

## VERTICAL EVAPORATOR COILS

### ALL N COIL MODELS

- 1½ thru 5 Tons
- Available for environmentally sound R-410A systems
- Bolt-on TXV metering device factory installed on all models (equalizer tube brazed in)
- Two condensate drain connections
- Aluminum main tubing and aluminum fins (copper stubs for field connection)

### CASED N COILS

- Removable front access panel
- Hemmed flanges for safer handling
- Foil faced insulation
- Non-sweat cabinet, even at extreme conditions
- Cabinets meet or exceed 2% air leakage codes
- Sturdy, pre-painted steel cabinet

#### END4X

- Upflow or downflow installation (cased use only)
- Compact design, shorter than comparable A-coils
- Cabinet widths match flush with ICP 14-3/16", 17-1/2", 21" and 24-1/2" gas furnace cabinets (field fabricated transitions required to match other ICP furnace models)

#### ENW4X

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

### UNCASED N COILS

#### ENA4X

- Upflow or downflow installation (plenum use only)

### WARRANTY\*

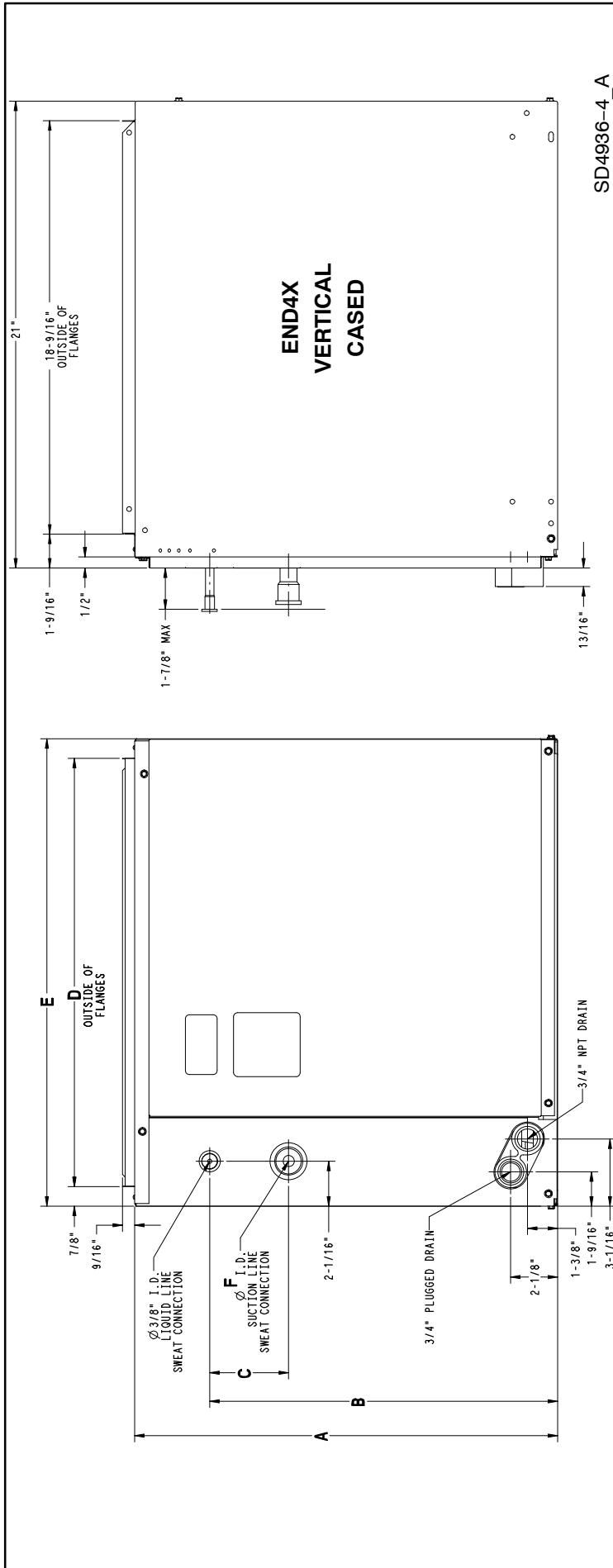
- 5 year parts limited warranty
  - With timely registration, an additional 5 year parts limited warranty
- \* For owner occupied, residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.



