

Submittal Data: CMB-WP1016NU-AA

Main BC Controller



Job Name:	Location:		
Schedule Reference:	Submitted By:		
Submitted To:	Reference:	Approval:	Construction:
Engineer:	Date:	Application:	



Image provided for reference purposes only

				illiage pro	ovided for refer	chec purpos	es offiny					
Specification	1:											
Number of branch						16						
Power source						1-phase 208/230 V 60 Hz						
MCA / MOP A						3.78 / 15						
Power input Cooling				kW	0.41-0.49							
		(208-230) Heating			kW		0.41-0.49					
Current input Cooling					Α	2.79-3.02						
·		(208-230)			Α		2.79-3.02					
Sound pressur	e level (measur	ed in anechoic	room) *16		dB <a>	43						
External finish						Galvanized steel plate - (Drain pan: Pre-coated galvanized sheets + powder coating)						
Connectable outdoor/heat source unit model						PURY- (E)P72~168Y/TNU-A (-BS), PURY-P72~144ZKMU-A (-BS)						
						PQRY-P72~168Y/T/ZLMU-A1						
Indoor unit oo		blo to 1 branch				Model WL30 or smaller						
Indoor unit capacity connectable to 1 branch						(Use optional joint pipe combining 2 branches when the total unit capacity exceeds WL30.)						
External dimension H v W v D					in.	11-13/16 x 70-7/8 x 24-13/16						
External dimension H × W × D mm				mm	300 x 1,800 x 630							
Refrigerant *17	frigerant *17					Connectable outdoor/heat source unit capacity						
piping	10 0010001/1	To outdoor/heat source unit				(E	(E)P72 (E)P96		(E)P120	(E)P144~ (E)P168		
diameter		High press. Pipe			in. (mm) O.D.	5/8 (15.88)		3/4 (19.05)	3/4 (19.05)	7/8 (22.2)		
	Low press. Pi	Low press. Pipe			in. (mm) O.D.	3/4 (19.05)		7/8 (22.2)	1-1/8 (28.58)	1-1/8 (28.58)		
	To Main-HBC	To Main-HBC controller			in. (mm) O.D.	5/8 (15.88)						
Water piping o												
	Connection	To Sub-HBC	controller	Inlet/Outlet	mm O.D.	22						
	size	To Indoor un	it	Inlet/Outlet	mm O.D.	22						
	Field pipe			Total down-st	eam	WL06-36	WL37-72	WL73-108	WL109-144	WL145-180	WL181-200	
	size	To Sub-HBC	controller	indoor unit ca	pacity		-					
		To sub fibe (one one	Inlet/Outlet	mm I.D. (Min)	20 (1)	25.8 (1-1/4)	30 (1-1/4)	33.3 (1-1/2)	36.2 (1-1/2)	36.8 (1-1/2)	
				1	` ′	or more	or more	or more	or more	or more	or more	
					Total down-steam		WL06-18			WL19-48		
		To Indoor un	it	indoor unit ca	 	I.D. (Min) 20 (1) or more						
				Inlet/Outlet	mm I.D. (Min)				30 (1-1/4) or more			
Field drain pipe size					in.	3/4 NPT						
Net weight				lbs (kg)	217 (98) [245 (111) with water]							

Notes:

