

CH12 High Efficiency Series

12 SEER Remote Heat Pump Units



PERFORMANCE:

Efficiency rating of 12.0 SEER

Cooling and heating capacities from 1½ to 5 tons

Rated in accordance with D.O.E. test standards

FEATURES:

Quiet top air discharge

G-90 galvanized steel exterior cabinet with
1000-hour salt spray powder coated finish

Long-life copper tubes, aluminum fin refrigerant
coils

State-of-the-art compressors

Powder coated fan guard & full metal louvered coil
guard for hail protection

Large wrap-around coil surface

Control box located for easy access to
electrical controls

Formed base with 2 ½" ground clearance

Factory installed liquid line filter dryer

CH12 High Efficiency Series

MODEL SPECIFICATIONS						
MODEL NUMBER	CH1218BD1	CH1224BD1	CH1230BD1	CH1236CD1	CH1236CD3	CH1236CD4
PERFORMANCE DATA						
RATED COOLING BTU/H	18,000	23,000	28,600	36,000		
RATED HEATING BTU/H	17,000	23,000	29,800	34,600		
SEER (COOLING) BTU/H-W	12.0	12.0	12.0	12.0		
CFM	650	800	950	1200		
VOLTS/HZ/PHASE	208-230/60/1	208-230/60/1	208-230/60/1	208-230/60/1	230/60/3	460/60/4
VOLTAGE RANGE	197-253	197-253	197-253	197-253	187-253	415-508
OPERATING CURRENT AMPS ①	8.9	11.3	12.5	15.8	13.2	6.9
MIN. WIRE AMPACITY	11.0	14.0	15.0	20.0	15.0	9.0
MAX. HACR BREAKER ②	15	20	25	30	25	15
COMPRESSOR DATA						
TYPE	SCROLL	SCROLL	SCROLL	SCROLL		
RLA	7.9	10.3	11.5	14.0	11.4	5.7
LRA	47	56	75	88	77	39
CRANKCASE HEAT	NONE	NONE	NONE	NONE		
FAN DATA						
DIAMETER	18 INCH / 3 BLADE	18 INCH / 3 BLADE	18 INCH / 3 BLADE	22 INCH / 3 BLADE		
MOTOR TYPE	PSC	PSC	PSC	PSC		
HP (W) / FLA	1/6 / 1.0	1/6 / 1.0	1/5 / 1.8	1/4 / 2.2		
RPM	1075	1075	1075	1075		
CFM	1800	1800	1900	3400		
OUTDOOR COIL						
TYPE	ENHANCED ALUMINUM PLATE FIN / RIFLED COPPER TUBE					
FACE AREA	9.8	9.8	12.3	14.7		
F.P.I. / ROWS	3/8 / 18-1	3/8 / 18-1	3/8 / 18-1	3/8 / 18-1		
REFRIGERANT LINE CONNECTIONS						
LIQUID V MODELS / Q MODELS	3/8 ID / #6	3/8 ID / #6	3/8 ID / #6	3/8 ID / #6		
VAPOR V MODELS / Q MODELS	3/4 ID / #11	3/4 ID / #11	3/4 ID / #11	3/4 ID / #11		
REFRIGERANT CHARGE R-22 (OZ) Q MODELS ③	45	54	70	84		
REFRIGERANT CHARGE R-22 (OZ) V MODELS ③	66	75	91	105		
FACTORY PROVIDED LQ DRYER	SPRING LOADED DRYER ON ALL V MODELS					
WEIGHTS						
NET WEIGHT — lbs.	139	139	157	172		
SHIPPING WEIGHT — lbs.	146	146	163	179		

