



TWO STAGE GAS HIGH EFFICIENCY UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	CHX3-75N	CHX3-100N	CHX3-125N
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	94.5%	94.4%	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	AOPS7504	AOPS7504	AOPS7504

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.

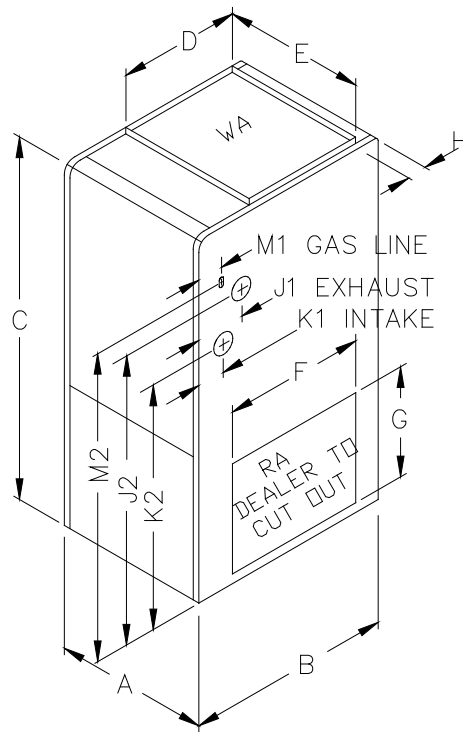
³ TO PERMIT LARGEST RECOMMENDED AIR CONDITIONING (AT .5 STATIC PRESSURE), SELECTION OF THE HIGHEST MOTOR SPEED IS REQUIRED.

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

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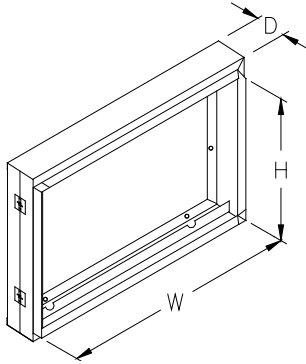


DIM / MODEL	CHX3-75N	CHX3-100N	CHX3-125N
A	17"	21"	24"
B	27-1/2"	27-1/2"	27-1/2"
C	44-1/4"	44-1/4"	44-1/4"
D	18"	18"	18"
E	15"	19"	22"
F ¹	23"	23"	23"
G ¹	14"	14"	14"
H	1-1/4"	1-1/4"	1-1/4"
J1 L	2-7/8"	2-7/8"	2-7/8"
J1 R	6-1/2"	6-1/2"	6-1/2"
J2 L	33"	33"	33"
J2 R	30-1/2"	30-1/2"	30-1/2"
K1 L	6-1/2"	6-1/2"	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"	23-3/4"	6-1/8"

BLOWER DATA:	CHX3-75N	CHX3-100N	CHX3-125N
BLOWER MODEL, DIRECT DRIVE	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"

