



TWO STAGE GAS HIGH EFFICIENCY UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	CHX1-75N	CHX1-100N	CHX1-125N
FUEL	GAS NAT/LP	GAS NAT/LP	GAS NAT/LP
INPUT BTUH (HIGH FIRE / LOW FIRE)	75,000 / 52,000	100,000 / 70,000	125,000 / 87,500
OUTPUT BTUH ¹	71,000 / 50,000	95,000 / 66,000	117,000 / 82,000
SEASONAL EFFICIENCY ²	95.0%	95.0%	95.0%
LARGEST REC A/C ³	3.5 T	4 T	5 T
NOMINAL TEMP RISE	70° / 60°	70° / 60°	70° / 60°
APPROX EFFECTIVE HEATING SURFACE	5950 SQ IN	6500 SQ IN	7025 SQ IN
APPROX SHIPPING WEIGHT	185 LBS	200 LBS	225 LBS
APPROVAL AGENCY	CSA	CSA	CSA
DIA OF FLUE (PVC)	2"	3"	3"
DIA OF COMBUSTION AIRINTAKE (PVC)	2"	3"	3"
QTY AND SIZE OF PERMANENT FILTERS	ONE 1" x 25" x 16"	ONE 1" x 25" x 16"	ONE 1" x 25" x 20"
ELECTRICAL RATING	115V 60HZ 1PH	115V 60HZ 1PH	115V 60HZ 1PH
MAX FUSE SIZE	15 AMP	15 AMP	20 AMP
ACCESSORY ITEMS			
FILTER RACK	AOPS7547	AOPS7547	AOPS7375
PROGRAMMABLE T-STAT STD/DELUXE	350164 / 350165	350164 / 350165	350164 / 350165
CONCENTRIC VENT KIT	AOPS7488	AOPS7489	AOPS7489
SIDEWALL VENT CAP	370191	370191	370191
NEUTRALIZER KIT	320095	320095	320095
CONDENSATE PUMP	350225	350225	350225
NAT. CONVERSION KIT	-	-	-
LP CONVERSION KIT	AOPS7682	AOPS7683	AOPS7419
FURNACE PARTS KIT	AOPS7428	AOPS7428	AOPS7428

¹ OUTPUT BTUH BASED ON ANNUAL FUEL UTILIZATION EFFICIENCY RATED BY MANUFACTURER.

² SEASONAL EFFICIENCY (ALSO CALLED AFUE - ANNUAL FUEL UTILIZATION EFFICIENCY) RATINGS ARE BASED ON TESTS FOLLOWING U.S. DEPARTMENT OF ENERGY TEST PROCEDURES.

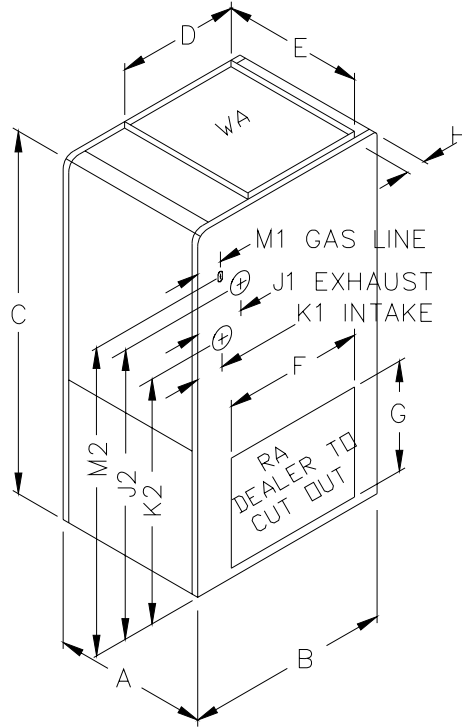
³ TO PERMIT LARGEST RECOMMENDED AIR CONDITIONING (AT .5 STATIC PRESSURE), SELECTION OF THE HIGHEST MOTOR SPEED IS REQUIRED.

