Outdoor Units

-5°F Heat Operations

See following pages for outdoor models specifications and combinations.

2 Zone (1.5 Ton)
CU-2E18SBU-5

ENERGY STAR Blue Fin Condenser

Cooling Capacity: 16,700 (7,200 - 20,000) Btu/hr.
Heating Capacity: 20,200 (7,200 - 24,600) Btu/hr.
SEER Non-Ducted 19.0 / Ducted 19.0
EER Non-Ducted 12.55 / Ducted 12.55
HSPF Non-Ducted 9.5 / Ducted 9.0
Min/Max capacity 11,000 - 21,8000 Btu/hr.

2-3 Zone (1.5 Ton)
CU-3E19RBU-5

ENERGY STAR Blue Fin Condenser

(Non-Ducted)

Cooling Capacity: 19,000 (6,100 - 24,800) Btu/hr.
Heating Capacity: 26,000 (5,500 - 28,400) Btu/hr.
SEER Non-Ducted 22.0 / Ducted 18.5
EER Non-Ducted 12.55 / Ducted 10.85
HSPF Non-Ducted 10.5 / Ducted 9.0
Min/Max capacity 15,300 - 30,600 Btu/hr.

2-4 Zones (2 Ton)
CU-4E24RBU-5

ENERGY STAR Blue Fin Condenser

(Non-Ducted)

Cooling Capacity: 24,000 (10,200 - 31,400) Btu/hr.
Heating Capacity: 37,800 (14,300 - 48,500) Btu/hr.
SEER Non-Ducted 22.0 / Ducted 19.0
EER Non-Ducted 12.55 / Ducted 10.85
HSPF Non-Ducted 9.5 / Ducted 9.0
Min/Max capacity 15,300 - 30,600 Btu/hr.

2-5 Zones (3 Ton)
CU-5E36QBU-5

Blue Fin Condenser

Cooling Capacity: 36,000 (9,900 - 39,000) Btu/hr.
Heating Capacity: 37,800 (11,600 - 49,500) Btu/hr.
SEER Non-Ducted 18.5 / Ducted 16.5
EER Non-Ducted 9.6 / Ducted 8.3
HSPF Non-Ducted 10.0 / Ducted 9.5
Min/Max capacity 15,300 - 59,500 Btu/hr.

All multi split condensors must have minimum two indoor units installed.

Advantages of Multi-Zone Inverter System

- Year-round comfort with Multi Zone Heating & Cooling.
- Combine low-energy Inverter Technology and Ductless Zone Control for optimum energy efficiency.
- Cool and Heat 2-5 rooms or a whole house with one outdoor condenser and up to 5 ductless indoor units.
- Eliminate cost of duct installation and cleaning.

Combination Possibilities

Multi Zone		CU-2E18SBU-5	CU-3E19RBU-5	CU-4E24RBU-5	CU-5E36QBU-5
Wall	CS-ME5RKUA	✔	✔	✔	✔
	CS-ME7RKUA	✔	✔	✔	✔
	CS-E9RKUAW	✔	✔	✔	✔
	CS-E12RKUAW	✔	✔	✔	✔
	CS-E18RKUAW	-	✔	✔	✔
	CS-E24RKUAW	-	-	✔	✔
4-Way	CS-ME9SB4U	✔	✔	✔	✔
	CS-E12RB4UW	✔	✔	✔	✔
	CS-E18RB4UW	-	✔	✔	✔
Ducted	CS-ME5SD3UA	✔	✔	✔	✔
	CS-ME7SD3UA	✔	✔	✔	✔
	CS-E9SD3UAW	✔	✔	✔	✔
	CS-E12SD3UAW	✔	✔	✔	✔
	CS-E18SD3UAW	-	✔	✔	✔
Capacity range of connectable indoor units		3.2 – 6.4 kW	4.5 – 9.0 kW	4.5 – 13.6 kW	4.5 – 17.5 kW
Piping Length	1 room maximum pipe length (m (ft))	25 (82.0)	25 (82.0)	25 (82.0)	25 (82.0)
	Allowable elevation (m (ft))	15 (49.2)	15 (49.2)	15 (49.2)	15 (49.2)
	Total allowable pipe length (m (ft))	50 (164.0)	50 (164.0)	70 (229.6)	80 (262.4)
	Total pipe length for maximum chargeless length (m (ft))	20 (65.6)	30 (98.4)	45 (147.6)	45 (147.6)
	Additional gas amount over chargeless length (g/m (oz/ft))	20 (0.2)	20 (0.2)	20 (0.2)	20 (0.2)

See Capacity and Combinations pages 35, 36

Indoor Units

Wall Mount

Wireless Controller (Included)

Wired Controller with 32 ft cable CZ-RD516C-1 (Optional)

CS-ME5RKUA / CS-ME7RKUA / CS-E9RKUAW / CS-E12RKUAW / CS-E18RKUAW / CS-E24RKUAW

4-Way Cassette

Wireless Controller (Included)

Wired Controller with 32 ft cable CZ-RD52CU (Optional)

CS-ME9SB4U / CS-E12RB4UW / CS-E18RB4UW

Slim Duct

Wireless Controller with Receiver/Cable (Included)

Wired Controller with 32 ft cable CZ-RD52DU (Optional)

CS-ME5SD3UA / CS-ME7SD3UA / CS-E9SD3UAW / CS-E12SD3UAW / CS-E18SD3UAW

All Indoor multi zone units can be field modified to operate as Cooling Only.

