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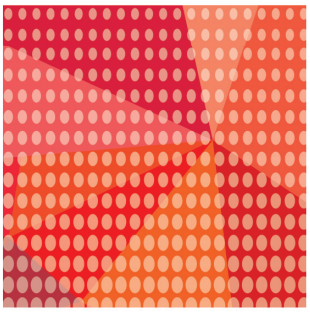


DATA BOOK

MODEL

CMB-P-NU-J2
CMB-P-NU-JA2
CMB-P-NU-KA2
CMB-P-NU-KB2

CONTENTS

CMB-P-NU-J2, CMB-P-NU-JA2, CMB-P-NU-KA2, CMB-P-NU-KB2

1. SPECIFICATIONS

Model			**CMB-P104NU-J2**		
Number of branch			4		
Power source			1 phase 208-230V		
			60Hz		
Power input	Cooling	kW	0.061/0.078		
	Heating	kW	0.030/0.039		
Current input	Cooling	A	0.30/0.35		
	Heating	A	0.15/0.18		
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P72 to P120		
Indoor unit capacity connectable to 1 branch		*10	Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)		
External dimension H × W × D		mm	250 x 596 x 398		
		in.	9-7/8 x 23-1/2 x 15-11/16		
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed
		*11 mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed
	To indoor unit		Liquid pipe		Gas pipe
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		in.	3/4 NPT		
Net weight		kg (lbs)	25 (56)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		
	Defrost	dB <A>	71		
Accessories			Details refer to Extarnal Drw		
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Model			**CMB-P106NU-J2**		
Number of branch			6		
Power source			1 phase 208-230V		
			60Hz		
Power input	Cooling	kW	0.091/0.118		
	Heating	kW	0.046/0.059		
Current input	Cooling	A	0.44/0.52		
	Heating	A	0.22/0.26		
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P72 to P120		
Indoor unit capacity connectable to 1 branch *10			Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)		
External dimension H × W × D		mm	250 x 596 x 398		
		in.	9-7/8 x 23-1/2 x 15-11/16		
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	*11	mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed
	To indoor unit		Liquid pipe		Gas pipe
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		in.	3/4 NPT		
Net weight		kg (lbs)	28 (62)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		
	Defrost	dB <A>	71		
Accessories			Details refer to Extarnal Drw		
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Model			**CMB-P108NU-J2**		
Number of branch			8		
Power source			1 phase 208-230V		
			60Hz		
Power input	Cooling	kW	0.122/0.157		
	Heating	kW	0.061/0.078		
Current input	Cooling	A	0.59/0.69		
	Heating	A	0.30/0.35		
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P72 to P120		
Indoor unit capacity connectable to 1 branch		*10	Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)		
External dimension H × W × D		mm	250 x 596 x 398		
		in.	9-7/8 x 23-1/2 x 15-11/16		
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	*11	mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed
	To indoor unit		Liquid pipe		Gas pipe
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		in.	3/4 NPT		
Net weight		kg (lbs)	32 (71)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		
	Defrost	dB <A>	71		
Accessories			Details refer to Extarnal Drw		
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