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

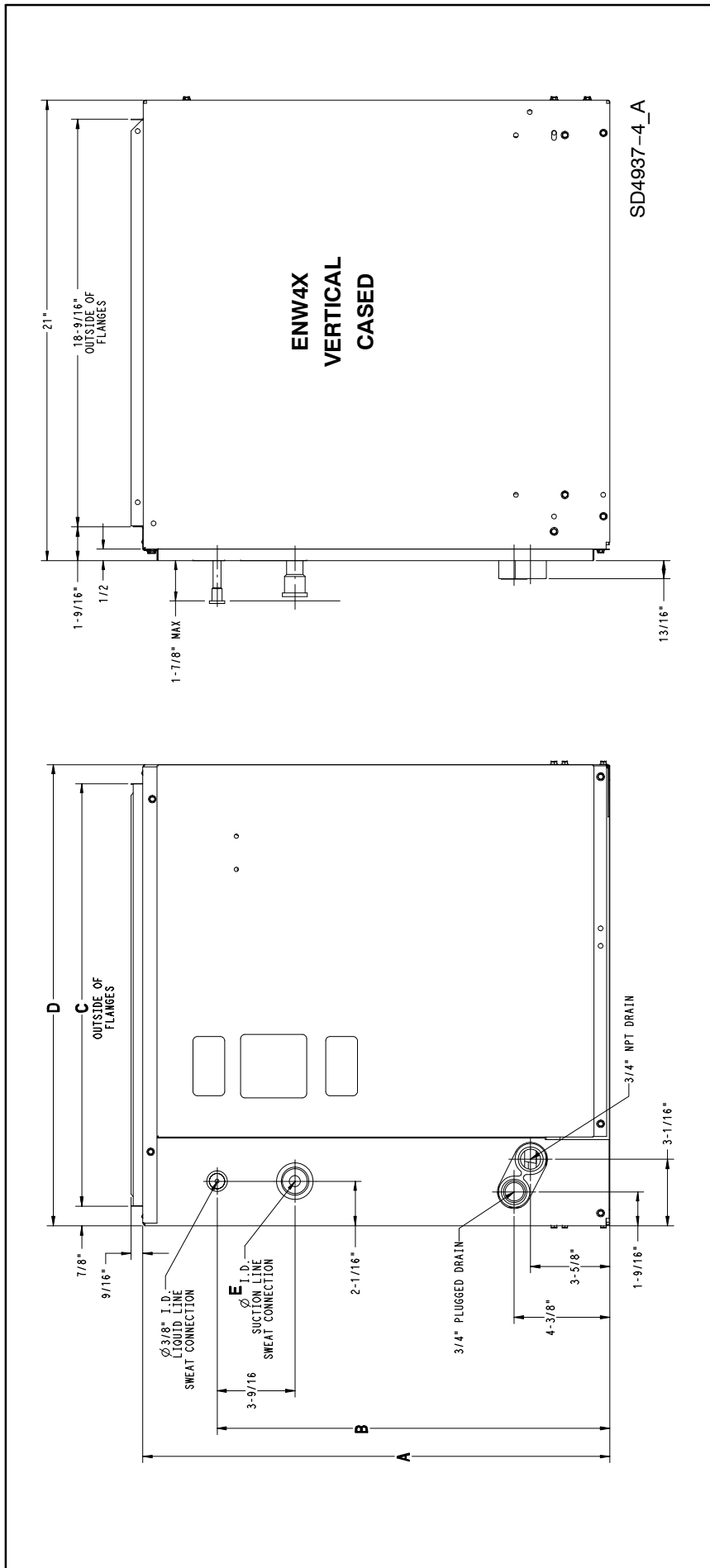


COIL MODEL NUMBER IDENTIFICATION GUIDE										
Digit Position	1	2	3	4	5	6,7	8	9,10	11	12
	<b>E</b>	<b>N</b>	<b>D</b>	<b>4</b>	<b>X</b>	<b>18</b>	<b>L</b>	<b>14</b>	<b>A</b>	<b>1</b>
E = Evaporator										
B = Builder										
D = Standard										
N = N Coil		<b>TYPE</b>								
A = Uncased										
D = Cased Upflow/Downflow										
M = Cased Multiposition (Upflow/Downflow/Horizontal)										
W = Cased Upflow/Downflow for narrower furnaces										
H = Cased Horizontal		<b>INSTALLATION</b>								
4 = Environmentally Sound R-410A				<b>REFRIGERANT</b>						
P = Piston										
X = TXV				<b>METERING DEVICE</b>						
18 = 18,000 BTUH = 1½ tons										
19 = 18,000 BTUH = 1½ tons										
24 = 24,000 BTUH = 2 tons										
30 = 30,000 BTUH = 2½ tons										
31 = 30,000 BTUH = 2½ tons										
36 = 36,000 BTUH = 3 tons										
37 = 36,000 BTUH = 3 tons										
42 = 42,000 BTUH = 3½ tons										
43 = 42,000 BTUH = 3½ tons										
48 = 48,000 BTUH = 4 tons										
60 = 60,000 BTUH = 5 tons										
61 = 60,000 BTUH = 5 tons				<b>NOMINAL CAPACITY</b>						
L = Aluminum						<b>HAIRPIN MATERIAL</b>				
14 = 14-3/16"										
17 = 17-1/2"										
21 = 21"										
24 = 24-1/2"								<b>WIDTH</b>		
Sales Digit (Major Revision)										
Engineering Digit (Minor Revision)										



