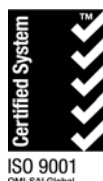


**VERTICAL EVAPORATOR COILS
N COIL – CASED
UPFLOW, DOWNFLOW
R-410A SYSTEMS
1-1/2 – 5 Tons**



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.



GRANDAIR[®]
Heating & Cooling Products



WLNC		WLNW	
Model	Size (tons)	Model	Size (tons)
WLNC184AA	1-1/2	WLNW364BA	3
WLNC244AA	2	WLNW424CA	3-1/2
WLNC244BA		WLNW484CA	4
WLNC304AA	2-1/2	WLNW604DA	5
WLNC304BA			
WLNC364BA	3		
WLNC364CA			
WLNC424BA	3-1/2		
WLNC424CA			
WLNC484CA	4		
WLNC484DA			
WLNC604DA	5		

STANDARD FEATURES

- Aluminum hairpin/return-bend/fin “N” coil with latest high-tech fin design
- Bolt-on TXV metering device factory installed on all models (equalizer tube brazed in)
- Available with industry exclusive tin coated copper main tubing for additional corrosion protection
- Two condensate drain connections
- Cabinet widths match flush with (WFMR, WFML, WFAR, WFSR) furnaces
- Sturdy, pre-painted steel cabinet with hemmed flanges for safety and removable front access panel
- Foil faced insulation
- Non-sweat cabinet that meet or exceed 2% air leakage codes

WLNC

- Upflow or downflow installation
- Compact design, shorter than comparable A-coils

WLNW

- Upflow or downflow installation
- Drainpan raised 2” (51mm) and block-off plate factory installed — for installing wider coil on narrower furnace