1. SPECIFICATIONS

Model			**CMB-P1012NU-J2**		
Number of branch			12		
Power source			1 phase 208-230V		
			60Hz		
Power input	Cooling	kW	0.182/0.235		
	Heating	kW	0.091/0,118		
Current input	Cooling	A	0.88/1.03		
	Heating	A	0.44/0.52		
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P72 to P120		
Indoor unit capacity connectable to 1 branch *10			Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)		
External dimension H × W × D		mm	250 x 911 x 545		
		in.	9-7/8 x 35-7/8 x 21-1/2		
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	*11	mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed
	To indoor unit		Liquid pipe		Gas pipe
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		in.	3/4 NPT		
Net weight		kg (lbs)	48 (106)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		
	Defrost	dB <A>	71		
Accessories			Details refer to Extarnal Drw		
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Model			CMB-P1016NU-J2		
Number of branch			16		
Power source			1 phase 208-230V		
			60Hz		
Power input	Cooling	kW	0.243/0.314		
	Heating	kW	0.122/0.157		
Current input	Cooling	A	1.17/1.37		
	Heating	A	0.59/0.69		
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)		
Connectable outdoor/heat source unit capacity			P72 to P120		
Indoor unit capacity connectable to 1 branch *10			Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)		
External dimension H × W × D		mm	250 x 1135 x 545		
		in.	9-7/8 x 44-11/16 x 21-1/2		
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed
	*11	mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed
	To indoor unit		Liquid pipe		Gas pipe
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 15.88 (5/8) Brazed (19.05 (3/4), 22.2 (7/8) with optional joint pipe used.)
Field drain pipe size		in.	3/4 NPT		
Net weight		kg (lbs)	58 (128)		
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59		
	Defrost	dB <A>	71		
Accessories			Details refer to Extarnal Drw		
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Model			**CMB-P108NU-JA2**			
Number of branch			8			
Power source			1-phase 208-230V			
			60Hz			
Power input	Cooling	kW	0.137/0.176			
	Heating	kW	0.076/0.098			
Current input	Cooling	A	0.66/0.77			
	Heating	A	0.37/043			
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P72 to P336			
Indoor unit capacity connectable to 1 branch		*10	Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)			
External dimension H × W × D		mm	250 x 911 x 545			
		in.	9-7/8 x 35-7/8 x 21-1/2			
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*11 mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P144 to P192	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*11 mm (in.) O.D.	P216	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	
		*11 mm (in.) O.D.	P240	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P264 to P288	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		*11 mm (in.) O.D.	P312	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed or 41.28 (1-5/8) Brazed	
		mm (in.) O.D.	P336	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 P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 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 P72	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P73 to P108	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P109 to P126	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P127 to P144	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P145 to P216	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P217 to P234	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P235 to P288	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P289 or above	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		in.	3/4 NPT			
Net weight		kg (lbs)	48 (106)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	69			
	Defrost	dB <A>	74			
Accessories			Details refer to Extarnal Drw			
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5. The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8. This unit is not designed for outside installations.
9. When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10. 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.
11. For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Model			**CMB-P1012NU-JA2**			
Number of branch			12			
Power source			1-phase 208-230V			
			60Hz			
Power input	Cooling	kW	0.198/0.255			
	Heating	kW	0.106/0.137			
Current input	Cooling	A	0.95/1.11			
	Heating	A	0.52/0.60			
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P72 to P336			
Indoor unit capacity connectable to 1 branch		*10	Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)			
External dimension H × W × D		mm	250 x 1,135 x 545			
		in.	9-7/8 x 44-11/16 x 21-1/2			
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*11 mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P144 to P192	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*11 mm (in.) O.D.	P216	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	
		*11 mm (in.) O.D.	P240	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P264 to P288	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		*11 mm (in.) O.D.	P312	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed or 41.28 (1-5/8) Brazed	
		mm (in.) O.D.	P336	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 P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 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 P72	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P73 to P108	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P109 to P126	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P127 to P144	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P145 to P216	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P217 to P234	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P235 to P288	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P289 or above	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		in.	3/4 NPT			
Net weight		kg (lbs)	60 (133)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	69			
	Defrost	dB <A>	74			
Accessories			Details refer to Extarnal Drw			
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Model			CMB-P1016NU-JA2			
Number of branch			16			
Power source			1-phase 208-230V			
			60Hz			
Power input	Cooling	kW	0.258/0.333			
	Heating	kW	0.137/0.176			
Current input	Cooling	A	1.25/1.45			
	Heating	A	0.66/0.77			
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P72 to P336			
Indoor unit capacity connectable to 1 branch		*10	Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)			
External dimension H × W × D		mm	250 x 1,135 x 545			
		in.	9-7/8 x 44-11/16 x 21-1/2			
Refrigerant piping diameter	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*11 mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P144 to P192	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*11 mm (in.) O.D.	P216	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	
		*11 mm (in.) O.D.	P240	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P264 to P288	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		*11 mm (in.) O.D.	P312	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed or 41.28 (1-5/8) Brazed	
		mm (in.) O.D.	P336	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 P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 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 P72	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P73 to P108	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P109 to P126	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P127 to P144	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P145 to P216	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P217 to P234	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P235 to P288	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P289 or above	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		in.	3/4 NPT			
Net weight		kg (lbs)	66 (146)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	69			
	Defrost	dB <A>	74			
Accessories			Details refer to Extarnal Drw			
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Model			**CMB-P1016NU-KA2**			
Number of branch			16			
Power source			1-phase 208-230V			
			60Hz			
Power input	Cooling	kW	0.258/0.333			
	Heating	kW	0.137/0.176			
Current input	Cooling	A	1.25/1.45			
	Heating	A	0.66/0.77			
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable outdoor/heat source unit capacity			P72 to P432			
Indoor unit capacity connectable to 1 branch		*10	Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)			
External dimension H × W × D		mm	250 x 1,135 x 545			
		in.	9-7/8 x 44-11/16 x 21-1/2			
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
piping		mm (in.) O.D.	P72	15.88 (5/8) Brazed	19.05 (3/4) Brazed	
diameter		mm (in.) O.D.	P96	19.05 (3/4) Brazed	22.2 (7/8) Brazed	
		*11 mm (in.) O.D.	P120	19.05 (3/4) Brazed	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	
		mm (in.) O.D.	P144 to P192	22.2 (7/8) Brazed	28.58 (1-1/8) Brazed	
		*11 mm (in.) O.D.	P216	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	
		*11 mm (in.) O.D.	P240	22.2 (7/8) Brazed or 28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		mm (in.) O.D.	P264 to P288	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed	
		*11 mm (in.) O.D.	P312	28.58 (1-1/8) Brazed	34.93 (1-3/8) Brazed or 41.28 (1-5/8) Brazed	
		mm (in.) O.D.	P336 to P432	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 P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 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 P72	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P73 to P108	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P109 to P126	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P127 to P144	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P145 to P216	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P217 to P234	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P235 to P288	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P289 or above	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		in.	3/4 NPT			
Net weight		kg (lbs)	69 (153)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	66			
	Defrost	dB <A>	73			
Accessories			Details refer to Extarnal Drw			
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Model			**CMB-P104NU-KB2**			
Number of branch			4			
Power source			1-phase 208-230V			
			60Hz			
Power input	Cooling	kW	0.061/0.078			
	Heating	kW	0.030/0.039			
Current input	Cooling	A	0.30/0.35			
	Heating	A	0.15/0.18			
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable Main BC controller			CMB-P108/1012/1016NU-JA2, CMB-P1016NU-KA2			
The maximum number of connectable Sub BC controllers			11			
The maximum connectable capacity of indoor unit			P126 for each			
Indoor unit capacity connectable to 1 branch *10			Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)			
External dimension H × W × D		mm	250 x 596 x 398			
		in.	9-7/8 x 23-1/2 x 15-11/16			
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
piping		mm (in.) O.D.	-	-	-	
diameter	To indoor unit		Liquid pipe	Gas pipe		
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed	Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 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 P72	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P73 to P108	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P109 to P126	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P127 to P144	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P145 to P216	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P217 to P234	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P235 to P288	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P289 or above	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		in.	3/4 NPT			
Net weight		kg (lbs)	22 (49)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59			
	Defrost	dB <A>	71			
Accessories			Details refer to Extarnal Drw			
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5. The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6. The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7. Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8. This unit is not designed for outside installations.
9. When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10. 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.
11. Can't use singleness. (MAIN BC CONTROLLER is necessary)

