

EXPANSION VALVE COILS

EAM4X and EAD4X

- 1-1/2 thru 5 Tons
- Bolt-on R-410A TXV metering device factory installed on all models (equalizer tube brazed in)
- TXV and manifold positioned to the side for easier cleaning
- Innovative drain pan design for complete water removal
- 2-piece delta plate for easier removal and cleaning
- Cabinet widths match flush with ICP gas furnaces
- Removable front access panel
- Easy slide-out coil for inspection
- Hemmed flanges for safer handling
- Foil faced insulation
- Non-sweat cabinet, even at extreme conditions
- Cabinets meet or exceed 2% air leakage codes
- Sturdy, 22 gauge, pre-painted steel cabinet
- One or two UV light knock-outs provided on cabinet (depending on size)
- Aluminum main tubing and aluminum fins (copper stubs for field connection).



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.



EAM4X only

- Two condensate drain connections (Additional two for horizontal installation)
- Multiposition installation – upflow, downflow, or horizontal

EAD4X only

- Vertical installation – upflow or downflow

EAM4X and EAD4X WARRANTY*

- 5 year parts limited warranty

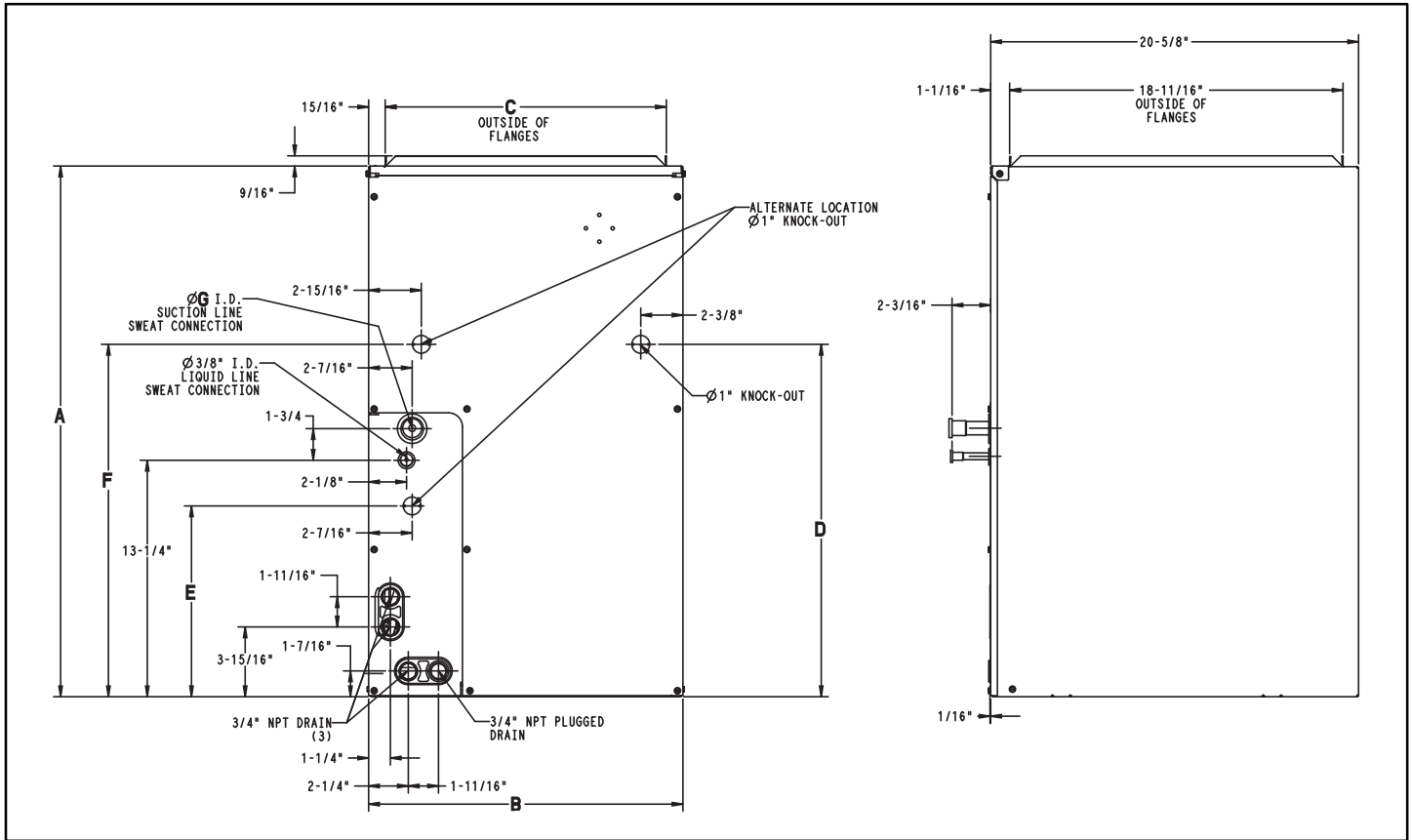
–With timely registration, an additional 5 year parts limited warranty

