Appendix G

Noise Measurements

Field Noise Data Sheets

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT THE MEADOWS PROJECT # 10328
SITE ID
SITE ADDRESS OBSERVER(S) PETE VITAIR
START DATE 10/20/20 END DATE 10/20/20
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 63 F HUMIDITY 67 % R.H. WIND (CALM) LIGHT MODERATE
WINDSPD MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 TYPE 1 2 SERIAL # 140317004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCRN YES

SETTINGS A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(ST1) 1-2	9:29	9:44	52.7	69.1	49.9				

COMMENTS ON SITE OF MAYFIELD DOLOROSA RETREAT GROUNDS, READING TAKEN APX 50' NORTH OF NORTH PROPERTY LINE OF RESIDENCE AT 501 N. SUNNYSIDE AVE AND APX 70' EAST OF EASTERN PROPERTY LINE OF RESIDENCE ON EDGEVIEW DR; PRIMARY NOISE SOURCE IS BIRD CHIRPING; SOME DISTANT TRAFFIC NOISE FROM 210 FWY

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO (RDWY C/L) OR EOP: APX 190' TO C/L ON N. SUNNYSIDE AVE

TRAFFIC COUNT DURATION: — MIN SPEED — MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE —	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS										
MED TRKS										
HVY TRKS										
BUSES										
MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING (DIST. CONVRSTNS/YELLING) DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: DISTANT CONVERSATIONS FROM NEARBY RESIDENCES; SOME DISTANT TRAFFIC NOISE FROM 210 FWY

DESCRIPTION / SKETCH
TERRAIN HARD SOFT (MIXED) FLAT OTHER:
PHOTOS 9103; 9105; 9106; 9107
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: THE MEADOWS | PROJECT #: 10328
SITE ID:
SITE ADDRESS: | OBSERVER(S): PEXE VIZAR
START DATE: 10/20/20 | END DATE: 10/20/20
START TIME: | END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 63 F | HUMIDITY: 75 % R.H. | WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH | DIR. N NE S SE S SW W NW | VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM-3 | TYPE 1 2 | SERIAL # 140317004
CALIBRATOR: BSWA CA 114 | SERIAL # 490151
CALIBRATION CHECK: PRE-TEST dBA SPL | POST-TEST dBA SPL | WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(ST2) 34	10:03	10:18	55.4	70.6	52.8				

COMMENTS
READING TAKEN IN FOUNTAIN PLAZA AREA IN CENTER OF MAJOR DOLOROSA NEXT GROUNDS; PRIMARY NOISE SOURCE IS TWO FOUNTAINS IN PLAZA AREA; PRIMARY FOUNTAIN NOISE ABT 35' AWAY FROM NOISE METER;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL (OTHER: FOUNTAINS)
ROADWAY TYPE: ASPHALT | DIST. TO RDWY C/L OR EOP:

TRAFFIC COUNT DURATION: — MIN | SPEED

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

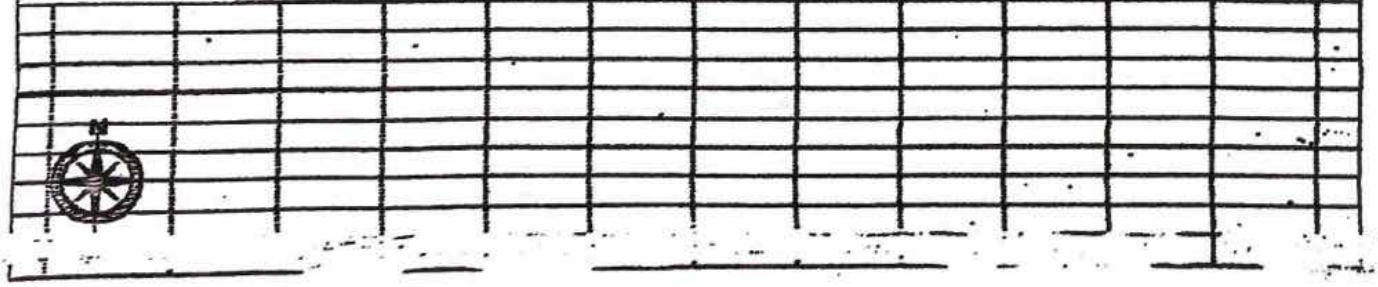
IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE —

COUNT 2 (OR RDWY 2)	MIN	NB/EB	SB/WB	NB/EB	SB/WB

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING (DIST. TRAFFIC (LIST RDWYS BELOW)) DISTD GARDENERS/LANDSCAPING NOISE
OTHER: 210 FWY

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 9109; 9110; 9111; 9112; 9113; 9114; 9115
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: THE MEADOWS — PROJECT #: 10328
SITE ID:
SITE ADDRESS: — OBSERVER(S): PEXE VIZAR
START DATE: 10/20/20 — END DATE: 10/20/20
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 68 F — HUMIDITY: 68 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH — DIR. N NE E SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) — OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM-3 — TYPE 1 2 — SERIAL #: 140317004
CALIBRATOR: B&K CA 114 — SERIAL #: 490151
CALIBRATION CHECK — PRE-TEST: ____ dBA SPL — POST-TEST: ____ dBA SPL — WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI — OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(ST3) 5-6	10:42	10:58	52.1	58.3	50.6				

COMMENTS: READING TAKEN AT SOUTHWEST GATE OF BAILEY CANYON PARK;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR EOP:

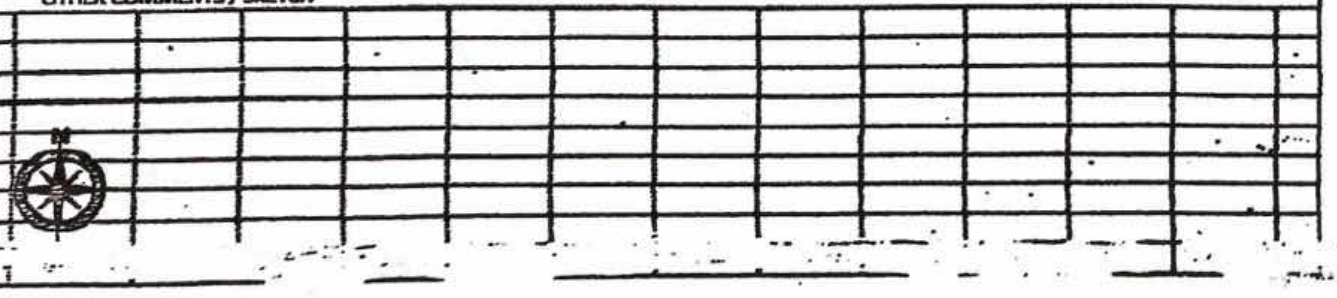
TRAFFIC COUNT DURATION: ___ MIN — SPEED ___ MIN — SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS										
MED TRKS										
HVY TRKS										
BUSES										
MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 9117; 9118; (9119; 9120; 9122; 9123
OTHER COMMENTS / SKETCH



DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: THE MEADOWS — PROJECT #: 10328
SITE ID:
SITE ADDRESS:
OBSERVER(S): PEXE VIZAR
START DATE: 10/20/20 — END DATE: 10/20/20
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS
TEMP: 68 F — HUMIDITY: 68 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH — DIR. N NE E SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT: PICCOLO SLM-3 — TYPE 1 2 — SERIAL # 14031700
CALIBRATOR: ISSUA CA 114 — SERIAL # 400151
CALIBRATION CHECK — PRE-TEST: dBA SPL — POST-TEST: dBA SPL — WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(STH) 7-8	11:05	11:20	56.1	75.9	46.4				

COMMENTS: READING TAKEN IN FRONT OF 390 W. CANYON AVE (RESIDENTIAL); PRIMARY NOISE SOURCE IS LIGHT TRAFFIC ON W. CANYON AVE AND ON N. LIMA ST TO THE EAST;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE: (TRAFFIC) AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR EOP: APX 7' TO W. CANYON AVE C/L
TRAFFIC COUNT DURATION: 15 MIN — SPEED: ___ MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED
	AUTOS	3			
	MED TRKS	0			
	HVY TRKS	0			
	BUSES	0			
	MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB SPEED	SB/WB SPEED

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) (DISTD GARDENERS/LANDSCAPING NOISE)
OTHER: GARDENERS WORKING (LAWNMOWER / EDGE TRIMMER) WEARING ABT 100+ FEET TO THE EAST STARTING APX 11:09 AM;

DESCRIPTION / SKETCH
TERRAIN: HARD SOFT (MIXED) FLAT OTHER:
PHOTOS: 4 WB 4 EB
OTHER COMMENTS / SKETCH

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT: THE MEADOWS — PROJECT #: 10328
SITE ID:
SITE ADDRESS:
OBSERVER(S): PETE VITAR
START DATE: 10/20/20 — END DATE: 10/20/20
START TIME: — END TIME:

METEOROLOGICAL CONDITIONS

TEMP: 68 F — HUMIDITY: 68 % R.H. — WIND: (CALM) LIGHT MODERATE
WINDSPD: MPH — DIR. N NE E SE S SW W NW — VARIABLE STEADY GUSTY
SKY: (SUNNY) (CLEAR) OVRCAST PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS

MEAS. INSTRUMENT: PICCOLO SLM-3 — TYPE 1 2 — SERIAL # 140317004
CALIBRATOR: BSWA CA 114 — SERIAL # 490151
CALIBRATION CHECK — PRE-TEST ____ dBA SPL — POST-TEST ____ dBA SPL — WINDSCRN: YES

SETTINGS: A-WTD (SLOW) FAST FRONTAL RANDOM ANSI OTHER:

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
(STS) 9-10	11:29	11:45	56.1	74.1	51.6				

COMMENTS: READING TAKEN IN FRONT OF 441 N. SUNNYSIDE AVE (RESIDENTIAL); PRIMARY NOISE SOURCE IS LIGHT TRAFFIC ON N. SUNNYSIDE AVE;

SOURCE INFO AND TRAFFIC COUNTS

PRIMARY NOISE SOURCE: TRAFFIC AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT — DIST. TO RDWY C/L OR EOP: APX 15' TO C/L ON SUNNYSIDE AVE

TRAFFIC COUNT DURATION: 15 MIN

COUNT 1 (OR RDWY 1)	NB/EB SPEED	SB/WB SPEED	NB/EB MIN	SB/WB MIN
AUTOS	4			
MED TRKS	0			
HVY TRKS	0			
BUSES	0			
MOTRCLS	0			

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE ✓

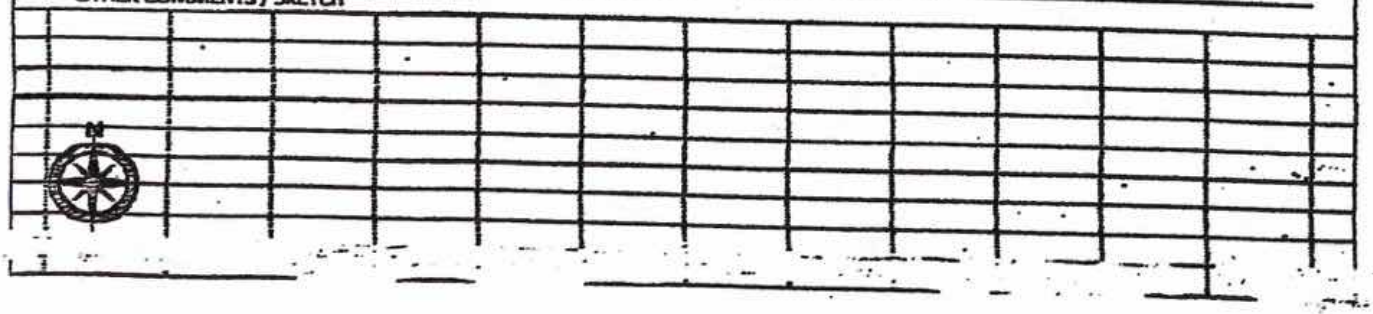
COUNT 2 (OR RDWY 2)	NB/EB SPEED	SB/WB SPEED	NB/EB MIN	SB/WB MIN

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT (RUSTLING LEAVES) DIST. BARKING DOGS (BIRDS) DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) (DIST GARDENERS/LANDSCAPING NOISE)
OTHER:

DESCRIPTION / SKETCH

TERRAIN: (HARD) SOFT (MIXED) FLAT OTHER:
PHOTOS: 9126, 9127, 9129, 9130;
OTHER COMMENTS / SKETCH



Construction Noise Modeling
Input and Output

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Clear and Grub

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		25	0
Tractor	No	40	84		50	0
Backhoe	No	40		77.6	75	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		90	86	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A
Backhoe		74	70.1	N/A	N/A	N/A	N/A
	Total	90	87.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		500	0
Tractor	No	40	84		500	0
Backhoe	No	40		77.6	500	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		64	60	N/A	N/A	N/A	N/A
Tractor		64	60	N/A	N/A	N/A	N/A
Backhoe		57.6	53.6	N/A	N/A	N/A	N/A
	Total	64	63.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Tractor	No	40	84		120	0
Tractor	No	40	84		150	0
Backhoe	No	40		77.6	175	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	76.4	72.4	N/A	N/A	N/A	N/A
Tractor	74.5	70.5	N/A	N/A	N/A	N/A
Backhoe	66.7	62.7	N/A	N/A	N/A	N/A
Total	76.4	74.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		550	0
Tractor	No	40	84		550	0
Backhoe	No	40		77.6	550	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	63.2	59.2	N/A	N/A	N/A	N/A
Tractor	63.2	59.2	N/A	N/A	N/A	N/A
Backhoe	56.7	52.8	N/A	N/A	N/A	N/A
Total	63.2	62.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		75	0
Tractor	No	40	84		100	0
Backhoe	No	40		77.6	150	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	80.5	76.5	N/A	N/A	N/A	N/A
Tractor	78	74	N/A	N/A	N/A	N/A
Backhoe	68	64	N/A	N/A	N/A	N/A
Total	80.5	78.6	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		500	0
Tractor	No	40	84		500	0
Backhoe	No	40		77.6	500	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		64	60	N/A	N/A	N/A	N/A
Tractor		64	60	N/A	N/A	N/A	N/A
Backhoe		57.6	53.6	N/A	N/A	N/A	N/A
	Total	64	63.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Remedial & Mass Excvtn

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		25	0
Tractor	No	40	84		50	0
Dozer	No	40		81.7	75	0
Scraper	No	40		83.6	75	0
Scraper	No	40		83.6	100	0
Scraper	No	40		83.6	150	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	250	0
Scraper	No	40		83.6	300	0
Scraper	No	40		83.6	350	0
Scraper	No	40		83.6	400	0
Scraper	No	40		83.6	100	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		90	86	N/A	N/A	N/A	N/A
Tractor		84	80	N/A	N/A	N/A	N/A
Dozer		78.1	74.2	N/A	N/A	N/A	N/A
Scraper		80.1	76.1	N/A	N/A	N/A	N/A
Scraper		77.6	73.6	N/A	N/A	N/A	N/A

Equipment		*Lmax	Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq
Scraper		74	70.1	N/A	N/A	N/A	N/A
Scraper		71.5	67.6	N/A	N/A	N/A	N/A
Scraper		69.6	65.6	N/A	N/A	N/A	N/A
Scraper		68	64	N/A	N/A	N/A	N/A
Scraper		66.7	62.7	N/A	N/A	N/A	N/A
Scraper		65.5	61.5	N/A	N/A	N/A	N/A
Scraper		77.6	73.6	N/A	N/A	N/A	N/A
	Total	90	88.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		500	0
Tractor	No	40	84		500	0
Dozer	No	40		81.7	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0

Results

Equipment		Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Tractor		64	60	N/A	N/A	N/A	N/A
Tractor		64	60	N/A	N/A	N/A	N/A
Dozer		61.7	57.7	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
	Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		120	0

Tractor	No	40	84		150	0
Dozer	No	40		81.7	175	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	250	0
Scraper	No	40		83.6	300	0
Scraper	No	40		83.6	350	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	400	0
Scraper	No	40		83.6	450	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	150	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	76.4	72.4	N/A	N/A	N/A	N/A
Tractor	74.5	70.5	N/A	N/A	N/A	N/A
Dozer	70.8	66.8	N/A	N/A	N/A	N/A
Scraper	71.5	67.6	N/A	N/A	N/A	N/A
Scraper	69.6	65.6	N/A	N/A	N/A	N/A
Scraper	68	64	N/A	N/A	N/A	N/A
Scraper	66.7	62.7	N/A	N/A	N/A	N/A
Scraper	71.5	67.6	N/A	N/A	N/A	N/A
Scraper	65.5	61.5	N/A	N/A	N/A	N/A
Scraper	64.5	60.5	N/A	N/A	N/A	N/A
Scraper	63.6	59.6	N/A	N/A	N/A	N/A
Scraper	74	70.1	N/A	N/A	N/A	N/A
Total	76.4	78.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		550	0
Tractor	No	40	84		550	0
Dozer	No	40		81.7	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0
Scraper	No	40		83.6	550	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	63.2	59.2	N/A	N/A	N/A	N/A
Tractor	63.2	59.2	N/A	N/A	N/A	N/A
Dozer	60.8	56.9	N/A	N/A	N/A	N/A
Scraper	62.8	58.8	N/A	N/A	N/A	N/A

Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
Scraper		62.8	58.8	N/A	N/A	N/A	N/A
	Total	63.2	69.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		75	0
Tractor	No	40	84		100	0
Dozer	No	40		81.7	125	0
Scraper	No	40		83.6	150	0
Scraper	No	40		83.6	250	0
Scraper	No	40		83.6	200	0
Scraper	No	40		83.6	300	0
Scraper	No	40		83.6	350	0
Scraper	No	40		83.6	450	0
Scraper	No	40		83.6	125	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	250	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		80.5	76.5	N/A	N/A	N/A	N/A
Tractor		78	74	N/A	N/A	N/A	N/A
Dozer		73.7	69.7	N/A	N/A	N/A	N/A
Scraper		74	70.1	N/A	N/A	N/A	N/A
Scraper		69.6	65.6	N/A	N/A	N/A	N/A
Scraper		71.5	67.6	N/A	N/A	N/A	N/A
Scraper		68	64	N/A	N/A	N/A	N/A
Scraper		66.7	62.7	N/A	N/A	N/A	N/A
Scraper		64.5	60.5	N/A	N/A	N/A	N/A
Scraper		75.6	71.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		69.6	65.6	N/A	N/A	N/A	N/A
	Total	80.5	80.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Tractor	No	40	84		500	0
Tractor	No	40	84		500	0
Dozer	No	40		81.7	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0
Scraper	No	40		83.6	500	0

				Results			
		Calculated (dBA)			Noise Limits (dBA)		
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		64	60	N/A	N/A	N/A	N/A
Tractor		64	60	N/A	N/A	N/A	N/A
Dozer		61.7	57.7	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
	Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2020

Case Description: The Meadows_Sierra Madre - Balance Site

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Front End Loader	No	40		79.1	25	0

				Results			
		Calculated (dBA)			Noise Limits (dBA)		
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader		85.1	81.2	N/A	N/A	N/A	N/A
	Total	85.1	81.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	59.1	55.1	N/A	N/A	N/A	N/A
Total	59.1	55.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	120	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	71.5	67.5	N/A	N/A	N/A	N/A
Total	71.5	67.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	550	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	58.3	54.3	N/A	N/A	N/A	N/A
Total	58.3	54.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	75	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	75.6	71.6	N/A	N/A	N/A	N/A
Total	75.6	71.6	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	64	60	N/A	N/A	N/A	N/A
Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Finish Grading

---- Receptor #1 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		25	0
Tractor	No	40	84		50	0
Grader	No	40	85		75	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor	90	86	N/A	N/A	N/A	N/A
Tractor	84	80	N/A	N/A	N/A	N/A
Grader	81.5	77.5	N/A	N/A	N/A	N/A
Total	90	87.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		500	0
Tractor	No	40	84		500	0
Grader	No	40	85		500	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Tractor	64	60	N/A	N/A	N/A	N/A
Tractor	64	60	N/A	N/A	N/A	N/A
Grader	61.7	57.7	N/A	N/A	N/A	N/A
Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		120	0
Tractor	No	40	84		150	0
Grader	No	40	85		175	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Tractor	76.4	72.4	N/A	N/A	N/A	N/A
Tractor	74.5	70.5	N/A	N/A	N/A	N/A
Grader	70.8	66.8	N/A	N/A	N/A	N/A
Total	76.4	78.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84		550	0
Tractor	No	40	84		550	0
Grader	No	40	85		550	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		63.2	59.2	N/A	N/A	N/A	N/A
Tractor		63.2	59.2	N/A	N/A	N/A	N/A
Grader		60.8	56.9	N/A	N/A	N/A	N/A
	Total	63.2	69.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		75	0
Tractor	No	40	84		100	0
Grader	No	40	85		125	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		80.5	76.5	N/A	N/A	N/A	N/A
Tractor		78	74	N/A	N/A	N/A	N/A
Grader		73.7	69.7	N/A	N/A	N/A	N/A
	Total	80.5	80.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Tractor	No	40	84		500	0
Tractor	No	40	84		500	0
Grader	No	40	85		500	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Tractor		64	60	N/A	N/A	N/A	N/A
Tractor		64	60	N/A	N/A	N/A	N/A
Grader		61.7	57.7	N/A	N/A	N/A	N/A
	Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Bldg Cnstn

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	25	0
Man Lift	No	20		74.7	50	0
Man Lift	No	20		74.7	75	0
Man Lift	No	20		74.7	75	0
Generator	No	50		80.6	100	0
Backhoe	No	40		77.6	150	0
Front End Loader	No	40		79.1	200	0
Tractor	No	40	84		250	0
Welder / Torch	No	40		74	300	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	86.6	78.6	N/A	N/A	N/A	N/A
Man Lift	74.7	67.7	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A
Man Lift	71.2	64.2	N/A	N/A	N/A	N/A
Generator	74.6	71.6	N/A	N/A	N/A	N/A
Backhoe	68	64	N/A	N/A	N/A	N/A
Front End Loader	67.1	63.1	N/A	N/A	N/A	N/A
Tractor	70	66	N/A	N/A	N/A	N/A
Welder / Torch	58.4	54.5	N/A	N/A	N/A	N/A
Total	86.6	80.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	500	0
Man Lift	No	20		74.7	500	0
Man Lift	No	20		74.7	500	0
Man Lift	No	20		74.7	500	0
Generator	No	50		80.6	500	0
Backhoe	No	40		77.6	500	0
Front End Loader	No	40		79.1	500	0
Tractor	No	40	84		500	0
Welder / Torch	No	40		74	500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq

Crane		64	60	N/A	N/A	N/A	N/A
Man Lift		64	60	N/A	N/A	N/A	N/A
Man Lift		61.7	57.7	N/A	N/A	N/A	N/A
Man Lift		63.6	59.6	N/A	N/A	N/A	N/A
Generator		63.6	59.6	N/A	N/A	N/A	N/A
Backhoe		63.6	59.6	N/A	N/A	N/A	N/A
Front End Loader		63.6	59.6	N/A	N/A	N/A	N/A
Tractor		63.6	59.6	N/A	N/A	N/A	N/A
Welder / Torch		63.6	59.6	N/A	N/A	N/A	N/A
	Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	120	0
Man Lift	No	20		74.7	150	0
Man Lift	No	20		74.7	175	0
Man Lift	No	20		74.7	200	0
Generator	No	50		80.6	250	0
Backhoe	No	40		77.6	300	0
Front End Loader	No	40		79.1	350	0
Tractor	No	40	84		200	0
Welder / Torch	No	40		74	400	0

		Results					
		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane		76.4	72.4	N/A	N/A	N/A	N/A
Man Lift		74.5	70.5	N/A	N/A	N/A	N/A
Man Lift		70.8	66.8	N/A	N/A	N/A	N/A
Man Lift		71.5	67.6	N/A	N/A	N/A	N/A
Generator		69.6	65.6	N/A	N/A	N/A	N/A
Backhoe		68	64	N/A	N/A	N/A	N/A
Front End Loader		66.7	62.7	N/A	N/A	N/A	N/A
Tractor		71.5	67.6	N/A	N/A	N/A	N/A
Welder / Torch		65.5	61.5	N/A	N/A	N/A	N/A
	Total	76.4	78.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	550	0
Man Lift	No	20		74.7	550	0
Man Lift	No	20		74.7	550	0
Man Lift	No	20		74.7	550	0
Generator	No	50		80.6	550	0

Backhoe	No	40		77.6	550	0
Front End Loader	No	40		79.1	550	0
Tractor	No	40	84		550	0
Welder / Torch	No	40		74	550	0

		Results				
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	63.2	59.2	N/A	N/A	N/A	N/A
Man Lift	63.2	59.2	N/A	N/A	N/A	N/A
Man Lift	60.8	56.9	N/A	N/A	N/A	N/A
Man Lift	62.8	58.8	N/A	N/A	N/A	N/A
Generator	62.8	58.8	N/A	N/A	N/A	N/A
Backhoe	62.8	58.8	N/A	N/A	N/A	N/A
Front End Loader	62.8	58.8	N/A	N/A	N/A	N/A
Tractor	62.8	58.8	N/A	N/A	N/A	N/A
Welder / Torch	62.8	58.8	N/A	N/A	N/A	N/A
Total	63.2	69.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Crane	No	16		80.6	75	0
Man Lift	No	20		74.7	100	0
Man Lift	No	20		74.7	125	0
Man Lift	No	20		74.7	150	0
Generator	No	50		80.6	250	0
Backhoe	No	40		77.6	200	0
Front End Loader	No	40		79.1	300	0
Tractor	No	40	84		350	0
Welder / Torch	No	40		74	450	0

		Results				
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane	80.5	76.5	N/A	N/A	N/A	N/A
Man Lift	78	74	N/A	N/A	N/A	N/A
Man Lift	73.7	69.7	N/A	N/A	N/A	N/A
Man Lift	74	70.1	N/A	N/A	N/A	N/A
Generator	69.6	65.6	N/A	N/A	N/A	N/A
Backhoe	71.5	67.6	N/A	N/A	N/A	N/A
Front End Loader	68	64	N/A	N/A	N/A	N/A
Tractor	66.7	62.7	N/A	N/A	N/A	N/A
Welder / Torch	64.5	60.5	N/A	N/A	N/A	N/A
Total	80.5	80.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	500	0
Man Lift	No	20		74.7	500	0
Man Lift	No	20		74.7	500	0
Man Lift	No	20		74.7	500	0
Generator	No	50		80.6	500	0
Backhoe	No	40		77.6	500	0
Front End Loader	No	40		79.1	500	0
Tractor	No	40	84		500	0
Welder / Torch	No	40		74	500	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Crane	64	60	N/A	N/A	N/A	N/A
Man Lift	64	60	N/A	N/A	N/A	N/A
Man Lift	61.7	57.7	N/A	N/A	N/A	N/A
Man Lift	63.6	59.6	N/A	N/A	N/A	N/A
Generator	63.6	59.6	N/A	N/A	N/A	N/A
Backhoe	63.6	59.6	N/A	N/A	N/A	N/A
Front End Loader	63.6	59.6	N/A	N/A	N/A	N/A
Tractor	63.6	59.6	N/A	N/A	N/A	N/A
Welder / Torch	63.6	59.6	N/A	N/A	N/A	N/A
Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Wet Utilities

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

---- Receptor #1 ----

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	25	0
Excavator	No	40		80.7	50	0
Excavator	No	40		80.7	75	0
Front End Loader	No	40		79.1	75	0
Front End Loader	No	40		79.1	100	0
Backhoe	No	40		77.6	150	0
Tractor	No	40	84		200	0

Equipment	Results Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Excavator	86.7	82.8	N/A	N/A	N/A	N/A
Excavator	80.7	76.7	N/A	N/A	N/A	N/A
Excavator	77.2	73.2	N/A	N/A	N/A	N/A

Front End Loader		75.6	71.6	N/A	N/A	N/A	N/A
Front End Loader		73.1	69.1	N/A	N/A	N/A	N/A
Backhoe		68	64	N/A	N/A	N/A	N/A
Tractor		72	68	N/A	N/A	N/A	N/A
	Total	86.7	84.6	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	500	0
Excavator	No	40		80.7	500	0
Excavator	No	40		80.7	500	0
Front End Loader	No	40		79.1	500	0
Front End Loader	No	40		79.1	500	0
Backhoe	No	40		77.6	500	0
Tractor	No	40	84		500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	64	60	N/A	N/A	N/A	N/A
Excavator	64	60	N/A	N/A	N/A	N/A
Excavator	61.7	57.7	N/A	N/A	N/A	N/A
Front End Loader	63.6	59.6	N/A	N/A	N/A	N/A
Front End Loader	63.6	59.6	N/A	N/A	N/A	N/A
Backhoe	63.6	59.6	N/A	N/A	N/A	N/A
Tractor	63.6	59.6	N/A	N/A	N/A	N/A
Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	120	0
Excavator	No	40		80.7	150	0
Excavator	No	40		80.7	175	0
Front End Loader	No	40		79.1	200	0
Front End Loader	No	40		79.1	250	0
Backhoe	No	40		77.6	300	0
Tractor	No	40	84		350	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	76.4	72.4	N/A	N/A	N/A	N/A
Excavator	74.5	70.5	N/A	N/A	N/A	N/A

Excavator		70.8	66.8	N/A	N/A	N/A	N/A
Front End Loader		71.5	67.6	N/A	N/A	N/A	N/A
Front End Loader		69.6	65.6	N/A	N/A	N/A	N/A
Backhoe		68	64	N/A	N/A	N/A	N/A
Tractor		66.7	62.7	N/A	N/A	N/A	N/A
	Total	76.4	78.2	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	550	0
Excavator	No	40		80.7	550	0
Excavator	No	40		80.7	550	0
Front End Loader	No	40		79.1	550	0
Front End Loader	No	40		79.1	550	0
Backhoe	No	40		77.6	550	0
Tractor	No	40	84		550	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	63.2	59.2	N/A	N/A	N/A	N/A
Excavator	63.2	59.2	N/A	N/A	N/A	N/A
Excavator	60.8	56.9	N/A	N/A	N/A	N/A
Front End Loader	62.8	58.8	N/A	N/A	N/A	N/A
Front End Loader	62.8	58.8	N/A	N/A	N/A	N/A
Backhoe	62.8	58.8	N/A	N/A	N/A	N/A
Tractor	62.8	58.8	N/A	N/A	N/A	N/A
Total	63.2	69.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	75	0
Excavator	No	40		80.7	100	0
Excavator	No	40		80.7	125	0
Front End Loader	No	40		79.1	150	0
Front End Loader	No	40		79.1	250	0
Backhoe	No	40		77.6	200	0
Tractor	No	40	84		300	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	80.5	76.5	N/A	N/A	N/A	N/A

Excavator		78	74	N/A	N/A	N/A	N/A
Excavator		73.7	69.7	N/A	N/A	N/A	N/A
Front End Loader		74	70.1	N/A	N/A	N/A	N/A
Front End Loader		69.6	65.6	N/A	N/A	N/A	N/A
Backhoe		71.5	67.6	N/A	N/A	N/A	N/A
Tractor		68	64	N/A	N/A	N/A	N/A
	Total	80.5	80.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Excavator	No	40		80.7	500	0
Excavator	No	40		80.7	500	0
Excavator	No	40		80.7	500	0
Front End Loader	No	40		79.1	500	0
Front End Loader	No	40		79.1	500	0
Backhoe	No	40		77.6	500	0
Tractor	No	40	84		500	0

			Results			
	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Excavator	64	60	N/A	N/A	N/A	N/A
Excavator	64	60	N/A	N/A	N/A	N/A
Excavator	61.7	57.7	N/A	N/A	N/A	N/A
Front End Loader	63.6	59.6	N/A	N/A	N/A	N/A
Front End Loader	63.6	59.6	N/A	N/A	N/A	N/A
Backhoe	63.6	59.6	N/A	N/A	N/A	N/A
Tractor	63.6	59.6	N/A	N/A	N/A	N/A
Total	64	70.3	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Dry Utilities

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Front End Loader	No	40		79.1	25	0
Front End Loader	No	40		79.1	125	0
Backhoe	No	40		77.6	50	0
Tractor	No	40	84		75	0

Results

Equipment		Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Front End Loader		85.1	81.2	N/A	N/A	N/A	N/A
Front End Loader		71.2	67.2	N/A	N/A	N/A	N/A
Backhoe		77.6	73.6	N/A	N/A	N/A	N/A
Tractor		80.5	76.5	N/A	N/A	N/A	N/A
	Total	85.1	83.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	500	0
Front End Loader	No	40		79.1	500	0
Backhoe	No	40		77.6	500	0
Tractor	No	40	84		500	0

Results

Equipment		Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Front End Loader		59.1	55.1	N/A	N/A	N/A	N/A
Front End Loader		59.1	55.1	N/A	N/A	N/A	N/A
Backhoe		57.6	53.6	N/A	N/A	N/A	N/A
Tractor		64	60	N/A	N/A	N/A	N/A
	Total	64	62.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	120	0
Front End Loader	No	40		79.1	175	0
Backhoe	No	40		77.6	150	0
Tractor	No	40	84		250	0

Results

Equipment		Calculated (dBA) *Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq
Front End Loader		71.5	67.5	N/A	N/A	N/A	N/A
Front End Loader		68.2	64.2	N/A	N/A	N/A	N/A
Backhoe		68	64	N/A	N/A	N/A	N/A
Tractor		70	66	N/A	N/A	N/A	N/A
	Total	71.5	71.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	550	0
Front End Loader	No	40		79.1	550	0
Backhoe	No	40		77.6	550	0
Tractor	No	40	84		550	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	58.3	54.3	N/A	N/A	N/A	N/A
Front End Loader	58.3	54.3	N/A	N/A	N/A	N/A
Backhoe	56.7	52.8	N/A	N/A	N/A	N/A
Tractor	63.2	59.2	N/A	N/A	N/A	N/A
Total	63.2	61.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	75	0
Front End Loader	No	40		79.1	125	0
Backhoe	No	40		77.6	200	0
Tractor	No	40	84		150	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	75.6	71.6	N/A	N/A	N/A	N/A
Front End Loader	71.2	67.2	N/A	N/A	N/A	N/A
Backhoe	65.5	61.5	N/A	N/A	N/A	N/A
Tractor	74.5	70.5	N/A	N/A	N/A	N/A
Total	75.6	75.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Front End Loader	No	40		79.1	500	0

