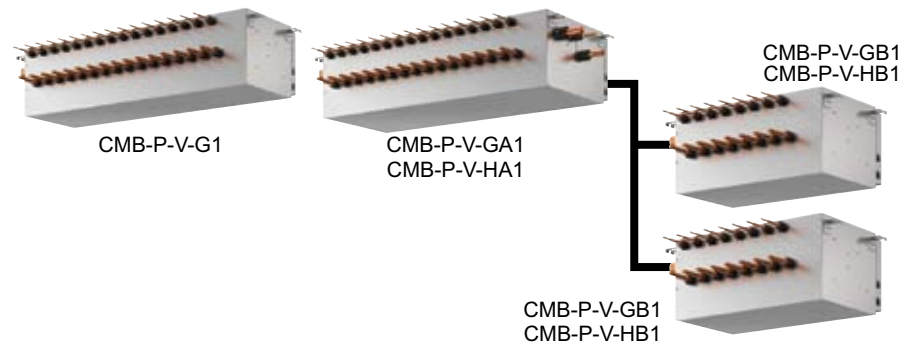


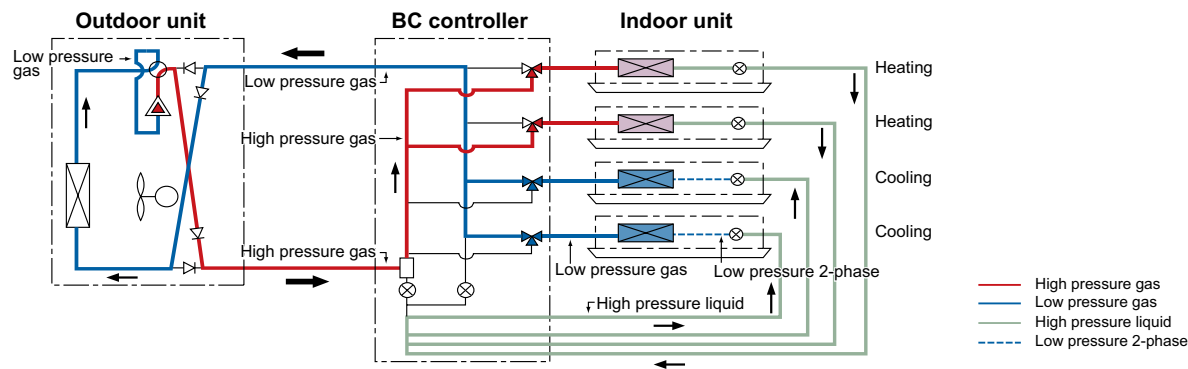
# BC CONTROLLER

## CMB-P-V-G1 CMB-P-V-GA1 CMB-P-V-HA1 CMB-P-V-GB1 CMB-P-V-HB1



### BC CONTROLLER

In many ways, the BC Controller is the technological heart of the CITY MULTI R2/WR2. It works in unison with the outdoor unit to provide simultaneous cooling and heating, something no other two-pipe system can do. The BC Controller is connected to the outdoor unit by two pipes and to each indoor unit by a series of two refrigerant pipes, depending on the indoor unit count. The BC Controller is required for all CITY MULTI R2-Series installations. It comes in 4, 5, 6, 8, 10, 13, and 16-branch options. The BC Controller you select depends on how many indoor units will be operated from each outdoor unit and your total capacity requirements.