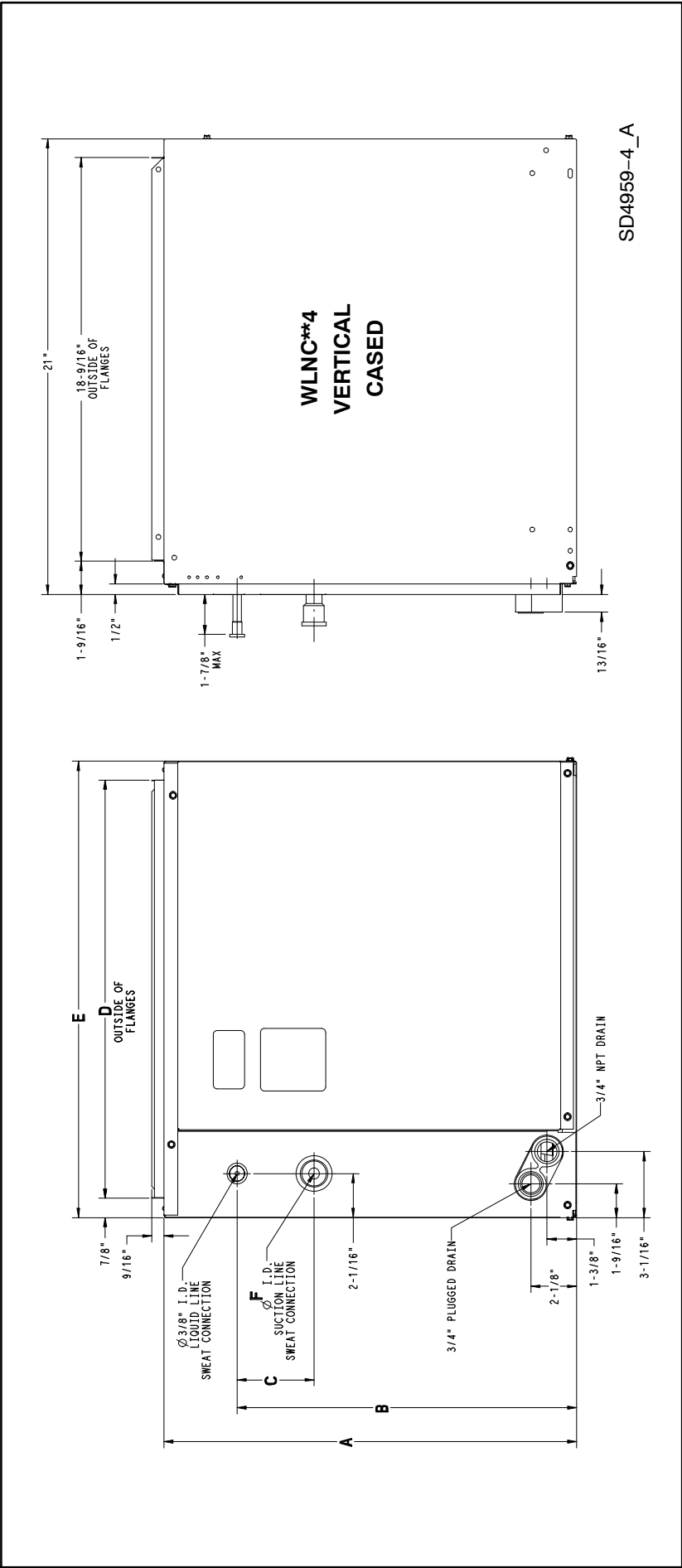
WARRANTY*

- 5 year parts (with an additional 5 years parts if properly registered) limited warranty to the original purchaser only for owner-occupied dwellings – see warranty certificate for details.

WLNC, WLNW

Product Specifications

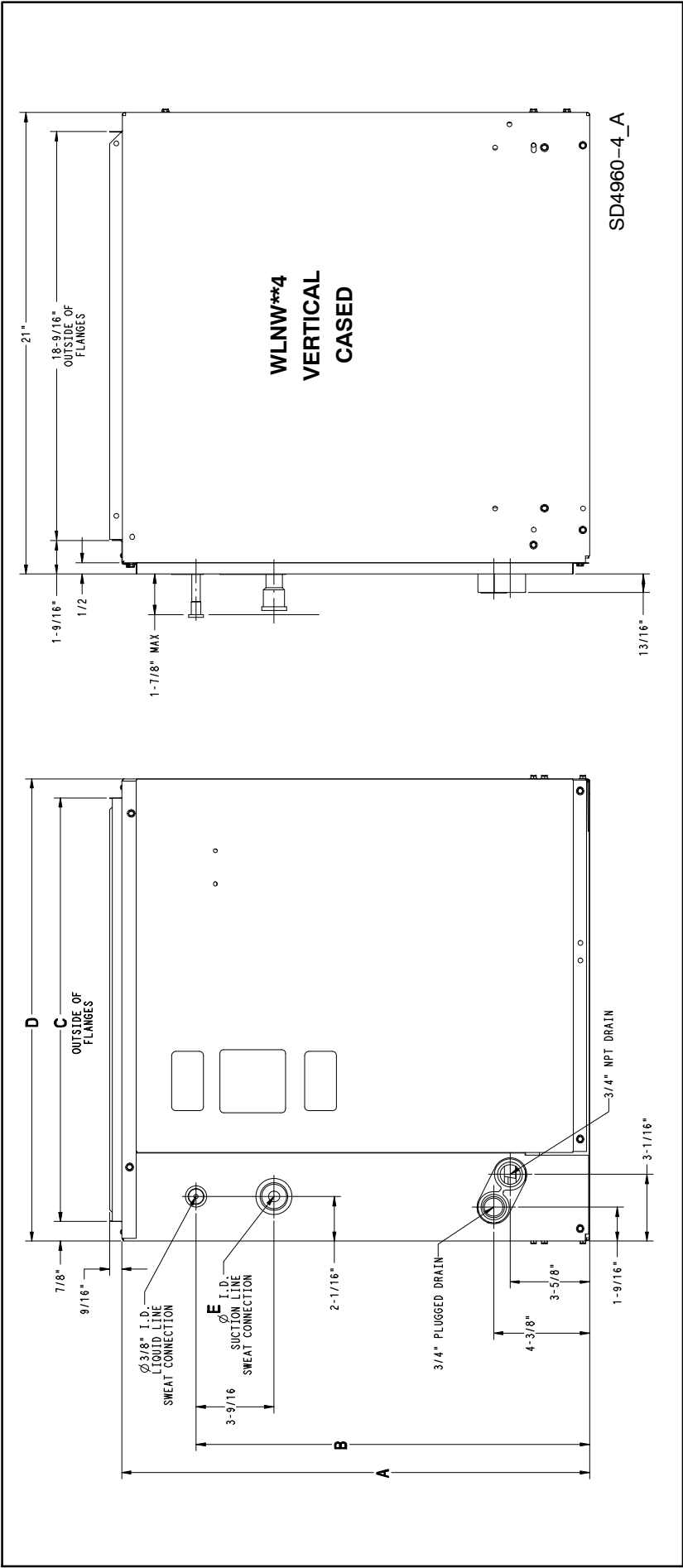
EVAPORATOR COIL MODEL NUMBER IDENTIFICATION GUIDE									
Digit Position:	1, 2	3	4	5, 6	7	8	9	10	
Example Part Number:	WL	N	H	24	4	A	A	1	
WL = Aluminum Evaporator Coil		TYPE							
A= A coil									
N = N coil									
U = Uncased Upflow/Downflow		INSTALLATION TYPE							
C = Cased Upflow/Downflow									
H = Cased Horizontal									
W = Cased Upflow/Downflow for narrower furnaces									
18 = 18,000 BTU/hr = 1–1/2 TONS		NOMINAL COOLING CAPACITY							
24 = 24,000 BTU/hr = 2 TONS									
30 = 30,000 BTU/hr = 2–1/2 TONS									
36 = 36,000 BTU/hr = 3 TONS									
42 = 42,000 BTU/hr = 3–1/2 TONS									
48 = 48,000 BTU/hr = 4 TONS									
60 = 60,000 BTU/hr = 5 TONS									
4 = R-410A		REFRIGERANT							
A = 14–3/16"									
B = 17–1/2"									
C = 21"									
D = 24–1/2"		CABINET WIDTH							
SALES DIGIT									
EXTRA DIGIT									



