

**CMB-P-V-G1, CMB-P-V-GA1, CMB-P-V-HA1, CMB-P-V-GB1, CMB-P-V-HB1**

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# 1. SPECIFICATIONS

G10 2nd

Model name			CMB-P104V-G1		CMB-P105V-G1	
Number of branch			4		5	
Power source			1-phase 220/230/240V			
			50Hz	60Hz	50Hz	60Hz
Power input (220/230/240)	Cooling	kW	0.067/0.076/0.085	0.054/0.061/0.067	0.082/0.093/0.104	0.066/0.074/0.082
	Heating		0.030/0.034/0.038	0.024/0.027/0.030	0.038/0.043/0.048	0.030/0.034/0.038
Current (220/230/240)	Cooling	A	0.31/0.34/0.36	0.25/0.27/0.28	0.38/0.41/0.44	0.30/0.33/0.35
	Heating		0.14/0.15/0.16	0.11/0.12/0.13	0.18/0.19/0.20	0.14/0.15/0.16
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)			
Connectable outdoor unit/heat source unit			PURY-(E)P200/250/300/350YJM-A(-BS) PQRY-P200/250/300YHM-A			
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.)			
External dimension H x W x D		mm (in.)	284 x 648 x 432 (11-3/16 x 25-17/32 x 17-1/32)			
Refrigerant piping diameter	Connectable outdoor unit capacity		<b>To outdoor unit</b>			
			<b>High press. pipe</b>		<b>Low press. pipe</b>	
	to P200		15.88 (5/8)		19.05 (3/4)	
	mm (in.) O.D.		Brazed		Brazed	
	P250/P300		19.05 (3/4)		22.2 (7/8)	
	mm (in.) O.D.		Brazed		Brazed	
	to P350		19.05 (3/4)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
			<b>To indoor unit</b>			
			<b>Liquid pipe</b>		<b>Gas pipe</b>	
mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)		
Field drain pipe size		mm (in.) O.D.	32 (1-1/4)			
Net weight		kg (lbs)	24 (53)		27 (60)	
Accessories			Drain Connection pipe (with flexible hose and insulation) Reducer		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark						
Note:			<ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>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 BC CONTROLLER at least 5m away from any indoor units.)</li> <li>4. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>5. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>			

# 1. SPECIFICATIONS

Model name			CMB-P106V-G1		CMB-P108V-G1	
Number of branch			6		8	
Power source			1-phase 220/230/240V			
			50Hz	60Hz	50Hz	60Hz
Power input (220/230/240)	Cooling	kW	0.097/0.110/0.123	0.078/0.088/0.097	0.127/0.144/0.161	0.102/0.115/0.127
	Heating		0.045/0.051/0.057	0.036/0.041/0.045	0.060/0.068/0.076	0.048/0.054/0.060
Current (220/230/240)	Cooling	A	0.45/0.48/0.52	0.36/0.39/0.41	0.58/0.63/0.68	0.47/0.50/0.53
	Heating		0.21/0.23/0.24	0.17/0.18/0.19	0.28/0.30/0.32	0.22/0.24/0.25
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)			
Connectable outdoor unit/heat source unit			PURY-(E)P200/250/300/350YJM-A(-BS) PQRY-P200/250/300YHM-A			
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.)			
External dimension H x W x D		mm (in.)	284 x 648 x 432 (11-3/16 x 25-17/32 x 17-1/32)			
Refrigerant piping diameter	Connectable outdoor unit capacity		<b>To outdoor unit</b>			
			<b>High press. pipe</b>		<b>Low press. pipe</b>	
	to P200		15.88 (5/8) Brazed		19.05 (3/4) Brazed	
	P250/P300		19.05 (3/4) Brazed		22.2 (7/8) Brazed	
	to P350		19.05 (3/4) Brazed		28.58 (1-1/8) Brazed	
			<b>To indoor unit</b>			
			<b>Liquid pipe</b>		<b>Gas pipe</b>	
	mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)	
Field drain pipe size		mm (in.) O.D.	32 (1-1/4)			
Net weight		kg (lbs)	28 (62)		33 (73)	
Accessories			Drain Connection pipe (with flexible hose and insulation) Reducer		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark						
Note:			<ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>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 BC CONTROLLER at least 5m away from any indoor units.)</li> <li>4. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>5. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>			

# 1. SPECIFICATIONS

G10 2nd

Model name			CMB-P1010V-G1		CMB-P1013V-G1	
Number of branch			10		13	
Power source			1-phase 220/230/240V			
			50Hz	60Hz	50Hz	60Hz
Power input (220/230/240)	Cooling	kW	0.156/0.177/0.198	0.126/0.141/0.156	0.201/0.228/0.255	0.162/0.182/0.201
	Heating		0.075/0.085/0.095	0.060/0.068/0.075	0.097/0.110/0.123	0.078/0.088/0.097
Current (220/230/240)	Cooling	A	0.71/0.77/0.83	0.58/0.62/0.65	0.92/1.00/1.07	0.74/0.80/0.84
	Heating		0.35/0.37/0.40	0.28/0.30/0.32	0.45/0.48/0.52	0.36/0.39/0.41
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)			
Connectable outdoor unit/heat source unit			PURY-(E)P200/250/300/350YJM-A(-BS) PQRY-P200/250/300YHM-A			
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.)			
External dimension H x W x D		mm (in.)	284 x 648 x 432 (11-3/16 x 25-17/32 x 17-1/32)		284 x 1,098 x 432 (11-3/16 x 43-1/4 x 17-1/32)	
Refrigerant piping diameter	Connectable outdoor unit capacity		To outdoor unit			
			High press. pipe		Low press. pipe	
	to P200		15.88 (5/8)		19.05 (3/4)	
	mm (in.) O.D.		Braze		Braze	
	P250/P300		19.05 (3/4)		22.2 (7/8)	
	mm (in.) O.D.		Braze		Braze	
	to P350		19.05 (3/4)		28.58 (1-1/8)	
	mm (in.) O.D.		Braze		Braze	
			To indoor unit			
			Liquid pipe		Gas pipe	
mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Braze bigger than 50 9.52 (3/8) Braze (12.7 (1/2) with optional joint pipe used.)		Indoor unit Model 50 or smaller 12.7 (1/2) Braze bigger than 50 15.88 (5/8) Braze (19.05 (3/4) with optional joint pipe used.)		
Field drain pipe size		mm (in.) O.D.	32 (1-1/4)			
Net weight		kg (lbs)	38 (84)		45 (100)	
Accessories			Drain Connection pipe (with flexible hose and insulation) Reducer		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark						
Note:			<ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>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 BC CONTROLLER at least 5m away from any indoor units.)</li> <li>4. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>5. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>			

# 1. SPECIFICATIONS

<b>Model name</b>			<b>CMB-P1016V-G1</b>	
<b>Number of branch</b>			16	
<b>Power source</b>			1-phase 220/230/240V	
			50Hz	60Hz
<b>Power input</b> (220/230/240)	Cooling	kW	0.246/0.279/0.312	
	Heating		0.198/0.222/0.246	
<b>Current</b> (220/230/240)	Cooling	A	0.119/0.135/0.151	
	Heating		0.096/0.108/0.119	
<b>External finish</b>			Galvanized steel plate (Lower part drain pan painting N1.5)	
<b>Connectable outdoor unit/heat source unit</b>			PURY-(E)P200/250/300/350YJM-A(-BS) PQRY-P200/250/300YHM-A	
<b>Indoor unit capacity connectable to 1 branch</b>			Model P80 or smaller (Use optional joint pipe combing 2 branches when the total unit capacity exceeds 81.)	
<b>External dimension H x W x D</b>		mm (in.)	284 x 1,098 x 432 (11-3/16 x 43-1/4 x 17-1/32)	
<b>Refrigerant piping diameter</b>	<b>Connectable outdoor unit capacity</b>		<b>To outdoor unit</b>	
			<b>High press. pipe</b>	<b>Low press. pipe</b>
	to P200		15.88 (5/8)	19.05 (3/4)
	mm (in.) O.D.		Brazed	Brazed
	P250/P300		19.05 (3/4)	22.2 (7/8)
	mm (in.) O.D.		Brazed	Brazed
	to P350		19.05 (3/4)	28.58 (1-1/8)
	mm (in.) O.D.		Brazed	Brazed
			<b>To indoor unit</b>	
			<b>Liquid pipe</b>	<b>Gas pipe</b>
mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)	Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)	
<b>Field drain pipe size</b>		mm (in.) O.D.	32 (1-1/4)	
<b>Net weight</b>		kg (lbs)	52 (115)	
<b>Accessories</b>			Drain Connection pipe (with flexible hose and insulation) Reducer	
<b>Remark</b>				
<b>Note:</b> <ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>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 BC CONTROLLER at least 5m away from any indoor units.)</li> <li>4. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>5. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>				

# 1. SPECIFICATIONS

G10 2nd

Model name			CMB-P108V-GA1		CMB-P1010V-GA1	
Number of branch			8		10	
Power source			1-phase 220/230/240V			
			50Hz	60Hz	50Hz	60Hz
Power input (220/230/240)	Cooling	kW	0.127/0.144/0.161	0.102/0.115/0.127	0.156/0.177/0.198	0.126/0.141/0.156
	Heating		0.060/0.068/0.076	0.048/0.054/0.060	0.075/0.085/0.095	0.060/0.068/0.075
Current (220/230/240)	Cooling	A	0.58/0.63/0.68	0.47/0.50/0.53	0.71/0.77/0.83	0.58/0.62/0.65
	Heating		0.28/0.30/0.32	0.22/0.24/0.25	0.35/0.37/0.40	0.28/0.30/0.32
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)			
Connectable outdoor unit/heat source unit			PURY-(E)P200/250/300/350/400/450/500/550/600/650Y(S)JM-A(1)(-BS) PQRY-P200/250/300/400/450/500/550/600Y(S)HM-A			
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.)			
External dimension H x W x D		mm (in.)	289 x 1,110 x 520 (11-13/32 x 43-23/32 x 20-1/2)			
Refrigerant piping diameter	Connectable outdoor unit capacity		<b>To outdoor unit</b>			
			<b>High press. pipe</b>		<b>Low press. pipe</b>	
	to P200		15.88 (5/8)		19.05 (3/4)	
	mm (in.) O.D.		Brazed		Brazed	
	P250/P300		19.05 (3/4)		22.2 (7/8)	
	mm (in.) O.D.		Brazed		Brazed	
	to P350		19.05 (3/4)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
	P400 to P500		22.2 (7/8)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
	P550 to P650		28.58 (1-1/8)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
			<b>To indoor unit</b>			
			<b>Liquid pipe</b>		<b>Gas pipe</b>	
mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)		
Total indoor unit capacity connected to this Sub BC controller		<b>To other BC controller</b>				
		<b>High press. pipe</b>		<b>Low press. pipe</b>		
		<b>Liquid pipe</b>				
to P200		15.88 (5/8) Brazed		19.05 (3/4) Brazed		
mm (in.) O.D.		9.52 (3/8) Brazed				
P201 to P300		19.05 (3/4) Brazed		22.2 (7/8) Brazed		
mm (in.) O.D.		9.52 (3/8) Brazed				
P301 to P350		19.05 (3/4) Brazed		28.58 (1-1/8) Brazed		
mm (in.) O.D.		12.7 (1/2) Brazed				
Field drain pipe size		mm (in.) O.D.	32 (1-1/4)			
Net weight		kg (lbs)	43 (95)		48 (106)	
Accessories			Drain Connection pipe (with flexible hose and insulation) Reducer		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark						
Note:			<ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>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 BC CONTROLLER at least 5m away from any indoor units.)</li> <li>4. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>5. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>			