Multi-Zone Systems

			Wall Mount					
Model No.			**CS-ME5RKUA**	**CS-ME7RKUA**	**CS-E9RKUAW**	**CS-E12RKUAW**	**CS-E18RKUAW**	**CS-E24RKUAW**
Performance & Electrical Ratings								
Capacity	Cooling	Btu/h	5,500 (4,400–7,800)	6,900 (6,100–9,900)	8,600 (6,100–9,900)	10,900 (6,100–13,000)	17,100 (6,500–19,800)	24,000 (5,800–27,200)
	Heating	Btu/h	8,900 (4,100–10,900)	10,900 (4,100–14,000)	12,300 (4,100–14,700)	15,300 (4,100–19,800)	23.400 (19,400–4,100)	28,800 (5,800–29,200)
Moisture Removal	High	Pints/H	0.6	0.8	1.1	1.3	3.0	7.6
Dry Air Flow	High	CFM	415	425	430	475	680	715
Power Supply	V, Phase, Hz		208/230V, 1PH, 60Hz	230/208V, 1PH, 60Hz	230/208V, 1PH, 60Hz	230/208V, 1PH, 60Hz	230/208V, 1PH, 60Hz	230/208V, 1PH, 60Hz
Running Amps	Cooling	A	2.0 / 2.3	2.5 / 2.8	3.2 / 3.5	3.9 / 4.3	7.2 / 8.0	10.8 / 11.9
	Heating	A	3.0 / 3.4	3.7 / 4.1	4.7 / 5.2	6.0 / 6.6	8.3 / 9.3	11.4 / 12.6
Power Input	Cooling	W	400 (250–640)	500 (340–810)	630 (340–810)	800 (340–1,360)	1,300 (430–1,600)	2,350 (430–2,720)
	Heating	W	600 (300–960)	740 (300–1,230)	940 (300–1,230)	1,230 (200–2,100)	1,750 (380–1,800)	2,500 (380–2,660)
Operation Sound [Hi / Me / Lo / Q-Lo]	Cooling		38 / 25	39 / 25	40 / 25	43 / 28	47 / 39 / 36	48 / 40 / 37
	Heating		40 / 29	41 / 29	42 / 29	44 / 35 / 32	46 / 39 / 36	48 / 40 / 37
Refrigerant Tube Diameter	Discharge	inches	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"
	Suction	inches	3/8"	3/8"	3/8"	3/8"	3/8"	1/2"
Adapters Required			none	none	none	CZ-MA1P-US	CZ-MA1P-US	CZ-MA2P-US and CZ-MA3P-US
Dimensions & Weight								
Height		inches	11-7/16"	11-7/16"	11-7/16"	11-7/16"	11-7/16"	11-7/16"
Width		inches	34-9/32"	34-9/32"	34-9/32"	34-9/32"	42-5/32"	42-5/32"
Depth		inches	8-7/16"	8-7/16"	8-7/16"	8-7/16"	9-15/32"	9-15/32"
Net Weight		lb	20.0	20.0	20.0	20.0	26.0	26.0

			4-Way Cassette		
Model No.			**CS-ME9SB4U**	**CS-E12RB4UW**	**CS-E18RB4UW**
Performance & Electrical Ratings					
Capacity	Cooling	Btu/h	8,600 (6,100 - 9,900)	10,900 (6,100–13,000)	171,000 (6,500–19,400)
	Heating	Btu/h	12,300 (4,100 - 14,700)	15,300 (4,100–19,800)	23,400 (4,100–23,600)
Moisture Removal	High	Pints/H	2.5	3.2	4.4
Dry Air Flow	High	CFM	400	370(C),390(H)	450(C),495(H)
Power Supply	V, Phase, Hz		208/230V, 1PH, 60Hz	230/208V, 1PH, 60Hz	230/208V, 1PH, 60Hz
Running Amps	Cooling	A	3.5 / 3.2	4.3 / 3.9	8.0 / 7.2
	Heating	A	5.2 / 4.7	6.6 / 6.0	10.7 / 9.7
Power Input	Cooling	W	630 (340 - 810)	800 (340–1,360)	1,550 (340–2.130)
	Heating	W	300 (940 - 1.2k)	1,230 (300–2,100)	2,100 (300–2,520)
Operation Sound [Hi / Me / Lo / Q-Lo]	Cooling		36 / 30 / 27	36 / 30	36 / 32
	Heating		37 / 32 / 29	36 / 32	46 / 33
Refrigerant Tube Diameter	Discharge	inches	1/4"	1/4	1/4
	Suction	inches	3/8"	3/8	3/8
Adapters Required			none	CZ-MA1P-US	CZ-MA1P-US
Dimensions & Weight					
Indoor	Height	inches	10-1/4"	10-1/4	10-1/4
	Width	inches	22-3/4"	22-3/4	22-3/4
	Depth	inches	22-3/4"	22-3/4	22-3/4
	Net Weight	lb	40.0 (grille 6.0)	40.0	40.0

Pipe diameters listed below are for Multi zone installations. For Single zone pipe diameter see single zone product pages.