SD4959-4_A

DIMENSIONAL DATA — WLNC**4

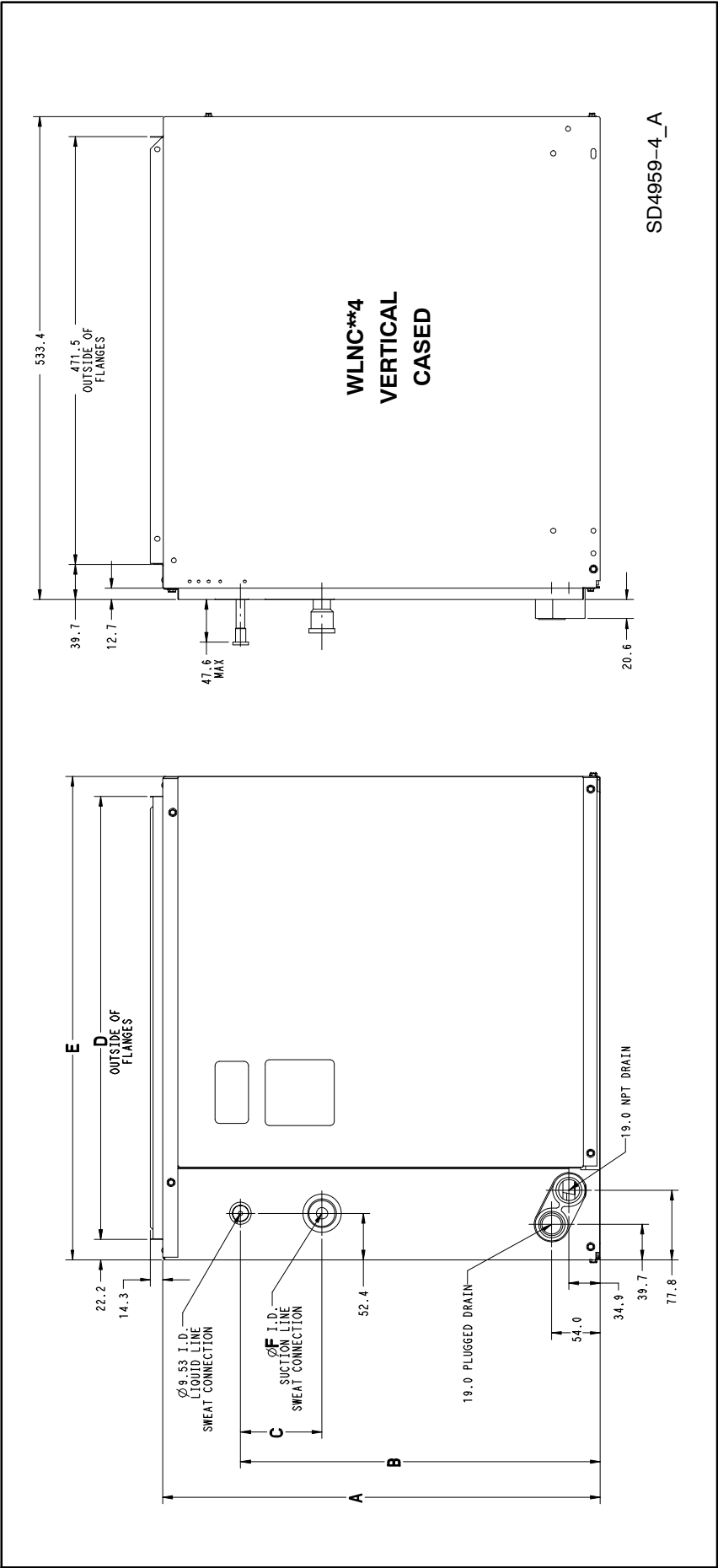
Model	Size (tons)	Inches – English (MM – SI Metric)						Shipping Weight lbs (kg)
		A	B	C	D	E	F	
WLNC184A	1-1/2	12-5/8 (321)	10-1/16 (256)	5-5/16 (135)	12-1/2 (318)	14-3/16 (360)	5/8 (16)	36 (16)
WLNC244A	2	14-5/8 (372)	12-1/16 (306)	5-5/16 (135)	12-1/2 (318)	14-3/16 (360)	5/8 (16)	40 (18)
WLNC244B	2	14-5/8 (372)	10-1/16 (256)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	5/8 (16)	40 (18)
WLNC304A	2-1/2	17 (432)	13-5/8 (346)	5-5/16 (135)	12-1/2 (318)	14-3/16 (360)	3/4 (19)	47 (21)
WLNC304B	2-1/2	17 (432)	13-7/8 (352)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	47 (21)
WLNC364B	3	17 (432)	13-7/8 (352)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	49 (22)
WLNC364C	3	17 (432)	13-9/16 (345)	3-9/16 (91)	19-1/4 (489)	21 (533)	3/4 (19)	49 (22)
WLNC424B	3-1/2	21-1/8 (537)	13-7/8 (352)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	7/8 (22)	52 (24)
WLNC424C	3-1/2	19 (483)	15-5/8 (397)	3-9/16 (91)	19-1/4 (489)	21 (533)	7/8 (22)	57 (26)
WLNC484C	4	22-1/16 (560)	17-1/2 (445)	3-9/16 (91)	19-1/4 (489)	21 (533)	7/8 (22)	66 (30)
WLNC484D	4	22-1/16 (560)	17-1/4 (438)	3-9/16 (91)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	62 (28)
WLNC604D	5	26-7/8 (683)	17-15/16 (456)	3-9/16 (91)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	78 (35)



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

DIMENSIONAL DATA — WLNW**4						
Model	Size (tons)	Inches – English (MM – SI Metric)				Shipping Weight lbs (kg)
		A	B	C	D	
WLNW364B	3	19-13/16 (503)	16-1/8 (410)	15-3/4 (400)	17-1/2 (445)	Aluminum 49 (22)
WLNW424C	3-1/2	21-13/16 (554)	17-7/8 (454)	19-1/4 (489)	21 (533)	62 (28)
WLNW484C	4	24-7/8 (632)	19-3/4 (502)	19-1/4 (489)	21 (533)	71 (32)
WLNW604D	5	29-1/8 (740)	20-3/16 (513)	22-3/4 (578)	24-1/2 (622)	78 (35)

SI Metric Drawing – WLNC**4



Technical drawing of a vertical case, showing front and side views with dimensions and labels.

