MITSUBISHI ELECTRIC

Changes for the Better

for a greener tomorrow

AIR CONDITIONING SYSTEMS

HYBRID CITY MULTI

DATA BOOK

MODEL

CMB-WM-V-AA
CMB-WM-V-AB

CMB-WM-V-AA, CMB-WM-V-AB (for YNW/YLM-Series)

Model name			CMB-WM108V-AA				
Number of branch			8				
Power source			1-phase 220-230-240 V				
			50 Hz				60 Hz
Power input	Cooling	kW	0.45/0.46/0.47				0.45/0.46/0.47
(220/230/240)	Heating	kW	0.45/0.46/0.47				0.45/0.46/0.47
Current input	Cooling	A	2.89/2.83/2.79				2.89/2.83/2.79
(220/230/240)	Heating	A	2.89/2.83/2.79				2.89/2.83/2.79
Sound pressure level (measured in anechoice room)		dB <A>	41				
Applicable temperature range of installation site		°C (D.B.)	0~32				
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)				
Connectable outdoor/heat source unit			PURY-P200~500YNW-A(-BS)/PURY-EP200~500YNW-A(-BS) PURY-M200~300YNW-A(-BS)/PURY-EM200~300YNW-A(-BS) PURY-P200~500YLM-A(1)(-BS)/PURY-EP200~500YLM-A1(-BS)/PQRY-P200~500YLM-A2/A1				
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81)				
External dimension H x W x D		mm	300 x 1,520 x 630				
		in.	11-13/16 x 59-7/8 x 24-13/16				
Refrigerant piping diameter	To outdoor/heat source unit		Connectable outdoor/heat source unit capacity				
			To P200 To M300	To P250/300	To P350	To P400 for each	To P450/500 for each
	High press. Pipe	mm (in.) O.D.	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	mm (in.) O.D.	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	mm (in.) I.D.	20 (3/4)				
	Outlet Pipe	mm (in.) I.D.	20 (3/4)				
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)				
Net weight		kg (lbs)	86 (190) [96 (212) with water]				
Standard attachment	Document		–				
	Accessory		Drain Connection pipe (with flexible hose and insulation)				
Optional parts			–				

Note

1.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/R32 refrigerant.

3.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 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.

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 antifreeze to the circulating water.
(Refer to the databook and the installation manual).

15.R32 is flammable, and certain restrictions apply to the installation of units.
When installing new units, moving the existing units, or changing the layout of the room,
ensure that installation restrictions are observed.
For detail, refer to the section in the Databook on installation restrictions.

1. SPECIFICATIONS

Model name			**CMB-WM1016V-AA**				
Number of branch			16				
Power source			1-phase 220-230-240 V				
			50 Hz	60 Hz			
Power input	Cooling	kW	0.45/0.46/0.47	0.45/0.46/0.47			
(220/230/240)	Heating	kW	0.45/0.46/0.47	0.45/0.46/0.47			
Current input	Cooling	A	2.89/2.83/2.79	2.89/2.83/2.79			
(220/230/240)	Heating	A	2.89/2.83/2.79	2.89/2.83/2.79			
Sound pressure level (measured in anechoice room)		dB <A>	41				
Applicable temperature range of installation site		°C (D.B.)	0~32				
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)				
Connectable outdoor/heat source unit			PURY-P200~500YNW-A(-BS)/PURY-EP200~500YNW-A(-BS) PURY-M200~300YNW-A(-BS)/PURY-EM200~300YNW-A(-BS) PURY-P200~500YLM-A(1)(-BS)/PURY-EP200~500YLM-A1(-BS)/PQRY-P200~500YLM-A2/A1				
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81)				
External dimension H x W x D		mm	300 x 1,800 x 630				
		in.	11-13/16 x 70-7/8 x 24-13/16				
Refrigerant piping diameter	To outdoor/heat source unit		Connectable outdoor/heat source unit capacity				
			To P200 To M300	To P250/300	To P350	To P400 for each	To P450/500 for each
	High press. Pipe	mm (in.) O.D.	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	mm (in.) O.D.	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	mm (in.) I.D.	20 (3/4)				
	Outlet Pipe	mm (in.) I.D.	20 (3/4)				
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)				
Net weight		kg (lbs)	98 (217) [111 (245) with water]				
Standard attachment	Document		–				
	Accessory		Drain Connection pipe (with flexible hose and insulation)				
Optional parts			–				

Note

1.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/R32 refrigerant.

3.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 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.

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 antifreeze to the circulating water.
(Refer to the databook and the installation manual).

15.R32 is flammable, and certain restrictions apply to the installation of units.
When installing new units, moving the existing units, or changing the layout of the room,
ensure that installation restrictions are observed.
For detail, refer to the section in the Databook on installation restrictions.

1. SPECIFICATIONS

Model name			CMB-WM108V-AB				
Number of branch			8				
Power source			1-phase 220-230-240 V				
			50 Hz			60 Hz	
Power input	Cooling	kW	0.01/0.01/0.01			0.01/0.01/0.01	
(220/230/240)	Heating	kW	0.01/0.01/0.01			0.01/0.01/0.01	
Current input	Cooling	A	0.05/0.05/0.05			0.05/0.05/0.05	
(220/230/240)	Heating	A	0.05/0.05/0.05			0.05/0.05/0.05	
Sound pressure level (measured in anechoice room)		dB <A>	–				
Applicable temperature range of installation site		°C (D.B.)	0~32				
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)				
Connectable outdoor/heat source unit			–				
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81)				
External dimension H x W x D		mm	300 x 1,520 x 630				
		in.	11-13/16 x 59-7/8 x 24-13/16				
Refrigerant piping diameter	To outdoor/heat source unit		Connectable outdoor/heat source unit capacity				
			–	–	–	–	–
	High press. Pipe	mm (in.) O.D.	–	–	–	–	–
	Low press. Pipe	mm (in.) O.D.	–	–	–	–	–
Water piping diameter	To Indoor unit						
	Inlet Pipe	mm (in.) I.D.	20 (3/4)				
	Outlet Pipe	mm (in.) I.D.	20 (3/4)				
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)				
Net weight		kg (lbs)	44 (98) [49 (109) with water]				
Standard attachment	Document		–				
	Accessory		Drain Connection pipe (with flexible hose and insulation)				
Optional parts			–				

Note

1.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 neighbors.
(For use in quiet environments with low background noise, position the Sub HBC CONTROLLER at least 5 m 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 antifreeze to the circulating water.
(Refer to the databook and the installation manual).