			Slim Duct				
Model No.			**CS-ME5SD3UA**	**CS-ME7SD3UA**	**CS-E9SD3UAW**	**CS-E12SD3UAW**	**CS-E18SD3UAW**
Performance & Electrical Ratings							
Capacity	Cooling	Btu/h	5,500 (4,400 - 7,800)	6,900 (6,100 - 9,900)	9000 (4100-10200)	11500 (4100-13300)	17200 (5800-19400)
	Heating	Btu/h	8,900 (4,100 - 10,900)	10,900 (4,100 - 14,000)	12000 (4100-14100)	13800 (4100-16300)	20800 (5800-24200)
Moisture Removal	High	Pints/H	0.8	1.1	1.30	1.70	4.60
Dry Air Flow	High	CFM	484	494	475	475	540
Static Pressure	(Standard / Switch Hi)	inch w.g.	0.10 / .022	0.10 / .022	0.10 / .022	0.10 / .022	0.10 / .023
Power Supply	V, Phase, Hz		208/230V, 1PH, 60Hz	208/230V, 1PH, 60Hz	208/230V, 1PH, 60Hz	208/230V, 1PH, 60Hz	208/230V, 1PH, 60Hz
Running Amps	Cooling	A	2.3 / 2.0	2.8 / 2.5	3.2	4.2	7.6
	Heating	A	3.4 / 3.0	4.1 / 3.7	5.1	5.6	8.7
Power Input	Cooling	W	400 (250 - 640)	500 (340 - 810)	690 (250 - 850)	920 (250 - 1.15k)	1.58k (430 - 1.82k)
	Heating	W	600 (300 - 960)	740 (300 - 1.23k)	1.12k (200 - 1.50k)	1.25k (200 - 1.71k)	1.83k (380 - 2.18k)
Operation Sound [Hi / Me / Lo / Q-Lo]	Cooling		35 / 28	36 / 29	35 / 28 / 25	35 / 28 / 25	41 / 30 / 37
	Heating		35 / 28	36 / 29	35 / 28 / 25	35 / 28 / 25	41 / 32 / 29
Refrigerant Tube Diameter	Discharge	inches	1/4"	1/4"	1/4	1/4	1/4
	Suction	inches	3/8"	3/8"	3/8	3/8	3/8
Adapters Required			none	none	none	CZ-MA1P-US	CZ-MA1P-US
Dimensions & Weight							
Indoor	Height	inches	7-7/8"	7-7/8"	7-7/8	7-7/8	7-7/8
	Width	inches	29-17/32"	29-17/32"	29-17/32	29-17/32	29-17/32
	Depth	inches	25-7/32"	25-7/32"	25-7/32	25-7/32	25-7/32
	Net Weight	lb	42.0	42.0	42.0	42.0	42.0

Important: You must use refrigerant piping rated for R410a.
*This is maximum elevation difference when the indoor unit is located above the outdoor unit. See p.45 for additional information.

-5°F Heat Operation

2 Zone (1.5 Ton)

CU-2E18SBU-5

Cooling Capacity: 16,700 (7,200 - 20,000) Btu/hr.
Heating Capacity: 20,200 (7,200 - 24,600) Btu/hr.
SEER Non-Ducted 19.0 / Ducted 19.0
EER Non-Ducted 12.55 / Ducted 12.55
HSPF Non-Ducted 9.5 / Ducted 9.0
Min/Max capacity 11,000 - 21,8000 Btu/hr.

Connect 2 Indoor Units

Wireless Controller (Included)

Wired Remote Controller (CZ-RD516C-1) (Optional)

Wireless Controller (Included)

Wired Controller with 32 ft cable CZ-RD52CU (Optional)

CZ-BT20U Grille Ordered Separately

CU-2E18SBU-5

ENERGY STAR

See Multi Zone Calculation and Selection Chart on pp. 35-36.

Outdoor Unit

Model No.			CU-2E18SBU-5	
Performance			Cooling	Heating
Capacity		Btu/h	16,700 (7,200~20,000)	20,200 (7,200~24,600)
Air Circulation	High	CFM	1,447	
Number of Connectable Indoor Units			2	
SEER	Non-Ducted / Ducted		19.0 / 19.0	
EER	Non-Ducted / Ducted		12.55 / 12.55	
HSPF	Non-Ducted / Ducted		9.5 / 9.0	
Electrical Rating				
Power Supply		V, Phase, Hz	230V / 208V, 1PH, 60Hz	
Running Ampere	Non-Ducted / Ducted	A	6.6~6.0 / 6.6~6.0	8.5~7.8 / 8.5~7.8
Power Input		W	1,330	1,750
Maximum Fuse Size : MCA / MOCP		Amps	20 / 25	
Features				
Controls			Microprocessor	
Fan Speeds			Variable Speed	
Compressor			DC Inverter	
Refrigerant / Amount Charged at Shipment			R-410A / 78.70 oz	
Refrigerant Control			Electronic Expansion Valve	
Operation Sound	Hi	dB-A	48	49
Refrigerant Tubing Connections		Type	Flare	
Max. Allowable Tubing Length		Ft.	164 per system (82 per indoor unit)	
Refrigerant Tube Diameter (service value)	Discharge	inch	1/4" x 2	
	Suction	inch	3/8" x 2	
Adaptor Required			Indoor 12K Btu/hr. requires 1 CZ-MA1P-US	
Dimensions & Weight				
Unit Dimensions	H x W x D	inch	31-5/16" x 34-15/32" (+3-3/4) x 14-3/6"	
Net Weight		Lbs.	157	

