

AIR CONDITIONING SYSTEMS

CITY MULTI

DATA BOOK

MODEL

CMB-P-V-J

CMB-P-V-JA

CMB-P-V-KA

CMB-P-V-KB

CMB-P-V-J, CMB-P-V-JA, CMB-P-V-KA, CMB-P-V-KB

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1. SPECIFICATIONS

Indoor units

Model			CMB-P104V-J			
Number of branch			4			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.067/0.076/0.085		0.054/0.061/0.067	
	Heating	kW	0.030/0.034/0.038		0.024/0.027/0.030	
Current input	Cooling	A	0.31/0.34/0.36		0.25/0.27/0.28	
	Heating	A	0.14/0.15/0.16		0.11/0.12/0.13	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P350			
Indoor unit capacity connectable to 1 branch *12			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	246 x 596 x 495			
		in.	9-11/16 x 23-1/2 x 19-1/2			
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity	High press. pipe		Low press. pipe	
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
	To indoor unit	*13 mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed		28.58 (1-1/8) Brazed
		Liquid pipe		Gas pipe		
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	23 (51)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P200 Outdoor/Heat source unit connected),57(P250),59(P350)			
	Defrost	dB <A>	71			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P200 Outdoor/Heat source unit connected),39(P250),40(P350)			
	Defrost	dB <A>	53			
Accessories			Drain Connection pipe, Washer, Tie band			
Remarks						

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power 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.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
- 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Indoor units

Model			CMB-P106V-J			
Number of branch			6			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.097/0.110/0.123		0.078/0.088/0.097	
	Heating	kW	0.045/0.051/0.057		0.036/0.041/0.045	
Current input	Cooling	A	0.45/0.48/0.52		0.36/0.39/0.41	
	Heating	A	0.21/0.23/0.24		0.17/0.18/0.19	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P350			
Indoor unit capacity connectable to 1 branch *12			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	246 x 596 x 495		
			in.	9-11/16 x 23-1/2 x 19-1/2		
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe	
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
	*13 To indoor unit	mm (in.) O.D.		P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
		Liquid pipe			Gas pipe	
		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed			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.)	
Field drain pipe size			mm (in.)	O.D. 32 (1-1/4)		
Net weight			kg (lbs)	27 (60)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P200 Outdoor unit connected),57(P250),59(P350)			
	Defrost	dB <A>	71			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P200 Outdoor unit connected),39(P250),40(P350)			
	Defrost	dB <A>	53			
Accessories			Drain Connection pipe, Washer, Tie band			
Remarks						

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power 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.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
- 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

BC controller

1. SPECIFICATIONS

Indoor units

Model			CMB-P108V-J		
Number of branch			8		
Power source			1-phase 220-230-240 V		
			50Hz	60Hz	
Power input	Cooling	kW	0.127/0.144/0.161		0.102/0.115/0.127
	Heating	kW	0.060/0.068/0.076		0.048/0.054/0.060
Current input	Cooling	A	0.58/0.63/0.68		0.47/0.50/0.53
	Heating	A	0.28/0.30/0.32		0.22/0.24/0.25
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P200 to P350		
Indoor unit capacity connectable to 1 branch			*12 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	246 x 596 x 495		
		in.	9-11/16 x 23-1/2 x 19-1/2		
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	*13 To indoor unit	mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
		Liquid pipe		Gas pipe	
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)		
Net weight		kg (lbs)	31 (69)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P200 Outdoor unit connected),57(P250),59(P350)		
	Defrost	dB <A>	71		
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P200 Outdoor unit connected),39(P250),40(P350)		
	Defrost	dB <A>	53		
Accessories		Drain Connection pipe, Washer, Tie band			
Remarks					

- Notes:
- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
 - 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
 - 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
 - 5.The sound pressure/power 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.
 - 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
 - 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
 - 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
 - 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
 - 10.This unit is not designed for outside installations.
 - 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
 - 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
 - 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Indoor units

Model			CMB-P1012V-J		
Number of branch			12		
Power source			1-phase 220-230-240 V		
			50Hz	60Hz	
Power input	Cooling	kW	0.186/0.211/0.236		0.150/0.168/0.186
	Heating	kW	0.090/0.102/0.114		0.072/0.081/0.090
Current input	Cooling	A	0.85/0.92/0.99		0.69/0.74/0.78
	Heating	A	0.42/0.44/0.48		0.33/0.36/0.38
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P200 to P350		
Indoor unit capacity connectable to 1 branch *12			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	246 x 911 x 639	
			in.	9-11/16 x 35-7/8 x 25-3/16	
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	To indoor unit	Liquid pipe		Gas pipe	
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed		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.)
			bigger than 50 9.52 (3/8) Brazed		
Field drain pipe size			mm (in.)	O.D. 32 (1-1/4)	
Net weight			kg (lbs)	46 (102)	
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P200 Outdoor unit connected),57(P250),59(P350)		
	Defrost	dB <A>	71		
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P200 Outdoor unit connected),39(P250),40(P350)		
	Defrost	dB <A>	53		
Accessories			Drain Connection pipe, Washer, Tie band		
Remarks					

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power 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.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
- 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Indoor units

Model			CMB-P1016V-J			
Number of branch			16			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.246/0.279/0.312		0.198/0.222/0.246	
	Heating	kW	0.119/0.135/0.151		0.096/0.108/0.119	
Current input	Cooling	A	1.12/1.22/1.30		0.90/0.97/1.03	
	Heating	A	0.55/0.59/0.63		0.44/0.47/0.50	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P350			
Indoor unit capacity connectable to 1 branch			*12 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	246 x 1,135 x 639			
		in.	9-11/16 x 44-11/16 x 25-3/16			
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe	
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
	*13 To indoor unit	Liquid pipe		Gas pipe		
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	56 (124)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P200 Outdoor unit connected),57(P250),59(P350)			
	Defrost	dB <A>	71			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P200 Outdoor unit connected),39(P250),40(P350)			
	Defrost	dB <A>	53			
Accessories		Drain Connection pipe, Washer, Tie band				
Remarks						

- Notes:
- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
 - 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
 - 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
 - 5.The sound pressure/power 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.
 - 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
 - 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
 - 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
 - 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
 - 10.This unit is not designed for outside installations.
 - 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
 - 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
 - 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Indoor units

Model			CMB-P108V-JA			
Number of branch			8			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.127/0.144/0.161		0.102/0.115/0.127	
	Heating	kW	0.060/0.068/0.076		0.048/0.054/0.060	
Current input	Cooling	A	0.58/0.63/0.68		0.47/0.50/0.53	
	Heating	A	0.28/0.30/0.32		0.22/0.24/0.25	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P900			
Indoor unit capacity connectable to 1 branch *12			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	246 x 911 x 639			
		in.	9-11/16 x 35-7/8 x 25-3/16			
Refrigerant piping diameter	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
	*13	mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P400 to P500	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*13	mm (in.) O.D.	P550	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P600	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed
		*13	mm (in.) O.D.	P650	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P700 to P800	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
	mm (in.) O.D.	P850 to P900	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed		
	To indoor unit		Liquid pipe		Gas pipe	
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)	
	To other BC controller		Total down-stream Indoor unit capacity	High press. pipe	Liquid pipe	Low press. pipe
		mm (in.) O.D.	to P200	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P201 to P300	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P301 to P350	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P351 to P400	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P401 to P600	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P601 to P650	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P651 to P800	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
	mm (in.) O.D.	P801 to P1000	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
	mm (in.) O.D.	P1001 or above	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	45 (100)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	62(When P250 Outdoor/Heat source unit connected),65(P450),68(P700),69(P900)			
	Defrost	dB <A>	74			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	44(When P250 Outdoor/Heat source unit connected),47(P450),50(P700),51(P900)			
	Defrost	dB <A>	56			
Accessories		Drain Connection pipe, Washer, Tie band				
Remarks						

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power 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.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
- 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

BC controller

1. SPECIFICATIONS

Indoor units

Model			CMB-P1012V-JA			
Number of branch			12			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.186/0.211/0.236		0.150/0.168/0.186	
	Heating	kW	0.090/0.102/0.114		0.072/0.081/0.090	
Current input	Cooling	A	0.85/0.92/0.99		0.69/0.74/0.78	
	Heating	A	0.42/0.44/0.48		0.33/0.36/0.38	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P900			
Indoor unit capacity connectable to 1 branch			*12 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	246 x 1,135 x 639			
		in.	9-11/16 x 44-11/16 x 25-3/16			
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe	
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*13	mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P400 to P500	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
		*13	mm (in.) O.D.	P550	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P600	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed
		*13	mm (in.) O.D.	P650	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P700 to P800	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
			mm (in.) O.D.	P850 to P900	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed
	mm (in.) O.D.		P850 to P900	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed	
	To indoor unit	Liquid pipe		Gas pipe		
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)	
	To other BC controller	Total down-stream Indoor unit capacity		High press. pipe	Liquid pipe	Low press. pipe
		mm (in.) O.D.	to P200	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P201 to P300	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P301 to P350	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P351 to P400	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P401 to P600	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P601 to P650	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
mm (in.) O.D.		P651 to P800	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	
mm (in.) O.D.		P801 to P1000	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
mm (in.) O.D.	P1001 or above	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed		
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	55 (122)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	62(When P250 Outdoor/Heat source unit connected),65(P450),68(P700),69(P900)			
	Defrost	dB <A>	74			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	44(When P250 Outdoor/Heat source unit connected),47(P450),50(P700),51(P900)			
	Defrost	dB <A>	56			
Accessories		Drain Connection pipe, Washer, Tie band				
Remarks						

Notes:					
1. Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.					
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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)					
4. Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.					
5. The sound pressure/power 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.					
6. The sound pressure level values were obtained at the location below 1.5m from the unit.					
7. The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.					
8. Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)					
9. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.					
10. This unit is not designed for outside installations.					
11. When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.					
12. Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.					
13. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.					