* For owner occupied, residential applications only. See warranty certificate for complete details and restrictions, including warranty coverage for other applications.

PRODUCT SPECIFICATIONS

MODEL NUMBER	TONS	FLUSH FIT TO FURNACE WIDTH inches (mm)	COIL CONNECTION TUBE SIZE inches (mm)		MODEL NUMBER	TONS	FLUSH FIT TO FURNACE WIDTH inches (mm)	COIL CONNECTION TUBE SIZE inches (mm)	
			Liquid	Suction				Liquid	Suction
EAM4X18L14A	1 – 1/2	14 – 3/16 (360)	3/8 (10)	5/8 (16)	EAM4X43L21A	3 – 1/2	21 (533)	3/8 (10)	7/8 (22)
EAM4X19L17A	1 – 1/2	17 – 1/2 (445)	3/8 (10)	3/4 (19)	EAM4X48L17A	4	17 – 1/2 (445)	3/8 (10)	7/8 (22)
EAM4X24L14A	2	14 – 3/16 (360)	3/8 (10)	5/8 (16)	EAM4X48L21A	4	21 (533)	3/8 (10)	7/8 (22)
EAM4X24L17A	2	17 – 1/2 (445)	3/8 (10)	5/8 (16)	EAM4X48L24A	4	24 – 1/2 (622)	3/8 (10)	7/8 (22)
EAM4X25L17A	2	17 – 1/2 (445)	3/8 (10)	3/4 (19)	EAM4X60L21A	5	(533)	3/8 (10)	7/8 (22)
EAM4X30L14A	2 – 1/2	14 – 3/16 (360)	3/8 (10)	3/4 (19)	EAM4X60L24A	5	24 – 1/2 (622)	3/8 (10)	7/8 (22)
EAM4X30L17A	2 – 1/2	17 – 1/2 (445)	3/8 (10)	3/4 (19)	EAM4X61L24A	5	24 – 1/2 (622)	3/8 (10)	7/8 (22)
EAM4X36L14A	3	14 – 3/16 (360)	3/8 (10)	3/4 (19)	EAD4X				
EAM4X36L17A	3	17 – 1/2 (445)	3/8 (10)	3/4 (19)	EAD4X19L17A	1 – 1/2	17 – 1/2 (445)	3/8 (10)	3/4 (19)
EAM4X36L21A	3	21 (533)	3/8 (10)	3/4 (19)	EAD4X25L17A	2	17 – 1/2 (445)	3/8 (10)	3/4 (19)
EAM4X37L17A	3	17 – 1/2 (445)	3/8 (10)	3/4 (19)	EAD4X37L17A	3	17 – 1/2 (445)	3/8 (10)	3/4 (19)
EAM4X37L21A	3	21 (533)	3/8 (10)	7/8 (22)	EAD4X37L21A	3	21 (533)	3/8 (10)	7/8 (22)
EAM4X42L21A	3 – 1/2	21 (533)	3/8 (10)	7/8 (22)	EAD4X43L21A	3 – 1/2	21 (533)	3/8 (10)	7/8 (22)
EAM4X42L24A	3 – 1/2	24 – 1/2 (622)	3/8 (10)	7/8 (22)	EAD4X61L24A	5	24 – 1/2 (622)	3/8 (10)	7/8 (22)