Front End Loader	No	40		79.1	500	0
Backhoe	No	40		77.6	500	0
Tractor	No	40	84		500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Front End Loader	59.1	55.1	N/A	N/A	N/A	N/A
Front End Loader	59.1	55.1	N/A	N/A	N/A	N/A
Backhoe	57.6	53.6	N/A	N/A	N/A	N/A
Tractor	64	60	N/A	N/A	N/A	N/A
Total	64	62.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Surface Improvements

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Residences_W	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		25	0
Paver	No	50		77.2	50	0
Paver	No	50		77.2	75	0
Concrete Pump Truck	No	20		81.4	75	0
Concrete Mixer Truck	No	40		78.8	100	0
Roller	No	20		80	150	0
Roller	No	20		80	200	0
Scraper	No	40		83.6	250	0
Backhoe	No	40		77.6	300	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	91	87	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A
Paver	73.7	70.7	N/A	N/A	N/A	N/A
Concrete Pump Truck	77.9	70.9	N/A	N/A	N/A	N/A
Concrete Mixer Truck	72.8	68.8	N/A	N/A	N/A	N/A
Roller	70.5	63.5	N/A	N/A	N/A	N/A
Roller	68	61	N/A	N/A	N/A	N/A
Scraper	69.6	65.6	N/A	N/A	N/A	N/A
Backhoe	62	58	N/A	N/A	N/A	N/A
Total	91	87.6	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night

Typical Residences-W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		500	0
Paver	No	50		77.2	500	0
Paver	No	50		77.2	500	0
Concrete Pump Truck	No	20		81.4	500	0
Concrete Mixer Truck	No	40		78.8	500	0
Roller	No	20		80	500	0
Roller	No	20		80	500	0
Scraper	No	40		83.6	500	0
Backhoe	No	40		77.6	500	0

		Results				
		Calculated (dBA)		Noise Limits (dBA)		
				Day	Evening	
Equipment		*Lmax	Leq	Lmax	Lmax	Leq
Grader		65	61	N/A	N/A	N/A
Paver		57.2	54.2	N/A	N/A	N/A
Paver		57.2	54.2	N/A	N/A	N/A
Concrete Pump Truck		61.4	54.4	N/A	N/A	N/A
Concrete Mixer Truck		58.8	54.8	N/A	N/A	N/A
Roller		60	53	N/A	N/A	N/A
Roller		60	53	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A
Backhoe		57.6	53.6	N/A	N/A	N/A
	Total	65	65.9	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

		---- Receptor #3 ----		
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		120	0
Paver	No	50		77.2	150	0
Paver	No	50		77.2	175	0
Concrete Pump Truck	No	20		81.4	200	0
Concrete Mixer Truck	No	40		78.8	250	0
Roller	No	20		80	300	0
Roller	No	20		80	350	0
Scraper	No	40		83.6	200	0
Backhoe	No	40		77.6	400	0

	Results				
	Calculated (dBA)		Noise Limits (dBA)		
			Day	Evening	
Equipment	*Lmax	Leq	Lmax	Lmax	Leq
Grader	77.4	73.4	N/A	N/A	N/A
Paver	67.7	64.7	N/A	N/A	N/A
Paver	66.3	63.3	N/A	N/A	N/A
Concrete Pump Truck	69.4	62.4	N/A	N/A	N/A
Concrete Mixer Truck	64.8	60.8	N/A	N/A	N/A
Roller	64.4	57.4	N/A	N/A	N/A

Roller		63.1	56.1	N/A	N/A	N/A	N/A
Scraper		71.5	67.6	N/A	N/A	N/A	N/A
Backhoe		59.5	55.5	N/A	N/A	N/A	N/A
	Total	77.4	75.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		550	0
Paver	No	50		77.2	550	0
Paver	No	50		77.2	550	0
Concrete Pump Truck	No	20		81.4	550	0
Concrete Mixer Truck	No	40		78.8	550	0
Roller	No	20		80	550	0
Roller	No	20		80	550	0
Scraper	No	40		83.6	550	0
Backhoe	No	40		77.6	550	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	64.2	60.2	N/A	N/A	N/A	N/A
Paver	56.4	53.4	N/A	N/A	N/A	N/A
Paver	56.4	53.4	N/A	N/A	N/A	N/A
Concrete Pump Truck	60.6	53.6	N/A	N/A	N/A	N/A
Concrete Mixer Truck	58	54	N/A	N/A	N/A	N/A
Roller	59.2	52.2	N/A	N/A	N/A	N/A
Roller	59.2	52.2	N/A	N/A	N/A	N/A
Scraper	62.8	58.8	N/A	N/A	N/A	N/A
Backhoe	56.7	52.8	N/A	N/A	N/A	N/A
Total	64.2	65.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85		75	0
Paver	No	50		77.2	100	0
Paver	No	50		77.2	125	0
Concrete Pump Truck	No	20		81.4	150	0
Concrete Mixer Truck	No	40		78.8	250	0
Roller	No	20		80	200	0
Roller	No	20		80	300	0
Scraper	No	40		83.6	350	0
Backhoe	No	40		77.6	450	0

Results

		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		81.5	77.5	N/A	N/A	N/A	N/A
Paver		71.2	68.2	N/A	N/A	N/A	N/A
Paver		69.3	66.3	N/A	N/A	N/A	N/A
Concrete Pump Truck		71.9	64.9	N/A	N/A	N/A	N/A
Concrete Mixer Truck		64.8	60.8	N/A	N/A	N/A	N/A
Roller		68	61	N/A	N/A	N/A	N/A
Roller		64.4	57.4	N/A	N/A	N/A	N/A
Scraper		66.7	62.7	N/A	N/A	N/A	N/A
Backhoe		58.5	54.5	N/A	N/A	N/A	N/A
	Total	81.5	78.8	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

			Equipment			
			Spec	Actual	Receptor	Estimated
	Impact		Lmax	Lmax	Distance	Shielding
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Grader	No	40	85		500	0
Paver	No	50		77.2	500	0
Paver	No	50		77.2	500	0
Concrete Pump Truck	No	20		81.4	500	0
Concrete Mixer Truck	No	40		78.8	500	0
Roller	No	20		80	500	0
Roller	No	20		80	500	0
Scraper	No	40		83.6	500	0
Backhoe	No	40		77.6	500	0

Results

		Calculated (dBA)		Noise Limits (dBA)			
				Day		Evening	
Equipment		*Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader		65	61	N/A	N/A	N/A	N/A
Paver		57.2	54.2	N/A	N/A	N/A	N/A
Paver		57.2	54.2	N/A	N/A	N/A	N/A
Concrete Pump Truck		61.4	54.4	N/A	N/A	N/A	N/A
Concrete Mixer Truck		58.8	54.8	N/A	N/A	N/A	N/A
Roller		60	53	N/A	N/A	N/A	N/A
Roller		60	53	N/A	N/A	N/A	N/A
Scraper		63.6	59.6	N/A	N/A	N/A	N/A
Backhoe		57.6	53.6	N/A	N/A	N/A	N/A
	Total	65	65.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Report date: 11/11/2020
Case Description: The Meadows_Sierra Madre - Architectural Coating

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night

Nearest Residences_W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	25	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	83.7	79.7	N/A	N/A	N/A	N/A
Total	83.7	79.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Residences-W	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	57.7	53.7	N/A	N/A	N/A	N/A
Total	57.7	53.7	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Park Visitors-E	Residential	60	55	50

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	120	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	70.1	66.1	N/A	N/A	N/A	N/A
Total	70.1	66.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Typical Park Visitors - E	Residential	60	55	50

			Equipment Spec	Actual	Receptor	Estimated

Description	Impact Device	Usage(%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	550	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	56.8	52.9	N/A	N/A	N/A	N/A
Total	56.8	52.9	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Nearest Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	75	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77	69.1	N/A	N/A	N/A	N/A
Total	77	72.5	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #6 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Typical Resort - N	Residential	60	55	50

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	500	0

Results

	Calculated (dBA)		Noise Limits (dBA)			
			Day		Evening	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	60.6	52.6	N/A	N/A	N/A	N/A
Total	64	64.1	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

Traffic Noise Modeling
Input and Output

Dudek				**19 November 2020**							
MG				**TNM 2.5**							
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**13028**						**a State highway agency substantiates the use**				
RUN:	**The Meadows at Sierra Madre Existing**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Sunnyside Ave - north of Fairview Ave	24.0	point1	1	2,787.6	5,892.6	1,100.00				Average	
		point3	3	2,784.1	4,191.6	1,100.00					
Michillinda Ave - north of Sierra Madre A	24.0	point10	10	1,735.8	4,187.8	1,100.00				Average	
		point8	8	1,724.8	1,608.8	1,100.00					
Sunnyside Ave - Fairview Ave to Sierra	24.0	point11	11	2,784.1	4,191.6	1,100.00				Average	
		point4	4	2,781.9	1,613.2	1,100.00				Average	
		point5	5	2,782.3	1,609.9	1,100.00					
Sierra Madre Ave - Sunnyside Ave to Mi	24.0	point12	12	2,782.3	1,609.9	1,100.00				Average	
		point6	6	1,740.1	1,597.5	1,100.00					
Michillinda Ave - s. of Sierra Madre Ave	24.0	point23	23	1,724.8	1,608.8	1,100.00				Average	
		point2	2	1,724.8	264.2	1,100.00					

Dudek **19 November**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: **13028**
RUN: **The Meadows at Sierra Madre Existing**

Roadway	Points												
Name	Name	No.	Segment										
			Total	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			Volume	P	S	P	S	P	S	P	S	P	S
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Sunnyside Ave - north of Fairview Ave	point1	1	340	97	30	2	30	1	25	0	0	0	0
	point3	3											
Michillinda Ave - north of Sierra Madre A	point10	10	7390	97	35	2	35	1	30	0	0	0	0
	point8	8											
Sunnyside Ave - Fairview Ave to Sierra	point11	11	490	97	30	2	30	1	25	0	0	0	0
	point4	4	490	97	30	2	30	1	25	0	0	0	0
	point5	5											
Sierra Madre Ave - Sunnyside Ave to Mi	point12	12	6970	97	30	2	30	1	25	0	0	0	0
	point6	6											
Michillinda Ave - s. of Sierra Madre Ave	point23	23	9550	97	35	2	35	1	30	0	0	0	0
	point2	2											

Dudek 19 November 2020
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 13028
RUN: The Meadows at Sierra Madre Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,670.2	4,977.3	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	2,917.6	5,691.4	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST5	3	1	2,717.4	4,509.8	1,100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	1,844.7	3,989.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	1,837.5	1,246.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,249.7	1,721.9	1,100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
MG

19 November 2020
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13028
RUN: The Meadows at Sierra Madre Existing

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per Unit Area	$ per Unit Vol.	Top Width	Run:Rise	$ per Unit Length			X	Y	Z	at Point	Seg Ht Incre-ment	#Up	#Dn	On Struct?	Important Reflec-tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	100.00	0.00				0.00	point1	1	2,475.8	5,182.2	1,100.00	25.00	0.00	0	0		
									point3	3	2,462.7	4,884.8	1,100.00	25.00	0.00	0	0		
									point4	4	2,707.6	4,876.0	1,100.00	25.00	0.00	0	0		
									point5	5	2,714.5	1,709.9	1,100.00	25.00	0.00	0	0		
									point6	6	1,846.6	1,737.7	1,100.00	25.00	0.00	0	0		
									point7	7	1,853.6	5,292.6	1,100.00	25.00					
Barrier1-2-2	W	0.00	100.00	0.00				0.00	point12	12	1,857.2	859.2	1,100.00	25.00	0.00	0	0		
									point9	9	1,851.7	1,520.5	1,100.00	25.00	0.00	0	0		
									point10	10	2,683.8	1,526.0	1,100.00	25.00	0.00	0	0		
									point2	2	2,678.3	842.6	1,100.00	25.00					

Dudek
MG
19 November 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13028
RUN: The Meadows at Sierra Madre Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	52.6	66	52.6	10	----	52.6	0.0	8	-8.0
ST2	2	1	0.0	51.1	66	51.1	10	----	51.1	0.0	8	-8.0
ST5	3	1	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0
M1	4	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M2	5	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
M3	6	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 19 November 2020
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Exist w Prj

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Sunnyside Ave - north of Fairview Ave	24.0	point1	1	2,787.6	5,892.6	1,100.00				Average	
		point3	3	2,784.1	4,191.6	1,100.00					
Michillinda Ave - north of Sierra Madre A	24.0	point10	10	1,735.8	4,187.8	1,100.00				Average	
		point8	8	1,724.8	1,608.8	1,100.00					
Sunnyside Ave - Fairview Ave to Sierra	24.0	point11	11	2,784.1	4,191.6	1,100.00				Average	
		point4	4	2,781.9	1,613.2	1,100.00				Average	
		point5	5	2,782.3	1,609.9	1,100.00					
Sierra Madre Ave - Sunnyside Ave to Mi	24.0	point12	12	2,782.3	1,609.9	1,100.00				Average	
		point6	6	1,740.1	1,597.5	1,100.00					
Michillinda Ave - s. of Sierra Madre Ave	24.0	point23	23	1,724.8	1,608.8	1,100.00				Average	
		point2	2	1,724.8	264.2	1,100.00					

Dudek **19 November**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: **13028**
RUN: **The Mdws@Sierra Madre Exist w Prj**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Total	**Autos**		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			Volume	**P**	**S**	**P**	**S**	**P**	**S**	**P**	**S**	**P**	**S**
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Sunnyside Ave - north of Fairview Ave	point1	1	740	97	30	2	30	1	25	0	0	0	0
	point3	3											
Michillinda Ave - north of Sierra Madre A	point10	10	7390	97	35	2	35	1	30	0	0	0	0
	point8	8											
Sunnyside Ave - Fairview Ave to Sierra	point11	11	850	97	30	2	30	1	25	0	0	0	0
	point4	4	850	97	30	2	30	1	25	0	0	0	0
	point5	5											
Sierra Madre Ave - Sunnyside Ave to Mi	point12	12	7310	97	30	2	30	1	25	0	0	0	0
	point6	6											
Michillinda Ave - s. of Sierra Madre Ave	point23	23	9680	97	35	2	35	1	30	0	0	0	0
	point2	2											

Dudek						**19 November 2020**					
MG						**TNM 2.5**					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	**13028**										
RUN:	**The Mdws@Sierra Madre Exist w Prj**										
Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,670.2	4,977.3	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	2,917.6	5,691.4	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST5	3	1	2,717.4	4,509.8	1,100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	1,844.7	3,989.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	1,837.5	1,246.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,249.7	1,721.9	1,100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
MG

19 November 2020
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Exist w Prj

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	100.00	0.00				0.00	point1	1	2,475.8	5,182.2	1,100.00	25.00	0.00	0	0		
									point3	3	2,462.7	4,884.8	1,100.00	25.00	0.00	0	0		
									point4	4	2,707.6	4,876.0	1,100.00	25.00	0.00	0	0		
									point5	5	2,714.5	1,709.9	1,100.00	25.00	0.00	0	0		
									point6	6	1,846.6	1,737.7	1,100.00	25.00	0.00	0	0		
									point7	7	1,853.6	5,292.6	1,100.00	25.00					
Barrier1-2-2	W	0.00	100.00	0.00				0.00	point12	12	1,857.2	859.2	1,100.00	25.00	0.00	0	0		
									point9	9	1,851.7	1,520.5	1,100.00	25.00	0.00	0	0		
									point10	10	2,683.8	1,526.0	1,100.00	25.00	0.00	0	0		
									point2	2	2,678.3	842.6	1,100.00	25.00					

Dudek
MG
19 November 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Exist w Prj
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	56.0	66	56.0	10	----	56.0	0.0	8	-8.0
ST2	2	1	0.0	54.4	66	54.4	10	----	54.4	0.0	8	-8.0
ST5	3	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
M1	4	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M2	5	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
M3	6	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 19 November 2020
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 wo Prj

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Sunnyside Ave - north of Fairview Ave	24.0	point1	1	2,787.6	5,892.6	1,100.00				Average	
		point3	3	2,784.1	4,191.6	1,100.00					
Michillinda Ave - north of Sierra Madre A	24.0	point10	10	1,735.8	4,187.8	1,100.00				Average	
		point8	8	1,724.8	1,608.8	1,100.00					
Sunnyside Ave - Fairview Ave to Sierra	24.0	point11	11	2,784.1	4,191.6	1,100.00				Average	
		point4	4	2,781.9	1,613.2	1,100.00				Average	
		point5	5	2,782.3	1,609.9	1,100.00					
Sierra Madre Ave - Sunnyside Ave to Mi	24.0	point12	12	2,782.3	1,609.9	1,100.00				Average	
		point6	6	1,740.1	1,597.5	1,100.00					
Michillinda Ave - s. of Sierra Madre Ave	24.0	point23	23	1,724.8	1,608.8	1,100.00				Average	
		point2	2	1,724.8	264.2	1,100.00					

Dudek **19 November**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: **13028**
RUN: **The Mdws@Sierra Madre Yr2025 wo Prj**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Total	**Autos**		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			Volume	**P**	**S**	**P**	**S**	**P**	**S**	**P**	**S**	**P**	**S**
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Sunnyside Ave - north of Fairview Ave	point1	1	340	97	30	2	30	1	25	0	0	0	0
	point3	3											
Michillinda Ave - north of Sierra Madre A	point10	10	7390	97	35	2	35	1	30	0	0	0	0
	point8	8											
Sunnyside Ave - Fairview Ave to Sierra	point11	11	490	97	30	2	30	1	25	0	0	0	0
	point4	4	490	97	30	2	30	1	25	0	0	0	0
	point5	5											
Sierra Madre Ave - Sunnyside Ave to Mi	point12	12	6970	97	30	2	30	1	25	0	0	0	0
	point6	6											
Michillinda Ave - s. of Sierra Madre Ave	point23	23	9550	97	35	2	35	1	30	0	0	0	0
	point2	2											

Dudek						**19 November 2020**					
MG						**TNM 2.5**					
INPUT: RECEIVERS											
PROJECT/CONTRACT:	**13028**										
RUN:	**The Mdws@Sierra Madre Yr2025 wo Prj**										
Receiver											
Name	**No.**	**#DUs**	**Coordinates (ground)**			**Height**	**Input Sound Levels and Criteria**				**Active**
			X	**Y**	**Z**	**above**	**Existing**	**Impact Criteria**		**NR**	**in**
						Ground	**LAeq1h**	**LAeq1h**	**Sub'l**	**Goal**	**Calc.**
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,670.2	4,977.3	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	2,917.6	5,691.4	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST5	3	1	2,717.4	4,509.8	1,100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	1,844.7	3,989.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	1,837.5	1,246.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,249.7	1,721.9	1,100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
MG

19 November 2020
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 wo Prj

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	100.00	0.00				0.00	point1	1	2,475.8	5,182.2	1,100.00	25.00	0.00	0	0		
									point3	3	2,462.7	4,884.8	1,100.00	25.00	0.00	0	0		
									point4	4	2,707.6	4,876.0	1,100.00	25.00	0.00	0	0		
									point5	5	2,714.5	1,709.9	1,100.00	25.00	0.00	0	0		
									point6	6	1,846.6	1,737.7	1,100.00	25.00	0.00	0	0		
									point7	7	1,853.6	5,292.6	1,100.00	25.00					
Barrier1-2-2	W	0.00	100.00	0.00				0.00	point12	12	1,857.2	859.2	1,100.00	25.00	0.00	0	0		
									point9	9	1,851.7	1,520.5	1,100.00	25.00	0.00	0	0		
									point10	10	2,683.8	1,526.0	1,100.00	25.00	0.00	0	0		
									point2	2	2,678.3	842.6	1,100.00	25.00					

Dudek
MG
19 November 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 wo Prj
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	52.6	66	52.6	10	----	52.6	0.0	8	-8.0
ST2	2	1	0.0	51.1	66	51.1	10	----	51.1	0.0	8	-8.0
ST5	3	1	0.0	56.6	66	56.6	10	----	56.6	0.0	8	-8.0
M1	4	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M2	5	1	0.0	69.1	66	69.1	10	Snd Lvl	69.1	0.0	8	-8.0
M3	6	1	0.0	65.5	66	65.5	10	----	65.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 19 November 2020
MG TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 w Prj

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Sunnyside Ave - north of Fairview Ave	24.0	point1	1	2,787.6	5,892.6	1,100.00				Average	
		point3	3	2,784.1	4,191.6	1,100.00					
Michillinda Ave - north of Sierra Madre A	24.0	point10	10	1,735.8	4,187.8	1,100.00				Average	
		point8	8	1,724.8	1,608.8	1,100.00					
Sunnyside Ave - Fairview Ave to Sierra	24.0	point11	11	2,784.1	4,191.6	1,100.00				Average	
		point4	4	2,781.9	1,613.2	1,100.00				Average	
		point5	5	2,782.3	1,609.9	1,100.00					
Sierra Madre Ave - Sunnyside Ave to Mi	24.0	point12	12	2,782.3	1,609.9	1,100.00				Average	
		point6	6	1,740.1	1,597.5	1,100.00					
Michillinda Ave - s. of Sierra Madre Ave	24.0	point23	23	1,724.8	1,608.8	1,100.00				Average	
		point2	2	1,724.8	264.2	1,100.00					

Dudek **19 November**
MG **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Percentages
PROJECT/CONTRACT: **13028**
RUN: **The Mdws@Sierra Madre Yr2025 w Prj**

Roadway	**Points**												
Name	**Name**	**No.**	**Segment**										
			Total	**Autos**		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			Volume	**P**	**S**	**P**	**S**	**P**	**S**	**P**	**S**	**P**	**S**
			veh/hr	%	mph	%	mph	%	mph	%	mph	%	mph
Sunnyside Ave - north of Fairview Ave	point1	1	740	97	30	2	30	1	25	0	0	0	0
	point3	3											
Michillinda Ave - north of Sierra Madre A	point10	10	7390	97	35	2	35	1	30	0	0	0	0
	point8	8											
Sunnyside Ave - Fairview Ave to Sierra	point11	11	850	97	30	2	30	1	25	0	0	0	0
	point4	4	850	97	30	2	30	1	25	0	0	0	0
	point5	5											
Sierra Madre Ave - Sunnyside Ave to Mi	point12	12	7310	97	30	2	30	1	25	0	0	0	0
	point6	6											
Michillinda Ave - s. of Sierra Madre Ave	point23	23	9680	97	35	2	35	1	30	0	0	0	0
	point2	2											

Dudek 19 November 2020
MG TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 w Prj

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
ST1	1	1	2,670.2	4,977.3	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST2	2	1	2,917.6	5,691.4	1,100.00	5.00	0.00	66	10.0	8.0	Y
ST5	3	1	2,717.4	4,509.8	1,100.00	5.00	0.00	66	10.0	8.0	Y
M1	4	1	1,844.7	3,989.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M2	5	1	1,837.5	1,246.0	1,100.00	5.00	0.00	66	10.0	8.0	Y
M3	6	1	2,249.7	1,721.9	1,100.00	5.00	0.00	66	10.0	8.0	Y

Dudek
MG

19 November 2020
TNM 2.5

INPUT: BARRIERS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 w Prj

Barrier									Points										
Name	Type	Height		If Wall	If Berm			Add'tnl	Name	No.	Coordinates (bottom)			Height	Segment				
		Min	Max	$ per	$ per	Top	Run:Rise	$ per			X	Y	Z	at	Seg Ht	Perturbs		On	Important
				Unit	Unit	Width		Unit						Point	Incre-	#Up	#Dn	Struct?	Reflec-
				Area	Vol.			Length							ment				tions?
		ft	ft	$/sq ft	$/cu yd	ft	ft:ft	$/ft			ft	ft	ft	ft	ft				
Barrier1	W	0.00	100.00	0.00				0.00	point1	1	2,475.8	5,182.2	1,100.00	25.00	0.00	0	0		
									point3	3	2,462.7	4,884.8	1,100.00	25.00	0.00	0	0		
									point4	4	2,707.6	4,876.0	1,100.00	25.00	0.00	0	0		
									point5	5	2,714.5	1,709.9	1,100.00	25.00	0.00	0	0		
									point6	6	1,846.6	1,737.7	1,100.00	25.00	0.00	0	0		
									point7	7	1,853.6	5,292.6	1,100.00	25.00					
Barrier1-2-2	W	0.00	100.00	0.00				0.00	point12	12	1,857.2	859.2	1,100.00	25.00	0.00	0	0		
									point9	9	1,851.7	1,520.5	1,100.00	25.00	0.00	0	0		
									point10	10	2,683.8	1,526.0	1,100.00	25.00	0.00	0	0		
									point2	2	2,678.3	842.6	1,100.00	25.00					

Dudek
MG
19 November 2020
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: 13028
RUN: The Mdws@Sierra Madre Yr2025 w Prj
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
ST1	1	1	0.0	56.0	66	56.0	10	----	56.0	0.0	8	-8.0
ST2	2	1	0.0	54.4	66	54.4	10	----	54.4	0.0	8	-8.0
ST5	3	1	0.0	59.9	66	59.9	10	----	59.9	0.0	8	-8.0
M1	4	1	0.0	67.8	66	67.8	10	Snd Lvl	67.8	0.0	8	-8.0
M2	5	1	0.0	69.2	66	69.2	10	Snd Lvl	69.2	0.0	8	-8.0
M3	6	1	0.0	65.8	66	65.8	10	----	65.8	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	6	0.0	0.0	0.0
All Impacted	2	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

HVAC Specifications

24VNA9 Infinity® 19VS Variable Speed Air Conditioner with Puron® Refrigerant 2 – 5 Ton

Carrier
turn to the experts

Product Data

INFINITY® 19VS

The Infinity 19VS air conditioner offers high-efficiency variable speed performance in a remarkably small cabinet and provides up to 19 SEER cooling efficiency. The variable speed inverter capacity control delivers up to 5 stages of operation for exceptional load matching, dehumidification and zoning performance.

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

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

INDUSTRY LEADING FEATURES / BENEFITS

Energy Efficiency

- Up to 19 SEER / up to 12.5 EER
- Microtube Technology™ refrigeration system

Sound

- Sound level as low as 56 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 Infinity Touch 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
- Infinity intelligence monitors critical system parameters
- Pressure equalizer valve for easy compressor starting
- High pressure switch
- Suction pressure transducer
- 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 Infinity system and Touch Control
- Smaller and lighter than 2-stage units
- Minimum and Maximum adjustments with Infinity Touch Control
- Compatible with non-communicating thermostats

Durability

WeatherArmor Ultra™ 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	13
N	N	A	A	A/N	N	N	N	A/N	A/N	A/N	N	N
2	4	V	N	A	9	3	6	A	0	0	3	0
Product Series		Product Family	Tier	Major Series	SEER	Cooling Capacity		Variations	Open	Open	Voltage	Minor Series
24 = AC		V = VS HP	N= Infinity Series	A = Puron	9 = 19 SEER	1,000 Btuh (nominal)		A = Standard B = Design Variation	0=Not Defined	0=Not Defined	3=208/230–1	0, 1, 2...

Puron the environmentally sound refrigerant

IdealHumidity

Comfort HEAT PUMP SYSTEM

AHRI CERTIFIED www.ahridirectory.org

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.

Certified System

ISO 9001 QMI-SAI Global

c UL US

STANDARD FEATURES

FEATURES	Unit Size – Voltage, Series				
	24A–30 24B–30	25–30	36–30	48–30	60–30
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
Enhanced Diagnostics with Infinity Touch™ Control (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 air conditioners 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 outdoor unit.

Maximum Line Lengths for Air Conditioner 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	AC 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.)	24VNA9 Cooling Capacity Loss (%)				
		Total Equivalent Line Length (ft)				
		25	50	75	80	100
24B–30	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	**0.1**	**0.4**	**0.6**	**0.7**	**0.8**
24A–30 25–30	5/8	0.5	1.2	1.8	1.9	2.4
	3/4	0.1	0.4	0.6	0.7	0.8
	7/8	0.0	0.1	0.3	0.3	0.4
36–30	5/8	1.1	2.4	3.7	4.0	5.0
	3/4	0.3	0.8	1.3	1.4	1.8
	7/8	0.0	0.3	0.5	0.6	0.8
48–30	3/4	0.7	1.6	2.4	2.6	3.2
	7/8	0.3	0.7	1.1	1.2	1.6
	1 1/8	0.0	0.1	0.2	0.3	0.4
60–30	3/4	1.0	2.3	3.5	3.8	4.8
	7/8	0.4	1.0	1.7	1.8	2.3
	1 1/8	0.0	0.1	0.3	0.4	0.5

Rating Line Size in **BOLD**

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 Infinity Control 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

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	24A–30	24B–30	25–30	36–30	48–30	60–30
Operating Weight lb (kg)	160 (72.6)	135 (61.2)	160 (72.6)	160 (72.6)	216 (98.0)	241 (109.3)
Shipping Weight lb (kg)	186 (84.4)	158 (71.7)	186 (84.4)	186 (84.4)	255 (115.7)	282 (127.9)
Compressor Type	Variable Speed Rotary					
REFRIGERANT	Puron® (R–410A)					
Control	TXV (Puron® Hard Shutoff)					
Charge lb (kg)	5.5 (2.50)	4.80 (2.18)	5.5 (2.50)	6.0 (2.72)	7.5 (3.40)	8.30 (3.76)
COND FAN	Forward Swept Propeller Type, Direct Drive					
Air Discharge	Vertical					
Air Qty (CFM)	2500	2500	2500	2500	4500	4500
Motor HP	1/3	1/5	1/3	1/3	1/3	1/3
Motor RPM	1050	825	1050	1050	850	900
COND COIL						
Face Area (Sq ft)	13.90	11.12	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	6	6	6	6	8	8
VALVE CONNECT. (In. ID)						
Vapor	3/4	5/8	3/4	3/4	7/8	7/8
Liquid	3/8					
REFRIGERANT TUBES (In. OD)						
Rated Vapor*	7/8	3/4	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		
24A–30	208–230–1	253	197	N/A	17.7	1.20	23.6	40
24B–30				N/A	10.32	0.58	13.5	20
25–30				N/A	17.7	1.20	23.6	40
36–30				N/A	18.3	1.20	24.4	40
48–30				N/A	23.9	1.20	31.4	50
60–30				N/A	31.3	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	
24A–30, 24B–30	**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**
25–30	
36–30	
48–30	
60–30	

RPM-CAPACITY-SOUND (dBA)*

STAGE #	COMP RPM	CAPACITY %	SOUND (dBA)
24VNA924A			
1	1200	36%	56
2	1900	58%	61
3	2400	73%	64
4	2600	79%	68
5	3300	100%	71
24VNA924B			
1	1500	35%	55
2	2566	56%	60
3	3150	69%	65
4	3950	87%	66
5	4700	100%	68
24VNA925			
1	1200	36%	56
2	1900	58%	61
3	2400	73%	63
4	2600	79%	67
5	3300	100%	69
24VNA936			
1	1200	25%	56
2	2400	50%	61
3	3300	69%	65
4	4200	88%	69
5	4800	100%	71
24VNA948			
1	1500	35%	62
2	2460	57%	65
3	2800	65%	67
4	3650	84%	70
5	4320	100%	72
24VNA960			
1	1200	32%	57
2	2180	55%	61
3	2850	70%	64
4	3700	90%	70
5	4140	100%	72

*Estimated sound for stages 2, 3, and 4
For 2–stage operation: Low = Stage 2, High = Stage 5

SOUND POWER LEVEL (dBA)

Unit Size – Voltage, Series	Typical Octave Band Spectrum (without tone adjustment)	Min Speed Cooling	Max Speed Cooling
024A – 30	Freq (Hz)	1200 RPM	3300 RPM
	125	40.4	43.9
	250	44.4	53.9
	500	46.3	61.8
	1000	45.0	59.0
	2000	37.2	56.7
	4000	31.0	60.0
	8000	28.4	45.4
	Sound Rating (dBA)	56	71
024B – 30	Freq (Hz)	1500 RPM	4700 RPM
	125	40.5	44.0
	250	45.5	49.5
	500	41.5	53.0
	1000	44.0	52.5
	2000	39.0	50.5
	4000	34.5	53.0
	8000	31.0	45.0
	Sound Rating (dBA)	55	67
025 – 30	Freq (Hz)	1200 RPM	3300 RPM
	125	40.4	45.4
	250	44.4	57.9
	500	46.3	61.3
	1000	45.0	58.0
	2000	37.2	54.7
	4000	31.0	52.0
	8000	28.4	41.9
	Sound Rating (dBA)	56	69
036 – 30	Freq (Hz)	1200 RPM	4800 RPM
	125	40.4	43.9
	250	44.4	53.9
	500	46.3	61.8
	1000	45.0	59.0
	2000	37.2	56.7
	4000	31.0	60.0
	8000	28.4	45.4
	Sound Rating (dBA)	56	71
048 – 30	Freq (Hz)	1500 RPM	4320 RPM
	125	40.9	42.4
	250	46.4	54.4
	500	47.3	60.3
	1000	56.5	63.5
	2000	39.2	56.7
	4000	35.0	56.0
	8000	31.9	44.9
	Sound Rating (dBA)	62	72
060 – 30	Freq (Hz)	1200 RPM	4140 RPM
	125	39.0	49.5
	250	48.0	59.5
	500	46.5	62.0
	1000	45.5	60.0
	2000	39.5	58.5
	4000	36.5	55.0
	8000	35.5	48.0
	Sound Rating (dBA)	57	72

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

ACCESSORIES

KIT NUMBER	KIT NAME	24A−30 24B−30 25−30	36−30	48−30	60
KSASF0101AAA	SPRT FEET KIT			X	X
KSASF0201AAA	SPRT FEET KIT	X	X		
KSATX0201PUR	TXV KIT	X			
KSATX0301PUR	TXV KIT		X		
KSATX0401PUR	TXV KIT			X	
KSATX0501PUR	TXV KIT				X
KSBTX0201PUR	TXV KIT	X			
KSBTX0301PUR	TXV KIT		X		
KSBTX0401PUR	TXV KIT			X	

x = Accessory S = Standard

Accessory Description and Usage

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 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

CONTROLS

SYSTXCCITN01−A	Infinity Touch Control (non−Wi−Fi) version 11 or newer
SYSTXCCITC01−A	Infinity Touch Control (Wi−Fi)
SYSTXCCITW01−A	Infinity Touch Control with Wi−Fi & Wireless Access Point
SYSTXCC4ZC01	Infinity 4−Zone Damper Control Module
SYSTXCCSMS01	Infinity Smart Sensor (Optional wall control used to monitor temperature and/or fan control in an individual zone.)
SYSTXCCNIM01	Infinity Network Interface Module (Connects Heat Recovery and Energy Recovery Ventilators on non−zoning applications.)
SYSTXCCSMS01	Infinity Smart Sensor