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

FURNACE NOMENCLATURE					
C	H	B	1	-50	N
C = CONDENSING	H = HIGHBOY (UPFLOW) D = COUNTERFLOW / HORIZONTAL	A = SERIES B = SERIES X = 2 STAGE, ECM	REVISION LEVEL	INPUT 50,000	NATURAL GAS

SEE NEXT PAGE FOR MORE DATA -

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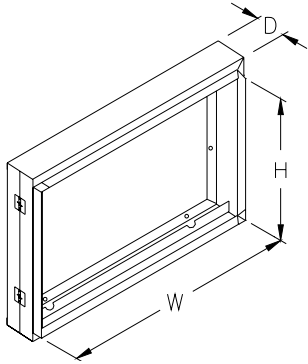


DIM / MODEL	CHX1-75N	CHX1-100N	CHX1-125N
A	17"	21"	24"
B	27-1/2"	27-1/2"	27-1/2"
C	44-1/4"	44-1/4"	44-1/4"
D	18"	18"	18"
E	15"	19"	22"
F ¹	23"	23"	23"
G ¹	14"	14"	14"
H	1-1/4"	1-1/4"	1-1/4"
J1 L	2-7/8"	2-7/8"	2-7/8"
J1 R	6-1/2"	6-1/2"	6-1/2"
J2 L	33"	33"	33"
J2 R	30-1/2"	30-1/2"	30-1/2"
K1 L	6-1/2"	6-1/2"	6-1/2"
K1 R	2-7/8"	2-7/8"	2-7/8"
K2 L	30-1/4"	30-1/4"	30-1/4"
K2 R	27"	27"	27"
M1 L	5-5/8"	5-5/8"	5-5/8"
M1 R	2-3/4"	2-3/4"	2-3/4"
M2 L	33"	33"	33"
M2 R	33"	33"	33"

¹ DIMENSIONS F & G ARE THE RETURN AIR CUT OUT DIMENSIONS. THESE ARE SMALLER THAN THE RETURN AIR DUCT DIMENSIONS AS THEY ALLOW FOR A 1" MOUNTING FLANGE. DUCTWORK SHOULD BE SIZED BY THE FILTER SIZE.

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FILTER RACK SPECIFICATIONS



FILTER RACK DIMENSIONS			
MODELS	RETURN AIR PLENUM FLANGE		DEPTH OF RACK
	H	W	D
AOPS7547	15"	24-1/2"	2-1/8"
AOPS7375	19"	23-1/2"	6-1/8"

BLOWER DATA:	CHX1-75N	CHX1-100N	CHX1-125N
BLOWER MODEL ²	10-9R DD	10-10R DD	12-11T DD
MOTOR H.P.	1/2	3/4	1
POWER CHOKE	-	2.65 mH	2.1mH

BURNER DATA			
BURNER TYPE	INSHOT	INSHOT	INSHOT
NO. PER UNIT	3	4	5
MAX INLET PRESSURE (NAT)	14" WC		
MIN INLET PRESSURE (NAT)	4.5" WC		
MAX INLET PRESSURE (LP)	14" WC		
MIN INLET PRESSURE (LP)	11" WC		
NORMAL MANIFOLD PRESS (NAT)	HIGH FIRE 3.5" WC / LOW FIRE 1.8"WC		
NORMAL MANIFOLD PRESS (LP)	HIGH FIRE 10" WC / LOW FIRE 4.8" WC		
ORIFICE SIZE (NAT.)	0.0935" (#42)		
DIA. (D.M.S.) (L.P.)	0.0591" (1.5mm)		

CLEARANCES			
	MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS:		
SIDES	0"	0"	0"
FRONT (SERVICE ACCESS)	6" (24")	6" (24")	6" (24")
REAR	0"	0"	0"
FLUE	0"	0"	0"
TOP	1"	1"	1"

² DD = DIRECT DRIVE

SEE NEXT PAGE FOR MORE DATA -

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HEATING SPEEDS

CHX1-75				
Dip switch settings	Low fire CFM	Rise (°F)	High Fire CFM	Rise (°F)
7-OFF 8-OFF	760	60	931	70
7-ON 8-OFF	708	65	867	75
7-OFF 8-ON	826	55	1012	65
7-ON 8-ON	909	50	1114	59

CHX1-100				
Dip switch settings	Low fire CFM	Rise (°F)	High Fire CFM	Rise (°F)
7-OFF 8-OFF	1015	60	1243	70
7-ON 8-OFF	947	64	1160	75
7-OFF 8-ON	1094	56	1340	65
7-ON 8-ON	1184	51	1450	60

CHX1-125				
Dip switch settings	Low fire CFM	Rise (°F)	High Fire CFM	Rise (°F)
7-OFF 8-OFF	1270	60	1556	70
7-ON 8-OFF	1185	64	1452	75
7-OFF 8-ON	1366	56	1673	65
7-ON 8-ON	1480	51	1813	60