COIL MODEL NUMBER IDENTIFICATION GUIDE										
DIGIT POSITION	1	2	3	4	5	6, 7	8	9, 10	11	12
	E	A	M	4	X	18	L	14	A	1
E = Evaporator										
A = A Coil	TYPE									
M = Cased, Multiposition (Upflow/Downflow/Horizontal)										
D = Cased, Vertical (Upflow/Downflow)			INSTALLATION							
4 = Environmentally Sound R-410A					REFRIGERANT					
X = TXV							METERING DEVICE			
18 = 18,000 BTUH = 1-1/2 tons										
19 = 18,000 BTUH = 1-1/2 tons										
24 = 24,000 BTUH = 2 tons										
25 = 24,000 BTUH = 2 tons										
30 = 30,000 BTUH = 2-1/2 tons										
36 = 36,000 BTUH = 3 tons										
37 = 36,000 BTUH = 3 tons										
42 = 42,000 BTUH = 3-1/2 tons										
43 = 42,000 BTUH = 3-1/2 tons										
48 = 48,000 BTUH = 4 tons										
60 = 60,000 BTUH = 5 tons										
61 = 60,000 BTUH = 5 tons							NOMINAL CAPACITY			
L = Aluminum									HAIRPIN MATERIAL	
14 = 14-3/16"										
17 = 17-1/2"										
21 = 21"										
24 = 24-1/2"									WIDTH (matches furnace)	
Sales Digit (Major Revision)										
Engineering Digit (Minor Revision)										



DIMENSIONAL DATA

UNIT	A in.(mm)	B in.(mm)	C in.(mm)	D in.(mm)	E in.(mm)	F in.(mm)	G in.(mm)	SHIPPING WT. lbs (kg)
EAM4X18L14A	25-13/16 (656)	14-3/16 (36)	12-7/16 (316)	17-3/16 (437)	10-11/16 (263)	-	5/8 (16)	50.5 (23)
EAM4X19L17A	25-13/16 (656)	17-1/2 (445)	15-3/4 (400)	17-3/16 (437)	-	19-3/4 (502)	3/4 (19)	64.5 (29)
EAM4X24L14A	25-13/16 (656)	14-3/16 (36)	12-7/16 (316)	17-3/16 (437)	10-11/16 (263)	-	5/8 (16)	52.5 (24)
EAM4X24L17A	25-13/16 (656)	17-1/2 (445)	15-3/4 (400)	10-11/16 (263)	10-11/16 (263)	-	5/8 (16)	56.5 (26)
EAM4X25L17A	29-3/4 (757)	17-1/2 (445)	15-3/4 (400)	19-3/4 (502)	-	19-3/4 (502)	3/4 (19)	71.0 (32)
EAM4X30L14A	25-13/16 (656)	14-3/16 (36)	12-7/16 (316)	17-3/16 (437)	-	19-3/4 (502)	3/4 (19)	58.0 (26)
EAM4X30L17A	25-13/16 (656)	17-1/2 (445)	15-3/4 (400)	17-3/16 (437)	-	19-3/4 (502)	3/4 (19)	64.5 (29)
EAM4X36L14A	29-3/4 (757)	14-3/16 (36)	12-7/16 (316)	19-3/4 (502)	-	19-3/4 (502)	3/4 (19)	65.0 (29)
EAM4X36L17A	29-3/4 (757)	17-1/2 (445)	15-3/4 (400)	19-3/4 (502)	-	19-3/4 (502)	3/4 (19)	71.0 (32)
EAM4X36L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	3/4 (19)	73.0 (33)
EAM4X37L17A	25-13/16 (656)	17-1/2 (445)	15-3/4 (400)	17-3/16 (437)	-	19-3/4 (502)	3/4 (19)	64.5 (29)
EAM4X37L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	84.0 (38)
EAM4X42L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	78.0 (35)
EAM4X42L24A	29-3/4 (757)	24-1/2 (622)	22-3/4 (578)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	82.0 (37)
EAM4X43L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	84.0 (38)
EAM4X48L17A	35 (889)	17-1/2 (445)	15-3/4 (400)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	91.0 (41)
EAM4X48L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	84.0 (38)
EAM4X48L24A	29-3/4 (757)	24-1/2 (622)	22-3/4 (578)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	88.5 (40)
EAM4X60L21A	35 (889)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	96.0 (44)
EAM4X60L24A	35 (889)	24-1/2 (622)	22-3/4 (578)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	101.0 (46)
EAM4X61L24A	35 (889)	24-1/2 (622)	22-3/4 (578)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	101.0 (46)
EAD4X19L17A	25-13/16 (656)	17-1/2 (445)	15-3/4 (400)	17-3/16 (437)	-	19-3/4 (502)	3/4 (19)	62.0 (28)
EAD4X25L17A	29-3/4 (30)	17-1/2 (445)	15-3/4 (400)	19-3/4 (502)	-	19-3/4 (502)	3/4 (19)	68.5 (31)
EAD4X37L17A	25-13/16 (656)	17-1/2 (445)	15-3/4 (400)	17-3/16 (437)	-	19-3/4 (502)	3/4 (19)	62.0 (28)
EAD4X37L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	81.5 (37)
EAD4X43L21A	29-3/4 (757)	21 (533)	19-1/4 (489)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	81.5 (37)
EAD4X61L24A	35 (889)	24-1/2 (622)	22-3/4 (578)	19-3/4 (502)	-	19-3/4 (502)	7/8 (22)	98.5 (45)