Important: You must use refrigerant piping rated for R410a. See p. 44 for additional information.
*Test Conditions based on AHRI 210/240

ECO NAVI ECONAVI · Room Freeze Protection · Micro-processor Control · Wireless Controller · Wired Controller · Self Diagnose · DRY Dry · AUTO 5 Fan speeds · Air Sweep · Louver · COOLING HEATING Auto-change over · Hot Start · 24H PROGRAM 24hr timer

-5°F Heat Operation

2-3 Zone (1.5 Ton)

CU-3E19RBU-5

Cooling Capacity: 19,000 (6,100 - 24,800) Btu/hr.
Heating Capacity: 26,000 (5,000 - 28,400) Btu/hr.
SEER Non-Ducted 22.0 / Ducted 18.5
EER Non-Ducted 12.55 / Ducted 10.85
HSPF Non-Ducted 10.5 / Ducted 9.0
Min/Max capacity 15,300 - 30,600 Btu/hr.

Wireless Controller (Included)

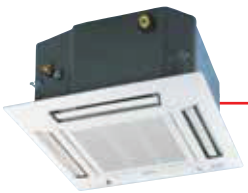
Wired Remote Controller CZ-RD516C-1 (Optional)

Connect 2 to 3 Indoor Units

Wireless Controller (Included)

Wired Controller with 32 ft cable CZ-RD52CU (Optional)

CZ-BT20U



CU-3E19RBU-5

ENERGY STAR

(Non-Ducted)

See Multi Zone Calculation and Selection Chart on pp. 35-36.

Outdoor Unit

Model No.			CU-3E19RBU-5	
Performance			Cooling	Heating
Capacity		Btu/h	19,000 (6,100~24,800)	26,000 (5,500~28,400)
Air Circulation	High	CFM	1,447	1,634
Number of Connectable Indoor Units			2~3	
SEER	Non-Ducted / Ducted		22.0 / 18.5	
EER	Non-Ducted / Ducted		12.55 / 10.85	
HSPF	Non-Ducted / Ducted		10.5 / 9.0	
Electrical Rating				
Power Supply		V, Phase, Hz	230V / 208V, 1Ph, 60Hz	
Running Ampere	Non-Ducted / Ducted	A	7.4~6.7 / 8.5~7.7	10.1~9.1 / 12.3~11.1
Power Input		W	1,510 (360~2,420)	2,060 (320~2,300)
Maximum Fuse Size		Amps	30	
Features				
Controls			Microprocessor	
Fan Speeds			Variable Speed	
Compressor			Twin Rotary, DC Motor, Inverter	
Refrigerant / Amount Charged at Shipment			R-410A / 93.2 oz	
Refrigerant Control			Electric Expansion Valve	
Operation Sound	Hi	dB-A	50	52
Refrigerant Tubing Connections		Type	Flare	
Max. Allowable Tubing Length		Ft	164 per system (82 per indoor unit)	
Refrigerant Tube Diameter	Discharge	inch	1/4 x 3	
	Suction	inch	3/8 x 3	
Adaptor Required			Indoor 12 and 18 Btu/hr. require 1 CZ-MA1P-US	
Dimensions & Weight				
Unit Dimensions	H x W x D	inch	31-5/16 x 34-15/32 x 14-3/6	
Net Weight		Lbs.	159	

Important: You must use refrigerant piping rated for R410a. See p. 44 for additional information.
*Test Conditions based on AHRI 210/240