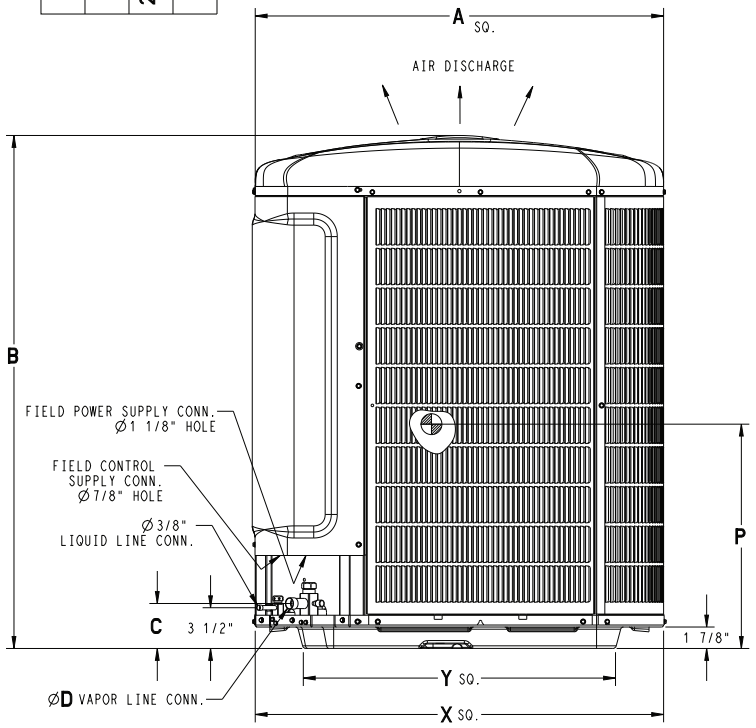
THERMOSTATS

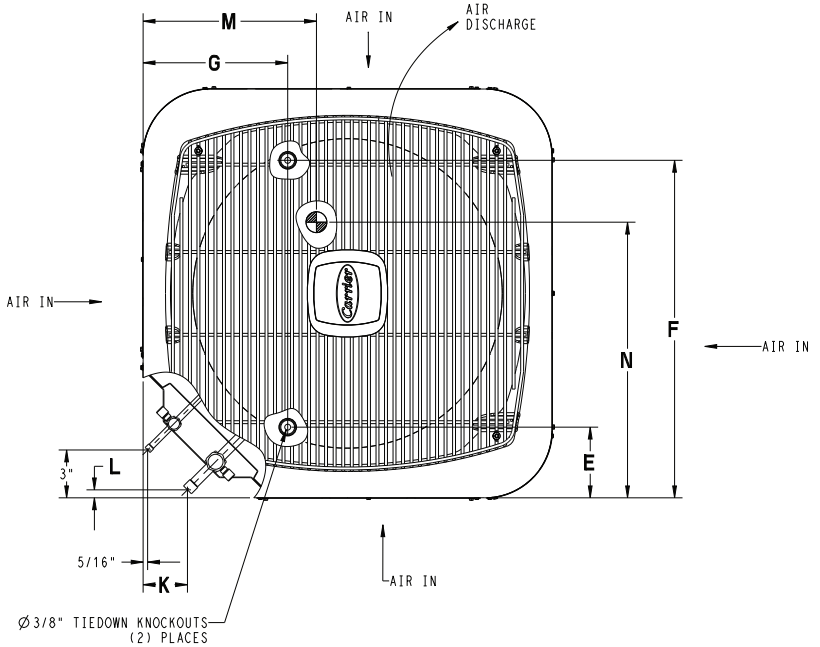
PART NUMBER	PROGRAM	GAS	ELECTRIC	HEAT	COOL
TP−PAC01	7−Day	√	√	1	1
TP−NRH01−A	NP	√	√	3	2
TP−NAC01	NP	√	√	1	1

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)
24VNA924A	0	X	O	O	O	23 1/8"	38 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	160	186	25 1/4" X 25 1/4" X 43 3/8"
24VNA924B	0	X	O	O	O	23 1/8"	31 5/8"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	11 1/4"	11 1/4"	14 1/2"	135	158	25 1/4" X 25 1/4" X 35 5/8"
24VNA925A	0	X	O	O	O	23 1/8"	38 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	160	186	25 1/4" X 25 1/4" X 43 3/8"
24VNA936A	0	X	O	O	O	23 1/8"	38 7/16"	3 3/4"	3/4"	4 7/16"	18 1/16"	7 13/16"	2 13/16"	1/2"	10 3/4"	10 3/4"	18 1/4"	160	186	25 1/4" X 25 1/4" X 43 3/8"
24VNA948A	0	X	O	O	O	31 3/16"	39 3/4"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	14 1/2"	14 5/8"	18 3/4"	216	255	33 3/8" X 33 3/8" X 46 1/8"
24VNA960A	0	X	O	O	O	31 3/16"	43 3/16"	3 7/8"	7/8"	6 9/16"	24 11/16"	9 1/8"	2 15/16"	5/8"	16 1/2"	15"	20"	241	282	33 3/8" X 33 3/8" X 49 9/16"
		208-230-1-60	230-1-60	208/230-3-60	460-3-60															

X = YES
O = NO





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"
-	25 3/4"	20 7/16"
48,60	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 louver panels require 24" (609.6 mm) between units.

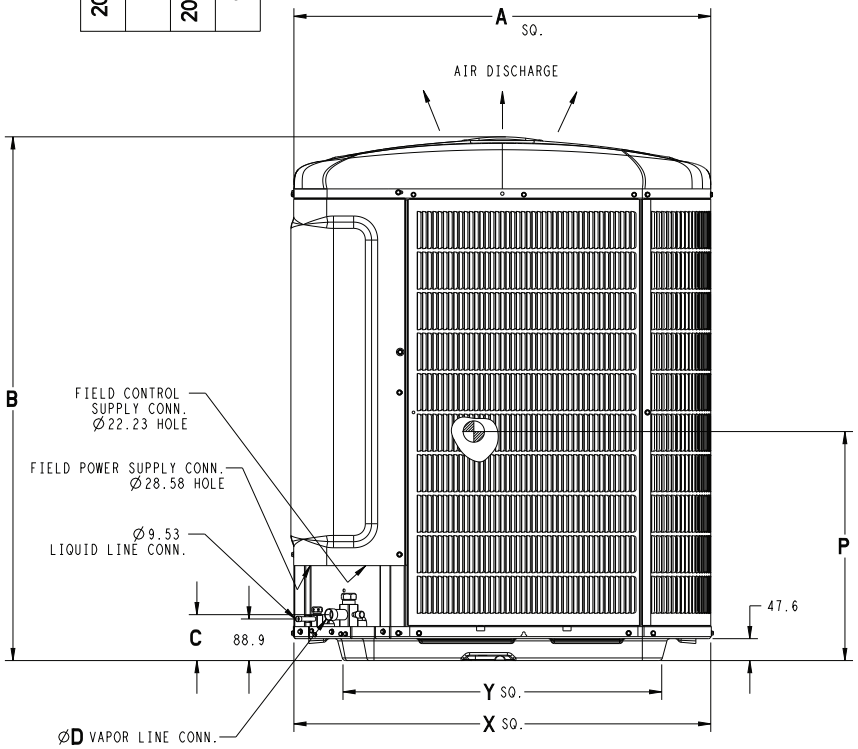
On rooftop applications, locate unit at least 6 in. (152.4 mm) above roof surface.

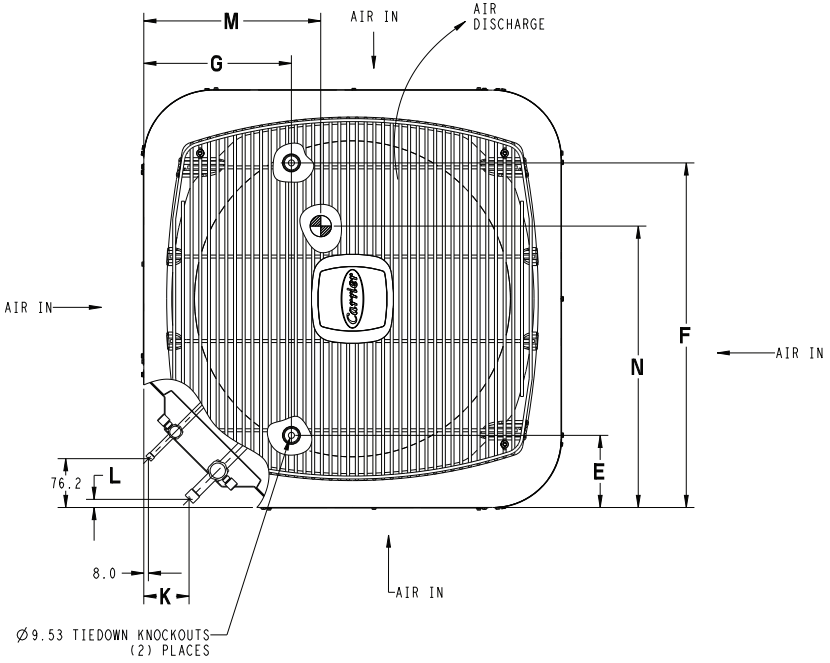
DIMENSIONS - SI

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)
24VNA924A	0	X	O	O	O	587.3	975.9	96.1	19.1	112.7	458.8	198.4	71.4	12.7	273.1	273.1	463.6	72.6	84.4	641.5 X 641.5 X 1102.2
24VNA924B	0	X	O	O	O	587.3	803.1	96.1	19.1	112.7	458.8	198.4	71.4	12.7	285.8	285.8	368.3	61.2	71.7	641.5 X 641.5 X 905.2
24VNA925A	0	X	O	O	O	587.3	975.9	96.1	19.1	112.7	458.8	198.4	71.4	12.7	273.1	273.1	463.6	72.6	84.4	641.5 X 641.5 X 1102.2
24VNA936A	0	X	O	O	O	587.3	975.9	96.1	19.1	112.7	458.8	198.4	71.4	12.7	273.1	273.1	463.6	72.6	84.4	641.5 X 641.5 X 1102.2
24VNA948A	0	X	O	O	O	792.2	1010.3	98.4	22.2	166.7	627.1	231.8	74.6	15.9	368.3	371.5	476.3	98.0	115.7	846.6 X 846.6 X 1172.2
24VNA960A	0	X	O	O	O	792.2	1096.7	98.4	22.2	166.7	627.1	231.8	74.6	15.9	419.1	381.0	508.0	109.3	127.9	846.6 X 846.6 X 1258.6

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

X = YES
O = NO





UNIT SIZE	"X" 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 louver panels require 24" (609.6 mm) between units.

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

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	Coil Model Number	Furnace Model Number	Cooling Capacity High	SEER	EER	ID CFM
24VNA924A**30	FE4AN(B,F)005L+UI		23000	18.0	11.0	825
24VNA924A**30	FV4CN(B,F)003L		22600	16.0	11.0	700
24VNA924B**30	FE4ANF002L+UI		24000	18.0	11.0	825
24VNA924B**30	FV4CNF002L		23800	16.0	11.0	700
24VNA925A**30	FE4AN(B,F)005L+UI		24000	19.0	12.5	825
24VNA925A**30	FV4CN(B,F)003L		22600	19.0	12.2	700
24VNA936A**30	FE4AN(B,F)005L+UI		35000	18.0	10.5	1050
24VNA936A**30	FV4CN(B,F)005L		35000	16.0	10.5	1050
24VNA948A**30	FE4ANB006L+UI		46500	19.0	11.0	1400
24VNA948A**30	FV4CNB006L		46000	15.5	11.0	1400
24VNA960A**30	FE4ANB006L+UI		57000	17.0	10.0	1600
24VNA960A**30	FV4CNB006L		57500	15.0	10.0	1750

* 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.
EER — Energy Efficiency Ratio
SEER — Seasonal Energy Efficiency Ratio
UI — User Interface

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

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE

EDB °F (°C)	EVAP. AIR	24VNA924A / 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)			
	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**	ID SCFM	Capacity MBtuh		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																									
75 (23.9)	72 (22.2)	**825**	22.60	9.53	3.21	**825**	24.02	10.05	2.61	**825**	25.33	10.54	2.07	**825**	26.67	11.04	1.60	**825**	27.98	11.54	1.20	**825**	29.26	12.02	0.84
	67 (19.4)		20.56	13.19	3.20		21.88	13.76	2.63		23.10	14.31	2.09		24.34	14.86	1.64		25.55	15.41	1.24		26.73	15.95	0.89
	63 (17.2)		19.06	16.04	3.19		20.29	16.66	2.63		21.44	17.25	2.10		22.61	17.85	1.66		23.74	18.44	1.26		24.85	19.01	0.93
	57 (13.9)		18.10	18.10	3.18		19.09	19.09	2.63		20.04	20.04	2.11		20.97	20.97	1.67		21.89	21.89	1.29		22.78	22.78	0.96
80 (26.7)	72 (22.2)	**825**	22.44	13.14	3.20	**825**	23.85	13.70	2.61	**825**	25.15	14.23	2.06	**825**	26.49	14.77	1.60	**825**	27.80	15.31	1.19	**825**	29.07	15.84	0.84
	67 (19.4)		20.48	16.76	3.20		21.79	17.38	2.62		23.00	17.96	2.09		24.24	18.56	1.63		25.45	19.15	1.23		26.62	19.73	0.89
	63 (17.2)		19.26	19.26	3.19		20.37	20.18	2.63		21.49	20.85	2.10		22.63	21.51	1.65		23.75	22.15	1.26		24.85	22.77	0.92
	57 (13.9)		19.23	19.23	3.19		20.28	20.28	2.63		21.25	21.25	2.10		22.23	22.23	1.66		23.18	23.18	1.27		24.10	24.10	0.94
STAGE 3																									
75 (23.9)	72 (22.2)	**650**	15.08	6.47	1.54	**650**	16.06	6.82	1.33	**650**	16.82	7.10	1.10	**650**	17.75	7.44	0.91	**650**	18.67	7.78	0.72	**650**	19.58	8.12	0.54
	67 (19.4)		13.68	9.15	1.54		14.59	9.54	1.35		15.33	9.87	1.12		16.19	10.25	0.94		17.03	10.62	0.76		17.86	10.99	0.59
	63 (17.2)		12.70	11.25	1.54		13.54	11.67	1.36		14.27	12.04	1.13		15.07	12.45	0.96		15.86	12.85	0.79		16.62	13.24	0.62
	57 (13.9)		12.27	12.27	1.54		12.97	12.97	1.37		13.58	13.58	1.14		14.24	14.24	0.97		14.89	14.89	0.81		15.52	15.52	0.65
80 (26.7)	72 (22.2)	**650**	14.96	9.12	1.53	**650**	15.93	9.51	1.33	**650**	16.68	9.81	1.10	**650**	17.61	10.18	0.91	**650**	18.52	10.55	0.72	**650**	19.47	10.93	0.54
	67 (19.4)		13.64	11.78	1.54		14.54	12.20	1.35		15.27	12.55	1.12		16.13	12.96	0.94		16.96	13.36	0.76		17.78	13.76	0.59
	63 (17.2)		13.08	13.08	1.54		13.82	13.82	1.36		14.43	14.43	1.13		15.14	15.09	0.96		15.89	15.56	0.79		16.65	15.99	0.62
	57 (13.9)		13.06	13.06	1.54		13.79	13.79	1.36		14.41	14.41	1.13		15.10	15.10	0.96		15.77	15.77	0.79		16.42	16.42	0.63
STAGE 1																									
75 (23.9)	72 (22.2)	**650**	11.92	5.31	0.85	**650**	12.72	5.59	0.82	**585**	10.55	4.66	0.46	**585**	11.18	4.89	0.44	**585**	11.84	5.13	0.39	**585**	12.52	5.37	0.28
	67 (19.4)		10.80	7.83	0.86		11.55	8.14	0.83		9.58	6.85	0.47		10.16	7.10	0.47		10.74	7.35	0.43		11.36	7.61	0.34
	63 (17.2)		10.05	9.78	0.86		10.74	10.13	0.84		8.93	8.56	0.49		9.46	8.83	0.49		10.00	9.10	0.46		10.55	9.37	0.38
	57 (13.9)		9.97	9.97	0.86		10.57	10.57	0.85		8.82	8.82	0.49		9.29	9.29	0.50		9.75	9.75	0.47		10.21	10.21	0.40
80 (26.7)	72 (22.2)	**650**	11.80	7.81	0.85	**650**	12.59	8.12	0.82	**585**	10.41	6.81	0.46	**585**	11.06	7.06	0.44	**585**	11.73	7.32	0.38	**585**	12.41	7.59	0.28
	67 (19.4)		10.80	10.29	0.86		11.52	10.64	0.83		9.55	8.98	0.47		10.13	9.25	0.47		10.71	9.53	0.43		11.32	9.81	0.34
	63 (17.2)		10.66	10.66	0.86		11.28	11.28	0.84		9.40	9.40	0.48		9.89	9.89	0.48		10.37	10.37	0.44		10.87	10.87	0.36
	57 (13.9)		10.64	10.64	0.86		11.26	11.26	0.84		9.39	9.39	0.48		9.87	9.87	0.48		10.35	10.35	0.44		10.85	10.85	0.36

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 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA924A

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005L	1.00	1.00	
FE4AN(B,F)003L	0.96	1.00	
FE4ANB006L	0.98	1.08	
FE4ANF002L	0.96	1.00	
CAP**3614AL*	0.98	1.03	58CV(A,X)070–12
CAP**3617AL*	0.98	1.03	58CV(A,X)070–12
CNPH*3617AL*	0.98	1.08	58CV(A,X)070–12
CNPV*3617AL*	0.97	1.01	58CV(A,X)070–12
CNPV*3717AL*	0.97	1.02	58CV(A,X)070–12
CNPV*4217AL*	0.96	1.00	58CV(A,X)070–12
CSPH*3612AL*	1.00	1.05	58CV(A,X)070–12
CSPH*4212AL*	1.00	1.05	58CV(A,X)070–12
CAP**3617AL*	0.98	1.03	58CV(A,X)090–16
CAP**3621AL*	0.98	1.03	58CV(A,X)090–16
CAP**4221AL*	0.99	1.04	58CV(A,X)090–16
CNPH*3617AL*	0.98	1.03	58CV(A,X)090–16
CNPH*4221AL*	0.99	1.04	58CV(A,X)090–16
CNPV*3617AL*	0.97	1.01	58CV(A,X)090–16
CNPV*3621AL*	0.97	1.01	58CV(A,X)090–16
CNPV*3717AL*	0.97	0.97	58CV(A,X)090–16
CNPV*4217AL*	0.96	1.00	58CV(A,X)090–16
CNPV*4221AL*	0.96	1.00	58CV(A,X)090–16
CSPH*3612AL*	1.00	1.00	58CV(A,X)090–16
CSPH*4212AL*	1.01	1.01	58CV(A,X)090–16
CAP**3617AL*	0.98	1.03	59*N*A060V17**14
CAP**3621AL*	0.98	1.03	59*N*A060V17**14
CAP**4221AL*	0.98	1.03	59*N*A060V17**14
CNPH*3617AL*	0.97	1.07	59*N*A060V17**14
CNPH*4221AL*	0.98	1.08	59*N*A060V17**14
CNPV*3617AL*	0.94	1.03	59*N*A060V17**14
CNPV*3621AL*	0.94	1.03	59*N*A060V17**14
CNPV*3717AL*	0.97	1.02	59*N*A060V17**14
CNPV*4221AL*	0.95	1.04	59*N*A060V17**14
CSPH*3612AL*	0.99	1.04	59*N*A060V17**14
CSPH*4212AL*	1.00	1.05	59*N*A060V17**14
CAP**3617AL*	0.98	1.03	59*N*A080V17**14
CAP**3621AL*	0.98	1.03	59*N*A080V17**14
CAP**4221AL*	0.99	1.04	59*N*A080V17**14
CNPH*3617AL*	0.98	1.08	59*N*A080V17**14
CNPH*4221AL*	0.99	1.09	59*N*A080V17**14
CNPV*3617AL*	0.95	1.04	59*N*A080V17**14
CNPV*3621AL*	0.95	0.99	59*N*A080V17**14
CNPV*3717AL*	0.97	1.02	59*N*A080V17**14
CNPV*4221AL*	0.97	1.02	59*N*A080V17**14
CSPH*3612AL*	1.00	1.05	59*N*A080V17**14
CSPH*4212AL*	1.00	1.05	59*N*A080V17**14
CAP**3621AL*	0.98	1.03	59MN7A060V21**20
CAP**4221AL*	0.99	1.04	59MN7A060V21**20
CAP**4224AL*	0.99	1.04	59MN7A060V21**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003L	0.94	0.94	0.99	0.94	
FV4CNF002L	0.94	0.94	1.00	0.97	
CAP**2414AL*	0.94	0.99	1.08	1.12	58PH*045–08
CAP**2417AL*	0.94	0.99	1.09	1.12	58PH*045–08
CAP**3014AL*	0.95	0.95	1.08	1.11	58PH*045–08
CAP**3017AL*	0.95	0.95	1.09	1.11	58PH*045–08
CNPV*2414AL*	0.93	0.98	1.08	1.12	58PH*045–08
CNPV*2417AL*	0.93	0.98	1.08	1.12	58PH*045–08
CNPV*3014AL*	0.95	1.00	1.08	1.11	58PH*045–08
CNPV*3017AL*	0.95	1.00	1.09	1.11	58PH*045–08
CNPV*3117AL*	0.95	0.95	1.12	1.11	58PH*045–08
CAP**2414AL*	0.93	0.93	1.08	1.08	58CTW045–12
CAP**2417AL*	0.94	0.94	1.08	1.07	58CTW045–12
CAP**3014AL*	0.93	0.93	1.10	1.09	58CTW045–12
CAP**3017AL*	0.93	0.93	1.11	1.09	58CTW045–12
CNPV*2414AL*	0.93	0.98	1.08	1.07	58CTW045–12
CNPV*2417AL*	0.93	0.98	1.08	1.07	58CTW045–12
CNPV*3014AL*	0.93	0.97	1.10	1.09	58CTW045–12
CNPV*3017AL*	0.93	0.93	1.11	1.09	58CTW045–12
CNPV*3117AL*	0.94	0.94	1.12	1.06	58CTW045–12
CSPH*3012AL*	0.93	0.93	1.11	1.08	58CTW045–12
CAP**2417AL*	0.93	0.93	1.11	1.09	58CTW070–16
CAP**3017AL*	0.93	0.93	1.11	1.08	58CTW070–16
CNPH*2417AL*	0.96	1.05	1.09	1.07	58CTW070–16
CNPH*3017AL*	0.93	0.98	1.11	1.08	58CTW070–16
CNPH*3117AL*	0.95	0.95	1.12	1.05	58CTW070–16
CNPV*2417AL*	0.93	0.98	1.08	1.07	58CTW070–16
CNPV*3017AL*	0.93	0.93	1.11	1.08	58CTW070–16
CNPV*3117AL*	0.95	0.95	1.12	1.05	58CTW070–16
CSPH*2412AL*	0.97	1.01	1.09	1.08	58CTW070–16
CSPH*3012AL*	0.93	0.93	1.11	1.07	58CTW070–16
CSPH*2412AL*	0.94	0.94	1.13	1.15	58CTW090–16
CSPH*3012AL*	0.95	0.95	1.14	1.12	58CTW090–16
CAP**2414AL*	0.95	1.00	1.08	1.13	59*P2A040E14**10
CAP**2417AL*	0.93	0.98	1.08	1.13	59*P2A040E14**10
CAP**3014AL*	0.94	0.99	1.07	1.12	59*P2A040E14**10
CAP**3017AL*	0.95	1.00	1.08	1.12	59*P2A040E14**10
CNPV*2414AL*	0.93	0.97	1.07	1.13	59*P2A040E14**10
CNPV*2417AL*	0.93	0.97	1.07	1.13	59*P2A040E14**10
CNPV*3014AL*	0.94	0.99	1.07	1.12	59*P2A040E14**10
CNPV*3017AL*	0.95	1.00	1.08	1.12	59*P2A040E14**10
CNPV*3117AL*	0.94	0.94	1.11	1.11	59*P2A040E14**10
CSPH*2412AL*	0.96	1.00	1.10	1.23	59*P2A040E14**10
CSPH*3012AL*	0.97	1.01	1.09	1.11	59*P2A040E14**10
CAP**2417AL*	0.93	0.98	1.07	1.12	59*P2A040E17**12
CAP**3017AL*	0.95	1.00	1.08	1.13	59*P2A040E17**12
CNPH*2417AL*	0.95	1.05	1.08	1.13	59*P2A040E17**12
CNPH*3017AL*	0.95	1.05	1.08	1.12	59*P2A040E17**12
CNPH*3117AL*	0.97	1.01	1.09	1.10	59*P2A040E17**12
CNPV*2417AL*	0.93	0.97	1.07	1.13	59*P2A040E17**12
CNPV*3017AL*	0.95	1.00	1.08	1.12	59*P2A040E17**12
CNPV*3117AL*	0.97	1.01	1.09	1.10	59*P2A040E17**12
CSPH*2412AL*	0.96	1.00	1.10	1.25	59*P2A040E17**12
CAP**2414AL*	0.94	0.94	1.09	1.10	59*P2A060E14**12
CAP**2417AL*	0.95	0.95	1.10	1.10	59*P2A060E14**12
CAP**3014AL*	0.93	0.93	1.11	1.11	59*P2A060E14**12

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CAP**3017AL*	0.94	0.94	1.12	1.11	59*P2A060E14**12
CNPV*2414AL*	0.94	0.99	1.09	1.09	59*P2A060E14**12
CNPV*2417AL*	0.94	0.99	1.09	1.09	59*P2A060E14**12
CNPV*3014AL*	0.93	0.98	1.11	1.11	59*P2A060E14**12
CNPV*3017AL*	0.94	0.94	1.12	1.11	59*P2A060E14**12
CNPV*3117AL*	0.96	0.96	1.13	1.09	59*P2A060E14**12
CSPH*2412AL*	0.95	0.95	1.09	1.10	59*P2A060E14**12
CSPH*3012AL*	0.94	0.94	1.12	1.10	59*P2A060E14**12
CNPH*2417AL*	0.96	1.00	1.11	1.13	59*P2A060E17**14
CSPH*2412AL*	0.95	0.95	1.13	1.15	59*P2A060E17**14
CNPH*2417AL*	0.96	1.00	1.10	1.10	59*P2A080E17**16
CSPH*2412AL*	0.94	0.94	1.12	1.12	59*P2A080E17**16
CAP**2414AL*	0.93	1.03	1.07	1.17	59*P5A040E14**10
CAP**2417AL*	0.94	1.04	1.07	1.17	59*P5A040E14**10
CAP**3014AL*	0.95	1.05	1.07	1.16	59*P5A040E14**10
CAP**3017AL*	0.95	1.05	1.07	1.15	59*P5A040E14**10
CNPV*2414AL*	0.93	1.03	1.07	1.17	59*P5A040E14**10
CNPV*2417AL*	0.93	1.03	1.07	1.17	59*P5A040E14**10
CNPV*3014AL*	0.95	1.05	1.07	1.16	59*P5A040E14**10
CNPV*3017AL*	0.95	1.05	1.07	1.15	59*P5A040E14**10
CNPV*3117AL*	0.96	1.05	1.08	1.13	59*P5A040E14**10
CSPH*2412AL*	0.95	1.05	1.07	1.17	59*P5A040E14**10
CSPH*3012AL*	0.95	1.05	1.08	1.15	59*P5A040E14**10
CAP**2417AL*	0.93	0.97	1.07	1.14	59*P5A040E17**12
CAP**3017AL*	0.93	0.98	1.07	1.13	59*P5A040E17**12
CNPH*2417AL*	0.94	1.04	1.08	1.15	59*P5A040E17**12
CNPH*3017AL*	0.93	1.03	1.07	1.13	59*P5A040E17**12
CNPH*3117AL*	0.96	1.00	1.09	1.12	59*P5A040E17**12
CNPV*2417AL*	0.92	1.01	1.07	1.14	59*P5A040E17**12
CNPV*3017AL*	0.93	0.98	1.07	1.13	59*P5A040E17**12
CNPV*3117AL*	0.94	0.99	1.09	1.12	59*P5A040E17**12
CSPH*2412AL*	0.96	1.05	1.10	1.23	59*P5A040E17**12
CSPH*3012AL*	0.93	0.98	1.08	1.13	59*P5A040E17**12
CNPH*2417AL*	0.96	1.05	1.10	1.17	59*P5A060E17**14
CSPH*2412AL*	0.97	1.01	1.10	1.16	59*P5A060E17**14

See notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAP. AIR	24VNA924B / 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)			
	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**	ID SCFM	Capacity MBtuh		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																									
75 (23.9)	72 (22.2)	**825**	23.43	9.90	2.85	**825**	25.03	10.49	2.52	**825**	26.46	11.02	2.20	**825**	28.00	11.60	1.91	**825**	29.51	12.16	1.63	**825**	31.01	12.73	1.37
	67 (19.4)		21.30	13.70	2.81		22.76	14.32	2.49		24.07	14.89	2.18		25.46	15.50	1.90		26.82	16.10	1.63		28.19	16.70	1.38
	63 (17.2)		19.74	16.69	2.78		21.07	17.34	2.47		22.29	17.94	2.17		23.58	18.57	1.89		24.85	19.20	1.63		26.11	19.82	1.39
	57 (13.9)		18.74	18.74	2.76		19.81	19.81	2.45		20.78	20.78	2.15		21.79	21.79	1.88		22.78	22.78	1.63		23.74	23.74	1.39
80 (26.7)	72 (22.2)	**825**	23.36	13.70	2.85	**825**	24.96	14.32	2.52	**825**	26.39	14.88	2.20	**825**	27.93	15.49	1.91	**825**	29.44	16.09	1.63	**825**	30.94	16.69	1.37
	67 (19.4)		21.24	17.45	2.81		22.69	18.11	2.49		24.00	18.72	2.18		25.39	19.36	1.90		26.76	19.99	1.63		28.12	20.63	1.38
	63 (17.2)		19.96	19.96	2.78		21.18	20.93	2.47		22.35	21.63	2.17		23.61	22.34	1.89		24.86	23.02	1.63		26.10	23.70	1.38
	57 (13.9)		19.93	19.93	2.78		21.05	21.05	2.47		22.07	22.07	2.16		23.12	23.12	1.89		24.16	24.16	1.63		25.17	25.17	1.39
STAGE 3																									
75 (23.9)	72 (22.2)	**650**	16.60	7.18	1.72	**650**	17.75	7.59	1.53	**650**	18.75	7.96	1.31	**650**	19.88	8.37	1.12	**650**	20.99	8.78	0.94	**650**	22.08	9.18	0.77
	67 (19.4)		15.01	10.22	1.72		16.06	10.66	1.53		16.99	11.06	1.32		18.00	11.49	1.14		18.99	11.92	0.97		19.97	12.34	0.81
	63 (17.2)		13.88	12.59	1.71		14.82	13.06	1.54		15.70	13.48	1.32		16.62	13.94	1.15		17.52	14.38	0.99		18.40	14.82	0.84
	57 (13.9)		13.48	13.48	1.71		14.25	14.25	1.54		14.97	14.97	1.32		15.70	15.70	1.16		16.40	16.40	1.01		17.10	17.10	0.86
80 (26.7)	72 (22.2)	**650**	16.54	10.24	1.72	**650**	17.69	10.68	1.53	**650**	18.68	11.07	1.31	**650**	19.81	11.51	1.12	**650**	20.92	11.94	0.94	**650**	22.01	12.37	0.77
	67 (19.4)		14.98	13.23	1.72		16.01	13.70	1.53		16.94	14.13	1.32		17.95	14.59	1.14		18.93	15.05	0.97		19.91	15.50	0.81
	63 (17.2)		14.42	14.42	1.72		15.24	15.24	1.53		15.99	15.99	1.32		16.77	16.77	1.15		17.61	17.39	0.99		18.46	17.89	0.83
	57 (13.9)		14.40	14.40	1.72		15.22	15.22	1.53		15.96	15.96	1.32		16.74	16.74	1.15		17.50	17.50	0.99		18.23	18.23	0.84
STAGE 1																									
75 (23.9)	72 (22.2)	**650**	14.01	6.30	1.38	**650**	15.00	6.65	1.24	**585**	9.25	4.60	0.54	**585**	9.85	4.81	0.46	**585**	10.45	5.01	0.37	**585**	11.04	5.22	0.29
	67 (19.4)		12.64	9.35	1.39		13.52	9.73	1.25		8.32	7.38	0.55		8.85	7.61	0.48		9.37	7.84	0.40		9.89	8.07	0.33
	63 (17.2)		11.71	11.62	1.39		12.49	12.06	1.26		8.11	8.11	0.55		8.56	8.56	0.48		9.00	9.00	0.41		9.43	9.43	0.34
	57 (13.9)		11.67	11.67	1.39		12.35	12.35	1.26		8.11	8.11	0.55		8.55	8.55	0.48		8.98	8.98	0.41		9.42	9.42	0.34
80 (26.7)	72 (22.2)	**650**	13.95	9.39	1.38	**650**	14.94	9.76	1.24	**585**	9.20	7.43	0.54	**585**	9.80	7.66	0.45	**585**	10.39	7.90	0.37	**585**	10.98	8.13	0.29
	67 (19.4)		12.66	12.32	1.39		13.52	12.75	1.25		8.77	8.77	0.54		9.26	9.26	0.47		9.73	9.73	0.39		10.19	10.19	0.31
	63 (17.2)		12.55	12.55	1.39		13.28	13.28	1.26		8.77	8.77	0.54		9.25	9.25	0.47		9.72	9.72	0.39		10.18	10.18	0.31
	57 (13.9)		12.53	12.53	1.39		13.26	13.26	1.26		8.76	8.76	0.54		9.24	9.24	0.47		9.71	9.71	0.39		10.17	10.17	0.31