Front View (Left):

- Overall width: 533.4
- Distance from left edge to center of suction line: 471.5
- Distance from left edge to center of sweat connection: 471.5
- Distance from left edge to center of plugged drain: 471.5
- Distance from left edge to center of NPT drain: 471.5
- Distance from left edge to center of suction line: 471.5
- Distance from left edge to center of sweat connection: 471.5
- Distance from left edge to center of plugged drain: 471.5
- Distance from left edge to center of NPT drain: 471.5

Side View (Right):

- Overall height: 77.8
- Distance from top edge to center of suction line: 111.1
- Distance from top edge to center of sweat connection: 92.1
- Distance from top edge to center of plugged drain: 92.1
- Distance from top edge to center of NPT drain: 92.1
- Distance from top edge to center of suction line: 111.1
- Distance from top edge to center of sweat connection: 92.1
- Distance from top edge to center of plugged drain: 92.1
- Distance from top edge to center of NPT drain: 92.1

Labels:

- WLNW**4
- VERTICAL
- CASED
- SD4960-4_A
- OUTSIDE OF FLANGES
- 19.0 PLUGGED DRAIN
- 19.0 NPT DRAIN
- Ø 19.53 I.D. COOL LINE SWEAT CONNECTION
- Ø I.D. SUCTION LINE SWEAT CONNECTION