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HEATING SPEEDS

CHX3-75								
Dip switch settings	Low fire CFM	Rise (°F)	Static Pressure (Amps / Watts)		High Fire CFM	Rise (°F)	Static Pressure (Amps / Watts)	
			0.2	0.5			0.2	0.5
S4-3 OFF S4-4 OFF	760	60	1.4 / 109	2.1 / 175	931	70	2.0 / 163	2.8 / 239
S4-3 ON S4-4 OFF	708	65	1.2 / 95	1.9 / 154	867	75	1.7 / 138	2.4 / 205
S4-3 OFF S4-4 ON	826	55	1.7 / 132	2.3 / 195	1012	65	2.3 / 197	3.1 / 269
S4-3 ON S4-4 ON	909	50	1.9 / 155	2.7 / 227	1114	59	2.8 / 238	3.3 / 289
CHX3-100								
Dip switch settings	Low fire CFM	Rise (°F)	Static Pressure (Amps / Watts)		High Fire CFM	Rise (°F)	Static Pressure (Amps / Watts)	
			0.2	0.5			0.2	0.5
S4-3 OFF S4-4 OFF	1015	60	1.8 / 151	2.7 / 230	1243	70	2.6 / 221	3.6 / 314
S4-3 ON S4-4 OFF	947	64	1.7 / 136	2.4 / 206	1160	75	2.3 / 192	3.2 / 278
S4-3 OFF S4-4 ON	1094	56	2.1 / 180	3.0 / 258	1340	65	2.1 / 269	4.2 / 374
S4-3 ON S4-4 ON	1184	51	2.4 / 209	3.4 / 299	1450	60	3.7 / 327	4.7 / 428
CHX3-125								
Dip switch settings	Low fire CFM	Rise (°F)	Static Pressure (Amps / Watts)		High Fire CFM	Rise (°F)	Static Pressure (Amps / Watts)	
			0.2	0.5			0.2	0.5
S4-3 OFF S4-4 OFF	1270	60	2.9 / 247	3.8 / 343	1556	70	4.5 / 406	5.5 / 508
S4-3 ON S4-4 OFF	1185	64	2.5 / 218	3.4 / 300	1452	75	3.9 / 354	4.7 / 436
S4-3 OFF S4-4 ON	1366	56	3.4 / 294	4.4 / 385	1673	65	5.3 / 481	6.3 / 581
S4-3 ON S4-4 ON	1480	51	3.9 / 354	4.9 / 431	1813	60	6.3 / 580	7.5 / 693
	=FACTORY SETTING							