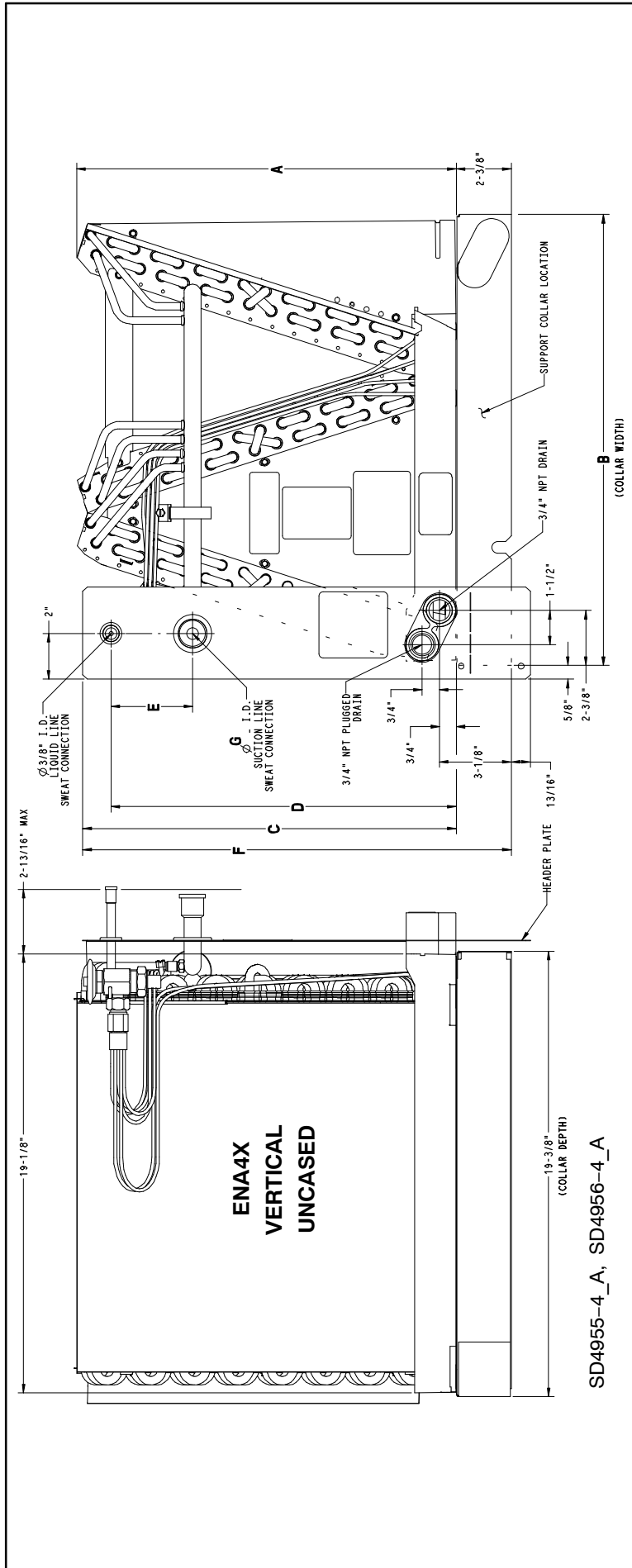
**DIMENSIONAL DATA — END4X**

Model	Size (tons)	Inches - English (MM - SI Metric)								Shipping Weight	
		A	B	C	D	E	F	Aluminum	lbs (kg)		
END4X18L14	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)			
END4X19L17	1-1/2	17 (432)	13-7/8 (352)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	35 (16)			
END4X24L14	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)			
END4X24L17	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)			
END4X30L14	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)			
END4X30L17	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)			
END4X31L17	2-1/2	23-1/4 (591)	17-1/2 (445)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	46 (21)			
END4X36L17	3	17 (432)	13-7/8 (352)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	3/4 (19)	49 (22)			
END4X36L21	3	17 (432)	13-9/16 (345)	3-9/16 (91)	19-1/4 (489)	21 (533)	3/4 (19)	48 (22)			
END4X37L17	3	27-3/16 (691)	17-1/2 (445)	3-9/16 (91)	15-3/4 (400)	17-1/2 (445)	7/8 (22)	45 (21)			
END4X42L17	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)			
END4X42L21	3-1/2	19 (483)	15-5/8 (397)	3-9/16 (91)	19-1/4 (489)	21 (533)	7/8 (22)	57 (26)			
END4X43L24	3-1/2	26-5/16 (669)	17-15/16 (456)	3-9/16 (91)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	58 (26)			
END4X48L21	4	22-1/16 (560)	17-1/2 (445)	3-9/16 (91)	19-1/4 (489)	21 (533)	7/8 (22)	66 (30)			
END4X48L24	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)			
END4X60L24	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)			
END4X61L24	5	32-7/16 (824)	17-15/16 (456)	3-9/16 (91)	22-3/4 (578)	24-1/2 (622)	7/8 (22)	84 (38)			