BC

# 1. SPECIFICATIONS

G10 2nd

Model name			CMB-P1013V-GA1		CMB-P1016V-GA1	
Number of branch			13		16	
Power source			1-phase 220/230/240V			
			50Hz	60Hz-	50Hz	60Hz-
Power input (220/230/240)	Cooling	kW	0.201/0.228/0.255	0.162/0.182/0.201	0.246/0.279/0.312	0.198/0.222/0.246
	Heating		0.097/0.110/0.123	0.078/0.088/0.097	0.119/0.135/0.151	0.096/0.108/0.119
Current (220/230/240)	Cooling	A	0.92/1.00/1.07	0.74/0.80/0.84	1.12/1.22/1.30	0.90/0.97/1.03
	Heating		0.45/0.48/0.52	0.36/0.39/0.41	0.55/0.59/0.63	0.44/0.47/0.50
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)			
Connectable outdoor unit/heat source unit			PURY-(E)P200/250/300/350/400/450/500/550/600/650Y(S)JM-A(1)(-BS) PQRY-P200/250/300/400/450/500/550/600Y(S)HM-A			
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.)			
External dimension H x W x D		mm (in.)	289 x 1,110 x 520 (11-13/32 x 43-23/32 x 20-1/2)			
Refrigerant piping diameter	Connectable outdoor unit capacity		<b>To outdoor unit</b>			
			<b>High press. pipe</b>		<b>Low press. pipe</b>	
	to P200		15.88 (5/8)		19.05 (3/4)	
	mm (in.) O.D.		Brazed		Brazed	
	P250/P300		19.05 (3/4)		22.2 (7/8)	
	mm (in.) O.D.		Brazed		Brazed	
	to P350		19.05 (3/4)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
	P400 to P500		22.2 (7/8)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
	P550 to P650		28.58 (1-1/8)		28.58 (1-1/8)	
	mm (in.) O.D.		Brazed		Brazed	
			<b>To indoor unit</b>			
			<b>Liquid pipe</b>		<b>Gas pipe</b>	
	mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)	
Total indoor unit capacity connected to this Sub BC controller		<b>To other BC controller</b>				
		<b>High press. pipe</b>		<b>Low press. pipe</b>		
		<b>Liquid pipe</b>				
to P200		15.88 (5/8) Brazed		19.05 (3/4) Brazed		
mm (in.) O.D.		9.52 (3/8) Brazed				
P201 to P300		19.05 (3/4) Brazed		22.2 (7/8) Brazed		
mm (in.) O.D.		9.52 (3/8) Brazed				
P301 to P350		19.05 (3/4) Brazed		28.58 (1-1/8) Brazed		
mm (in.) O.D.		12.7 (1/2) Brazed				
Field drain pipe size	mm (in.) O.D.	32 (1-1/4)				
Net weight	kg (lbs)	55 (122)		62 (137)		
Accessories			Drain Connection pipe (with flexible hose and insulation) Reducer		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark						
Note:			<ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>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 BC CONTROLLER at least 5m away from any indoor units.)</li> <li>4. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>5. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>			

BC

# 1. SPECIFICATIONS

G10 2nd

<b>Model name</b>			<b>CMB-P1016V-HA1</b>		
Number of branch			16		
Power source			1-phase 220/230/240V		
			50Hz	60Hz	
Power input (220/230/240)	Cooling	kW	0.246/0.279/0.312		
	Heating		0.119/0.135/0.151		
Current (220/230/240)	Cooling	A	1.12/1.22/1.30		
	Heating		0.55/0.59/0.63		
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)		
Connectable outdoor unit/heat source unit			PURY-(E)P700/750/800/850/900YSJM-A(1)(-BS)		
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.)		
External dimension H x W x D		mm (in.)	289 x 1,110 x 520 (11-13/32 x 43-23/32 x 20-1/2)		
Refrigerant piping diameter	Connectable outdoor unit capacity		<b>To outdoor unit</b>		
			<b>High press. pipe</b>	<b>Low press. pipe</b>	
	P700/P750/ P800 mm (in.) O.D.	28.58 (1-1/8)		34.93 (1-3/8)	
		Braze		Braze	
	P850/P900 mm (in.) O.D.	28.58 (1-1/8)		41.28 (1-5/8)	
		Braze		Braze	
			<b>To indoor unit</b>		
			<b>Liquid pipe</b>	<b>Gas pipe</b>	
	mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Braze		Indoor unit Model 50 or smaller 12.7 (1/2) Braze	
		bigger than 50 9.52 (3/8) Braze (12.7 (1/2) with optional joint pipe used.)		bigger than 50 15.88 (5/8) Braze (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)	
Total indoor unit capacity connected to this Sub BC controller		<b>To other BC controller</b>			
		<b>High press. pipe</b>	<b>Low press. pipe</b>		
		<b>Liquid pipe</b>			
to P200 mm (in.) O.D.	15.88 (5/8) Braze		19.05 (3/4) Braze		
	9.52 (3/8) Braze				
P201 to P300 mm (in.) O.D.	19.05 (3/4) Braze		22.2 (7/8) Braze		
	9.52 (3/8) Braze				
P301 to P350 mm (in.) O.D.	19.05 (3/4) Braze		28.58 (1-1/8) Braze		
	12.7 (1/2) Braze				
P351 to P400 mm (in.) O.D.	22.2 (7/8) Braze		28.58 (1-1/8) Braze		
	12.7 (1/2) Braze				
P401 to P450 mm (in.) O.D.	22.2 (7/8) Braze		28.58 (1-1/8) Braze		
	15.88 (5/8) Braze				
Field drain pipe size	mm (in.) O.D.	32 (1-1/4)			
Net weight	kg (lbs)	69 (153)			
Accessories		Drain Connection pipe (with flexible hose and insulation) Reducer			
Remark					
<p>Note:</p> <ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>3. When using an outdoor unit -28HP(P700) or more, use this product.</li> <li>4. 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 5m away from any indoor units.)</li> <li>5. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>6. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>					

BC



# 1. SPECIFICATIONS

G10 2nd

Model name			CMB-P104V-GB1		CMB-P108V-GB1	
Number of branch			4		8	
Power source			1-phase 220/230/240V			
			50Hz	60Hz	50Hz	60Hz
Power input (220/230/240)	Cooling	kW	0.060/0.068/0.076	0.048/0.054/0.060	0.119/0.135/0.151	0.096/0.108/0.119
	Heating		0.030/0.034/0.038	0.024/0.027/0.030	0.060/0.068/0.076	0.048/0.054/0.060
Current (220/230/240)	Cooling	A	0.28/0.30/0.32	0.22/0.24/0.25	0.55/0.59/0.63	0.44/0.47/0.50
	Heating		0.14/0.15/0.16	0.11/0.12/0.13	0.28/0.30/0.32	0.22/0.24/0.25
External finish			Galvanized steel plate (Lower part drain pan painting N1.5)			
Connectable BC controller			CMB-P108/1010/1013/1016V-GA1, CMB-P1016V-HA1 CMB-P104/108V-GB1, CMB-P1016V-HB1			
Indoor unit capacity connectable to 1 branch			Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds 81.)			
External dimension H x W x D		mm (in.)	284 x 648 x 432 (11-3/16 x 25-17/32 x 17-1/32)			
Refrigerant piping diameter			<b>To indoor unit</b>			
			<b>Liquid pipe</b>		<b>Gas pipe</b>	
	mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)		Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4) with optional joint pipe used.)	
	Total indoor unit capacity connected to this Sub BC controller		<b>To other BC controller</b>			
			<b>High press. pipe</b>		<b>Low press. pipe</b>	
			<b>Liquid pipe</b>			
	to P200		15.88 (5/8) Brazed		19.05 (3/4) Brazed	
	mm (in.) O.D.		9.52 (3/8) Brazed			
	P201 to P300		19.05 (3/4) Brazed		22.2 (7/8) Brazed	
	mm (in.) O.D.		9.52 (3/8) Brazed			
P301 to P350		19.05 (3/4) Brazed		28.58 (1-1/8) Brazed		
mm (in.) O.D.		12.7 (1/2) Brazed				
Field drain pipe size		mm (in.) O.D.	32 (1-1/4)			
Net weight		kg (lbs)	22 (49)		32 (71)	
Accessories			Drain Connection pipe (with flexible hose and insulation) Reducer		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark						
<p>Note:</p> <ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>3. For sub BC controller CMB-P-V-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.</li> <li>4. To use the Sub BC controller, the Main BC controller is necessary to be connected with.</li> <li>5. 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 5m away from any indoor units.)</li> <li>6. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>7. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>						