BC controller

1. SPECIFICATIONS

Indoor units

Model			CMB-P1016V-JA			
Number of branch			16			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.246/0.279/0.312		0.198/0.222/0.246	
	Heating	kW	0.119/0.135/0.151		0.096/0.108/0.119	
Current input	Cooling	A	1.12/1.22/1.30		0.90/0.97/1.03	
	Heating	A	0.55/0.59/0.63		0.44/0.47/0.50	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P900			
Indoor unit capacity connectable to 1 branch *12			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	246 x 1,135 x 639			
		in.	9-11/16 x 44-11/16 x 25-3/16			
Refrigerant piping diameter	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
	*13	mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P400 to P500	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*13	mm (in.) O.D.	P550	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P600	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed or 34.93 (1-3/8) Brazed
		*13	mm (in.) O.D.	P650	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P700 to P800	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed
	mm (in.) O.D.	P850 to P900	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed		
	To indoor unit		Liquid pipe		Gas pipe	
			Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)	
	To other BC controller		Total down-stream Indoor unit capacity	High press. pipe	Liquid pipe	Low press. pipe
			to P200	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
			P201 to P300	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
			P301 to P350	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
			P351 to P400	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
			P401 to P600	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
			P601 to P650	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
			P651 to P800	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		P801 to P1000	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
		P1001 or above	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	63 (139)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	62(When P250 Outdoor/Heat source unit connected),65(P450),68(P700),69(P900)			
	Defrost	dB <A>	74			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	44(When P250 Outdoor/Heat source unit connected),47(P450),50(P700),51(P900)			
	Defrost	dB <A>	56			
Accessories		Drain Connection pipe, Washer, Tie band				
Remarks						

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power 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.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.
- 13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

BC controller

1. SPECIFICATIONS

Indoor units

Model			CMB-P1016V-KA			
Number of branch			16			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.246/0.279/0.312		0.198/0.222/0.246	
	Heating	kW	0.119/0.135/0.151		0.096/0.108/0.119	
Current input	Cooling	A	1.12/1.22/1.30		0.90/0.97/1.03	
	Heating	A	0.55/0.59/0.63		0.44/0.47/0.50	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P200 to P1100			
Indoor unit capacity connectable to 1 branch			*12 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	246 x 1,135 x 639			
		in.	9-11/16 x 44-11/16 x 25-3/16			
Refrigerant piping diameter	To outdoor/heat source unit	Connectable unit capacity		High press. pipe	Low press. pipe	
		mm (in.) O.D.	P200	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P250/P300	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*13	mm (in.) O.D.	P350	19.05 (3/4) Brazed or 22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
			mm (in.) O.D.	P400 to P500	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed
		*13	mm (in.) O.D.	P550	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
			*13	mm (in.) O.D.	P600	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed
		mm (in.) O.D.		P650	28.58 (1-1/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P700 to P800	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P850 to P1000	28.58 (1-1/8) Brazed	41.28 (1-5/8) Brazed	
	mm (in.) O.D.	P1050 to P1100	34.93 (1-3/8) Brazed	41.28 (1-5/8) Brazed		
	To indoor unit	Liquid pipe		Gas pipe		
		mm (in.) O.D.	Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed	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.)		
	To other BC controller	Total down-stream Indoor unit capacity		High press. pipe	Liquid pipe	Low press. pipe
		mm (in.) O.D.	to P200	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P201 to P300	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P301 to P350	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P351 to P400	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P401 to P600	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P601 to P650	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
mm (in.) O.D.		P651 to P800	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	
mm (in.) O.D.		P801 to P1000	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
mm (in.) O.D.		P1001 or above	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	65 (144)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P300 Outdoor/Heat source unit connected),61(P550),63(P800),66(P1100)			
	Defrost	dB <A>	73			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P300 Outdoor/Heat source unit connected),43(P550),45(P800),48(P1100)			
	Defrost	dB <A>	55			
Accessories		Drain Connection pipe, Washer, Tie band				
Remarks						

Notes:					
1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.					
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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)					
4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.					
5.The sound pressure/power 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.					
6.The sound pressure level values were obtained at the location below 1.5m from the unit.					
7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.					
8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)					
9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.					
10.This unit is not designed for outside installations.					
11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.					
12.Indoor unit capacity connectable to 1 branch is changed depending on the indoor unit type and connection method. Please refer to the Installation Manual for more information.					
13.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.					

BC controller

1. SPECIFICATIONS

Indoor units

Model			CMB-P104V-KB			
Number of branch			4			
Power source			1-phase 220-230-240 V			
			50Hz	60Hz		
Power input	Cooling	kW	0.060/0.068/0.076		0.048/0.054/0.060	
	Heating	kW	0.030/0.034/0.038		0.024/0.027/0.030	
Current input	Cooling	A	0.28/0.30/0.32		0.22/0.24/0.25	
	Heating	A	0.14/0.15/0.16		0.11/0.12/0.13	
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable Main BC controller			CMB-P108/1012/1016V-JA, CMB-P1016V-KA			
The maximum number of connectable Sub BC controllers			11			
The maximum connectable capacity of indoor units			P350 for each			
External dimension H x W x D		mm	246 x 596 x 495			
		in.	9-11/16 x 23-1/2 x 19-1/2			
Refrigerant piping diameter	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
	mm (in.) O.D.		-	-	-	
	To indoor unit		Liquid pipe		Gas pipe	
	mm (in.) O.D.		Indoor unit Model 50 or smaller 6.35 (1/4) Brazed bigger than 50 9.52 (3/8) Brazed		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.)	
	To other BC controller		Total down-stream Indoor unit capacity	High press. pipe	Liquid pipe	Low press. pipe
	mm (in.) O.D.		to P200	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
	mm (in.) O.D.		P201 to P300	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
	mm (in.) O.D.		P301 to P350	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
	mm (in.) O.D.		P351 to P400	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
	mm (in.) O.D.		P401 to P600	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
mm (in.) O.D.		P601 to P650	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed	
mm (in.) O.D.		P651 to P800	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed	
mm (in.) O.D.		P801 to P1000	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
mm (in.) O.D.		P1001 or above	34.93 (1-3/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed	
Field drain pipe size		mm (in.)	O.D. 32 (1-1/4)			
Net weight		kg (lbs)	21 (47)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	56(When P200 Outdoor/Heat source unit connected),57(P250),59(P350)			
	Defrost	dB <A>	71			
Sound pressure level (measured in anechoic room)	Rated operation	dB <A>	38(When P200 Outdoor/Heat source unit connected),39(P250),40(P350)			
	Defrost	dB <A>	53			
Accessories		Drain Connection pipe, Washer, Tie band				
Remarks						

Notes:

- 1.Installation/foundation work, electrical connection work, insulation work, power source switch, and other items shall be referred to the Installation Manual.
- 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 neighbors. (For use in quiet environments with low background noise, position the BC CONTROLLER at least 5m away from any indoor units.)
- 4.Sound pressure/power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound pressure/power level at the rated operation is the value of the cooling mode.
- 5.The sound pressure/power 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.
- 6.The sound pressure level values were obtained at the location below 1.5m from the unit.
- 7.The solenoid valve switching sound is 56 dB (sound pressure level) regardless of the unit model.
- 8.Indoor units P100, P125, P140 can be connected to 1 branch. (In this case, cooling capacity decreases a little.)
- 9.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
- 10.This unit is not designed for outside installations.
- 11.When blazing the pipes, be sure to blaze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
- 12.Can't use singleness. (MAIN BC CONTROLLER is necessary)

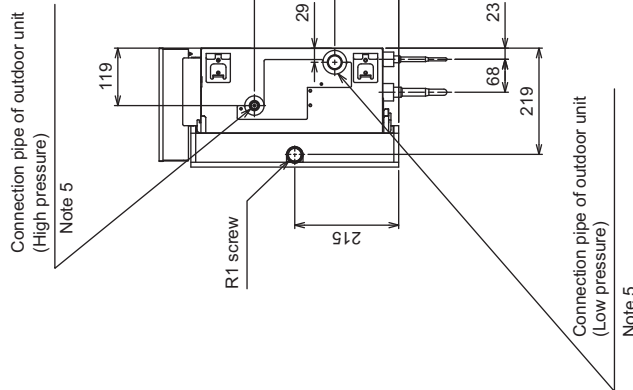
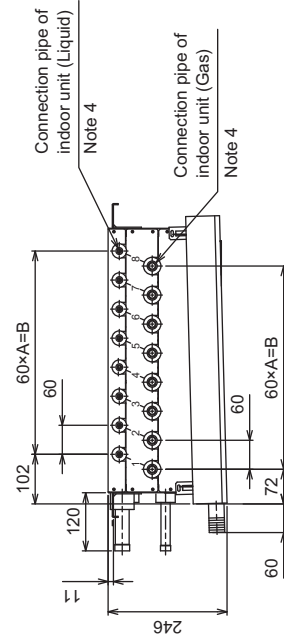
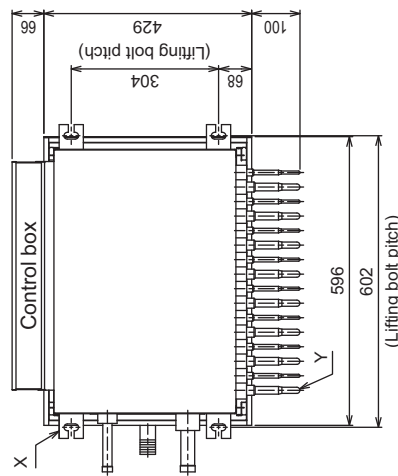
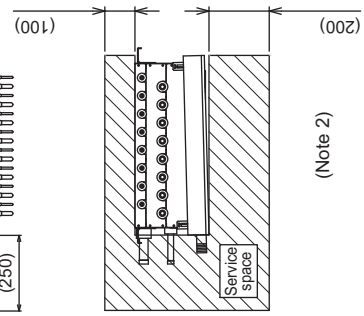
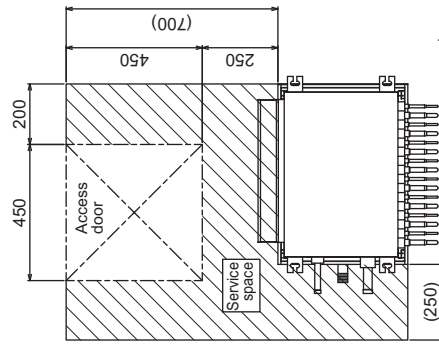
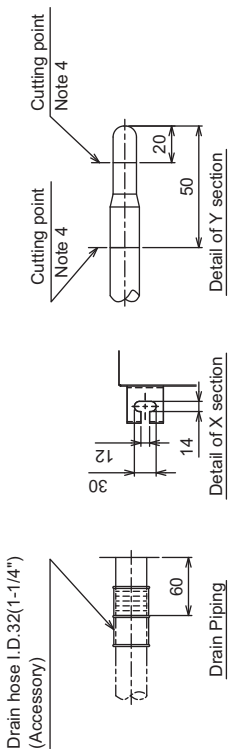
BC controller

CMB-P104, 106, 108V-J

Unit: mm

- <Accessories>
- Drain hose I.D.32(1-1/4") 1pc.
 - Tie band 3pcs.
 - Square washer (with cushion) 4pcs.
 - Square washer 4pcs.

- Note 1. Suspension bolt(ø10) 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.
 5. Refer to the Installation Manual for connection pipe of outdoor unit diameter size.
 6. Refer to the Installation Manual for insulation of connection pipe and drain piping.
 7. Refer to the Installation Manual for installation of drain pan.
 8. Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tilted position.



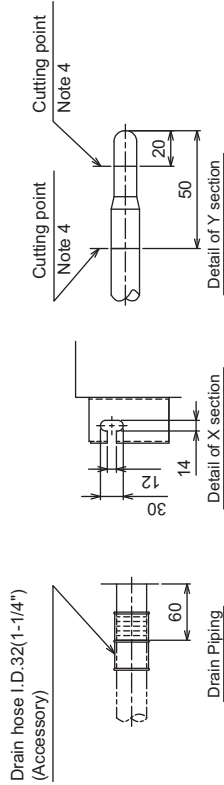
	A	B
CMB-P104V-J	3	180
CMB-P106V-J	5	300
CMB-P108V-J	7	420

CMB-P1012, 1016V-J

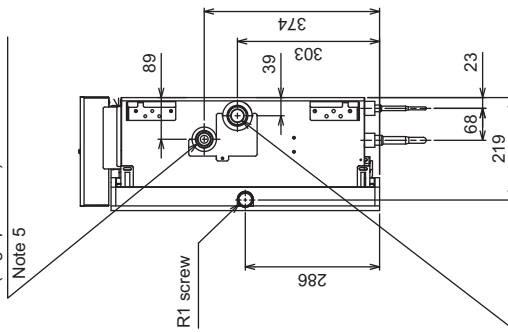
Unit: mm

- <Accessories>
- Drain hose I.D.32(1-1/4") 1pc.
 - Tie band 3pcs.
 - Square washer (with cushion) 4pcs.
 - Square washer 4pcs.