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

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

See additional notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA924B

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANF002L	1.00	1.00	
FE4AN(B,F)003L	1.00	1.00	
FE4AN(B,F)005L	1.00	1.00	
CAP**2414AL*	0.98	1.03	58CV(A,X)070−12
CAP**2417AL*	0.98	1.03	59*N*A060V17**14
CAP**2417AL*	0.98	1.03	59*N*A080V17**14
CAP**2417AL*	0.98	0.98	58CV(A,X)090−16
CAP**3014AL*	0.98	0.98	58CV(A,X)070−12
CAP**3017AL*	0.98	1.03	59*N*A060V17**14
CAP**3017AL*	0.98	1.03	59*N*A080V17**14
CAP**3017AL*	0.98	0.98	58CV(A,X)090−16
CAP**3614AL*	1.00	1.00	58CV(A,X)070−12
CAP**3617AL*	1.00	1.00	59*N*A060V17**14
CAP**3617AL*	1.00	1.00	59*N*A080V17**14
CAP**3617AL*	1.00	1.00	58CV(A,X)070−12
CAP**3617AL*	1.00	1.00	58CV(A,X)090−16
CAP**3621AL*	1.00	1.00	59*N*A060V17**14
CAP**3621AL*	1.00	1.00	59*N*A080V17**14
CAP**3621AL*	1.00	1.00	58CV(A,X)090−16
CAP**4221AL*	1.00	1.00	59*N*A060V17**14
CAP**4221AL*	1.00	1.00	59*N*A080V17**14
CAP**4221AL*	1.00	1.00	58CV(A,X)090−16
CAP**4817AL*	1.00	1.00	59*N*A060V17**14
CAP**4817AL*	1.00	1.00	59*N*A080V17**14
CAP**4817AL*	1.00	1.00	58CV(A,X)070−12
CAP**4817AL*	1.00	1.00	58CV(A,X)090−16
CAP**4821AL*	1.00	1.00	59*N*A060V17**14
CAP**4821AL*	1.00	1.00	59*N*A080V17**14
CAP**4821AL*	1.00	1.00	58CV(A,X)090−16
CNPH*3617AL*	1.00	1.05	59*N*A060V17**14
CNPH*3617AL*	1.00	1.05	59*N*A080V17**14
CNPH*4221AL*	1.00	1.05	59*N*A060V17**14
CNPH*4221AL*	1.00	1.05	59*N*A080V17**14
CNPH*4221AL*	1.00	1.00	58CV(A,X)090−16
CNPV*3117AL*	1.00	1.00	59*N*A060V17**14
CNPV*3117AL*	1.00	1.00	59*N*A080V17**14
CNPV*3117AL*	1.00	1.00	58CV(A,X)070−12
CNPV*3117AL*	1.00	1.00	58CV(A,X)090−16
CNPV*3617AL*	1.00	1.05	59*N*A060V17**14
CNPV*3617AL*	1.00	1.05	59*N*A080V17**14
CNPV*3621AL*	1.00	1.05	59*N*A060V17**14
CNPV*3621AL*	1.00	1.05	59*N*A080V17**14
CNPV*3621AL*	1.00	1.00	58CV(A,X)090−16
CNPV*3717AL*	1.00	1.00	59*N*A060V17**14
CNPV*3717AL*	1.00	1.00	59*N*A080V17**14
CNPV*4217AL*	1.00	1.05	59*N*A060V17**14
CNPV*4217AL*	1.00	1.00	59*N*A080V17**14
CNPV*4221AL*	1.00	1.05	59*N*A060V17**14
CNPV*4221AL*	1.00	1.05	59*N*A080V17**14
CNPV*4221AL*	1.00	1.00	58CV(A,X)090−16
CNPV*4821AL*	1.00	1.00	59*N*A060V17**14
CNPV*4821AL*	1.00	1.00	59*N*A080V17**14
CNPV*4821AL*	1.00	1.00	58CV(A,X)090−16
CSPH*3612AL*	1.00	1.00	59*N*A060V17**14
CSPH*3612AL*	1.00	1.00	59*N*A080V17**14
CSPH*3612AL*	1.00	1.00	58CV(A,X)070−12
CSPH*3612AL*	1.00	1.00	58CV(A,X)090−16
CSPH*4212AL*	1.00	1.00	59*N*A060V17**14
CSPH*4212AL*	1.00	1.00	59*N*A080V17**14

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CSPH*4212AL*	1.00	1.00	58CV(A,X)070−12
CSPH*4212AL*	1.00	1.00	58CV(A,X)090−16
CSPH*4812AL*	1.00	1.00	59*N*A060V17**14
CSPH*4812AL*	1.00	1.00	59*N*A080V17**14

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNF002L	1.00	1.00	1.00	1.00	
FV4CN(B,F)003L	1.04	0.95	0.99	0.98	
FV4CNF002L	1.03	0.94	1.00	1.00	
CAP**2414AL*	1.03	0.99	1.08	1.16	59*P2A040E14**10
CAP**2414AL*	1.03	0.93	1.09	1.13	59*P2A060E14**12
CAP**2414AL*	1.02	1.02	1.07	1.19	59*P5A040E14**10
CAP**2414AL*	1.02	0.97	1.08	1.15	58PH*045−08
CAP**2414AL*	1.02	0.92	1.08	1.11	58CTW045−12
CAP**2417AL*	1.02	0.97	1.08	1.16	59*P2A040E14**10
CAP**2417AL*	1.02	0.97	1.07	1.15	59*P2A040E17**12
CAP**2417AL*	1.03	0.94	1.10	1.14	59*P2A060E14**12
CAP**2417AL*	1.02	1.02	1.07	1.19	59*P5A040E14**10
CAP**2417AL*	1.01	0.96	1.07	1.17	59*P5A040E17**12
CAP**2417AL*	1.03	0.98	1.09	1.16	58PH*045−08
CAP**2417AL*	1.03	0.93	1.08	1.10	58CTW045−12
CAP**2417AL*	1.03	0.93	1.11	1.13	58CTW070−16
CAP**3014AL*	1.03	0.98	1.07	1.16	59*P2A040E14**10
CAP**3014AL*	1.04	0.95	1.11	1.16	59*P2A060E14**12
CAP**3014AL*	1.03	1.03	1.07	1.19	59*P5A040E14**10
CAP**3014AL*	1.03	0.94	1.08	1.15	58PH*045−08
CAP**3014AL*	1.03	0.94	1.10	1.13	58CTW045−12
CAP**3017AL*	1.03	0.99	1.08	1.16	59*P2A040E14**10
CAP**3017AL*	1.03	0.99	1.08	1.16	59*P2A040E17**12
CAP**3017AL*	1.04	0.95	1.12	1.16	59*P2A060E14**12
CAP**3017AL*	1.03	1.03	1.07	1.18	59*P5A040E14**10
CAP**3017AL*	1.02	0.97	1.07	1.17	59*P5A040E17**12
CAP**3017AL*	1.03	0.94	1.09	1.15	58PH*045−08
CAP**3017AL*	1.03	0.94	1.11	1.13	58CTW045−12
CAP**3017AL*	1.04	0.95	1.11	1.12	58CTW070−16
CNPH*2417AL*	1.03	1.03	1.08	1.16	59*P2A040E17**12
CNPH*2417AL*	1.04	0.99	1.11	1.17	59*P2A060E17**14
CNPH*2417AL*	1.04	0.99	1.10	1.14	59*P2A080E17**16
CNPH*2417AL*	1.03	1.03	1.09	1.11	58CTW070−16
CNPH*3017AL*	1.03	1.03	1.08	1.16	59*P2A040E17**12
CNPH*3017AL*	1.02	1.02	1.07	1.17	59*P5A040E17**12
CNPH*3017AL*	1.04	0.99	1.11	1.12	58CTW070−16
CNPH*3117AL*	1.06	1.01	1.09	1.14	59*P2A040E17**12
CNPH*3117AL*	1.04	0.99	1.09	1.16	59*P5A040E17**12
CNPH*3117AL*	1.07	0.97	1.12	1.10	58CTW070−16
CNPV*2414AL*	1.00	0.95	1.07	1.16	59*P2A040E14**10
CNPV*2414AL*	1.02	0.97	1.09	1.13	59*P2A060E14**12
CNPV*2414AL*	1.01	1.01	1.07	1.20	59*P5A040E14**10
CNPV*2414AL*	1.01	0.96	1.08	1.15	58PH*045−08
CNPV*2414AL*	1.01	0.96	1.08	1.11	58CTW045−12
CNPV*2417AL*	1.00	0.95	1.07	1.16	59*P2A040E14**10
CNPV*2417AL*	1.00	0.95	1.07	1.16	59*P2A040E17**12
CNPV*2417AL*	1.02	0.97	1.09	1.13	59*P2A060E14**12
CNPV*2417AL*	1.01	1.01	1.07	1.20	59*P5A040E14**10
CNPV*2417AL*	0.99	0.99	1.07	1.17	59*P5A040E17**12
CNPV*2417AL*	1.01	0.96	1.08	1.15	58PH*045−08

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CNPV*2417AL*	1.01	0.96	1.08	1.11	58CTW045−12
CNPV*2417AL*	1.01	0.96	1.08	1.11	58CTW070−16
CNPV*3014AL*	1.02	0.97	1.07	1.15	59*P2A040E14**10
CNPV*3014AL*	1.03	0.99	1.11	1.16	59*P2A060E14**12
CNPV*3014AL*	1.03	1.03	1.07	1.19	59*P5A040E14**10
CNPV*3014AL*	1.03	0.98	1.08	1.15	58PH*045−08
CNPV*3014AL*	1.03	0.98	1.10	1.13	58CTW045−12
CNPV*3017AL*	1.03	0.98	1.08	1.15	59*P2A040E14**10
CNPV*3017AL*	1.03	0.98	1.08	1.16	59*P2A040E17**12
CNPV*3017AL*	1.03	0.94	1.12	1.16	59*P2A060E14**12
CNPV*3017AL*	1.03	1.03	1.07	1.18	59*P5A040E14**10
CNPV*3017AL*	1.01	0.96	1.07	1.17	59*P5A040E17**12
CNPV*3017AL*	1.03	0.99	1.09	1.15	58PH*045−08
CNPV*3017AL*	1.03	0.93	1.11	1.13	58CTW045−12
CNPV*3017AL*	1.03	0.94	1.11	1.12	58CTW070−16
CNPV*3117AL*	1.05	0.96	1.11	1.16	59*P2A040E14**10
CNPV*3117AL*	1.04	0.99	1.09	1.15	59*P2A040E17**12
CNPV*3117AL*	1.06	0.96	1.13	1.14	59*P2A060E14**12
CNPV*3117AL*	1.05	1.05	1.08	1.16	59*P5A040E14**10
CNPV*3117AL*	1.03	0.99	1.09	1.16	59*P5A040E17**12
CNPV*3117AL*	1.05	0.96	1.12	1.15	58PH*045−08
CNPV*3117AL*	1.06	0.96	1.12	1.11	58CTW045−12
CNPV*3117AL*	1.07	0.97	1.12	1.10	58CTW070−16
CSPH*2412AL*	1.04	0.99	1.10	1.27	59*P2A040E14**10
CSPH*2412AL*	1.04	0.99	1.10	1.28	59*P2A040E17**12
CSPH*2412AL*	1.03	0.94	1.09	1.13	59*P2A060E14**12
CSPH*2412AL*	1.06	0.96	1.13	1.19	59*P2A060E17**14
CSPH*2412AL*	1.05	0.96	1.12	1.16	59*P2A080E17**16
CSPH*2412AL*	1.03	1.03	1.07	1.19	59*P5A040E14**10
CSPH*2412AL*	1.04	1.04	1.10	1.26	59*P5A040E17**12
CSPH*2412AL*	1.05	1.00	1.10	1.20	59*P5A060E17**14
CSPH*2412AL*	1.05	1.00	1.09	1.11	58CTW070−16
CSPH*2412AL*	1.05	0.96	1.13	1.19	58CTW090−16
CSPH*3012AL*	1.05	1.00	1.09	1.15	59*P2A040E14**10
CSPH*3012AL*	1.08	1.03	1.12	1.19	59*P2A060E14**12
CSPH*3012AL*	1.03	1.03	1.08	1.19	59*P5A040E14**10
CSPH*3012AL*	1.03	0.98	1.08	1.16	59*P5A040E17**12
CSPH*3012AL*	1.03	0.94	1.11	1.12	58CTW045−12
CSPH*3012AL*	1.04	0.95	1.11	1.12	58CTW070−16
CSPH*3012AL*	1.06	0.96	1.14	1.17	58CTW090−16

See notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAP. AIR	24VNA925/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)			
	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**	ID SCFM	Capacity MBtuh		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																									
75 (23.9)	72 (22.2)	**825**	23.68	9.99	2.51	**825**	25.12	10.51	2.21	**825**	26.43	11.00	1.90	**825**	27.77	11.50	1.62	**825**	29.08	11.99	1.34	**825**	30.34	12.47	1.07
	67 (19.4)		21.55	13.82	2.50		22.88	14.39	2.21		24.10	14.93	1.92		25.35	15.48	1.65		26.55	16.01	1.39		27.72	16.54	1.13
	63 (17.2)		19.97	16.81	2.49		21.22	17.43	2.22		22.38	18.00	1.93		23.54	18.59	1.67		24.67	19.16	1.42		25.77	19.72	1.17
	57 (13.9)		18.96	18.96	2.48		19.97	19.97	2.21		20.91	20.91	1.94		21.84	21.84	1.69		22.75	22.75	1.45		23.62	23.62	1.21
80 (26.7)	72 (22.2)	**825**	23.52	13.77	2.50	**825**	24.94	14.33	2.20	**825**	26.25	14.85	1.90	**825**	27.59	15.38	1.61	**825**	28.89	15.91	1.34	**825**	30.15	16.42	1.07
	67 (19.4)		21.46	17.56	2.50		22.78	18.18	2.21		24.00	18.75	1.92		25.24	19.33	1.65		26.45	19.90	1.39		27.61	20.46	1.13
	63 (17.2)		20.19	20.19	2.49		21.30	21.10	2.22		22.43	21.76	1.93		23.57	22.40	1.67		24.68	23.02	1.42		25.77	23.62	1.17
	57 (13.9)		20.15	20.15	2.49		21.20	21.20	2.22		22.18	22.18	1.93		23.15	23.15	1.67		24.09	24.09	1.43		25.00	25.00	1.19
STAGE 3																									
75 (23.9)	72 (22.2)	**650**	15.55	6.67	1.25	**650**	16.54	7.02	1.17	**650**	17.29	7.30	1.03	**650**	18.23	7.64	0.91	**650**	19.14	7.98	0.77	**650**	20.05	8.32	0.61
	67 (19.4)		14.11	9.43	1.25		15.02	9.82	1.18		15.76	10.15	1.05		16.63	10.52	0.95		17.47	10.89	0.82		18.29	11.25	0.67
	63 (17.2)		13.09	11.60	1.25		13.94	12.02	1.19		14.67	12.38	1.06		15.47	12.78	0.97		16.26	13.17	0.85		17.02	13.56	0.71
	57 (13.9)		12.65	12.65	1.25		13.36	13.36	1.20		13.97	13.97	1.07		14.62	14.62	0.98		15.26	15.26	0.87		15.89	15.89	0.75
80 (26.7)	72 (22.2)	**650**	15.43	9.41	1.24	**650**	16.40	9.79	1.17	**650**	17.14	10.08	1.03	**650**	18.08	10.45	0.91	**650**	18.99	10.81	0.77	**650**	19.94	11.19	0.61
	67 (19.4)		14.07	12.14	1.25		14.97	12.56	1.18		15.70	12.91	1.05		16.56	13.31	0.94		17.39	13.70	0.82		18.21	14.09	0.67
	63 (17.2)		13.49	13.49	1.25		14.23	14.23	1.19		14.84	14.84	1.06		15.54	15.49	0.96		16.30	15.95	0.84		17.05	16.38	0.71
	57 (13.9)		13.47	13.47	1.25		14.20	14.20	1.19		14.81	14.81	1.06		15.50	15.50	0.96		16.17	16.17	0.85		16.81	16.81	0.72
STAGE 1																									
75 (23.9)	72 (22.2)	**650**	12.12	5.39	0.73	**650**	12.92	5.68	0.75	**585**	10.55	4.66	0.46	**585**	11.18	4.89	0.44	**585**	11.84	5.13	0.39	**585**	12.52	5.37	0.28
	67 (19.4)		10.98	7.95	0.74		11.73	8.27	0.77		9.58	6.85	0.47		10.16	7.10	0.47		10.74	7.35	0.43		11.36	7.61	0.34
	63 (17.2)		10.22	9.94	0.74		10.91	10.29	0.77		8.93	8.56	0.49		9.46	8.83	0.49		10.00	9.10	0.46		10.55	9.37	0.38
	57 (13.9)		10.14	10.14	0.74		10.74	10.74	0.78		8.82	8.82	0.49		9.29	9.29	0.50		9.75	9.75	0.47		10.21	10.21	0.40
80 (26.7)	72 (22.2)	**650**	11.99	7.94	0.73	**650**	12.79	8.25	0.75	**585**	10.41	6.81	0.46	**585**	11.06	7.06	0.44	**585**	11.73	7.32	0.38	**585**	12.41	7.59	0.28
	67 (19.4)		10.97	10.45	0.74		11.70	10.80	0.76		9.55	8.98	0.47		10.13	9.25	0.47		10.71	9.53	0.43		11.32	9.81	0.34
	63 (17.2)		10.83	10.83	0.74		11.46	11.46	0.77		9.40	9.40	0.48		9.89	9.89	0.48		10.37	10.37	0.44		10.87	10.87	0.36
	57 (13.9)		10.82	10.82	0.74		11.44	11.44	0.77		9.39	9.39	0.48		9.87	9.87	0.48		10.35	10.35	0.44		10.85	10.85	0.36

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 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA925

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005L	1.00	1.00	
FE4AN(B,F)003L	0.96	0.98	
FE4ANB006L	0.98	1.07	
FE4ANF002L	0.96	0.98	
CAP**3614AL*	0.98	1.01	58CV(A,X)070–12
CAP**3617AL*	0.98	1.01	58CV(A,X)070–12
CNPH*3617AL*	0.98	1.02	58CV(A,X)070–12
CNPV*3617AL*	0.97	0.99	58CV(A,X)070–12
CNPV*3717AL*	0.98	1.00	58CV(A,X)070–12
CNPV*4217AL*	0.96	0.98	58CV(A,X)070–12
CSPH*3612AL*	1.00	1.02	58CV(A,X)070–12
CSPH*4212AL*	1.00	1.02	58CV(A,X)070–12
CAP**3617AL*	0.98	1.01	58CV(A,X)090–16
CAP**3621AL*	0.98	1.01	58CV(A,X)090–16
CAP**4221AL*	0.99	0.99	58CV(A,X)090–16
CNPH*3617AL*	0.98	1.01	58CV(A,X)090–16
CNPH*4221AL*	0.99	1.02	58CV(A,X)090–16
CNPV*3617AL*	0.97	0.99	58CV(A,X)090–16
CNPV*3621AL*	0.97	0.99	58CV(A,X)090–16
CNPV*3717AL*	0.98	0.98	58CV(A,X)090–16
CNPV*4217AL*	0.96	0.98	58CV(A,X)090–16
CNPV*4221AL*	0.96	0.98	58CV(A,X)090–16
CSPH*3612AL*	1.00	1.00	58CV(A,X)090–16
CSPH*4212AL*	1.01	1.01	58CV(A,X)090–16
CAP**3617AL*	0.98	1.02	59*N*A060V17**14
CAP**3621AL*	0.98	1.01	59*N*A060V17**14
CAP**4221AL*	0.98	1.01	59*N*A060V17**14
CNPH*3617AL*	0.98	1.11	59*N*A060V17**14
CNPH*4221AL*	0.98	1.12	59*N*A060V17**14
CNPV*3617AL*	0.94	1.02	59*N*A060V17**14
CNPV*3621AL*	0.94	1.02	59*N*A060V17**14
CNPV*3717AL*	0.98	1.00	59*N*A060V17**14
CNPV*4221AL*	0.95	1.03	59*N*A060V17**14
CSPH*3612AL*	0.99	1.02	59*N*A060V17**14
CSPH*4212AL*	1.00	1.02	59*N*A060V17**14
CAP**3617AL*	0.98	1.01	59*N*A080V17**14
CAP**3621AL*	0.98	1.01	59*N*A080V17**14
CAP**4221AL*	0.99	1.02	59*N*A080V17**14
CNPH*3617AL*	0.98	1.07	59*N*A080V17**14
CNPH*4221AL*	0.99	1.08	59*N*A080V17**14
CNPV*3617AL*	0.95	1.03	59*N*A080V17**14
CNPV*3621AL*	0.95	0.99	59*N*A080V17**14
CNPV*3717AL*	0.98	1.00	59*N*A080V17**14
CNPV*4221AL*	0.98	1.00	59*N*A080V17**14
CSPH*3612AL*	1.00	1.02	59*N*A080V17**14
CSPH*4212AL*	1.00	1.02	59*N*A080V17**14
CAP**3621AL*	0.98	1.01	59MN7A060V21**20
CAP**4221AL*	0.99	1.02	59MN7A060V21**20
CAP**4224AL*	0.99	1.02	59MN7A060V21**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003L	0.94	0.98	0.99	0.94	
FV4CNF002L	0.94	0.98	1.00	0.97	
CAP**2414AL*	0.94	1.02	1.08	1.12	58PH*045–08
CAP**2417AL*	0.94	1.02	1.09	1.12	58PH*045–08
CAP**3014AL*	0.95	0.99	1.08	1.11	58PH*045–08
CAP**3017AL*	0.95	0.99	1.09	1.11	58PH*045–08
CNPV*2414AL*	0.93	1.01	1.08	1.12	58PH*045–08
CNPV*2417AL*	0.93	1.01	1.08	1.12	58PH*045–08
CNPV*3014AL*	0.95	1.03	1.08	1.11	58PH*045–08
CNPV*3017AL*	0.95	1.03	1.09	1.11	58PH*045–08
CNPV*3117AL*	0.95	0.99	1.12	1.11	58PH*045–08
CAP**2414AL*	0.93	0.97	1.08	1.08	58CTW045–12
CAP**2417AL*	0.94	0.98	1.08	1.07	58CTW045–12
CAP**3014AL*	0.93	0.96	1.10	1.09	58CTW045–12
CAP**3017AL*	0.93	0.97	1.11	1.09	58CTW045–12
CNPV*2414AL*	0.93	1.01	1.08	1.07	58CTW045–12
CNPV*2417AL*	0.93	1.01	1.08	1.07	58CTW045–12
CNPV*3014AL*	0.93	1.01	1.10	1.09	58CTW045–12
CNPV*3017AL*	0.93	0.97	1.11	1.09	58CTW045–12
CNPV*3117AL*	0.94	0.98	1.12	1.06	58CTW045–12
CSPH*3012AL*	0.93	0.96	1.11	1.08	58CTW045–12
CAP**2417AL*	0.93	0.96	1.11	1.09	58CTW070–16
CAP**3017AL*	0.93	0.97	1.11	1.08	58CTW070–16
CNPH*2417AL*	0.96	1.04	1.09	1.07	58CTW070–16
CNPH*3017AL*	0.93	1.01	1.11	1.08	58CTW070–16
CNPH*3117AL*	0.95	0.99	1.12	1.05	58CTW070–16
CNPV*2417AL*	0.93	1.01	1.08	1.07	58CTW070–16
CNPV*3017AL*	0.93	0.97	1.11	1.08	58CTW070–16
CNPV*3117AL*	0.95	0.99	1.12	1.05	58CTW070–16
CSPH*2412AL*	0.97	1.05	1.09	1.08	58CTW070–16
CSPH*3012AL*	0.93	0.97	1.11	1.07	58CTW070–16
CSPH*2412AL*	0.94	0.98	1.13	1.15	58CTW090–16
CSPH*3012AL*	0.95	0.99	1.14	1.12	58CTW090–16
CAP**2414AL*	0.95	1.03	1.08	1.13	59*P2A040E14**10
CAP**2417AL*	0.93	1.01	1.08	1.13	59*P2A040E14**10
CAP**3014AL*	0.94	1.02	1.07	1.12	59*P2A040E14**10
CAP**3017AL*	0.95	1.03	1.08	1.12	59*P2A040E14**10
CNPV*2414AL*	0.93	1.01	1.07	1.13	59*P2A040E14**10
CNPV*2417AL*	0.93	1.01	1.07	1.13	59*P2A040E14**10
CNPV*3014AL*	0.94	1.02	1.07	1.12	59*P2A040E14**10
CNPV*3017AL*	0.95	1.03	1.08	1.12	59*P2A040E14**10
CNPV*3117AL*	0.94	0.98	1.11	1.11	59*P2A040E14**10
CSPH*2412AL*	0.96	1.04	1.10	1.23	59*P2A040E14**10
CSPH*3012AL*	0.97	1.05	1.09	1.11	59*P2A040E14**10
CAP**2417AL*	0.93	1.01	1.07	1.12	59*P2A040E17**12
CAP**3017AL*	0.95	1.03	1.08	1.13	59*P2A040E17**12
CNPH*2417AL*	0.95	1.08	1.08	1.13	59*P2A040E17**12
CNPH*3017AL*	0.95	1.03	1.08	1.12	59*P2A040E17**12
CNPH*3117AL*	0.97	1.05	1.09	1.10	59*P2A040E17**12
CNPV*2417AL*	0.93	1.01	1.07	1.13	59*P2A040E17**12
CNPV*3017AL*	0.95	1.03	1.08	1.12	59*P2A040E17**12
CNPV*3117AL*	0.97	1.05	1.09	1.10	59*P2A040E17**12
CSPH*2412AL*	0.96	1.04	1.10	1.25	59*P2A040E17**12
CAP**2414AL*	0.94	0.98	1.09	1.10	59*P2A060E14**12
CAP**2417AL*	0.95	0.99	1.10	1.10	59*P2A060E14**12
CAP**3014AL*	0.93	0.97	1.11	1.11	59*P2A060E14**12

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CAP**3017AL*	0.94	0.98	1.12	1.11	59*P2A060E14**12
CNPV*2414AL*	0.94	1.02	1.09	1.09	59*P2A060E14**12
CNPV*2417AL*	0.94	1.02	1.09	1.09	59*P2A060E14**12
CNPV*3014AL*	0.93	1.01	1.11	1.11	59*P2A060E14**12
CNPV*3017AL*	0.94	0.98	1.12	1.11	59*P2A060E14**12
CNPV*3117AL*	0.96	1.00	1.13	1.09	59*P2A060E14**12
CSPH*2412AL*	0.95	0.99	1.09	1.10	59*P2A060E14**12
CSPH*3012AL*	0.94	0.98	1.12	1.10	59*P2A060E14**12
CNPH*2417AL*	0.96	1.04	1.11	1.13	59*P2A060E17**14
CSPH*2412AL*	0.95	0.99	1.13	1.15	59*P2A060E17**14
CNPH*2417AL*	0.96	1.04	1.10	1.10	59*P2A080E17**16
CSPH*2412AL*	0.94	0.98	1.12	1.12	59*P2A080E17**16
CAP**2414AL*	0.93	1.06	1.07	1.17	59*P5A040E14**10
CAP**2417AL*	0.94	1.07	1.07	1.17	59*P5A040E14**10
CAP**3014AL*	0.95	1.08	1.07	1.16	59*P5A040E14**10
CAP**3017AL*	0.95	1.08	1.07	1.15	59*P5A040E14**10
CNPV*2414AL*	0.93	1.11	1.07	1.17	59*P5A040E14**10
CNPV*2417AL*	0.93	1.11	1.07	1.17	59*P5A040E14**10
CNPV*3014AL*	0.95	1.08	1.07	1.16	59*P5A040E14**10
CNPV*3017AL*	0.95	1.08	1.07	1.15	59*P5A040E14**10
CNPV*3117AL*	0.98	1.11	1.08	1.13	59*P5A040E14**10
CSPH*2412AL*	0.95	1.08	1.07	1.17	59*P5A040E14**10
CSPH*3012AL*	0.95	1.08	1.08	1.15	59*P5A040E14**10
CAP**2417AL*	0.93	1.01	1.07	1.14	59*P5A040E17**12
CAP**3017AL*	0.93	1.01	1.07	1.13	59*P5A040E17**12
CNPH*2417AL*	0.94	1.12	1.08	1.15	59*P5A040E17**12
CNPH*3017AL*	0.93	1.06	1.07	1.13	59*P5A040E17**12
CNPH*3117AL*	0.96	1.04	1.09	1.12	59*P5A040E17**12
CNPV*2417AL*	0.92	1.04	1.07	1.14	59*P5A040E17**12
CNPV*3017AL*	0.93	1.01	1.07	1.13	59*P5A040E17**12
CNPV*3117AL*	0.96	1.04	1.09	1.12	59*P5A040E17**12
CSPH*2412AL*	0.96	1.09	1.10	1.23	59*P5A040E17**12
CSPH*3012AL*	0.93	1.01	1.08	1.13	59*P5A040E17**12
CNPH*2417AL*	0.96	1.09	1.10	1.17	59*P5A060E17**14
CSPH*2412AL*	0.97	1.05	1.10	1.16	59*P5A060E17**14

See notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAP. AIR	24VNA936 / 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)			
	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**	ID SCFM	Capacity MBtuh		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																									
75 (23.9)	72 (22.2)	**1050**	34.24	14.18	4.44	**1050**	36.41	14.99	3.89	**1050**	38.29	15.70	3.36	**1050**	40.30	16.47	2.87	**1050**	42.28	17.24	2.41	**1050**	44.18	17.98	1.98
	67 (19.4)		31.38	19.07	4.38		33.35	19.95	3.85		35.13	20.75	3.34		36.99	21.60	2.87		38.79	22.42	2.43		40.52	23.22	2.02
	63 (17.2)		29.21	22.90	4.33		31.07	23.84	3.81		32.74	24.70	3.31		34.48	25.59	2.86		36.17	26.47	2.44		37.79	27.32	2.04
	57 (13.9)		27.05	27.05	4.27		28.50	28.50	3.77		29.85	29.85	3.28		31.20	31.20	2.84		32.65	32.25	2.44		34.08	33.21	2.06
80 (26.7)	72 (22.2)	**1050**	34.04	18.92	4.44	**1050**	36.21	19.79	3.88	**1050**	38.09	20.56	3.35	**1050**	40.10	21.39	2.86	**1050**	42.08	22.22	2.41	**1050**	43.98	23.01	1.98
	67 (19.4)		31.25	23.78	4.38		33.23	24.72	3.84		35.00	25.57	3.33		36.86	26.47	2.86		38.66	27.35	2.42		40.39	28.21	2.02
	63 (17.2)		29.21	27.55	4.33		31.05	28.56	3.81		32.70	29.48	3.31		34.43	30.44	2.86		36.11	31.38	2.43		37.72	32.28	2.04
	57 (13.9)		28.61	28.61	4.32		30.14	30.14	3.80		31.53	31.53	3.30		32.95	32.95	2.85		34.31	34.31	2.44		35.64	35.64	2.05
STAGE 3																									
75 (23.9)	72 (22.2)	**900**	21.81	9.32	1.96	**900**	23.25	9.85	1.83	**900**	24.29	10.24	1.67	**900**	25.66	10.75	1.50	**900**	27.01	11.26	1.31	**900**	28.33	11.75	1.10
	67 (19.4)		19.85	13.12	1.96		21.18	13.71	1.84		22.21	14.19	1.68		23.48	14.77	1.52		24.72	15.33	1.35		25.94	15.89	1.15
	63 (17.2)		18.41	16.08	1.95		19.66	16.73	1.85		20.68	17.29	1.68		21.87	17.91	1.54		23.02	18.53	1.37		24.16	19.14	1.19
	57 (13.9)		17.71	17.71	1.95		18.75	18.75	1.85		19.63	19.63	1.68		20.61	20.61	1.54		21.57	21.57	1.39		22.50	22.50	1.22
80 (26.7)	72 (22.2)	**900**	21.64	13.06	1.95	**900**	23.07	13.65	1.83	**900**	24.08	14.08	1.66	**900**	25.46	14.65	1.49	**900**	26.81	15.21	1.31	**900**	28.13	15.76	1.10
	67 (19.4)		19.77	16.83	1.95		21.09	17.48	1.84		22.11	18.01	1.67		23.37	18.64	1.52		24.60	19.26	1.35		25.82	19.87	1.15
	63 (17.2)		18.86	18.86	1.95		19.95	19.95	1.84		20.82	20.82	1.68		21.94	21.67	1.53		23.07	22.38	1.37		24.19	23.06	1.19
	57 (13.9)		18.83	18.83	1.95		19.91	19.91	1.84		20.79	20.79	1.68		21.82	21.82	1.53		22.82	22.82	1.37		23.80	23.80	1.20
STAGE 1																									
75 (23.9)	72 (22.2)	**800**	14.74	6.58	0.98	**800**	15.80	6.96	1.00	**600**	10.82	4.81	0.48	**600**	11.57	5.09	0.46	**600**	12.38	5.38	0.39	**600**	13.21	5.69	0.27
	67 (19.4)		13.36	9.71	0.98		14.34	10.16	1.02		9.83	7.10	0.49		10.52	7.42	0.49		11.24	7.76	0.44		11.99	8.11	0.34
	63 (17.2)		12.47	12.13	0.98		13.37	12.65	1.03		9.17	8.88	0.51		9.81	9.25	0.51		10.45	9.62	0.47		11.13	10.00	0.38
	57 (13.9)		12.37	12.37	0.98		13.18	13.18	1.03		9.09	9.09	0.51		9.66	9.66	0.52		10.22	10.22	0.48		10.81	10.81	0.40
80 (26.7)	72 (22.2)	**800**	14.58	9.69	0.97	**800**	15.63	10.12	1.00	**600**	10.67	7.06	0.47	**600**	11.46	7.39	0.46	**600**	12.27	7.73	0.39	**600**	13.08	8.07	0.27
	67 (19.4)		13.36	12.75	0.98		14.32	13.27	1.02		9.80	9.32	0.49		10.49	9.70	0.49		11.21	10.08	0.44		11.95	10.47	0.34
	63 (17.2)		13.20	13.20	0.98		14.04	14.04	1.02		9.68	9.68	0.49		10.28	10.28	0.49		10.89	10.89	0.45		11.52	11.52	0.36
	57 (13.9)		13.18	13.18	0.98		14.02	14.02	1.02		9.67	9.67	0.49		10.26	10.26	0.49		10.87	10.87	0.45		11.50	11.50	0.36

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 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA936