-5°F Heat Operation

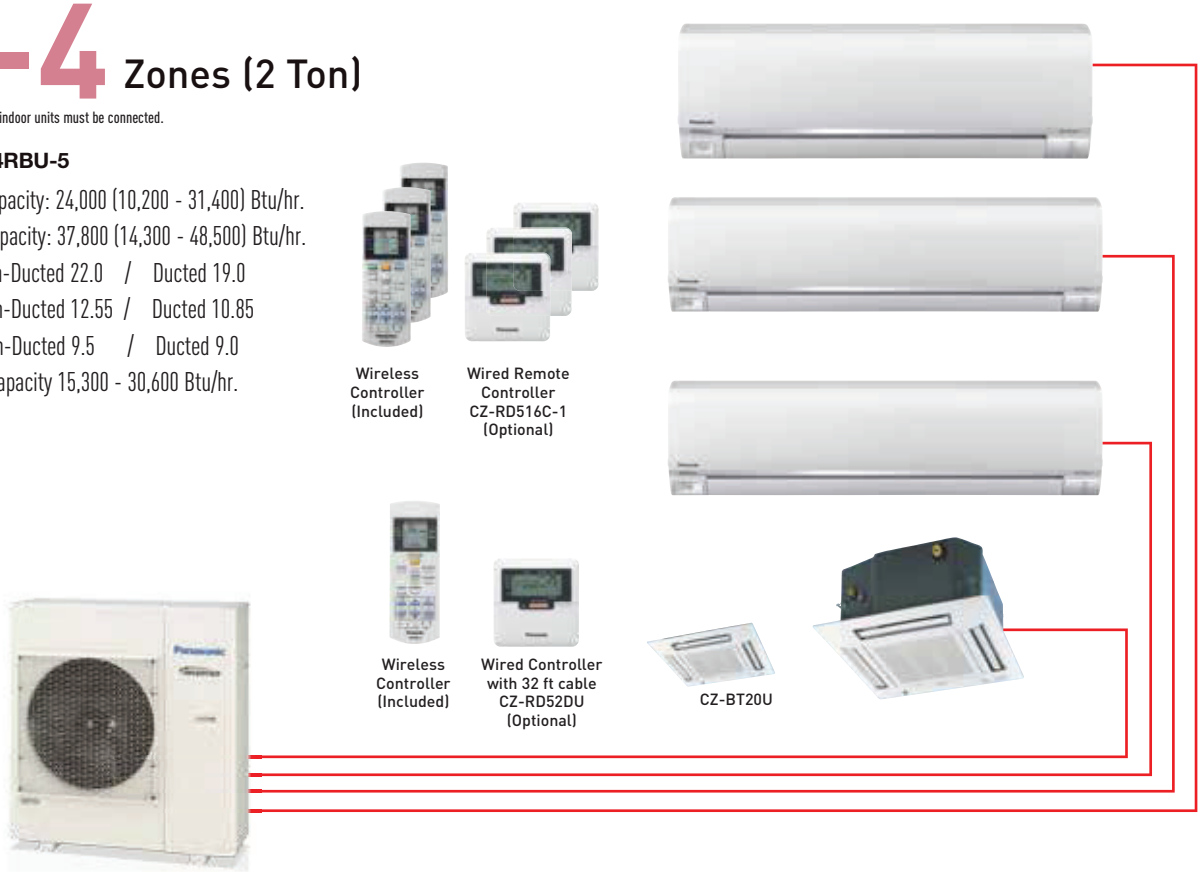
2-4 Zones (2 Ton)

A minimum of 2 indoor units must be connected.

CU-4E24RBU-5

Cooling Capacity: 24,000 (10,200 - 31,400) Btu/hr.
Heating Capacity: 37,800 (14,300 - 48,500) Btu/hr.
SEER Non-Ducted 22.0 / Ducted 19.0
EER Non-Ducted 12.55 / Ducted 10.85
HSPF Non-Ducted 9.5 / Ducted 9.0
Min/Max capacity 15,300 - 30,600 Btu/hr.

Connect 2 to 4 Indoor Units



Wireless Controller (Included)

Wired Remote Controller CZ-RD516C-1 (Optional)

Wireless Controller (Included)

Wired Controller with 32 ft cable CZ-RD52DU (Optional)

CZ-BT20U

CU-4E24RBU-5

ENERGY STAR

(Non-Ducted)

See Multi Zone Calculation and Selection Chart on pp. 35-36.

Outdoor Unit

Model No.			CU-4E24RBU-5	
Performance			Cooling	Heating
Capacity		Btu/h	24,000 (10,200~31,400)	37,800 (14,300~48,500)
Air Circulation	High	CFM	1,963	2,330
Number of Connectable Indoor Units			2~4	
SEER	Non-Ducted / Ducted		22.0 / 19.0	
EER	Non-Ducted / Ducted		12.55 / 10.85	
HSPF	Non-Ducted / Ducted		9.5 / 9.0	
Electrical Rating				
Power Supply		V, Phase, Hz	230V / 208V, 1Ph, 60Hz	
Running Ampere	Non-Ducted / Ducted	A	9.9~8.9 / 11.4~10.3	15.3~13.9 / 17.8~16.1
Power Input		W	1,910 (530~2,870)	3,030 (700~4,380)
Maximum Fuse Size		Amps	30	
Features				
Controls			Microprocessor	
Fan Speeds			Variable Speed	
Compressor			Twin Rotary, DC Motor, Inverter	
Refrigerant / Amount Charged at Shipment			R-410A / 120.0 oz	
Refrigerant Control			Electric Expansion Valve	
Operation Sound	Hi	dB-A	55	55
Refrigerant Tubing Connections		Type	Flare	
Max. Allowable Tubing Length		Ft	230 per system (82 per indoor unit)	
Refrigerant Tube Diameter	Discharge	inch	1/4 x 4	
	Suction	inch	3/8 x 4	
Adaptors Required			Indoor 12 and 18 Btu/hr. require 1 CZ-MA1P-US / 24 Btu/hr 1 CZ-MA1P-US and 1 CZ-MA3P-US**	
Dimensions & Weight				
Unit Dimensions	H x W x D	inch	39-11/32 x 37-1/32 x 13-13/32	
Net Weight		Lbs.	183	

Important: You must use refrigerant piping rated for R410a. See p.45 for additional information.
*Test Conditions based on AHRI 210/240

ECO NAVI ECONAVI · Room Freeze Protection · Micro-processor Control · Wireless Controller · Wired Controller · Self Diagnose · DRY Dry · 5 Fan speeds · Air Sweep · Louver · Auto-change over · Hot Start · 24H PROGRAM 24hr timer

-5°F Heat Operation

2-5 Zones (3 Ton)

A minimum of 2 indoor units must be connected.

