

## **HBC CONTROLLER**

Model			8 Port					16 Port				
			CMB-WP108V-GA1					CMB-WP1016V-GA1				
Number of Branch			8					16				
Power Source			1-phase 220-230-240 V					1-phase 220-230-240 V				
			50 Hz			60 Hz			50 Hz 60 Hz			
Power Input (220/230/240)	Cooling	kW	0.45	0.45/0.46/0.47		0.45/0.46/0.47		0.45/0.46/0.47		0.45/0.46/0.47		
	Heating	kW	0.45/0.46/0.47			0.45/0.46/0.47		0.45	/0.46/0.47	· · · · · · · · · · · · · · · · · · ·		0.47
Current Input	Cooling	Α	2.89/2.83/2.79			2.89/2.83/2.79		2.89	/2.83/2.79	2.89/2.83/2.79		2.79
(220/230/240)	Heating	Α	2.89/2.83/2.79			2.89/2.83/2.79		2.89	89/2.83/2.79 2.89/2.83/2.7		2.79	
Sound Pressure Level (Measured in Anechoic Room)		dBA	41				41					
Applicable Temperature Range of Installation Site		°C (D.B.)	0~32				0~32					
External Finish			Galvanised steel plate (Lower part drain pan: pre-coated galvanised sheets + powder coating)					Galvanised steel plate (Lower part drain pan: pre-coated galvanised sheets + powder coating)				
Connectable Outdoor/Heat Source Unit			PURY-P200~500YLM-A(1)(-BS)/PURY-EP200~500YLM-A1(-BS)/PQRY-P200~500YLM-A					PURY-P200~500YLM-A(1)(-BS)/PURY-EP200~500YLM-A1(-BS)/PQRY-P200~500YLM-A				
Indoor Unit Capacity Connectable to 1 Branch			Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81)				Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81)					
External Dimension H x W x D mr		mm	300 x 1,520 x 630					300 x 1,800 x 630				
		in.	11-13/16 x 59-7/8 x 24-13/16				11-13/16 x 70-7/8 x 24-13/16					
Refrigerant	To Outdoor/He	at	Connectable outdoor unit capacity				Connectable outdoor unit capacity					
Piping Diameter	Source Unit		To P200	To P250/300	To P350	To P400 for each	To P450/500 for each	To P200	To P250/300	To P350	To P400 for each	To P450/500 for each
	High Press. Pipe (O.D.)	mm (in.)	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed	19.05 (3/4) Brazed	15.88 (5/8) Brazed	19.05 (3/4) Brazed
	Low Press. Pipe (O.D.)	mm (in.)	19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	22.2 (7/8) Brazed
Water Piping Diameter	To Indoor Unit											
	Inlet Pipe (I.D.)	mm (in.)	20 (3					20 (3/4)				
	Outlet Pipe (I.D.)	mm (in.)	20 (3/4)					20 (3/4)				
Field Drain Pipe Size mm (in.)			O.D. 32 (1-1/4)				O.D. 32 (1-1/4)					
Net Weight kg (lbs)		86 (190) [96 (212) with water]				98 (217) [111 (245) with water]						
Standard Attachment Accessory			Drain connection pipe (with flexible hose and insulation)					Drain connection pipe (with flexible hose and insulation)				
Optional Parts					-					_		

Note: When P400/P450/500 outdoor is utilised 2x master HBC's must be installed.

## Notes

- Works not included:
  - Installation/foundation work, electrical connection work, duct work, insulation work, power source switch, and other items are not specified in this specifications.
- 2. The equipment is for R410A refrigerant.
- 3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbours.
  - (For use in quiet environments with low background noise, position the HBC CONTROLLER at least 5m away from any indoor units.)
- 4. Please install the HBC controller in a place where noise will not be an issue.
- 5. Please attach an expansion vessel (field supply).
- 6. Please use copper or plastic pipes for the water circuit. Do not use steel or stainless steel pipework. Furthermore, when using copper pipework, use a non-oxidative brazing method.
- Oxidation of the pipework will reduce the pump life.
- 7. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 8. Please install an air purge valve where air will gather in the water circuit.
- 9. Please install a pressure reducing valve and a strainer on the water supply to the HBC controller.
- 10. Please refer to the databook or the installation manual for the specified water quality.
- 11. This unit is not designed for outside installations.
- 12. Please always make water circulate or pull out the circulation water completely when not using it. \*Please do not use it as a drinking water.
- 13. Please do not use ground water and well water.
- 14. When installing the HBC unit in an environment which may drop below 0 °C, please add anti-freeze to the circulating water. (Refer to the data book and the installation manual).