COOLING CAPACITIES (MBH)																	
UNIT SIZE	INDOOR COIL		SATURATED TEMPERATURE LEAVING EVAPORATOR °F (°C)														
	AIR		30 (-1)			35 (2)			40 (4)			45 (7)			50 (10)		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
18	450	72 (22)	31.00	15.20	0.00	28.60	13.90	0.00	25.80	12.50	0.00	22.80	11.10	0.00	19.30	9.60	0.00
		67 (19)	26.00	15.70	0.00	23.50	14.30	0.01	20.70	12.80	0.01	17.60	11.30	0.01	14.10	9.80	0.01
		62 (17)	21.50	16.00	0.01	18.90	14.50	0.01	16.10	13.00	0.01	13.00	11.50	0.01	10.10	10.10	0.03
	600	72 (22)	38.30	18.70	0.00	35.30	17.10	0.00	32.00	15.50	0.00	28.20	13.80	0.00	23.90	12.00	0.01
		67 (19)	32.30	19.50	0.01	29.20	17.80	0.02	25.70	16.10	0.02	21.80	14.30	0.02	17.50	12.40	0.02
		62 (17)	26.70	20.10	0.02	23.50	18.40	0.02	20.00	16.60	0.02	16.20	14.80	0.02	12.90	12.90	0.06
	750	72 (22)	44.30	21.50	0.00	40.90	19.90	0.00	37.00	18.10	0.00	32.70	16.10	0.02	27.70	14.00	0.02
		67 (19)	37.40	22.80	0.03	33.90	20.90	0.03	29.90	19.00	0.03	25.40	16.90	0.03	20.40	14.70	0.04
		62 (17)	31.10	23.80	0.04	27.40	21.80	0.04	23.40	19.80	0.04	19.10	17.70	0.04	15.60	15.60	0.10
24	600	72 (22)	39.00	19.00	0.00	36.00	17.50	0.00	32.70	15.90	0.00	28.80	14.10	0.00	24.60	12.30	0.01
		67 (19)	32.80	19.80	0.01	29.80	18.20	0.01	26.30	16.40	0.01	22.40	14.60	0.02	18.10	12.60	0.02
		62 (17)	27.20	20.50	0.02	24.00	18.70	0.02	20.50	16.90	0.02	16.60	15.00	0.02	13.10	13.10	0.05
	800	72 (22)	47.10	22.80	0.00	43.60	21.10	0.00	39.60	19.30	0.00	35.00	17.30	0.02	29.90	15.10	0.02
		67 (19)	39.80	24.20	0.03	36.10	22.30	0.03	32.00	20.30	0.03	27.30	18.10	0.03	22.00	15.90	0.03
		62 (17)	33.10	25.40	0.03	29.30	23.40	0.03	25.10	21.20	0.03	20.50	19.00	0.04	16.70	16.70	0.09
	1000	72 (22)	53.40	25.90	0.00	49.50	24.20	0.00	45.10	22.10	0.02	40.00	19.90	0.03	34.10	17.50	0.04
		67 (19)	45.30	27.90	0.05	41.20	25.90	0.05	36.60	23.70	0.05	31.30	21.30	0.05	25.20	18.70	0.05
		62 (17)	37.80	29.60	0.05	33.60	27.40	0.05	28.80	25.10	0.05	23.80	22.70	0.06	20.00	20.00	0.13
30	750	72 (22)	48.00	23.50	0.00	44.00	21.40	0.00	39.70	19.20	0.00	34.80	17.00	0.00	29.40	14.60	0.01
		67 (19)	40.30	24.20	0.01	36.20	22.00	0.02	31.80	19.70	0.02	26.80	17.40	0.02	21.40	15.00	0.02
		62 (17)	33.20	24.80	0.02	29.10	22.50	0.02	24.60	20.20	0.02	19.90	17.90	0.02	15.60	15.60	0.05
	1000	72 (22)	58.70	28.50	0.00	53.90	26.10	0.00	48.50	23.60	0.00	42.50	20.90	0.02	35.80	18.10	0.03
		67 (19)	49.40	29.90	0.03	44.40	27.30	0.03	38.90	24.60	0.04	32.90	21.70	0.04	26.20	18.80	0.04
		62 (17)	40.80	30.90	0.04	35.80	28.20	0.04	30.30	25.40	0.04	24.60	22.60	0.05	19.90	19.90	0.10
	1250	72 (22)	67.40	32.70	0.00	61.90	30.10	0.00	55.70	27.30	0.02	48.80	24.20	0.04	41.10	21.00	0.05
		67 (19)	56.80	34.70	0.05	51.20	31.80	0.06	44.90	28.70	0.06	37.80	25.50	0.06	30.10	22.20	0.06
		62 (17)	47.10	36.30	0.06	41.30	33.20	0.06	35.00	30.10	0.06	28.60	27.00	0.07	23.70	23.70	0.14
36	900	72 (22)	58.10	28.30	0.00	53.40	25.90	0.00	48.00	23.30	0.00	42.10	20.60	0.01	35.50	17.80	0.02
		67 (19)	48.90	29.50	0.02	44.00	26.90	0.03	38.50	24.20	0.03	32.50	21.30	0.03	25.90	18.40	0.03
		62 (17)	40.40	30.40	0.03	35.40	27.70	0.03	29.90	24.90	0.03	24.20	22.10	0.04	19.40	19.40	0.08