### Specifications

Model name		CMB-P104V-G1	CMB-P105V-G1	CMB-P106V-G1	CMB-P108V-G1	CMB-P1010V-G1	CMB-P1013V-G1	CMB-P1016V-G1	
Number of branch		4	5	6	8	10	13	16	
Power source		1-phase 220/230/240V 50Hz/60Hz							
Power input	kW	50Hz	Cooling 0.067/0.076/0.085	0.082/0.093/0.104	0.097/0.110/0.123	0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312
		heating	0.030/0.034/0.038	0.038/0.043/0.048	0.045/0.051/0.057	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151
	60Hz	Cooling	0.054/0.061/0.067	0.066/0.074/0.082	0.078/0.088/0.097	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246
		heating	0.024/0.027/0.030	0.030/0.034/0.038	0.036/0.041/0.045	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119
Current	A	50Hz	Cooling 0.31/0.34/0.36	0.38/0.41/0.44	0.45/0.48/0.52	0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30
		heating	0.14/0.15/0.16	0.18/0.19/0.20	0.21/0.23/0.24	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63
	60Hz	Cooling	0.25/0.27/0.28	0.30/0.33/0.35	0.36/0.39/0.41	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03
		heating	0.11/0.12/0.13	0.14/0.15/0.16	0.17/0.18/0.19	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50
External finish		Galvanized steel plate (Lower part drain pan painting N1.5)							
Indoor unit capacity connectable to 1 branch		Model P80 or smaller (*Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)							
Connectable Outdoor unit ★		Refer to the combination chart of BC controller R2/WR2 series							
Height		mm 284							
Width		mm 648							
Depth		mm 432							
Refrigerant piping diameter	To outdoor unit	Connectable outdoor unit capacity							
		High pressure pipe	P200	P250, P300		P350			
	To indoor unit	Liquid pipe	Indoor unit Model 50 or smaller: ø6.35 brazed, Over 50: ø9.52 brazed (ø12.7 with optional joint pipe used.)						
		Gas pipe	Indoor unit Model 50 or smaller: ø12.7 brazed, Over 50: ø15.88 brazed (ø19.05 with optional joint pipe used.)						
To another BC controller		Total indoor unit capacity connected to this Sub BC controller							
Drain pipe		O.D. 32mm							
Net weight		kg 24	27	28	33	38	45	52	
Accessories		*Drain connection pipe (with flexible hose and insulation) *Reducer							

### Specifications

Model name		CMB-P108V-GA1	CMB-P1010V-GA1	CMB-P1013V-GA1	CMB-P1016V-GA1	CMB-P1016V-HA1	
Number of branch		8	10	13	16		
Power source		1-phase 220/230/240V 50Hz/60Hz					
Power input	kW	50Hz	Cooling 0.127/0.144/0.161	0.156/0.177/0.198	0.201/0.228/0.255	0.246/0.279/0.312	
		heating	0.060/0.068/0.076	0.075/0.085/0.095	0.097/0.110/0.123	0.119/0.135/0.151	
	60Hz	Cooling	0.102/0.115/0.127	0.126/0.141/0.156	0.162/0.182/0.201	0.198/0.222/0.246	
		heating	0.048/0.054/0.060	0.060/0.068/0.075	0.078/0.088/0.097	0.096/0.108/0.119	
Current	A	50Hz	Cooling 0.58/0.63/0.68	0.71/0.77/0.83	0.92/1.00/1.07	1.12/1.22/1.30	
		heating	0.28/0.30/0.32	0.35/0.37/0.40	0.45/0.48/0.52	0.55/0.59/0.63	
	60Hz	Cooling	0.47/0.50/0.53	0.58/0.62/0.65	0.74/0.80/0.84	0.90/0.97/1.03	
		heating	0.22/0.24/0.25	0.28/0.30/0.32	0.36/0.39/0.41	0.44/0.47/0.50	
External finish		Galvanized steel plate (Lower part drain pan painting N1.5)					
Indoor unit capacity connectable to 1 branch		Model P80 or smaller (*Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)					
Connectable Outdoor unit ★		Refer to the combination chart of BC controller R2/WR2 series					
Height		mm 289					
Width		mm 1,110					
Depth		mm 520					
Refrigerant piping diameter	To outdoor unit	Connectable outdoor unit capacity					
		High pressure pipe	P200	P250,300	P350	P400-P500	P550-P650
	To indoor unit	Liquid pipe	Indoor unit Model 50 or smaller: ø6.35 brazed, Over 50: ø9.52 brazed (ø12.7 with optional joint pipe used.)				
		Gas pipe	Indoor unit Model 50 or smaller: ø12.7 brazed, Over 50: ø15.88 brazed (ø19.05 with optional joint pipe used.)				
To another BC controller		Total indoor unit capacity connected to this Sub BC controller					
Drain pipe		O.D. 32mm					
Net weight		kg 43	48	55	62	69	
Accessories		*Drain connection pipe (with flexible hose and insulation) *Reducer					