BC

# 1. SPECIFICATIONS

G10 2nd

<b>Model name</b>		<b>CMB-P1016V-HB1</b>	
Number of branch		16	
Power source		1-phase 220/230/240V	
		50Hz	60Hz
Power input (220/230/240)	Cooling	kW	0.237/0.269/0.301
	Heating		0.119/0.135/0.151
Current (220/230/240)	Cooling	A	1.08/1.17/1.26
	Heating		0.55/0.59/0.63
External finish		Galvanized steel plate (Lower part drain pan painting N1.5)	
Connectable BC controller		Main BC	CMB-P108/1010/1013/1016V-GA1,CMB-P1016V-HA1
		Sub BC	CMB-P104/108V-GB1, CMB-P1016V-HB1
Indoor unit capacity connectable to 1 branch		Model P80 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds 81.)	
External dimension H x W x D		mm (in.)	284 x 1,098 x 432 (11-3/16 x 43-1/4 x 17-1/32)
Refrigerant piping diameter	Connectable outdoor unit capacity		<b>To outdoor unit</b>
			<b>High press. pipe</b>
			<b>Low press. pipe</b>
	mm (in.) O.D.		-
			<b>To indoor unit</b>
			<b>Liquid pipe</b>
			<b>Gas pipe</b>
	mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed (12.7 (1/2) with optional joint pipe used.)
			Indoor unit Model 50 or smaller 12.7 (1/2) Brazed bigger than 50 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
	Total indoor unit capacity connected to this Sub BC controller		<b>To other BC controller</b>
		<b>High press. pipe</b>	<b>Low press. pipe</b>
		<b>Liquid pipe</b>	
to P200		15.88 (5/8) Brazed	19.05 (3/4) Brazed
mm (in.) O.D.		9.52 (3/8) Brazed	
P201 to P300		19.05 (3/4) Brazed	22.2 (7/8) Brazed
mm (in.) O.D.		9.52 (3/8) Brazed	
P301 to P350		19.05 (3/4) Brazed	28.58 (1-1/8) Brazed
mm (in.) O.D.		12.7 (1/2) Brazed	
P351 to P400		22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
mm (in.) O.D.		12.7 (1/2) Brazed	
P401 to P450		22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
mm (in.) O.D.		15.88 (5/8) Brazed	
Field drain pipe size		mm (in.) O.D.	32 (1-1/4)
Net weight		kg (lbs)	55 (122)
Accessories		Drain Connection pipe (with flexible hose and insulation) Reducer	
Remark			
<p>Note:</p> <ol style="list-style-type: none"> <li>1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.</li> <li>2. The equipment is for R410A refrigerant.</li> <li>3. For sub BC controller CMB-P1016V-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.</li> <li>4. To use the Sub BC controller, the Main BC controller is necessary to be connected with.</li> <li>5. 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 5m away from any indoor units.)</li> <li>6. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decrease a little.)</li> <li>7. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.</li> </ol>			

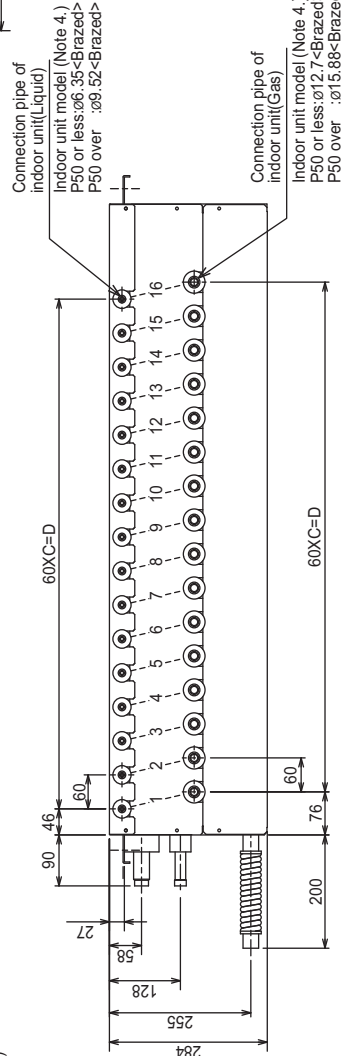
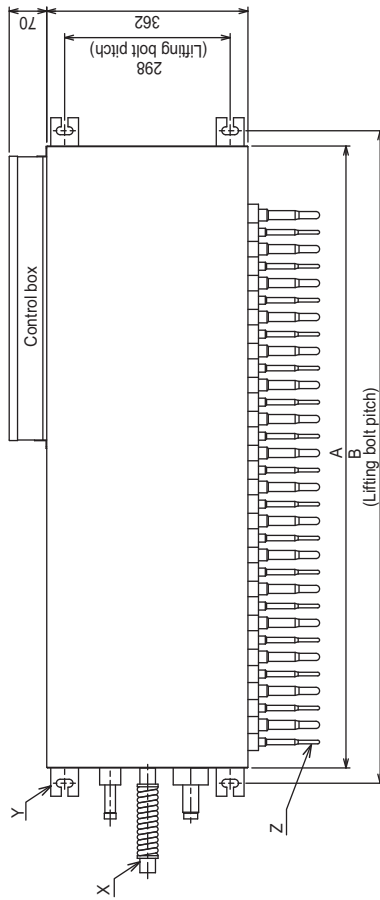
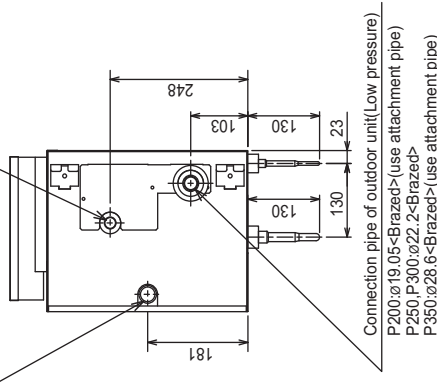
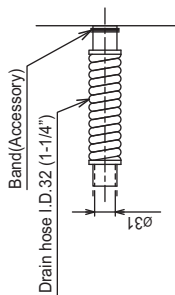
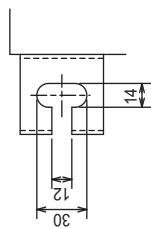
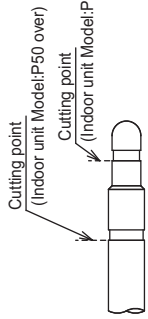
BC

## CMB-P104, 105, 106, 108, 1010, 1013, 1016V-G1

Unit : mm

- <Accessories>
- Refrigerant<Low pressure> conn. pipe.....2pcs.
  - Refrigerant<High pressure> conn. pipe.....1pc.
  - Drain hose I.D.32 (1-1/4").....1pc.
  - Hose band.....1pc.
  - Tie band.....1pc.

- Note 1. Suspension bolt(φ10), 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.)  
 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 BC CONTROLLER at least 5m away from any indoor units.)  
 4. Refer to the Installation Manual for refrigerant piping diameter size when connecting plural indoor units with 1 branch.



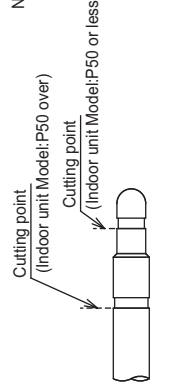
	A	B	C	D
CMB-P104V-G1			3	180
CMB-P105V-G1			4	240
CMB-P106V-G1	648	702	5	300
CMB-P108V-G1			7	420
CMB-P1010V-G1			9	540
CMB-P1013V-G1			12	720
CMB-P1016V-G1	1098	1152	15	900

## CMB-P108, 1010, 1013, 1016V-GA1

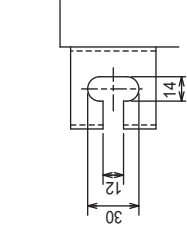
Unit : mm

- <Accessories>
- Refrigerant<Low pressure> conn. pipe...1pc.
  - Refrigerant<High pressure> conn. pipe...2pcs.
  - Drain hose I.D.32 (1-1/4").....1pc.
  - Hose band.....1pc.
  - Tie band.....1pc.

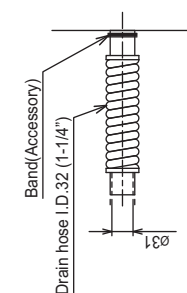
- Note 1. Suspension bolt( $\phi$ 10), washer(M10), and nut(M10) prepare in the field.  
 2. Take notice of service space as follows.  
 (Please give attention not to occupy service space by letting ducts and pipes through.)  
 3. Please take service space for connection pipe of SUB BC CONTROLLER.  
 4. 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 5m away from any indoor units.)  
 5. Refer to the Installation Manual for refrigerant piping diameter size when connecting plural indoor units with 1 branch.



Detail of Z section



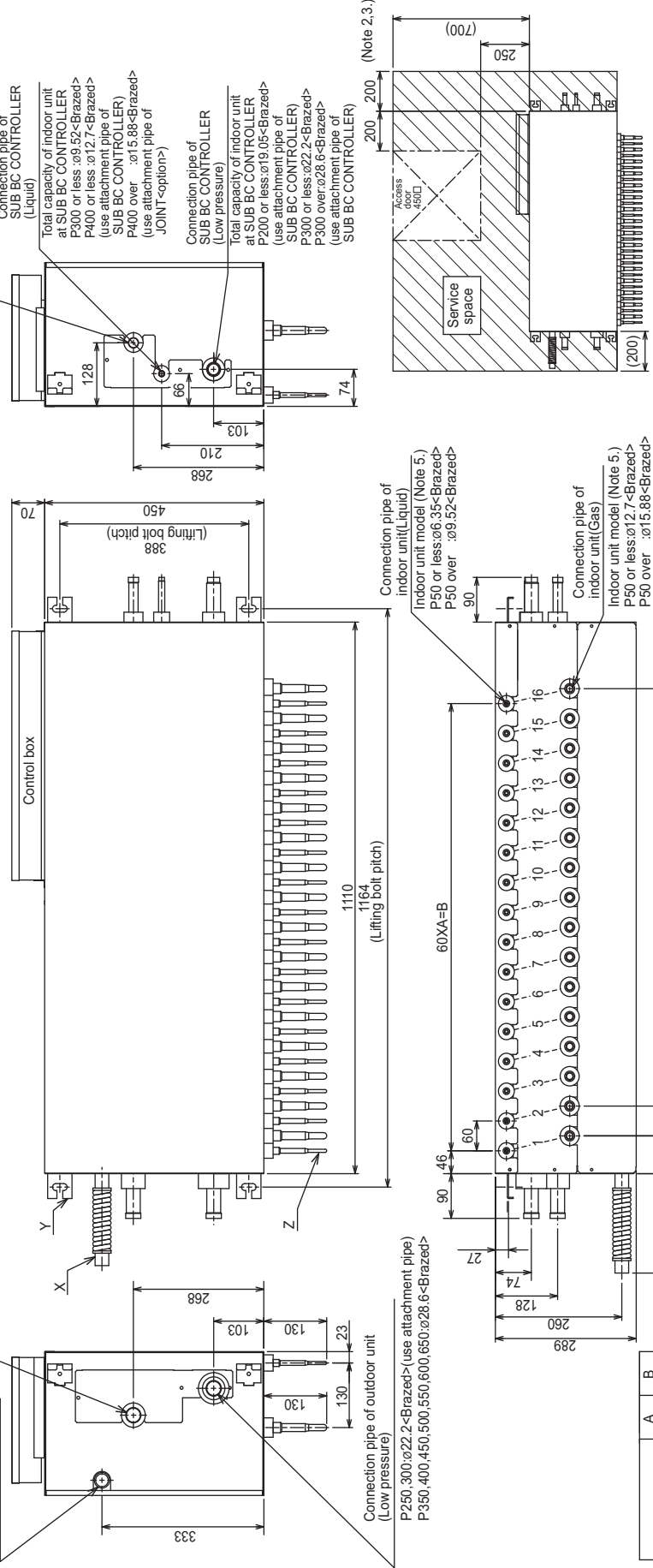
Detail of Y section



Detail of X section

- Connection pipe of outdoor unit(High pressure)  
 P250,300,350: $\phi$ 19.05<Brazed>(use attachment pipe)  
 P400,450,500: $\phi$ 22.2 <Brazed>  
 P550,600,650: $\phi$ 28.6 <Brazed>(use attachment pipe)

Drain pipe O.D.32 (1-1/4")



- Connection pipe of outdoor unit (Low pressure)  
 P250,300: $\phi$ 22.2<Brazed>(use attachment pipe)  
 P350,400,450,500,550,600,650: $\phi$ 28.6<Brazed>

	A	B
CMB-P108V-GA1	7	420
CMB-P1010V-GA1	9	540
CMB-P1013V-GA1	12	720
CMB-P1016V-GA1	15	900

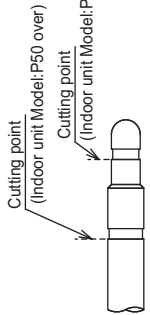
BC

## CMB-P1016V-HA1

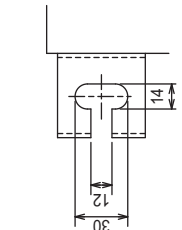
Unit : mm

- <Accessories>
- Refrigerant<Low pressure> conn. pipe.....1pc.
  - Drain hose I.D.32 (1-1/4").....1pc.
  - Hose band.....1pc.
  - Tie band.....1pc.