	1200	72 (22)	70.00	33.90	0.00	64.30	31.20	0.00	57.80	28.30	0.02	50.70	25.10	0.04	42.70	21.80	0.05
		67 (19)	58.90	35.90	0.05	53.10	32.90	0.05	46.50	29.70	0.05	39.30	26.40	0.06	31.20	22.90	0.06
		62 (17)	48.80	37.50	0.06	42.80	34.30	0.06	36.30	31.00	0.06	29.60	27.80	0.06	24.40	24.40	0.13
	1500	72 (22)	79.30	38.60	0.00	72.90	35.60	0.02	65.70	32.30	0.05	57.50	28.80	0.06	48.50	25.10	0.07
		67 (19)	67.00	41.30	0.08	60.40	38.00	0.08	53.00	34.40	0.08	44.70	30.70	0.08	35.50	26.80	0.09
		62 (17)	55.70	43.60	0.09	48.80	40.00	0.09	41.60	36.50	0.09	34.20	32.90	0.10	28.80	28.80	0.18
42	1050	72 (22)	74.40	36.30	0.00	68.10	33.10	0.00	61.20	29.70	0.00	53.50	26.20	0.01	45.00	22.60	0.02
		67 (19)	62.30	37.60	0.02	56.00	34.20	0.03	48.90	30.60	0.03	41.20	27.00	0.03	32.80	23.30	0.03
		62 (17)	51.40	38.60	0.03	44.90	35.00	0.03	37.90	31.40	0.03	30.60	27.80	0.04	24.40	24.40	0.08
	1400	72 (22)	90.20	43.80	0.00	82.60	40.10	0.00	74.10	36.20	0.01	64.70	32.00	0.04	54.40	27.60	0.05
		67 (19)	75.80	46.00	0.05	68.00	42.00	0.05	59.40	37.70	0.06	50.00	33.40	0.06	39.60	28.90	0.06
		62 (17)	62.60	47.70	0.06	54.70	43.50	0.06	46.20	39.20	0.06	37.50	35.00	0.07	30.70	30.70	0.13
	1750	72 (22)	103.00	50.00	0.00	94.30	46.00	0.00	84.60	41.50	0.05	73.90	36.80	0.06	62.00	32.00	0.07
		67 (19)	86.70	53.10	0.08	77.80	48.60	0.08	68.00	43.90	0.08	57.10	39.00	0.08	45.20	33.90	0.09
		62 (17)	71.70	55.70	0.09	62.70	50.90	0.09	53.10	46.20	0.09	43.40	41.50	0.10	36.30	36.30	0.18
48	1200	72 (22)	79.30	38.70	0.00	72.90	35.40	0.00	65.70	31.90	0.00	57.70	28.20	0.00	48.80	24.40	0.01
		67 (19)	66.60	40.20	0.02	60.00	36.60	0.02	52.70	32.90	0.02	44.60	29.10	0.02	35.70	25.10	0.03
		62 (17)	55.00	41.30	0.03	48.30	37.60	0.03	40.90	33.80	0.03	33.10	30.00	0.03	26.30	26.30	0.07
	1600	72 (22)	96.00	46.60	0.00	88.30	42.90	0.00	79.60	38.90	0.00	69.90	34.50	0.03	59.10	30.00	0.04
		67 (19)	80.90	49.20	0.04	72.90	45.00	0.04	64.10	40.70	0.05	54.20	36.10	0.05	43.30	31.40	0.05
		62 (17)	67.00	51.20	0.05	58.80	46.80	0.05	49.90	42.30	0.05	40.70	37.90	0.05	33.30	33.30	0.11
	2000	72 (22)	109.40	53.10	0.00	100.70	49.10	0.00	90.90	44.60	0.03	79.90	39.80	0.05	67.50	34.70	0.06
		67 (19)	92.40	56.70	0.06	83.40	52.20	0.07	73.30	47.40	0.07	62.00	42.20	0.07	49.50	36.90	0.07
		62 (17)	76.70	59.70	0.07	67.50	54.90	0.08	57.40	49.90	0.08	47.20	44.90	0.08	39.50	39.50	0.16
60	1600	72 (22)	103.20	50.40	0.00	94.40	45.90	0.00	84.80	41.10	0.00	74.10	36.30	0.00	62.40	31.20	0.02
		67 (19)	86.40	52.10	0.02	77.50	47.20	0.02	67.80	42.30	0.02	57.10	37.20	0.03	45.40	32.10	0.03
		62 (17)	71.20	53.30	0.03	62.20	48.30	0.03	52.40	43.30	0.03	42.30	38.30	0.03	33.50	33.50	0.07
	2000	72 (22)	120.70	58.70	0.00	110.40	53.60	0.00	99.00	48.20	0.00	86.40	42.50	0.02	72.60	36.70	0.03
		67 (19)	101.20	61.30	0.03	90.70	55.70	0.04	79.20	50.00	0.04	66.60	44.10	0.04	52.80	38.10	0.05
		62 (17)	83.40	63.20	0.05	72.80	57.40	0.05	61.40	51.60	0.05	49.70	46.00	0.05	40.30	40.30	0.11
	2400	72 (22)	135.60	65.80	0.00	124.10	60.30	0.00	111.20	54.40	0.01	97.00	48.00	0.04	81.30	41.50	0.05
		67 (19)	113.90	69.30	0.05	102.10	63.20	0.06	89.10	56.90	0.06	74.80	50.30	0.06	59.20	43.60	0.06
		62 (17)	94.10	72.10	0.06	82.10	65.70	0.06	69.30	59.30	0.06	56.40	53.00	0.07	46.50	46.50	0.14