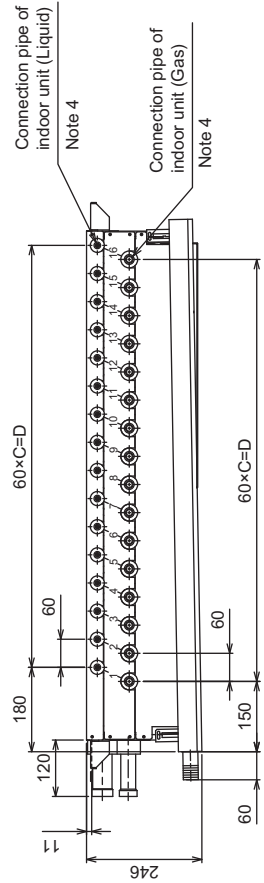
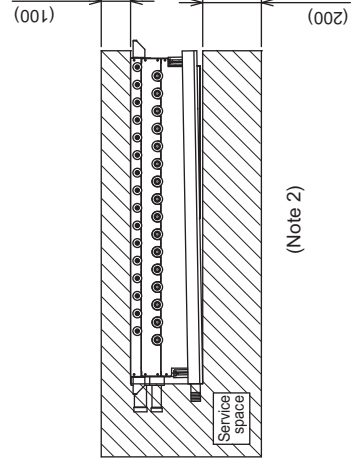
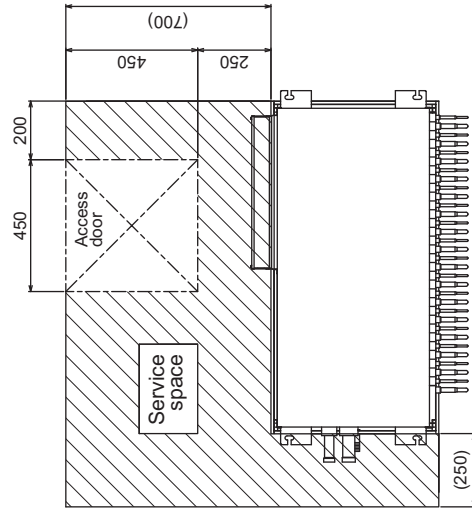
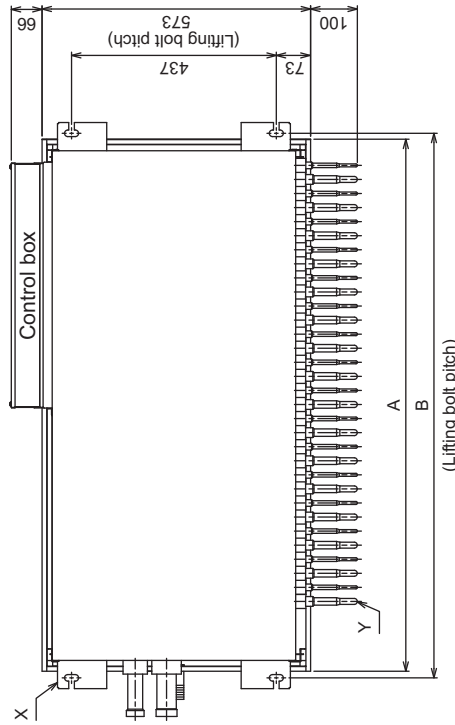
- Note 1. Suspension bolt(ø10) and nut(M10) prepare in the field.
 2. Take notice of service space as follows.
 (Please give attention not to occupy service space by letting ducts and pipes through.)
 3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb 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.
 5. Refer to the Installation Manual for connection pipe of outdoor unit diameter size.
 6. Refer to the Installation Manual for insulation of connection pipe and drain piping.
 7. Refer to the Installation Manual for installation of drain pan.
 8. Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tiled position.



Connection pipe of outdoor unit (High pressure)



Connection pipe of outdoor unit (Low pressure)



	A	B	C	D
CMB-P1012V-J	911	938	11	660
CMB-P1016V-J	1135	1161	15	900

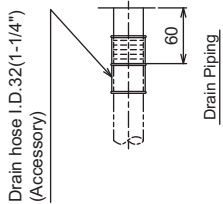
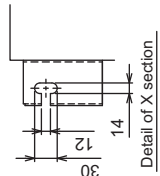
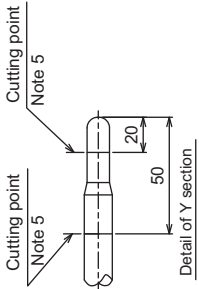
CMB-P108, 1012, 1016V-JA

Unit: mm

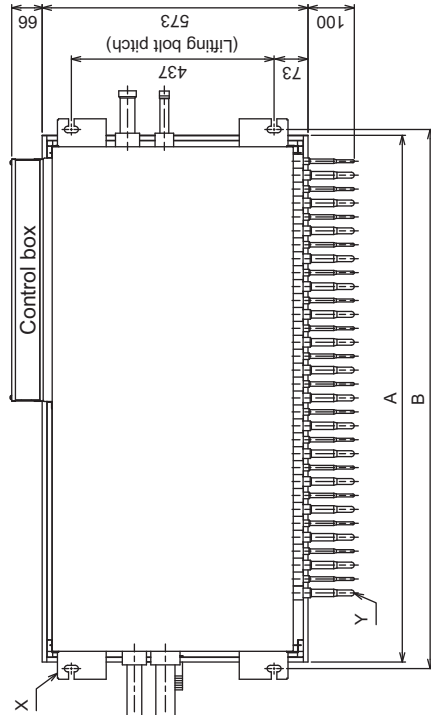
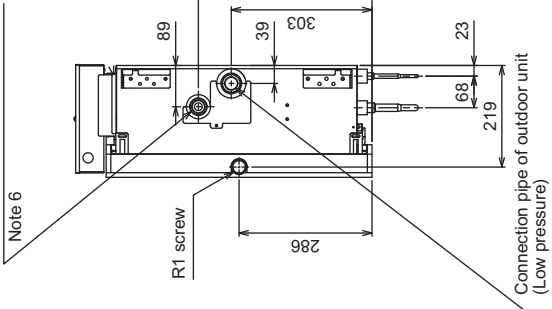
<Accessories>

- Drain hose I.D.32(1-1/4") 1pc.
- Tie band 3pcs.
- Square washer (with cushion) 4pcs.
- Square washer 4pcs.

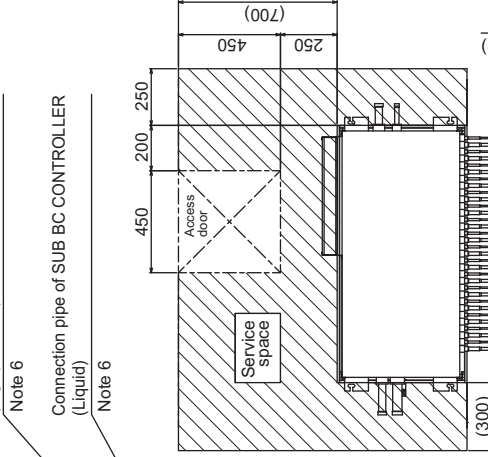
- Note 1. Suspension bolt(φ10) and nut(M10) prepare in the field.
 2. Take notice of service space as follows.
 (Please give attention not to occupy service space by letting ducts and pipes through.)
 3. Please take service space for connection pipe of SUB BC CONTROLLER.
 4. Install this product in a 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.
 6. Refer to the Installation Manual for connection pipe of outdoor unit or SUB BC CONTROLLER diameter size.
 7. Refer to the Installation Manual for insulation of connection pipe and drain piping.
 8. Refer to the Installation Manual for Installation of drain pan.
 9. Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tilted position.



Connection pipe of outdoor unit (High pressure)

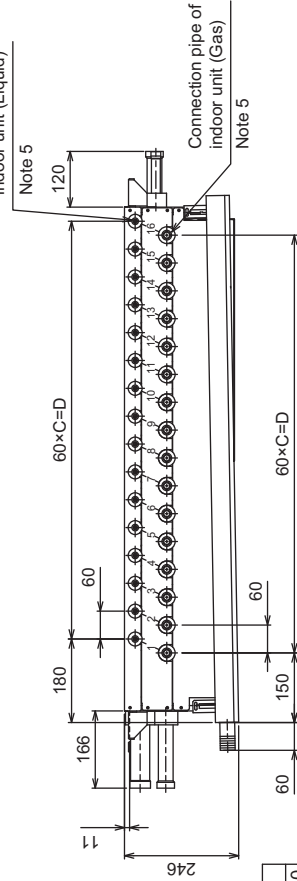


Connection pipe of SUB BC CONTROLLER (High pressure)



Connection pipe of SUB BC CONTROLLER (Liquid)

Connection pipe of indoor unit (Liquid)



Note 6

(Note 2,3)

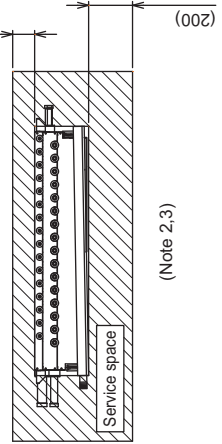
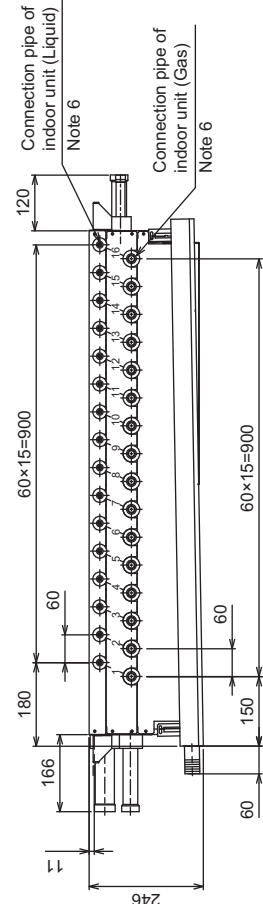
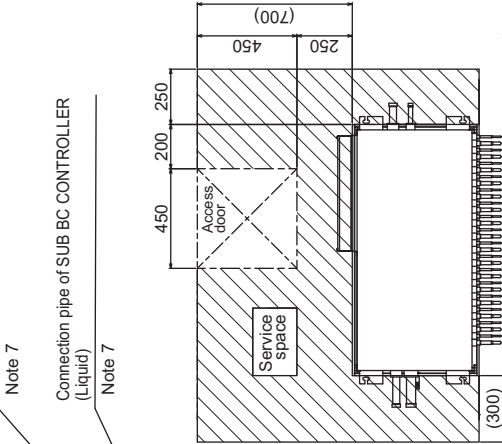
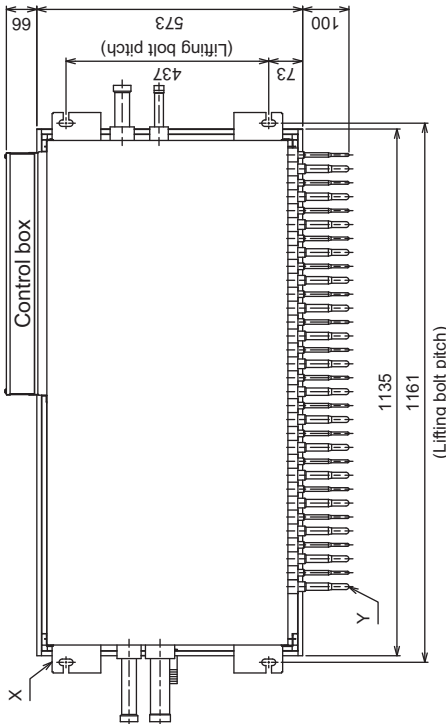
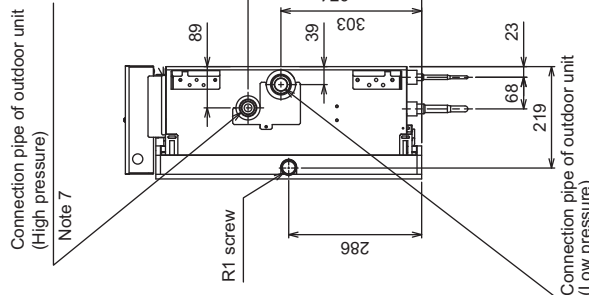
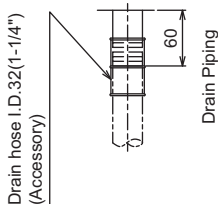
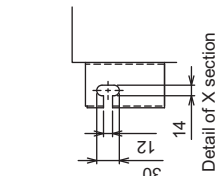
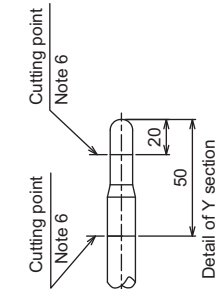
	A	B	C	D
CMB-P108V-JA	911	938	7	420
CMB-P1012V-JA	1135	1161	11	660
CMB-P1016V-JA	1135	1161	15	900

