

POSSIBLE COMBINATIONS

C2M021-2		
SINGLE ZONE	DUAL ZONE	
9	9 + 9	
12	9 + 12	12 + 12*

* Wall-Mount Type Indoor Unit ONLY.

C3M031-3B			
SINGLE ZONE	DUAL ZONE**		TRI ZONE**
9	9 + 9		9 + 9 + 9
12	9 + 12	12 + 12*	9 + 9 + 12
18*	9 + 18*	12 + 18*	9 + 12 + 12

* Wall-Mount Type Indoor Unit ONLY.

** Combine 1 Light Commercial Type Indoor Unit ONLY (Fan Coil, Cassette, Floor Ceiling)

C4M043-4B		
SINGLE ZONE	DUAL ZONE	
9	9 + 9	12 + 12
12	9 + 12	12 + 18
18	9 + 18	18 + 18
TRI ZONE		
9 + 9 + 9	9 + 12 + 12	12 + 12 + 12
9 + 9 + 12	9 + 12 + 18	12 + 12 + 18
9 + 9 + 18	9 + 18 + 18	12 + 18 + 18
QUAD ZONE		
9 + 9 + 9 + 9	9 + 9 + 12 + 12	9 + 12 + 12 + 18
9 + 9 + 9 + 12	9 + 9 + 12 + 18	12 + 12 + 12 + 12
9 + 9 + 9 + 18	9 + 12 + 12 + 12	



MULTIPLE SPLIT HEAT PUMP



ALEGRIA SERIES

INVERTER

OUTDOOR Unit

OUTDOOR UNIT	MODEL	C2M021-2	C3M031-3B	C4M043-4B
Cooling Capacity	Btu/h	18000 (9200 to 21000)	27000 (9800 to 31000)	36000 (10000 to 36200)
Heating Capacity	Btu/h	18100 (9900 to 21900)	24600(10900 to 31000)	36200 (11000 to 45200)
Power Supply (V,Hz,Ph)		208-230V,60Hz,1Ph	208-230V,60Hz,1Ph	208-230V,60Hz,1Ph
Power Input (W)	Cooling	1900	2700	3800
	Heating	1900	2300	4100
MOP(A)		15	30	40
MCA(A)		12	14	18.5
Interconnection wire gauge (stranded)		16-4	16-4	16-4
SEER (Btu/W)		16	15.6	16.5
EER (Btu/W)		10	9.8	9.2
HSPF (Btu/W)		8	8.5	9
Dimension (in)	WxHxD	33 4/16x27 6/16x13 3/16	33 4/16x27 6/16x13 3/16	39 x38 x14
Net/Gross Weight (lb)		112/121	123/132	192/203
Noise Level (dB(A))		57	58	62
Refrigerant Pre-Charge (ft)	ft	16x2	16X3	16X4
Additional charge for each extra ft	Oz/ft	0.212	0.212	0.212
Maximum line set run (combined)	ft	100/ 50 for each indoor	150/ 50 for each indoor	200/ 50 for each indoor
Maximum elevation between indoor and outdoor	ft	33	33	33

WALL MOUNT INDOOR Unit

INDOOR UNIT	MODEL	C-09-234	C-12-234	C-18-234
CAPACITY				
Capacity (Btu/h)	Cooling	9000	12000	18000
	Heating	10000	12700	19200
PERFORMANCE DATA				
Air Flow Volume (CFM)		270	340	510
Noise Level (dB(A))	Hi/Med/Lo	35/30/25	37/32/27	42/37/33
DIMENSION & WEIGHT				
Net Dimension (in)	W*H*D	31 1/8 X 10 7/16 X 7 13/16	31 1/8 X 10 7/16 X 7 13/16	36 1/4 X 11 1/2 X 8 3/4
Net/Gross Weight (lb)		18/20	20/25	26/33
Piping Size (mm(inch))	Liquid	1/4"	1/4"	1/4"
	Gas	3/8"	1/2"	1/2"