14.Can't use singleness. (MAIN HBC CONTROLLER is necessary)

Model name			CMB-WM1016V-AB				
Number of branch			16				
Power source			1-phase 220-230-240 V				
			50 Hz			60 Hz	
Power input	Cooling	kW	0.01/0.01/0.01			0.01/0.01/0.01	
(220/230/240)	Heating	kW	0.01/0.01/0.01			0.01/0.01/0.01	
Current input	Cooling	A	0.05/0.05/0.05			0.05/0.05/0.05	
(220/230/240)	Heating	A	0.05/0.05/0.05			0.05/0.05/0.05	
Sound pressure level (measured in anechoice room)		dB <A>	–				
Applicable temperature range of installation site		°C (D.B.)	0~32				
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)				
Connectable outdoor/heat source unit			–				
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds P81)				
External dimension H x W x D		mm	300 x 1,520 x 630				
		in.	11-13/16 x 59-7/8 x 24-13/16				
Refrigerant piping diameter	To outdoor/heat source unit		Connectable outdoor/heat source unit capacity				
			–	–	–	–	–
	High press. Pipe	mm (in.) O.D.	–	–	–	–	–
	Low press. Pipe	mm (in.) O.D.	–	–	–	–	–
Water piping diameter	To Indoor unit						
	Inlet Pipe	mm (in.) I.D.	20 (3/4)				
	Outlet Pipe	mm (in.) I.D.	20 (3/4)				
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)				
Net weight		kg (lbs)	53 (117) [62 (137) with water]				
Standard attachment	Document		–				
	Accessory		Drain Connection pipe (with flexible hose and insulation)				
Optional parts			–				

Note

1.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 neighbors.
(For use in quiet environments with low background noise, position the Sub HBC CONTROLLER at least 5 m 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.

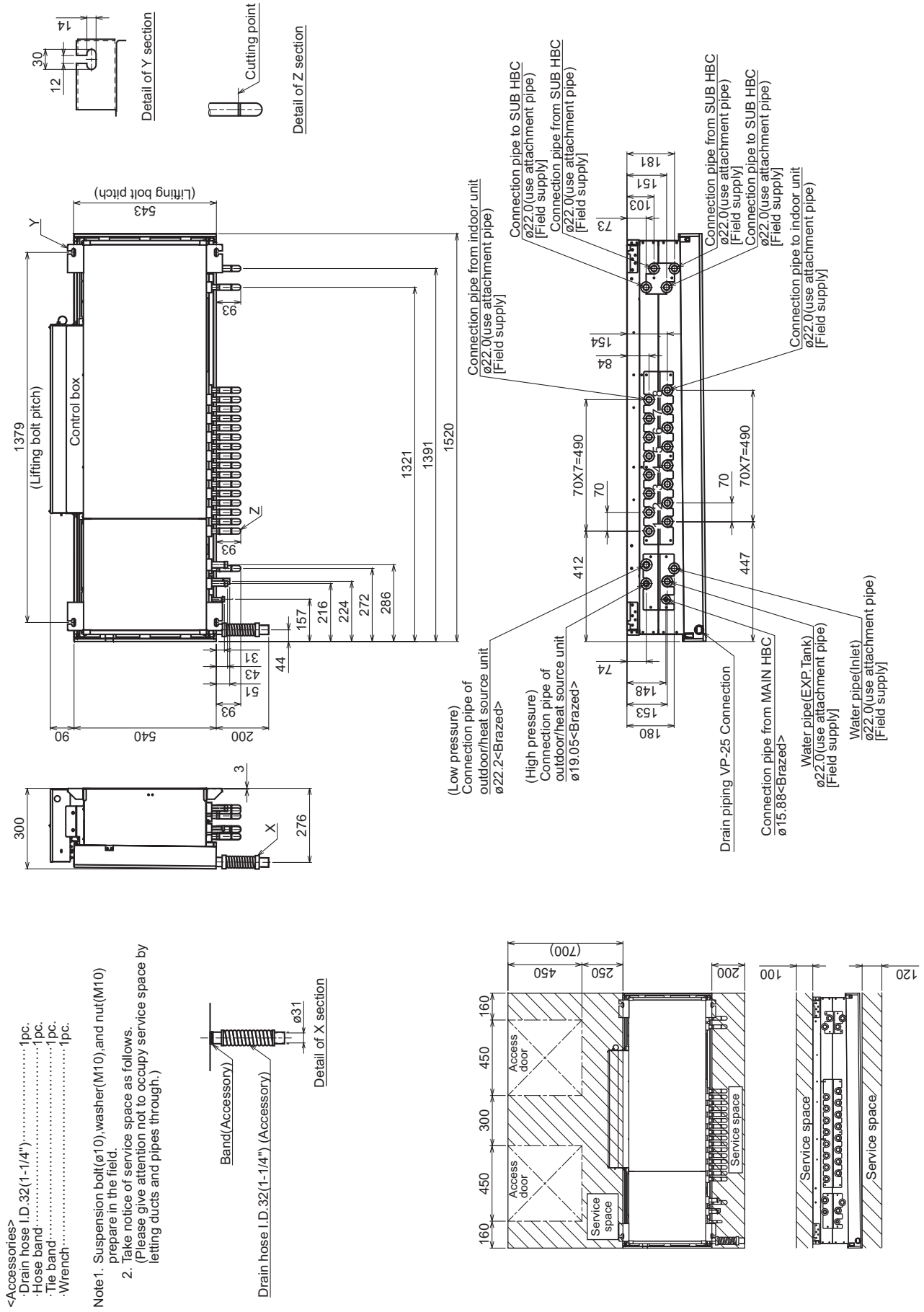
13.When installing the Sub HBC unit in an environment which may drop below 0 °C, please add antifreeze to the circulating water.
(Refer to the databook and the installation manual).