CMB-P1016V-KA

Unit: mm

- <Accessories>
- Drain hose I.D.32(1-1/4")1pc.
 - Tie band3pcs.
 - Square washer (with cushion)4pcs.
 - Square washer4pcs.

- Note 1. Suspension bolt(φ10) 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-38HP(P950) 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.
 7. Refer to the Installation Manual for connection pipe of outdoor unit or SUB BC CONTROLLER diameter size.
 8. Refer to the Installation Manual for insulation of connection pipe and drain piping.
 9. Refer to the Installation Manual for installation of drain pan.
 10. Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tilted position.

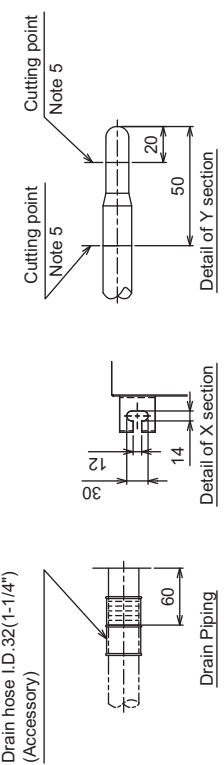


CMB-P104V-KB

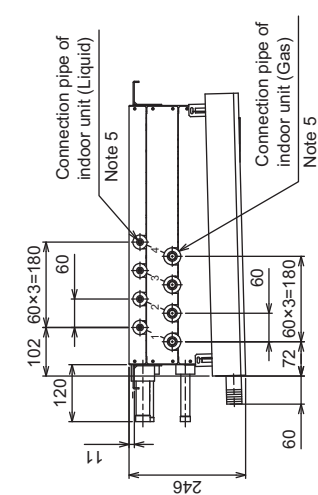
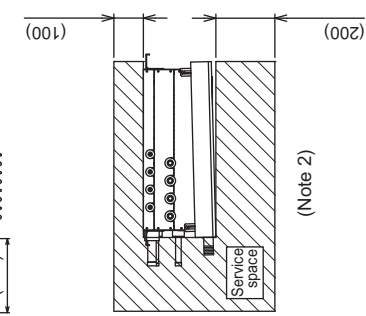
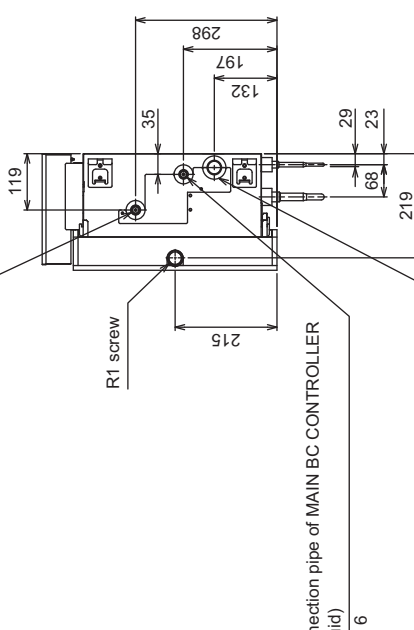
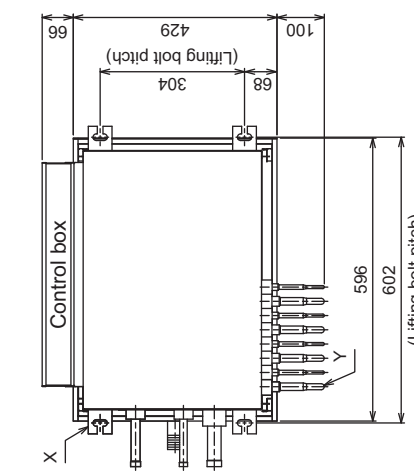
Unit: mm

- <Accessories>
- Drain hose I.D.32(1-1/4") 1pc.
 - Tie band 3pcs.
 - Square washer (with cushion) 4pcs.
 - Square washer 4pcs.

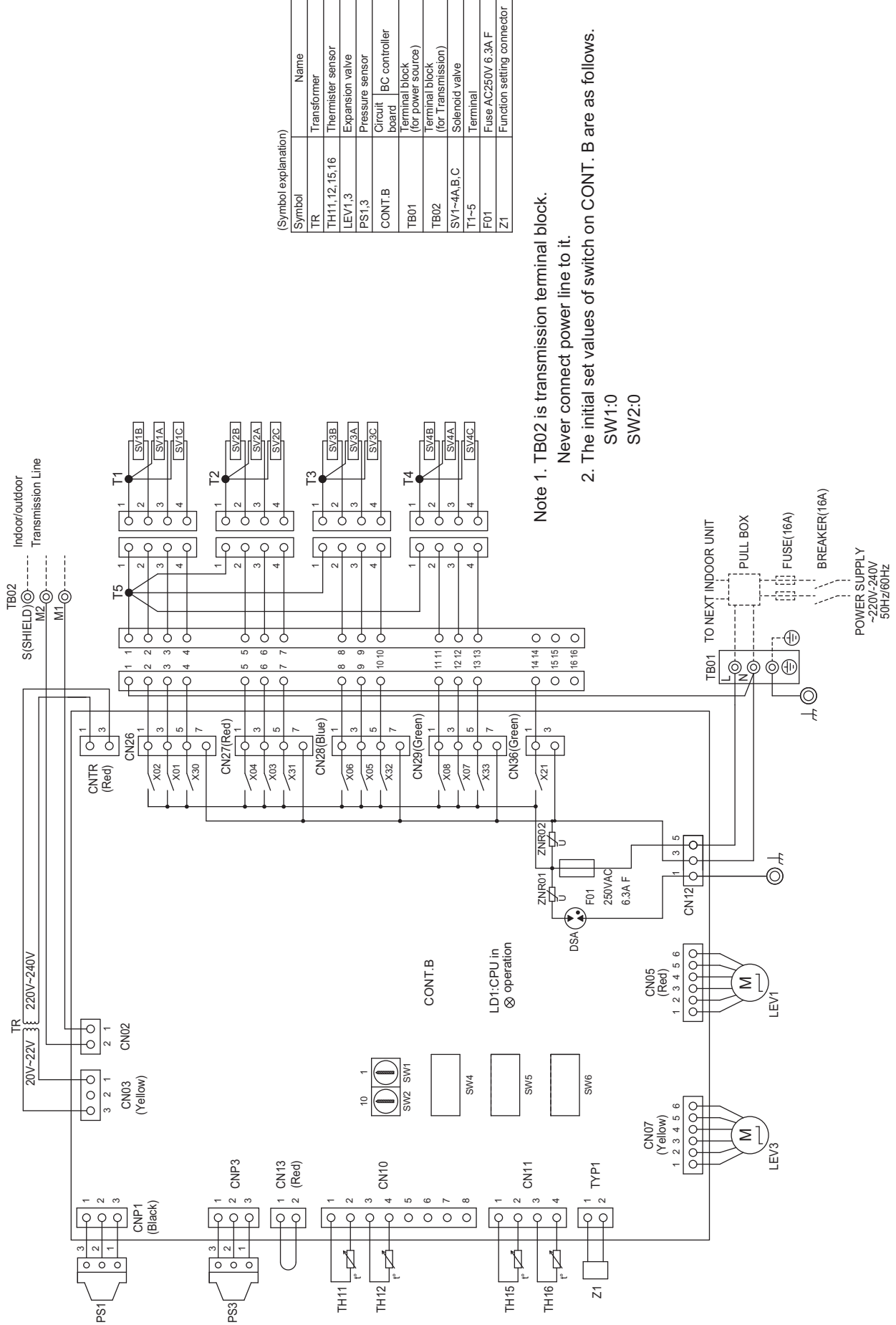
- Note 1. Suspension bolt(φ10) and nut(M10) prepare in the field.
 2. Take notice of service space as follows.
 (Please give attention not to occupy service space by letting ducts and pipes through.)
 3. Can't use singleness. (MAIN BC CONTROLLER is necessary.)
 4. Install this product in a location where 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.
 6. Refer to the Installation Manual for connection pipe of MAIN BC CONTROLLER or outdoor unit diameter size.
 7. Refer to the Installation Manual for insulation of connection pipe and drain piping.
 8. Refer to the Installation Manual for installation of drain pan.
 9. Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tilted position.



Connection pipe of MAIN BC CONTROLLER (High pressure) Note 6



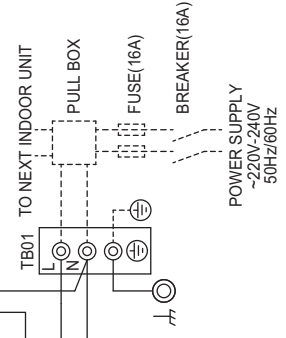
CMB-P104V-J



(Symbol explanation)