**DIMENSIONAL DATA — ENW4X**

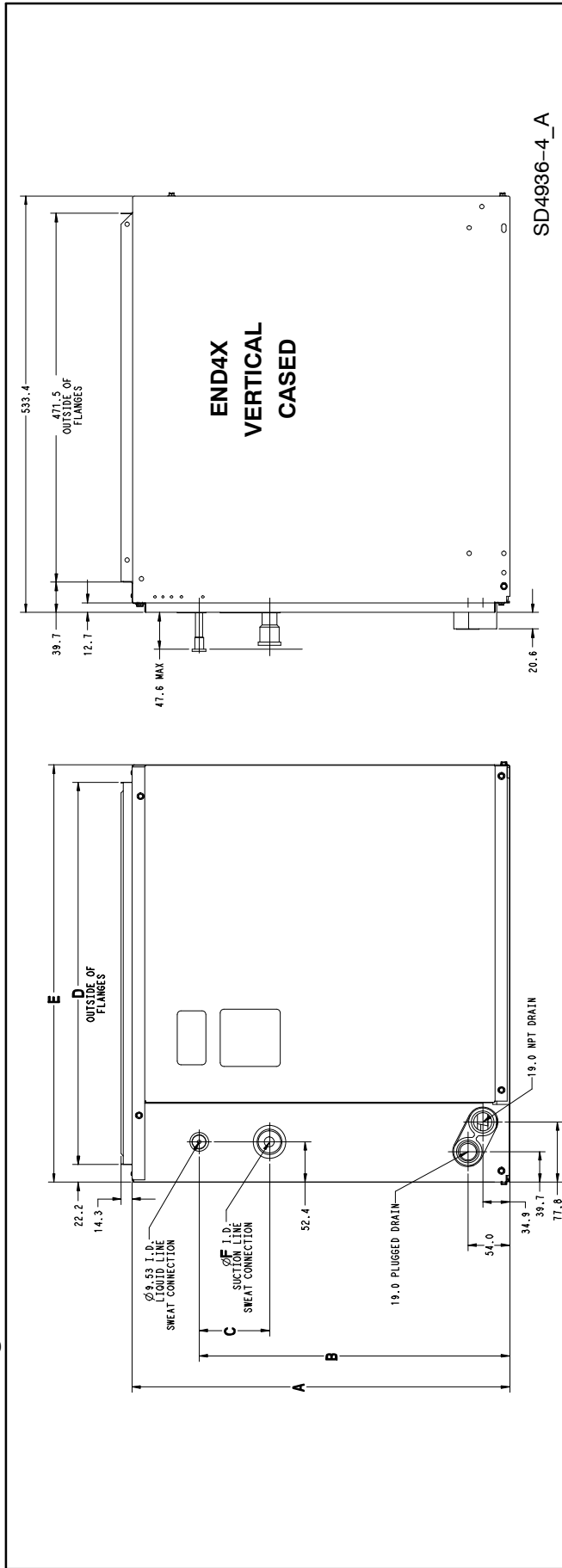
Model	Size (tons)	Inches – English (MM – SI Metric)				Shipping Weight lbs (kg)
		A	B	C	D	
ENW4X36L17	3	19-13/16 (503)	16-1/8 (410)	15-3/4 (400)	17-1/2 (445)	Aluminum 49 (22)
ENW4X42L21	3-1/2	21-13/16 (554)	17-7/8 (454)	19-1/4 (489)	21 (533)	62 (28)
ENW4X48L21	4	24-7/8 (632)	19-3/4 (502)	19-1/4 (489)	21 (533)	71 (32)
ENW4X60L24	5	29-1/8 (740)	20-3/16 (513)	22-3/4 (578)	24-1/2 (622)	78 (35)