14.Can't use singleness. (MAIN HBC CONTROLLER is necessary)

HBC controller

CMB-WM108V-AA

Unit : mm



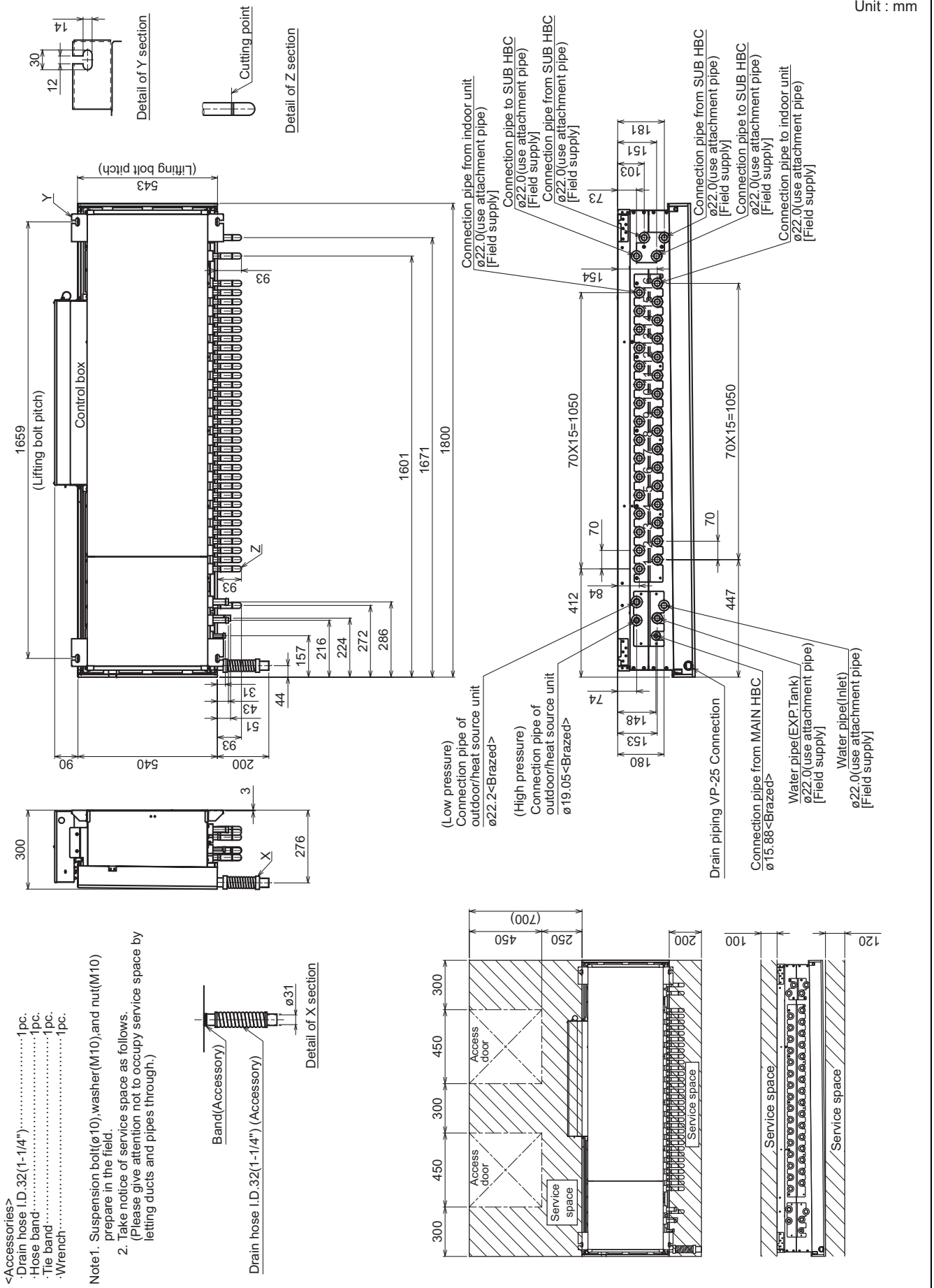
<Accessories>
·Drain hose I.D.32(1-1/4")……1pc.
·Hose band……1pc.
·Tie band……1pc.
·Wrench……1pc.

Note1. Suspension bolt(ø10),washer(M10),and nut(M10) prepare in the field.
2. Take notice of service space as follows.
(Please give attention not to occupy service space by letting ducts and pipes through.)