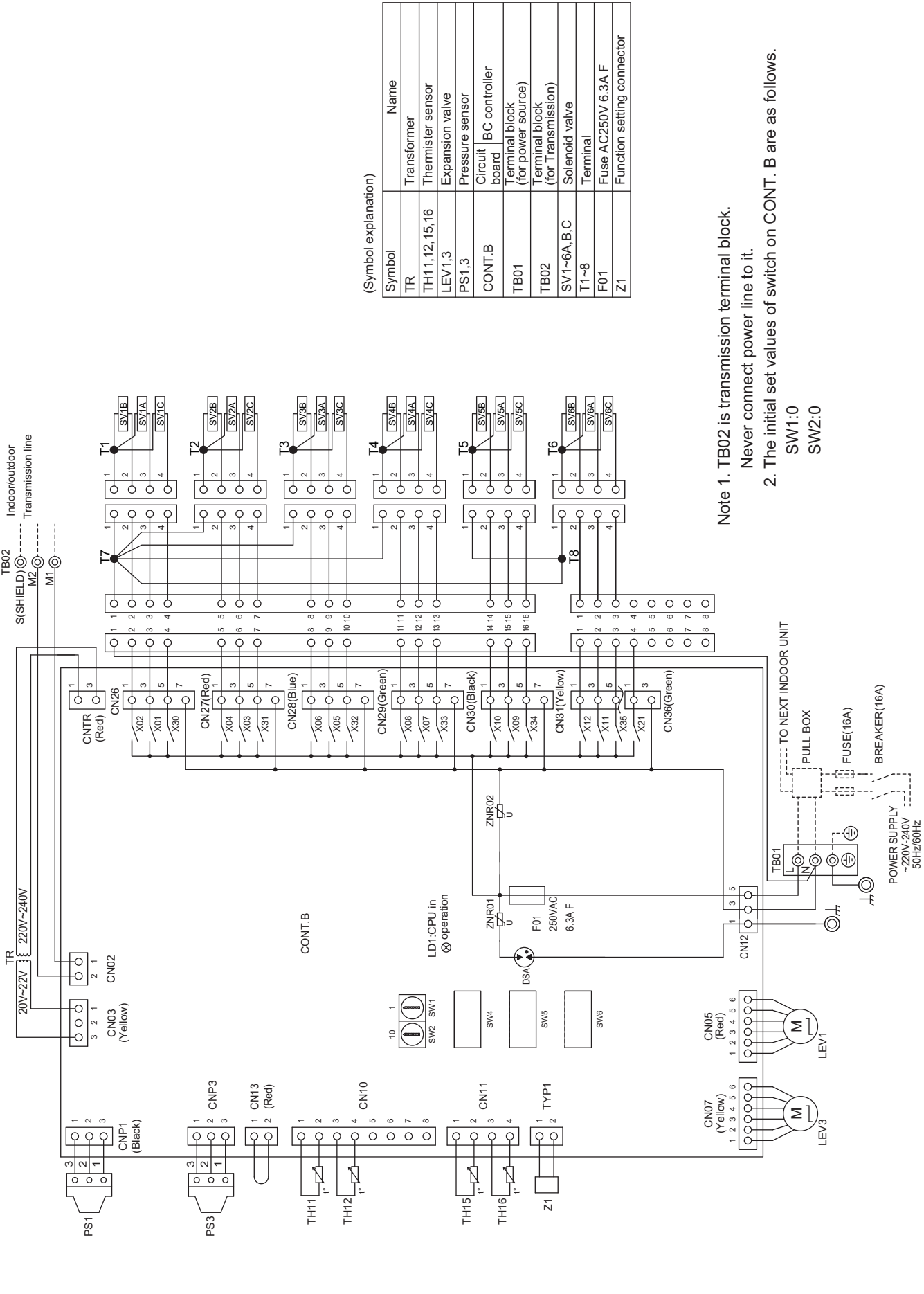
Symbol	Name
TR	Transformer
TH1,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
CONT.B	Circuit BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1-4A,B,C	Solenoid valve
TT-5	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector

- 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 controller

CMB-P106V-J



(Symbol explanation)

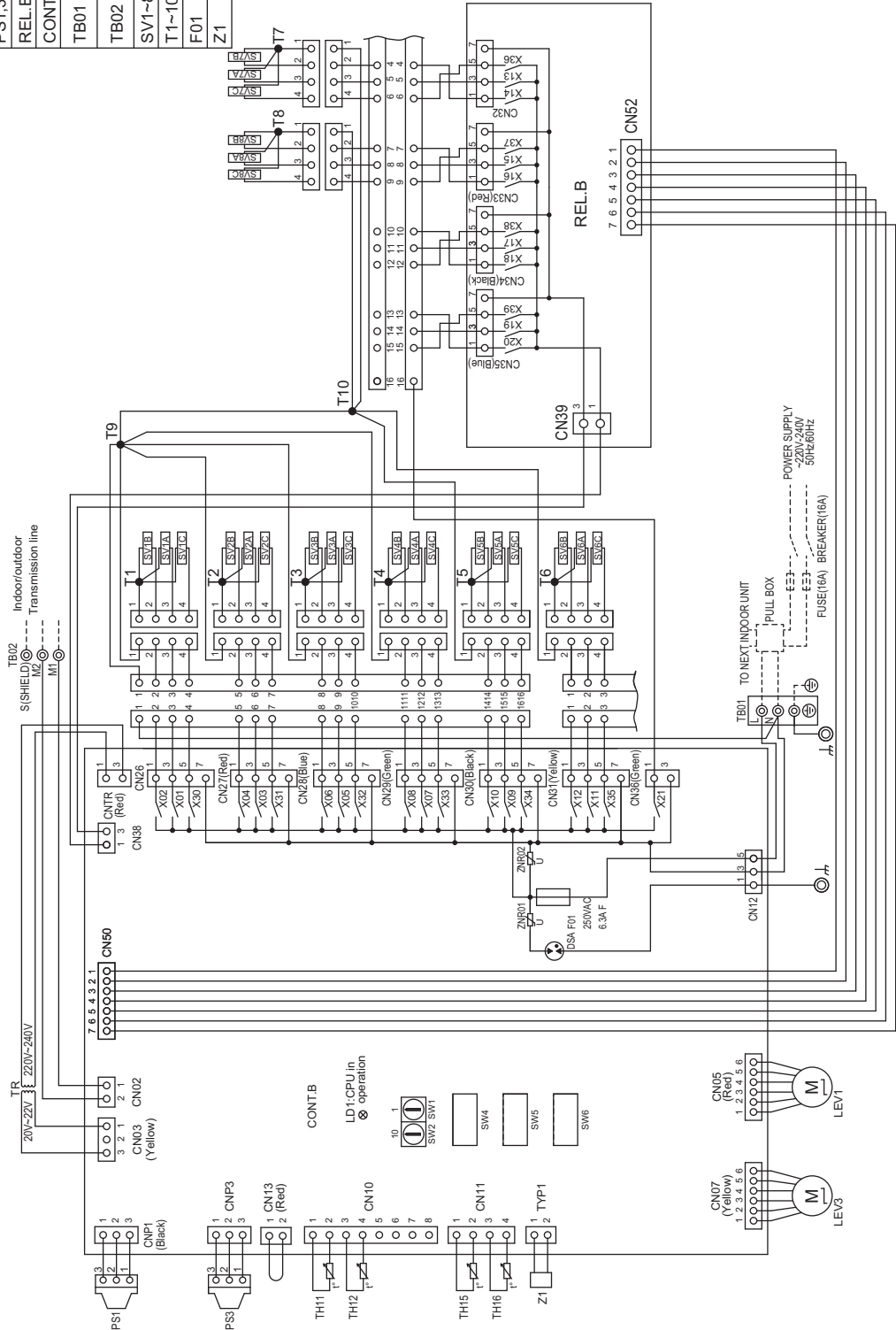
Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
CONT.B	Circuit BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~6A,B,C	Solenoid valve
T1~8	Terminal
F01	Fuse AC250V/6.3A F
Z1	Function setting connector

- 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-P108V-J

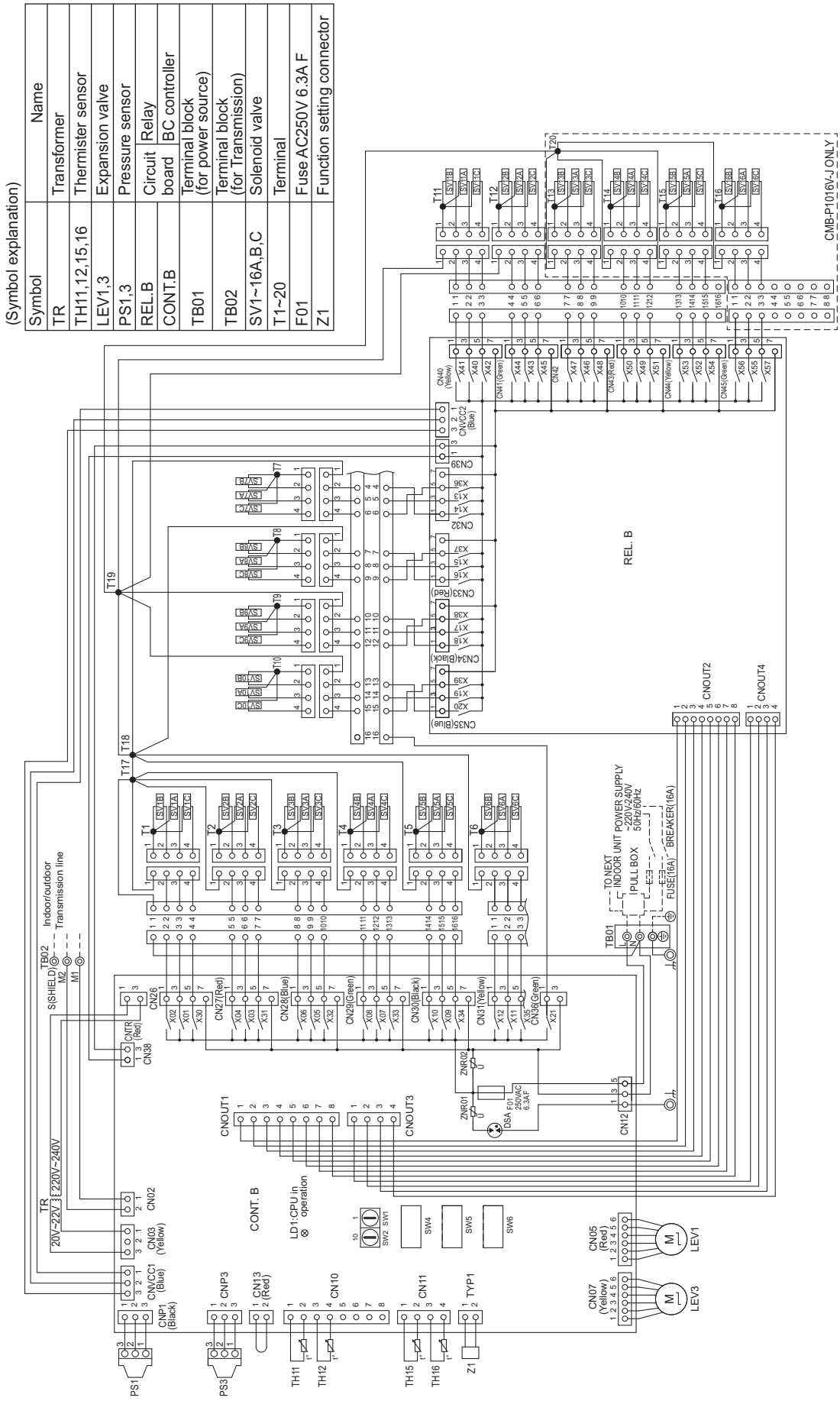
Symbol	Name
TR	Transformer
TH11, 12, 15, 16	Thermister sensor
LEV1, 3	Expansion valve
PS1, 3	Pressure sensor
REL.B	Relay
CONT.B	BC controller board
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~8A,B,C	Solenoid valve
T1~10	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector

- 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-P1012,1016V-J

- 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

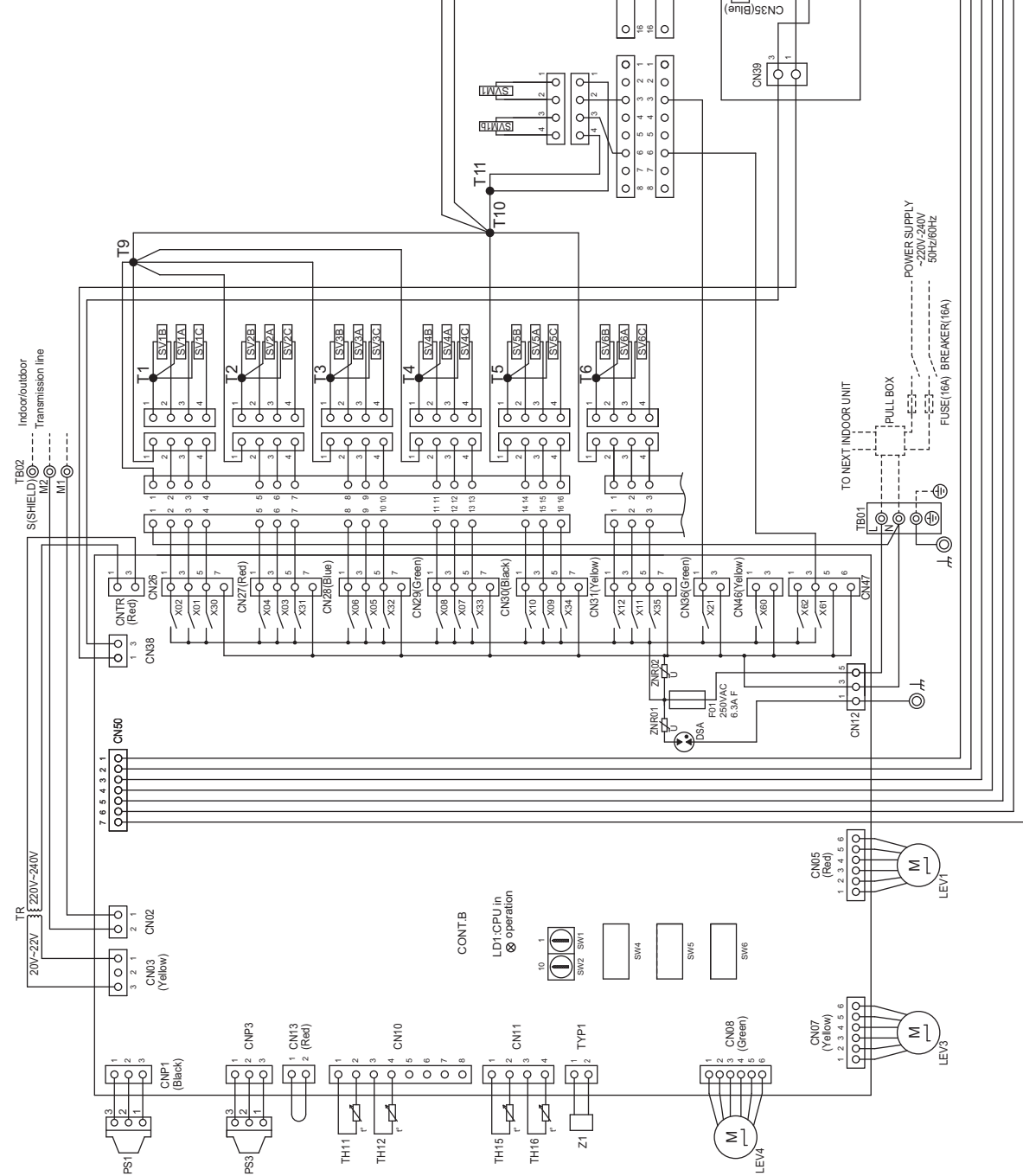


(Symbol explanation)

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)
SV1~16A,B,C	Solenoid valve
T1~20	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector

CMB-P108V-JA

Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3,4	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)
SV1~8A,B,C	Solenoid valve
SVM1,SVM1b	Solenoid valve
T1~11	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector

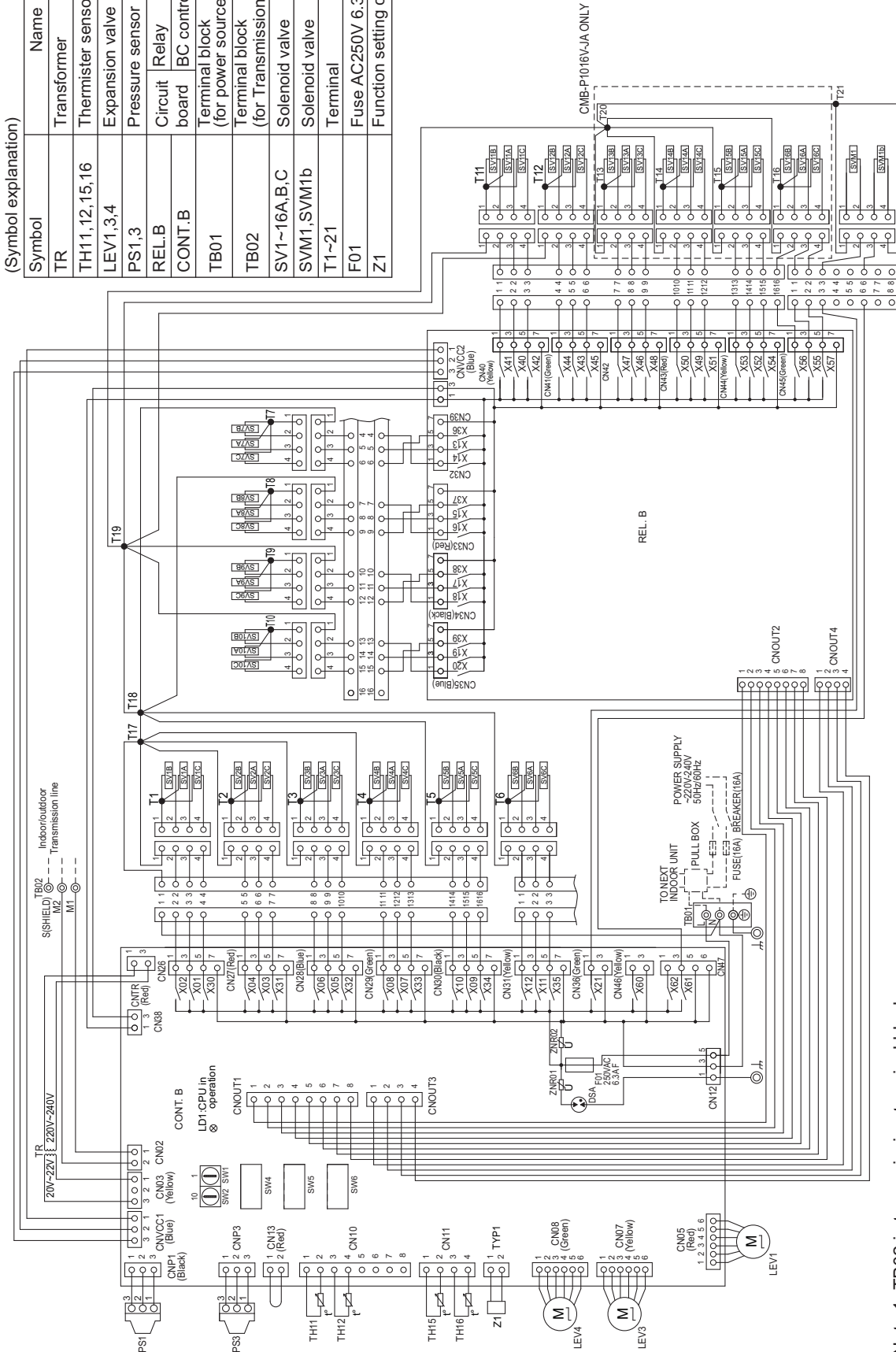


- Note 1. TB02 is transmission terminal block.
 Never connect power line to it.
2. The initial set values of switch on CONT. B are as follows.
 SW1:0
 SW2:0

BC controller

CMB-P1012,1016V-JA

(Symbol explanation)	
Symbol	Name
TR	Transformer
TH11, 12, 15, 16	Thermister sensor
LEV1, 3, 4	Expansion valve
PS1, 3	Pressure sensor
REL.B	Circuit Relay board
CONT.B	BC controller
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
SVM1,SVM1b	Solenoid valve
T1~21	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector



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.

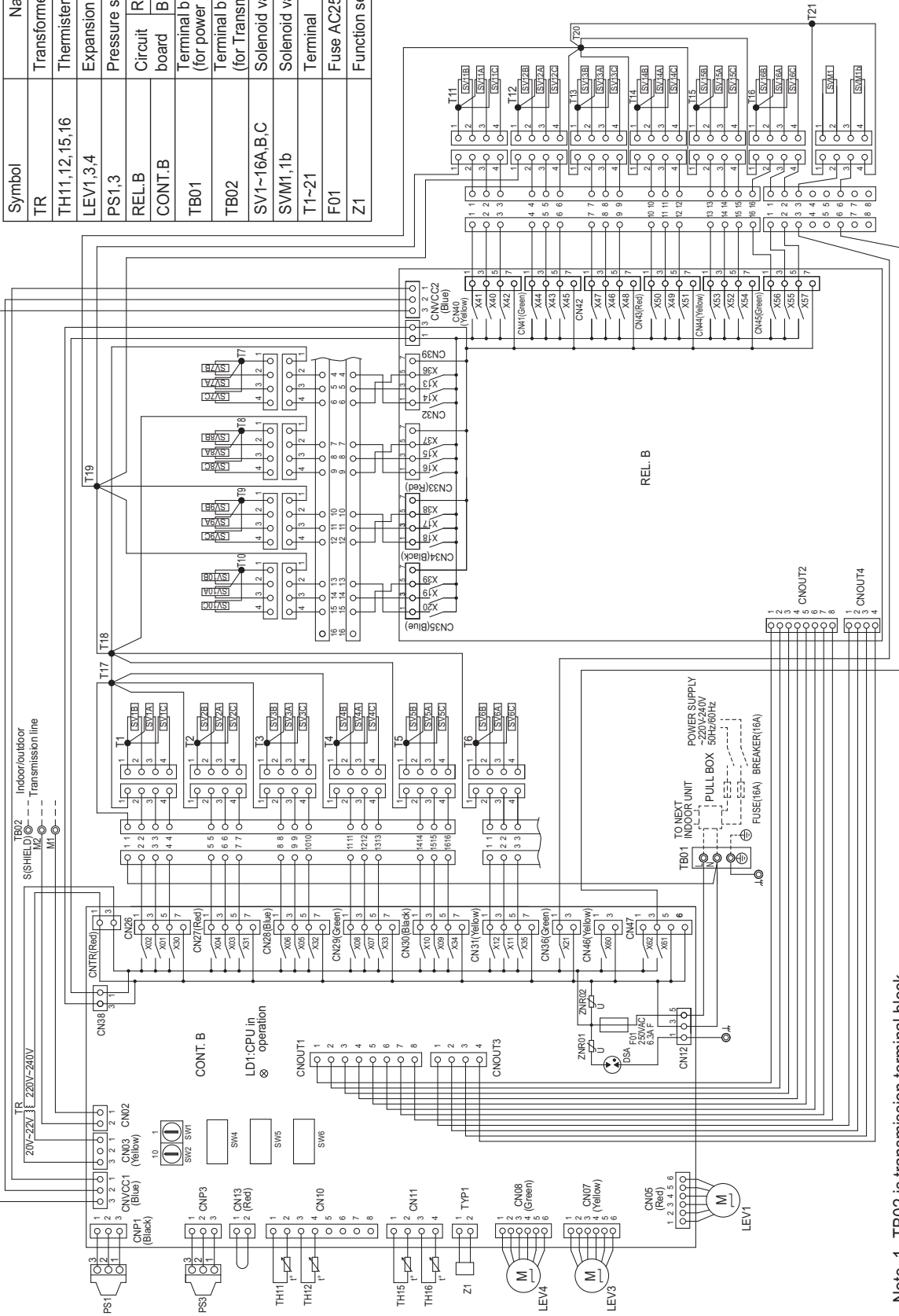
SW1:0

SW2:0

CMB-P1016V-KA

(Symbol explanation)

Symbol	Name
TR	Transformer
TH11, 12, 15, 16	Thermister sensor
LEV1, 3, 4	Expansion valve
PS1, 3	Pressure sensor
REL.B	Relay board
CONT.B	BC controller
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
SVM1, 1b	Solenoid valve
T1~21	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector



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.

