

Chinook Gas Furnace
Multi-Position High Efficiency Condensing Furnace



2 stage ECM CXX-2-V
Modulating CXX-M-V, CXX-M-S
Modulating Compact CC15-M-V

Features

- Certified for altitude up to 4500 ft without any derating
- Ultra-compact size, featuring the industry’s smallest footprint
- Right-sized for today’s more efficient homes and new codes
- Ideally suited to the replacement market
- Allows the Right-Sized System® in combination with the Alizé cooling unit
- Stainless steel primary and secondary heat exchangers
- Part of our HVAC in a box solution

CONTENT

SPECIFICATION TABLES	2
MAXIMUM EQUIVALENT STRAIGHT VENT LENGTH MODULATING AND 2 STAGE	3
ELECTRICAL DATA	3
MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS	3
DIMENSIONS	4
CHINOOK COMPACT DIMENSIONS.....	4
AIRFLOW CHARTS - 2-STAGE ECM UNITS.....	5
AIRFLOW CHARTS - MODULATING UNITS	6

SPECIFICATION TABLES

<i>Model</i>		CC15-M-V	C15-M-V	C30-M-V	C45-M-V	C60-M-V	C75-M-V	C105-M-V	C120-M-V
INPUT (BTU/hr)	HIGH (100%)	15 000	15 000	30 000	45 000	60 000	75 000	105 000	120 000
	LOW (40%)	6 000	6 000	12 000	18 000	24 000	30 000	42 000	48 000
OUTPUT (BTU/hr)	HIGH (100%)	14 445	14 595	28 860	43 515	58 080	72 000	101 430	116 400
	LOW (40%)	5 778	5 838	11 544	17 406	23 232	28 800	40 572	46 560
EFFICIENCY (%)		96.3	97.3	96.2	96.7	96.8	96.0	96.6	97.0
TEMP. RISE		20 – 55°F (11-30°C)			40 – 70°F (22 – 39°C)				
AIRFLOW (CFM)	HEATING HIGH	400	310	480	720	1 025	1 200	1 680	1 920
	HEATING LOW	260	310	310	330	430	480	670	770
	MAX¹	580	1 200	1 200	1 200	1 600	1 600	2 000	2 000
	MAX²	400	800	800	800	1 200	1 200	N/A	N/A
MAX COOLING CAPACITY (TONS)¹		1.5	3.0	3.0	3.0	4.0	4.0	5.0	5.0
MOTOR HP		1/3	1/2	1/2	1/2	3/4	3/4	1	1
BLOWER SIZE		9" X 4"	12" X 6"	12" X 6"	12" X 6"	12" X 8"	12" X 9"	12" X 11"	12" X 11"

<i>Model</i>		C15-M-S	C30-M-S	C45-M-S
INPUT (BTU/hr)	HIGH (100%)	15 000	30 000	45 000
	LOW (40%)	6 000	12 000	18 000
OUTPUT (BTU/hr)	HIGH (100%)	14 595	28 860	43 515
	LOW (40%)	5 838	11 544	17 406
EFFICIENCY (%)		97.3	96.2	96.7
TEMP. RISE		20 – 55 °F (11 – 30 °C)	40 – 70°F (22 – 38°C)	
AIRFLOW (CFM)	HEATING HIGH	310	480	720
	HEATING LOW (40%)	310	385	330
	MAX¹	1 200	1 200	1 200
	MAX²	1 200	1 200	1 200
MAX COOLING CAPACITY (TONS)¹		3.0	3.0	3.0
MOTOR HP		3/4	3/4	3/4
BLOWER SIZE		12" X 6"	12" X 6"	12" X 6"