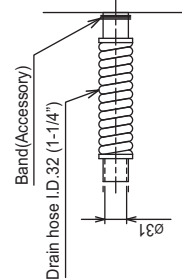
- Note 1. Suspension bolt(φ10), washer(M10), and nut(M10) prepare in the field.  
 2. Take notice of service space as follows.  
 (Please give attention not to occupy service space by letting ducts and pipes through.)  
 3. Please take service space for connection pipe of SUB BC CONTROLLER.  
 4. When using an outdoor unit-28HP(P700) or more, use this product.  
 5. 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 5m away from any indoor units.)  
 6. Refer to the Installation Manual for refrigerant piping diameter size when connecting plural indoor units with 1 branch.



Detail of Z section



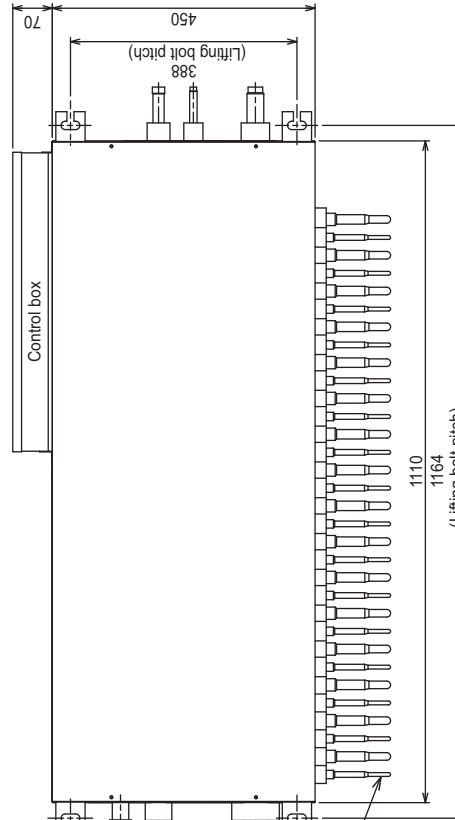
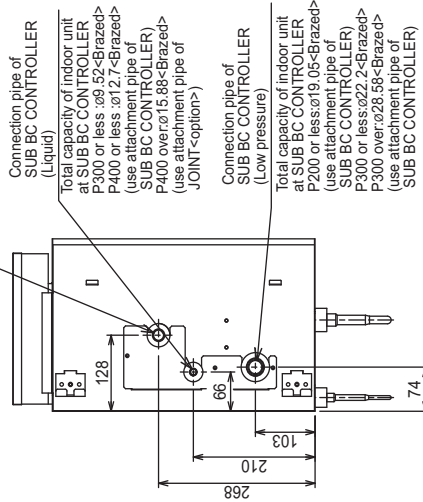
Detail of Y section



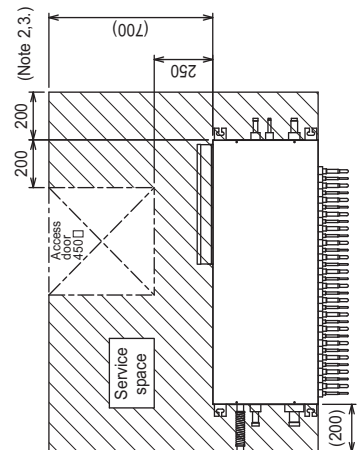
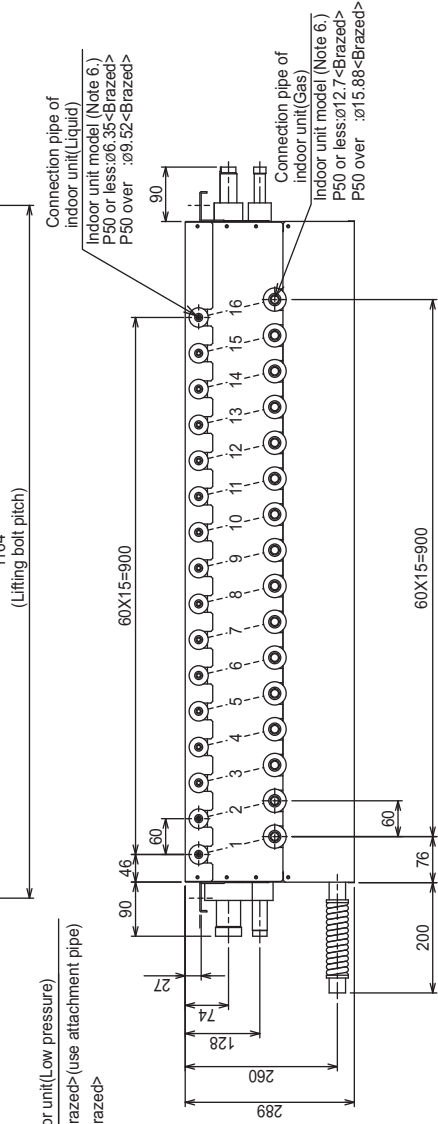
Detail of X section

Connection pipe of outdoor unit (High pressure)  
ø28.58 <Brazed>

Drain pipe O.D.32 (1-1/4")



Connection pipe of outdoor unit (Low pressure)  
P700 to P800 : ø34.93<Brazed> (use attachment pipe)  
P850, P900 : ø41.28<Brazed>



BC

## CMB-P104, 108V-GB1

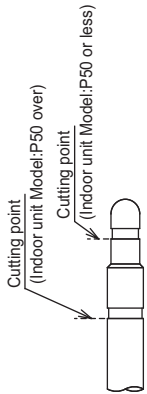
Unit : mm

<Accessories>

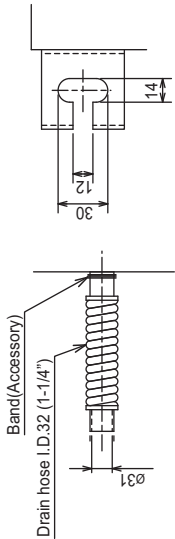
- Refrigerant<Low pressure> conn. pipe.....4pcs.
- Refrigerant<High pressure> conn. pipe.....2pcs.
- Refrigerant<Liquid> conn. pipe.....2pcs.
- Drain hose I.D.32 (1-1/4").....1pc.
- Hose band.....1pc.
- Tie band.....1pc.

Note 1. Suspension bolt(φ10), 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.)
3. Can't use singleness. (MAIN BC CONTROLLER is necessary.)
4. 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 5m away from any indoor units.)
5. Refer to the Installation Manual for refrigerant piping diameter size when connecting plural indoor units with 1 branch.



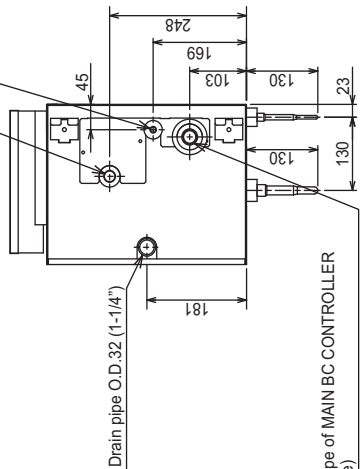
Detail of Z section



Detail of Y section

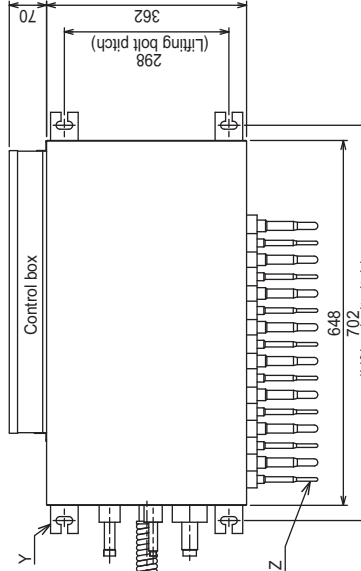
Connection pipe of MAIN BC CONTROLLER  
(High pressure)

Total capacity of indoor units at SUB BC CONTROLLER  
P200 or less:φ15.88<Brazed>(use attachment pipe)  
P200 over:φ19.05<Brazed>



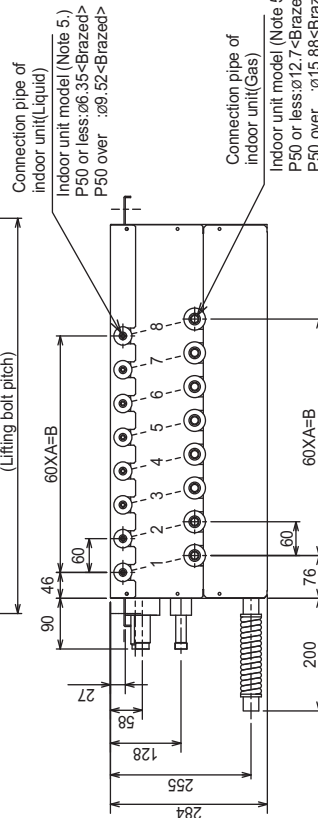
Connection pipe of MAIN BC CONTROLLER(Liquid)

Total capacity of indoor units at SUB BC CONTROLLER  
P300 or less:φ9.52<Brazed>  
P300 over:φ12.7<Brazed>(use attachment pipe)

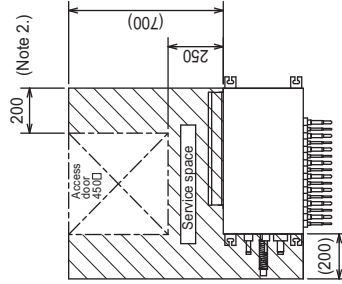


Connection pipe of MAIN BC CONTROLLER  
(Low pressure)

Total capacity of indoor units at SUB BC CONTROLLER  
P200 or less:φ19.05<Brazed>(use attachment pipe)  
P300 or less:φ22.2<Brazed>  
P300 over:φ28.6<Brazed>(use attachment pipe)



	A	B
CMB-P104V-GB1	3	180
CMB-P108V-GB1	7	420



## CMB-P1016V-HB1

Unit : mm

- <Accessories>
- Refrigerant<Low pressure> conn. pipe.....4pcs.
  - Refrigerant<High pressure> conn. pipe.....2pcs.
  - Refrigerant<Liquid> conn. pipe.....2pcs.
  - Drain hose I.D.32 (1-1/4").....1pc.
  - Hose band.....1pc.
  - Tie band.....1pc.