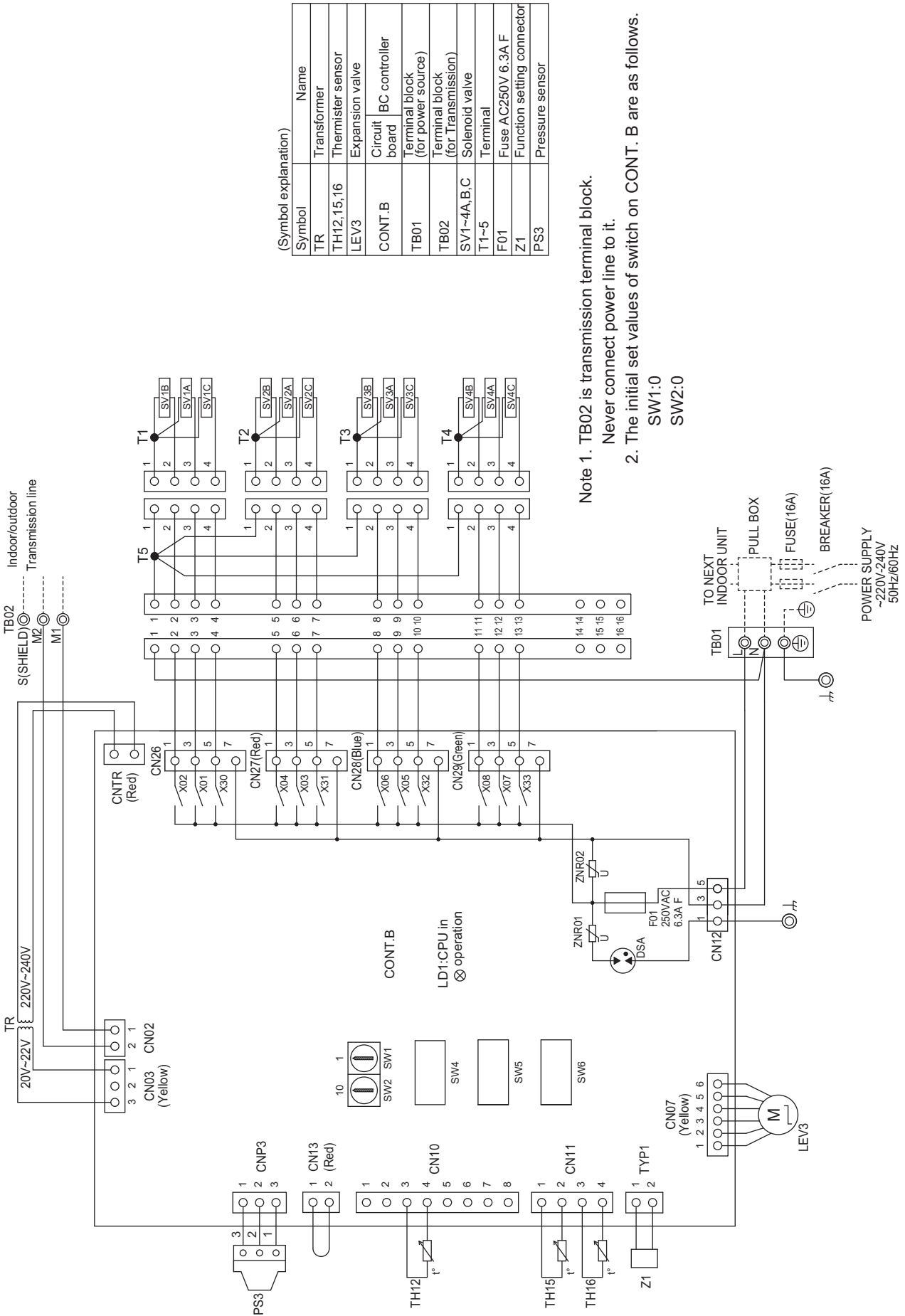
SW1:0

SW2:0

BC controller

CMB-P104V-KB

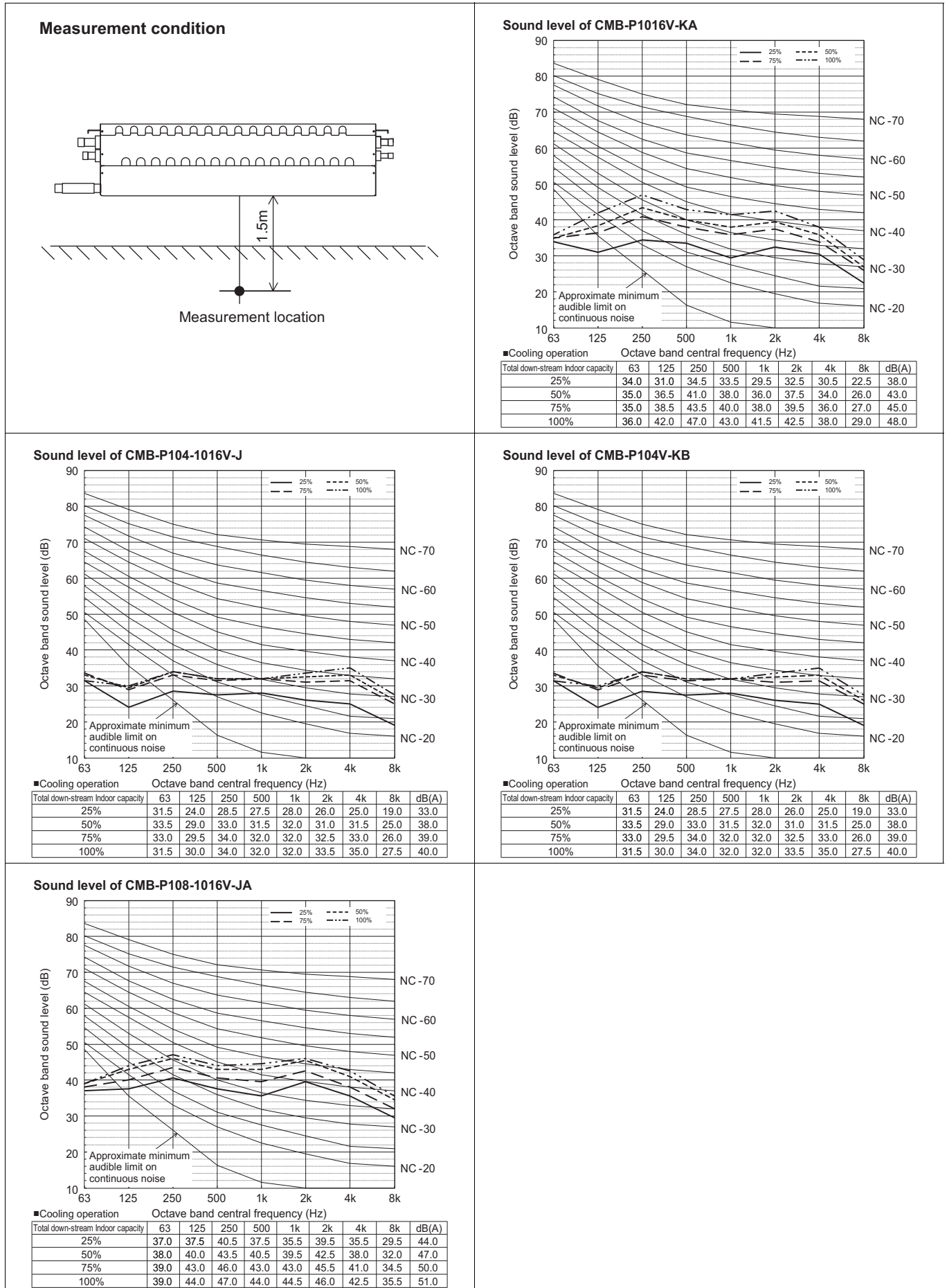
BC controller



Symbol	Name
TR	Transformer
TH12,15,16	Thermister sensor
LEV3	Expansion valve
CONT.B	Circuit board
TB01	BC controller
TB02	Terminal block (for power source)
SV1~4A,B,C	Terminal block (for Transmission)
T1~5	Solenoid valve
F01	Terminal
Z1	Fuse AC250V 6.3A F
PS3	Function setting connector
	Pressure sensor

- 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

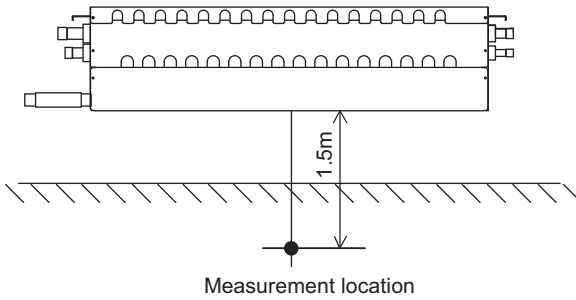
4-1. Sound levels in cooling mode



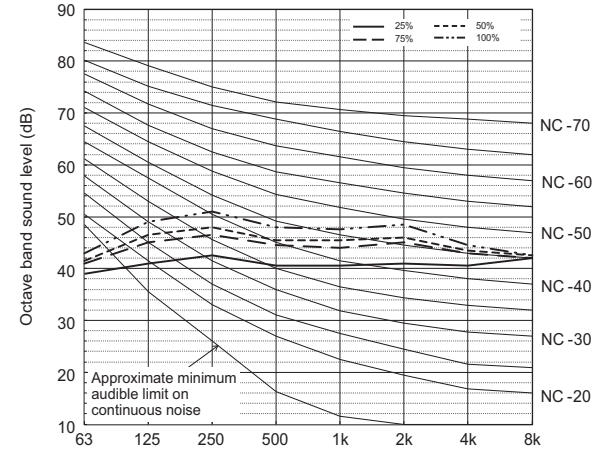
• Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.