<i>Model</i>		C15-2-V	C30-2-V	C45-2-V	C60-2-V	C75-2-V	C105-2-V	C120-2-V
INPUT (BTU/H)	HIGH	15 000	30 000	45 000	60 000	75 000	105 000	120 000
	LOW	10 500	21 000	31 500	42 000	52 500	73 500	84 000
OUTPUT (BTU/H)	HIGH	14 400	28 890	43 200	57 420	71 925	100 065	115 560
	LOW	10 080	20 223	30 240	40 194	50 350	70 050	80 900
EFFICIENCY % (AFUE)		96.2	96.3	96.0	95.7	95.9	95.3	96.3
TEMP. RISE		25 – 55 °F (14 – 30°C)	30-60°F (16-34°C)	40 - 70°F (22 - 39°C)				
AIRFLOW (CFM)	HEATING HIGH	335	595	730	985	1 180	1 590	2 000
	HEATING LOW	265	415	510	685	820	1 130	1 400
	MAX	1 000	1 000	1 000	1 400	1 400	1 800	2 000
MAX COOLING CAPACITY (TONS)		2.5	2.5	2.5	3.5	3.5	4.5	5.0
MOTOR HP		1/2	1/2	1/2	3/4	3/4	1	1
BLOWER		12" X 6"	12" X 6"	12" X 6"	12" X 8"	12" X 9"	12" X 11"	12" X 11"

¹ Total external static pressure of 0.5" w.c.

² Smart Duct™

³These models do not meet the FER Standard and cannot be sold outside of Quebec, Canada.

MAXIMUM EQUIVALENT STRAIGHT VENT LENGTH MODULATING AND 2 STAGE

Altitude (ft)	Unit size (BTU/hr)	Modulating units		2-Stage units		Single stage unit	
		2" pipe dia.	3" pipe dia.	2" pipe dia.	3" pipe dia.	2" pipe dia.	3" pipe dia.
0 to 4500	15,000	300	N/A	100	100	N/A	N/A
	30,000	180	N/A	100	100	N/A	N/A
	45,000	70	90	70	90	70	90
	60,000	70	90	70	90	45	90
	75,000	70	90	70	90	30	90
	105,000	15	80	15	70	N/A	70
	120,000	10	40	10	40	N/A	40

TERMINATION AND ELBOW EQUIVALENT LENGTH

ELECTRICAL DATA

INPUT	15K COMPACT	15K	30K	45K	60K	75K	105K	120K
SHIP WEIGHT LB/KG	79 / 35.8	115 / 52.2	116 / 52.6	119 / 54.0	136 / 61.7	138 / 62.6	161 / 73.0	171 / 77.6
MAXIMUM CONSUMPTION (Amps/Breaker size)	MODULATING	8.6 / 10	10.7 / 15	10.7 / 15	12.6 / 15	15.6 / 20	15.6 / 20	19.0 / 20
	2 STAGE ECM	N/A	12.6 / 15	12.6 / 15	12.6 / 15	15.0 / 15	15.0 / 15	19.0 / 20
	2 STAGE PSC	N/A	N/A	N/A	15.3 / 20	15.3 / 20	15.0 / 15	19.1 / 20
	1 STAGE X13	N/A	N/A	N/A	11.9 / 15	11.9 / 15	13.5 / 15	16.6 / 20
	1 STAGE PSC	N/A	N/A	N/A	15.9 / 20	15.9 / 20	15.5 / 20	19.6 / 20
SUPPLY	115 Volts - 60 Hertz - 1 Phase							

MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS

Position	Clearance in (mm)
Rear	0
Front	0
Required for service	24" (610)
All sides of supply plenum ⁴	1"(25) ⁵
Sides	0
Vent	0
Top of furnace	1"(25) ⁵

⁴ For a distance of 3 ft

⁵ The Chinook Compact (CC15-M-V) is certified zero clearance

For California Residents:

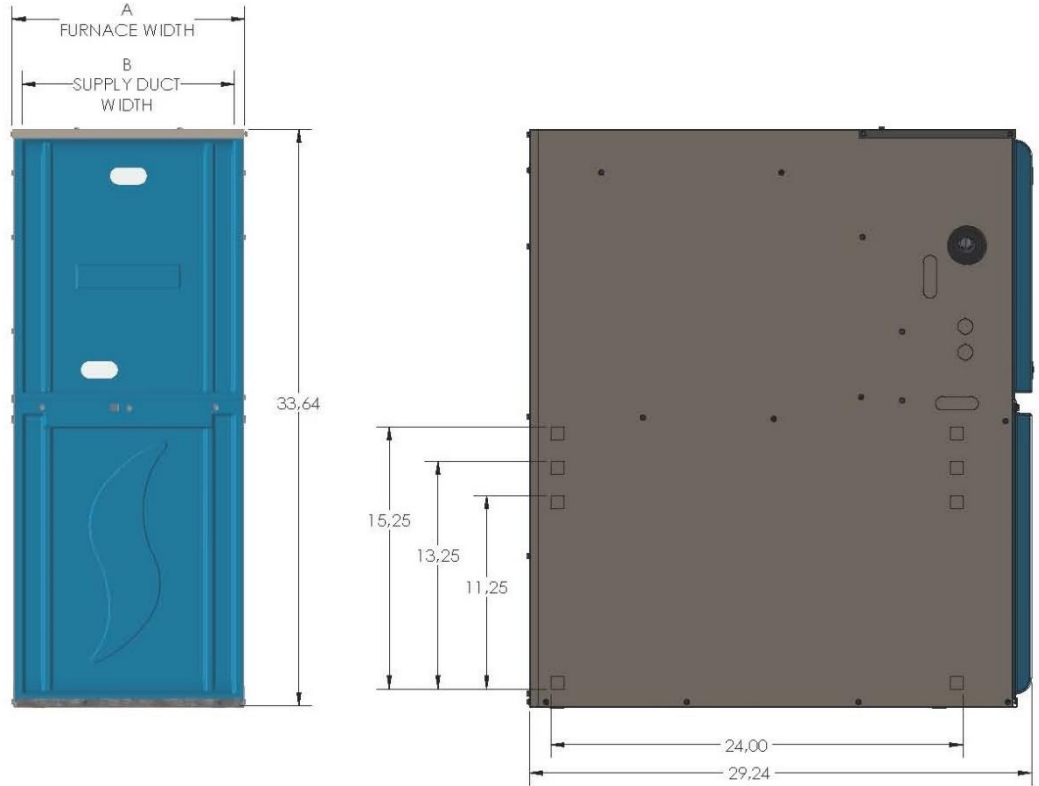
For installation in SCAQMD only: This furnace does not meet the SCAQMD Rule 1111 14ng/J NOx emission limit, and thus is subject to a mitigation fee of up to \$450. This furnace is not eligible for the Clean Air Rebate Program:

www.CleanAirFurnaceRebate.com

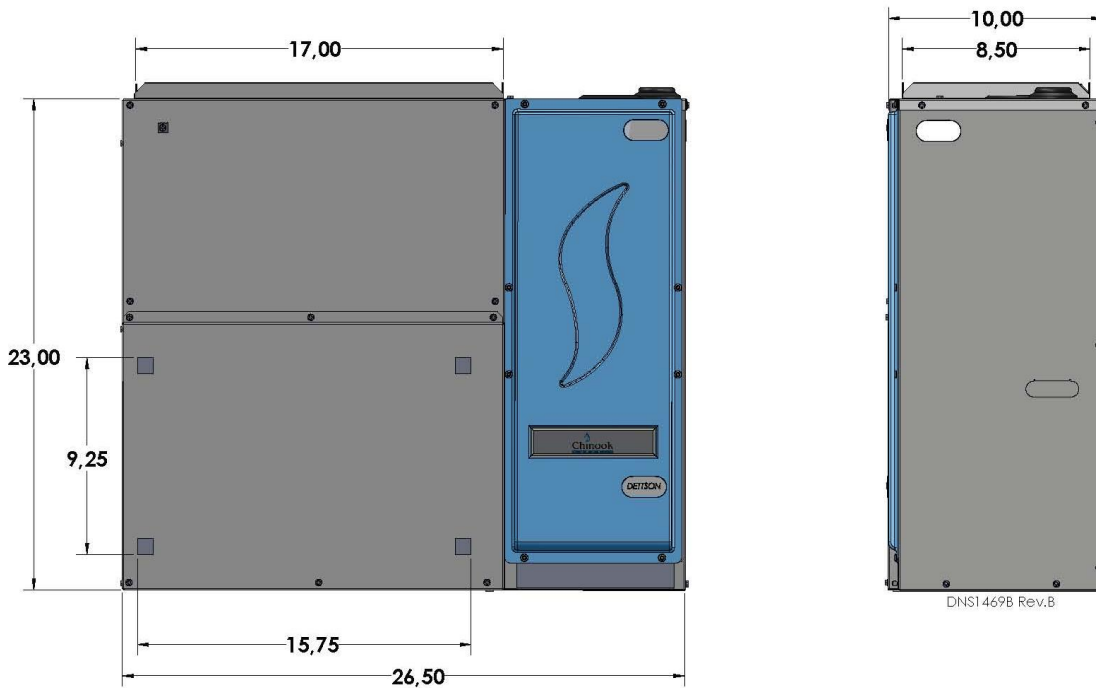
The efficiency is AHRI efficiency rating certified. This furnace meets California Air Quality Management District emission requirements.