Note1.Suspension bolt(φ10),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.)

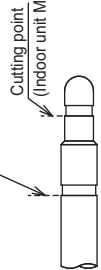
3.Can't use singleness.(MAIN BC CONTROLLER is necessary)

4. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb the neighbors.

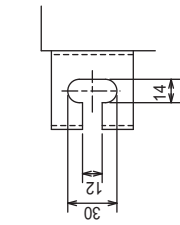
(For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)

5. Refer to the Installation Manual for refrigerant piping diameter size when connecting plural indoor units with 1 branch.

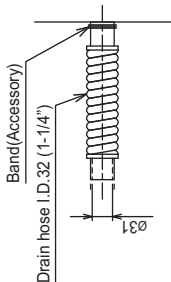
Cutting point  
(Indoor unit Model:P50 over)



Detail of Z section



Detail of Y section

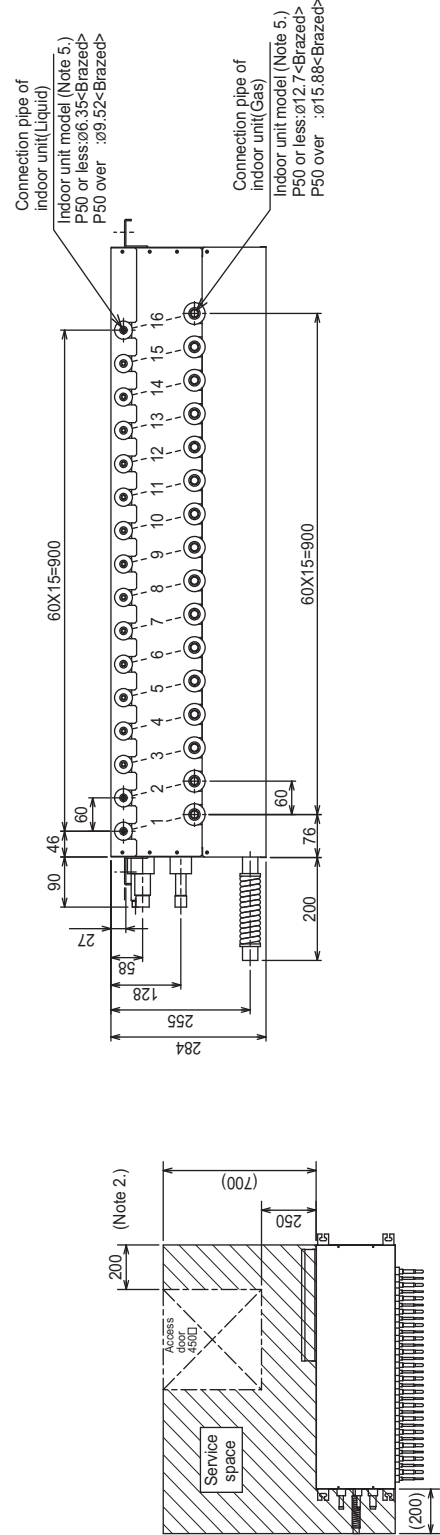
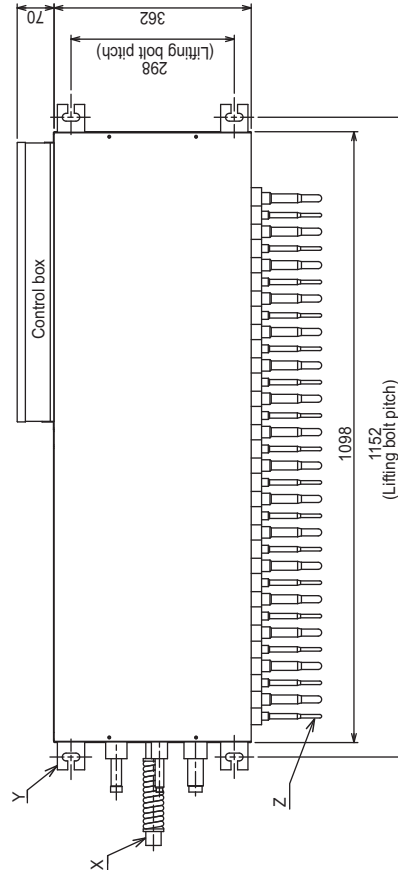


Detail of X section

Connection pipe of MAIN BC CONTROLLER(Liquid)  
Total capacity of indoor units at SUB BC CONTROLLER  
P300 or less:φ9.52 <Brazed>  
P300 over :φ12.7 <Brazed>(use attachment pipe)

Connection pipe of MAIN BC CONTROLLER  
(High pressure)  
Total capacity of indoor units at SUB BC CONTROLLER  
P200 or less:φ15.88<Brazed>(use attachment pipe)  
P200 over :φ19.05<Brazed>

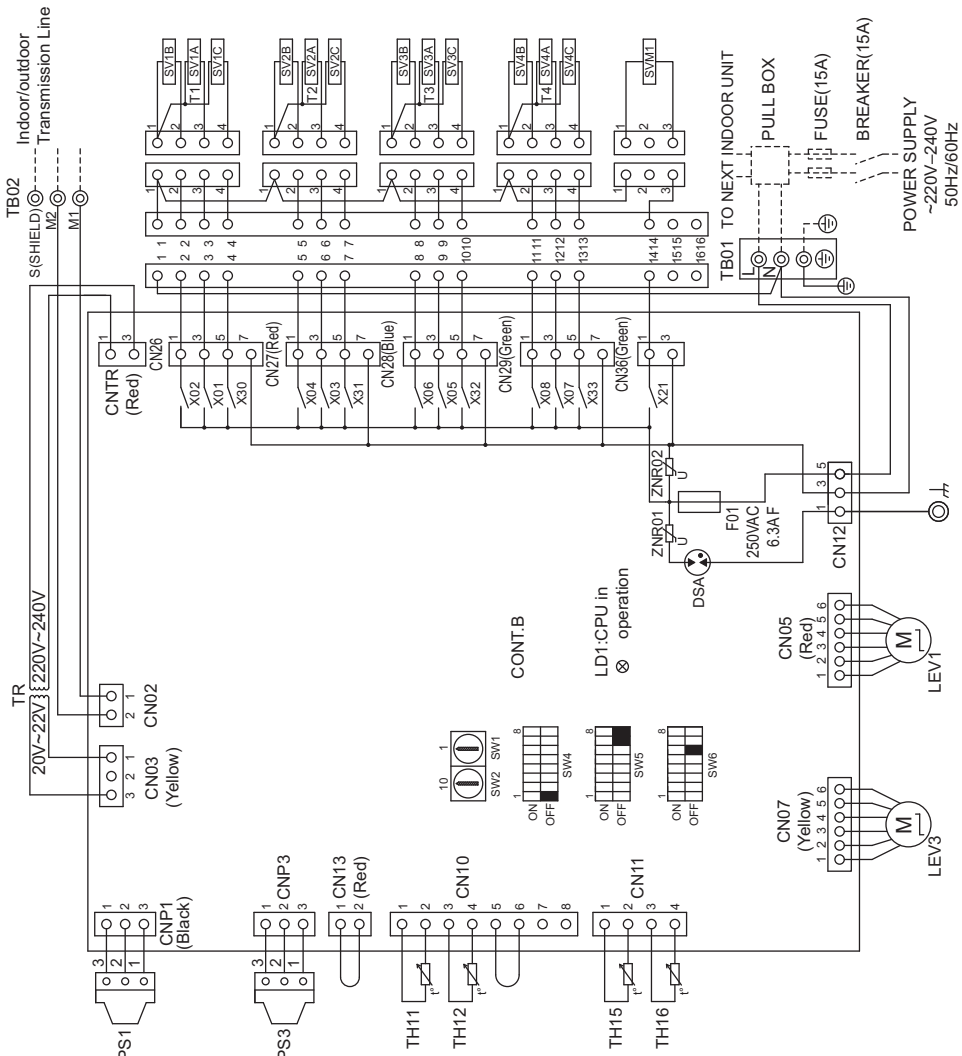
Connection pipe of MAIN BC CONTROLLER  
(Low pressure)  
Total capacity of indoor units at SUB BC CONTROLLER  
P200 or less:φ19.05<Brazed>(use attachment pipe)  
P300 or less:φ22.2 <Brazed>  
P300 over :φ28.58<Brazed>(use attachment pipe)



## CMB-P104V-G1

(Symbol explanation)	Name
TR	Transformer
TH11, 12, 15, 16	Thermister sensor
LEV1, 3	Expansion valve
PS1, 3	Pressure sensor
CONT.B	Circuit BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~4A, B, C	Solenoid valve
SVM1	Solenoid valve
T1~4	Terminal
F01	Fuse AC250V 6.3A F

Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.  
2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0