Model			**CMB-P108NU-KB2**			
Number of branch			8			
Power source			1-phase 208-230V			
			60Hz			
Power input	Cooling	kW	0.122/0.157			
	Heating	kW	0.061/0.078			
Current input	Cooling	A	0.59/0.69			
	Heating	A	0.30/0.35			
External finish			Galvanized steel plate (Lower part drain pan: Pre-coated galvanized sheets + powder coating)			
Connectable Main BC controller			CMB-P108/1012/1016NU-JA2, CMB-P1016NU-KA2			
The maximum number of connectable Sub BC controllers			11			
The maximum connectable capacity of indoor unit			P126 for each			
Indoor unit capacity connectable to 1 branch *10			Model P54 or smaller (Use optional joint pipe combining 2 branches when the total unit capacity exceeds P55.)			
External dimension H × W × D		mm	250 x 596 x 398			
		in.	9-7/8 x 23-1/2 x 15-11/16			
Refrigerant	To outdoor/heat source unit		Connectable unit capacity	High press. pipe	Low press. pipe	
piping		mm (in.) O.D.	-	-	-	
diameter	To indoor unit		Liquid pipe		Gas pipe	
		mm (in.) O.D.	Indoor unit Model P18 or smaller 6.35 (1/4) Brazed bigger than P18 9.52 (3/8) Brazed		Indoor unit Model P18 or smaller 12.7 (1/2) Brazed bigger than P18 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 P72	15.88 (5/8) Brazed	9.52 (3/8) Brazed	19.05 (3/4) Brazed
		mm (in.) O.D.	P73 to P108	19.05 (3/4) Brazed	9.52 (3/8) Brazed	22.2 (7/8) Brazed
		mm (in.) O.D.	P109 to P126	19.05 (3/4) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P127 to P144	22.2 (7/8) Brazed	12.7 (1/2) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P145 to P216	22.2 (7/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P217 to P234	28.58 (1-1/8) Brazed	15.88 (5/8) Brazed	28.58 (1-1/8) Brazed
		mm (in.) O.D.	P235 to P288	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	34.93 (1-3/8) Brazed
		mm (in.) O.D.	P289 or above	28.58 (1-1/8) Brazed	19.05 (3/4) Brazed	41.28 (1-5/8) Brazed
Field drain pipe size		in.	3/4 NPT			
Net weight		kg (lbs)	29 (64)			
Sound power level (measured in anechoic room)	Rated operation	dB <A>	59			
	Defrost	dB <A>	71			
Accessories			Details refer to Extarnal Drw			
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 power level differs depending on the connected outdoor/heat source unit capacity or operation condition. The sound power level at the rated operation is the value of the cooling mode.
5.The sound power level values were obtained in an anechoic room. Actual sound power level is usually greater than that measured in anechoic room due to ambient noise and deflection sound.
6.The solenoid valve switching sound is 74 dB (sound power level) regardless of the unit model.
7.Refrigerant piping diameter for connection of plural indoor units with 1 branch shall be referred to the Installation Manual.
8.This unit is not designed for outside installations.
9.When brazing the pipes, be sure to braze, after covering a wet cloth to the insulation pipes of the units in order to prevent it from burning and shrinking by heat.
10.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.
11.Can't use singleness. (MAIN BC CONTROLLER is necessary)

CMB-P104, 106, 108NU-J2

Unit: mm(in)