Model name		CMB-P104V-GB1	CMB-P108V-GB1	CMB-P1016V-HB1	
Number of branch		4	8	16	
Power source		1-phase 220/230/240V 50Hz/60Hz			
Power input	kW	50Hz	Cooling 0.060/0.068/0.076	0.119/0.135/0.151	0.237/0.269/0.301
		heating	0.030/0.034/0.038	0.060/0.068/0.076	0.119/0.135/0.151
	60Hz	Cooling	0.048/0.054/0.060	0.096/0.108/0.119	0.192/0.216/0.237
		heating	0.024/0.027/0.030	0.048/0.054/0.060	0.096/0.108/0.120
Current	A	50Hz	Cooling 0.28/0.30/0.32	0.55/0.59/0.63	1.08/1.17/1.26
		heating	0.14/0.15/0.16	0.28/0.30/0.32	0.55/0.59/0.63
	60Hz	Cooling	0.22/0.24/0.25	0.44/0.47/0.50	0.88/0.94/0.99
		heating	0.11/0.12/0.13	0.22/0.24/0.25	0.44/0.47/0.50
External finish		Galvanized steel plate (Lower part drain pan painting N1.5)			
Indoor unit capacity connectable to 1 branch		Model P80 or smaller (*Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)			
Connectable Outdoor unit ★		Refer to the combination chart of BC controller R2/WR2 series			
Height		mm 284			
Width		mm 648			
Depth		mm 432			
Refrigerant piping diameter	To Main BC controller	Total indoor unit capacity connected this Sub BC controller			
		High pressure pipe	~P200	~P200, P201~P350	~P200, P201~P450
	To indoor unit	Liquid pipe	Indoor unit Model 50 or smaller: ø6.35 brazed, Over 50: ø9.52 brazed (ø12.7 with optional joint pipe used.)		
		Gas pipe	Indoor unit Model 50 or smaller: ø12.7 brazed, Over 50: ø15.88 brazed (ø19.05 with optional joint pipe used.)		
Drain pipe		O.D. 32mm			
Net weight		kg 22	32	55	
Accessories		*Drain connection pipe (with flexible hose and insulation) *Reducer			

#### ★ Combination chart of BC Controller for R2 series

	P200,250,300,350	P400-650	P700-900
CMB-P V-G1	○	X	X
CMB-P V-GA1	○	○	X
CMB-P V-HA1	X	X	○
CMB-P V-GB1	○	○	○
CMB-P V-HB1	○	○	○

#### ★ Combination chart of BC Controller for WR2 series

	P200,250,300	P400,450,500,550,600
CMB-P V-G1	○	X
CMB-P V-GA1	○	○
CMB-P V-HA1	X	X
CMB-P V-GB1	○	○
CMB-P V-HB1	○	○

#### Notes:

- The equipment is for R410A refrigerant.
- Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5 m away from any indoor units.)
- Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)
- When using an outdoor unit - 28HP (P700) or more, use CMB-P1016V-HA1.
- For sub BC controller CMB-P-B-GB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P350 unit. For sub BC controller CMB-P-1016V-HB1 the connectable indoor unit capacities may sum to equal that of a P350 unit or less. However, if two sub controllers are used the TOTAL sum of connectable units connected to BOTH sub controllers must also not exceed that a P450 unit.