COOLING PERFORMANCE DATA												
BASIC OUTDOOR UNIT MODEL*	BASIC INDOOR COIL MODEL*	A.R.I. CERTIFIED RATINGS ⑤			COOLING DATA AT EXTENDED OUTDOOR AMBIENTS °F.M.B.T.U.H.							
		BTUH	SEER ④	CFM	80	85	90	95	100	105	110	115
CH1218BD	E3009AE6	18,000	12.00	650	19,750	19,170	18,580	18,000	17,740	17,470	17,210	16,940
	E2419PE6	17,000	12.00	650	18,780	18,180	17,590	17,000	16,780	16,550	16,310	16,090
CH1224BD	E3009AE6	23,000	12.00	800	24,760	24,170	23,590	23,000	22,440	21,880	21,320	20,750
	E3612AE6	28,600	12.00	950	31,670	30,650	29,620	28,600	27,910	27,220	26,530	25,830
CH1230BD	E3612PE6	28,600	12.00	950	31,670	30,650	29,620	28,600	27,910	27,220	26,530	25,830
	E4824AE6	36,000	12.00	1200	39,030	38,020	37,010	36,000	35,140	34,270	33,400	32,530
CH1236CD	E4824PE6	36,000	12.00	1200	39,030	38,020	37,010	36,000	35,140	34,270	33,400	32,530
	E4824AE8	41,500	12.00	1330	44,100	43,230	42,370	41,500	39,680	37,860	36,040	34,220
CH1242CD	E4824PE8	41,500	12.00	1350	44,100	43,230	42,370	41,500	39,680	37,860	36,040	34,220
	E6026AE8	45,500	12.00	1450	48,430	47,450	46,480	45,500	44,490	43,480	42,470	41,450
CH1248CD	E6040PE8	46,000	12.00	1450	48,930	47,950	46,980	46,000	44,990	43,980	42,970	41,950
	E6038AE8	54,500	12.00	1750	59,600	57,900	56,200	54,500	53,150	51,790	50,440	49,080
CH1260CD	E6040PE8	54,500	12.00	1750	59,600	57,900	56,200	54,500	53,150	51,790	50,440	49,080

FOOTNOTES:

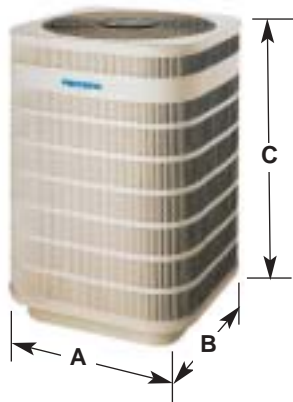
① Amps at 104°F OD temp. 80°F DB / 67°F WB indoor temp. ② Time delay type fuse for HACR Circuit Breaker. ③ Model refrigerant charge for condensing unit, matching evaporator coil and 25' of connecting line set. Q models charged for condensing unit only, matching precharged evaporator and line set contain the remainder of refrigerant. ④ Requires time delay relay to obtain SEER rating. ⑤ Rated in accordance with ARI 210-89 and D.O.E. Test Standards. *Basic model number only. See unit nomenclature on the next page for exact model number. For indoor coils nomenclature see indoor coil specification sheet. Due to constant improvement, all specifications are subject to change without notice.

MODEL SPECIFICATIONS

MODEL NUMBER	CH1242CD1	CH1248CD1	CH1248CD3	CH1248CD4	CH1260CD1	CH1260CD3	CH1260CD4
PERFORMANCE DATA							
RATED COOLING BTU/H	41,500	45,500			54,500		
RATED HEATING BTU/H	38,500	45,500			54,000		
SEER (COOLING) BTU/H-W	12.0	12.0			12.0		
CFM	1350	1450			1750		
VOLTS/HZ/PHASE	208-230/60/1	208-230/60/1	230/60/3	460/60/4	208-230/60/1	230/60/3	460/60/4
VOLTAGE RANGE	197-253	197-253	187-253	415-508	197-253	187-253	415-508
OPERATING CURRENT AMPS ①	19.5	21.1	16.1	8.4	25.7	20.4	10.3
MIN. WIRE AMPACITY	24.0	23.0	20.0	11.0	32.0	27.0	13.0
MAX. HACR BREAKER ②	40	40	30	15	50	45	20
COMPRESSOR DATA							
TYPE	SCROLL	SCROLL			SCROLL		
RLA	17.3	18.9	14.3	7.2	23.5	19.3	9.1
LRA	104	137	91	46	148	123	62
CRANKCASE HEAT	NONE	NONE			NONE		
FAN DATA							
DIAMETER	22 INCH / 3 BLADE	22 INCH / 3 BLADE			22 INCH / 3 BLADE		
MOTOR TYPE	PSC	PSC			PSC		
HP (W) / FLA	1/4 / 2.2	1/4 / 2.2			1/4 / 2.2		
RPM	1075	1075			1075		
CFM	3400	3400			3400		
OUTDOOR COIL							
TYPE	ENHANCED ALUMINUM PLATE FIN / RIFLED COPPER TUBE						
FACE AREA	14.7	18.3			22.0		
F.P.I. / ROWS	3/8 / 18-1	3/8 / 18-1			3/8 / 20-1		
REFRIGERANT LINE CONNECTIONS							
LIQUID V MODELS / Q MODELS	3/8 ID / #6	3/8 ID / #6			3/8 ID / #6		
VAPOR V MODELS / Q MODELS	7/8 ID / #11	7/8 ID / #11			1-1/8 ID / #12		
REFRIGERANT CHARGE R-22 (OZ) Q MODELS ③	80	110			129		
REFRIGERANT CHARGE R-22 (OZ) V MODELS ③	101	131			150		
FACTORY PROVIDED LQ DRYER	SPRING LOADED DRYER ON ALL V MODELS						
WEIGHTS							
NET WEIGHT — lbs.	174	194			218		
SHIPPING WEIGHT — lbs.	182	203			228		