BC

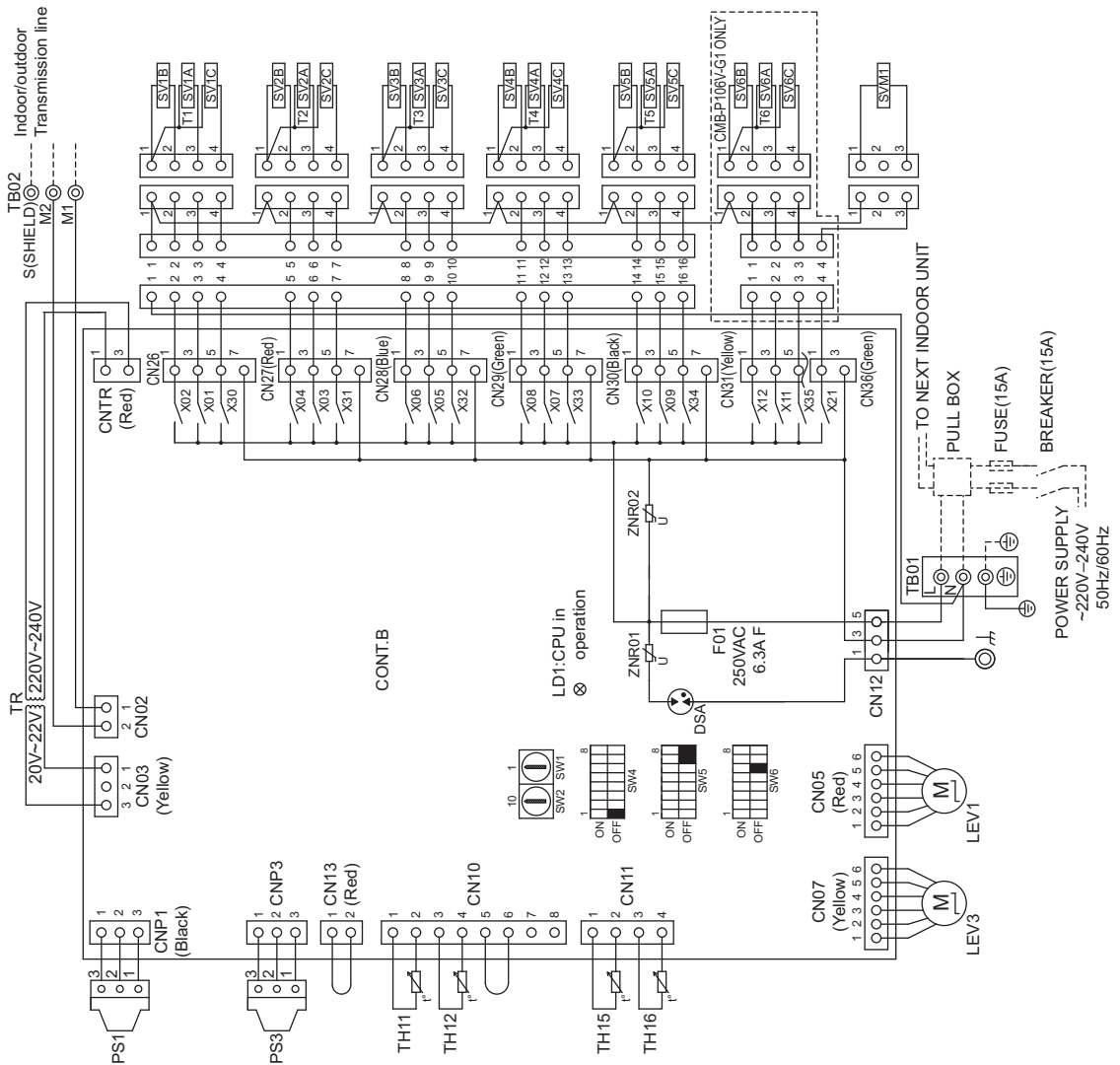


## CMB-P105,106V-G1

Symbol	Name
TR	Transformer
TH11, 12, 15, 16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
CONT.B	Circuit board
TB01	Terminal block
TB02	Terminal block (for power source)
SV1-6A,B,C	Terminal block (for Transmission)
SVM1	Solenoid valve
T1-6	Solenoid valve
F01	Terminal
	Fuse AC250V 6.3A F

Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.

2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0



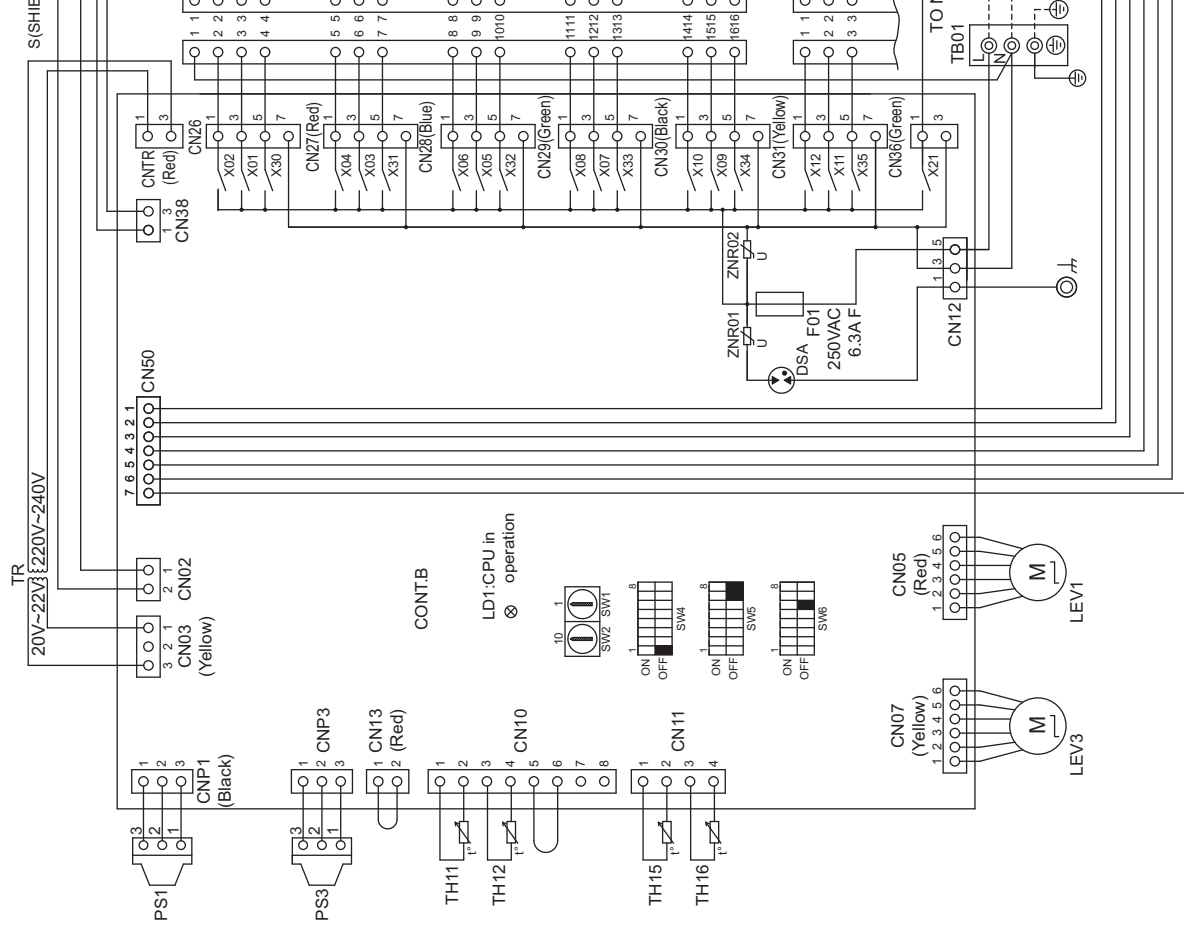
BC

## CMB-P108,1010V-G1

Symbol	Name
TR	Transformer
TH11, 12, 15, 16	Thermister sensor
LEV1, 3	Expansion valve
PS1, 3	Pressure sensor
REL.B	Circuit Relay
CONT.B	BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~10A, B, C	Solenoid valve
SVM1	Solenoid valve
T1~10	Terminal
F01	Fuse AC250V 6.3A F

Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.  
2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0

Indoor/outdoor Transmission line  
TB02  
S(SHIELD) M2 M1



TO NEXT INDOOR UNIT  
TB01  
L N PE  
PULL BOX  
FUSE(15A) BREAKER(15A)

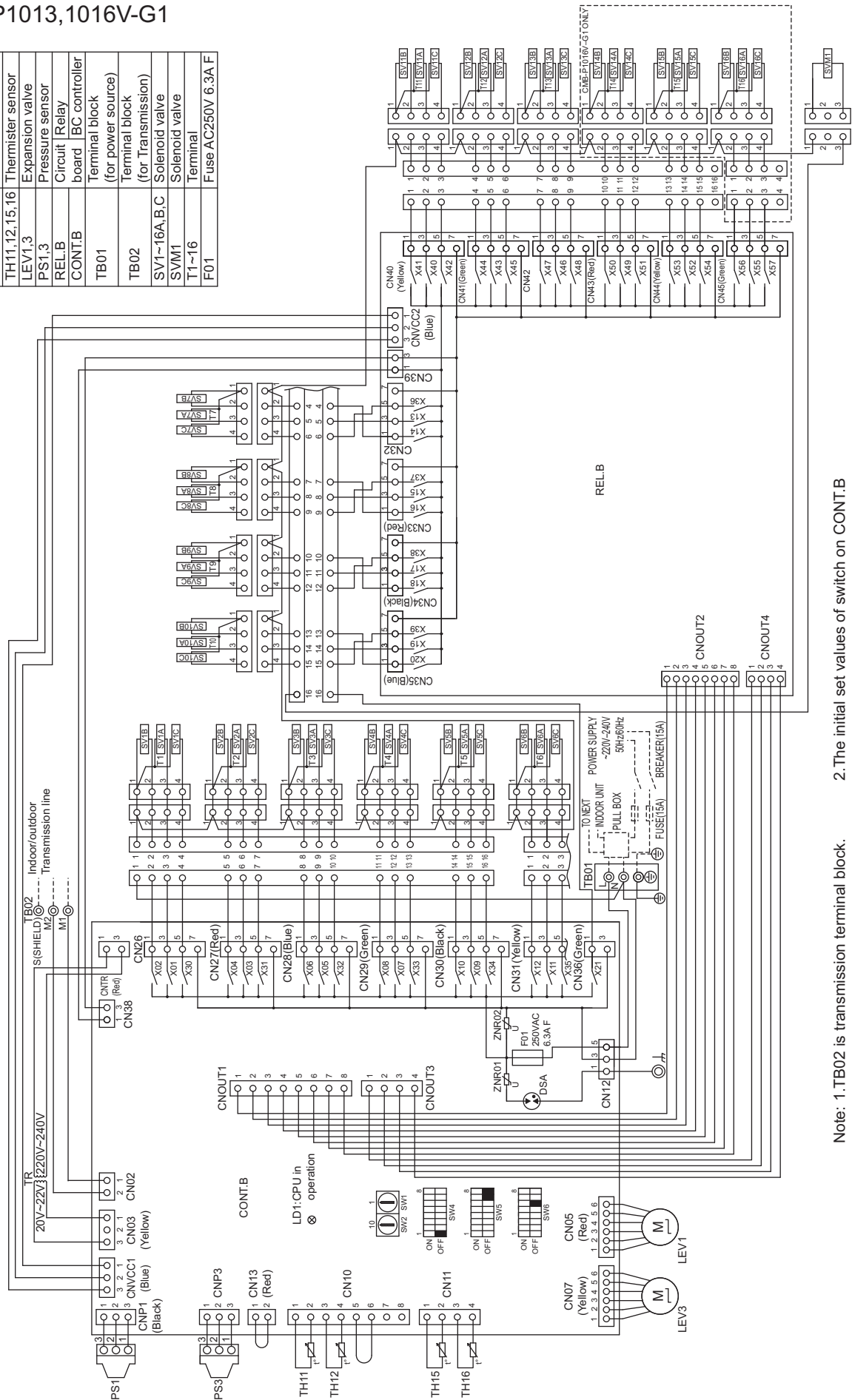
POWER SUPPLY  
~220V-240V  
50hz/60Hz

BC

## CMB-P1013,1016V-G1

(Symbol explanation)

Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
REL.B	Circuit Relay board
CONT.B	BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
SVM1	Solenoid valve
T1~16	Terminal
F01	Fuse AC250V 6.3A F



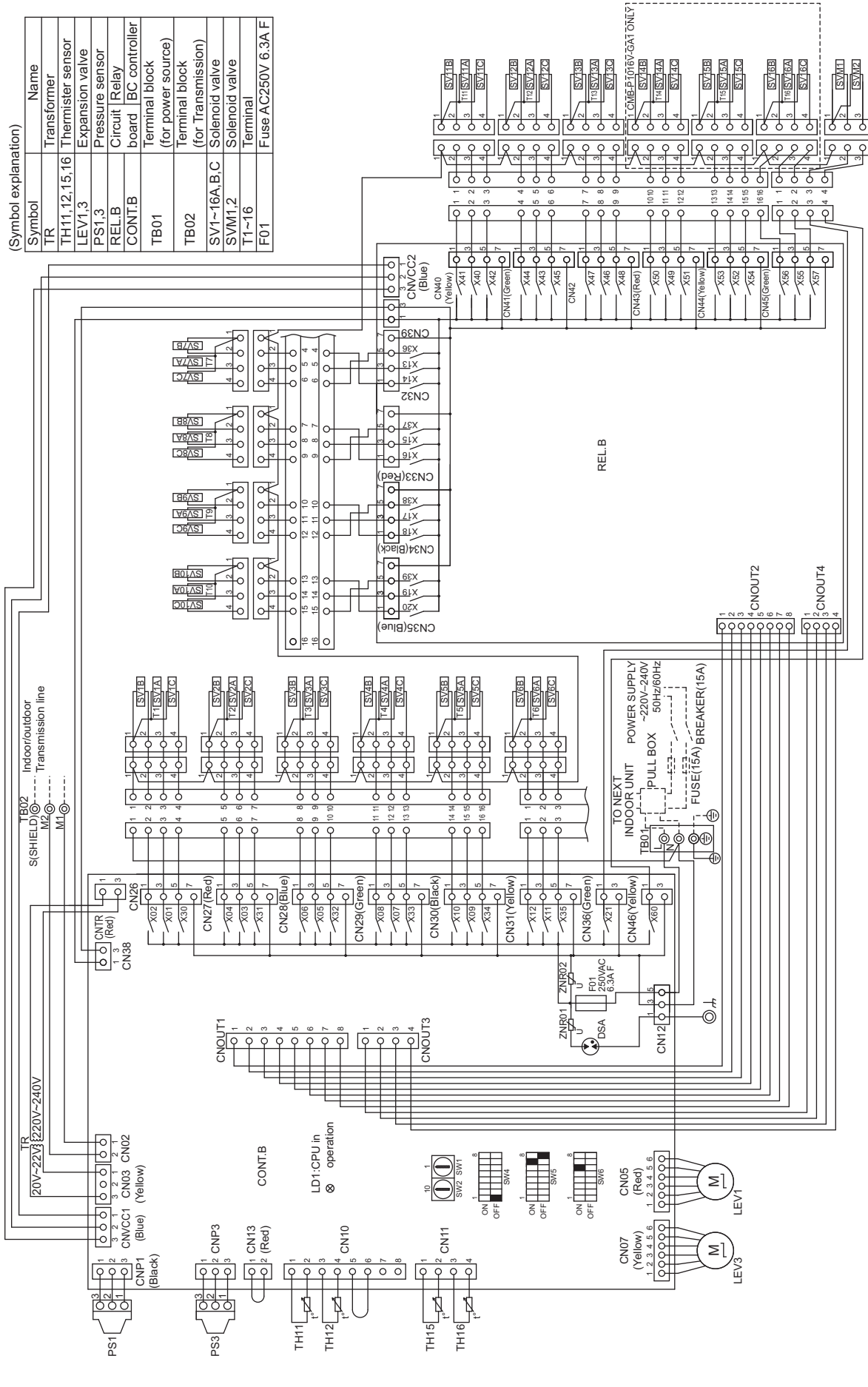
Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.

2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0



## CMB-P1013,1016V-GA1

Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
RELB	Circuit Relay
CONT.B	board IC controller
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
SVM1,2	Solenoid valve
T1~16	Terminal
F01	Fuse AC250V 6.3A F

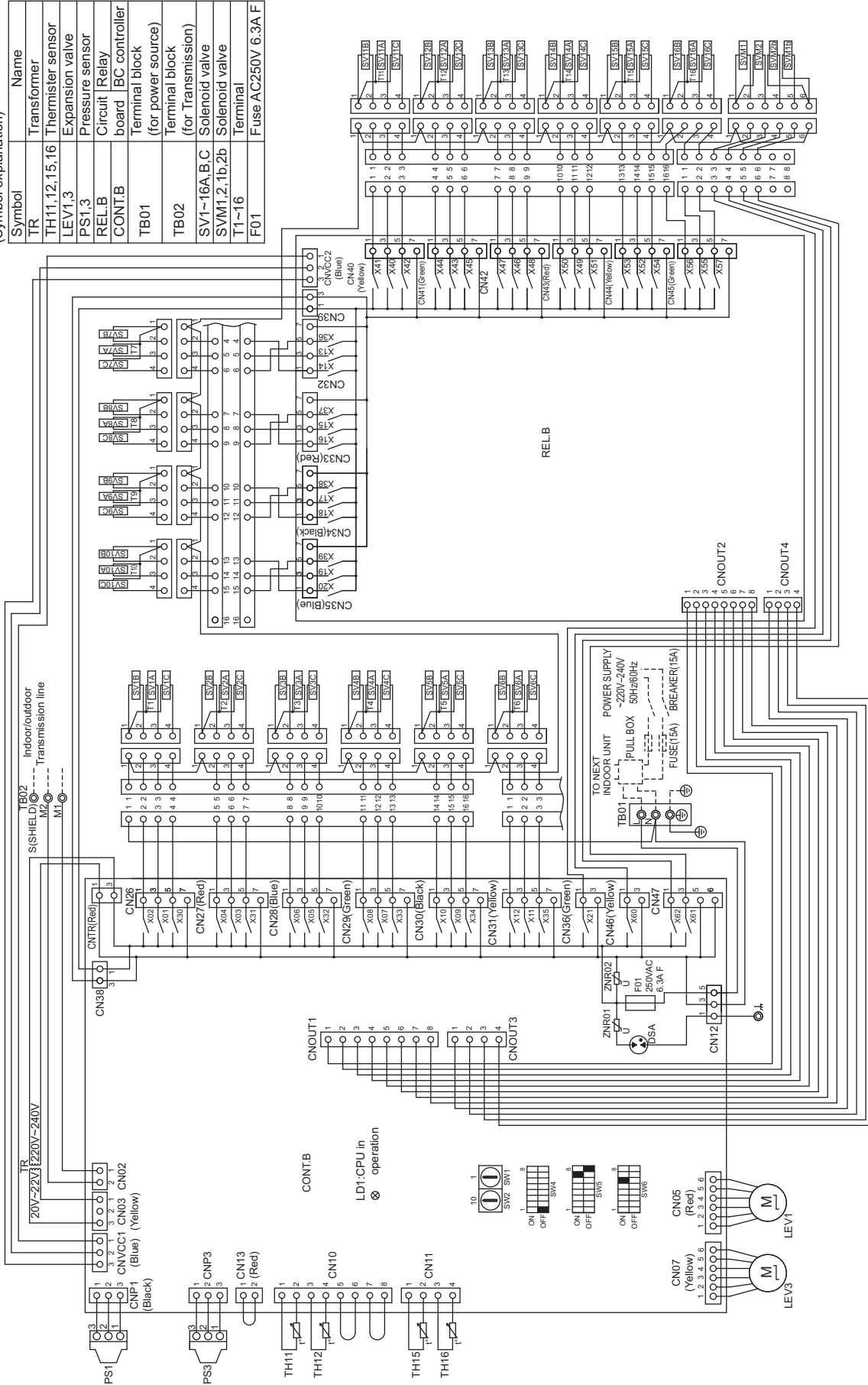


Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.

2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0

## CMB-P1016V-HA1

Symbol	Name
TR	Transformer
TH1,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
REL.B	Circuit Relay board
CONTB	IBC controller
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
SVM1,2,1b,2b	Solenoid valve
T1~16	Terminal
F01	Fuse AC250V 6.3A F