- 1. Installation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 2.This unit is for R410A refrigerant.
- 3.Install HBC 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 HBC controller at least 5 m away from any indoor units.)
- 4.Please install the HBC controller in a place where noise will not be an issue.
- Please install an expansion tank (field supply).
- 6.Please use copper or plastic pipes for the water circuit. Please follow manufacturer recommendation for piping. Do not use steel or stainless steel pipework. Plus, when using copper pipe-work use a non-oxidative brazing method.Oxidation of the 7.Please install an air purge valve where air will gather in the water circuit.
- 8. Please install a pressure reducing valve and a strainer on the water supply to the HBC controller.
- 9.Please refer to the manuals for required water quality.
- 10. This unit is not designed for outdoor 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.The unit cannot be used when the outdoor temperature is outside the guaranteed operation range: 1f the unit is used in such condition, the unit may not go into the Thermo-ON mode. Guaranteed operation range: 23 to 126°F 13.Application should be restricted to comfort heating and cooling only; process/equipment heating and cooling applications are not recommended.
- 14.The ambient relative humidity of the HBC controller needs to be kept below 80%.
- 15. Sound pressure level differs depending on the connected outdoor/heat source unit capacity or operation condition.
- 16. The sound pressure level values were obtained in an anechoic room. Actual sound pressure level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
- 17. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.
- 18. All electrical work shall comply with National (CEC) and local codes and regulations.
- 19. Mitsubishi Electric Sales Canada Inc. (MESCA) supports the use of only MESCA supplied and approved components and accessories for proper functioning of the unit(s). Always consult relevant technical product documentation at mitsubishitechinfo.ca, your local distributor or MESCA BC sales office as applicable. Use of non MESCA supported components and accessories will affect warranty coverage. MESCA recommends (A) consideration of all applicable design and application parameters and requirements specific to any project; and (B) implementation of any countermeasures needed to address those parameters and requirements, including the provision of antifreeze solution in water based systems used in conjunction with ducted indoor units.
- 20. Should any person change this document in any manner whatsoever without MESCA's written permission, the document shall be of no force and effect and any change shall be deemed to be a representation and warranty made by that person and not MESCA. That person, and not MESCA, shall assume full responsibility for the consequences of such changes. MESCA assumes no responsibility for any consequences in such cases.

(700)(21-9/16)

(4/6-71)024





BC Controller Outline and Dimensions

Note1. Suspension bolt(ø10), washer(M10), and nut(M10)

(ø22.2(7/8) Power source wiring)

Knockout hole
(ø22.2(7/8) Transmission wiring)

Unit: mm (in.)

Prepare in the field.

2. Take notice of service space as follows.

2. Take notice of service space as follows.

(Please give attention not to occupy service space by eliting ducts and pipes through.)

3. Refer to the DATA BOOK about connection pipe and drain pipe diameter size.

4. Refer to the installation Manual for insulation of connection pipe and drain ping.

5. Refer to the Installation Manual for installation of drain pan.

6. Do not place the HBC controller directly on the floor because the drain pan needs to be installed in a titled position.

(1-3/16)

[1/2]

View A

Control box

(Lifting bolt pitch) 1659(65-3/8)

(91/6-8)

300(11-13/16)

(Lifting bolt pitch) 543(21-7/16)

450(17-3/4) (11-13/16) 450(17-3/4) (11-13/16)

<u>E6</u>(91/11-E)

£6(91/11-E)

(1-3/4)44 (4-11/16)118

(1/8)3

(91/11-E)

31(1-1/4)

43(1-3/4)

21(2-1/16) 240(21-2/16)

43(1-3/4)

272(10-3/4) 286(11-5/16)

216(8-9/16) 224(8-7/8)

(91/6)71

Cutting point (35/17-1) Detail of Z section Detail of Y section

Connection pipe from SUB HBC (#22.0(7/8)(use attachment pipe) Connection pipe to SUB HBC Ø22.0(7/8)(use attachment pipe) [Field supply]

(8/1-9) 491

70(2-13/16)×15=1050(41-3/8)

70 (2-13/16)

191/9-8

(91/1-9)

(21/61-01)472

280(11-1/16)

112(16-1/4)

(High pressure)
Connection pipe of outdoor/heat source unit ø19.05(3/4)

A19.05(3/4)

Approximation outdoor/heat source on the outdoor/heat source on the outdoor/heat source outd

Connection pipe of outdoor/heat source unit ø22.2(7/8)<

Connection pipe from indoor unit Ø22.0(7/8)(use attachment pipe) [Field supply]

1800(70-7/8) 1671(65-13/16) 1601(63-1/16)

100 (3-15/16)

Service space

Service space

(91/6-7) (9) 121

Connection pipe from SUB HBC 022.0(7/8)(use attachment pipe) Field supply) Connection pipe to SUB HBC 022.0(7/8)(use attachment pipe) Field supply]

70(2-13/16)×15=1050(41-3/8)

447(17-5/8)

3/4 NPT screw (Emergency draining)

3/4 NPT screw

70(2-13/16)

Connection pipe to indoor unit Ø22.0(7/8)(use attachment pipe) [Field supply]

Water pipe(Inlet) @22.0(7/8)(use attachment pipe) [Field supply] Water pipe(EXP.Tank) ø22.0(7/8)(use attachment pipe) [Field supply]

Connection pipe from MAIN HBC ø15.88(11/16)</ri>

ELECTRIC



Changes for the Better