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TWO STAGE GAS HIGH-EFFICIENCY UPFLOW FURNACE SPECIFICATIONS

COOLING SPEED SELECTIONS

CHX3-75						COOLING CFM						CONT. FAN CFM
						SINGLE STAGE OR HIGH			LOW STAGE			
SWITCH SETTINGS						NORMAL CLG	STATIC PRESSURE (AMPS / WATTS)		DEHUM	NORMAL CLG	DEHUM	
TONS	CFM/TON	S3-1	S3-2	S3-3	S3-4		0.2	0.5				
2	440	ON	OFF	ON	OFF	880	1.8 / 146	2.4 / 206	750	580	490	
	400	ON	OFF	OFF	OFF	800	1.5 / 121	2.3 / 188	680	530	450	
	360	ON	OFF	OFF	ON	720	1.3 / 104	2.0 / 160	610	480	400	
2.5	440	OFF	OFF	ON	OFF	1100	2.6 / 223	3.5 / 304	940	730	620	
	400	OFF	OFF	ON	OFF	1000	2.3 / 193	3.0 / 262	850	660	560	
	360	OFF	OFF	OFF	ON	900	1.8 / 150	2.6 / 218	770	590	500	
3	440	OFF	ON	ON	OFF	1320	3.9 / 343	4.8 / 441	1120	870	740	
	400	OFF	ON	OFF	OFF	1200	3.2 / 275	4.0 / 355	1020	790	670	
	360	OFF	ON	OFF	ON	1080	2.5 / 213	3.4 / 295	920	710	610	
3.5	440	ON	ON	ON	OFF	1540	5.6 / 508	5.7 / 519	1310	1020	860	
	400	ON	ON	OFF	OFF	1400	4.4 / 393	5.5 / 494	1190	920	790	
	360	ON	ON	OFF	ON	1260	3.5 / 310	4.6 / 408	1070	830	710	
CHX3-100						COOLING CFM						CONT. FAN CFM
						SINGLE STAGE OR HIGH			LOW STAGE			
SWITCH SETTINGS						NORMAL CLG	STATIC PRESSURE (AMPS / WATTS)		DEHUM	NORMAL CLG	DEHUM	
TONS	CFM/TON	S3-1	S3-2	S3-3	S3-4		0.2	0.5				
2.5	440	ON	OFF	ON	OFF	1100	2.0 / 165	2.9 / 250	940	730	620	
	400	ON	OFF	OFF	OFF	1000	1.8 / 148	2.5 / 217	850	660	560	
	360	ON	OFF	OFF	ON	900	1.5 / 119	2.3 / 191	770	590	500	
3	440	OFF	OFF	ON	OFF	1320	3.0 / 263	3.9 / 351	1120	870	740	
	400	OFF	OFF	OFF	OFF	1200	2.4 / 202	3.4 / 294	1020	790	670	
	360	OFF	OFF	OFF	ON	1080	2.0 / 161	2.8 / 242	920	710	610	
3.5	440	OFF	ON	ON	OFF	1540	4.0 / 362	5.1 / 470	1310	1020	860	
	400	OFF	ON	OFF	OFF	1400	3.1 / 274	4.3 / 387	1190	920	790	
	360	OFF	ON	OFF	ON	1260	2.6 / 220	3.6 / 319	1070	830	710	
4	440	ON	ON	ON	OFF	1760	5.4 / 500	6.7 / 623	1500	1160	990	
	400	ON	ON	OFF	OFF	1600	4.3 / 386	5.5 / 505	1360	1060	900	
	360	ON	ON	OFF	ON	1440	3.4 / 302	4.4 / 393	1220	950	810	
CHX3-125						COOLING CFM						CONT. FAN CFM
						SINGLE STAGE OR HIGH			LOW STAGE			
SWITCH SETTINGS						NORMAL CLG	STATIC PRESSURE (AMPS / WATTS)		DEHUM	NORMAL CLG	DEHUM	
TONS	CFM/TON	S3-1	S3-2	S3-3	S3-4		0.2	0.5				
3	440	ON	OFF	ON	OFF	1320	3.2 / 274	4.0 / 358	1120	870	740	
	400	ON	OFF	OFF	OFF	1200	2.5 / 220	3.4 / 299	1020	790	670	
	360	ON	OFF	OFF	ON	1080	2.2 / 179	2.9 / 255	920	710	610	
3.5	440	OFF	OFF	ON	OFF	1540	4.4 / 385	5.3 / 482	1310	1020	860	
	400	OFF	OFF	OFF	OFF	1400	3.6 / 314	4.6 / 408	1190	920	790	
	360	OFF	OFF	OFF	ON	1260	2.8 / 250	3.8 / 340	1070	830	710	
4	440	OFF	ON	ON	OFF	1760	5.9 / 551	7.0 / 658	1500	1160	990	
	400	OFF	ON	OFF	OFF	1600	4.7 / 433	5.7 / 525	1360	1060	900	
	360	OFF	ON	OFF	ON	1440	3.7 / 336	4.6 / 421	1220	950	810	
5	440	ON	ON	ON	OFF	2200	10.1 / 977	10.4 / 1010	1870	1450	1230	
	400	ON	ON	OFF	OFF	2000	7.9 / 747	9.2 / 882	1700	1320	1120	
	360	ON	ON	OFF	ON	1800	6.1 / 568	7.2 / 681	1530	1190	1010	

=FACTORY SETTING

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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
CHX3-75N	AC14241G2	LS01E-30 LS01E-50	13U2430AB15	13.70	11.75	23,600	0.730
			CA243615	14.00	11.85	23,800	0.733
			13U3030AB15	14.00	11.85	23,800	0.733
			CA303615 ¹	14.40	12.15	24,400	0.739
			13U3036AB17	14.40	12.15	24,400	0.739
	AC14301G2	LS01E-30 LS01E-50	13U2430AB15	13.70	11.90	28,000	0.767
			CA243615	14.00	12.05	28,400	0.739
			13U3030AB15	14.00	12.05	28,400	0.739
			CA303615 ¹	14.50	12.40	29,200	0.746
			13U3036AB17	14.50	12.40	29,200	0.746
	AC14361G2	LS03E-30 LS03E-50	13U2430AB15	13.40	11.50	32,600	0.739
			CA243615	13.70	11.70	33,200	0.740
			13U3030AB15	13.70	11.70	33,200	0.740
			CA303615 ¹	14.00	11.95	34,000	0.750
			13U3036AB17	14.00	11.95	34,000	0.750
	AC14421G2	LS03E-30 LS03E-50	CA424215	13.40	11.55	39,500	0.748
			13U3642AB17	13.40	11.55	39,500	0.748
			CA424820 ²	13.70	11.80	40,500	0.749
			13U4248AB20 ²	13.70	11.80	40,500	0.749
			13C4860HA26 ²	14.00	11.90	41,000	0.758