Band(Accessory)
Drain hose I.D.32(1-1/4") (Accessory)
ø31
Detail of X section

CMB-WM1016V-AA

Unit : mm



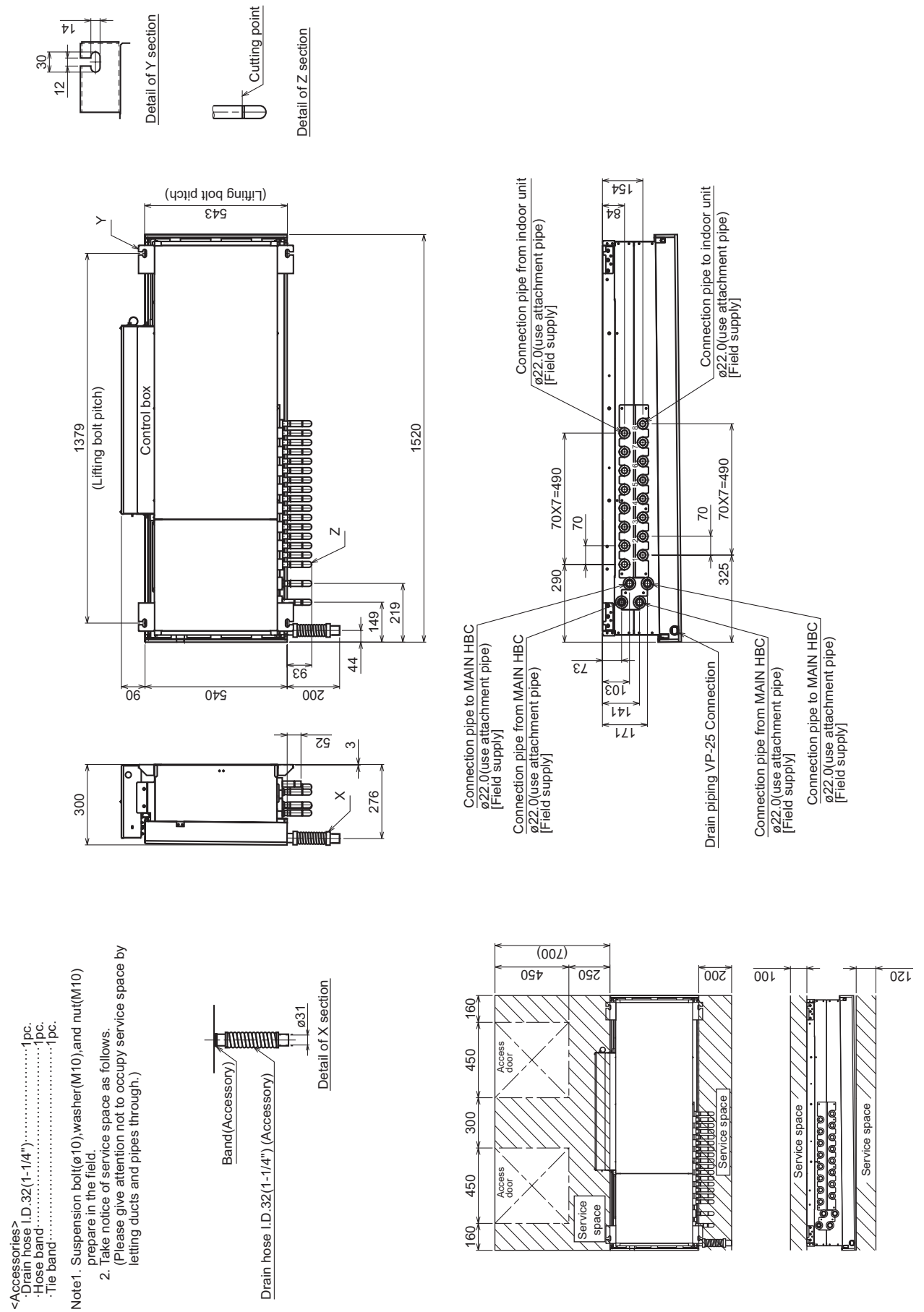
<Accessories>
·Drain hose I.D.32(1-1/4")……1pc.
·Hose band……1pc.
·Tie band……1pc.
·Wrench……1pc.

Note1. Suspension bolt(ø10),washer(M10),and nut(M10) prepare in the field.
2. Take notice of service space as follows.
(Please give attention not to occupy service space by letting ducts and pipes through.)