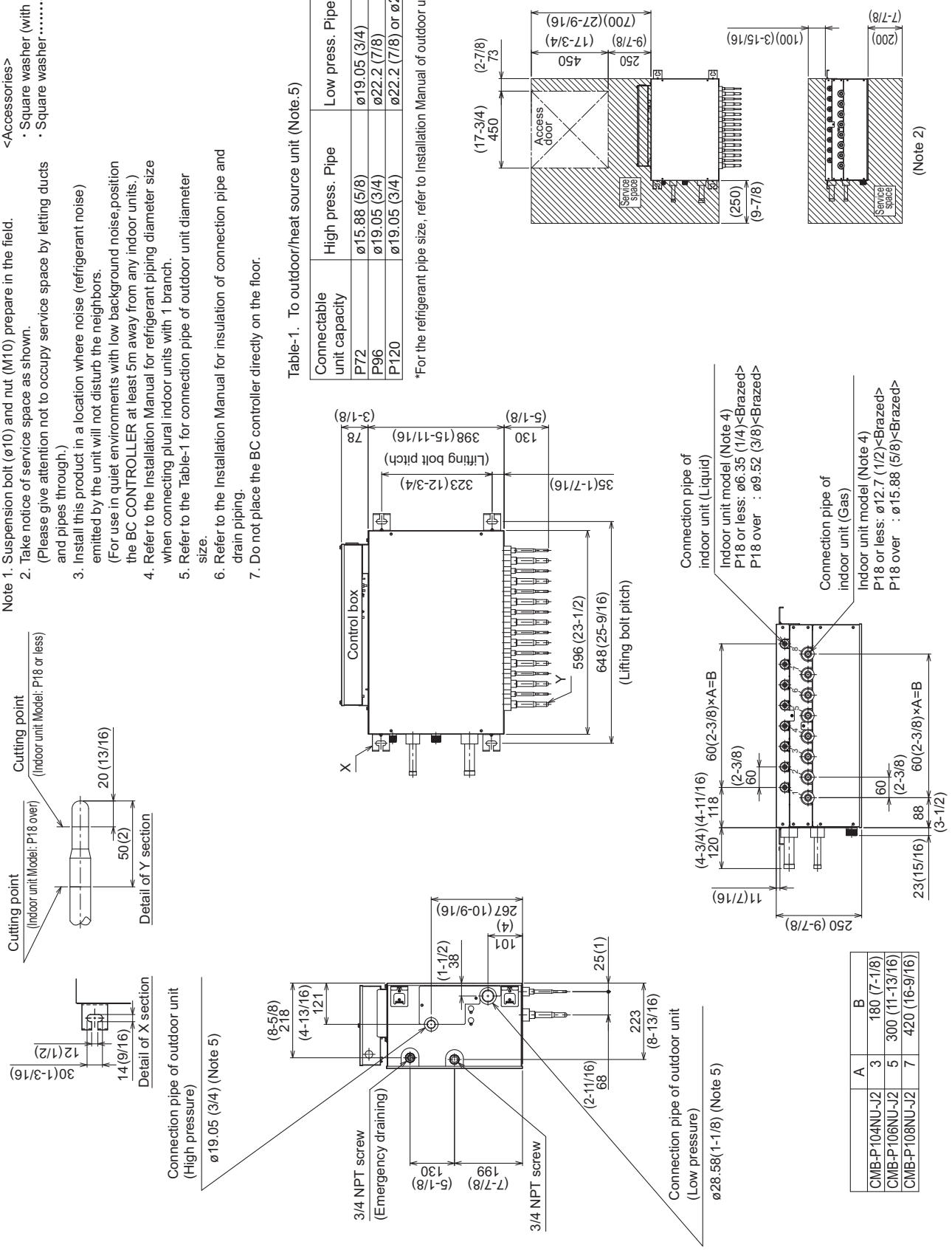
Note 1. Suspension bolt (ø10) and nut (M10) prepare in the field.
2. Take notice of service space as shown.
(Please give attention not to occupy service space by letting ducts and pipes through.)
3. Install this product in a location where noise (refrigerant noise) emitted by the unit will not disturb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

<Accessories>
・Square washer (with cushion)·····4pcs.
・Square washer·····4pcs.

Table-1. To outdoor/heat source unit (Note.5)

Connectable unit capacity	High press. Pipe	Low press. Pipe
P72	ø15.88 (5/8)	ø19.05 (3/4)
P96	ø19.05 (3/4)	ø22.2 (7/8)
P120	ø19.05 (3/4)	ø22.2 (7/8) or ø28.58 (1-1/8) *