Legend:

CFM – Cubic Ft. per Minute **EWB** – Entering Wet Bulb (°F) **LWB** – Leaving Wet Bulb (°F) **TC** – Gross Cooling Capacity 1000 Btuh
SHC – Gross Sensible Capacity 1000 Btuh **BF** – Bypass Factor **MBH** – 1000 Btuh

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 db temperature of air entering the evaporator coil.
 Below 80°F db, subtract (Correction Factor x CFM) from SHC.
 Above 80°F 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 superheat leaving coil and use of thermostatic expansion valve (TXV) device.
7. All units have sweat suction–tube connection and a liquid–tube connection. For 1–1/8 in. system suction tube, 3/4 x 1–1/8 in. suction tube connection adapter is available as accessory.
8. The EAM4X coils can be used in any properly designed system using Refrigerant R–410A.
9. 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.
10. Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

BYPASS FACTOR	ENTERING AIR DRY BULB TEMPERATURE (°F)					
	79	78	77	76	75	Under 75
	81	82	83	84	84	Above 85
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.

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

PERFORMANCE DATA (CONT.)

COIL STATIC PRESSURE DROP (in. w.c.) R-410A

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																			
	0.079	0.111	0.145	0.186	0.232															
19L17	Wet																			
	0.083	0.116	0.151	0.196	0.243															
24L14	Dry																			
	0.077	0.099	0.124	0.152	0.182															
24L17	Wet																			
	0.088	0.113	0.137	0.170	0.209															
25L17	Dry																			
	0.065	0.091	0.120	0.154	0.194	0.237	0.284													
24L17	Wet																			
	0.066	0.094	0.124	0.161	0.203	0.250	0.301													
25L17	Dry																			
	0.056	0.076	0.097	0.123	0.151	0.182	0.215													
30L14	Wet																			
	0.060	0.082	0.105	0.132	0.163	0.195	0.231													
30L17	Dry																			
	0.069	0.090	0.111	0.136	0.165	0.193	0.227													
36L14	Wet																			
	0.071	0.090	0.113	0.136	0.164	0.196	0.229													
36L17	Dry																			
	0.054	0.077	0.102	0.133	0.167	0.206	0.248	0.296	0.347											
37L17	Wet																			
	0.059	0.084	0.111	0.142	0.181	0.223	0.269	0.319	0.375											
36L17	Dry																			
	0.043	0.059	0.077	0.096	0.119	0.144	0.171	0.201	0.232											
36L21	Wet																			
	0.046	0.063	0.083	0.105	0.130	0.157	0.186	0.219	0.252											
37L17	Dry																			
	0.047	0.069	0.093	0.119	0.151	0.187	0.227	0.270	0.317	0.362	0.418									
37L21	Wet																			
	0.053	0.076	0.101	0.129	0.162	0.200	0.241	0.286	0.335	0.388	0.447									
42L21	Dry																			
	0.023	0.036	0.052	0.069	0.089	0.110	0.135	0.160	0.189	0.219	0.251									
42L24	Wet																			
	0.042	0.058	0.076	0.095	0.117	0.142	0.169	0.198	0.231	0.265	0.299									
43L21	Dry																			
	0.026	0.037	0.050	0.062	0.077	0.092	0.109	0.128	0.148	0.170	0.193									