HBC controller

CMB-WM108V-AB

Unit : mm

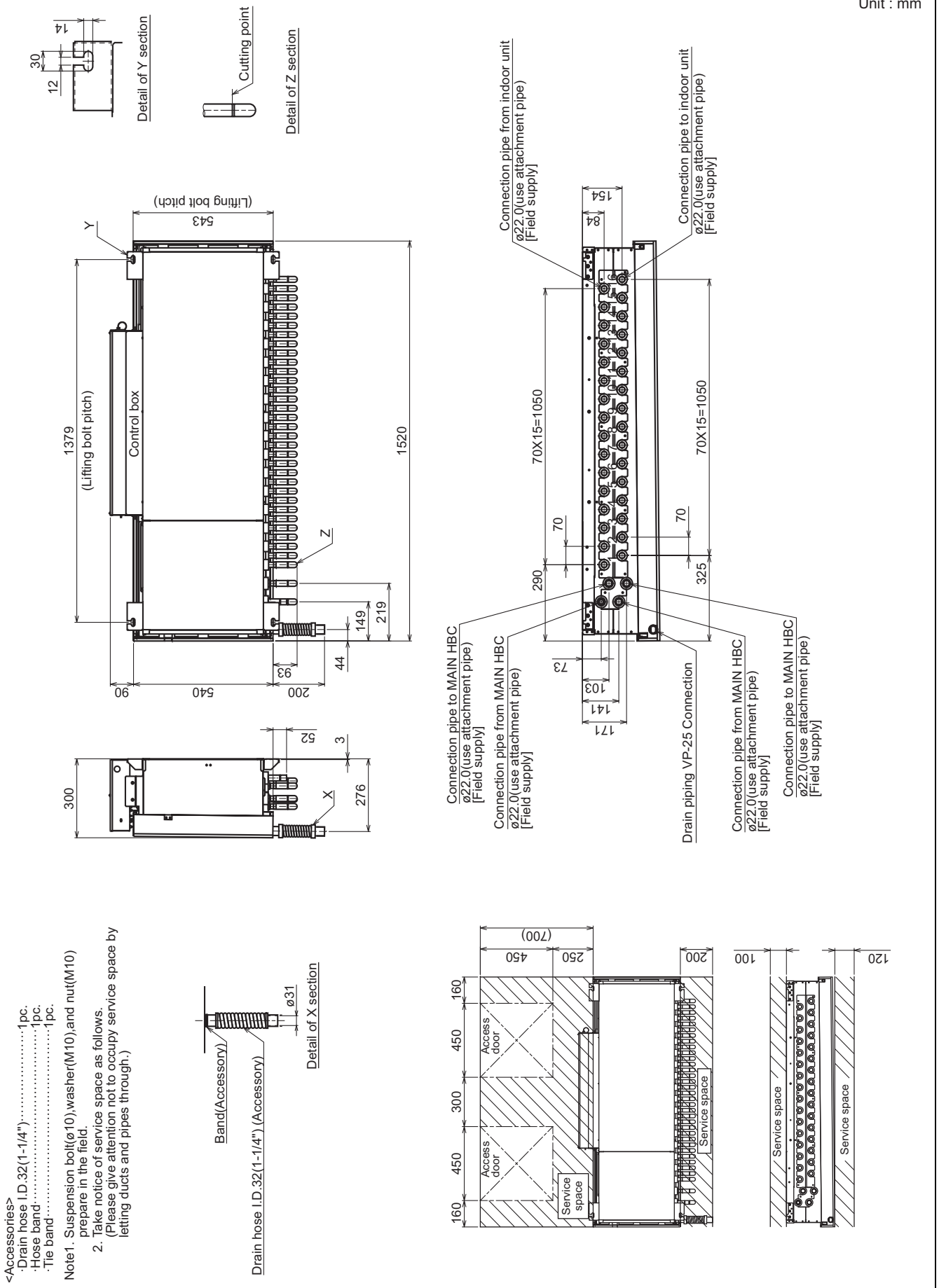


<Accessories>
·Drain hose I.D.32(1-1/4")·····1pc.
·Hose band·····1pc.
·Tie band·····1pc.

Note1. Suspension bolt(ø10),washer(M10),and nut(M10) prepare in the field.
2. Take notice of service space as follows.
(Please give attention not to occupy service space by letting ducts and pipes through.)

CMB-WM1016V-AB

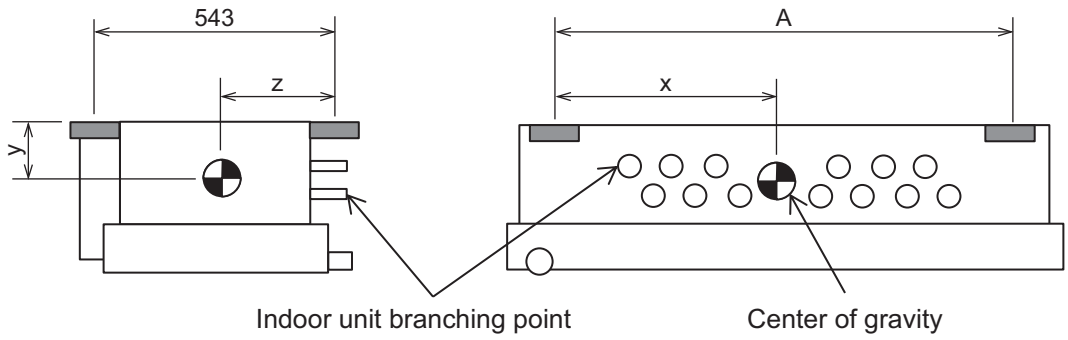
Unit : mm



<Accessories>
·Drain hose I.D.32(1-1/4")·····1pc.
·Hose band·····1pc.
·Tie band·····1pc.

Note1. Suspension bolt(ø10),washer(M10),and nut(M10) prepare in the field.
2. Take notice of service space as follows.
(Please give attention not to occupy service space by letting ducts and pipes through.)

CMB-WM108, 1016V-AA
CMB-WM108, 1016V-AB



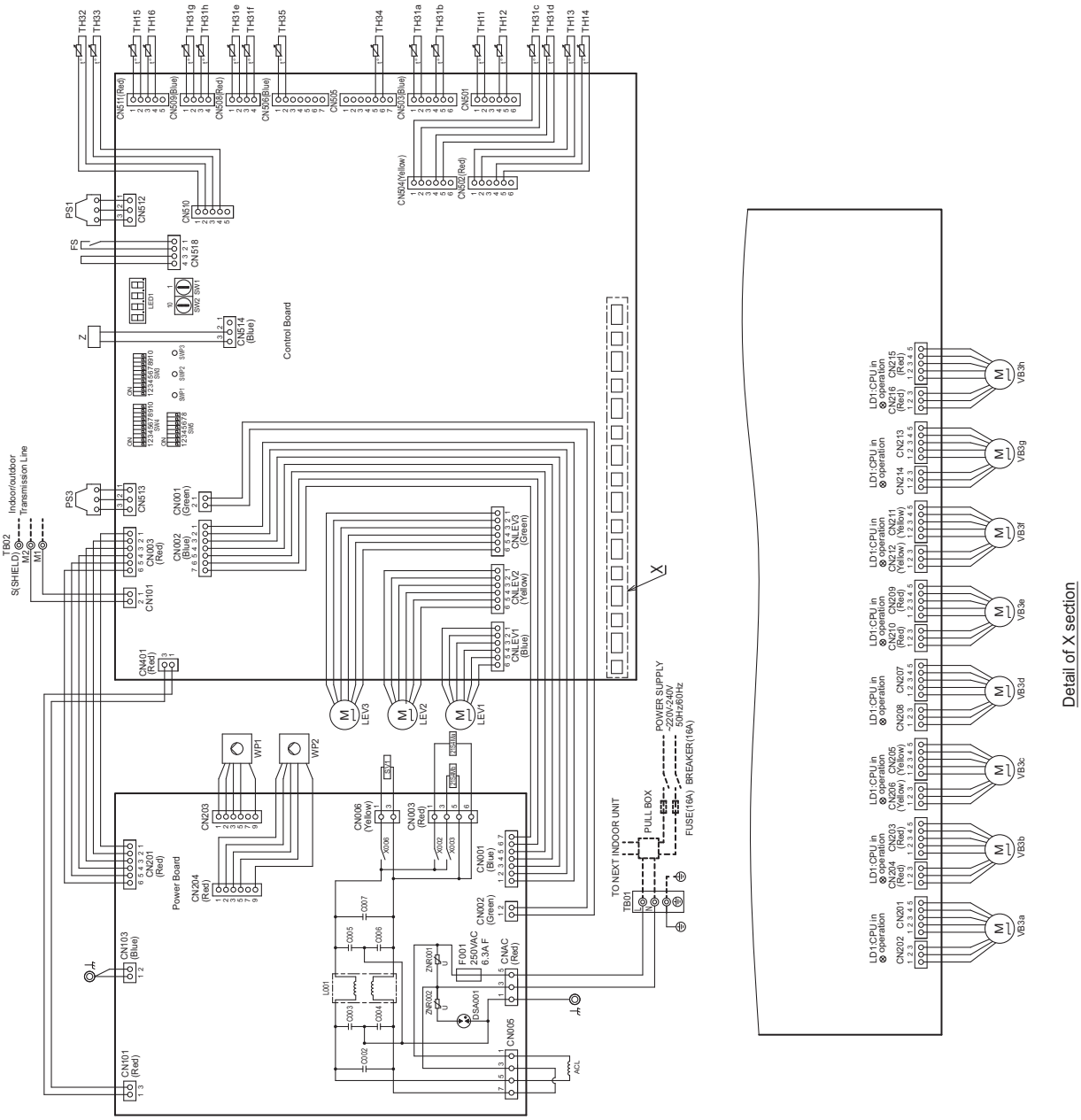
	CMB-WM108V-AA	CMB-WM1016V-AA	CMB-WM108V-AB	CMB-WM1016V-AB
A (mm)	1379	1659	1379	1379
x (mm)	680	825	610	680
y (mm)	145	145	145	145
z (mm)	285	285	270	270