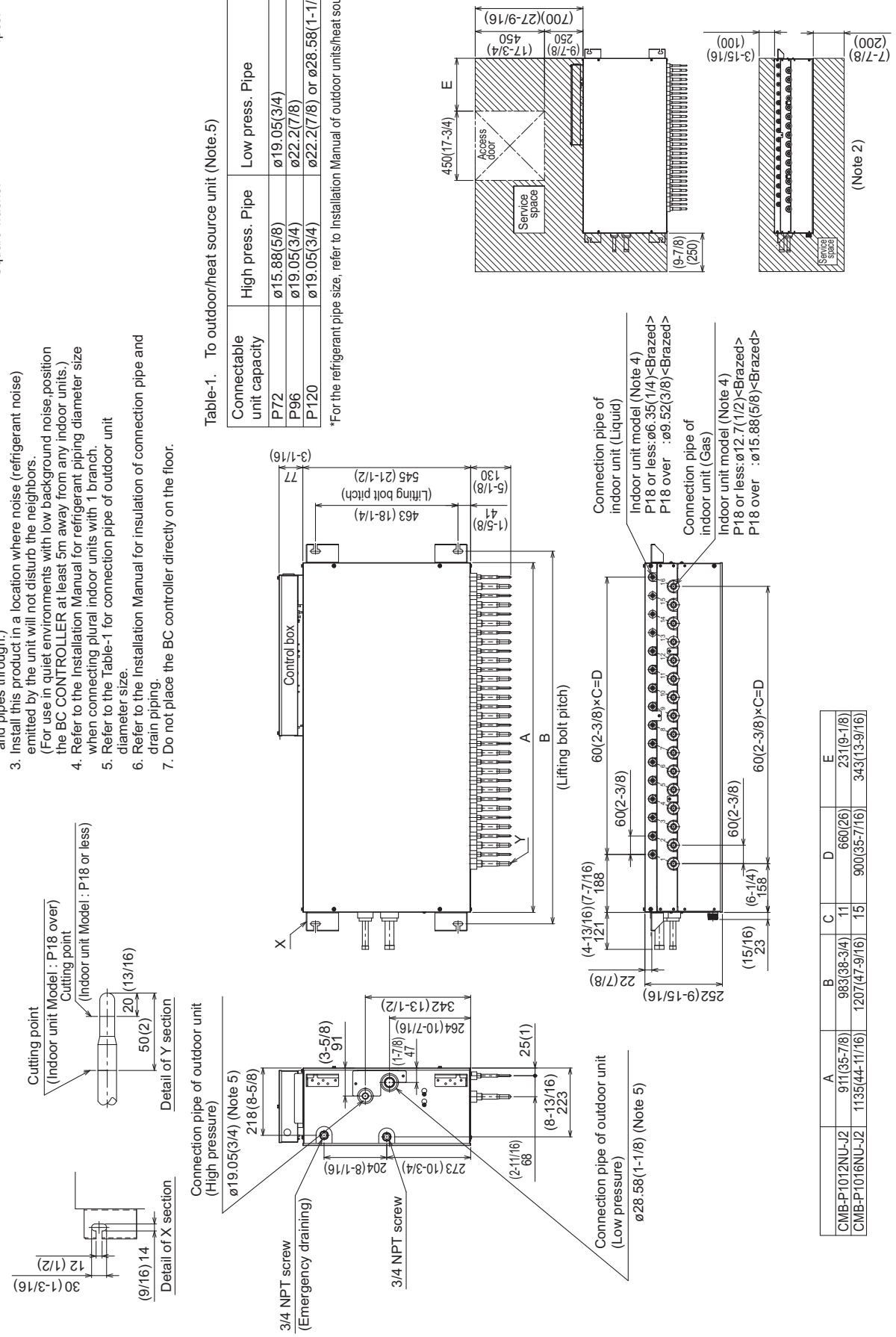
*For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.



	A	B
CMB-P104NU-J2	3	180 (7-1/8)
CMB-P106NU-J2	5	300 (11-13/16)
CMB-P108NU-J2	7	420 (16-9/16)

CMB-P1012, 1016NU-J2

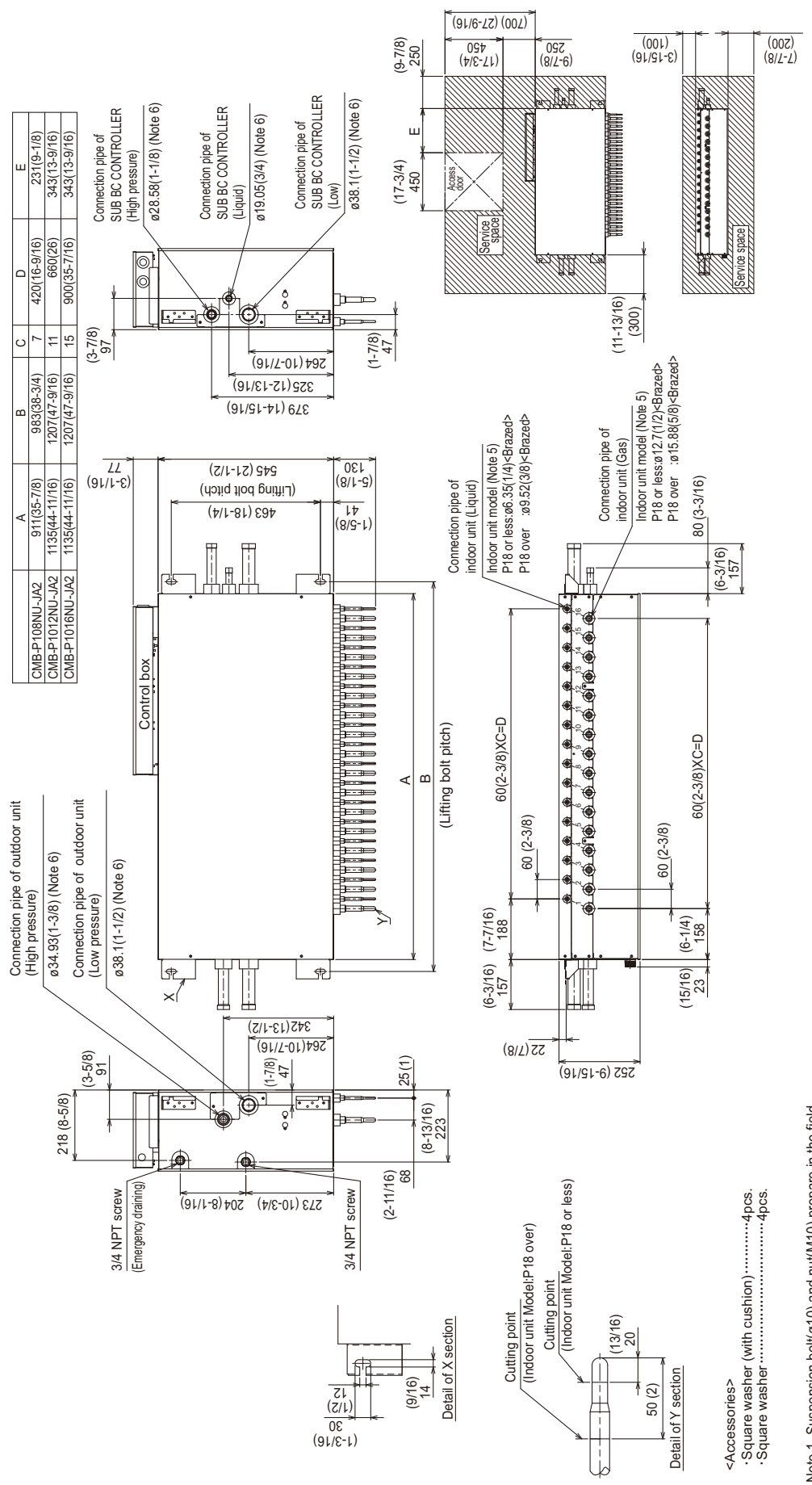
Unit: mm(in)



