

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

C3M031-3B TRI ZONE ZONE

Zone Options	Combination			Nominal Cooling Capacity (Btu/h)			System Cooling Capacity (Btu/h)		
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min	Rated	Max
1- Zone	9k	–	–	8992	–	–	6295	8992	11510
	12k	–	–	11867	–	–	7714	11867	15190
2- Zone	18k*	–	–	17422	–	–	10802	17422	22300
	9k	9k	–	8792	8792	–	7386	17585	21277
	9k	12k	–	8656	10654	–	8110	19311	23366
	9k	18k*	–	8359	17041	–	10668	25400	30734
	12k	12k	–	10942	10942	–	9191	21883	26479
	12k	18k*	–	9808	16244	–	10942	26051	31522
3- Zone	9k	9k	9k	8467	8467	8467	10668	25600	30734
	9k	9k	12k	8164	8164	10048	11078	26377	31916
	9k	12k	12k	7667	9436	9436	11147	26540	32113

Zone Options	Combination			Nominal Heating Capacity (Btu/h)			System Heating Capacity (Btu/h)		
	Unit A	Unit B	Unit C	Unit A	Unit B	Unit C	Min	Rated	Max
1- Zone	9k	–	–	9276	–	–	6493	9276	11874
	12k	–	–	11886	–	–	8320	11886	15214
2- Zone	18k*	–	–	15675	–	–	10973	15675	20065
	9k	9k	–	8709	8709	–	7315	17417	21075
	9k	12k	–	8393	10330	–	7864	18723	22655
	9k	18k*	–	8359	17041	–	10668	25400	30734
	12k	12k	–	10015	10015	–	8412	20030	24236
	12k	18k*	–	9836	16290	–	10973	26126	31612
3- Zone	9k	9k	9k	8467	8467	8467	10668	25400	30734
	9k	9k	12k	8131	8131	10008	11034	26271	31788
	9k	12k	12k	7631	9392	9392	11095	26416	31963

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.