PERFORMANCE & COMBINATIONS

C2M021-2 DUAL ZONE

COOLING CAPACITY	Zone Options	Combination		Nominal Cooling Capacity (Btu/h)		System Cooling Capacity (Btu/h)		
		Unit A	Unit B	Unit A	Unit B	Min	Rated	Max
1-Zone	9k	–	9346	–	6542	9346	11309	
	12k	–	11977	–	7785	11977	14492	
2-Zone	9k	9k	9000	9000	7560	18000	21960	
	9k	12k	8379	10313	7851	18692	22618	
	12k*	12k*	9450	9450	7938	18900	22869	

HEATING CAPACITY	Zone Options	Combination		Nominal Heating Capacity (Btu/h)		System Heating Capacity (Btu/h)		
		Unit A	Unit B	Unit A	Unit B	Min	Rated	Max
1-Zone	9k	–	9095	–	6367	9095	11005	
	12k	–	11680	–	7592	11680	14133	
2-Zone	9k	9k	9500	9500	7980	19000	22990	
	9k	12k	8769	10792	8215	19561	23668	
	12k*	12k*	9998	9998	8399	19996*	24196	

*Wall-Mounted Type Indoor Unit ONLY.



Mini-Splits Specs at a Glance

ComfortStar Model No.	Min. Power Supply Wire Size (AWG)	Min. Inter-Connecting Wire Size (AWG)	Breaker Size (A)	Piping Sizes (in)	Max. Allowable Piping Length (ft)	Min. Recommended Piping Length (ft)	Max. Allowable Elevation Difference (ft)	Factory Refrigerant Charge (ft)	Refrigerant Adjustment Factor (oz. per foot)	Drain Pipe Size (in)	SEER	EER	HSPF
ALEGRIA - 16 ~ 18 SEER Cooling Only Single-Zone Wall-Mounted													
CCS009CA	12*3	16*4	25	1/4" 3/8"	33	12	16	16	0.212	3/4"	18	14	N/A
CCS012CA	12*3	16*4	25	1/4" 1/2"	33	12	16	16	0.212	3/4"	18	12.5	N/A
CCS012CD	12*3	16*4	15	1/4" 1/2"	33	12	16	16	0.212	3/4"	18	12.5	N/A
CCS018CD	12*3	16*4	20	3/8" 5/8"	49	12	26	16	0.423	3/4"	18	12.5	N/A
CCS024CD	12*3	16*4	25	3/8" 5/8"	66	12	33	16	0.423	3/4"	16	9	N/A
ALEGRIA - 14.5 ~ 18 SEER Heat Pump Single-Zone Wall-Mounted													
CHP009CA	12*3	16*4	25	1/4" 3/8"	33	12	16	16	0.212	3/4"	18	14	9.6
CHP012CA	12*3	16*4	25	1/4" 1/2"	33	12	16	16	0.212	3/4"	18	12.5	9.6
CHP012CD	12*3	16*4	15	1/4" 1/2"	33	12	16	16	0.212	3/4"	18	12.5	9.3
CHP018CD	12*3	16*4	20	3/8" 5/8"	49	12	26	16	0.423	3/4"	18	12.5	9.6
CHP024CD	12*3	16*4	25	3/8" 5/8"	66	12	33	16	0.423	3/4"	16	9.6	7.8
CHP030CD	10*3	16*4	25	3/8" 5/8"	98	12	49	16	0.423	3/4"	16	10	9.6
CHP036CD	10*3	16*4	30	3/8" 5/8"	98	12	49	16	0.423	3/4"	14.5	8.8	9
ALEGRIA - 15 ~ 16 SEER Light Commercial Indoor Units (Single Zone and Multi Zone)													
Floor-Ceiling (Universal)													