CMB-WM108V-AA

(Symbol explanation)

Symbol	Name	Symbol	Name
ACL	AC reactor	SV1	Solenoid valve
TH11~16,TH32~35,	Thermister sensor	F001	Fuse AC250V 6.3A F
TH31a~h		21S4Ma,21S4Mb	4 way valve
LEV1~3	Expansion valve	WP1,WP2	Pump
PS1,PS3	Pressure sensor	VB3a~h	Valve block
TB01	Terminal block (for power source)	FS	Float switch
		Z	Function setting connector
TB02	Terminal block (for Transmission)		

NOTE:1. TB02 is transmission terminal block.
Never connect power line to it.
2. The initial set values of switch on Control Board are as follows.
SW1:0
SW2:0
3. The wirings to TB01 and TB02 shown in dotted line are field work.

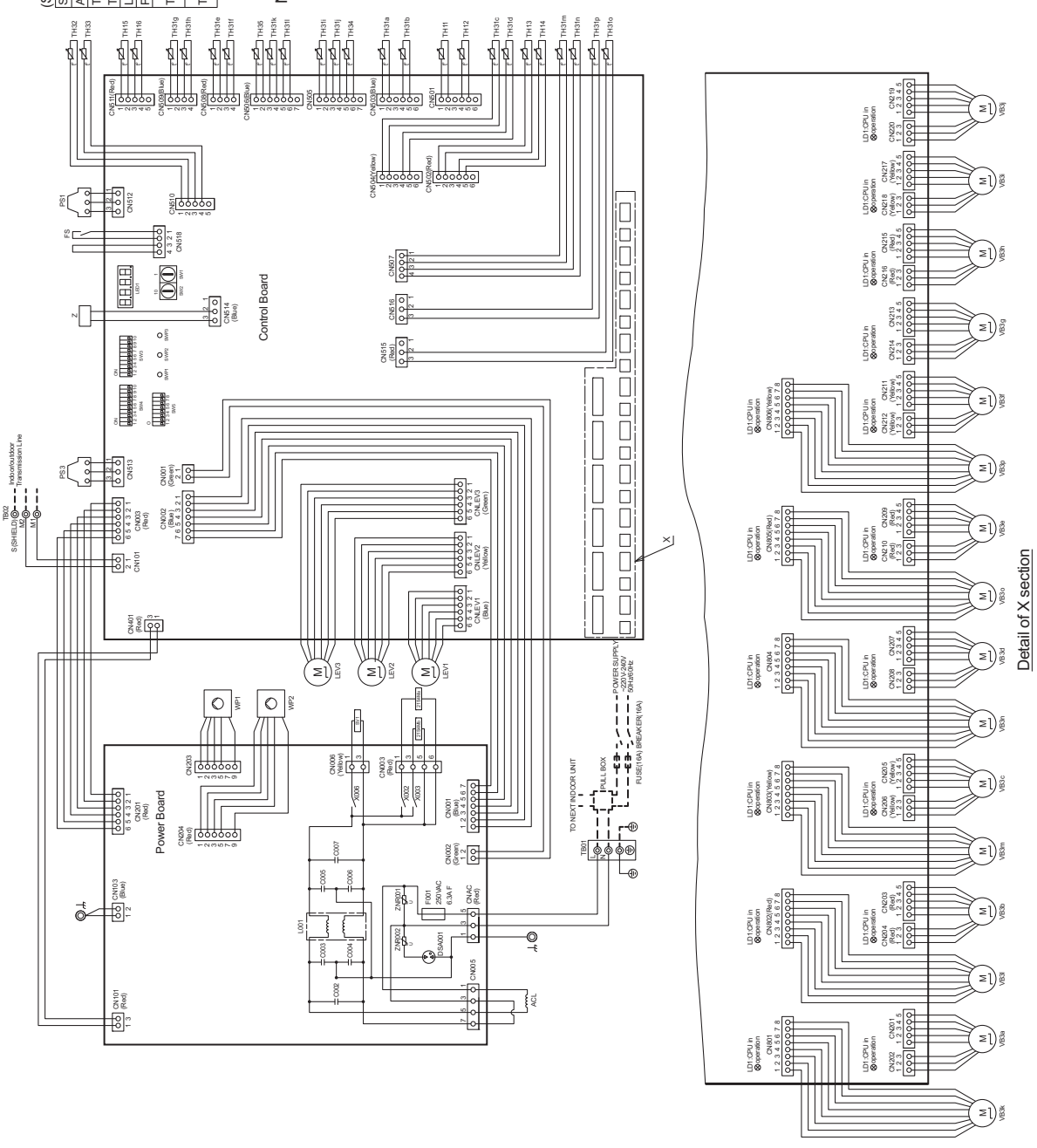


CMB-WM1016V-AA

(Symbol explanation)

Symbol	Name	Symbol	Name
ACL	AC reactor	SV1	Solenoid valve
TH11~16,TH32~35, TH31a~p	Thermister sensor	F001	Fuse AC250V 6.3A F
LEV1~3	Expansion valve	21S4Ma,21S4Mb	4 way valve
PS1,PS3	Pressure sensor	WP1,WP2	Pump
TB01	Terminal block (for power source)	VB3a~p	Valve block
		FS	Float switch
TB02	Terminal block (for Transmission)	Z	Function setting connector

NOTE:1.TB02 is transmission terminal block.
Never connect power line to it.
2.The initial set values of switch on Control Board are as follows.
SW1:0
SW2:0
3.The wirings to TB01 and TB02 shown in dotted line are field work.