Legend:

CFM – Cubic Ft. per Minute

NOTES:

1. Contact manufacturer for cooling capacities at conditions other than shown in table.
2. Formulas:

$$\text{Leaving db} = \text{entering db} - \frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$$

$$\text{Leaving wb} = \text{wb corresponding to enthalpy of air leaving coil (h}_{\text{LWB}})$$

$$h_{\text{LWB}} = h_{\text{EWB}} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$

Where h_{EWB} = enthalpy of air entering coil
3. SHC is based on 80°F (27°C) db temperature of air entering the evaporator coil.
 Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC.
 Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
4. Direct interpolation is permissible. Do not extrapolate.
5. Fan motor heat has not been deducted.
6. All data points are based on 10°F (–12°C) superheat leaving coil and use of thermostatic expansion valve (TXV) device.
7. The WLNC and WLNW coils can be used in any properly designed system using R–410A refrigerant.
8. Before using maximum cfm shown in table, check coil static pressure drop to ensure system blower can provide necessary static pressure needed for coil and duct systems.
9. Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

BYPASS FACTOR	ENTERING AIR DRY BULB TEMPERATURE °F (°C)					
	79 (26)	78 (26)	77 (25)	76 (24)	75 (24)	Under 75 (24)
	81 (27)	82 (28)	83 (28)	84 (29)	84 (29)	Above 85 (29)
	Correction Factor					
0.10	0.98	1.96	2.94	3.92	4.91	Use formula shown below
0.20	0.87	1.74	2.62	3.49	4.36	
0.30	0.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correction Factor = $1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$

COIL STATIC PRESSURE DROP (in. w.c.)																					
UNIT SIZE	Standard CFM																				
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200		
18*A	Dry																				
	0.078	0.114	0.156	0.198	0.253																
	Wet																				
24*A	0.096	0.138	0.183	0.213	0.277																
	Dry																				
	0.070	0.103	0.143	0.182	0.233	0.290	0.354														
24*B	Wet																				
	0.089	0.128	0.171	0.214	0.269	0.336	0.413														
	Dry																				
30*A	0.048	0.068	0.090	0.112	0.140	0.170	0.203														
	Wet																				
	0.064	0.091	0.122	0.150	0.188	0.224	0.263														
30*B	Dry																				
	0.065	0.097	0.135	0.173	0.223	0.278	0.339	0.405	0.478												
	Wet																				
36*B	0.078	0.114	0.160	0.206	0.260	0.321	0.388	0.461	0.540												
	Dry																				
	0.042	0.060	0.080	0.102	0.128	0.157	0.188	0.222	0.259												
36*C	Wet																				
	0.055	0.076	0.104	0.127	0.158	0.190	0.225	0.266	0.309												
	Dry																				
42*B	0.043	0.061	0.082	0.103	0.128	0.157	0.189	0.221	0.259	0.299	0.341										
	Wet																				
	0.056	0.079	0.107	0.133	0.166	0.200	0.236	0.276	0.315	0.361	0.413										
42*C	Dry																				
	0.035	0.048	0.062	0.076	0.093	0.111	0.132	0.153	0.177	0.201	0.228										
	Wet																				
48*B	0.049	0.066	0.085	0.100	0.122	0.144	0.171	0.192	0.217	0.245	0.276										
	Dry																				
			0.072	0.093	0.118	0.145	0.175	0.206	0.243	0.281	0.322	0.366	0.413								
48*C	Wet																				
			0.079	0.102	0.130	0.159	0.192	0.228	0.26	0.303	0.348	0.396	0.446								
	Dry																				
60*D	0.030	0.041	0.054	0.066	0.082	0.099	0.118	0.137	0.158	0.180	0.205	0.231	0.259								
	Wet																				
	0.043	0.059	0.078	0.101	0.126	0.153	0.181	0.207	0.234	0.260	0.288	0.319	0.354								
60*D	Dry																				
			0.047	0.060	0.075	0.092	0.110	0.130	0.152	0.176	0.204	0.230	0.256	0.284	0.318						
	Wet																				
60*D			0.053	0.067	0.085	0.104	0.125	0.147	0.172	0.200	0.228	0.259	0.292	0.327	0.365						
	Dry																				
			0.015	0.046	0.057	0.069	0.094	0.100	0.119	0.124	0.140	0.158	0.175	0.195	0.214						
60*D	Wet																				
			0.032	0.050	0.066	0.081	0.097	0.114	0.131	0.150	0.169	0.190	0.211	0.233	0.257						
	Dry																				
60*D					0.062	0.073	0.084	0.097	0.111	0.126	0.138	0.154	0.172	0.190	0.210	0.228	0.251	0.273	0.293		
	Wet																				
					0.082	0.096	0.112	0.129	0.145	0.163	0.171	0.191	0.212	0.235	0.258	0.283	0.310	0.336	0.366		

* = 4 (R-410A).