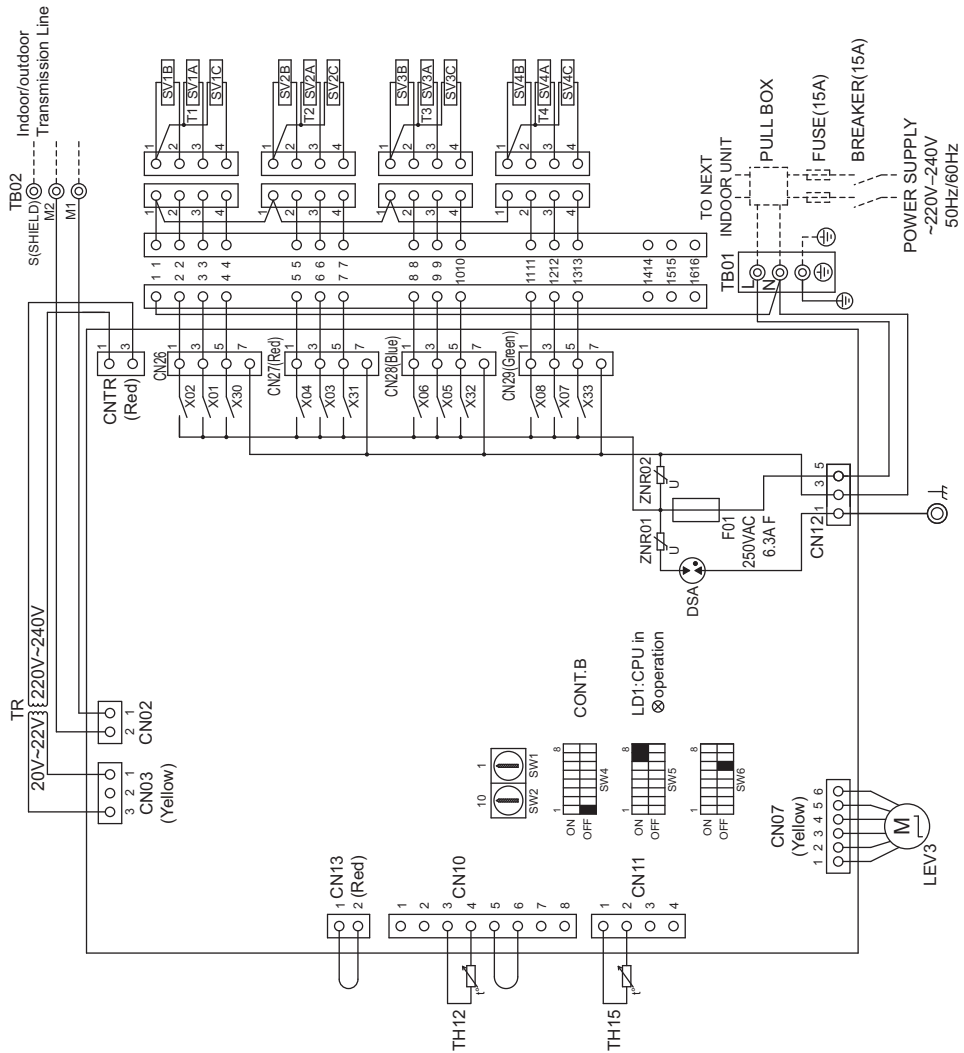
Note: 1. TB02 is transmission terminal block. Never connect power line to it.

2. The initial set values of switch on CONT.B are as follows.  
 SW1:0  
 SW2:0

## CMB-P104V-GB1

(Symbol explanation)	Name
Symbol	Transformer
TR	Transformer
TH12.15	Thermister sensor
LEV3	Expansion valve
CONT.B	Circuit BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~4A,B,C	Solenoid valve
T1~4	Terminal
F01	Fuse AC250V 6.3A F

Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.  
2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0  
SW4:0



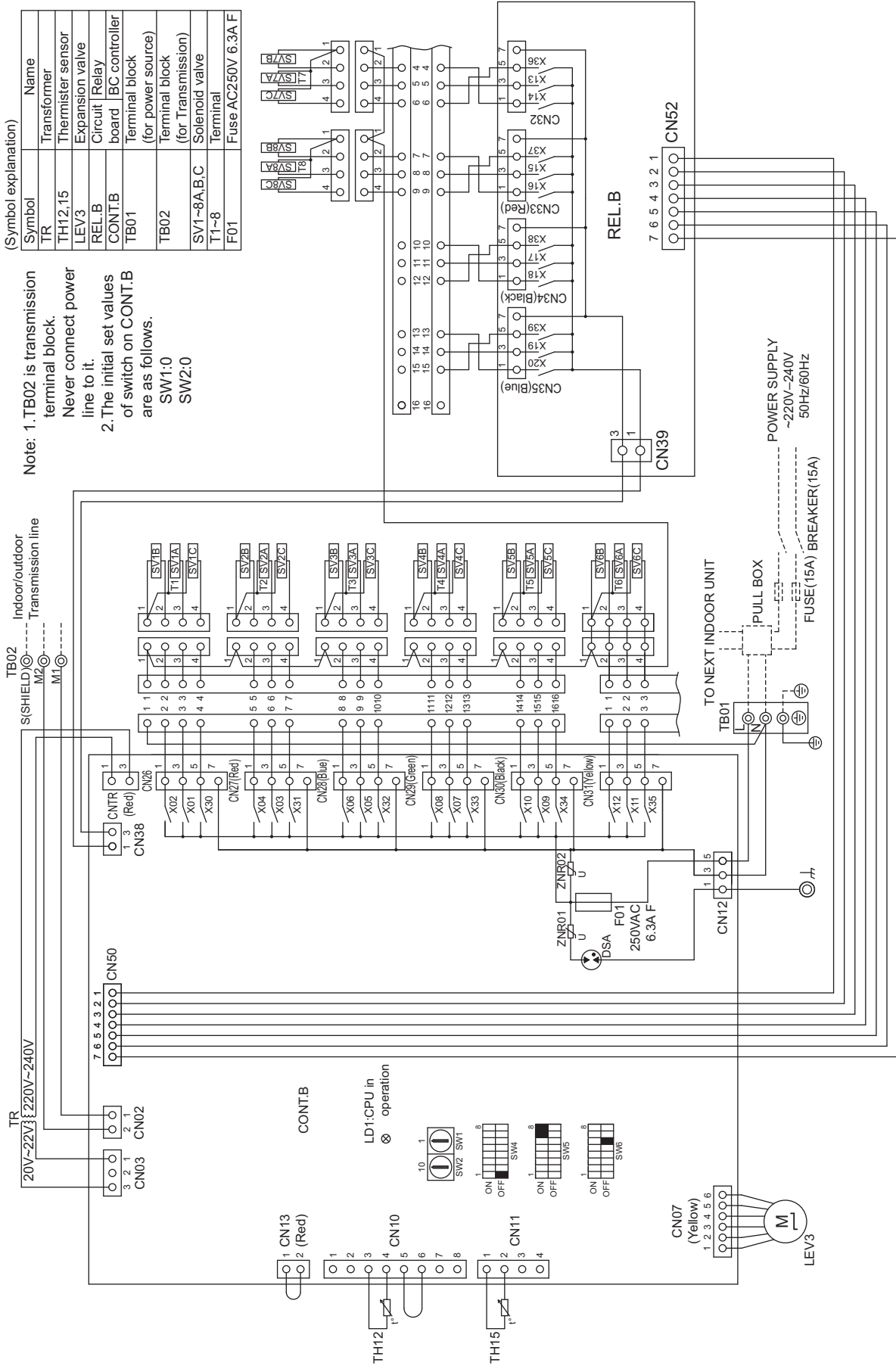
BC

## CMB-P108V-GB1

(Symbol explanation)

Symbol	Name
TR	Transformer
TH12,15	Thermister sensor
LEV3	Expansion valve
REL.B	Circuit Relay
CONT.B	BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~8A,B,C	Solenoid valve
T1~8	Terminal
F01	Fuse AC250V 6.3A F

Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.  
2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0



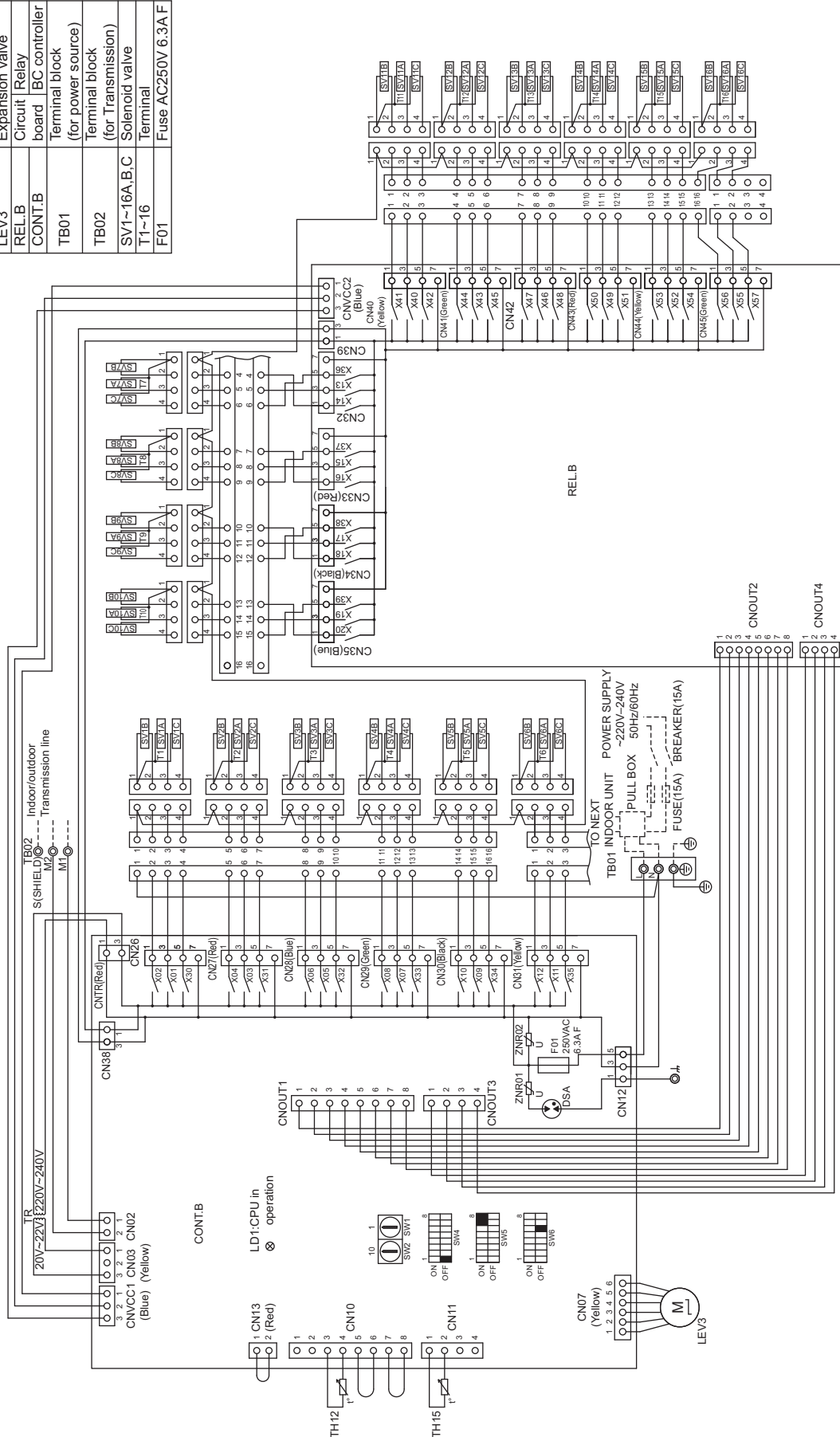
BC



## CMB-P1016V-HB1

Symbol	Name
TR	Transformer
TH12,15	Thermister sensor
LEV3	Expansion valve
RELB	Circuit Relay
CONT.B	board  BC controller
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
TT1~16	Terminal
F01	Fuse AC250V 6.3A F

(Symbol explanation)



- Note: 1. TB02 is transmission terminal block.  
Never connect power line to it.
2. The initial set values of switch on CONT.B are as follows.  
SW1:0  
SW2:0