CU-5E36QBU-5

Cooling Capacity: 36,000 (9,900 - 39,000) Btu/hr.
Heating Capacity: 37,800 (11,600 - 49,500) Btu/hr.
SEER Non-Ducted 18.5 / Ducted 16.5
EER Non-Ducted 9.6 / Ducted 8.3
HSPF Non-Ducted 10.0 / Ducted 9.5
Min/Max capacity 15,300 - 59,500 Btu/hr.

Connect 2 to 5 Indoor Units

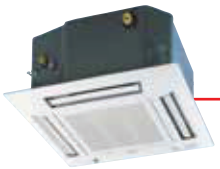
Wireless Controller (Included)

Wired Remote Controller CZ-RD516C-1 (Optional)

Wireless Controller (Included)

Wired Remote Controller CZ-RD52CU (Optional)

CZ-BT20U



CU-5E36QBU-5

See Multi Zone Calculation and Selection Chart on pp. 35-36.

Outdoor Unit

Model No.			CU-5E36QBU-5	
Performance			Cooling	Heating
Capacity	Rated (min-max)	Btu/h	36,000 (9,900–39,000)	37,800 (11,600–49,500)
Air Circulation	High	CFM	2,475	
Number of Connectable Indoor Units			2–5	
SEER	Non-Ducted / Ducted		18.5 / 16.5	
EER	Non-Ducted / Ducted		9.6 / 8.3	
HSPF	Non-Ducted / Ducted		10.0 / 9.5	
Electrical Rating				
Power Supply		V, Phase, Hz	230V / 208V,1Ph,60Hz	
Running Ampere	Non-Ducted / Ducted	A	19.0~17.2 / 21.1~19.1	14.8~13.4 / 17.5~15.8
Power Input		W	3,750 (550–3,860)	2,900 (530–4,240)
Maximum Fuse Size		Amps	30	
Features				
Controls			Microprocessor	
Fan Speeds			Variable Speed	
Compressor			Twin Rotary, DC Motor, Inverter	
Refrigerant / Amount Charged at Shipment		Type/oz	R-410A / 120.0 oz	
Refrigerant Control			Electric Expansion Valve	
Operation Sound	Hi	dB-A	55	
Refrigerant Tubing Connections		Type	Flare	
Max. Allowable Tubing Length		ft	262 per system (82 per indoor unit)	
Refrigerant Tube Diameter	Discharge	inches	1/4 x 5	
	Suction	inches	3/8 x 5	
Adaptors Required			CZ-MA2P 1pc for 12K & 18K / CZ-MA2P	
Indoor Adaptor			Indoor 12 and 18 Btu/hr. require 1 CZ-MA1P-US / 24 Btu/hr 1 CZ-MA1P-US and 1 CZ-MA3P-US	
Dimensions & Weight				
Unit Dimensions	H x W x D	inches	39-11/32 x 37-1/32 x 13-13/32	
Net Weight		lb	183	

Important: You must use refrigerant piping rated for R410a. See p.45 for additional information.
*Test Conditions based on AHRI 210/240

1H Timer 1hr off timer · WEEKLY Timer Weekly Timer · System Controller · Filter sign · Auto Restart · Fresh Air intake · Branch Extension · DP Drain Pump · LOW AMBIENT Low Ambient Operation · ELECTRIC Elect.Valve · R-410A R-410A Refrigerator · Quiet · Anti-microbial Filt. · Blue Fin

Multi Zone Combination Charts

Understanding total System Capacity is an important step in sizing and selecting heat pump equipment.

Outdoor Unit Capacity: The **System Capacity** is the Cooling and Heating Capacity listed at the top of each Outdoor unit's specification chart.

Indoor Unit Demand: The Cooling and Heating Capacities are listed at the top of the specification chart of each Indoor Unit (see page 30). The total of these partial indoor capacities is the **System Demand**.

CU-2E18SBU-5
2 Zones
5 + 5
5 + 7
5 + 9
5 + 12
7 + 7
7 + 9
7 + 12
9 + 9
9 + 12
12 + 12

CU-3E19RBU-5		
2 Zones	3 Zones	
5 + 12	5 + 5 + 5	7 + 7 + 7
5 + 18	5 + 5 + 7	7 + 7 + 9
5 + 18	5 + 5 + 7	7 + 7 + 9
7 + 12	5 + 5 + 12	7 + 7 + 18
7 + 18	5 + 5 + 18	7 + 9 + 9
9 + 9	5 + 7 + 7	7 + 9 + 12
9 + 12	5 + 7 + 9	7 + 12 + 12
9 + 18	5 + 7 + 12	9 + 9 + 9
12 + 12	5 + 7 + 18	9 + 9 + 12
12 + 18	5 + 9 + 9	9 + 12 + 12
-	5 + 9 + 12	-
-	5 + 12 + 12	-