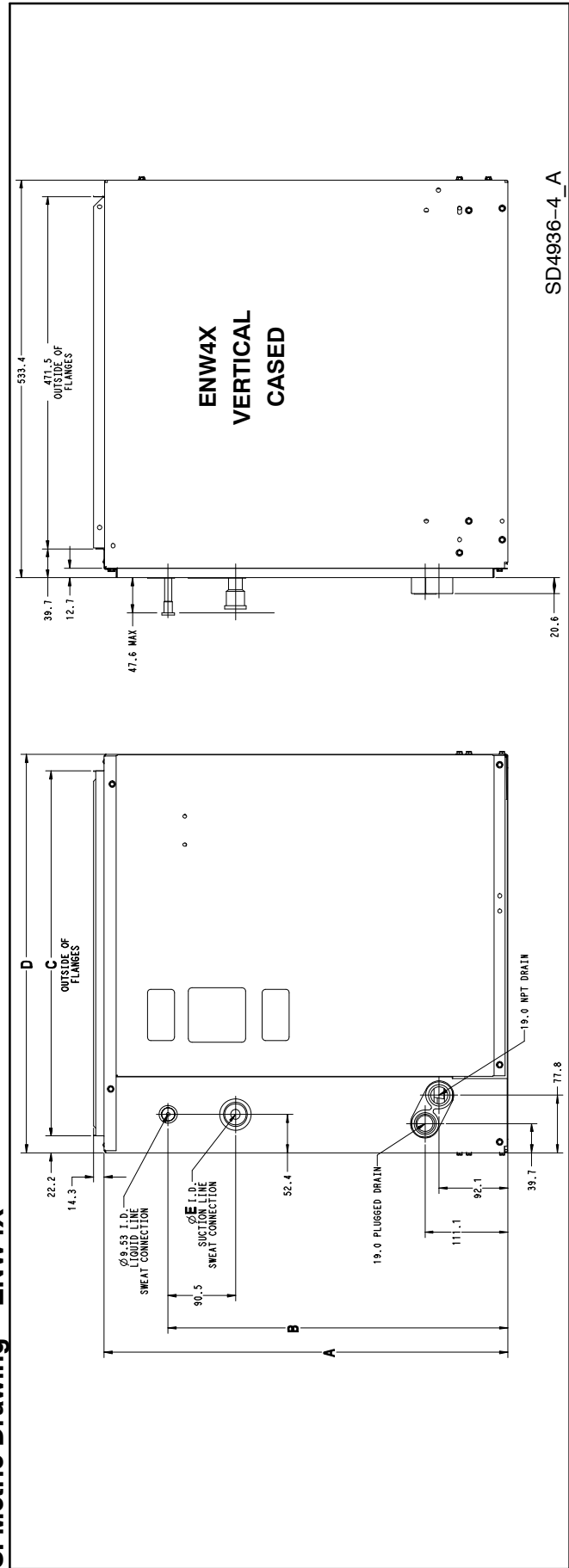
**DIMENSIONAL DATA — ENA4X**

Model	Size (tons)	Inches – English (MM – SI Metric)							Shipping Weight lbs (kg)
		A	B (Collar Width)	C	D	E	F	G	
ENA4X18L14	1-1/2	10-7/8 (276)	12-7/8 (327)	10-5/8 (270)	9-3/8 (238)	5-5/16 (135)	13 (330)	5/8 (16)	17 (8)
ENA4X19L17	1-1/2	14-11/16 (373)	16-1/4 (413)	14-1/2 (369)	13-1/4 (337)	3-9/16 (91)	16-15/16 (429)	3/4 (19)	25 (11)
ENA4X24L14	2	12-7/8 (327)	12-7/8 (327)	12-5/8 (321)	11-7/16 (291)	5-5/16 (135)	15 (381)	5/8 (16)	21 (10)
ENA4X24L17	2	12-11/16 (322)	16-1/4 (413)	10-5/8 (270)	9-3/8 (238)	3-9/16 (91)	13 (330)	5/8 (16)	22 (10)
ENA4X30L14	2-1/2	14-7/8 (378)	12-7/8 (327)	14-3/16 (360)	13 (330)	5-5/16 (135)	16-9/16 (421)	3/4 (19)	23 (10)
ENA4X30L17	2-1/2	14-11/16 (373)	16-1/4 (413)	14-7/16 (367)	13-1/4 (337)	3-9/16 (91)	16-13/16 (427)	3/4 (19)	24 (11)
ENA4X31L17	2-1/2	20-3/4 (527)	16-1/4 (413)	18-1/16 (459)	16-13/16 (427)	3-9/16 (91)	20-7/16 (519)	3/4 (19)	31 (14)
ENA4X36L17	3	14-11/16 (373)	16-1/4 (413)	14-7/16 (367)	13-1/4 (337)	3-9/16 (91)	16-13/16 (427)	3/4 (19)	26 (12)
ENA4X36L21	3	14-7/16 (367)	19-5/8 (499)	14-7/16 (367)	12-15/16 (329)	3-9/16 (91)	16-5/8 (422)	3/4 (19)	27 (12)
ENA4X37L17	3	24-3/4 (629)	16-1/4 (413)	18-1/16 (459)	16-13/16 (427)	3-9/16 (91)	20-7/16 (519)	7/8 (22)	33 (14)
ENA4X42L21	3-1/2	16-1/2 (419)	19-5/8 (499)	16-3/16 (411)	15 (381)	3-9/16 (91)	18-9/16 (472)	7/8 (22)	29 (13)
ENA4X43L24	3-1/2	24-3/8 (619)	23-1/8 (587)	18-9/16 (472)	17-5/16 (440)	3-9/16 (91)	20-15/16 (532)	7/8 (22)	36 (16)
ENA4X48L21	4	20-9/16 (522)	19-5/8 (499)	18-1/16 (459)	16-7/8 (429)	3-9/16 (91)	20-7/16 (519)	7/8 (22)	33 (15)
ENA4X48L24	4	20-5/16 (516)	23-1/8 (587)	17-7/8 (454)	16-5/8 (422)	3-9/16 (91)	20-1/4 (514)	7/8 (22)	34 (15)
ENA4X60L24	5	24-3/8 (619)	23-1/8 (587)	18-1/2 (470)	17-5/16 (440)	3-9/16 (91)	20-7/8 (530)	7/8 (22)	35 (16)
ENA4X61L24	5	30-1/2 (774)	23-1/8 (587)	18-9/16 (472)	17-5/16 (440)	3-9/16 (91)	20-15/16 (532)	7/8 (22)	40 (18)

