



EAM4X Product Specifications

EXPANSION VALVE COILS

- 1–1/2 thru 5 Tons
- Tin plated copper tube / aluminum fin “A” coil with latest high–tech fin design
- Bolt–on 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
- Two condensate drain connections (Additional two for horizontal installation)
- 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
- Multiposition installation – upflow, downflow, or horizontal
- Available for R–410A
- One or two UV light knock–outs provided on cabinet (depending on size)
- Industry exclusive tin coated copper main tubing for additional corrosion protection



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.



WARRANTY*

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

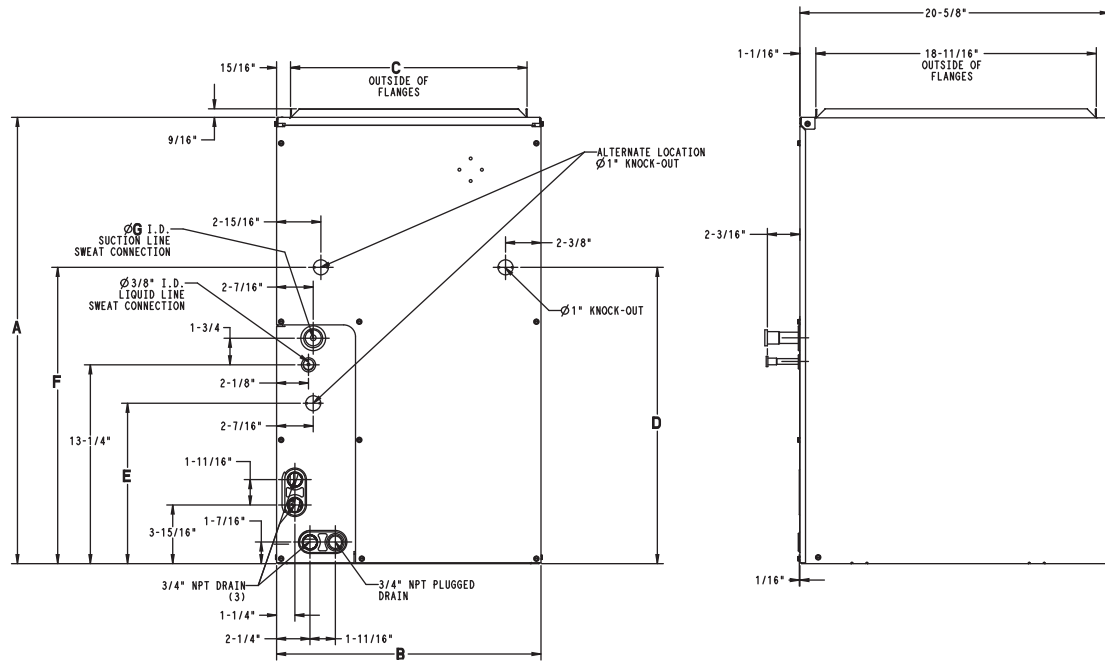
* Applies to original purchaser/homeowner, some limitations may apply. See Warranty certificate for complete details.

PRODUCT SPECIFICATONS

MODEL NUMBER	TONS	FLUSH FIT TO FURNACE WIDTH inches (mm)	COIL CONNECTION TUBE SIZE inches (mm)	
			Liquid	Suction
EAM4X18T14A	1–1/2	14–3/16 (360)	3/8	5/8
EAM4X24T14A	2	14–3/16 (360)	3/8	5/8
EAM4X24T17A	2	17–1/2 (445)	3/8	5/8
EAM4X30T14A	2–1/2	14–3/16 (360)	3/8	3/4
EAM4X30T17A	2–1/2	17–1/2 (445)	3/8	3/4
EAM4X36T14A	3	14–3/16 (360)	3/8	3/4
EAM4X36T17A	3	17–1/2 (445)	3/8	3/4
EAM4X36T21A	3	21 (533)	3/8	3/4
EAM4X42T21A	3–1/2	21 (533)	3/8	7/8
EAM4X42T24A	3–1/2	24–1/2 (622)	3/8	7/8
EAM4X48T17A	4	17–1/2 (445)	3/8	7/8
EAM4X48T21A	4	21 (533)	3/8	7/8
EAM4X48T24A	4	24–1/2 (622)	3/8	7/8
EAM4X60T21A	5	21 (533)	3/8	7/8
EAM4X60T24A	5	24–1/2 (622)	3/8	7/8

Specifications subject to change without notice.