CU-4E24RBU-5					
2 Zones	3 Zones		4 Zones		
5 + 18	5 + 5 + 5	7 + 7 + 12	5 + 5 + 5 + 5	5 + 7 + 7 + 24	7 + 7 + 9 + 24
5 + 24	5 + 5 + 7	7 + 7 + 18	5 + 5 + 5 + 7	5 + 7 + 9 + 9	7 + 7 + 12 + 12
7 + 9	5 + 5 + 9	7 + 7 + 24	5 + 5 + 5 + 9	5 + 7 + 9 + 12	7 + 7 + 12 + 18
7 + 12	5 + 5 + 12	7 + 9 + 9	5 + 5 + 5 + 12	5 + 7 + 9 + 18	7 + 9 + 9 + 9
7 + 18	5 + 5 + 18	7 + 9 + 12	5 + 5 + 5 + 18	5 + 7 + 9 + 24	7 + 9 + 9 + 12
7 + 24	5 + 5 + 24	7 + 9 + 18	5 + 5 + 5 + 24	5 + 7 + 12 + 12	7 + 9 + 9 + 18
9 + 9	5 + 7 + 7	7 + 9 + 24	5 + 5 + 7 + 7	5 + 7 + 12 + 18	7 + 9 + 12 + 12
9 + 12	5 + 7 + 9	7 + 12 + 12	5 + 5 + 7 + 9	5 + 7 + 18 + 18	7 + 9 + 12 + 18
9 + 18	5 + 7 + 12	7 + 12 + 18	5 + 5 + 7 + 12	5 + 9 + 9 + 9	7 + 12 + 12 + 12
9 + 24	5 + 7 + 18	7 + 12 + 24	5 + 5 + 7 + 18	5 + 9 + 9 + 12	7 + 12 + 12 + 18
12 + 12	5 + 7 + 24	7 + 18 + 18	5 + 5 + 7 + 24	5 + 9 + 9 + 18	9 + 9 + 9 + 9
12 + 18	5 + 9 + 9	9 + 9 + 9	5 + 5 + 9 + 9	5 + 9 + 9 + 24	9 + 9 + 9 + 12
12 + 24	5 + 9 + 12	9 + 9 + 12	5 + 5 + 9 + 12	5 + 9 + 12 + 12	9 + 9 + 9 + 18
18 + 18	5 + 9 + 18	9 + 9 + 18	5 + 5 + 9 + 18	5 + 9 + 12 + 18	9 + 9 + 12 + 12
18 + 24	5 + 9 + 24	9 + 9 + 24	5 + 5 + 9 + 24	5 + 12 + 12 + 12	9 + 9 + 12 + 18
-	5 + 12 + 12	9 + 12 + 12	5 + 5 + 12 + 12	5 + 12 + 12 + 18	9 + 12 + 12 + 12
-	5 + 12 + 18	9 + 12 + 18	5 + 5 + 12 + 18	7 + 7 + 7 + 7	12 + 12 + 12 + 12
-	5 + 12 + 24	9 + 12 + 24	5 + 5 + 12 + 24	7 + 7 + 7 + 9	-
-	5 + 18 + 18	9 + 18 + 18	5 + 5 + 18 + 18	7 + 7 + 7 + 12	-
-	5 + 18 + 24	12 + 12 + 12	5 + 7 + 7 + 7	7 + 7 + 7 + 18	-
-	7 + 7 + 7	12 + 12 + 18	5 + 7 + 7 + 9	7 + 7 + 7 + 24	-
-	7 + 7 + 9	12 + 12 + 24	5 + 7 + 7 + 12	7 + 7 + 9 + 9	-
-	-	12 + 18 + 18	5 + 7 + 7 + 18	7 + 7 + 9 + 12	-

Multi Zone Combination Charts

Now let's understand the term **Diversity**. Diversity is when the load in the conditioned space is not constant. For example the east side of a house has more direct sun and cooling load requirement in the morning and the west side has more direct sun and cooling load requirement in the afternoon.

A system sizing calculation that plans for diversity may size up to approximately 130% of indoor unit demand versus the outdoor unit's system capacity provided that planned operating demand throughout the day never exceeds 100% of system capacity. If there is no planned Diversity then the indoor unit demand should not exceed 100% of the outdoor unit capacity.

Therefore, a first step in sizing and selecting any multi-zone system is to understand the System Demand that the building requires before moving on to selecting Indoor unit combinations.