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005L	1.00	1.00	
FE4AN(B,F)003L	0.97	0.97	
FE4ANB006L	0.99	0.99	
FE4ANF002L	0.96	1.01	
CAP**3614AL*	0.98	1.03	58CV(A,X)070−12
CSPH*3612AL*	0.98	1.03	58CV(A,X)070−12
CSPH*4212AL*	0.98	1.03	58CV(A,X)070−12
CAP**3617AL*	0.98	0.98	58CV(A,X)090−16
CAP**4817AL*	0.98	0.98	58CV(A,X)090−16
CNPH*3617AL*	0.95	1.00	58CV(A,X)090−16
CNPV*3617AL*	0.95	1.00	58CV(A,X)090−16
CNPV*3717AL*	0.97	0.97	58CV(A,X)090−16
CNPV*4217AL*	0.97	0.97	58CV(A,X)090−16
CNPV*4221AL*	0.97	1.01	58CV(A,X)090−16
CNPV*4821AL*	0.98	0.98	58CV(A,X)090−16
CSPH*3612AL*	0.98	0.98	58CV(A,X)090−16
CSPH*4212AL*	0.98	0.98	58CV(A,X)090−16
CAP**3617AL*	0.97	1.02	59*N*A060V17**14
CAP**4817AL*	0.98	1.03	59*N*A060V17**14
CNPH*3617AL*	0.95	1.05	59*N*A060V17**14
CNPV*3617AL*	0.95	1.05	59*N*A060V17**14
CNPV*3717AL*	0.97	1.02	59*N*A060V17**14
CNPV*4217AL*	0.95	1.00	59*N*A060V17**14
CNPV*4221AL*	0.95	1.05	59*N*A060V17**14
CNPV*4821AL*	0.97	1.02	59*N*A060V17**14
CSPH*3612AL*	0.97	1.02	59*N*A060V17**14
CSPH*4212AL*	0.98	1.03	59*N*A060V17**14
CSPH*4812AL*	0.98	1.03	59*N*A060V17**14
CAP**3617AL*	0.98	1.03	59*N*A080V17**14
CAP**4817AL*	0.98	1.03	59*N*A080V17**14
CNPH*3617AL*	0.95	1.05	59*N*A080V17**14
CNPV*3617AL*	0.95	1.00	59*N*A080V17**14
CNPV*3717AL*	0.97	1.02	59*N*A080V17**14
CNPV*4217AL*	0.96	1.01	59*N*A080V17**14
CNPV*4221AL*	0.95	1.00	59*N*A080V17**14
CNPV*4821AL*	0.97	1.02	59*N*A080V17**14
CSPH*3612AL*	0.98	1.03	59*N*A080V17**14
CSPH*4212AL*	0.98	1.03	59*N*A080V17**14
CSPH*4812AL*	0.98	1.03	59*N*A080V17**14
CAP**3621AL*	0.98	1.03	59*N*A080V21**20
CAP**4221AL*	0.97	1.01	59*N*A080V21**20
CAP**4821AL*	0.98	0.98	59*N*A080V21**20
CNPH*4221AL*	0.96	1.01	59*N*A080V21**20
CNPH*4221AL*	0.96	1.01	59*N*A080V21**20
CNPH*4321AL*	0.98	1.03	59*N*A080V21**20
CNPH*4821AL*	0.98	1.03	59*N*A080V21**20
CNPV*3621AL*	0.95	1.00	59*N*A080V21**20
CNPV*4221AL*	0.95	1.00	59*N*A080V21**20
CNPV*4221AL*	0.96	1.01	59*N*A080V21**20
CNPV*4324AL*	0.99	0.99	59*N*A080V21**20
CNPV*4821AL*	0.97	0.97	59*N*A080V21**20
CNPV*4821AL*	0.98	1.03	59*N*A080V21**20
CNPV*4824AL*	0.98	1.03	59*N*A080V21**20
CSPH*3612AL*	0.98	0.98	59*N*A080V21**20
CSPH*4212AL*	0.98	0.98	59*N*A080V21**20
CSPH*4812AL*	0.99	0.99	59*N*A080V21**20
CAP**3621AL*	0.98	0.98	59*N*A100V21**22
CAP**3621AL*	0.98	1.03	59MN7A060V21**20
CAP**4221AL*	0.97	1.01	59MN7A060V21**20

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CAP**4821AL*	0.98	1.03	59MN7A060V21**20
CNPH*4221AL*	0.96	1.06	59MN7A060V21**20
CNPH*4221AL*	0.96	1.06	59MN7A060V21**20
CNPH*4321AL*	0.98	1.03	59MN7A060V21**20
CNPH*4821AL*	0.97	1.02	59MN7A060V21**20
CNPV*3621AL*	0.95	1.00	59MN7A060V21**20
CNPV*4221AL*	0.95	1.00	59MN7A060V21**20
CNPV*4221AL*	0.96	1.01	59MN7A060V21**20
CNPV*4324AL*	0.98	1.03	59MN7A060V21**20
CNPV*4821AL*	0.97	1.01	59MN7A060V21**20
CNPV*4821AL*	0.97	1.02	59MN7A060V21**20
CNPV*4824AL*	0.97	1.02	59MN7A060V21**20
CSPH*3612AL*	0.98	1.03	59MN7A060V21**20
CSPH*4212AL*	0.98	1.03	59MN7A060V21**20
CSPH*4812AL*	0.98	1.03	59MN7A060V21**20

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003L	0.97	0.97	1.01	1.06	
FV4CNF002L	0.97	1.01	0.99	1.08	
CAP**3614AL*	0.96	1.06	0.97	1.09	58PH*045−08
CAP**3617AL*	0.97	1.07	0.97	1.08	58PH*045−08
CAP**3614AL*	0.96	1.01	0.97	1.07	58CTW045−12
CAP**3617AL*	0.97	1.01	0.97	1.06	58CTW045−12
CAP**3617AL*	0.97	1.02	0.98	1.05	58CTW070−16
CAP**3621AL*	0.97	1.02	0.98	1.04	58CTW070−16
CAP**4221AL*	0.98	1.03	0.99	1.05	58CTW070−16
CNPH*3617AL*	0.97	1.01	0.97	1.05	58CTW070−16
CNPV*3617AL*	0.97	1.01	0.97	1.05	58CTW070−16
CNPV*3717AL*	1.01	1.01	1.00	1.03	58CTW070−16
CNPV*4217AL*	0.99	1.04	0.99	1.05	58CTW070−16
CAP**3621AL*	0.97	0.97	0.98	1.02	58CTW090−16
CAP**4221AL*	0.98	0.98	0.99	1.03	58CTW090−16
CNPH*4221AL*	0.98	0.98	0.98	1.03	58CTW090−16
CNPH*4321AL*	1.01	1.01	1.01	1.01	58CTW090−16
CNPV*3621AL*	0.97	1.01	0.97	1.03	58CTW090−16
CNPV*4221AL*	0.98	0.98	0.98	1.03	58CTW090−16
CNPH*4221AL*	0.98	0.98	0.98	1.02	58CTW110−22
CNPH*4321AL*	1.01	1.01	1.01	0.99	58CTW110−22
CNPV*3621AL*	0.97	0.97	0.97	1.02	58CTW110−22
CNPV*4221AL*	0.98	0.98	0.98	1.02	58CTW110−22
CNPV*4324AL*	1.02	0.97	1.01	0.98	58CTW135−22
CAP**3617AL*	0.96	1.06	0.97	1.12	59*P2A040E17**12
CAP**3621AL*	0.96	1.06	0.97	1.11	59*P2A040E17**12
CAP**4221AL*	0.97	1.07	0.97	1.10	59*P2A040E17**12
CNPH*3617AL*	0.95	1.05	0.96	1.11	59*P2A040E17**12
CNPV*3717AL*	1.00	1.05	0.99	1.09	59*P2A040E17**12
CNPV*4217AL*	0.98	1.08	0.98	1.11	59*P2A040E17**12
CSPH*3612AL*	0.98	1.09	0.98	1.10	59*P2A040E17**12
CAP**3614AL*	0.97	1.01	0.98	1.08	59*P2A060E14**12
CAP**3617AL*	0.97	1.01	0.98	1.07	59*P2A060E14**12
CSPH*3612AL*	0.99	1.04	0.99	1.06	59*P2A060E14**12
CAP**3617AL*	0.97	1.02	0.98	1.05	59*P2A060E17**14
CAP**3621AL*	0.97	1.02	0.98	1.04	59*P2A060E17**14
CAP**4221AL*	0.98	0.98	0.99	1.04	59*P2A060E17**14
CNPH*3617AL*	0.97	1.01	0.97	1.05	59*P2A060E17**14

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CNPV*3617AL*	0.97	1.01	0.97	1.05	59*P2A060E17**14
CNPV*3717AL*	1.01	1.01	1.00	1.02	59*P2A060E17**14
CNPV*4217AL*	0.99	0.99	0.99	1.04	59*P2A060E17**14
CSPH*3612AL*	0.99	0.99	0.99	1.04	59*P2A060E17**14
CAP**3617AL*	0.97	1.02	0.98	1.05	59*P2A080E17**16
CAP**3621AL*	0.98	0.98	0.98	1.04	59*P2A080E17**16
CAP**4221AL*	0.98	0.98	0.99	1.04	59*P2A080E17**16
CNPH*3617AL*	0.97	1.01	0.97	1.04	59*P2A080E17**16
CNPV*3617AL*	0.97	1.01	0.97	1.04	59*P2A080E17**16
CNPV*3717AL*	1.01	1.01	1.00	1.02	59*P2A080E17**16
CNPV*4217AL*	0.99	0.99	0.99	1.04	59*P2A080E17**16
CAP**3617AL*	0.96	1.12	0.96	1.10	59*P5A040E17**12
CAP**3621AL*	0.96	1.12	0.96	1.09	59*P5A040E17**12
CAP**4221AL*	0.97	1.13	0.96	1.09	59*P5A040E17**12
CNPH*3617AL*	0.95	1.11	0.95	1.09	59*P5A040E17**12
CNPV*3617AL*	0.95	1.11	0.95	1.09	59*P5A040E17**12
CNPV*3617AL*	0.95	1.11	0.95	1.09	59*P5A040E17**12
CNPV*3717AL*	1.00	1.11	0.98	1.07	59*P5A040E17**12
CNPV*4217AL*	0.98	1.08	0.97	1.09	59*P5A040E17**12
CAP**3614AL*	0.95	1.11	0.96	1.12	59*P5A060E14**12
CAP**3617AL*	0.96	1.12	0.97	1.13	59*P5A060E14**12
CAP**3617AL*	0.97	1.01	0.97	1.06	59*P5A060E17**14
CAP**3621AL*	0.97	1.01	0.97	1.06	59*P5A060E17**14
CAP**4221AL*	0.97	1.02	0.98	1.06	59*P5A060E17**14
CNPH*3617AL*	0.96	1.01	0.97	1.07	59*P5A060E17**14
CNPV*3617AL*	0.96	1.01	0.97	1.07	59*P5A060E17**14
CNPV*3717AL*	1.00	1.05	0.99	1.04	59*P5A060E17**14
CNPV*4217AL*	0.98	1.03	0.98	1.06	59*P5A060E17**14

See notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAP. AIR	24VNA948 / FE4BNB006 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)			
	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**	ID SCFM	Capacity MBtuh		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																									
75 (23.9)	72 (22.2)	**1400**	44.82	18.57	5.52	**1400**	47.96	19.76	4.88	**1400**	50.99	20.91	4.29	**1400**	53.98	22.06	3.74	**1400**	56.89	23.19	3.23	**1400**	59.70	24.29	2.75
	67 (19.4)		40.99	24.95	5.42		43.86	26.26	4.80		46.65	27.54	4.23		49.36	28.80	3.70		52.01	30.04	3.21		54.60	31.27	2.75
	63 (17.2)		38.13	29.97	5.34		40.79	31.36	4.74		43.37	32.72	4.18		45.91	34.07	3.67		48.37	35.40	3.19		50.78	36.72	2.74
	57 (13.9)		35.29	35.29	5.26		37.41	37.41	4.66		39.46	39.46	4.12		41.45	41.45	3.62		43.58	43.09	3.16		45.70	44.59	2.73
80 (26.7)	72 (22.2)	**1400**	44.60	24.79	5.51	**1400**	47.74	26.09	4.88	**1400**	50.77	27.36	4.28	**1400**	53.76	28.62	3.73	**1400**	56.66	29.86	3.22	**1400**	59.48	31.07	2.75
	67 (19.4)		40.84	31.14	5.42		43.71	32.55	4.80		46.50	33.94	4.23		49.21	35.31	3.70		51.86	36.65	3.20		54.45	37.98	2.75
	63 (17.2)		38.13	36.06	5.34		40.76	37.59	4.74		43.33	39.07	4.18		45.84	40.54	3.67		48.30	41.98	3.18		50.70	43.40	2.74
	57 (13.9)		37.36	37.36	5.32		39.59	39.59	4.72		41.72	41.72	4.16		43.81	43.81	3.64		45.84	45.84	3.17		47.82	47.82	2.73
STAGE 3																									
75 (23.9)	72 (22.2)	**1200**	29.42	12.62	2.82	**1200**	31.60	13.43	2.56	**1200**	33.63	14.20	2.26	**1200**	35.75	15.00	2.00	**1200**	37.82	15.78	1.74	**1200**	39.85	16.55	1.49
	67 (19.4)		26.82	17.86	2.80		28.83	18.79	2.56		30.73	19.68	2.27		32.66	20.60	2.02		34.57	21.50	1.77		36.44	22.40	1.52
	63 (17.2)		24.93	21.96	2.79		26.79	22.99	2.55		28.58	23.99	2.26		30.39	25.00	2.02		32.16	26.00	1.78		33.91	26.99	1.55
	57 (13.9)		24.03	24.03	2.78		25.61	25.61	2.55		27.12	27.12	2.26		28.62	28.62	2.03		30.11	30.11	1.80		31.55	31.55	1.57
80 (26.7)	72 (22.2)	**1200**	29.22	17.78	2.81	**1200**	31.39	18.70	2.55	**1200**	33.41	19.57	2.25	**1200**	35.52	20.47	2.00	**1200**	37.60	21.37	1.74	**1200**	39.62	22.25	1.48
	67 (19.4)		26.71	22.96	2.80		28.71	24.01	2.56		30.60	25.01	2.26		32.52	26.03	2.01		34.42	27.05	1.77		36.30	28.05	1.52
	63 (17.2)		25.56	25.56	2.80		27.23	27.23	2.55		28.80	28.80	2.26		30.48	30.24	2.02		32.21	31.42	1.78		33.93	32.55	1.55
	57 (13.9)		25.52	25.52	2.80		27.19	27.19	2.55		28.76	28.76	2.26		30.35	30.35	2.02		31.90	31.90	1.78		33.43	33.43	1.55
STAGE 1																									
75 (23.9)	72 (22.2)	**1100**	25.50	10.99	2.21	**1100**	27.46	11.73	2.07	**875**	19.62	8.56	0.95	**875**	20.96	9.06	0.84	**875**	22.29	9.57	0.72	**875**	23.61	10.07	0.57
	67 (19.4)		23.22	15.65	2.21		25.04	16.51	2.08		17.88	12.38	0.98		19.11	12.99	0.88		20.32	13.60	0.76		21.53	14.21	0.62
	63 (17.2)		21.57	19.30	2.21		23.24	20.26	2.08		16.68	15.37	1.00		17.82	16.07	0.90		18.95	16.77	0.79		20.07	17.46	0.66
	57 (13.9)		20.89	20.89	2.20		22.32	22.32	2.08		16.33	16.33	1.00		17.34	17.34	0.91		18.34	18.34	0.81		19.33	19.33	0.68
80 (26.7)	72 (22.2)	**1100**	25.31	15.59	2.21	**1100**	27.26	16.44	2.06	**875**	19.42	12.31	0.95	**875**	20.76	12.92	0.84	**875**	22.09	13.52	0.71	**875**	23.43	14.14	0.57
	67 (19.4)		23.13	20.20	2.21		24.93	21.18	2.07		17.82	16.09	0.98		19.04	16.80	0.88		20.25	17.51	0.76		21.44	18.21	0.62
	63 (17.2)		22.25	22.25	2.21		23.77	23.77	2.08		17.35	17.35	0.98		18.41	18.41	0.89		19.46	19.46	0.78		20.50	20.50	0.65
	57 (13.9)		22.21	22.21	2.21		23.73	23.73	2.08		17.32	17.32	0.98		18.39	18.39	0.89		19.43	19.43	0.78		20.47	20.47	0.65

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

See additional notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA948

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB006L	1.00	1.00	
FE4AN(B,F)005L	0.98	0.98	
CAP**4817AL*	0.97	1.01	58CV(A,X)090–16
CSPH*4812AL*	0.98	1.03	58CV(A,X)090–16
CSPH*6012AL*	0.99	0.99	58CV(A,X)090–16
CAP**4821AL*	0.97	1.01	58CV(A,X)110–20
CAP**6021AL*	0.99	0.99	58CV(A,X)110–20
CNPH*4821AL*	0.97	1.06	58CV(A,X)110–20
CNPV*4821AL*	0.97	1.01	58CV(A,X)110–20
CSPH*4812AL*	0.98	1.03	58CV(A,X)110–20
CSPH*6012AL*	1.00	1.00	58CV(A,X)110–20
CAP**4824AL*	0.97	0.97	58CV(A,X)135–22
CAP**6024AL*	0.99	0.99	58CV(A,X)135–22
CNPH*6024AL*	0.99	1.04	58CV(A,X)135–22
CNPH*6124AL*	1.00	1.05	58CV(A,X)135–22
CNPV*4824AL*	0.98	1.03	58CV(A,X)135–22
CNPV*6024AL*	0.99	0.99	58CV(A,X)135–22
CNPV*6124AL*	1.00	1.00	58CV(A,X)135–22
CSPH*4812AL*	0.98	0.98	58CV(A,X)135–22
CSPH*6012AL*	1.00	1.00	58CV(A,X)135–22
CAP**4824AL*	0.97	0.97	58CV(A,X)155–22
CAP**6024AL*	0.99	0.99	58CV(A,X)155–22
CNPH*6024AL*	0.99	0.99	58CV(A,X)155–22
CNPH*6124AL*	1.00	1.05	58CV(A,X)155–22
CNPV*4824AL*	0.98	0.98	58CV(A,X)155–22
CNPV*6024AL*	0.99	0.99	58CV(A,X)155–22
CNPV*6124AL*	1.00	1.00	58CV(A,X)155–22
CSPH*4812AL*	0.98	0.98	58CV(A,X)155–22
CSPH*6012AL*	1.00	1.00	58CV(A,X)155–22
CAP**4821AL*	0.97	1.01	59*N*A080V21**20
CAP**6021AL*	0.99	1.04	59*N*A080V21**20
CNPH*4821AL*	0.97	1.06	59*N*A080V21**20
CNPV*4821AL*	0.97	1.01	59*N*A080V21**20
CSPH*4812AL*	0.98	1.03	59*N*A080V21**20
CSPH*6012AL*	0.99	0.99	59*N*A080V21**20
CAP**4821AL*	0.97	1.01	59*N*A100V21**22
CAP**6021AL*	0.99	0.99	59*N*A100V21**22
CNPH*4821AL*	0.97	1.01	59*N*A100V21**22
CNPV*4821AL*	0.97	1.01	59*N*A100V21**22
CSPH*4812AL*	0.98	1.03	59*N*A100V21**22
CSPH*6012AL*	0.99	0.99	59*N*A100V21**22
CAP**4824AL*	0.97	1.01	59*N*A120V24**22
CAP**6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6124AL*	0.99	1.04	59*N*A120V24**22
CNPV*4824AL*	0.97	1.01	59*N*A120V24**22
CNPV*6024AL*	0.99	1.04	59*N*A120V24**22
CNPV*6124AL*	1.00	1.05	59*N*A120V24**22
CSPH*4812AL*	0.98	1.03	59*N*A120V24**22
CSPH*6012AL*	0.99	0.99	59*N*A120V24**22
CAP**4821AL*	0.96	1.05	59MN7A060V21**20
CAP**6021AL*	0.98	1.08	59MN7A060V21**20
CNPH*4821AL*	0.97	1.06	59MN7A060V21**20
CNPV*4821AL*	0.97	1.06	59MN7A060V21**20
CSPH*4812AL*	0.97	1.06	59MN7A060V21**20
CSPH*6012AL*	0.99	1.04	59MN7A060V21**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNB006L	1.00	1.00	1.00	1.00	
FV4CN(B,F)005L	0.99	0.99	0.99	1.03	
CAP**4817AL*	0.96	1.11	0.97	1.12	58PH*070–16
CSPH*4812AL*	0.97	1.06	0.98	1.13	58PH*070–16
CAP**4821AL*	0.96	1.00	0.98	1.06	58PH*090–16
CAP**6021AL*	0.99	1.04	0.98	1.05	58PH*090–16
CNPH*4821AL*	0.97	1.01	0.98	1.06	58PH*090–16
CNPV*4821AL*	0.97	1.01	0.98	1.06	58PH*090–16
CSPH*4812AL*	0.97	1.01	0.98	1.06	58PH*090–16
CAP**4821AL*	0.96	1.00	0.98	1.05	58PH*110–20
CAP**6021AL*	0.99	0.99	0.99	1.09	58PH*110–20
CNPH*4821AL*	0.97	1.01	0.98	1.05	58PH*110–20
CNPV*4821AL*	0.97	1.01	0.98	1.05	58PH*110–20
CSPH*4812AL*	0.97	0.97	0.99	1.10	58PH*110–20
CSPH*6012AL*	0.99	0.99	0.99	1.04	58PH*110–20
CAP**6024AL*	0.99	0.99	0.99	1.10	58PH*135–20
CSPH*4812AL*	0.97	1.01	0.99	1.11	58PH*135–20
CAP**4821AL*	0.96	1.00	0.97	1.05	58CTW090–16
CAP**6021AL*	0.99	1.04	0.98	1.04	58CTW090–16
CNPH*4821AL*	0.97	1.01	0.98	1.04	58CTW090–16
CNPV*4821AL*	0.97	1.01	0.98	1.04	58CTW090–16
CSPH*4812AL*	0.97	1.01	0.98	1.05	58CTW090–16
CAP**4821AL*	0.97	1.01	0.98	1.03	58CTW110–22
CAP**6021AL*	0.99	0.99	0.98	1.02	58CTW110–22
CNPH*4821AL*	0.97	1.01	0.98	1.03	58CTW110–22
CNPV*4821AL*	0.97	1.01	0.98	1.03	58CTW110–22
CSPH*4812AL*	0.98	1.02	0.98	1.03	58CTW110–22
CSPH*6012AL*	1.00	1.00	0.99	1.02	58CTW110–22
CAP**4824AL*	0.97	1.01	0.98	1.03	58CTW135–22
CAP**6024AL*	0.99	0.99	0.98	1.02	58CTW135–22
CNPH*6024AL*	0.99	0.99	0.99	1.02	58CTW135–22
CNPH*6124AL*	1.00	1.05	0.98	1.02	58CTW135–22
CNPV*4824AL*	0.97	1.01	0.98	1.02	58CTW135–22
CNPV*6024AL*	0.99	0.99	0.99	1.02	58CTW135–22
CNPV*6124AL*	1.00	1.00	1.00	1.02	58CTW135–22
CSPH*6012AL*	1.00	1.00	0.99	1.02	58CTW135–22
CAP**4817AL*	0.97	1.01	0.98	1.06	59*P2A080E17**16
CSPH*4812AL*	0.97	1.01	0.98	1.07	59*P2A080E17**16
CAP**4821AL*	0.97	1.01	0.97	1.03	59*P2A080E21**20
CAP**6021AL*	0.99	0.99	0.98	1.03	59*P2A080E21**20
CNPH*4821AL*	0.97	1.01	0.98	1.03	59*P2A080E21**20
CNPV*4821AL*	0.97	1.01	0.98	1.03	59*P2A080E21**20
CSPH*4812AL*	0.98	1.02	0.98	1.04	59*P2A080E21**20
CAP**4821AL*	0.97	1.01	0.97	1.04	59*P2A100E21**20
CAP**6021AL*	0.99	0.99	0.98	1.03	59*P2A100E21**20
CNPH*4821AL*	0.97	1.01	0.98	1.03	59*P2A100E21**20
CNPV*4821AL*	0.97	1.01	0.98	1.03	59*P2A100E21**20
CSPH*4812AL*	0.98	1.02	0.98	1.04	59*P2A100E21**20
CSPH*6012AL*	1.00	1.00	0.99	1.03	59*P2A100E21**20
CAP**4824AL*	0.97	1.01	0.98	1.04	59*P2A120E24**20
CAP**6024AL*	0.99	0.99	0.98	1.03	59*P2A120E24**20
CNPH*6024AL*	0.99	1.04	0.99	1.03	59*P2A120E24**20
CNPH*6124AL*	1.00	1.05	0.98	1.03	59*P2A120E24**20
CNPV*4824AL*	0.97	1.01	0.98	1.04	59*P2A120E24**20
CNPV*6024AL*	0.99	0.99	0.99	1.03	59*P2A120E24**20
CNPV*6124AL*	1.00	1.00	0.99	1.02	59*P2A120E24**20
CSPH*4812AL*	0.98	1.02	0.98	1.04	59*P2A120E24**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CSPH*6012AL*	1.00	1.00	0.99	1.03	59*P2A120E24**20
CAP**4817AL*	0.96	1.05	0.97	1.08	59*P5A080E17**16
CSPH*4812AL*	0.97	1.06	0.97	1.08	59*P5A080E17**16
CNPH*4821AL*	0.97	1.01	0.96	1.02	59*P5A080E21**20
CNPV*4821AL*	0.97	1.01	0.96	1.02	59*P5A080E21**20
CSPH*4812AL*	0.97	1.01	0.96	1.02	59*P5A080E21**20
CAP**4821AL*	0.96	1.00	0.98	1.11	59*P5A100E21**20
CAP**6021AL*	0.99	1.04	0.99	1.10	59*P5A100E21**20
CAP**6021AL*	0.99	1.04	0.99	1.10	59*P5A100E21**20
CNPH*4821AL*	0.97	1.01	0.99	1.11	59*P5A100E21**20
CSPH*4812AL*	0.97	1.01	0.99	1.11	59*P5A100E21**20
CSPH*6012AL*	0.99	0.99	1.00	1.10	59*P5A100E21**20
CAP**6024AL*	0.99	1.04	0.99	1.14	59*P5A120E24**22

See notes on page 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

EDB °F (°C)	EVAP. AIR EWB °F (°C)	24VNA960 / FE4BNB006L 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 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**	ID SCFM	Capacity MBtuh		Total Sys. KW**
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																									
75 (23.9)	72 (22.2)	**1600**	55.38	22.79	7.70	**1600**	59.00	24.17	6.73	**1600**	62.54	25.53	5.88	**1600**	65.96	26.86	5.13	**1600**	69.30	28.16	4.47	**1600**	72.59	29.46	3.89
	67 (19.4)		50.63	30.18	7.50		53.95	31.68	6.54		57.12	33.14	5.70		60.22	34.57	4.96		63.25	35.99	4.32		66.21	37.38	3.75
	63 (17.2)		47.11	36.00	7.35		50.18	37.58	6.40		53.13	39.12	5.57		55.99	40.62	4.84		58.78	42.11	4.21		61.52	43.58	3.65
	57 (13.9)		43.16	43.16	7.19		45.55	45.55	6.23		47.97	47.63	5.40		50.44	49.37	4.69		52.86	51.01	4.06		55.26	52.62	3.52
80 (26.7)	72 (22.2)	**1600**	55.24	30.04	7.70	**1600**	58.86	31.53	6.73	**1600**	62.40	33.00	5.88	**1600**	65.82	34.44	5.13	**1600**	69.15	35.85	4.47	**1600**	72.44	37.26	3.89
	67 (19.4)		50.50	37.37	7.50		53.83	38.98	6.54		57.00	40.53	5.70		60.10	42.07	4.96		63.13	43.59	4.32		66.10	45.08	3.75
	63 (17.2)		47.09	43.10	7.35		50.13	44.81	6.40		53.07	46.46	5.57		55.91	48.08	4.84		58.70	49.67	4.21		61.44	51.25	3.65
	57 (13.9)		45.62	45.62	7.29		48.12	48.12	6.33		50.51	50.51	5.49		52.83	52.83	4.76		55.06	55.06	4.12		57.24	57.24	3.56
STAGE 3																									
75 (23.9)	72 (22.2)	**1350**	35.94	15.07	3.39	**1350**	38.40	15.98	3.08	**1350**	40.44	16.73	2.76	**1350**	42.79	17.61	2.51	**1350**	45.10	18.48	2.29	**1350**	47.36	19.34	2.08
	67 (19.4)		32.49	20.54	3.35		34.72	21.48	3.05		36.67	22.32	2.72		38.80	23.24	2.47		40.88	24.15	2.24		42.94	25.05	2.04
	63 (17.2)		29.95	24.83	3.33		32.01	25.81	3.03		33.87	26.70	2.69		35.85	27.65	2.44		37.78	28.59	2.22		39.68	29.52	2.01
	57 (13.9)		28.14	28.14	3.32		29.76	29.76	3.02		31.24	31.24	2.67		32.75	32.75	2.42		34.21	34.21	2.19		35.65	35.65	1.99
80 (26.7)	72 (22.2)	**1350**	35.82	20.59	3.39	**1350**	38.29	21.54	3.08	**1350**	40.32	22.34	2.76	**1350**	42.67	23.26	2.51	**1350**	44.98	24.17	2.29	**1350**	47.24	25.07	2.08
	67 (19.4)		32.39	26.01	3.35		34.62	26.99	3.05		36.56	27.87	2.72		38.70	28.83	2.47		40.78	29.77	2.24		42.84	30.72	2.04
	63 (17.2)		30.07	30.04	3.29		32.09	31.18	3.03		33.90	32.16	2.69		35.85	33.17	2.44		37.76	34.16	2.22		39.65	35.14	2.01
	57 (13.9)		30.02	30.02	3.33		31.70	31.70	3.03		33.22	33.22	2.68		34.80	34.80	2.43		36.33	36.33	2.21		37.82	37.82	2.00
STAGE 1																									
75 (23.9)	72 (22.2)	**1200**	26.64	11.34	1.89	**1200**	28.56	12.02	1.84	**975**	20.89	8.78	1.03	**975**	22.26	9.26	1.00	**975**	23.59	9.73	0.91	**975**	24.89	10.21	0.75
	67 (19.4)		23.86	15.71	1.89		25.60	16.40	1.84		18.63	11.93	1.02		19.89	12.40	1.00		21.11	12.85	0.92		22.30	13.31	0.77
	63 (17.2)		21.85	19.14	1.89		23.45	19.83	1.84		16.95	14.38	1.01		18.11	14.83	1.00		19.24	15.26	0.92		20.34	15.69	0.79
	57 (13.9)		20.91	20.91	1.88		22.14	22.14	1.84		15.97	15.97	1.01		16.81	16.81	1.00		17.62	17.62	0.94		18.38	18.38	0.81
80 (26.7)	72 (22.2)	**1200**	26.55	15.84	1.89	**1200**	28.46	16.52	1.84	**975**	20.81	12.06	1.03	**975**	22.18	12.52	1.00	**975**	23.51	12.97	0.91	**975**	24.81	13.42	0.75
	67 (19.4)		23.79	20.16	1.89		25.52	20.85	1.84		18.58	15.17	1.02		19.83	15.62	1.00		21.05	16.05	0.92		22.24	16.48	0.77
	63 (17.2)		22.48	22.48	1.89		23.77	23.77	1.84		17.25	17.25	1.01		18.20	17.98	1.00		19.28	18.43	0.92		20.35	18.85	0.79
	57 (13.9)		22.44	22.44	1.89		23.72	23.72	1.84		17.21	17.21	1.01		18.08	18.08	1.00		18.91	18.91	0.93		19.70	19.70	0.80

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 34

DETAILED COOLING CAPACITIES# - EFFICIENCY MODE CONTINUED

24VNA960

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB006L	1.00	1.00	
CAP**6021AL*	0.99	0.99	58CV(A,X)110−20
CAP**6024AL*	0.99	0.99	58CV(A,X)110−20
CNPH*6024AL*	0.99	1.04	58CV(A,X)110−20
CNPH*6124AL*	0.99	1.04	58CV(A,X)110−20
CNPV*6024AL*	0.98	0.98	58CV(A,X)110−20
CNPV*6124AL*	1.00	1.00	58CV(A,X)110−20
CSPH*6012AL*	1.00	1.00	58CV(A,X)110−20
CAP**6024AL*	0.99	0.99	58CV(A,X)135−22
CNPH*6024AL*	0.99	0.99	58CV(A,X)135−22
CNPH*6124AL*	1.00	1.00	58CV(A,X)135−22
CNPV*6024AL*	0.98	0.98	58CV(A,X)135−22
CNPV*6124AL*	1.00	1.00	58CV(A,X)135−22
CSPH*6012AL*	1.00	1.00	58CV(A,X)135−22
CAP**6024AL*	1.00	1.00	58CV(A,X)155−22
CNPH*6024AL*	1.00	1.00	58CV(A,X)155−22
CNPH*6124AL*	1.00	1.00	58CV(A,X)155−22
CNPV*6024AL*	0.99	0.99	58CV(A,X)155−22
CNPV*6124AL*	1.00	1.00	58CV(A,X)155−22
CSPH*6012AL*	1.00	1.00	58CV(A,X)155−22
CAP**6021AL*	0.99	1.04	59*N*A080V21**20
CAP**6024AL*	0.99	1.04	59*N*A080V21**20
CNPH*6024AL*	0.99	1.04	59*N*A080V21**20
CNPH*6124AL*	0.99	1.04	59*N*A080V21**20
CNPV*6024AL*	0.98	1.03	59*N*A080V21**20
CNPV*6124AL*	0.99	1.04	59*N*A080V21**20
CSPH*6012AL*	0.99	1.04	59*N*A080V21**20
CAP**6021AL*	0.99	1.04	59*N*A100V21**22
CAP**6024AL*	0.99	0.99	59*N*A100V21**22
CNPH*6024AL*	0.99	1.04	59*N*A100V21**22
CNPH*6124AL*	0.99	1.04	59*N*A100V21**22
CNPV*6024AL*	0.98	0.98	59*N*A100V21**22
CNPV*6124AL*	1.00	1.00	59*N*A100V21**22
CSPH*6012AL*	1.00	1.00	59*N*A100V21**22
CAP**6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6124AL*	0.99	1.04	59*N*A120V24**22
CNPV*6024AL*	0.98	1.03	59*N*A120V24**22
CNPV*6124AL*	0.99	0.99	59*N*A120V24**22
CSPH*6012AL*	1.00	1.00	59*N*A120V24**22
CAP**6021AL*	0.98	1.03	59MN7A060V21**20
CAP**6024AL*	0.98	1.03	59MN7A060V21**20
CNPH*6024AL*	0.98	1.09	59MN7A060V21**20
CNPH*6124AL*	0.98	1.09	59MN7A060V21**20
CNPV*6024AL*	0.97	1.02	59MN7A060V21**20
CNPV*6124AL*	0.99	1.04	59MN7A060V21**20
CSPH*6012AL*	0.99	1.04	59MN7A060V21**20