DIMENSIONS

UNIT INPUT K. BTU	"A"	"B"
15	13.50	12.50
30		
45		
60	15.75	14.75
75		
105		
120	21.00	20.00



CHINOOK COMPACT DIMENSIONS



DNSI 469B Rev.8

AIRFLOW CHARTS - 2-STAGE ECM UNITS

C30-2-V – Heating airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Heating [CMF]	Air flow 2nd Stage Heating [CMF]	dT [°F]	
S4-3 = OFF S4-4 = OFF	A	1.6	415	595	45
S4-3 = ON S4-4 = OFF	B	1.6	390	560	50
S4-3 = OFF S4-4 = ON	C	1.6	335	480	55
S4-3 = ON S4-4 = ON	D	1.6	280	400	65

C30-2-V – Cooling airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Cooling [CMF]	Air flow 2nd Stage Cooling [CMF]	Fan ON [CFM]	
S3-1 = OFF S3-2 = OFF	A	1.0	800	1000	440
S3-1 = ON S3-2 = OFF	B	1.6	640	800	350
S3-1 = OFF S3-2 = ON	C	1.6	480	600	265
S3-1 = ON S3-2 = ON	D	1.6	320	400	175

C45-2-V – HEATING

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Heating [CMF]	Air flow 2nd Stage Heating [CMF]	dT [°F]	
S4-3 = OFF S4-4 = OFF	A	1.6	480	685	58
S4-3 = ON S4-4 = OFF	B	1.6	510	730	55
S4-3 = OFF S4-4 = ON	C	1.6	420	600	65
S4-3 = ON S4-4 = ON	D	1.6	350	500	80

C45-2-V – Cooling airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Cooling [CMF]	Air flow 2nd Stage Cooling [CMF]	Fan ON [CFM]	
S3-1 = OFF S3-2 = OFF	A	1.0	800	1 000	440
S3-1 = ON S3-2 = OFF	B	1.6	640	800	350
S3-1 = OFF S3-2 = ON	C	1.6	480	600	265
S3-1 = ON S3-2 = ON	D	1.6	320	400	175

C60-2-V – Heating airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Heating [CMF]	Air flow 2nd Stage Heating [CMF]	dT [°F]	
S4-3 = OFF S4-4 = OFF	A	1.6	620	910	55
S4-3 = ON S4-4 = OFF	B	1.6	685	1 005	50
S4-3 = OFF S4-4 = ON	C	1.6	530	775	65
S4-3 = ON S4-4 = ON	D	1.6	570	840	60

C60-2-V – Cooling airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Cooling [CMF]	Air flow 2nd Stage Cooling [CMF]	Fan ON [CFM]	
S3-1 = OFF S3-2 = OFF	A	1.6	1 115	1 400	700
S3-1 = ON S3-2 = OFF	B	1.6	955	1 200	600
S3-1 = OFF S3-2 = ON	C	1.6	800	1 000	500
S3-1 = ON S3-2 = ON	D	1.6	635	800	400