4-2. Sound levels in heating mode

Measurement condition

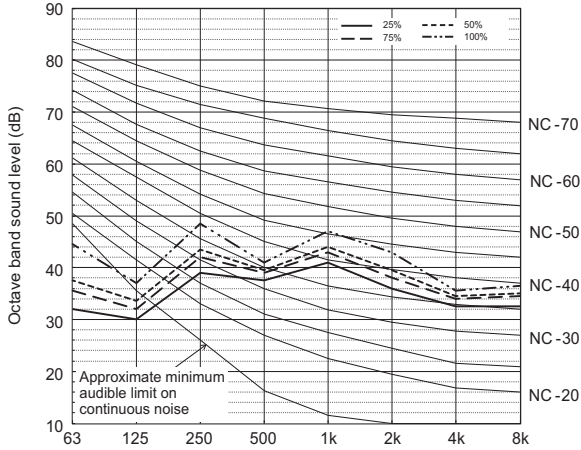


Sound level of CMB-P1016V-KA



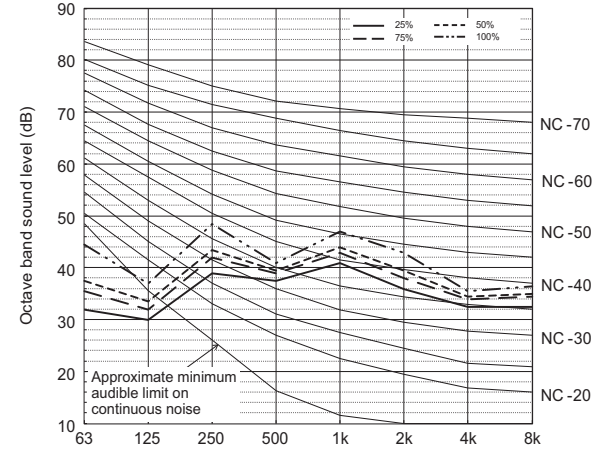
■Heating operation		Octave band central frequency (Hz)								
Total down-stream Indoor capacity	63	125	250	500	1k	2k	4k	8k	dB(A)	
25%	39.0	41.0	42.5	40.5	40.5	41.0	40.5	42.0	48.0	
50%	41.0	45.0	46.5	44.5	44.0	45.0	43.0	42.0	51.0	
75%	41.5	46.5	48.0	45.5	45.5	46.0	43.5	42.5	52.0	
100%	43.0	49.0	51.0	48.0	47.5	48.5	44.5	42.5	54.0	

Sound level of CMB-P104-1016V-J



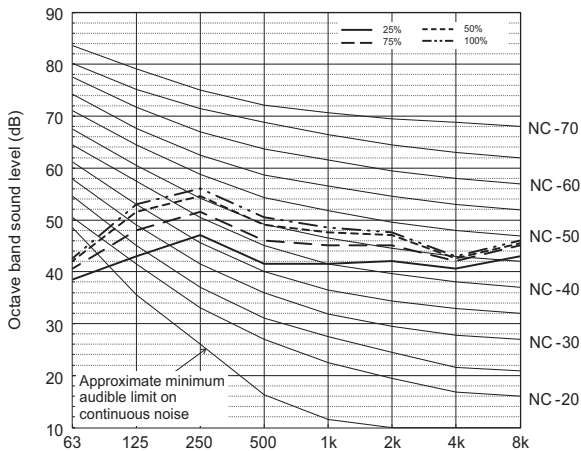
■Heating operation		Octave band central frequency (Hz)								
Total down-stream Indoor capacity	63	125	250	500	1k	2k	4k	8k	dB(A)	
25%	32.0	30.0	39.0	37.5	41.0	36.0	32.5	32.5	44.0	
50%	35.5	32.0	42.0	39.0	43.0	38.0	34.0	34.5	46.0	
75%	37.5	33.5	43.5	39.5	44.0	39.5	34.5	35.0	47.0	
100%	44.5	37.0	48.5	41.0	47.0	43.0	35.5	36.5	50.0	

Sound level of CMB-P104V-KB



■Heating operation		Octave band central frequency (Hz)								
Total down-stream Indoor capacity	63	125	250	500	1k	2k	4k	8k	dB(A)	
25%	32.0	30.0	39.0	37.5	41.0	36.0	32.5	32.5	44.0	
50%	35.5	32.0	42.0	39.0	43.0	38.0	34.0	34.5	46.0	
75%	37.5	33.5	43.5	39.5	44.0	39.5	34.5	35.0	47.0	
100%	44.5	37.0	48.5	41.0	47.0	43.0	35.5	36.5	50.0	

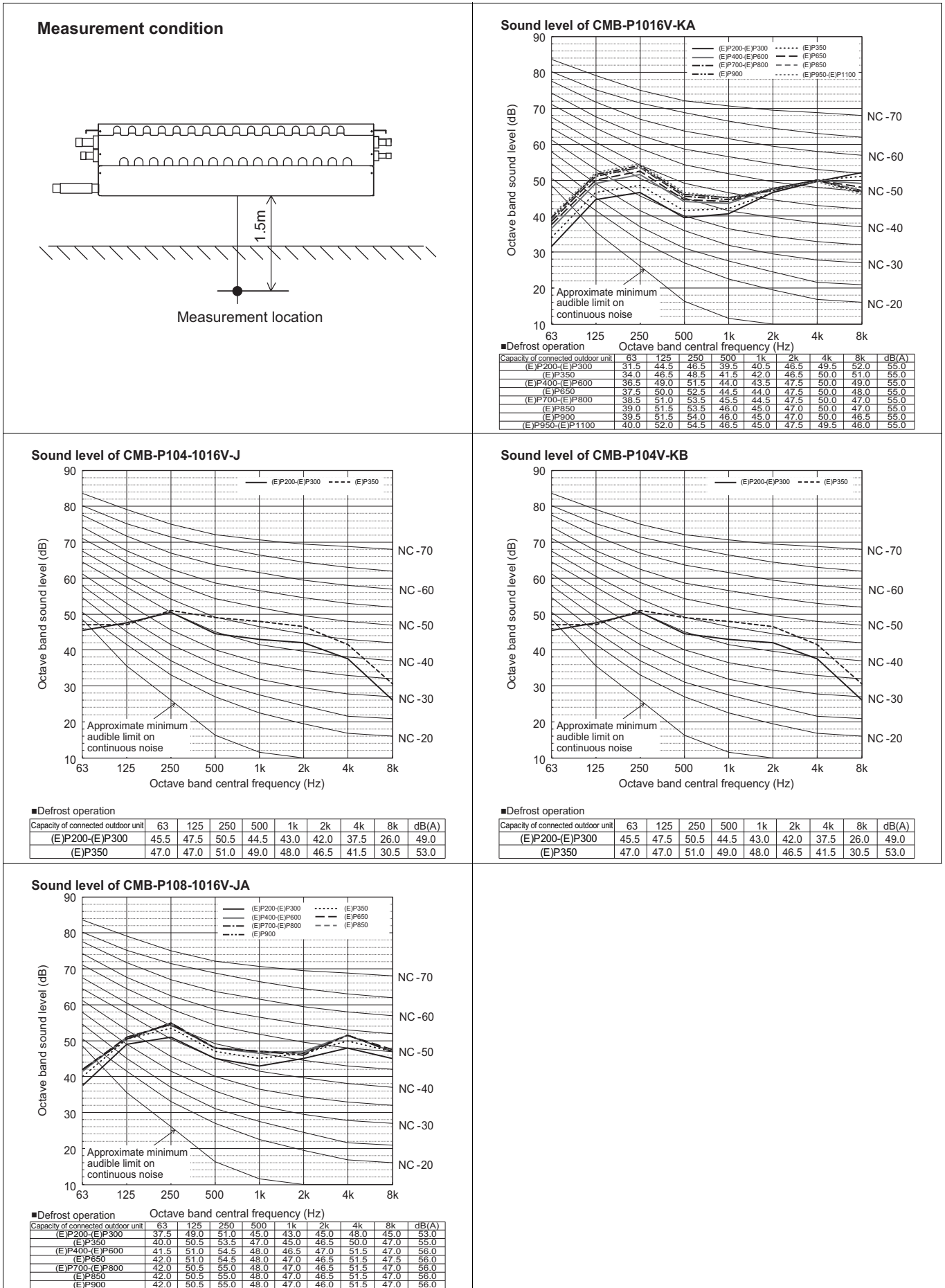
Sound level of CMB-P108-1016V-JA



■Heating operation		Octave band central frequency (Hz)								
Total down-stream Indoor capacity	63	125	250	500	1k	2k	4k	8k	dB(A)	
25%	38.5	43.0	47.0	41.5	41.5	42.0	40.5	43.0	49.0	
50%	40.5	48.0	51.5	46.0	45.0	45.0	42.0	45.0	52.0	
75%	42.0	51.5	54.5	49.0	47.5	47.0	42.5	45.5	54.0	
100%	42.5	53.0	56.0	50.5	48.5	47.5	43.0	46.0	55.0	

♦ Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.

4-3. Sound levels in defrost mode



• Depending on the operation conditions, the unit generates noise caused by valve actuation, refrigerant flow, and pressure changes when operating normally. Please consider to avoid location where quietness is required.

5. ELECTRICAL CHARACTERISTICS

Indoor units

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

BC controller	Power supply					RLA(A)
	Hz	Volts	Range±10%	MCA(A)	MFA(A)	
CMB-P104V-J	50/60	220	Max.: 264V Min.: 198V	0.45	15	0.31
		230				0.34
		240				0.36
CMB-P106V-J		220		0.65		0.45
		230				0.48
		240				0.52
CMB-P108V-J		220		0.85		0.58
		230				0.63
		240				0.68
CMB-P1012V-J		220		1.24		0.85
		230				0.92
		240				0.99
CMB-P1016V-J		220		1.63		1.12
		230				1.22
		240				1.30
CMB-P108V-JA		220		0.85		0.58
		230				0.63
		240				0.68
CMB-P1012V-JA	220	1.24	0.85			
	230		0.92			
	240		0.99			
CMB-P1016V-JA	220	1.63	1.12			
	230		1.22			
	240		1.30			
CMB-P1016V-KA	220	1.63	1.12			
	230		1.22			
	240		1.30			
CMB-P104V-KB	220	0.40	0.28			
	230		0.30			
	240		0.32			

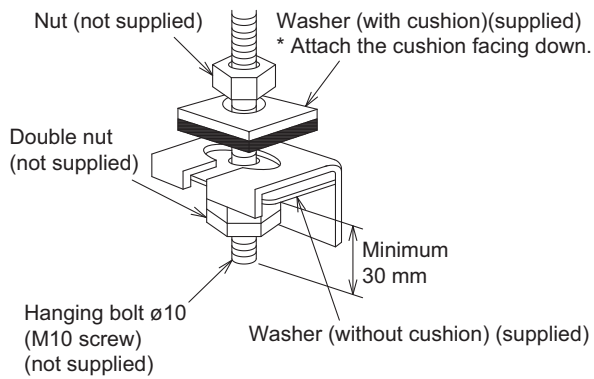
6-1. Installing BC controllers

Installing hanging bolts

Install locally procured hanging bolts (threaded rod) following the procedure given in the figure.

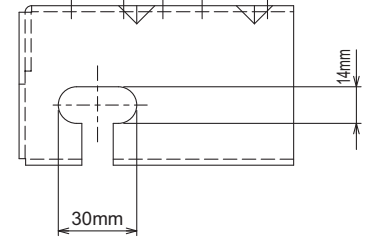
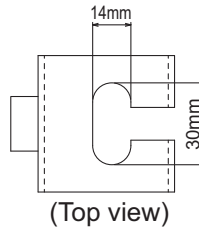
The hanging bolt size is $\phi 10$ (M10 screw).

To hang the unit, use a lifting machine to lift and pass it through the hanging bolts.



CMB-P104, 106, 108V-J,
CMB-P104V-KB

CMB-P1012, 1016V-J
CMB-P108, 1012, 1016V-JA
CMB-P1016V-KA



- ▶ Be sure to install the BC controller horizontally, using a level. If the controller is installed at an angle, drain water may leak out. If the controller is slanted, loosen the fixing nuts on the hanging brackets to adjust its position.
- ▶ Provide a downward pitch of 1.5° or below to the BC controller.
- ▶ Do not place the BC controller directly on the floor because the drain pan needs to be installed in a tilted position.



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, during 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 equipments and heat pumps contain a fluorinated greenhouse gas, R410A.

MITSUBISHI ELECTRIC CORPORATION

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