	A	B	C	D	E
CMB-P1012NU-J2	911(35-7/8)	983(38-3/4)	11	660(26)	231(9-1/8)
CMB-P1016NU-J2	1135(44-11/16)	1207(47-9/16)	15	900(35-7/16)	343(13-9/16)

CMB-P108, 1012, 1016NU-JA2

Unit: mm (in)



	A	B	C	D	E
CMB-P108NU-JA2	911(35-7/8)	983(38-3/4)	7	420(16-9/16)	231(9-1/8)
CMB-P1012NU-JA2	1135(44-11/16)	1207(47-9/16)	11	660(26)	343(13-9/16)
CMB-P1016NU-JA2	1135(44-11/16)	1207(47-9/16)	15	900(35-7/16)	343(13-9/16)

Table-1. To outdoor/heat source unit (Note.6)

Connectable unit capacity	High press. Pipe	Low press. Pipe	
P72	ø15.88(5/8)	ø19.05(3/4)	
P96	ø19.05(3/4)	ø22.2(7/8)	
P120	ø19.05(3/4)	ø22.2(7/8) or ø28.58(1-1/8)	*
P144 to P192	ø22.2(7/8)	ø28.58(1-1/8)	
P216	ø22.2(7/8) or ø28.58(1-1/8)	ø28.58(1-1/8)	*
P240	ø22.2(7/8) or ø28.58(1-1/8)	ø34.93(1-3/8)	*
P264 to P288	ø28.58(1-1/8)	ø34.93(1-3/8)	
P312	ø28.58(1-1/8)	ø34.93(1-3/8) or ø41.28(1-5/8)	*
P336	ø28.58(1-1/8)	ø41.28(1-5/8)	

Table-2. To other BC controller (Note.6)

Total downstream Indoor unit capacity	High press. Pipe	Liquid Pipe	Low press. Pipe
~P72	ø15.88(5/8)	ø9.52(3/8)	ø19.05(3/4)
P73~108	ø19.05(3/4)	ø9.52(3/8)	ø22.2(7/8)
P109~126	ø19.05(3/4)	ø12.7(1/2)	ø28.58(1-1/8)
P127~144	ø22.2(7/8)	ø12.7(1/2)	ø28.58(1-1/8)
P145~216	ø22.2(7/8)	ø15.88(5/8)	ø28.58(1-1/8)
P217~234	ø28.58(1-1/8)	ø15.88(5/8)	ø28.58(1-1/8)
P235~288	ø28.58(1-1/8)	ø19.05(3/4)	ø34.93(1-3/8)
P289~	ø28.58(1-1/8)	ø19.05(3/4)	ø41.28(1-5/8)

*For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

<Accessories>
·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 shown.
(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 Table-1,2 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. Do not place the BC controller directly on the floor.

CMB-P1016NU-KA2

Unit: mm (in)