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNB006L	1.00	1.00	1.00	1.00	
CAP**6021AL*	1.01	1.06	1.01	1.07	58PH*110−20
CSPH*6012AL*	1.02	1.07	1.00	1.04	58PH*110−20
CAP**6024AL*	1.01	1.06	1.00	1.11	58PH*135−20
CNPH*6024AL*	1.01	1.06	1.01	1.06	58PH*135−20
CNPH*6124AL*	1.01	1.06	1.01	1.12	58PH*135−20
CNPV*6024AL*	1.00	1.05	1.01	1.06	58PH*135−20
CNPV*6124AL*	1.02	1.07	1.00	1.03	58PH*135−20
CSPH*6012AL*	1.02	1.07	1.01	1.05	58PH*135−20
CAP**6021AL*	1.01	1.06	1.01	1.07	58CTW110−22
CSPH*6012AL*	1.02	1.07	1.00	1.04	58CTW110−22
CAP**6024AL*	1.01	1.06	1.01	1.06	58CTW135−22
CNPH*6024AL*	1.01	1.06	1.01	1.06	58CTW135−22
CNPH*6124AL*	1.01	1.06	1.01	1.06	58CTW135−22
CNPV*6024AL*	1.00	1.05	1.01	1.06	58CTW135−22
CNPV*6124AL*	1.02	1.07	1.01	1.04	58CTW135−22
CSPH*6012AL*	1.02	1.07	1.00	1.04	58CTW135−22
CAP**6021AL*	1.01	1.06	1.01	1.07	59*P2A080E21**20
CSPH*6012AL*	1.02	1.07	1.00	1.05	59*P2A080E21**20
CAP**6021AL*	1.01	1.06	1.01	1.07	59*P2A100E21**20
CSPH*6012AL*	1.01	1.06	1.00	1.05	59*P2A100E21**20
CAP**6024AL*	1.01	1.06	1.01	1.07	59*P2A120E24**20
CNPH*6024AL*	1.01	1.06	1.01	1.07	59*P2A120E24**20
CNPH*6124AL*	1.01	1.06	1.01	1.07	59*P2A120E24**20
CNPV*6024AL*	1.00	1.05	1.01	1.07	59*P2A120E24**20
CNPV*6124AL*	1.02	1.07	1.00	1.04	59*P2A120E24**20
CSPH*6012AL*	1.02	1.07	1.00	1.05	59*P2A120E24**20
CAP**6021AL*	0.99	1.04	1.01	1.11	59*P5A080E21**20
CSPH*6012AL*	1.00	1.05	1.01	1.10	59*P5A080E21**20
CAP**6024AL*	1.00	1.05	1.01	1.11	59*P5A120E24**22
CNPH*6024AL*	1.00	1.05	1.01	1.11	59*P5A120E24**22
CNPH*6124AL*	1.00	1.05	1.01	1.10	59*P5A120E24**22
CNPV*6024AL*	0.99	1.04	1.01	1.11	59*P5A120E24**22
CNPV*6124AL*	1.00	1.05	1.01	1.09	59*P5A120E24**22
CSPH*6012AL*	1.00	1.05	1.00	1.09	59*P5A120E24**22
CSPH*6012AL*	1.00	1.05	1.01	1.10	59*P6A080E21**20
CSPH*6012AL*	1.01	1.06	1.00	1.11	59*P6A100E21**20
CAP**6024AL*	0.99	1.04	1.01	1.11	59*P6A120E24**22
CNPH*6124AL*	1.00	1.05	1.01	1.10	59*P6A120E24**22
CNPV*6024AL*	0.98	1.03	1.01	1.10	59*P6A120E24**22
CNPV*6124AL*	1.00	1.05	1.01	1.09	59*P6A120E24**22
CSPH*6012AL*	1.00	1.05	1.00	1.08	59*P6A120E24**22
CAP**6024AL*	1.00	1.05	1.01	1.09	OVLAAB060154
CNPV*6024AL*	0.99	1.04	1.01	1.09	OVLAAB060154
CNPV*6124AL*	1.01	1.06	1.01	1.07	OVLAAB060154
CNPV*6124AL*	1.01	1.06	1.01	1.11	OVMAAB060154
CSPH*6012AL*	1.01	1.06	1.00	1.11	OVMAAB060154

See notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EVAP. AIR	24VNA924A / FE4ANF005 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																		
		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)		
	EWB °F (°C)	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW
STAGE 5																					
75 (23.9)	72 (22.2)	608	18.41	7.66	1.92	608	24.19	9.83	2.05	634	25.62	10.41	1.59	663	27.05	11.00	1.19	708	28.58	11.63	0.84
	67 (19.4)		16.71	10.40	1.94		22.02	12.63	2.06		23.35	13.37	1.62		24.68	14.13	1.23		26.09	15.02	0.89
	63 (17.2)		15.50	12.56	1.95		20.40	14.80	2.07		21.64	15.67	1.63		22.89	16.56	1.25		24.23	17.65	0.92
	57 (13.9)		14.52	14.52	1.95		18.30	18.00	2.07		19.43	19.04	1.65		20.56	20.13	1.28		21.81	21.49	0.95
80 (26.7)	72 (22.2)	608	18.29	10.37	1.91	608	24.08	12.57	2.04	634	25.50	13.30	1.59	663	26.92	14.05	1.19	708	28.43	14.92	0.84
	67 (19.4)		16.65	13.09	1.94		21.95	15.35	2.06		23.28	16.24	1.62		24.60	17.16	1.23		26.00	18.28	0.89
	63 (17.2)		15.55	15.22	1.95		20.38	17.52	2.07		21.62	18.53	1.63		22.87	19.59	1.25		24.20	20.91	0.92
	57 (13.9)		15.42	15.42	1.95		19.24	19.24	2.07		20.39	20.39	1.64		21.57	21.57	1.27		22.92	22.92	0.94
STAGE 3																					
75 (23.9)	72 (22.2)	437	15.17	6.19	1.32	437	15.89	6.46	1.09	452	16.82	6.84	0.91	475	17.81	7.24	0.73	510	18.87	7.68	0.54
	67 (19.4)		13.78	8.02	1.34		14.47	8.33	1.11		15.33	8.80	0.93		16.24	9.32	0.76		17.22	9.94	0.59
	63 (17.2)		12.75	9.46	1.34		13.41	9.80	1.12		14.22	10.33	0.95		15.07	10.96	0.79		16.00	11.72	0.62
	57 (13.9)		11.46	11.46	1.35		12.02	11.94	1.12		12.74	12.57	0.97		13.52	13.34	0.82		14.39	14.31	0.66
80 (26.7)	72 (22.2)	437	15.10	8.00	1.32	437	15.81	8.29	1.09	452	16.74	8.75	0.91	475	17.72	9.27	0.72	510	18.78	9.88	0.54
	67 (19.4)		13.74	9.82	1.34		14.42	10.15	1.11		15.28	10.70	0.93		16.19	11.34	0.76		17.16	12.14	0.59
	63 (17.2)		12.73	11.26	1.34		13.39	11.61	1.12		14.20	12.23	0.95		15.05	12.97	0.79		15.98	13.90	0.62
	57 (13.9)		12.15	12.15	1.34		12.69	12.69	1.12		13.42	13.42	0.96		14.24	14.24	0.80		15.18	15.18	0.64
STAGE 1 – FE4ANF005 ONLY																					
75 (23.9)	72 (22.2)	342	11.66	4.74	0.81	250	9.26	3.75	0.47	250	9.75	3.95	0.47	250	10.23	4.15	0.43	250	10.72	4.35	0.36
	67 (19.4)		10.56	6.08	0.83		8.39	4.68	0.48		8.84	4.89	0.49		9.27	5.09	0.47		9.70	5.30	0.40
	63 (17.2)		9.75	7.13	0.83		7.74	5.40	0.49		8.15	5.61	0.51		8.56	5.83	0.49		8.96	6.04	0.44
	57 (13.9)		8.68	8.68	0.84		6.85	6.46	0.49		7.22	6.68	0.52		7.59	6.90	0.52		7.95	7.12	0.48
80 (26.7)	72 (22.2)	342	11.61	6.08	0.81	250	9.23	4.68	0.47	250	9.72	4.88	0.47	250	10.20	5.09	0.43	250	10.68	5.30	0.36
	67 (19.4)		10.53	7.41	0.83		8.37	5.60	0.48		8.81	5.82	0.49		9.25	6.03	0.47		9.68	6.24	0.40
	63 (17.2)		9.73	8.46	0.83		7.72	6.32	0.49		8.14	6.54	0.51		8.54	6.76	0.49		8.95	6.98	0.44
	57 (13.9)		9.21	9.21	0.83		7.09	7.09	0.49		7.40	7.40	0.52		7.70	7.70	0.51		8.00	8.00	0.48
STAGE 1 – ALL OTHER INDOOR COMBINATIONS																					
75 (23.9)	72 (22.2)	342	11.66	4.74	0.81	222	8.99	3.64	0.47	234	9.59	3.89	0.48	229	9.99	4.06	0.44	245	10.66	4.33	0.36
	67 (19.4)		10.56	6.08	0.83		8.13	4.46	0.48		8.68	4.76	0.50		9.04	4.92	0.48		9.65	5.25	0.41
	63 (17.2)		9.75	7.13	0.83		7.49	5.09	0.49		8.00	5.44	0.51		8.34	5.58	0.50		8.91	5.98	0.44
	57 (13.9)		8.68	8.68	0.84		6.63	6.02	0.49		7.09	6.43	0.52		7.39	6.56	0.52		7.90	7.04	0.48
80 (26.7)	72 (22.2)	342	11.61	6.08	0.81	222	8.96	4.47	0.47	234	9.55	4.76	0.47	229	9.96	4.92	0.44	245	10.62	5.26	0.36
	67 (19.4)		10.53	7.41	0.83		8.11	5.28	0.48		8.66	5.63	0.50		9.02	5.78	0.48		9.63	6.18	0.41
	63 (17.2)		9.73	8.46	0.83		7.48	5.91	0.49		7.99	6.31	0.51		8.33	6.44	0.50		8.89	6.91	0.44
	57 (13.9)		9.21	9.21	0.83		6.73	6.73	0.49		7.19	7.19	0.52		7.40	7.40	0.52		7.93	7.93	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 34

DETAILED COOLING CAPACITIES[#]- COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA924A

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005L	1.00	1.00	
FE4AN(B,F)003L	0.96	1.00	
FE4ANB006L	0.98	1.08	
FE4ANF002L	0.96	1.00	
CAP**3614AL*	0.98	1.03	58CV(A,X)070−12
CAP**3617AL*	0.98	1.03	58CV(A,X)070−12
CNPH*3617AL*	0.98	1.08	58CV(A,X)070−12
CNPV*3617AL*	0.97	1.01	58CV(A,X)070−12
CNPV*3717AL*	0.97	1.02	58CV(A,X)070−12
CNPV*4217AL*	0.96	1.00	58CV(A,X)070−12
CSPH*3612AL*	1.00	1.05	58CV(A,X)070−12
CSPH*4212AL*	1.00	1.05	58CV(A,X)070−12
CAP**3617AL*	0.98	1.03	58CV(A,X)090−16
CAP**3621AL*	0.98	1.03	58CV(A,X)090−16
CAP**4221AL*	0.99	1.04	58CV(A,X)090−16
CNPH*3617AL*	0.98	1.03	58CV(A,X)090−16
CNPH*4221AL*	0.99	1.04	58CV(A,X)090−16
CNPV*3617AL*	0.97	1.01	58CV(A,X)090−16
CNPV*3621AL*	0.97	1.01	58CV(A,X)090−16
CNPV*3717AL*	0.97	0.97	58CV(A,X)090−16
CNPV*4217AL*	0.96	1.00	58CV(A,X)090−16
CNPV*4221AL*	0.96	1.00	58CV(A,X)090−16
CSPH*3612AL*	1.00	1.00	58CV(A,X)090−16
CSPH*4212AL*	1.01	1.01	58CV(A,X)090−16
CAP**3617AL*	0.98	1.03	59*N*A060V17**14
CAP**3621AL*	0.98	1.03	59*N*A060V17**14
CAP**4221AL*	0.98	1.03	59*N*A060V17**14
CNPH*3617AL*	0.97	1.07	59*N*A060V17**14
CNPH*4221AL*	0.98	1.08	59*N*A060V17**14
CNPV*3617AL*	0.94	1.03	59*N*A060V17**14
CNPV*3621AL*	0.94	1.03	59*N*A060V17**14
CNPV*3717AL*	0.97	1.02	59*N*A060V17**14
CNPV*4221AL*	0.95	1.04	59*N*A060V17**14
CSPH*3612AL*	0.99	1.04	59*N*A060V17**14
CSPH*4212AL*	1.00	1.05	59*N*A060V17**14
CAP**3617AL*	0.98	1.03	59*N*A080V17**14
CAP**3621AL*	0.98	1.03	59*N*A080V17**14
CAP**4221AL*	0.99	1.04	59*N*A080V17**14
CNPH*3617AL*	0.98	1.08	59*N*A080V17**14
CNPH*4221AL*	0.99	1.09	59*N*A080V17**14
CNPV*3617AL*	0.95	1.04	59*N*A080V17**14
CNPV*3621AL*	0.95	0.99	59*N*A080V17**14
CNPV*3717AL*	0.97	1.02	59*N*A080V17**14
CNPV*4221AL*	0.97	1.02	59*N*A080V17**14
CSPH*3612AL*	1.00	1.05	59*N*A080V17**14
CSPH*4212AL*	1.00	1.05	59*N*A080V17**14
CAP**3621AL*	0.98	1.03	59MN7A060V21**20
CAP**4221AL*	0.99	1.04	59MN7A060V21**20
CAP**4224AL*	0.99	1.04	59MN7A060V21**20

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003L	0.94	0.94	0.99	0.94	
FV4CNF002L	0.94	0.94	1.00	0.97	
CAP**2414AL*	0.94	0.99	1.08	1.12	58PH*045−08
CAP**2417AL*	0.94	0.99	1.09	1.12	58PH*045−08
CAP**3014AL*	0.95	0.95	1.08	1.11	58PH*045−08
CAP**3017AL*	0.95	0.95	1.09	1.11	58PH*045−08
CNPV*2414AL*	0.93	0.98	1.08	1.12	58PH*045−08
CNPV*2417AL*	0.93	0.98	1.08	1.12	58PH*045−08
CNPV*3014AL*	0.95	1.00	1.08	1.11	58PH*045−08
CNPV*3017AL*	0.95	1.00	1.09	1.11	58PH*045−08
CNPV*3117AL*	0.95	0.95	1.12	1.11	58PH*045−08
CAP**2414AL*	0.93	0.93	1.08	1.08	58CTW045−12
CAP**2417AL*	0.94	0.94	1.08	1.07	58CTW045−12
CAP**3014AL*	0.93	0.93	1.10	1.09	58CTW045−12
CAP**3017AL*	0.93	0.93	1.11	1.09	58CTW045−12
CNPV*2414AL*	0.93	0.98	1.08	1.07	58CTW045−12
CNPV*2417AL*	0.93	0.98	1.08	1.07	58CTW045−12
CNPV*3014AL*	0.93	0.97	1.10	1.09	58CTW045−12
CNPV*3017AL*	0.93	0.93	1.11	1.09	58CTW045−12
CNPV*3117AL*	0.94	0.94	1.12	1.06	58CTW045−12
CSPH*3012AL*	0.93	0.93	1.11	1.08	58CTW045−12
CAP**2417AL*	0.93	0.93	1.11	1.09	58CTW070−16
CAP**3017AL*	0.93	0.93	1.11	1.08	58CTW070−16
CNPH*2417AL*	0.96	1.05	1.09	1.07	58CTW070−16
CNPH*3017AL*	0.93	0.98	1.11	1.08	58CTW070−16
CNPH*3117AL*	0.95	0.95	1.12	1.05	58CTW070−16
CNPV*2417AL*	0.93	0.98	1.08	1.07	58CTW070−16
CNPV*3017AL*	0.93	0.93	1.11	1.08	58CTW070−16
CNPV*3117AL*	0.95	0.95	1.12	1.05	58CTW070−16
CSPH*2412AL*	0.97	1.01	1.09	1.08	58CTW070−16
CSPH*3012AL*	0.93	0.93	1.11	1.07	58CTW070−16
CSPH*2412AL*	0.94	0.94	1.13	1.15	58CTW090−16
CSPH*3012AL*	0.95	0.95	1.14	1.12	58CTW090−16
CAP**2414AL*	0.95	1.00	1.08	1.13	59*P2A040E14**10
CAP**2417AL*	0.93	0.98	1.08	1.13	59*P2A040E14**10
CAP**3014AL*	0.94	0.99	1.07	1.12	59*P2A040E14**10
CAP**3017AL*	0.95	1.00	1.08	1.12	59*P2A040E14**10
CNPV*2414AL*	0.93	0.97	1.07	1.13	59*P2A040E14**10
CNPV*2417AL*	0.93	0.97	1.07	1.13	59*P2A040E14**10
CNPV*3014AL*	0.94	0.99	1.07	1.12	59*P2A040E14**10
CNPV*3017AL*	0.95	1.00	1.08	1.12	59*P2A040E14**10
CNPV*3117AL*	0.94	0.94	1.11	1.11	59*P2A040E14**10
CSPH*2412AL*	0.96	1.00	1.10	1.23	59*P2A040E14**10
CSPH*3012AL*	0.97	1.01	1.09	1.11	59*P2A040E14**10
CAP**2417AL*	0.93	0.98	1.07	1.12	59*P2A040E17**12
CAP**3017AL*	0.95	1.00	1.08	1.13	59*P2A040E17**12
CNPH*2417AL*	0.95	1.05	1.08	1.13	59*P2A040E17**12
CNPH*3017AL*	0.95	1.05	1.08	1.12	59*P2A040E17**12
CNPH*3117AL*	0.97	1.01	1.09	1.10	59*P2A040E17**12
CNPV*2417AL*	0.93	0.97	1.07	1.13	59*P2A040E17**12
CNPV*3017AL*	0.95	1.00	1.08	1.12	59*P2A040E17**12
CNPV*3117AL*	0.97	1.01	1.09	1.10	59*P2A040E17**12
CSPH*2412AL*	0.96	1.00	1.10	1.25	59*P2A040E17**12
CAP**2414AL*	0.94	0.94	1.09	1.10	59*P2A060E14**12
CAP**2417AL*	0.95	0.95	1.10	1.10	59*P2A060E14**12
CAP**3014AL*	0.93	0.93	1.11	1.11	59*P2A060E14**12

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CAP**3017AL*	0.94	0.94	1.12	1.11	59*P2A060E14**12
CNPV*2414AL*	0.94	0.99	1.09	1.09	59*P2A060E14**12
CNPV*2417AL*	0.94	0.99	1.09	1.09	59*P2A060E14**12
CNPV*3014AL*	0.93	0.98	1.11	1.11	59*P2A060E14**12
CNPV*3017AL*	0.94	0.94	1.12	1.11	59*P2A060E14**12
CNPV*3117AL*	0.96	0.96	1.13	1.09	59*P2A060E14**12
CSPH*2412AL*	0.95	0.95	1.09	1.10	59*P2A060E14**12
CSPH*3012AL*	0.94	0.94	1.12	1.10	59*P2A060E14**12
CNPH*2417AL*	0.96	1.00	1.11	1.13	59*P2A060E17**14
CSPH*2412AL*	0.95	0.95	1.13	1.15	59*P2A060E17**14
CNPH*2417AL*	0.96	1.00	1.10	1.10	59*P2A080E17**16
CSPH*2412AL*	0.94	0.94	1.12	1.12	59*P2A080E17**16
CAP**2414AL*	0.93	1.03	1.07	1.17	59*P5A040E14**10
CAP**2417AL*	0.94	1.04	1.07	1.17	59*P5A040E14**10
CAP**3014AL*	0.95	1.05	1.07	1.16	59*P5A040E14**10
CAP**3017AL*	0.95	1.05	1.07	1.15	59*P5A040E14**10
CNPV*2414AL*	0.93	1.03	1.07	1.17	59*P5A040E14**10
CNPV*2417AL*	0.93	1.03	1.07	1.17	59*P5A040E14**10
CNPV*3014AL*	0.95	1.05	1.07	1.16	59*P5A040E14**10
CNPV*3017AL*	0.95	1.05	1.07	1.15	59*P5A040E14**10
CNPV*3117AL*	0.96	1.05	1.08	1.13	59*P5A040E14**10
CSPH*2412AL*	0.95	1.05	1.07	1.17	59*P5A040E14**10
CSPH*3012AL*	0.95	1.05	1.08	1.15	59*P5A040E14**10
CAP**2417AL*	0.93	0.97	1.07	1.14	59*P5A040E17**12
CAP**3017AL*	0.93	0.98	1.07	1.13	59*P5A040E17**12
CNPH*2417AL*	0.94	1.04	1.08	1.15	59*P5A040E17**12
CNPH*3017AL*	0.93	1.03	1.07	1.13	59*P5A040E17**12
CNPH*3117AL*	0.96	1.00	1.09	1.12	59*P5A040E17**12
CNPV*2417AL*	0.92	1.01	1.07	1.14	59*P5A040E17**12
CNPV*3017AL*	0.93	0.98	1.07	1.13	59*P5A040E17**12
CNPV*3117AL*	0.94	0.99	1.09	1.12	59*P5A040E17**12
CSPH*2412AL*	0.96	1.05	1.10	1.23	59*P5A040E17**12
CSPH*3012AL*	0.93	0.98	1.08	1.13	59*P5A040E17**12
CNPH*2417AL*	0.96	1.05	1.10	1.17	59*P5A060E17**14
CSPH*2412AL*	0.97	1.01	1.10	1.16	59*P5A060E17**14

See notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EVAP. AIR	24VNA924B / FE4ANF002L Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																		
		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																					
75 (23.9)	72 (22.2)	**642**	24.23	9.92	2.44	**608**	25.33	10.31	2.12	**634**	26.93	10.95	1.84	**663**	28.54	11.60	1.58	**708**	30.28	12.32	1.33
	67 (19.4)		22.01	12.96	2.42		23.01	13.22	2.10		24.45	14.00	1.83		25.91	14.82	1.58		27.51	15.77	1.34
	63 (17.2)		20.38	15.34	2.39		21.31	15.50	2.08		22.64	16.40	1.82		24.00	17.33	1.57		25.48	18.47	1.35
	57 (13.9)		18.45	18.45	2.36		19.08	18.80	2.05		20.28	19.87	1.80		21.49	20.99	1.57		22.82	22.37	1.36
80 (26.7)	72 (22.2)	**642**	24.17	12.95	2.44	**608**	25.27	13.22	2.12	**634**	26.87	14.00	1.84	**663**	28.48	14.82	1.58	**708**	30.22	15.77	1.33
	67 (19.4)		21.96	15.96	2.42		22.96	16.09	2.10		24.40	17.02	1.83		25.86	17.99	1.58		27.45	19.17	1.34
	63 (17.2)		20.36	18.31	2.39		21.28	18.35	2.08		22.61	19.39	1.82		23.97	20.49	1.57		25.45	21.85	1.35
	57 (13.9)		19.56	19.56	2.38		20.08	20.08	2.07		21.29	21.29	1.81		22.54	22.54	1.57		23.97	23.97	1.35
STAGE 3																					
75 (23.9)	72 (22.2)	**437**	16.80	6.88	1.49	**415**	17.53	7.13	1.28	**437**	18.69	7.60	1.10	**456**	19.82	8.06	0.92	**484**	21.04	8.55	0.76
	67 (19.4)		15.18	8.96	1.50		15.85	9.13	1.28		16.89	9.72	1.11		17.91	10.28	0.95		18.99	10.93	0.79
	63 (17.2)		13.98	10.59	1.50		14.60	10.69	1.28		15.56	11.37	1.13		16.49	12.01	0.97		17.48	12.77	0.82
	57 (13.9)		12.63	12.63	1.49		12.99	12.94	1.29		13.83	13.75	1.14		14.64	14.51	1.00		15.53	15.43	0.86
80 (26.7)	72 (22.2)	**437**	16.75	8.99	1.49	**415**	17.48	9.16	1.28	**437**	18.64	9.75	1.10	**456**	19.77	10.32	0.92	**484**	20.98	10.97	0.76
	67 (19.4)		15.14	11.05	1.50		15.81	11.13	1.28		16.85	11.84	1.11		17.87	12.51	0.95		18.95	13.31	0.79
	63 (17.2)		13.97	12.66	1.50		14.59	12.68	1.28		15.54	13.48	1.13		16.47	14.23	0.97		17.46	15.14	0.82
	57 (13.9)		13.43	13.43	1.50		13.78	13.78	1.29		14.66	14.66	1.13		15.51	15.51	0.99		16.47	16.47	0.84
STAGE 1																					
75 (23.9)	72 (22.2)	**362**	13.91	5.70	1.21	**222**	8.34	3.43	0.52	**234**	8.89	3.65	0.44	**229**	9.31	3.80	0.37	**245**	9.90	4.05	0.29
	67 (19.4)		12.50	7.42	1.22		7.48	4.49	0.53		7.97	4.78	0.46		8.34	4.91	0.40		8.86	5.24	0.33
	63 (17.2)		11.48	8.77	1.22		6.85	5.34	0.53		7.30	5.67	0.47		7.63	5.79	0.41		8.11	6.18	0.35
	57 (13.9)		10.41	10.41	1.22		6.25	6.25	0.54		6.65	6.65	0.48		6.87	6.87	0.43		7.32	7.32	0.37
80 (26.7)	72 (22.2)	**362**	13.87	7.46	1.21	**222**	8.31	4.53	0.52	**234**	8.86	4.82	0.44	**229**	9.28	4.96	0.37	**245**	9.87	5.29	0.29
	67 (19.4)		12.47	9.17	1.22		7.45	5.59	0.53		7.94	5.94	0.46		8.31	6.06	0.40		8.83	6.48	0.33
	63 (17.2)		11.48	10.51	1.22		6.85	6.43	0.53		7.30	6.83	0.47		7.62	6.93	0.41		8.10	7.41	0.35
	57 (13.9)		11.08	11.08	1.22		6.68	6.68	0.54		7.10	7.10	0.48		7.33	7.33	0.42		7.81	7.81	0.36

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 34

DETAILED COOLING CAPACITIES[#]- COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA924B

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANF002L	1.00	1.00	
FE4AN(B,F)003L	1.00	1.00	
FE4AN(B,F)005L	1.00	1.00	
CAP**2414AL*	0.98	1.03	58CV(A,X)070−12
CAP**2417AL*	0.98	1.03	59*N*A060V17**14
CAP**2417AL*	0.98	1.03	59*N*A080V17**14
CAP**2417AL*	0.98	0.98	58CV(A,X)090−16
CAP**3014AL*	0.98	0.98	58CV(A,X)070−12
CAP**3017AL*	0.98	1.03	59*N*A060V17**14
CAP**3017AL*	0.98	1.03	59*N*A080V17**14
CAP**3017AL*	0.98	0.98	58CV(A,X)090−16
CAP**3614AL*	1.00	1.00	58CV(A,X)070−12
CAP**3617AL*	1.00	1.00	59*N*A060V17**14
CAP**3617AL*	1.00	1.00	59*N*A080V17**14
CAP**3617AL*	1.00	1.00	58CV(A,X)070−12
CAP**3617AL*	1.00	1.00	58CV(A,X)090−16
CAP**3621AL*	1.00	1.00	59*N*A060V17**14
CAP**3621AL*	1.00	1.00	59*N*A080V17**14
CAP**3621AL*	1.00	1.00	58CV(A,X)090−16
CAP**4221AL*	1.00	1.00	59*N*A060V17**14
CAP**4221AL*	1.00	1.00	59*N*A080V17**14
CAP**4221AL*	1.00	1.00	58CV(A,X)090−16
CAP**4817AL*	1.00	1.00	59*N*A060V17**14
CAP**4817AL*	1.00	1.00	59*N*A080V17**14
CAP**4817AL*	1.00	1.00	58CV(A,X)070−12
CAP**4817AL*	1.00	1.00	58CV(A,X)090−16
CAP**4821AL*	1.00	1.00	59*N*A060V17**14
CAP**4821AL*	1.00	1.00	59*N*A080V17**14
CAP**4821AL*	1.00	1.00	58CV(A,X)090−16
CNPH*3617AL*	1.00	1.05	59*N*A060V17**14
CNPH*3617AL*	1.00	1.05	59*N*A080V17**14
CNPH*4221AL*	1.00	1.05	59*N*A060V17**14
CNPH*4221AL*	1.00	1.05	59*N*A080V17**14
CNPH*4221AL*	1.00	1.00	58CV(A,X)090−16
CNPV*3117AL*	1.00	1.00	59*N*A060V17**14
CNPV*3117AL*	1.00	1.00	59*N*A080V17**14
CNPV*3117AL*	1.00	1.00	58CV(A,X)070−12
CNPV*3117AL*	1.00	1.00	58CV(A,X)090−16
CNPV*3617AL*	1.00	1.05	59*N*A060V17**14
CNPV*3617AL*	1.00	1.05	59*N*A080V17**14
CNPV*3621AL*	1.00	1.05	59*N*A060V17**14
CNPV*3621AL*	1.00	1.05	59*N*A080V17**14
CNPV*3621AL*	1.00	1.00	58CV(A,X)090−16
CNPV*3717AL*	1.00	1.00	59*N*A060V17**14
CNPV*3717AL*	1.00	1.00	59*N*A080V17**14
CNPV*4217AL*	1.00	1.05	59*N*A060V17**14
CNPV*4217AL*	1.00	1.00	59*N*A080V17**14
CNPV*4221AL*	1.00	1.05	59*N*A060V17**14
CNPV*4221AL*	1.00	1.05	59*N*A080V17**14
CNPV*4221AL*	1.00	1.00	58CV(A,X)090−16
CNPV*4821AL*	1.00	1.00	59*N*A060V17**14
CNPV*4821AL*	1.00	1.00	59*N*A080V17**14
CNPV*4821AL*	1.00	1.00	58CV(A,X)090−16
CSPH*3612AL*	1.00	1.00	59*N*A060V17**14
CSPH*3612AL*	1.00	1.00	59*N*A080V17**14
CSPH*3612AL*	1.00	1.00	58CV(A,X)070−12
CSPH*3612AL*	1.00	1.00	58CV(A,X)090−16
CSPH*4212AL*	1.00	1.00	59*N*A060V17**14
CSPH*4212AL*	1.00	1.00	59*N*A080V17**14

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CSPH*4212AL*	1.00	1.00	58CV(A,X)070−12
CSPH*4212AL*	1.00	1.00	58CV(A,X)090−16
CSPH*4812AL*	1.00	1.00	59*N*A060V17**14
CSPH*4812AL*	1.00	1.00	59*N*A080V17**14

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNF002L	1.00	1.00	1.00	1.00	
FV4CN(B,F)003L	1.04	0.95	0.99	0.98	
FV4CNF002L	1.03	0.94	1.00	1.00	
CAP**2414AL*	1.03	0.99	1.08	1.16	59*P2A040E14**10
CAP**2414AL*	1.03	0.93	1.09	1.13	59*P2A060E14**12
CAP**2414AL*	1.02	1.02	1.07	1.19	59*P5A040E14**10
CAP**2414AL*	1.02	0.97	1.08	1.15	58PH*045−08
CAP**2414AL*	1.02	0.92	1.08	1.11	58CTW045−12
CAP**2417AL*	1.02	0.97	1.08	1.16	59*P2A040E14**10
CAP**2417AL*	1.02	0.97	1.07	1.15	59*P2A040E17**12
CAP**2417AL*	1.03	0.94	1.10	1.14	59*P2A060E14**12
CAP**2417AL*	1.02	1.02	1.07	1.19	59*P5A040E14**10
CAP**2417AL*	1.01	0.96	1.07	1.17	59*P5A040E17**12
CAP**2417AL*	1.03	0.98	1.09	1.16	58PH*045−08
CAP**2417AL*	1.03	0.93	1.08	1.10	58CTW045−12
CAP**2417AL*	1.03	0.93	1.11	1.13	58CTW070−16
CAP**3014AL*	1.03	0.98	1.07	1.16	59*P2A040E14**10
CAP**3014AL*	1.04	0.95	1.11	1.16	59*P2A060E14**12
CAP**3014AL*	1.03	1.03	1.07	1.19	59*P5A040E14**10
CAP**3014AL*	1.03	0.94	1.08	1.15	58PH*045−08
CAP**3014AL*	1.03	0.94	1.10	1.13	58CTW045−12
CAP**3017AL*	1.03	0.99	1.08	1.16	59*P2A040E14**10
CAP**3017AL*	1.03	0.99	1.08	1.16	59*P2A040E17**12
CAP**3017AL*	1.04	0.95	1.12	1.16	59*P2A060E14**12
CAP**3017AL*	1.03	1.03	1.07	1.18	59*P5A040E14**10
CAP**3017AL*	1.02	0.97	1.07	1.17	59*P5A040E17**12
CAP**3017AL*	1.03	0.94	1.09	1.15	58PH*045−08
CAP**3017AL*	1.03	0.94	1.11	1.13	58CTW045−12
CAP**3017AL*	1.04	0.95	1.11	1.12	58CTW070−16
CNPH*2417AL*	1.03	1.03	1.08	1.16	59*P2A040E17**12
CNPH*2417AL*	1.04	0.99	1.11	1.17	59*P2A060E17**14
CNPH*2417AL*	1.04	0.99	1.10	1.14	59*P2A080E17**16
CNPH*2417AL*	1.03	1.03	1.09	1.11	58CTW070−16
CNPH*3017AL*	1.03	1.03	1.08	1.16	59*P2A040E17**12
CNPH*3017AL*	1.02	1.02	1.07	1.17	59*P5A040E17**12
CNPH*3017AL*	1.04	0.99	1.11	1.12	58CTW070−16
CNPH*3117AL*	1.06	1.01	1.09	1.14	59*P2A040E17**12
CNPH*3117AL*	1.04	0.99	1.09	1.16	59*P5A040E17**12
CNPH*3117AL*	1.07	0.97	1.12	1.10	58CTW070−16
CNPV*2414AL*	1.00	0.95	1.07	1.16	59*P2A040E14**10
CNPV*2414AL*	1.02	0.97	1.09	1.13	59*P2A060E14**12
CNPV*2414AL*	1.01	1.01	1.07	1.20	59*P5A040E14**10
CNPV*2414AL*	1.01	0.96	1.08	1.15	58PH*045−08
CNPV*2414AL*	1.01	0.96	1.08	1.11	58CTW045−12
CNPV*2417AL*	1.00	0.95	1.07	1.16	59*P2A040E14**10
CNPV*2417AL*	1.00	0.95	1.07	1.16	59*P2A040E17**12
CNPV*2417AL*	1.02	0.97	1.09	1.13	59*P2A060E14**12
CNPV*2417AL*	1.01	1.01	1.07	1.20	59*P5A040E14**10
CNPV*2417AL*	0.99	0.99	1.07	1.17	59*P5A040E17**12
CNPV*2417AL*	1.01	0.96	1.08	1.15	58PH*045−08