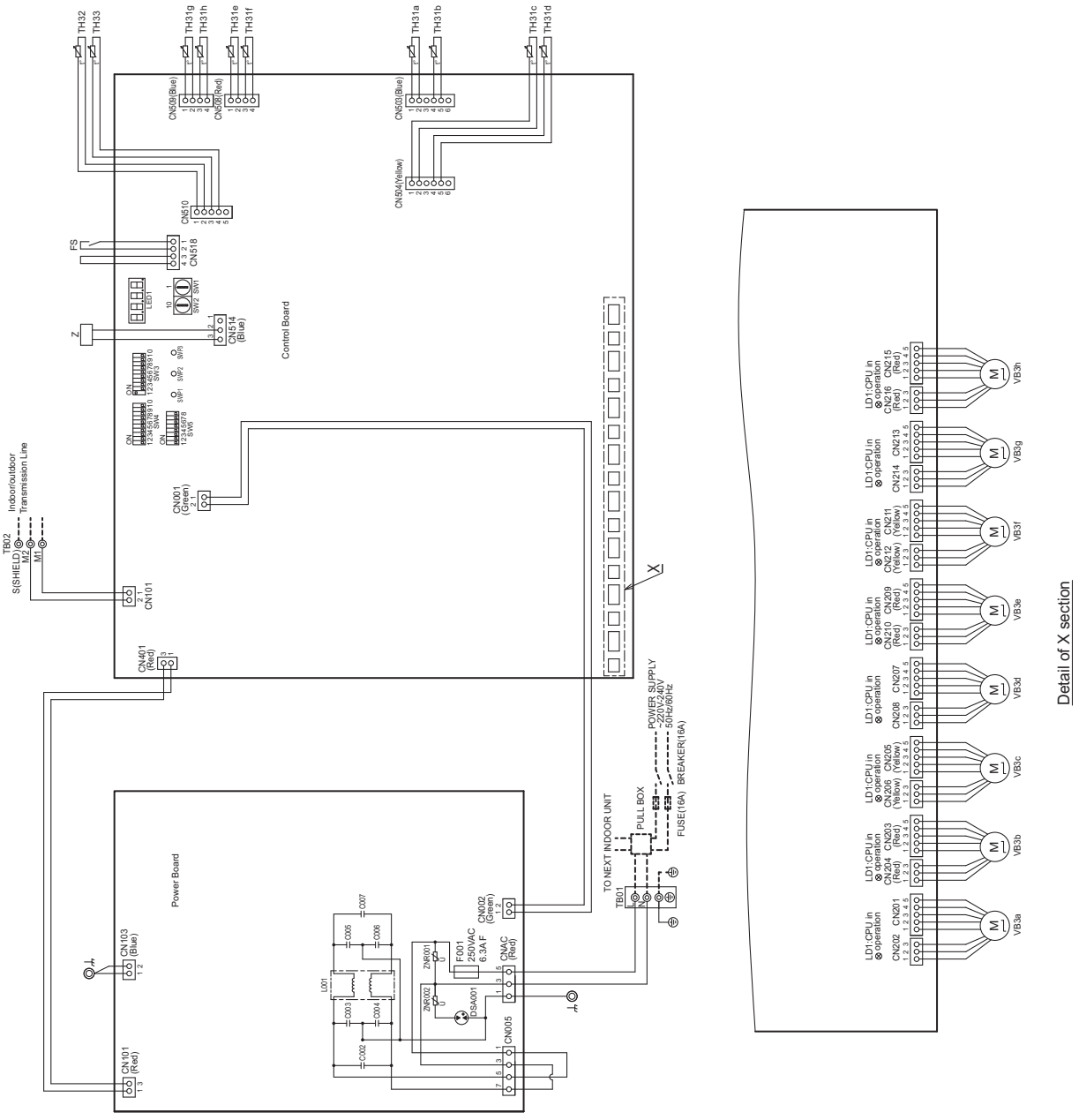


CMB-WM108V-AB

(Symbol explanation)

Symbol	Name
TH31a~h,TH32,TH33	Thermister sensor
VB3a~h	Valve block
FS	Float switch
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
F001	Fuse AC250V 6.3A F
Z	Function setting connector

NOTE:1. TB02 is transmission terminal block.
Never connect power line to it.
2. The initial set values of switch on Control Board are as follows.
SW1:0
SW2:0
3. The wirings to TB01 and TB02 shown in dotted line are field work.