¹ adapter angles included with coil cabinet

² adaption required

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FURNACE MODEL	CONDENSER MODEL	LINE SET MODEL	EVAPORATOR COIL MODEL	SEER	EER	TOTAL (BTU/HR) HEAT REMOVAL	SENSIBLE HEAT REMOVAL
CHX3-100	AC14301G2	LS01E-30 LS01E-50	13U2430AB15	13.70	11.90	28,000	0.767
			CA243619	14.00	12.05	28,400	0.739
			13U3030AB15	14.00	12.05	28,400	0.739
			CA303619	14.50	12.40	29,200	0.746
			13U3036AB17	14.50	12.40	29,200	0.746
	AC14361G2	LS03E-30 LS03E-50	13U2430AB15	13.40	11.50	32,600	0.739
			CA243619	13.70	11.70	33,200	0.740
			13U3030AB15	13.70	11.70	33,200	0.740
			CA303619	14.00	11.95	34,000	0.750
			13U3036AB17	14.00	11.95	34,000	0.750
	AC14421G2	LS03E-30 LS03E-50	CA424219	13.40	11.55	39,500	0.748
			13U3642AB17	13.40	11.55	39,500	0.748
			CA424820 ¹	13.70	11.80	40,500	0.749
			13U4248AB20	13.70	11.80	40,500	0.749
			13C4860HA26 ²	14.00	11.90	41,000	0.758
	AC14481G2	LS03E-30 LS03E-50	CA424219	13.00	11.20	44,500	0.746
			13U3642AB17	13.00	11.20	44,500	0.746
			CA424820 ¹	13.35	11.40	45,500	0.748
			13U4248AB20	13.35	11.40	45,500	0.748
			13C4860HA26 ²	13.65	11.80	47,000	0.758

¹ adapter angles included with coil cabinet

² adaption required

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FURNACE MODEL	CONDENSER MODEL	LINE SET MODEL	EVAPORATOR COIL MODEL	SEER	EER	TOTAL (BTU/HR) HEAT REMOVAL	SENSIBLE HEAT REMOVAL
CHX3-125	AC14361G2	LS03E-30 LS03E-50	13U2430AB15	13.40	11.50	32,600	0.739
			13C2430AA23	13.70	11.70	33,200	0.740
			13U3030AB15	13.70	11.70	33,200	0.740
			13C3036AA23	14.00	11.95	34,000	0.750
			13U3036AB17	14.00	11.95	34,000	0.750
	AC14421G2	LS03E-30 LS03E-50	13C3642AA23	13.40	11.55	39,500	0.748
			13U3642AB17	13.40	11.55	39,500	0.748
			13C4248HA23	13.70	11.80	40,500	0.749
			13U4248AB20	13.70	11.80	40,500	0.749
	AC14481G2	LS03E-30 LS03E-50	13C4860HA26 ¹	14.00	11.90	41,000	0.758
			13C3642AA23	13.00	11.20	44,500	0.746
			13U3642AB17	13.00	11.20	44,500	0.746
			13C4248HA23	13.35	11.40	45,500	0.748
	AC14601G2	LS03E-30 LS03E-50	13U4248AB20	13.35	11.40	45,500	0.748
			13C4860HA26 ¹	13.65	11.80	47,000	0.758
			13C4860HA26 ¹	13.00	11.20	58,000	0.753

¹Needs plenum adapter AOPS7693

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