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CNPV*2417AL*	1.01	0.96	1.08	1.11	58CTW045−12
CNPV*2417AL*	1.01	0.96	1.08	1.11	58CTW070−16
CNPV*3014AL*	1.02	0.97	1.07	1.15	59*P2A040E14**10
CNPV*3014AL*	1.03	0.99	1.11	1.16	59*P2A060E14**12
CNPV*3014AL*	1.03	1.03	1.07	1.19	59*P5A040E14**10
CNPV*3014AL*	1.03	0.98	1.08	1.15	58PH*045−08
CNPV*3014AL*	1.03	0.98	1.10	1.13	58CTW045−12
CNPV*3017AL*	1.03	0.98	1.08	1.15	59*P2A040E14**10
CNPV*3017AL*	1.03	0.98	1.08	1.16	59*P2A040E17**12
CNPV*3017AL*	1.03	0.94	1.12	1.16	59*P2A060E14**12
CNPV*3017AL*	1.03	1.03	1.07	1.18	59*P5A040E14**10
CNPV*3017AL*	1.01	0.96	1.07	1.17	59*P5A040E17**12
CNPV*3017AL*	1.03	0.99	1.09	1.15	58PH*045−08
CNPV*3017AL*	1.03	0.93	1.11	1.13	58CTW045−12
CNPV*3017AL*	1.03	0.94	1.11	1.12	58CTW070−16
CNPV*3117AL*	1.05	0.96	1.11	1.16	59*P2A040E14**10
CNPV*3117AL*	1.04	0.99	1.09	1.15	59*P2A040E17**12
CNPV*3117AL*	1.06	0.96	1.13	1.14	59*P2A060E14**12
CNPV*3117AL*	1.05	1.05	1.08	1.16	59*P5A040E14**10
CNPV*3117AL*	1.03	0.99	1.09	1.16	59*P5A040E17**12
CNPV*3117AL*	1.05	0.96	1.12	1.15	58PH*045−08
CNPV*3117AL*	1.06	0.96	1.12	1.11	58CTW045−12
CNPV*3117AL*	1.07	0.97	1.12	1.10	58CTW070−16
CSPH*2412AL*	1.04	0.99	1.10	1.27	59*P2A040E14**10
CSPH*2412AL*	1.04	0.99	1.10	1.28	59*P2A040E17**12
CSPH*2412AL*	1.03	0.94	1.09	1.13	59*P2A060E14**12
CSPH*2412AL*	1.06	0.96	1.13	1.19	59*P2A060E17**14
CSPH*2412AL*	1.05	0.96	1.12	1.16	59*P2A080E17**16
CSPH*2412AL*	1.03	1.03	1.07	1.19	59*P5A040E14**10
CSPH*2412AL*	1.04	1.04	1.10	1.26	59*P5A040E17**12
CSPH*2412AL*	1.05	1.00	1.10	1.20	59*P5A060E17**14
CSPH*2412AL*	1.05	1.00	1.09	1.11	58CTW070−16
CSPH*2412AL*	1.05	0.96	1.13	1.19	58CTW090−16
CSPH*3012AL*	1.05	1.00	1.09	1.15	59*P2A040E14**10
CSPH*3012AL*	1.08	1.03	1.12	1.19	59*P2A060E14**12
CSPH*3012AL*	1.03	1.03	1.08	1.19	59*P5A040E14**10
CSPH*3012AL*	1.03	0.98	1.08	1.16	59*P5A040E17**12
CSPH*3012AL*	1.03	0.94	1.11	1.12	58CTW045−12
CSPH*3012AL*	1.04	0.95	1.11	1.12	58CTW070−16
CSPH*3012AL*	1.06	0.96	1.14	1.17	58CTW090−16

See notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EVAP. AIR	24VNA925 / FE4ANF005 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																	
		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW
STAGE 5																					
75 (23.9)	72 (22.2)	608	19.25	8.01	1.62	608	25.24	10.26	1.88	634	26.68	10.84	1.61	663	28.11	11.43	1.34	708	29.64	12.06	1.07
	67 (19.4)		17.48	10.88	1.63		22.98	13.18	1.89		24.31	13.92	1.63		25.64	14.68	1.38		27.06	15.57	1.13
	63 (17.2)		16.21	13.13	1.64		21.29	15.45	1.90		22.54	16.31	1.65		23.79	17.21	1.41		25.13	18.30	1.17
	57 (13.9)		15.18	15.18	1.65		19.10	18.78	1.90		20.23	19.83	1.66		21.37	20.92	1.44		22.62	22.29	1.21
80 (26.7)	72 (22.2)	608	19.12	10.84	1.61	608	25.12	13.12	1.88	634	26.55	13.85	1.60	663	27.98	14.60	1.33	708	29.49	15.47	1.07
	67 (19.4)		17.42	13.69	1.63		22.91	16.02	1.89		24.24	16.91	1.63		25.56	17.83	1.38		26.97	18.96	1.13
	63 (17.2)		16.26	15.91	1.64		21.26	18.28	1.90		22.51	19.29	1.65		23.76	20.35	1.41		25.10	21.68	1.17
	57 (13.9)		16.12	16.12	1.64		20.08	20.08	1.90		21.23	21.23	1.66		22.41	22.41	1.42		23.77	23.77	1.19
STAGE 3																					
75 (23.9)	72 (22.2)	437	15.62	6.37	1.16	437	16.33	6.64	1.03	452	17.27	7.02	0.91	475	18.26	7.42	0.78	510	19.32	7.87	0.62
	67 (19.4)		14.19	8.25	1.17		14.88	8.57	1.04		15.74	9.03	0.94		16.66	9.56	0.82		17.64	10.18	0.68
	63 (17.2)		13.12	9.74	1.18		13.79	10.07	1.05		14.60	10.61	0.96		15.46	11.23	0.85		16.38	12.00	0.71
	57 (13.9)		11.80	11.80	1.18		12.35	12.27	1.06		13.08	12.91	0.97		13.87	13.68	0.88		14.74	14.65	0.76
80 (26.7)	72 (22.2)	437	15.55	8.23	1.16	437	16.25	8.52	1.02	452	17.19	8.98	0.91	475	18.17	9.50	0.78	510	19.23	10.12	0.62
	67 (19.4)		14.14	10.11	1.17		14.83	10.44	1.04		15.69	10.99	0.94		16.60	11.63	0.82		17.57	12.43	0.67
	63 (17.2)		13.11	11.59	1.18		13.77	11.94	1.05		14.58	12.56	0.96		15.44	13.30	0.85		16.36	14.24	0.71
	57 (13.9)		12.51	12.51	1.18		13.05	13.05	1.05		13.78	13.78	0.97		14.60	14.60	0.86		15.55	15.55	0.74
STAGE 1 – FE4ANF005 ONLY																					
75 (23.9)	72 (22.2)	342	6.36	2.59	0.47	250	9.26	3.75	0.47	250	9.75	3.95	0.47	250	10.23	4.15	0.43	250	10.72	4.35	0.36
	67 (19.4)		10.72	6.18	0.76		8.39	4.68	0.48		8.84	4.89	0.49		9.27	5.09	0.47		9.70	5.30	0.40
	63 (17.2)		9.90	7.24	0.76		7.74	5.40	0.49		8.15	5.61	0.51		8.56	5.83	0.49		8.96	6.04	0.44
	57 (13.9)		8.82	8.81	0.77		6.85	6.46	0.49		7.22	6.68	0.52		7.59	6.90	0.52		7.95	7.12	0.48
80 (26.7)	72 (22.2)	342	11.79	6.17	0.75	250	9.23	4.68	0.47	250	9.72	4.88	0.47	250	10.20	5.09	0.43	250	10.68	5.30	0.36
	67 (19.4)		10.69	7.53	0.76		8.37	5.60	0.48		8.81	5.82	0.49		9.25	6.03	0.47		9.68	6.24	0.40
	63 (17.2)		9.88	8.60	0.76		7.72	6.32	0.49		8.14	6.54	0.51		8.54	6.76	0.49		8.95	6.98	0.44
	57 (13.9)		9.35	9.35	0.77		7.09	7.09	0.49		7.40	7.40	0.52		7.70	7.70	0.51		8.00	8.00	0.48
STAGE 1 – ALL OTHER INDOOR COMBINATIONS																					
75 (23.9)	72 (22.2)	342	3.18	1.29	0.24	222	8.99	3.64	0.47	234	9.59	3.89	0.48	229	9.99	4.06	0.44	245	10.66	4.33	0.36
	67 (19.4)		10.72	6.18	0.76		8.13	4.46	0.48		8.68	4.76	0.50		9.04	4.92	0.48		9.65	5.25	0.41
	63 (17.2)		9.90	7.24	0.76		7.49	5.09	0.49		8.00	5.44	0.51		8.34	5.58	0.50		8.91	5.98	0.44
	57 (13.9)		8.82	8.81	0.77		6.63	6.02	0.49		7.09	6.43	0.52		7.39	6.56	0.52		7.90	7.04	0.48
80 (26.7)	72 (22.2)	342	11.79	6.17	0.75	222	8.96	4.47	0.47	234	9.55	4.76	0.47	229	9.96	4.92	0.44	245	10.62	5.26	0.36
	67 (19.4)		10.69	7.53	0.76		8.11	5.28	0.48		8.66	5.63	0.50		9.02	5.78	0.48		9.63	6.18	0.41
	63 (17.2)		9.88	8.60	0.76		7.48	5.91	0.49		7.99	6.31	0.51		8.33	6.44	0.50		8.89	6.91	0.44
	57 (13.9)		9.35	9.35	0.77		6.73	6.73	0.49		7.19	7.19	0.52		7.40	7.40	0.52		7.93	7.93	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 34

DETAILED COOLING CAPACITIES[#]- COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA925

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005L	1.00	1.00	
FE4AN(B,F)003L	0.96	0.98	
FE4ANB006L	0.98	1.07	
FE4ANF002L	0.96	0.98	
CAP**3614AL*	0.98	1.01	58CV(A,X)070–12
CAP**3617AL*	0.98	1.01	58CV(A,X)070–12
CNPH*3617AL*	0.98	1.02	58CV(A,X)070–12
CNPV*3617AL*	0.97	0.99	58CV(A,X)070–12
CNPV*3717AL*	0.98	1.00	58CV(A,X)070–12
CNPV*4217AL*	0.96	0.98	58CV(A,X)070–12
CSPH*3612AL*	1.00	1.02	58CV(A,X)070–12
CSPH*4212AL*	1.00	1.02	58CV(A,X)070–12
CAP**3617AL*	0.98	1.01	58CV(A,X)090–16
CAP**3621AL*	0.98	1.01	58CV(A,X)090–16
CAP**4221AL*	0.99	0.99	58CV(A,X)090–16
CNPH*3617AL*	0.98	1.01	58CV(A,X)090–16
CNPH*4221AL*	0.99	1.02	58CV(A,X)090–16
CNPV*3617AL*	0.97	0.99	58CV(A,X)090–16
CNPV*3621AL*	0.97	0.99	58CV(A,X)090–16
CNPV*3717AL*	0.98	0.98	58CV(A,X)090–16
CNPV*4217AL*	0.96	0.98	58CV(A,X)090–16
CNPV*4221AL*	0.96	0.98	58CV(A,X)090–16
CSPH*3612AL*	1.00	1.00	58CV(A,X)090–16
CSPH*4212AL*	1.01	1.01	58CV(A,X)090–16
CAP**3617AL*	0.98	1.02	59*N*A060V17**14
CAP**3621AL*	0.98	1.01	59*N*A060V17**14
CAP**4221AL*	0.98	1.01	59*N*A060V17**14
CNPH*3617AL*	0.98	1.11	59*N*A060V17**14
CNPH*4221AL*	0.98	1.12	59*N*A060V17**14
CNPV*3617AL*	0.94	1.02	59*N*A060V17**14
CNPV*3621AL*	0.94	1.02	59*N*A060V17**14
CNPV*3717AL*	0.98	1.00	59*N*A060V17**14
CNPV*4221AL*	0.95	1.03	59*N*A060V17**14
CSPH*3612AL*	0.99	1.02	59*N*A060V17**14
CSPH*4212AL*	1.00	1.02	59*N*A060V17**14
CAP**3617AL*	0.98	1.01	59*N*A080V17**14
CAP**3621AL*	0.98	1.01	59*N*A080V17**14
CAP**4221AL*	0.99	1.02	59*N*A080V17**14
CNPH*3617AL*	0.98	1.07	59*N*A080V17**14
CNPH*4221AL*	0.99	1.08	59*N*A080V17**14
CNPV*3617AL*	0.95	1.03	59*N*A080V17**14
CNPV*3621AL*	0.95	0.99	59*N*A080V17**14
CNPV*3717AL*	0.98	1.00	59*N*A080V17**14
CNPV*4221AL*	0.98	1.00	59*N*A080V17**14
CSPH*3612AL*	1.00	1.02	59*N*A080V17**14
CSPH*4212AL*	1.00	1.02	59*N*A080V17**14
CAP**3621AL*	0.98	1.01	59MN7A060V21**20
CAP**4221AL*	0.99	1.02	59MN7A060V21**20
CAP**4224AL*	0.99	1.02	59MN7A060V21**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003L	0.94	0.98	0.99	0.94	
FV4CNF002L	0.94	0.98	1.00	0.97	
CAP**2414AL*	0.94	1.02	1.08	1.12	58PH*045–08
CAP**2417AL*	0.94	1.02	1.09	1.12	58PH*045–08
CAP**3014AL*	0.95	0.99	1.08	1.11	58PH*045–08
CAP**3017AL*	0.95	0.99	1.09	1.11	58PH*045–08
CNPV*2414AL*	0.93	1.01	1.08	1.12	58PH*045–08
CNPV*2417AL*	0.93	1.01	1.08	1.12	58PH*045–08
CNPV*3014AL*	0.95	1.03	1.08	1.11	58PH*045–08
CNPV*3017AL*	0.95	1.03	1.09	1.11	58PH*045–08
CNPV*3117AL*	0.95	0.99	1.12	1.11	58PH*045–08
CAP**2414AL*	0.93	0.97	1.08	1.08	58CTW045–12
CAP**2417AL*	0.94	0.98	1.08	1.07	58CTW045–12
CAP**3014AL*	0.93	0.96	1.10	1.09	58CTW045–12
CAP**3017AL*	0.93	0.97	1.11	1.09	58CTW045–12
CNPV*2414AL*	0.93	1.01	1.08	1.07	58CTW045–12
CNPV*2417AL*	0.93	1.01	1.08	1.07	58CTW045–12
CNPV*3014AL*	0.93	1.01	1.10	1.09	58CTW045–12
CNPV*3017AL*	0.93	0.97	1.11	1.09	58CTW045–12
CNPV*3117AL*	0.94	0.98	1.12	1.06	58CTW045–12
CSPH*3012AL*	0.93	0.96	1.11	1.08	58CTW045–12
CAP**2417AL*	0.93	0.96	1.11	1.09	58CTW070–16
CAP**3017AL*	0.93	0.97	1.11	1.08	58CTW070–16
CNPH*2417AL*	0.96	1.04	1.09	1.07	58CTW070–16
CNPH*3017AL*	0.93	1.01	1.11	1.08	58CTW070–16
CNPH*3117AL*	0.95	0.99	1.12	1.05	58CTW070–16
CNPV*2417AL*	0.93	1.01	1.08	1.07	58CTW070–16
CNPV*3017AL*	0.93	0.97	1.11	1.08	58CTW070–16
CNPV*3117AL*	0.95	0.99	1.12	1.05	58CTW070–16
CSPH*2412AL*	0.97	1.05	1.09	1.08	58CTW070–16
CSPH*3012AL*	0.93	0.97	1.11	1.07	58CTW070–16
CSPH*2412AL*	0.94	0.98	1.13	1.15	58CTW090–16
CSPH*3012AL*	0.95	0.99	1.14	1.12	58CTW090–16
CAP**2414AL*	0.95	1.03	1.08	1.13	59*P2A040E14**10
CAP**2417AL*	0.93	1.01	1.08	1.13	59*P2A040E14**10
CAP**3014AL*	0.94	1.02	1.07	1.12	59*P2A040E14**10
CAP**3017AL*	0.95	1.03	1.08	1.12	59*P2A040E14**10
CNPV*2414AL*	0.93	1.01	1.07	1.13	59*P2A040E14**10
CNPV*2417AL*	0.93	1.01	1.07	1.13	59*P2A040E14**10
CNPV*3014AL*	0.94	1.02	1.07	1.12	59*P2A040E14**10
CNPV*3017AL*	0.95	1.03	1.08	1.12	59*P2A040E14**10
CNPV*3117AL*	0.94	0.98	1.11	1.11	59*P2A040E14**10
CSPH*2412AL*	0.96	1.04	1.10	1.23	59*P2A040E14**10
CSPH*3012AL*	0.97	1.05	1.09	1.11	59*P2A040E14**10
CAP**2417AL*	0.93	1.01	1.07	1.12	59*P2A040E17**12
CAP**3017AL*	0.95	1.03	1.08	1.13	59*P2A040E17**12
CNPH*2417AL*	0.95	1.08	1.08	1.13	59*P2A040E17**12
CNPH*3017AL*	0.95	1.03	1.08	1.12	59*P2A040E17**12
CNPH*3117AL*	0.97	1.05	1.09	1.10	59*P2A040E17**12
CNPV*2417AL*	0.93	1.01	1.07	1.13	59*P2A040E17**12
CNPV*3017AL*	0.95	1.03	1.08	1.12	59*P2A040E17**12
CNPV*3117AL*	0.97	1.05	1.09	1.10	59*P2A040E17**12
CSPH*2412AL*	0.96	1.04	1.10	1.25	59*P2A040E17**12
CAP**2414AL*	0.94	0.98	1.09	1.10	59*P2A060E14**12
CAP**2417AL*	0.95	0.99	1.10	1.10	59*P2A060E14**12
CAP**3014AL*	0.93	0.97	1.11	1.11	59*P2A060E14**12

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CAP**3017AL*	0.94	0.98	1.12	1.11	59*P2A060E14**12
CNPV*2414AL*	0.94	1.02	1.09	1.09	59*P2A060E14**12
CNPV*2417AL*	0.94	1.02	1.09	1.09	59*P2A060E14**12
CNPV*3014AL*	0.93	1.01	1.11	1.11	59*P2A060E14**12
CNPV*3017AL*	0.94	0.98	1.12	1.11	59*P2A060E14**12
CNPV*3117AL*	0.96	1.00	1.13	1.09	59*P2A060E14**12
CSPH*2412AL*	0.95	0.99	1.09	1.10	59*P2A060E14**12
CSPH*3012AL*	0.94	0.98	1.12	1.10	59*P2A060E14**12
CNPH*2417AL*	0.96	1.04	1.11	1.13	59*P2A060E17**14
CSPH*2412AL*	0.95	0.99	1.13	1.15	59*P2A060E17**14
CNPH*2417AL*	0.96	1.04	1.10	1.10	59*P2A080E17**16
CSPH*2412AL*	0.94	0.98	1.12	1.12	59*P2A080E17**16
CAP**2414AL*	0.93	1.06	1.07	1.17	59*P5A040E14**10
CAP**2417AL*	0.94	1.07	1.07	1.17	59*P5A040E14**10
CAP**3014AL*	0.95	1.08	1.07	1.16	59*P5A040E14**10
CAP**3017AL*	0.95	1.08	1.07	1.15	59*P5A040E14**10
CNPV*2414AL*	0.93	1.11	1.07	1.17	59*P5A040E14**10
CNPV*2417AL*	0.93	1.11	1.07	1.17	59*P5A040E14**10
CNPV*3014AL*	0.95	1.08	1.07	1.16	59*P5A040E14**10
CNPV*3017AL*	0.95	1.08	1.07	1.15	59*P5A040E14**10
CNPV*3117AL*	0.98	1.11	1.08	1.13	59*P5A040E14**10
CSPH*2412AL*	0.95	1.08	1.07	1.17	59*P5A040E14**10
CSPH*3012AL*	0.95	1.08	1.08	1.15	59*P5A040E14**10
CAP**2417AL*	0.93	1.01	1.07	1.14	59*P5A040E17**12
CAP**3017AL*	0.93	1.01	1.07	1.13	59*P5A040E17**12
CNPH*2417AL*	0.94	1.12	1.08	1.15	59*P5A040E17**12
CNPH*3017AL*	0.93	1.06	1.07	1.13	59*P5A040E17**12
CNPH*3117AL*	0.96	1.04	1.09	1.12	59*P5A040E17**12
CNPV*2417AL*	0.92	1.04	1.07	1.14	59*P5A040E17**12
CNPV*3017AL*	0.93	1.01	1.07	1.13	59*P5A040E17**12
CNPV*3117AL*	0.96	1.04	1.09	1.12	59*P5A040E17**12
CSPH*2412AL*	0.96	1.09	1.10	1.23	59*P5A040E17**12
CSPH*3012AL*	0.93	1.01	1.08	1.13	59*P5A040E17**12
CNPH*2417AL*	0.96	1.09	1.10	1.17	59*P5A060E17**14
CSPH*2412AL*	0.97	1.05	1.10	1.16	59*P5A060E17**14

See notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EVAP. AIR	24VNA936 / FE4ANF005 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																	
		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW	ID SCFM	Capacity MBtuh Total	Capacity MBtuh Sens‡	Total Sys. KW
STAGE 5																					
75 (23.9)	72 (22.2)	**812**	35.03	14.21	3.80	**812**	36.79	14.91	3.28	**848**	38.97	15.79	2.81	**887**	41.14	16.67	2.38	**948**	43.43	17.61	1.97
	67 (19.4)		32.03	18.10	3.76		33.69	18.87	3.26		35.70	19.98	2.81		37.69	21.10	2.39		39.83	22.39	2.00
	63 (17.2)		29.78	21.12	3.72		31.34	21.94	3.23		33.23	23.22	2.80		35.10	24.53	2.40		37.11	26.09	2.02
	57 (13.9)		26.68	25.51	3.66		28.08	26.39	3.19		29.78	27.92	2.78		31.49	29.50	2.40		33.35	31.47	2.04
80 (26.7)	72 (22.2)	**812**	34.90	17.98	3.79	**812**	36.65	18.72	3.28	**848**	38.82	19.81	2.81	**887**	40.98	20.92	2.37	**948**	43.26	22.19	1.97
	67 (19.4)		31.95	21.83	3.75		33.60	22.64	3.25		35.61	23.95	2.81		37.60	25.30	2.39		39.72	26.91	2.00
	63 (17.2)		29.73	24.84	3.72		31.29	25.70	3.23		33.16	27.18	2.80		35.04	28.72	2.39		37.04	30.61	2.02
	57 (13.9)		27.71	27.71	3.68		28.95	28.95	3.20		30.66	30.66	2.78		32.41	32.41	2.40		34.42	34.42	2.04
STAGE 3																					
75 (23.9)	72 (22.2)	**566**	21.74	8.83	1.80	**566**	22.72	9.22	1.63	**600**	24.20	9.82	1.47	**626**	25.61	10.39	1.30	**664**	27.10	11.00	1.09
	67 (19.4)		19.76	11.28	1.80		20.72	11.74	1.64		22.09	12.54	1.49		23.39	13.27	1.33		24.77	14.10	1.14
	63 (17.2)		18.28	13.20	1.80		19.22	13.70	1.63		20.51	14.65	1.50		21.73	15.51	1.35		23.02	16.51	1.18
	57 (13.9)		16.37	16.02	1.79		17.25	16.59	1.63		18.42	17.76	1.51		19.53	18.80	1.37		20.72	20.04	1.21
80 (26.7)	72 (22.2)	**566**	21.65	11.25	1.80	**566**	22.62	11.67	1.63	**600**	24.08	12.45	1.47	**626**	25.49	13.17	1.29	**664**	26.96	13.99	1.09
	67 (19.4)		19.70	13.69	1.80		20.66	14.18	1.63		22.03	15.15	1.49		23.32	16.03	1.33		24.69	17.07	1.14
	63 (17.2)		18.26	15.60	1.80		19.20	16.13	1.63		20.48	17.26	1.50		21.70	18.27	1.35		22.99	19.47	1.17
	57 (13.9)		17.18	17.18	1.80		17.96	17.96	1.63		19.20	19.20	1.50		20.34	20.34	1.36		21.61	21.61	1.20
STAGE 1 – FE4ANF005 ONLY																					
75 (23.9)	72 (22.2)	**417**	14.50	5.90	0.99	**250**	9.48	3.84	0.49	**250**	10.07	4.08	0.49	**250**	10.66	4.32	0.45	**267**	11.47	4.65	0.35
	67 (19.4)		13.17	7.58	1.00		8.59	4.79	0.50		9.13	5.04	0.52		9.66	5.30	0.49		10.39	5.71	0.41
	63 (17.2)		12.18	8.91	1.00		7.92	5.53	0.51		8.42	5.80	0.53		8.92	6.07	0.51		9.60	6.55	0.45
	57 (13.9)		10.89	10.84	1.01		7.02	6.61	0.52		7.46	6.90	0.55		7.91	7.19	0.54		8.52	7.77	0.49
80 (26.7)	72 (22.2)	**417**	14.44	7.57	0.99	**250**	9.44	4.79	0.49	**250**	10.03	5.04	0.49	**250**	10.62	5.30	0.45	**267**	11.43	5.71	0.35
	67 (19.4)		13.13	9.25	1.00		8.56	5.73	0.50		9.10	6.01	0.52		9.64	6.28	0.49		10.36	6.78	0.41
	63 (17.2)		12.16	10.56	1.00		7.91	6.47	0.51		8.41	6.76	0.53		8.91	7.05	0.51		9.58	7.61	0.45
	57 (13.9)		11.52	11.52	1.01		7.26	7.26	0.52		7.64	7.64	0.54		8.03	8.03	0.54		8.66	8.66	0.48
STAGE 1 – ALL OTHER INDOOR COMBINATIONS																					
75 (23.9)	72 (22.2)	**417**	14.50	5.90	0.99	**236**	9.35	3.79	0.49	**232**	9.88	4.01	0.50	**246**	10.62	4.30	0.45	**267**	11.47	4.65	0.35
	67 (19.4)		13.17	7.58	1.00		8.46	4.68	0.50		8.94	4.90	0.52		9.62	5.27	0.49		10.39	5.71	0.41
	63 (17.2)		12.18	8.91	1.00		7.80	5.37	0.51		8.25	5.59	0.53		8.88	6.02	0.51		9.60	6.55	0.45
	57 (13.9)		10.89	10.84	1.01		6.91	6.39	0.52		7.30	6.60	0.55		7.87	7.12	0.54		8.52	7.77	0.49
80 (26.7)	72 (22.2)	**417**	14.44	7.57	0.99	**236**	9.31	4.68	0.49	**232**	9.84	4.90	0.50	**246**	10.58	5.27	0.45	**267**	11.43	5.71	0.35
	67 (19.4)		13.13	9.25	1.00		8.44	5.57	0.50		8.92	5.79	0.52		9.60	6.23	0.49		10.36	6.78	0.41
	63 (17.2)		12.16	10.56	1.00		7.79	6.26	0.51		8.23	6.48	0.53		8.87	6.98	0.51		9.58	7.61	0.45
	57 (13.9)		11.52	11.52	1.01		7.08	7.08	0.52		7.39	7.39	0.55		7.97	7.97	0.54		8.66	8.66	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 34

DETAILED COOLING CAPACITIES#- COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA936

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4AN(B,F)005L	1.00	1.00	
FE4AN(B,F)003L	0.97	0.97	
FE4ANB006L	0.99	0.99	
FE4ANF002L	0.96	1.01	
CAP**3614AL*	0.98	1.03	58CV(A,X)070−12
CSPH*3612AL*	0.98	1.03	58CV(A,X)070−12
CSPH*4212AL*	0.98	1.03	58CV(A,X)070−12
CAP**3617AL*	0.98	0.98	58CV(A,X)090−16
CAP**4817AL*	0.98	0.98	58CV(A,X)090−16
CNPH*3617AL*	0.95	1.00	58CV(A,X)090−16
CNPV*3617AL*	0.95	1.00	58CV(A,X)090−16
CNPV*3717AL*	0.97	0.97	58CV(A,X)090−16
CNPV*4217AL*	0.97	0.97	58CV(A,X)090−16
CNPV*4221AL*	0.97	1.01	58CV(A,X)090−16
CNPV*4821AL*	0.98	0.98	58CV(A,X)090−16
CSPH*3612AL*	0.98	0.98	58CV(A,X)090−16
CSPH*4212AL*	0.98	0.98	58CV(A,X)090−16
CAP**3617AL*	0.97	1.02	59*N*A060V17**14
CAP**4817AL*	0.98	1.03	59*N*A060V17**14
CNPH*3617AL*	0.95	1.05	59*N*A060V17**14
CNPV*3617AL*	0.95	1.05	59*N*A060V17**14
CNPV*3717AL*	0.97	1.02	59*N*A060V17**14
CNPV*4217AL*	0.95	1.00	59*N*A060V17**14
CNPV*4221AL*	0.95	1.05	59*N*A060V17**14
CNPV*4821AL*	0.97	1.02	59*N*A060V17**14
CSPH*3612AL*	0.97	1.02	59*N*A060V17**14
CSPH*4212AL*	0.98	1.03	59*N*A060V17**14
CSPH*4812AL*	0.98	1.03	59*N*A060V17**14
CAP**3617AL*	0.98	1.03	59*N*A080V17**14
CAP**4817AL*	0.98	1.03	59*N*A080V17**14
CNPH*3617AL*	0.95	1.05	59*N*A080V17**14
CNPV*3617AL*	0.95	1.00	59*N*A080V17**14
CNPV*3717AL*	0.97	1.02	59*N*A080V17**14
CNPV*4217AL*	0.96	1.01	59*N*A080V17**14
CNPV*4221AL*	0.95	1.00	59*N*A080V17**14
CNPV*4821AL*	0.97	1.02	59*N*A080V17**14
CSPH*3612AL*	0.98	1.03	59*N*A080V17**14
CSPH*4212AL*	0.98	1.03	59*N*A080V17**14
CSPH*4812AL*	0.98	1.03	59*N*A080V17**14
CAP**3621AL*	0.98	1.03	59*N*A080V21**20
CAP**4221AL*	0.97	1.01	59*N*A080V21**20
CAP**4821AL*	0.98	0.98	59*N*A080V21**20
CNPH*4221AL*	0.96	1.01	59*N*A080V21**20
CNPH*4221AL*	0.96	1.01	59*N*A080V21**20
CNPH*4321AL*	0.98	1.03	59*N*A080V21**20
CNPH*4821AL*	0.98	1.03	59*N*A080V21**20
CNPV*3621AL*	0.95	1.00	59*N*A080V21**20
CNPV*4221AL*	0.95	1.00	59*N*A080V21**20
CNPV*4221AL*	0.96	1.01	59*N*A080V21**20
CNPV*4324AL*	0.99	0.99	59*N*A080V21**20
CNPV*4821AL*	0.97	0.97	59*N*A080V21**20
CNPV*4821AL*	0.98	1.03	59*N*A080V21**20
CNPV*4824AL*	0.98	1.03	59*N*A080V21**20
CSPH*3612AL*	0.98	0.98	59*N*A080V21**20
CSPH*4212AL*	0.98	0.98	59*N*A080V21**20
CSPH*4812AL*	0.99	0.99	59*N*A080V21**20
CAP**3621AL*	0.98	0.98	59*N*A100V21**22
CAP**3621AL*	0.98	1.03	59MN7A060V21**20
CAP**4221AL*	0.97	1.01	59MN7A060V21**20

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
CAP**4821AL*	0.98	1.03	59MN7A060V21**20
CNPH*4221AL*	0.96	1.06	59MN7A060V21**20
CNPH*4221AL*	0.96	1.06	59MN7A060V21**20
CNPH*4321AL*	0.98	1.03	59MN7A060V21**20
CNPH*4821AL*	0.97	1.02	59MN7A060V21**20
CNPV*3621AL*	0.95	1.00	59MN7A060V21**20
CNPV*4221AL*	0.95	1.00	59MN7A060V21**20
CNPV*4221AL*	0.96	1.01	59MN7A060V21**20
CNPV*4324AL*	0.98	1.03	59MN7A060V21**20
CNPV*4821AL*	0.97	1.01	59MN7A060V21**20
CNPV*4821AL*	0.97	1.02	59MN7A060V21**20
CNPV*4824AL*	0.97	1.02	59MN7A060V21**20
CSPH*3612AL*	0.98	1.03	59MN7A060V21**20
CSPH*4212AL*	0.98	1.03	59MN7A060V21**20
CSPH*4812AL*	0.98	1.03	59MN7A060V21**20

