	28.63	26.31	3.80	36.40	33.19	4.05	42.82	38.03	4.29	50.01	45.51	4.57	57.99	57.99	4.87	66.19	66.19	5.20	72.85	72.85	5.55
CH17NA060P-B Outdoor Section With FV4CNB006 Indoor Section - LO																									
65 (18.3)	1200	13.69	12.59	2.67	19.50	17.92	2.75	25.04	22.83	2.84	30.30	26.91	2.94	35.80	32.58	3.07	39.55	39.55	3.18	42.98	42.98	3.30	46.15	46.15	3.40
	1300	13.81	12.71	2.68	19.67	18.08	2.75	25.29	23.05	2.83	30.62	27.19	2.92	36.10	32.85	3.04	39.97	39.97	3.13	43.47	43.47	3.24	46.62	46.62	3.32
	1400	13.95	12.83	2.69	19.87	18.26	2.75	25.53	23.27	2.83	30.92	27.46	2.90	36.39	33.11	3.01	40.32	40.32	3.09	43.89	43.89	3.19	47.03	47.03	3.26
	1600	14.22	13.08	2.71	20.21	18.57	2.77	25.94	23.65	2.82	31.45	27.93	2.89	36.86	33.54	2.97	40.89	40.89	3.04	44.64	44.64	3.10	47.64	47.64	3.18
70 (21.1)	1200	12.56	11.56	2.79	18.42	16.93	2.87	23.98	21.87	2.97	29.23	25.96	3.07	35.00	31.85	3.22	38.74	38.74	3.33	42.09	42.09	3.46	45.24	45.24	3.57
	1300	12.73	11.72	2.80	18.60	17.09	2.87	24.24	22.10	2.96	29.55	26.25	3.05	35.36	32.17	3.19	39.13	39.13	3.29	42.58	42.58	3.40	45.78	45.78	3.49
	1400	12.89	11.86	2.81	18.80	17.28	2.88	24.50	22.33	2.96	29.87	26.53	3.04	35.67	32.46	3.16	39.50	39.50	3.25	43.01	43.01	3.35	46.18	46.18	3.43
	1600	13.13	12.08	2.83	19.16	17.61	2.89	24.93	22.73	2.95	30.41	27.01	3.02	36.13	32.88	3.12	40.09	40.09	3.20	43.75	43.75	3.27	46.81	46.81	3.34
75 (23.9)	1200	12.10	11.14	2.92	17.17	15.78	3.00	22.80	20.79	3.10	28.07	24.93	3.21	33.24	30.25	3.34	37.87	37.87	3.50	41.18	41.18	3.63	44.31	44.31	3.75
	1300	12.28	11.30	2.93	17.37	15.96	3.00	23.05	21.02	3.09	28.41	25.23	3.19	33.69	30.66	3.31	38.28	38.28	3.45	41.66	41.66	3.57	44.86	44.86	3.66
	1400	12.44	11.44	2.94	17.58	16.15	3.00	23.32	21.26	3.09	28.73	25.51	3.18	34.38	31.28	3.30	38.63	38.63	3.41	42.08	42.08	3.52	45.31	45.31	3.60
	1600	11.89	10.94	2.95	17.95	16.50	3.02	23.79	21.69	3.09	29.27	25.99	3.16	35.34	32.16	3.28	39.23	39.23	3.36	42.79	42.79	3.45	45.96	45.96	3.51

NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

* Tested Combination

‡ 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.

† 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.

EDB — Entering Dry Bulb

Guide specifications

GENERAL

Air-cooled, split-system air conditioner
CH17NA
2 to 5 nominal tons

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, 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 210.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/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 will be leak tested and pressure 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 air conditioner unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge R-410A, and special features required prior to field start-up.

Unit Cabinet

- Unit cabinet, including dense wire coil guard, will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

Fans

- Condenser fan will be direct-drive propeller type, discharging air upward.
- Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings. 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.

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 shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of R-410A refrigerant, and compressor oil.
- Unit will be equipped with low pressure switch and filter drier for R-410A 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.

Special Features

- Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.