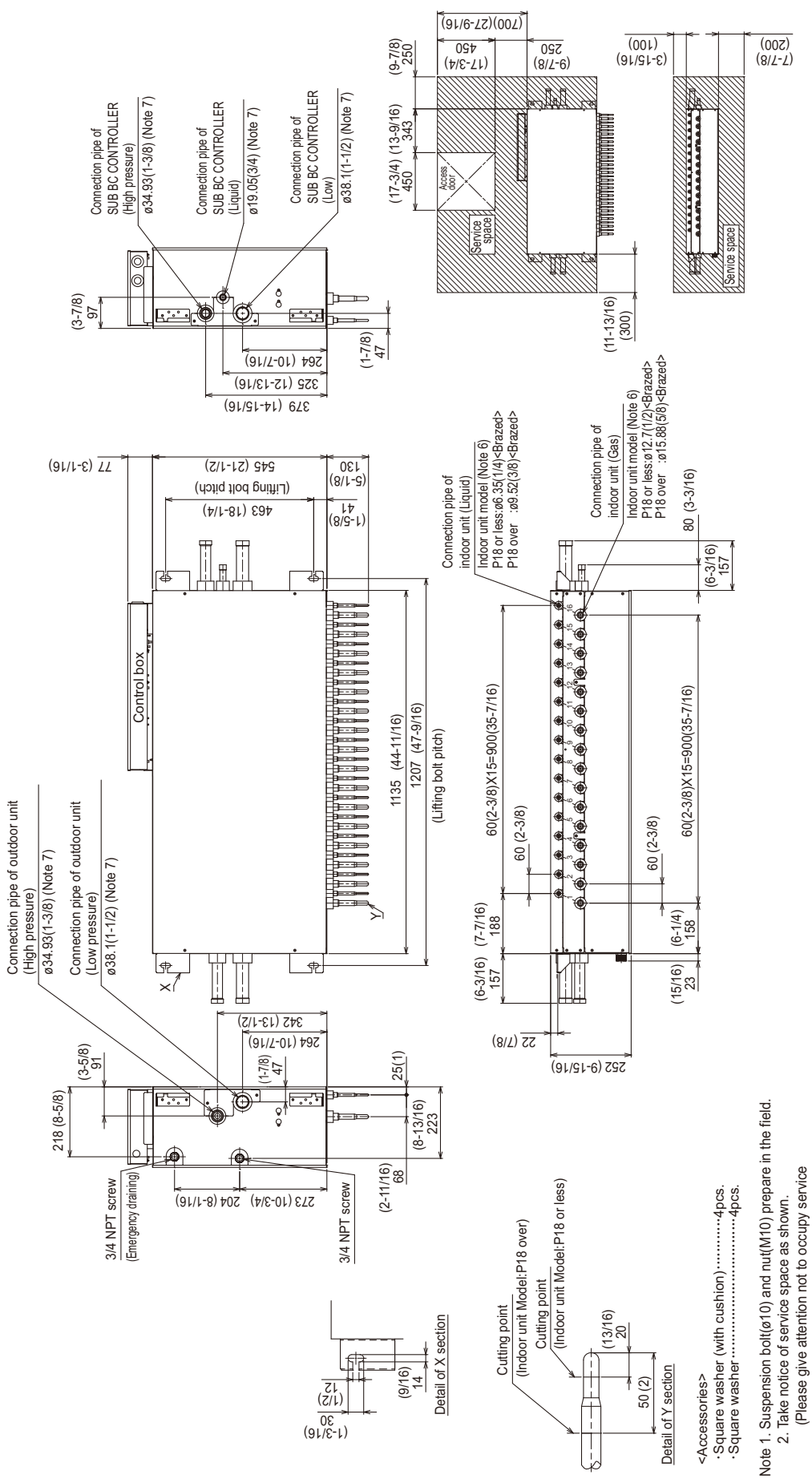


Table-1. To outdoor/heat source unit (Note.7)

Connectable unit capacity	High press. Pipe	Low press. Pipe	
P72	ø15.88(5/8)	ø19.05(3/4)	
P96	ø19.05(3/4)	ø22.2(7/8)	
P120	ø19.05(3/4)	ø22.2(7/8) or ø28.58(1-1/8)	*
P144 to P192	ø22.2(7/8)	ø28.58(1-1/8)	
P216	ø22.2(7/8) or ø28.58(1-1/8)	ø28.58(1-1/8)	*
P240	ø22.2(7/8) or ø28.58(1-1/8)	ø34.93(1-3/8)	*
P264 to P288	ø28.58(1-1/8)	ø34.93(1-3/8)	
P312	ø28.58(1-1/8)	ø34.93(1-3/8) or ø41.28(1-5/8)	*
P336 to P432	ø28.58(1-1/8)	ø41.28(1-5/8)	

*For the refrigerant pipe size, refer to Installation Manual of outdoor units/heat source units.

Table-2. To other BC controller (Note.7)

Total downstream Indoor unit capacity	High press. Pipe	Liquid Pipe	Low press. Pipe
~P72	ø15.88(5/8)	ø9.52(3/8)	ø19.05(3/4)
P73~108	ø19.05(3/4)	ø9.52(3/8)	ø22.2(7/8)
P109~126	ø19.05(3/4)	ø12.7(1/2)	ø28.58(1-1/8)
P127~144	ø22.2(7/8)	ø12.7(1/2)	ø28.58(1-1/8)
P145~216	ø22.2(7/8)	ø15.88(5/8)	ø28.58(1-1/8)
P217~234	ø28.58(1-1/8)	ø15.88(5/8)	ø28.58(1-1/8)
P235~288	ø28.58(1-1/8)	ø19.05(3/4)	ø34.93(1-3/8)
P289~	ø28.58(1-1/8)	ø19.05(3/4)	ø41.28(1-5/8)

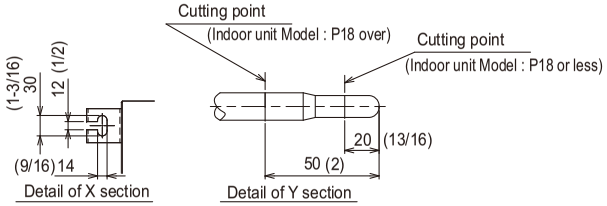
Note 1. Suspension bolt(ø10) and nut(M10) prepare in the field.
2. Take notice of service space as shown.
(Please give attention not to occupy service space by letting ducts and pipes through.)
3. Please take service space for connection pipe of SUB BC CONTROLLER.
4. When using an outdoor unit-38HP(P950) 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 Table-1,2 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. Do not place the BC controller directly on the floor.