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	T	14	A	1
E = Evaporator										
A = A Coil		TYPE								
M = Cased, Multiposition (Upflow/Downflow/Horizontal)			INSTALLATION							
4 = Environmentally Sound R-410A			REFRIGERANT							
X = TXV			METERING DEVICE							
18 = 18,000 BTUH = 1-1/2 tons 24 = 24,000 BTUH = 2 tons 30 = 30,000 BTUH = 2-1/2 tons 36 = 36,000 BTUH = 3 tons 42 = 42,000 BTUH = 3-1/2 tons 48 = 48,000 BTUH = 4 tons 60 = 60,000 BTUH = 5 tons										
						NOMINAL CAPACITY				
T = Tin Coated Copper Tubes for Additional Corrosion Protection						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.)	B (IN.)	C (IN.)	D (IN.)	E (IN.)	F (IN.)	G (IN.)	SHIPPING WT. (LBS.)
								Tin-Coated Hairpins (T)
EAM4X18T14A1	25-13/16	14-3/16	12-7/16	17-3/16	10-11/16	-	5/8	50.5
EAM4X24T14A1	25-13/16	14-3/16	12-7/16	17-3/16	10-11/16	-	5/8	52.5
EAM4X24T17A1	25-13/16	17-1/2	15-3/4	10-11/16	10-11/16	-	5/8	56.5
EAM4X30T14A1	25-13/16	14-3/16	12-7/16	17-3/16	-	19-3/4	3/4	58.0
EAM4X30T17A1	25-13/16	17-1/2	15-3/4	17-3/16	-	19-3/4	3/4	64.5
EAM4X36T14A1	29-3/4	14-3/16	12-7/16	19-3/4	-	19-3/4	3/4	65.0
EAM4X36T17A1	29-3/4	17-1/2	15-3/4	19-3/4	-	19-3/4	3/4	71.0
EAM4X36T21A1	29-3/4	21	19-1/4	19-3/4	-	19-3/4	3/4	73.0
EAM4X42T21A1	29-3/4	21	19-1/4	19-3/4	-	19-3/4	7/8	78.0
EAM4X42T24A1	29-3/4	24-1/2	22-3/4	19-3/4	-	19-3/4	7/8	82.0
EAM4X48T17A1	35	17-1/2	15-3/4	19-3/4	-	19-3/4	7/8	91.0
EAM4X48T21A1	29-3/4	21	19-1/4	19-3/4	-	19-3/4	7/8	84.0
EAM4X48T24A1	29-3/4	24-1/2	22-3/4	19-3/4	-	19-3/4	7/8	88.5
EAM4X60T21A1	35	21	19-1/4	19-3/4	-	19-3/4	7/8	96.0
EAM4X60T24A1	35	24-1/2	22-3/4	19-3/4	-	19-3/4	7/8	101.0

Specifications subject to change without notice.

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:
 Leaving db = entering db – $\frac{\text{sensible heat cap.}}{1.09 \times \text{CFM}}$
 Leaving wb = 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.
 Correction Factor = 1.09 x (1 – BF) x (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									
18T14	Dry																											
	0.079	0.111	0.145	0.186	0.232																							
	Wet																											
24T14	0.083	0.116	0.151	0.196	0.243																							
	Dry																											
	0.065	0.091	0.120	0.154	0.194	0.237	0.284																					
24T17	Wet																											
	0.066	0.094	0.124	0.161	0.203	0.250	0.301																					
	Dry																											
30T14	0.056	0.076	0.097	0.123	0.151	0.182	0.215																					
	Wet																											
	0.060	0.082	0.105	0.132	0.163	0.195	0.231																					
30T17	Dry																											
	0.054	0.077	0.102	0.133	0.167	0.206	0.248	0.296	0.347																			
	Wet																											
36T14	0.059	0.084	0.111	0.142	0.181	0.223	0.269	0.319	0.375																			
	Dry																											
	0.043	0.059	0.077	0.096	0.119	0.144	0.171	0.201	0.232																			
36T17	Wet																											
	0.046	0.063	0.083	0.105	0.130	0.157	0.186	0.219	0.252																			
	Dry																											
36T21	0.047	0.069	0.093	0.119	0.151	0.187	0.227	0.270	0.317	0.362	0.418																	
	Wet																											
	0.053	0.076	0.101	0.129	0.162	0.200	0.241	0.286	0.335	0.388	0.447																	
36T24	Dry																											
	0.023	0.036	0.052	0.069	0.089	0.110	0.135	0.160	0.189	0.219	0.251																	
	Wet																											
42T21	0.042	0.058	0.076	0.095	0.117	0.142	0.169	0.198	0.231	0.265	0.299																	
	Dry																											
	0.026	0.037	0.050	0.062	0.077	0.092	0.109	0.128	0.148	0.170	0.193																	
42T24	Wet																											
	0.029	0.040	0.053	0.065	0.082	0.099	0.119	0.138	0.160	0.185	0.209																	
	Dry																											
48T17			0.044	0.056	0.068	0.082	0.099	0.119	0.138	0.161	0.183	0.205	0.233															
	Wet																											
			0.058	0.073	0.089	0.106	0.125	0.143	0.165	0.189	0.213	0.239	0.268															
48T21	Dry																											
			0.039	0.049	0.060	0.072	0.085	0.099	0.114	0.130	0.146	0.164	0.182															
	Wet																											
48T24			0.054	0.066	0.079	0.092	0.103	0.125	0.142	0.161	0.182	0.202	0.222															
	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													
60T21	Wet																											
			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																											
60T24			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													
	Wet																											
			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													
60T28	Dry																											
			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													
	Wet																											
60T32			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																											
					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									
60T36	Wet																											
					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																											
60T40					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									
	Wet																											
					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									