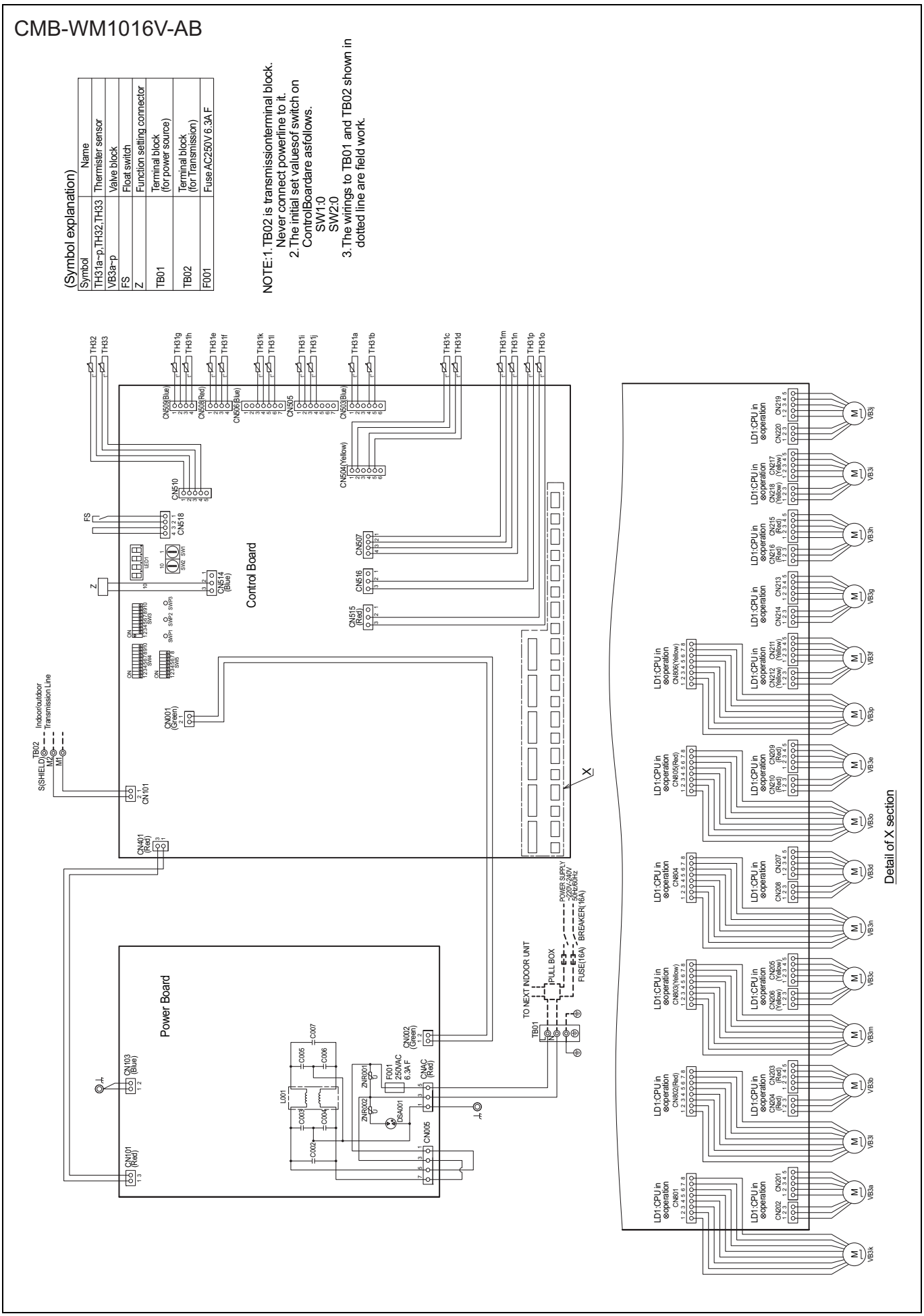
HBC controller

CMB-WM1016V-AB

(Symbol explanation)

Symbol	Name
TH31a~p,TH32,TH33	Thermister sensor
VB3a~p	Valve block
FS	Float switch
Z	Function setting connector
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
F001	Fuse AC250V 6.3A F

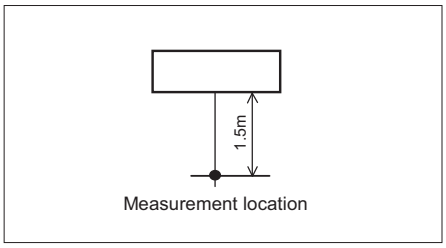
NOTE:1. TB02 is transmissionterminal block.
Never connect powerline to it.
2. The initial set valuesof switch on ControlBoardare asfollows.
SW1:0
SW2:0
3. The wirings to TB01 and TB02 shown in dotted line are field work.



5-1. Sound levels

(Measured point)

CMB-WM108V-AA
CMB-WM1016V-AA

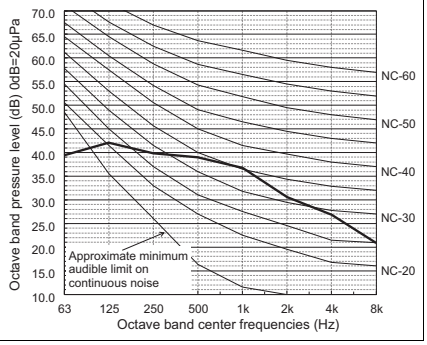


* Measured in anechoic room.

5-2. NC curves

CMB-WM108V-AA,CMB-WM1016V-AA

Power Source: 230V, 50Hz



HBC controller

Symbols: MCA: Max. Circuit Amps, MFA: Max. Fuse Amps, RLA: Rated Load Amps

HBC controller	Power supply					RLA(A)
	Hz	Volts	Range+-10%	MCA(A)	MFA(A)	
CMB-WM108V-AA CMB-WM1016V-AA	50/60	220	Max.: 264V Min.: 198V	3.49	15	2.89
		230				2.83
		240				2.79
CMB-WM108V-AB CMB-WM1016V-AB	50/60	220	Max.: 264V Min.: 198V	0.06	15	0.05
		230				0.05
		240				0.05

for a greener tomorrow

Eco Changes is the Mitsubishi Electric Group's environmental statement, and expresses the Group's stance on environmental management. Through a wide range of businesses, we are helping contribute to the realization of a sustainable society.

⚠Warning

■ Do not use refrigerant other than the type indicated in the manuals provided with the unit and on the nameplate.
- Doing so may cause the unit or pipes to burst, or result in explosion or fire during use, repair, or at the time of disposal of the unit.
- It may also be in violation of applicable laws.
- MITSUBISHI ELECTRIC CORPORATION cannot be held responsible for malfunctions or accidents resulting from the use of the wrong type of refrigerant.

■ Our air conditioning equipment and heat pumps contain a fluorinated greenhouse gas, R410A/R32.

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