43L21	Wet																			
	0.029	0.040	0.053	0.065	0.082	0.099	0.119	0.138	0.160	0.185	0.209									
42L24	Dry																			
	0.077	0.099	0.124	0.152	0.182	0.216	0.253	0.294	0.338											
42L24	Wet																			
	0.088	0.113	0.137	0.170	0.209	0.247	0.287	0.326	0.368											
43L21	Dry																			
			0.059	0.073	0.090	0.111	0.135	0.162	0.191	0.222	0.254									
43L21	Wet																			
			0.073	0.096	0.120	0.147	0.176	0.207	0.240	0.276	0.314									
43L21	Dry																			
			0.044	0.056	0.068	0.082	0.099	0.119	0.138	0.161	0.183	0.205	0.233							
43L21	Wet																			
			0.058	0.073	0.089	0.106	0.125	0.143	0.165	0.189	0.213	0.239	0.268							
43L21	Dry																			
			0.039	0.049	0.060	0.072	0.085	0.099	0.114	0.130	0.146	0.164	0.182							
43L21	Wet																			
			0.054	0.066	0.079	0.092	0.103	0.125	0.142	0.161	0.182	0.202	0.222							
43L21	Dry																			
			0.059	0.073	0.090	0.111	0.135	0.162	0.191	0.222	0.254	0.288	0.323							
43L21	Wet																			
			0.073	0.096	0.120	0.147	0.176	0.207	0.240	0.276	0.314	0.354	0.396							

UNIT SIZE	STANDARD CFM																			
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	
48L17	Dry																			
			0.065	0.082	0.105	0.128	0.156	0.185	0.216	0.253	0.290	0.331	0.372	0.417	0.464					
	Wet																			
48L21			0.066	0.084	0.106	0.130	0.159	0.188	0.222	0.256	0.296	0.337	0.379	0.425	0.476					
	Dry																			
	Wet																			
48L24			0.055	0.072	0.089	0.107	0.128	0.150	0.175	0.199	0.228	0.257	0.288	0.321	0.356					
	Dry																			
	Wet																			
60L21			0.058	0.075	0.094	0.115	0.136	0.161	0.188	0.217	0.247	0.279	0.313	0.347	0.386					
	Dry																			
	Wet																			
60L24			0.044	0.056	0.069	0.084	0.100	0.118	0.137	0.159	0.180	0.198	0.222	0.247	0.275					
	Dry																			
	Wet																			
60L21			0.052	0.065	0.080	0.095	0.112	0.131	0.150	0.171	0.193	0.214	0.241	0.270	0.296					
	Dry																			
	Wet																			
60L24					0.075	0.093	0.112	0.133	0.157	0.181	0.206	0.234	0.264	0.294	0.326	0.360	0.396	0.432	0.478	
	Dry																			
	Wet																			
61L24					0.077	0.095	0.115	0.137	0.159	0.184	0.209	0.238	0.268	0.300	0.334	0.370	0.407	0.444	0.488	
	Dry																			
	Wet																			
61L24					0.073	0.083	0.095	0.107	0.120	0.136	0.152	0.169	0.184	0.203	0.217	0.238	0.260	0.283	0.307	
	Dry																			
	Wet																			
61L24					0.076	0.086	0.098	0.110	0.124	0.140	0.157	0.175	0.193	0.215	0.238	0.261	0.286	0.314	0.342	
	Dry																			
	Wet																			
61L24					0.099	0.113	0.127	0.144	0.162	0.182	0.203	0.227	0.252	0.279	0.307	0.337	0.369	0.403		
	Dry																			
	Wet																			
61L24					0.118	0.140	0.163	0.187	0.213	0.239	0.266	0.295	0.325	0.355	0.387	0.420	0.454	0.489		
	Dry																			
	Wet																			