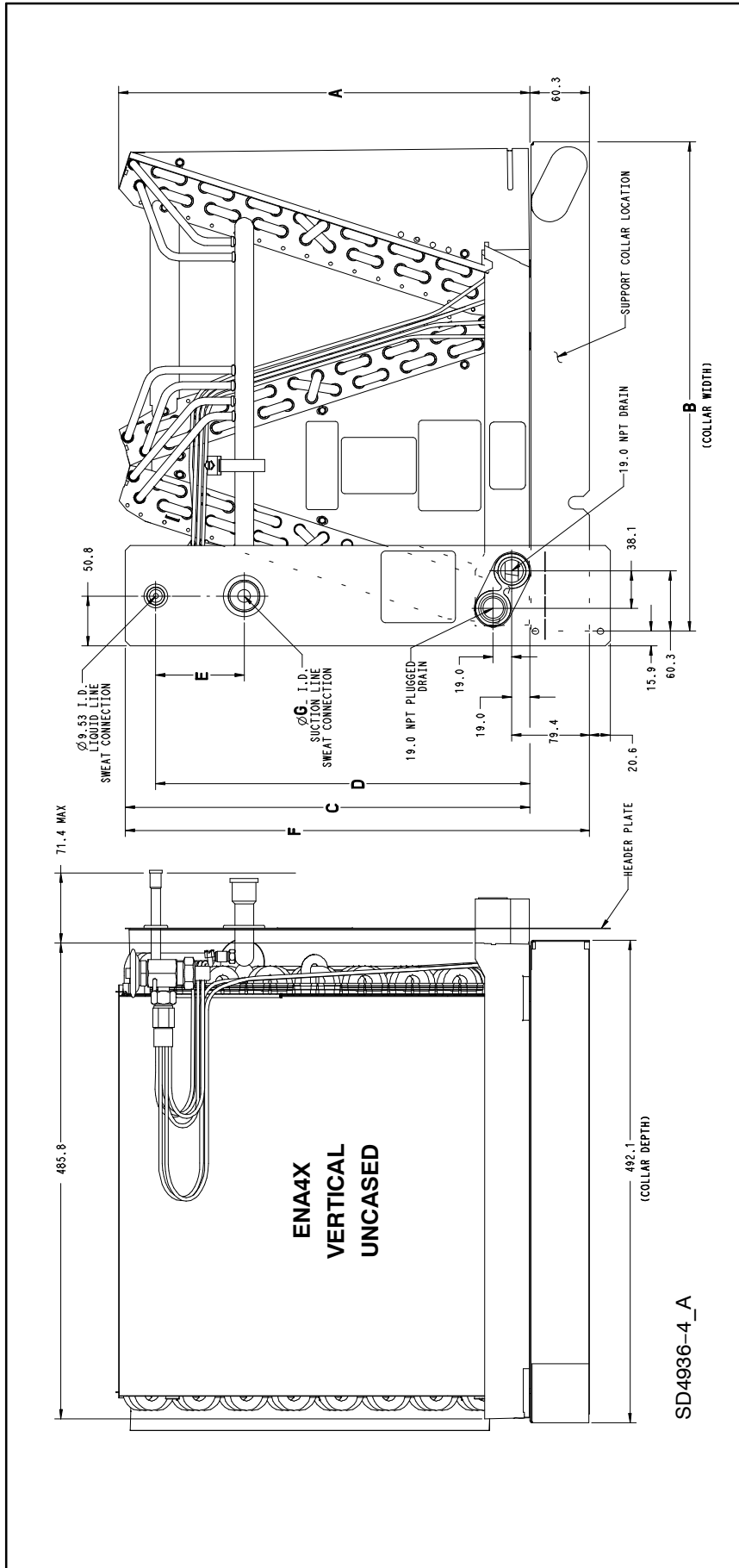
SI Metric Drawing – END4X



SI Metric Drawing – ENW4X



SI Metric Drawing – ENA4X



PHYSICAL DATA												
END4X	Model Size											
	18L14	19L17	24L(14,17)	30L(14,17)	31L17	36L(17,21)	37L17	42L(17,21)	43L24	48L(21,24)	60L24	61L24
<b>Nominal Acceptable CFM Range</b>												
CFM (L/s) - min	525 (248)	700 (330)	875 (413)	1050 (496)	1225 (578)	1400 (661)	1750 (826)	1800 (849)	1800 (849)	1750 (826)	2000 (944)	2000 (944)
CFM (L/s) - max	625 (295)	900 (425)	1125 (531)	1350 (637)	1600 (755)	1800 (849)	2000 (944)	2000 (944)	1800 (849)	2000 (944)	2000 (944)	2000 (944)
<b>Coil Data (all coils 2 slab "A" configuration, lanced sine wave bare aluminum fin)</b>												
Face Area ft <sup>2</sup> (m <sup>2</sup> )	3.34 (0.31)	4.68 (0.43)	4.01 (0.37)	4.68 (0.43)	6.68 (0.62)	8.02 (0.75)	5.35 (0.50)	8.02 (0.75)	6.68 (0.62)	8.02 (0.75)	10.03 (0.93)	10.03 (0.93)
Each Slab H x L in. (mm)	10 x 16 (254 x 406)	14 x 16 (355 x 406)	12 x 16 (305 x 406)	14 x 16 (355 x 406)	20 x 16 (508 x 406)	24 x 16 (610 x 406)	16 x 16 (406 x 406)	24 x 16 (610 x 406)	20 x 16 (508 x 406)	24 x 16 (610 x 406)	30 x 16 (762 x 406)	30 x 16 (762 x 406)
Fins Per Inch	17	16	16	16	16	17	16	17	16	17	17	17
<b>Refrigerant Line Connections (sweat)</b>												
Liquid in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)
Suction in. (mm)	5/8 (16)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)

PHYSICAL DATA												
ENW4X	Model Size											
	36L17	42L21	48L21	60L24								
<b>Nominal Acceptable CFM Range</b>												
CFM (L/s) - min	1050 (496)	1225 (578)	1400 (661)	1750 (826)								
CFM (L/s) - max	1350 (637)	1600 (755)	1800 (849)	2000 (944)								
<b>Coil Data (all coils 2 slab "A" configuration, lanced sine wave bare aluminum fin)</b>												
Face Area ft <sup>2</sup> (m <sup>2</sup> )	4.68 (0.43)	5.35 (0.50)	6.68 (0.62)	8.02 (0.75)								
Each Slab H x L in. (mm)	14 x 16 (355 x 406)	16 x 16 (406 x 406)	20 x 16 (508 x 406)	24 x 16 (610 x 406)								
Fins Per Inch	16	16	16	17								
<b>Refrigerant Line Connections (sweat)</b>												
Liquid in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)								
Suction in. (mm)	3/4 (19)	7/8 (22)	7/8 (22)	7/8 (22)								