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
FV4CN(B,F)003L	0.97	0.97	1.01	1.06	
FV4CNF002L	0.97	1.01	0.99	1.08	
CAP**3614AL*	0.96	1.06	0.97	1.09	58PH*045−08
CAP**3617AL*	0.97	1.07	0.97	1.08	58PH*045−08
CAP**3614AL*	0.96	1.01	0.97	1.07	58CTW045−12
CAP**3617AL*	0.97	1.01	0.97	1.06	58CTW045−12
CAP**3617AL*	0.97	1.02	0.98	1.05	58CTW070−16
CAP**3621AL*	0.97	1.02	0.98	1.04	58CTW070−16
CAP**4221AL*	0.98	1.03	0.99	1.05	58CTW070−16
CNPH*3617AL*	0.97	1.01	0.97	1.05	58CTW070−16
CNPV*3617AL*	0.97	1.01	0.97	1.05	58CTW070−16
CNPV*3717AL*	1.01	1.01	1.00	1.03	58CTW070−16
CNPV*4217AL*	0.99	1.04	0.99	1.05	58CTW070−16
CAP**3621AL*	0.97	0.97	0.98	1.02	58CTW090−16
CAP**4221AL*	0.98	0.98	0.99	1.03	58CTW090−16
CNPH*4221AL*	0.98	0.98	0.98	1.03	58CTW090−16
CNPH*4321AL*	1.01	1.01	1.01	1.01	58CTW090−16
CNPV*3621AL*	0.97	1.01	0.97	1.03	58CTW090−16
CNPV*4221AL*	0.98	0.98	0.98	1.03	58CTW090−16
CNPH*4221AL*	0.98	0.98	0.98	1.02	58CTW110−22
CNPH*4321AL*	1.01	1.01	1.01	0.99	58CTW110−22
CNPV*3621AL*	0.97	0.97	0.97	1.02	58CTW110−22
CNPV*4221AL*	0.98	0.98	0.98	1.02	58CTW110−22
CNPV*4324AL*	1.02	0.97	1.01	0.98	58CTW135−22
CAP**3617AL*	0.96	1.06	0.97	1.12	59*P2A040E17**12
CAP**3621AL*	0.96	1.06	0.97	1.11	59*P2A040E17**12
CAP**4221AL*	0.97	1.07	0.97	1.10	59*P2A040E17**12
CNPH*3617AL*	0.95	1.05	0.96	1.11	59*P2A040E17**12
CNPV*3717AL*	1.00	1.05	0.99	1.09	59*P2A040E17**12
CNPV*4217AL*	0.98	1.08	0.98	1.11	59*P2A040E17**12
CSPH*3612AL*	0.98	1.09	0.98	1.10	59*P2A040E17**12
CAP**3614AL*	0.97	1.01	0.98	1.08	59*P2A060E14**12
CAP**3617AL*	0.97	1.01	0.98	1.07	59*P2A060E14**12
CSPH*3612AL*	0.99	1.04	0.99	1.06	59*P2A060E14**12
CAP**3617AL*	0.97	1.02	0.98	1.05	59*P2A060E17**14
CAP**3621AL*	0.97	1.02	0.98	1.04	59*P2A060E17**14
CAP**4221AL*	0.98	0.98	0.99	1.04	59*P2A060E17**14
CNPH*3617AL*	0.97	1.01	0.97	1.05	59*P2A060E17**14

2−STAGE (Hi−Stage 5, Lo−Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CNPV*3617AL*	0.97	1.01	0.97	1.05	59*P2A060E17**14
CNPV*3717AL*	1.01	1.01	1.00	1.02	59*P2A060E17**14
CNPV*4217AL*	0.99	0.99	0.99	1.04	59*P2A060E17**14
CSPH*3612AL*	0.99	0.99	0.99	1.04	59*P2A060E17**14
CAP**3617AL*	0.97	1.02	0.98	1.05	59*P2A080E17**16
CAP**3621AL*	0.98	0.98	0.98	1.04	59*P2A080E17**16
CAP**4221AL*	0.98	0.98	0.99	1.04	59*P2A080E17**16
CNPH*3617AL*	0.97	1.01	0.97	1.04	59*P2A080E17**16
CNPV*3617AL*	0.97	1.01	0.97	1.04	59*P2A080E17**16
CNPV*3717AL*	1.01	1.01	1.00	1.02	59*P2A080E17**16
CNPV*4217AL*	0.99	0.99	0.99	1.04	59*P2A080E17**16
CAP**3617AL*	0.96	1.12	0.96	1.10	59*P5A040E17**12
CAP**3621AL*	0.96	1.12	0.96	1.09	59*P5A040E17**12
CAP**4221AL*	0.97	1.13	0.96	1.09	59*P5A040E17**12
CNPH*3617AL*	0.95	1.11	0.95	1.09	59*P5A040E17**12
CNPV*3617AL*	0.95	1.11	0.95	1.09	59*P5A040E17**12
CNPV*3617AL*	0.95	1.11	0.95	1.09	59*P5A040E17**12
CNPV*3717AL*	1.00	1.11	0.98	1.07	59*P5A040E17**12
CNPV*4217AL*	0.98	1.08	0.97	1.09	59*P5A040E17**12
CAP**3614AL*	0.95	1.11	0.96	1.12	59*P5A060E14**12
CAP**3617AL*	0.96	1.12	0.97	1.13	59*P5A060E14**12
CAP**3617AL*	0.97	1.01	0.97	1.06	59*P5A060E17**14
CAP**3621AL*	0.97	1.01	0.97	1.06	59*P5A060E17**14
CAP**4221AL*	0.97	1.02	0.98	1.06	59*P5A060E17**14
CNPH*3617AL*	0.96	1.01	0.97	1.07	59*P5A060E17**14
CNPV*3617AL*	0.96	1.01	0.97	1.07	59*P5A060E17**14
CNPV*3717AL*	1.00	1.05	0.99	1.04	59*P5A060E17**14
CNPV*4217AL*	0.98	1.03	0.98	1.06	59*P5A060E17**14

See notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EVAP. AIR	24VNA948 / FE4BNB006 Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																	
		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																					
75 (23.9)	72 (22.2)	1110	46.42	18.85	4.71	1184	49.80	20.23	4.17	1247	53.09	21.57	3.65	1330	56.46	22.96	3.19	1226	58.44	23.68	2.67
	67 (19.4)		42.40	24.08	4.63		45.50	25.89	4.11		48.51	27.62	3.61		51.61	29.50	3.17		53.38	29.85	2.67
	63 (17.2)		39.38	28.15	4.57		42.27	30.30	4.06		45.08	32.33	3.58		47.99	34.60	3.15		49.62	34.64	2.66
	57 (13.9)		35.31	34.09	4.47		37.94	36.72	3.98		40.49	39.19	3.53		43.14	41.99	3.12		44.52	41.65	2.64
80 (26.7)	72 (22.2)	1110	46.26	23.95	4.71	1184	49.62	25.75	4.16	1247	52.90	27.46	3.65	1330	56.25	29.32	3.19	1226	58.25	29.68	2.67
	67 (19.4)		42.29	29.13	4.63		45.38	31.35	4.10		48.38	33.45	3.61		51.47	35.79	3.17		53.26	35.77	2.67
	63 (17.2)		39.31	33.18	4.57		42.20	35.74	4.06		45.01	38.14	3.58		47.91	40.87	3.15		49.54	40.54	2.66
	57 (13.9)		36.80	36.80	4.51		39.58	39.58	4.01		42.24	42.24	3.55		45.10	45.10	3.13		45.76	45.76	2.65
STAGE 3																					
75 (23.9)	72 (22.2)	744	29.62	12.03	2.44	801	31.87	12.96	2.16	842	34.08	13.86	1.91	887	36.31	14.77	1.66	1001	38.96	15.92	1.43
	67 (19.4)		26.97	15.41	2.44		29.06	16.68	2.16		31.09	17.85	1.92		33.14	19.06	1.68		35.59	20.85	1.46
	63 (17.2)		24.98	18.04	2.43		26.95	19.58	2.15		28.84	20.96	1.92		30.75	22.40	1.70		33.06	24.69	1.49
	57 (13.9)		22.33	21.88	2.41		24.13	23.80	2.14		25.84	25.48	1.92		27.58	27.24	1.71		29.92	29.92	1.51
80 (26.7)	72 (22.2)	744	29.51	15.35	2.44	801	31.74	16.60	2.15	842	33.93	17.76	1.91	887	36.15	18.96	1.66	1001	38.77	20.72	1.43
	67 (19.4)		26.90	18.70	2.44		28.98	20.29	2.15		31.00	21.72	1.92		33.04	23.21	1.68		35.47	25.60	1.46
	63 (17.2)		34.45	25.97	4.20		26.90	23.17	2.15		28.79	24.81	1.92		30.70	26.53	1.70		33.02	29.42	1.49
	57 (13.9)		30.79	29.76	4.10		33.37	32.41	3.78		35.77	34.73	3.46		38.24	37.17	3.15		41.59	41.26	2.86
STAGE 1 – FE4ANB006 ONLY																					
75 (23.9)	72 (22.2)	662	25.60	10.40	1.99	500	18.27	7.44	0.93	500	19.44	7.91	0.83	508	20.67	8.39	0.71	534	22.04	8.96	0.56
	67 (19.4)		23.27	13.31	1.99		16.64	9.65	0.95		17.72	10.17	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	63 (17.2)		21.53	15.58	1.99		15.45	11.39	0.97		16.45	11.96	0.88		17.49	12.62	0.77		18.68	13.53	0.65
	57 (13.9)		19.26	18.92	1.98		13.90	13.90	0.98		14.76	14.58	0.90		15.69	15.35	0.81		16.77	16.48	0.70
80 (26.7)	72 (22.2)	662	25.60	10.40	1.99	500	18.26	7.44	0.93	500	19.44	7.91	0.83	508	20.67	8.39	0.71	534	22.04	8.96	0.56
	67 (19.4)		23.27	13.31	1.99		16.64	9.65	0.95		17.72	10.17	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	63 (17.2)		21.53	15.58	1.99		15.45	11.39	0.97		16.45	11.96	0.88		17.49	12.62	0.77		18.68	13.53	0.65
	57 (13.9)		19.26	18.92	1.98		13.90	13.90	0.98		14.76	14.58	0.90		15.69	15.35	0.81		16.77	16.48	0.70
STAGE 1 – ALL OTHER COILS																					
75 (23.9)	72 (22.2)	662	25.60	10.40	1.99	457	17.95	7.29	0.93	482	19.30	7.84	0.83	508	20.67	8.39	0.71	534	22.04	8.96	0.56
	67 (19.4)		23.27	13.31	1.99		16.36	9.31	0.95		17.59	10.02	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	63 (17.2)		21.53	15.58	1.99		15.18	10.89	0.97		16.33	11.74	0.88		17.49	12.62	0.77		18.68	13.53	0.65
	57 (13.9)		19.26	18.92	1.98		13.59	13.23	0.98		14.63	14.27	0.90		15.69	15.35	0.81		16.77	16.48	0.70
80 (26.7)	72 (22.2)	662	25.60	10.40	1.99	457	17.95	7.29	0.93	482	19.30	7.84	0.83	508	20.67	8.39	0.71	534	22.04	8.96	0.56
	67 (19.4)		23.27	13.31	1.99		16.36	9.31	0.95		17.59	10.02	0.86		18.84	10.76	0.75		20.11	11.51	0.61
	63 (17.2)		21.53	15.58	1.99		15.18	10.89	0.97		16.33	11.74	0.88		17.49	12.62	0.77		18.68	13.53	0.65
	57 (13.9)		19.26	18.92	1.98		13.59	13.23	0.98		14.63	14.27	0.90		15.69	15.35	0.81		16.77	16.48	0.70

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 34

DETAILED COOLING CAPACITIES[#]- COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA948

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB006L	1.00	1.00	
FE4AN(B,F)005L	0.98	0.98	
CAP**4817AL*	0.97	1.01	58CV(A,X)090–16
CSPH*4812AL*	0.98	1.03	58CV(A,X)090–16
CSPH*6012AL*	0.99	0.99	58CV(A,X)090–16
CAP**4821AL*	0.97	1.01	58CV(A,X)110–20
CAP**6021AL*	0.99	0.99	58CV(A,X)110–20
CNPH*4821AL*	0.97	1.06	58CV(A,X)110–20
CNPV*4821AL*	0.97	1.01	58CV(A,X)110–20
CSPH*4812AL*	0.98	1.03	58CV(A,X)110–20
CSPH*6012AL*	1.00	1.00	58CV(A,X)110–20
CAP**4824AL*	0.97	0.97	58CV(A,X)135–22
CAP**6024AL*	0.99	0.99	58CV(A,X)135–22
CNPH*6024AL*	0.99	1.04	58CV(A,X)135–22
CNPH*6124AL*	1.00	1.05	58CV(A,X)135–22
CNPV*4824AL*	0.98	1.03	58CV(A,X)135–22
CNPV*6024AL*	0.99	0.99	58CV(A,X)135–22
CNPV*6124AL*	1.00	1.00	58CV(A,X)135–22
CSPH*4812AL*	0.98	0.98	58CV(A,X)135–22
CSPH*6012AL*	1.00	1.00	58CV(A,X)135–22
CAP**4824AL*	0.97	0.97	58CV(A,X)155–22
CAP**6024AL*	0.99	0.99	58CV(A,X)155–22
CNPH*6024AL*	0.99	0.99	58CV(A,X)155–22
CNPH*6124AL*	1.00	1.05	58CV(A,X)155–22
CNPV*4824AL*	0.98	0.98	58CV(A,X)155–22
CNPV*6024AL*	0.99	0.99	58CV(A,X)155–22
CNPV*6124AL*	1.00	1.00	58CV(A,X)155–22
CSPH*4812AL*	0.98	0.98	58CV(A,X)155–22
CSPH*6012AL*	1.00	1.00	58CV(A,X)155–22
CAP**4821AL*	0.97	1.01	59*N*A080V21**20
CAP**6021AL*	0.99	1.04	59*N*A080V21**20
CNPH*4821AL*	0.97	1.06	59*N*A080V21**20
CNPV*4821AL*	0.97	1.01	59*N*A080V21**20
CSPH*4812AL*	0.98	1.03	59*N*A080V21**20
CSPH*6012AL*	0.99	0.99	59*N*A080V21**20
CAP**4821AL*	0.97	1.01	59*N*A100V21**22
CAP**6021AL*	0.99	0.99	59*N*A100V21**22
CNPH*4821AL*	0.97	1.01	59*N*A100V21**22
CNPV*4821AL*	0.97	1.01	59*N*A100V21**22
CSPH*4812AL*	0.98	1.03	59*N*A100V21**22
CSPH*6012AL*	0.99	0.99	59*N*A100V21**22
CAP**4824AL*	0.97	1.01	59*N*A120V24**22
CAP**6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6124AL*	0.99	1.04	59*N*A120V24**22
CNPV*4824AL*	0.97	1.01	59*N*A120V24**22
CNPV*6024AL*	0.99	1.04	59*N*A120V24**22
CNPV*6124AL*	1.00	1.05	59*N*A120V24**22
CSPH*4812AL*	0.98	1.03	59*N*A120V24**22
CSPH*6012AL*	0.99	0.99	59*N*A120V24**22
CAP**4821AL*	0.96	1.05	59MN7A060V21**20
CAP**6021AL*	0.98	1.08	59MN7A060V21**20
CNPH*4821AL*	0.97	1.06	59MN7A060V21**20
CNPV*4821AL*	0.97	1.06	59MN7A060V21**20
CSPH*4812AL*	0.97	1.06	59MN7A060V21**20
CSPH*6012AL*	0.99	1.04	59MN7A060V21**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNB006L	1.00	1.00	1.00	1.00	
FV4CN(B,F)005L	0.99	0.99	0.99	1.03	
CAP**4817AL*	0.96	1.11	0.97	1.12	58PH*070–16
CSPH*4812AL*	0.97	1.06	0.98	1.13	58PH*070–16
CAP**4821AL*	0.96	1.00	0.98	1.06	58PH*090–16
CAP**6021AL*	0.99	1.04	0.98	1.05	58PH*090–16
CNPH*4821AL*	0.97	1.01	0.98	1.06	58PH*090–16
CNPV*4821AL*	0.97	1.01	0.98	1.06	58PH*090–16
CSPH*4812AL*	0.97	1.01	0.98	1.06	58PH*090–16
CAP**4821AL*	0.96	1.00	0.98	1.05	58PH*110–20
CAP**6021AL*	0.99	0.99	0.99	1.09	58PH*110–20
CNPH*4821AL*	0.97	1.01	0.98	1.05	58PH*110–20
CNPV*4821AL*	0.97	1.01	0.98	1.05	58PH*110–20
CSPH*4812AL*	0.97	0.97	0.99	1.10	58PH*110–20
CSPH*6012AL*	0.99	0.99	0.99	1.04	58PH*110–20
CAP**6024AL*	0.99	0.99	0.99	1.10	58PH*135–20
CSPH*4812AL*	0.97	1.01	0.99	1.11	58PH*135–20
CAP**4821AL*	0.96	1.00	0.97	1.05	58CTW090–16
CAP**6021AL*	0.99	1.04	0.98	1.04	58CTW090–16
CNPH*4821AL*	0.97	1.01	0.98	1.04	58CTW090–16
CNPV*4821AL*	0.97	1.01	0.98	1.04	58CTW090–16
CSPH*4812AL*	0.97	1.01	0.98	1.05	58CTW090–16
CAP**4821AL*	0.97	1.01	0.98	1.03	58CTW110–22
CAP**6021AL*	0.99	0.99	0.98	1.02	58CTW110–22
CNPH*4821AL*	0.97	1.01	0.98	1.03	58CTW110–22
CNPV*4821AL*	0.97	1.01	0.98	1.03	58CTW110–22
CSPH*4812AL*	0.98	1.02	0.98	1.03	58CTW110–22
CSPH*6012AL*	1.00	1.00	0.99	1.02	58CTW110–22
CAP**4824AL*	0.97	1.01	0.98	1.03	58CTW135–22
CAP**6024AL*	0.99	0.99	0.98	1.02	58CTW135–22
CNPH*6024AL*	0.99	0.99	0.99	1.02	58CTW135–22
CNPH*6124AL*	1.00	1.05	0.98	1.02	58CTW135–22
CNPV*4824AL*	0.97	1.01	0.98	1.02	58CTW135–22
CNPV*6024AL*	0.99	0.99	0.99	1.02	58CTW135–22
CNPV*6124AL*	1.00	1.00	1.00	1.02	58CTW135–22
CSPH*6012AL*	1.00	1.00	0.99	1.02	58CTW135–22
CAP**4817AL*	0.97	1.01	0.98	1.06	59*P2A080E17**16
CSPH*4812AL*	0.97	1.01	0.98	1.07	59*P2A080E17**16
CAP**4821AL*	0.97	1.01	0.97	1.03	59*P2A080E21**20
CAP**6021AL*	0.99	0.99	0.98	1.03	59*P2A080E21**20
CNPH*4821AL*	0.97	1.01	0.98	1.03	59*P2A080E21**20
CNPV*4821AL*	0.97	1.01	0.98	1.03	59*P2A080E21**20
CSPH*4812AL*	0.98	1.02	0.98	1.04	59*P2A080E21**20
CAP**4821AL*	0.97	1.01	0.97	1.04	59*P2A100E21**20
CAP**6021AL*	0.99	0.99	0.98	1.03	59*P2A100E21**20
CNPH*4821AL*	0.97	1.01	0.98	1.03	59*P2A100E21**20
CNPV*4821AL*	0.97	1.01	0.98	1.03	59*P2A100E21**20
CSPH*4812AL*	0.98	1.02	0.98	1.04	59*P2A100E21**20
CSPH*6012AL*	1.00	1.00	0.99	1.03	59*P2A100E21**20
CAP**4824AL*	0.97	1.01	0.98	1.04	59*P2A120E24**20
CAP**6024AL*	0.99	0.99	0.98	1.03	59*P2A120E24**20
CNPH*6024AL*	0.99	1.04	0.99	1.03	59*P2A120E24**20
CNPH*6124AL*	1.00	1.05	0.98	1.03	59*P2A120E24**20
CNPV*4824AL*	0.97	1.01	0.98	1.04	59*P2A120E24**20
CNPV*6024AL*	0.99	0.99	0.99	1.03	59*P2A120E24**20
CNPV*6124AL*	1.00	1.00	0.99	1.02	59*P2A120E24**20
CSPH*4812AL*	0.98	1.02	0.98	1.04	59*P2A120E24**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
CSPH*6012AL*	1.00	1.00	0.99	1.03	59*P2A120E24**20
CAP**4817AL*	0.96	1.05	0.97	1.08	59*P5A080E17**16
CSPH*4812AL*	0.97	1.06	0.97	1.08	59*P5A080E17**16
CNPH*4821AL*	0.97	1.01	0.96	1.02	59*P5A080E21**20
CNPV*4821AL*	0.97	1.01	0.96	1.02	59*P5A080E21**20
CSPH*4812AL*	0.97	1.01	0.96	1.02	59*P5A080E21**20
CAP**4821AL*	0.96	1.00	0.98	1.11	59*P5A100E21**20
CAP**6021AL*	0.99	1.04	0.99	1.10	59*P5A100E21**20
CAP**6021AL*	0.99	1.04	0.99	1.10	59*P5A100E21**20
CNPH*4821AL*	0.97	1.01	0.99	1.11	59*P5A100E21**20
CSPH*4812AL*	0.97	1.01	0.99	1.11	59*P5A100E21**20
CSPH*6012AL*	0.99	0.99	1.00	1.10	59*P5A100E21**20
CAP**6024AL*	0.99	1.04	0.99	1.14	59*P5A120E24**22

See notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE

EDB °F (°C)	EVAP. AIR	24VNA960 / FE4BNB006L Comfort + Dehumidify Mode Condenser Entering Air Temperature °F (°C)																	
		105 (40.5)				95 (35)				85 (29.4)				75 (23.9)				65 (18.3)			
	EWB °F (°C)	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW	ID SCFM	Capacity MBtuh		Total Sys. KW
			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡			Total	Sens‡	
STAGE 5																					
75 (23.9)	72 (22.2)	**1367**	57.74	23.45	6.51	**1440**	61.60	25.02	5.73	**1514**	65.43	26.57	5.06	**1566**	69.11	28.06	4.43	**1488**	71.73	29.06	3.80
	67 (19.4)		52.75	29.96	6.32		56.26	31.94	5.56		59.74	33.92	4.89		63.08	35.74	4.28		65.39	36.48	3.66
	63 (17.2)		49.06	35.05	6.19		52.31	37.35	5.43		55.53	39.67	4.77		58.62	41.74	4.17		60.75	42.26	3.56
	57 (13.9)		44.14	42.48	6.02		47.05	45.25	5.27		49.93	48.04	4.62		52.69	50.49	4.02		54.52	50.74	3.43
80 (26.7)	72 (22.2)	**1367**	57.61	29.82	6.52	**1440**	61.47	31.80	5.74	**1514**	65.28	33.78	5.06	**1566**	68.97	35.61	4.43	**1488**	71.59	36.37	3.80
	67 (19.4)		52.65	36.25	6.32		56.15	38.64	5.56		59.62	41.04	4.89		62.96	43.19	4.28		65.29	43.67	3.66
	63 (17.2)		48.99	41.31	6.19		52.23	44.02	5.43		55.45	46.75	4.77		58.54	49.15	4.17		60.67	49.42	3.56
	57 (13.9)		45.90	45.90	6.08		48.92	48.92	5.33		51.93	51.93	4.67		54.72	54.72	4.07		55.91	55.91	3.46
STAGE 3																					
75 (23.9)	72 (22.2)	**959**	36.98	15.01	3.25	**1013**	39.25	15.94	2.79	**1066**	41.77	16.95	2.44	**1120**	44.28	17.97	2.13	**1210**	47.05	19.11	1.87
	67 (19.4)		33.40	19.03	3.22		35.55	20.23	2.75		37.83	21.50	2.39		40.10	22.76	2.09		42.62	24.30	1.84
	63 (17.2)		30.77	22.16	3.21		32.82	23.59	2.72		34.94	25.04	2.37		37.04	26.50	2.06		39.38	28.36	1.81
	57 (13.9)		27.31	26.75	3.18		29.19	28.48	2.69		31.09	30.22	2.34		32.99	31.96	2.04		35.10	34.26	1.79
80 (26.7)	72 (22.2)	**959**	36.89	19.10	3.25	**1013**	39.15	20.27	2.79	**1066**	41.66	21.53	2.44	**1120**	44.17	22.80	2.13	**1210**	46.93	24.34	1.87
	67 (19.4)		33.32	23.06	3.22		35.47	24.51	2.75		37.74	26.01	2.39		40.02	27.53	2.09		42.53	29.47	1.84
	63 (17.2)		30.72	26.18	3.21		32.77	27.85	2.72		34.89	29.54	2.37		36.99	31.25	2.06		39.33	33.50	1.81
	57 (13.9)		28.74	28.74	3.19		30.65	30.65	2.70		32.58	32.58	2.35		34.53	34.53	2.05		36.85	36.85	1.80
STAGE 1																					
75 (23.9)	72 (22.2)	**748**	27.11	11.00	2.21	**600**	19.91	8.07	1.22	**600**	20.99	8.50	1.01	**647**	22.49	9.11	0.80	**700**	24.02	9.73	0.59
	67 (19.4)		24.28	13.80	2.21		17.69	10.04	1.21		18.67	10.45	1.01		20.04	11.19	0.81		21.43	11.97	0.61
	63 (17.2)		22.21	15.99	2.20		16.05	11.57	1.21		16.97	11.96	1.01		18.23	12.81	0.82		19.53	13.71	0.62
	57 (13.9)		19.51	19.20	2.20		13.98	13.85	1.20		14.76	14.19	1.02		15.88	15.20	0.84		17.03	16.27	0.65
80 (26.7)	72 (22.2)	**748**	27.04	13.93	2.21	**600**	19.86	10.20	1.22	**600**	20.94	10.61	1.01	**647**	22.43	11.35	0.80	**700**	23.96	12.13	0.59
	67 (19.4)		24.22	16.71	2.21		17.65	12.16	1.21		18.63	12.54	1.01		19.99	13.42	0.81		21.39	14.35	0.61
	63 (17.2)		22.18	18.88	2.20		16.04	13.68	1.21		16.95	14.04	1.01		18.21	15.03	0.82		19.50	16.08	0.62
	57 (13.9)		20.65	20.65	2.20		14.90	14.90	1.20		15.50	15.50	1.02		16.63	16.63	0.83		17.82	17.82	0.64

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

See additional notes on page 34

DETAILED COOLING CAPACITIES# - COMFORT + DEHUMIDIFY MODE CONTINUED

24VNA960

COOLING INDOOR MODEL	CAPACITY	POWER	FURNACE MODEL
*FE4ANB006L	1.00	1.00	
CAP**6021AL*	0.99	0.99	58CV(A,X)110–20
CAP**6024AL*	0.99	0.99	58CV(A,X)110–20
CNPH*6024AL*	0.99	1.04	58CV(A,X)110–20
CNPH*6124AL*	0.99	1.04	58CV(A,X)110–20
CNPV*6024AL*	0.98	0.98	58CV(A,X)110–20
CNPV*6124AL*	1.00	1.00	58CV(A,X)110–20
CSPH*6012AL*	1.00	1.00	58CV(A,X)110–20
CAP**6024AL*	0.99	0.99	58CV(A,X)135–22
CNPH*6024AL*	0.99	0.99	58CV(A,X)135–22
CNPH*6124AL*	1.00	1.00	58CV(A,X)135–22
CNPV*6024AL*	0.98	0.98	58CV(A,X)135–22
CNPV*6124AL*	1.00	1.00	58CV(A,X)135–22
CSPH*6012AL*	1.00	1.00	58CV(A,X)135–22
CAP**6024AL*	1.00	1.00	58CV(A,X)155–22
CNPH*6024AL*	1.00	1.00	58CV(A,X)155–22
CNPH*6124AL*	1.00	1.00	58CV(A,X)155–22
CNPV*6024AL*	0.99	0.99	58CV(A,X)155–22
CNPV*6124AL*	1.00	1.00	58CV(A,X)155–22
CSPH*6012AL*	1.00	1.00	58CV(A,X)155–22
CAP**6021AL*	0.99	1.04	59*N*A080V21**20
CAP**6024AL*	0.99	1.04	59*N*A080V21**20
CNPH*6024AL*	0.99	1.04	59*N*A080V21**20
CNPH*6124AL*	0.99	1.04	59*N*A080V21**20
CNPV*6024AL*	0.98	1.03	59*N*A080V21**20
CNPV*6124AL*	0.99	1.04	59*N*A080V21**20
CSPH*6012AL*	0.99	1.04	59*N*A080V21**20
CAP**6021AL*	0.99	1.04	59*N*A100V21**22
CAP**6024AL*	0.99	0.99	59*N*A100V21**22
CNPH*6024AL*	0.99	1.04	59*N*A100V21**22
CNPH*6124AL*	0.99	1.04	59*N*A100V21**22
CNPV*6024AL*	0.98	0.98	59*N*A100V21**22
CNPV*6124AL*	1.00	1.00	59*N*A100V21**22
CSPH*6012AL*	1.00	1.00	59*N*A100V21**22
CAP**6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6024AL*	0.99	1.04	59*N*A120V24**22
CNPH*6124AL*	0.99	1.04	59*N*A120V24**22
CNPV*6024AL*	0.98	1.03	59*N*A120V24**22
CNPV*6124AL*	0.99	0.99	59*N*A120V24**22
CSPH*6012AL*	1.00	1.00	59*N*A120V24**22
CAP**6021AL*	0.98	1.03	59MN7A060V21**20
CAP**6024AL*	0.98	1.03	59MN7A060V21**20
CNPH*6024AL*	0.98	1.09	59MN7A060V21**20
CNPH*6124AL*	0.98	1.09	59MN7A060V21**20
CNPV*6024AL*	0.97	1.02	59MN7A060V21**20
CNPV*6124AL*	0.99	1.04	59MN7A060V21**20
CSPH*6012AL*	0.99	1.04	59MN7A060V21**20

2–STAGE (Hi–Stage 5, Lo–Stage 2)					
Cooling Indoor Model	High Speed Cap.	Power	Low Speed Cap.	Power	Furnace Model
*FV4CNB006L	1.00	1.00	1.00	1.00	
CAP**6021AL*	1.01	1.06	1.01	1.07	58PH*110–20
CSPH*6012AL*	1.02	1.07	1.00	1.04	58PH*110–20
CAP**6024AL*	1.01	1.06	1.00	1.11	58PH*135–20
CNPH*6024AL*	1.01	1.06	1.01	1.06	58PH*135–20
CNPH*6124AL*	1.01	1.06	1.01	1.12	58PH*135–20
CNPV*6024AL*	1.00	1.05	1.01	1.06	58PH*135–20
CNPV*6124AL*	1.02	1.07	1.00	1.03	58PH*135–20
CSPH*6012AL*	1.02	1.07	1.01	1.05	58PH*135–20
CAP**6021AL*	1.01	1.06	1.01	1.07	58CTW110–22
CSPH*6012AL*	1.02	1.07	1.00	1.04	58CTW110–22
CAP**6024AL*	1.01	1.06	1.01	1.06	58CTW135–22
CNPH*6024AL*	1.01	1.06	1.01	1.06	58CTW135–22
CNPH*6124AL*	1.01	1.06	1.01	1.06	58CTW135–22
CNPV*6024AL*	1.00	1.05	1.01	1.06	58CTW135–22
CNPV*6124AL*	1.02	1.07	1.01	1.04	58CTW135–22
CSPH*6012AL*	1.02	1.07	1.00	1.04	58CTW135–22
CAP**6021AL*	1.01	1.06	1.01	1.07	59*P2A080E21**20
CSPH*6012AL*	1.02	1.07	1.00	1.05	59*P2A080E21**20
CAP**6021AL*	1.01	1.06	1.01	1.07	59*P2A100E21**20
CSPH*6012AL*	1.01	1.06	1.00	1.05	59*P2A100E21**20
CAP**6024AL*	1.01	1.06	1.01	1.07	59*P2A120E24**20
CNPH*6024AL*	1.01	1.06	1.01	1.07	59*P2A120E24**20
CNPH*6124AL*	1.01	1.06	1.01	1.07	59*P2A120E24**20
CNPV*6024AL*	1.00	1.05	1.01	1.07	59*P2A120E24**20
CNPV*6124AL*	1.02	1.07	1.00	1.04	59*P2A120E24**20
CSPH*6012AL*	1.02	1.07	1.00	1.05	59*P2A120E24**20
CAP**6021AL*	0.99	1.04	1.01	1.11	59*P5A080E21**20
CSPH*6012AL*	1.00	1.05	1.01	1.10	59*P5A080E21**20
CAP**6024AL*	1.00	1.05	1.01	1.11	59*P5A120E24**22
CNPH*6024AL*	1.00	1.05	1.01	1.11	59*P5A120E24**22
CNPH*6124AL*	1.00	1.05	1.01	1.10	59*P5A120E24**22
CNPV*6024AL*	0.99	1.04	1.01	1.11	59*P5A120E24**22
CNPV*6124AL*	1.00	1.05	1.01	1.09	59*P5A120E24**22
CSPH*6012AL*	1.00	1.05	1.00	1.09	59*P5A120E24**22
CSPH*6012AL*	1.00	1.05	1.01	1.10	59*P6A080E21**20
CSPH*6012AL*	1.01	1.06	1.00	1.11	59*P6A100E21**20
CAP**6024AL*	0.99	1.04	1.01	1.11	59*P6A120E24**22
CNPH*6124AL*	1.00	1.05	1.01	1.10	59*P6A120E24**22
CNPV*6024AL*	0.98	1.03	1.01	1.10	59*P6A120E24**22
CNPV*6124AL*	1.00	1.05	1.01	1.09	59*P6A120E24**22
CSPH*6012AL*	1.00	1.05	1.00	1.08	59*P6A120E24**22
CAP**6024AL*	1.00	1.05	1.01	1.09	OVLAAB060154
CNPV*6024AL*	0.99	1.04	1.01	1.09	OVLAAB060154
CNPV*6124AL*	1.01	1.06	1.01	1.07	OVLAAB060154
CNPV*6124AL*	1.01	1.06	1.01	1.11	OVMAAB060154
CSPH*6012AL*	1.01	1.06	1.00	1.11	OVMAAB060154

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 (23.4°C) entering air at the indoor coil.

For sensible capacities at other than these, deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below reference temperature, or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree above reference temperature.

Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240–2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

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

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

EWB — Entering Wet Bulb

GUIDE SPECIFICATIONS
GENERAL

System Description

Outdoor-mounted, air-cooled, split-system air conditioning 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 air conditioning 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.
- Infinity 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. For reliable operation, unit should be level in all horizontal planes.
4. This unit is qualified for up to 100 ft (30.5 m) equivalent length of line set without additional accessories.
5. 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).
6. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
7. Do not apply capillary tube indoor coils to these units.
8. Puron refrigerant TXV required on indoor coil.

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