



ALIZÉ

VARIABLE SPEED (AIR-TO-AIR) HEATPUMP UNIT

In order to increase the comfort benefit provided by the modulation of our *Chinook* gas furnace, we developed our outdoor unit *Alizé*, which enables variable speed cooling and heating.

Our *Alizé* is an integrated part of our Right-Sized System[®], which can provide the required airflow per room.



Benefits of our variable speed *Alizé* heatpump unit

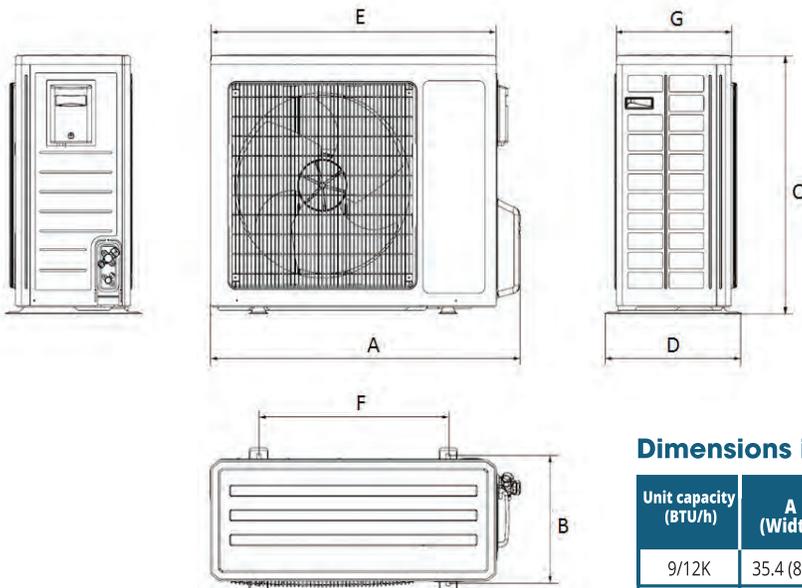
Integrating our *Alizé* unit to our *Chinook* gas furnace with our Dettson communicating thermostat, allowed us to develop the Right-Sized System[®] which is exclusive to Dettson.

The Right-Sized System[®] will provide homeowners with unequalled comfort, also enabling homebuilders creating energy efficient and well insulated homes to meet the new building Regulations (Codes), as well as attaining the volunteer programs requirements.

Our *Alizé* can also be combined with our new Supreme modulating electric furnace platform, which also enables the Right-Sized System[®] while offering a progressive switch-over in heating mode.

Benefits and differentiators

- Access to Dettson's high performance HVAC Right-Sized System[®]
- Dettson is the first HVAC manufacturer to use a side discharge only approach for residential central systems that offers:
 - **Very small footprint**
 - **Quiet outdoor operation with a maximum dB range of 49 to 65 at full capacity**
- Longer operating cycles for better air mixing:
 - Uniform temperature for thermal comfort
 - Lower CFM for a quieter air distribution vs the traditional overshoot excessive airflow
- Low electrical consumption in both mode : heating or cooling
- Allows for a central warm air system with variable speed for comfort all-year-round, in combination with our *Chinook* and *Supreme* modulating platforms



Product features

- Variable speed compressor, modulates from 25 to 100 %
- Very efficient: 27 SEER and COP 3.8 for 9,000 BTU/h
- Capacities from 3/4 ton to 3 tons
- Specially designed fan blades for low drag, reducing fan noise to a minimum

Dimensions inches (cm)

Unit capacity (BTU/h)	A (Width)	B (Depth)	C (Height)	D	E	F	G
9/12K	35.4 (89.9)	13.9 (35.3)	23.5 (59.7)	14.9 (37.8)	33 (83.8)	21.7 (55.1)	11.9 (30.2)
18K	37.6 (95.5)	14.3 (36.3)	27.6 (70.1)	15.6 (39.6)	35 (88.9)	22 (55.9)	13.4 (34.0)
24K	38.6 (98.0)	15.6 (39.6)	31.1 (79.0)	16.8 (42.7)	36.2 (91.9)	24 (61.0)	14.6 (37.1)
30/36K	38.6 (98.0)	15.7 (39.9)	31.1 (79.0)	16.7 (42.4)	36 (91.4)	24 (61.0)	14.6 (37.1)

Specifications

MODEL		COND-09-01	COND-12-01	COND-18-01	COND-24-01	COND-30-01	COND-36-01
Power Supply		208/230V / 60Hz / 1 Phase					
Cooling capacity (min-max)	Btu/h	9000 (3500-9600)	12000 (3100-13000)	18000 (4600-20000)	24000 (6800-26000)	28000 (9500-30000)	33600 (7400-36000)
Heating capacity (min-max)	Btu/h	9800 (2200-11000)	13000 (2400-14000)	19000 (3400-20000)	25000 (7500-26000)	28400 (10000-33000)	34600 (15000-36000)
Rated current	A	9	9	11.1	16	16.7	18.2
EER	(Btu/h)/W	14.5	12.8	12	12	10.1	9.2
COP		3.8	3.5	3.5	3.3	2.9	2.9
SEER		27	25	21	21	16	16
HSPF		9	9	9.8	10	8.2	8.2
Throttling method		Electronic expansion valve					
Cooling operation ambient temperature range	° F (°C)	5/118.4 (-15/48)				40/109.4 (4/43)	
Heating operation ambient temperature range	° F (°C)	-4/86 (-20/30)				5/75.2 (-15/24)	
Defrosting method		Automatic defrosting					
Sound pressure level	dB(A)	49	49	56	56	62	65
Net weight	lb (kg)	86 (39)	87.1(39.5)	110.3 (50)	153 (70)	154.3 (70)	161 (73)
Refrigerant		R410A					
Refrigerant charge	oz	45.9	45.9	56.5	88.2	84.7	91.7
Precharged connection pipe length	ft (m)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)	24.6 (7.5)
Connection pipe gas additional charge	oz/ft.	0.2	0.2	0.5	0.5	0.5	0.5
Outer diameter liquid pipe	inch	φ1/4	φ1/4	φ1/4	φ1/4	φ1/4	φ1/4
Outer diameter gas pipe	inch	φ1/2	φ1/2	φ5/8	φ5/8	φ5/8	φ5/8
Max distance height	ft (m)	32.8 (10)	32.8 (10)	32.8 (10)	32.8 (10)	32.8 (10)	32.8 (10)
Max distance length	ft (m)	49.2 (15)	65.6 (20)	82 (25)	82 (25)	98.4 (30)	98.4 (30)