FCA-12	12*3	16*4	N/A	1/4"/1/2"	66	12	26	N/A	0.21	1.00	16	10	8.2
FCA-18	12*3	16*4	N/A	1/4"/1/2"	82	12	33	N/A	0.42	1.00	16	10	8.2
FCA-24	12*3	16*3 / 24*4	N/A	3/8"/5/8"	82	12	33	N/A	0.42	1.00	16	10	8.2
Cassette													
TCA-12	12*3	16*4	N/A	1/4"/1/2"	66	12	26	N/A	0.21	1.00	16	10	8.2
TCA-18	12*3	16*4	N/A	1/4"/1/2"	82	12	33	N/A	0.42	1.00	16	10	8.2
TCA-24	12*3	16*3 / 24*4	N/A	3/8"/5/8"	82	12	33	N/A	0.42	1-1/4"	16	10	8.2
Concealed Fan Coil													
CCA-12	12*3	16*4	N/A	1/4"/1/2"	66	12	26	N/A	0.21	1.00	15	10	8.2
CCA-18	12*3	16*4	N/A	1/4"/1/2"	82	12	33	N/A	0.42	1.00	15	10	8.2
CCA-24	12*3	16*3 / 24*4	N/A	3/8"/5/8"	82	12	33	N/A	0.42	1.00	15	10	8.2
ALEGRIA - 16 SEER Light Commercial Outdoor Unit Single Zone													
CHP012CD(0)	12*3	16*4	15	1/4"/1/2"	66	12	26	25	0.21	N/A	16	10	8.2
CHP018CD(0)	12*3	16*4	20	3/8" 5/8"	82	12	33	25	0.42	N/A	16	10	8.2
CHP024CD-B(0)	12*3	16*3 / 24*4	30	3/8"/5/8"	82	12	33	25	0.42	N/A	16	10	8.2
ALEGRIA - 16 SEER Heat Pump Multi-Zone													
C2M021-2	12*3	16*4	15	1/4" 3/8"	100(50/in-door unit)	12	33	16x2	0.212	3/4"	16	10	8
C3M031-3B	12*3	16*4	30	1/4" 3/8"	150(50/in-door unit)	12	33	16x3	0.212	3/4"	15.6	9.8	8.5
C4M043-4B	10*3	16*4	40	1/4" 3/8"	200(50/in-door unit)	12	33	16x4	0.212	3/4"	16.5	9.2	9
DIAMOND - 18 ~ 23 SEER Heat Pump Single-Zone Wall-Mounted													
CARAT09CD-2B	12*3	16*4	15	1/4" 3/8"	49	12	33	25	0.22	3/4"	23	14	9.8
CARAT12CD-2B	12*3	16*4	15	1/4" 1/2"	65	12	33	25	0.22	3/4"	22	12	9.1
CARAT18CD-2B	12*3	16*4	20	1/4" 1/2"	82	12	33	25	0.22	3/4"	18	12	10
CARAT24CD-2B	12*3	16*4	20	1/4" 5/8"	82	12	33	25	0.5	3/4"	18	12	10
13 SEER Horizontal Discharge Condensing Unit													
CHD-18	12*3	16*2	15	1/4"/1/2"	82	12	33	25	0.22	N/A	13	11	N/A
CHD-24	12*3	16*2	20	3/8"/3/4"	82	12	33	25	0.42	N/A	13	11	N/A
CHD-30	10*3	16*2	25	3/8"/3/4"	82	12	33	25	0.42	N/A	13	11	N/A
CHD-36	10*3	16*2	35	3/8"/3/4"	98	12	49	25	0.42	N/A	13	11	N/A

NOTES: The wire sizes listed are the manufacturer-recommended minimum sizes. Wires should be stranded and rated for high-voltage. Always refer to NEC local code.
CCA-24, FCA-24, TCA-24 units require 2 set of interconnecting wires: 16*3 stranded for Power Supply, and 24*4 stranded and shielded for Communication.