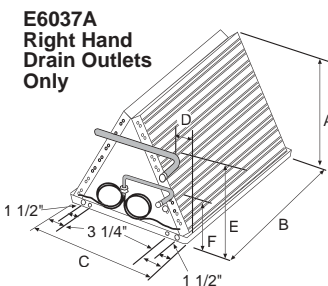
HEATING PERFORMANCE DATA

BASIC OUTDOOR UNIT MODEL*	BASIC INDOOR COIL MODEL*	A.R.I. CERTIFIED RATINGS ⑤			HEATING DATA AT EXTENDED OUTDOOR AMBIENTS °F.M.B.T.U.H.							
		BTUH	HSPF	CFM	-10	0	10	20	30	40	50	60
CH1218BD	E3009AE6	18,000	8.00	650	5,800	7,750	9,700	11,650	13,600	16,000	18,860	21,720
	E2419PE6	17,000	8.00	650	5,350	7,240	9,130	11,010	12,900	15,160	17,790	20,420
CH1224BD	E3009AE6	23,400	8.00	800	8,080	10,100	12,120	14,130	16,150	19,760	24,960	30,160
CH1230BD	E3612AE6	29,800	8.00	950	11,800	14,090	16,390	18,690	20,990	25,330	31,720	38,100
	E3612PE6	29,800	8.00	950	11,800	14,090	16,390	18,690	20,990	25,330	31,720	38,100
CH1236CD	E4824AE6	34,600	8.00	1200	14,200	17,090	19,980	22,870	25,760	30,290	36,450	42,610
	E4824PE6	34,600	8.00	1200	14,200	17,090	19,980	22,870	25,760	30,290	36,450	42,610
CH1242CD	E4824AE8	38,500	8.00	1330	17,060	20,190	23,310	26,440	29,560	34,200	40,340	46,490
	E4824PE8	38,500	8.00	1350	17,060	20,190	23,310	26,440	29,560	34,200	40,340	46,490
CH1248CD	E6026AE8	45,000	8.00	1450	19,360	23,240	27,120	31,010	34,890	40,240	47,040	53,850
	E6040PE8	45,500	8.00	1450	19,860	23,740	27,620	31,510	35,390	40,740	47,400	54,250
CH1260CD	E6038AE8	54,000	8.00	1750	28,790	31,090	33,390	35,690	37,990	45,330	57,720	70,100
	E6040PE8	54,000	8.00	1750	28,790	31,090	33,390	35,690	37,990	45,330	57,720	70,100

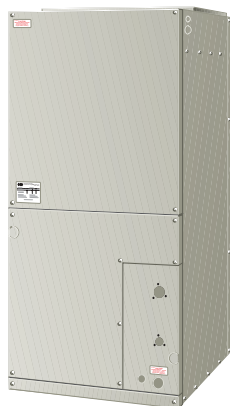


CONDENSER DIMENSIONS (INCHES)						
MODEL	UNIT			SHIPPING		
	A	B	C	A	B	C
CH1218B, CH1224B	21-1/2	21-1/2	26-1/2	23-1/2	23-1/2	27
CH1230B	21-1/2	21-1/2	32-1/2	23-1/2	23-1/2	33
CH1236C	29-1/2	29-1/2	26-1/2	31-1/2	31-1/2	27
CH1242C	29-1/2	29-1/2	26-1/2	31-1/2	31-1/2	27
CH1248C	29-1/2	29-1/2	32-1/2	31-1/2	31-1/2	33
CH1260C	29-1/2	29-1/2	38-1/2	31-1/2	31-1/2	39