C75-2-V – Heating airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Heating [CMF]	Air flow 2nd Stage Heating [CMF]	dT [°F]	
S4-3 = OFF S4-4 = OFF	A	1.0	820	1 180	55
S4-3 = ON S4-4 = OFF	B	1.0	835	1 200	55
S4-3 = OFF S4-4 = ON	C	1.0	840	1 210	55
S4-3 = ON S4-4 = ON	D	1.0	810	1 160	57

C75-2-V – Cooling airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Cooling [CMF]	Air flow 2nd Stage Cooling [CMF]	Fan ON [CFM]	
S3-1 = OFF S3-2 = OFF	A	1.0	1 120	1 400	435
S3-1 = ON S3-2 = OFF	B	1.0	960	1 200	375
S3-1 = OFF S3-2 = ON	C	1.0	800	1 000	310
S3-1 = ON S3-2 = ON	D	1.0	640	800	250

C105-2-V – Heating airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Heating [CMF]	Air flow 2nd Stage Heating [CMF]	dT [°F]	
S4-3 = OFF S4-4 = OFF	A	1.0	1 130	1 625	55
S4-3 = ON S4-4 = OFF	B	1.0	1 280	1 800	50
S4-3 = OFF S4-4 = ON	C	1.0	1 150	1 600	58
S4-3 = ON S4-4 = ON	D	1.0	1 100	1 545	60

C105-2-V – Cooling airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Cooling [CMF]	Air flow 2nd Stage Cooling [CMF]	Fan ON [CFM]	
S3-1 = OFF S3-2 = OFF	A	1.0	1 440	1 800	900
S3-1 = ON S3-2 = OFF	B	1.0	1 275	1 600	800
S3-1 = OFF S3-2 = ON	C	1.0	1 120	1 400	700
S3-1 = ON S3-2 = ON	D	1.0	960	1 200	600

C120-2-V – Heating airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Heating [CMF]	Air flow 2nd Stage Heating [CMF]	dT [°F]	
S4-3 = OFF S4-4 = OFF	A	1.0	1 400	2 000	55
S4-3 = ON S4-4 = OFF	B	1.0	1 780	2 540	40
S4-3 = OFF S4-4 = ON	C	1.0	1 580	2 260	45
S4-3 = ON S4-4 = ON	D	1.0	1 300	1 860	60

C120-2-V – Cooling airflow

Dipswitch	Max. ESP [" w.c.]	Air flow 1st Stage Cooling [CMF]	Air flow 2nd Stage Cooling [CMF]	Fan ON [CFM]	
S3-1 = OFF S3-2 = OFF	A	1.0	1 600	2 000	1 000
S3-1 = ON S3-2 = OFF	B	1.0	1 440	1800	900
S3-1 = OFF S3-2 = ON	C	1.0	1 270	1 600	800
S3-1 = ON S3-2 = ON	D	1.0	1 115	1 400	700

AIRFLOW CHARTS - MODULATING UNITS

	GAS HEATING CFM		LEGACY HEAT PUMP CFM			
	100% (MAX)	40% (MIN)	A S3-1:OFF S3-2:OFF	B S3-1:ON S3-2:OFF	C S3-1:OFF S3-2:ON	D S3-1:ON S3-2:ON
CC15-M-V	400	160	600	400	300	200
C15-M-V	310	310	1200	1000	800	600
C15-M-S	310	310	1200	1000	800	400
C30-M-V	480	310	1200	1000	800	600
C30-M-S	480	385	1200	1000	800	400
C45-M-V	720	335	1200	1000	800	600
C45-M-S	720	335	1200	1000	800	600
C60-M-V	1025	430	1600	1400	1200	800
C75-M-V	1200	480	1600	1200	1000	800
C105-M-V	1680	675	2000	1600	1400	1200
C120-M-V	1900	770	2000	1600	1400	1200