=FACTORY SHIPPED SETTINGS

SEE NEXT PAGE FOR MORE DATA -

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COOLING SPEED SELECTIONS

CHX1-75

TONS	CFM/TON	SWITCH SETTINGS				COOLING CFM				CONT. FAN CFM
						SINGLE STAGE OR HIGH		LOW STAGE		
						NORMAL CLG	DEHUM	NORMAL CLG	DEHUM	
2	440	ON	OFF	ON	OFF	880	750	580	490	400
	400	ON	OFF	OFF	OFF	800	680	530	450	
	360	ON	OFF	OFF	ON	720	610	480	400	
2.5	440	OFF	OFF	ON	OFF	1100	940	730	620	500
	400	OFF	OFF	OFF	OFF	1000	850	660	560	
	360	OFF	OFF	OFF	ON	900	770	590	500	
3	440	OFF	ON	ON	OFF	1320	1120	870	740	600
	400	OFF	ON	OFF	OFF	1200	1020	790	670	
	360	OFF	ON	OFF	ON	1080	920	710	610	
3.5	440	ON	ON	ON	OFF	1540	1310	1020	860	700
	400	ON	ON	OFF	OFF	1400	1190	920	790	
	360	ON	ON	OFF	ON	1260	1070	830	710	

CHX1-100

TONS	CFM/TON	SWITCH SETTINGS				COOLING CFM				CONT. FAN CFM
						SINGLE STAGE OR HIGH		LOW STAGE		
						NORMAL CLG	DEHUM	NORMAL CLG	DEHUM	
2.5	440	ON	OFF	ON	OFF	1100	940	730	620	500
	400	ON	OFF	OFF	OFF	1000	850	660	560	
	360	ON	OFF	OFF	ON	900	770	590	500	
3	440	OFF	OFF	ON	OFF	1320	1120	870	740	600
	400	OFF	OFF	OFF	OFF	1200	1020	790	670	
	360	OFF	OFF	OFF	ON	1080	920	710	610	
3.5	440	OFF	ON	ON	OFF	1540	1310	1020	860	700
	400	OFF	ON	OFF	OFF	1400	1190	920	790	
	360	OFF	ON	OFF	ON	1260	1070	830	710	
4	440	ON	ON	ON	OFF	1760	1500	1160	990	800
	400	ON	ON	OFF	OFF	1600	1360	1060	900	
	360	ON	ON	OFF	ON	1440	1220	950	810	

CHX1-125

TONS	CFM/TON	SWITCH SETTINGS				COOLING CFM				CONT. FAN CFM
						SINGLE STAGE OR HIGH		LOW STAGE		
						NORMAL CLG	DEHUM	NORMAL CLG	DEHUM	
3	440	ON	OFF	ON	OFF	1320	1120	870	740	600
	400	ON	OFF	OFF	OFF	1200	1020	790	670	
	360	ON	OFF	OFF	ON	1080	920	710	610	
3.5	440	OFF	OFF	ON	OFF	1540	1310	1020	860	700
	400	OFF	OFF	OFF	OFF	1400	1190	920	790	
	360	OFF	OFF	OFF	ON	1260	1070	830	710	
4	440	OFF	ON	ON	OFF	1760	1500	1160	990	800
	400	OFF	ON	OFF	OFF	1600	1360	1060	900	
	360	OFF	ON	OFF	ON	1440	1220	950	810	
5	440	ON	ON	ON	OFF	2200	1870	1450	1230	1000
	400	ON	ON	OFF	OFF	2000	1700	1320	1120	
	360	ON	ON	OFF	ON	1800	1530	1190	1010	