CU-5E36QBU-5									
2 Zones	3 Zones		4 Zones			5 Zones			
5+12	5+5+5	7+7+7	5+5+5+5	5+7+18+18	7+9+9+18	5+5+5+5+7	5+5+9+9+9	5+7+12+12+12	7+7+9+9+18
5+18	5+5+7	7+7+9	5+5+5+7	5+7+18+24	7+9+9+24	5+5+5+5+9	5+5+9+9+12	5+7+12+12+18	7+7+9+9+24
5+24	5+5+9	7+7+12	5+5+5+9	5+9+9+9	7+9+12+12	5+5+5+5+12	5+5+9+9+18	5+7+12+12+24	7+7+9+12+12
7+9	5+5+12	7+7+18	5+5+5+12	5+9+9+12	7+9+12+18	5+5+5+5+18	5+5+9+9+24	5+7+12+18+18	7+7+9+12+18
7+12	5+5+18	7+7+24	5+5+5+18	5+9+9+18	7+9+12+24	5+5+5+5+24	5+5+9+12+12	5+9+9+9+9	7+7+9+12+24
7+18	5+5+24	7+9+9	5+5+5+24	5+9+9+24	7+9+18+18	5+5+5+7+7	5+5+9+12+18	5+9+9+9+12	7+7+9+18+18
7+24	5+7+7	7+9+12	5+5+7+7	5+9+12+12	7+9+18+24	5+5+5+7+9	5+5+9+12+24	5+9+9+9+18	7+7+12+12+12
9+9	5+7+9	7+9+18	5+5+7+9	5+9+12+18	7+12+12+12	5+5+5+7+12	5+5+9+18+18	5+9+9+9+24	8+7+12+12+18
9+12	5+7+12	7+9+24	5+5+7+12	5+9+12+24	7+12+12+18	5+5+5+7+18	5+5+12+12+12	5+9+9+12+12	9+7+12+12+24
9+18	5+7+18	7+12+12	5+5+7+18	5+9+18+18	7+12+12+24	5+5+5+7+24	5+5+12+12+18	5+9+9+12+18	7+7+12+18+18
9+24	5+7+24	7+12+18	5+5+7+24	5+9+18+24	7+12+18+18	5+5+5+9+9	5+5+12+12+24	5+9+9+12+24	7+9+9+9+9
12+12	5+9+9	7+12+24	5+5+9+9	5+12+12+12	7+12+18+24	5+5+5+9+12	5+5+12+18+18	5+9+9+18+18	8+9+9+9+12
12+18	5+9+12	7+18+18	5+5+9+12	5+12+12+18	7+18+18+18	5+5+5+9+18	5+7+7+7+7	5+9+12+12+12	9+9+9+9+18
12+24	5+9+18	7+18+24	5+5+9+18	5+12+12+24	9+9+9+9	5+5+5+9+24	5+7+7+7+9	5+9+12+12+18	10+9+9+9+24
18+18	5+9+24	7+24+24	5+5+9+24	5+12+18+18	9+9+9+12	5+5+5+12+12	5+7+7+7+12	5+9+12+12+24	7+9+9+12+12
18+24	5+12+12	9+9+9	5+5+12+12	5+12+18+24	9+9+9+18	5+5+5+12+18	5+7+7+7+18	5+9+12+18+18	7+9+9+12+18
24+24	6+12+18	9+9+12	5+5+12+18	5+18+18+18	9+9+9+24	5+5+5+12+24	5+7+7+7+24	5+12+12+12+12	7+9+9+12+24
-	7+12+24	9+9+18	5+5+12+24	7+7+7+7	9+9+12+12	5+5+5+18+18	5+7+7+9+9	5+12+12+12+18	7+9+9+18+18
-	5+18+18	9+9+24	5+5+18+18	7+7+7+9	9+9+12+18	5+5+5+18+24	5+7+7+9+12	7+7+7+7+7	7+9+12+12+12
-	5+18+24	9+12+12	5+5+18+24	7+7+7+12	9+9+12+24	5+5+7+7+7	5+7+7+9+18	7+7+7+7+9	7+9+12+12+18
-	5+24+24	9+12+18	5+5+24+24	7+7+7+18	9+9+18+18	5+5+7+7+9	5+7+7+9+24	7+7+7+7+12	7+12+12+12+12
-	-	9+12+24	5+7+7+7	7+7+7+24	9+9+18+24	5+5+7+7+12	5+7+7+12+12	7+7+7+7+18	7+12+12+12+18
-	-	9+18+18	5+7+7+9	7+7+9+9	9+12+12+12	5+5+7+7+18	5+7+7+12+18	7+7+7+7+24	9+9+9+9+9
-	-	9+18+24	5+7+7+12	7+7+9+12	9+12+12+18	5+5+7+7+24	5+7+7+12+24	7+7+7+9+9	9+9+9+9+12
-	-	9+24+24	5+7+7+18	7+7+9+18	9+12+12+24	5+5+7+9+9	5+7+7+18+18	7+7+7+9+12	9+9+9+9+18
-	-	12+12+12	5+7+7+24	7+7+9+24	9+12+18+18	5+5+7+9+12	5+7+9+9+9	7+7+7+9+18	9+9+9+9+24
-	-	12+12+18	5+7+9+9	7+7+12+12	9+18+18+18	5+5+7+9+18	5+7+9+9+12	7+7+7+9+24	9+9+9+12+12
-	-	12+12+24	5+7+9+12	7+7+12+18	12+12+12+12	5+5+7+9+24	5+7+9+9+18	7+7+7+12+12	9+9+9+12+18
-	-	12+18+18	5+7+9+18	7+7+12+24	12+12+12+18	5+5+7+12+12	5+7+9+9+24	7+7+7+12+18	9+9+9+18+18
-	-	12+18+24	5+7+9+24	7+7+18+18	12+12+12+24	5+5+7+12+18	5+7+9+12+12	7+7+7+12+24	9+9+12+12+12
-	-	12+24+24	5+7+12+12	7+7+18+24	12+12+18+18	5+5+7+12+24	5+7+9+12+18	7+7+7+18+18	9+9+12+12+18
-	-	18+18+18	5+7+12+18	7+9+9+9	-	5+5+7+18+18	5+7+9+12+24	7+7+9+9+9	9+12+12+12+12
-	-	18+18+24	5+7+12+24	7+9+9+12	-	5+5+7+18+24	5+7+9+18+18	7+7+9+9+12	9+12+12+12+18
-	-	-	-	-	-	-	-	-	12+12+12+12+12