TYPICAL COIL DIMENSIONS* (INCHES)							
INDOOR COIL MODEL NO.	A	B	C	D	E	F	DRAIN FITTING PRIM. / SEC.
E3009	12	19-1/2	16-1/2	1-1/2	8	3	3/4 F.P.T. / 1/2 F.P.T.
E3612	17-1/2	19-1/2	16-1/2	1-1/2	14-1/4	8-1/2	3/4 F.P.T. / 1/2 F.P.T.
E4824	18	19-1/2	20	1-1/2	14	7-1/2	3/4 F.P.T. / 1/2 F.P.T.
E6016	22	19-1/2	20	1-1/2	13-5/8	9-1/4	3/4 F.P.T. / 1/2 F.P.T.
E6037	21-1/2	23	21	1-1/2	14-1/4	8-1/4	3/4 F.P.T. / 1/2 F.P.T.
E6038	24	23	21	1-1/2	11-3/4	7	3/4 F.P.T. / 1/2 F.P.T.



D = MANIFOLD TO PAN E = SUCTION HEIGHT F = LIQUID HEIGHT
 Indoor coil surfaces constructed of rifled tubing and enhanced aluminum plate fin.
 All indoor coils are equipped with TXV type refrigerant control device and high temperature, durable nylon drain pans.
 Limited coil samples. For full details refer to Fedders Indoor Coils Spec Sheet #FECS.

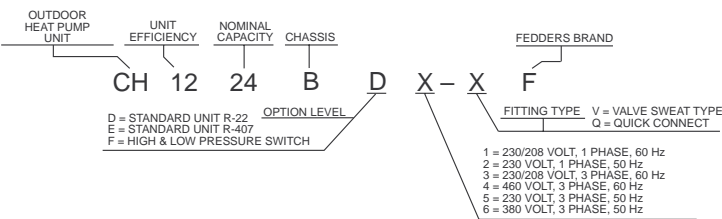


The "A" Series Air Handler is designed to be matched with the CH12 Series for performance and quiet operation.

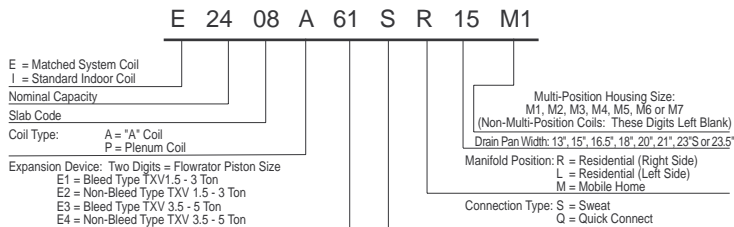
OUTDOOR & INDOOR UNITS W/ MATCHING AIR HANDLER				
OUTDOOR UNIT	MATCHING INDOOR COIL	REQUIRED CFM	INDOOR COIL PRESSURE DROP* (IN W.C.)	MATCHING A SERIES AIR HANDLER-AVAILABLE ESP @ MIN FAN SPEED**
CH1218	E3009A	650	.12	A08 - .35 - LOW
CH1224	E3009A	800	.16	A08 - .3 - HIGH
CH1230	E3612A	950	.26	A12 - .3 - MEDIUM
CH1236	E4824A	1200	.21	A12 - .35 - HIGH
CH1242	E4824A	1350	.28	A16 - .3 - MEDIUM
CH1248	E6026A	1450	.21	A16 - .3 - MEDIUM
CH1260	E6038A	1750	.26	A20 - .3 - MEDIUM

* Dry coil static. For wet coil static, increase static 30%.
 ** Air handler available ESP includes .3 wet coil static & factory supplied air filter.

MODEL KEY: Residential & Light Commercial – Outdoor Unit



MODEL KEY: Indoor Coils



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U.L. & C.U.L certified

Rated in Accordance with ARI Standard 210/240.
 Certification Applies Only When Used with
 Proper Components as Listed with ARI.

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