FACTORY SETTINGS

SEE NEXT PAGE FOR MORE DATA -

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EVAPORATOR COIL APPLICATION

FURNACE MODEL	CONDENSER MODEL	LINE SET MODEL	EVAPORATOR COIL MODEL	SEER	EER	TOTAL (BTU/HR) HEAT REMOVAL	SENSIBLE HEAT REMOVAL
CHX1-75N	AC14241G2	LS01E-30 LS01E-50	13U2430AB15	13.80	12.30	24,000	0.730
			CA243615	14.00	12.40	24,000	0.733
			13U3030AB15	14.00	12.40	24,000	0.733
			CA303615 ¹	14.40	12.70	25,400	0.739
			13U3036AB17	14.40	12.70	25,400	0.739
	AC14301G2	LS01E-30 LS01E-50	13U2430AB15	13.70	12.30	29,000	0.767
			CA243615	14.00	12.50	29,400	0.739
			13U3030AB15	14.00	12.50	29,400	0.739
			CA303615 ¹	14.50	13.00	30,400	0.746
			13U3036AB17	14.50	13.00	30,400	0.746
	AC14361G2	LS03E-30 LS03E-50	13U2430AB15	13.40	11.95	33,800	0.739
			CA243615	13.70	12.20	34,600	0.740
			13U3030AB15	13.70	12.20	34,600	0.740
			CA303615 ¹	14.00	12.50	35,600	0.750
			13U3036AB17	14.00	12.50	35,600	0.750
	AC14421G2	LS03E-30 LS03E-50	CA424215	13.40	12.00	41,000	0.748
			13U3642AB17	13.40	12.00	41,000	0.748
			CA424820 ²	13.80	12.20	42,000	0.749
			13U4248AB20 ²	13.80	12.20	42,000	0.749
			13C4860HA26 ²	14.10	12.50	43,000	0.758

¹ adapter angles included with coil cabinet

² adaption required

SEE NEXT PAGE FOR MORE DATA -

FURNACE MODEL	CONDENSER MODEL	LINE SET MODEL	EVAPORATOR COIL MODEL	SEER	EER	TOTAL (BTU/HR) HEAT REMOVAL	SENSIBLE HEAT REMOVAL
CHX1-100	AC14301G2	LS01E-30 LS01E-50	13U2430AB15	13.70	12.30	29,000	0.767
			CA243619	14.00	12.50	29,400	0.739
			13U3030AB15	14.00	12.50	29,400	0.739
			CA303619	14.50	13.00	30,400	0.746
			13U3036AB17	14.50	13.00	30,400	0.746
	AC14361G2	LS03E-30 LS03E-50	13U2430AB15	13.40	11.95	33,800	0.739
			CA243619	13.70	12.20	34,600	0.740
			13U3030AB15	13.70	12.20	34,600	0.740
			CA303619	14.00	12.50	35,600	0.750
			13U3036AB17	14.00	12.50	35,600	0.750
	AC14421G2	LS03E-30 LS03E-50	CA424219	13.40	12.00	41,000	0.748
			13U3642AB17	13.40	12.00	41,000	0.748
			CA424820 ¹	13.80	12.20	42,000	0.749
			13U4248AB20	13.80	12.20	42,000	0.749
			13C4860HA26 ²	14.10	12.50	43,000	0.758
	AC14481G2	LS03E-30 LS03E-50	CA424219	13.00	11.60	46,000	0.746
			13U3642AB17	13.00	11.60	46,000	0.746
			CA424820 ¹	13.35	12.00	47,500	0.748
			13U4248AB20	13.35	12.00	47,500	0.748
			13C4860HA26 ²	13.65	12.20	48,500	0.758

¹adapter angles included with coil cabinet

² adaption required

FURNACE MODEL	CONDENSER MODEL	LINE SET MODEL	EVAPORATOR COIL MODEL	SEER	EER	TOTAL (BTU/HR) HEAT REMOVAL	SENSIBLE HEAT REMOVAL
CHX1-125	AC14361G2	LS03E-30 LS03E-50	13U2430AB15	13.40	11.95	33,800	0.739
			13C2430AA23	13.70	12.20	34,600	0.740
			13U3030AB15	13.70	12.20	34,600	0.740
			13C3036AA23	14.00	12.50	35,600	0.750
			13U3036AB17	14.00	12.50	35,600	0.750
	AC14421G2	LS03E-30 LS03E-50	13C3642AA23	13.40	12.00	41,000	0.748
			13U3642AB17	13.40	12.00	41,000	0.748
			13C4248HA23	13.80	12.20	42,000	0.749
			13U4248AB20	13.80	12.20	42,000	0.749
			13C4860HA26 ¹	14.10	12.50	43,000	0.758
	AC14481G2	LS03E-30 LS03E-50	13C3642AA23	13.00	11.60	46,000	0.746
			13U3642AB17	13.00	11.60	46,000	0.746
			13C4248HA23	13.35	12.00	47,500	0.748
			13U4248AB20	13.35	12.00	47,500	0.748
			13C4860HA26 ¹	13.65	12.20	48,500	0.758
	AC14601G2	LS03E-30 LS03E-50	13C4860HA26 ¹	13.00	11.60	60,000	0.753

¹Needs plenum adapter AOPS7693