PHYSICAL DATA												
ENA4X	Model Size											
	18L14	19L17	24L(14,17)	30L(14,17)	31L17	36L(17,21)	37L17	42L21	43L24	48L(21,24)	60L24	61L24
<b>Nominal Acceptable CFM Range</b>												
CFM (L/s) - min	525 (248)	700 (330)	875 (413)	1050 (496)	1225 (578)	1400 (661)	1750 (826)	1800 (849)	1800 (849)	1750 (826)	2000 (944)	2000 (944)
CFM (L/s) - max	625 (295)	900 (425)	1125 (531)	1350 (637)	1600 (755)	1800 (849)	2000 (944)	2000 (944)	1800 (849)	2000 (944)	2000 (944)	2000 (944)
<b>Coil Data (all coils 2 slab "A" configuration, lanced sine wave bare aluminum fin)</b>												
Face Area ft <sup>2</sup> (m <sup>2</sup> )	3.34 (0.31)	4.68 (0.43)	4.01 (0.37)	4.68 (0.43)	6.68 (0.62)	8.02 (0.75)	5.35 (0.50)	8.02 (0.75)	6.68 (0.62)	8.02 (0.75)	10.03 (0.93)	10.03 (0.93)
Each Slab H x L in. (mm)	10 x 16 (254 x 406)	14 x 16 (355 x 406)	12 x 16 (305 x 406)	14 x 16 (355 x 406)	20 x 16 (508 x 406)	24 x 16 (610 x 406)	16 x 16 (406 x 406)	24 x 16 (610 x 406)	20 x 16 (508 x 406)	24 x 16 (610 x 406)	30 x 16 (762 x 406)	30 x 16 (762 x 406)
Fins Per Inch	17	16	16	16	16	17	16	17	16	17	17	17
<b>Refrigerant Line Connections (sweat)</b>												
Liquid in. (mm)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)	3/8 (10)
Suction in. (mm)	5/8 (16)	3/4 (19)	3/4 (19)	3/4 (19)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)	7/8 (22)



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	
18L14	Dry																			
	0.078	0.114	0.156	0.198	0.253															
19L17	Wet																			
	0.096	0.138	0.183	0.213	0.277															
24L14	Dry																			
	0.042	0.060	0.080	0.102	0.128															
24L17	Wet																			
	0.055	0.076	0.104	0.127	0.158															
30L14	Dry																			
	0.070	0.103	0.143	0.182	0.233	0.290	0.354													
30L17	Wet																			
	0.089	0.128	0.171	0.214	0.269	0.336	0.413													
31L17	Dry																			
	0.048	0.068	0.090	0.112	0.140	0.170	0.203													
36L17	Wet																			
	0.064	0.091	0.122	0.150	0.188	0.224	0.263													
36L21	Dry																			
	0.065	0.097	0.135	0.173	0.223	0.278	0.339	0.405	0.478											
37L17	Wet																			
	0.078	0.114	0.160	0.206	0.260	0.321	0.388	0.461	0.540											
42L17	Dry																			
	0.042	0.060	0.080	0.102	0.128	0.157	0.188	0.222	0.259											
42L21	Wet																			
	0.055	0.076	0.104	0.127	0.158	0.190	0.225	0.266	0.309											
48L21	Dry																			
	0.031	0.046	0.063	0.083	0.105	0.130	0.156	0.193	0.230											
48L24	Wet																			
	0.039	0.056	0.075	0.097	0.121	0.149	0.179	0.212	0.249											
60L24	Dry																			
	0.043	0.061	0.082	0.103	0.128	0.157	0.189	0.221	0.259	0.299	0.341									
61L24	Wet																			
	0.056	0.079	0.107	0.133	0.166	0.200	0.236	0.276	0.315	0.361	0.413									
61L24	Dry																			
	0.035	0.048	0.062	0.076	0.093	0.111	0.132	0.153	0.177	0.201	0.228									
61L24	Wet																			
	0.049	0.066	0.085	0.100	0.122	0.144	0.171	0.192	0.217	0.245	0.276									
61L24	Dry																			
	0.025	0.038	0.054	0.072	0.093	0.117	0.143	0.171	0.205	0.233	0.273									
61L24	Wet																			
	0.030	0.044	0.061	0.079	0.103	0.125	0.154	0.182	0.216	0.251	0.288									
61L24	Dry																			
			0.072	0.093	0.118	0.145	0.175	0.206	0.243	0.281	0.322	0.366	0.413							
61L24	Wet																			
			0.079	0.102	0.130	0.159	0.192	0.228	0.26	0.303	0.348	0.396	0.446							
61L24	Dry																			
	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							
61L24	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							
61L24	Dry																			
				0.053	0.062	0.073	0.084	0.097	0.111	0.126	0.138	0.154	0.172	0.190	0.210					
61L24	Wet																			
				0.067	0.082	0.096	0.112	0.129	0.145	0.163	0.171	0.191	0.212	0.235	0.258					
61L24	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				
61L24	Wet																			
				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				
61L24	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				
61L24	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				
61L24	Dry																			
					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	
61L24	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	
61L24	Dry																			
											0.130	0.140	0.160	0.180	0.200	0.220	0.240	0.270	0.290	
61L24	Wet																			
											0.150	0.170	0.190	0.210	0.230	0.260	0.290	0.310	0.340	





**NOTES:**

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

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

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

$$h_{LWB} = h_{EWB} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$
 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 END4X, ENW4X, and ENA4X 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.

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