Model			8 P		16 Port CMB-WP1016V-GB1			
			CMB-WP					
Number of Branch				3	16			
Power Source				0-230-240 V	1-phase 220-230-240 V			
			50 Hz	60 Hz	50 Hz	60 Hz		
Power Input (220/230/240)	Cooling	kW	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01		
	Heating	kW	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01	0.01/0.01/0.01		
Current Input (220/230/240)	Cooling	Α	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05		
	Heating	Α	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05	0.05/0.05/0.05		
Sound Pressure Level (Measured in Anechoic Room)		dBA	-	-	-			
Applicable Temperature Range of Installation Site		°C (D.B.)	0~	32	0~32			
External Finish			Galvanised steel plate pre-coated galvanised s	(Lower part drain pan: heets + powder coating)	Galvanised steel plate (Lower part drain pan: pre-coated galvanised sheets + powder coating)			
Connectable Outdoor/Heat Source Unit			-	-	-			
Indoor Unit Capacity Connectable to 1 Branch			Model P80 or smaller (Use of 2 branches when the total	pptional joint pipe combining unit capacity exceeds P81)	Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P81)			
External Dimension H x W x D mr		mm	300 x 1,5	520 x 630	300 x 1,520 x 630			
		in.	11-13/16 x 59-	7/8 x 24-13/16	11-13/16 x 70-7/8 x 24-13/16			
Water Piping	To Main HBC Controller							
Diameter	Inlet Pipe (I.D.)	mm (in.)	20 (	3/4)	20 (3/4)			
	Outlet Pipe (I.D.)	mm (in.)	20 (	3/4)	20 (3/4)			
	To Indoor Unit							
	Inlet Pipe (I.D.)	mm (in.)	20 (	3/4)	20 (3/4)			
	Outlet Pipe (I.D.)	mm (in.)	20 (	3/4)	20 (3/4)			
Field Drain Pipe Size mm (in.		O.D. 32	2 (1-1/4)	O.D. 32 (1-1/4)				
Net Weight kg (lbs)		44 (98) [49 (10	· /	53 (117) [62 (137) with water]				
Standard Attachment Accessory			1 / 1	flexible hose and insulation)	( / ) ( / )			
Optional Parts			-		_			

## Notes

- Works not included:
  - Installation/foundation work, electrical connection work, duct work, insulation work, power source switch, and other items are not specified in this specifications.
- 2. The equipment is for water.
- 3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbours.
  - (For use in quiet environments with low background noise, position the Sub HBC CONTROLLER at least 5m away from any indoor units.)
- 4. Please install the Sub HBC controller in a place where noise will not be an issue.
- 5. Please attach an expansion vessel (field supply).
- 6. Please use copper or plastic pipes for the water circuit. Do not use steel or stainless steel pipework. Furthermore, when using copper pipework, use a non-oxidative brazing method.
- Oxidation of the pipework will reduce the pump life.
- 7. When brazing the pipes, be sure to braze after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 8. Please install an air purge valve where air will gather in the water circuit.
- 9. Please refer to the databook or the installation manual for the specified water quality.
- 10. This unit is not designed for outside installations.
- 11. Please always make water circulate or pull out the circulation water completely when not using it.
  - \*Please do not use it as a drinking water.
- 12. Please do not use ground water and well water.
- 13. When installing the Sub HBC unit in an environment which may drop below 0°C, please add anti-freeze to the circulating water. (Refer to the data book and the installation manual).
- 14. Can't use singularly. (MAIN HBC CONTROLLER is necessary.)