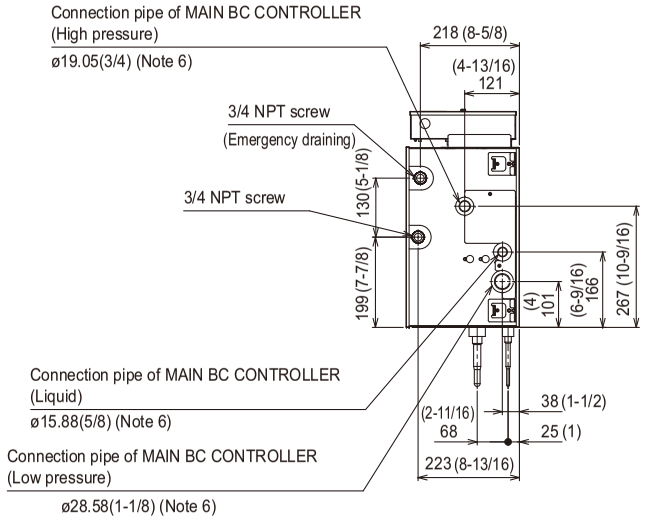
<Accessories>
·Square washer (with cushion)·····4pcs.
·Square washer·····4pcs.

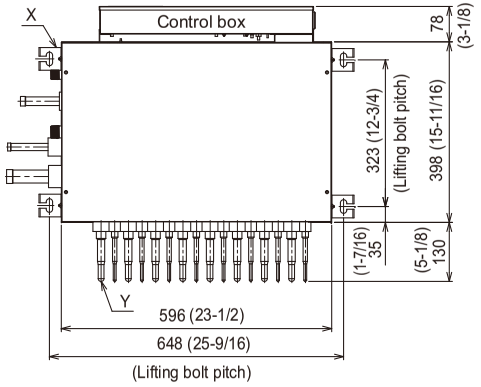
CMB-P104, 108NU-KB2

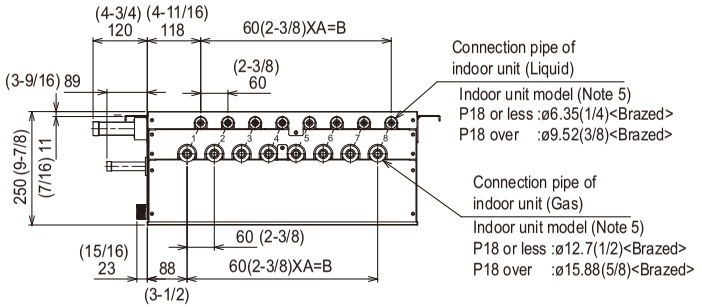
Note 1. Suspension bolt(ø10) and nut(M10) prepare in the field.
2. Take notice of service space as shown.
(Please give attention not to occupy service space by letting ducts and pipes through.)
3. Can't use singleness. (MAIN BC CONTROLLER is necessary.)
4. Install this product in a location where noise (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 Table-1 for connection pipe of MAIN BC CONTROLLER.
7. Refer to the Installation Manual for insulation of connection pipe and drain piping.
8. Do not place the BC controller directly on the floor.

<Accessories>
·Square washer (with cushion)·····4pcs.
·Square washer·····4pcs.





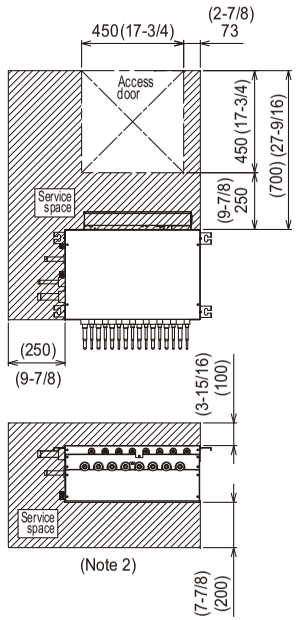




	A	B
CMB-P104NU-KB2	3	180(7-1/8)
CMB-P108NU-KB2	7	420(16-9/16)

Table-1. To other BC controller (Note.6)

Total downstream Indoor unit capacity	High press. Pipe	Liquid Pipe	Low press. Pipe
~P72	ø15.88(5/8)	ø9.52(3/8)	ø19.05(3/4)
P73~108	ø19.05(3/4)	ø9.52(3/8)	ø22.2(7/8)
P109~126	ø19.05(3/4)	ø12.7(1/2)	ø28.58(1-1/8)
P127~144	ø22.2(7/8)	ø12.7(1/2)	ø28.58(1-1/8)
P145~216	ø22.2(7/8)	ø15.88(5/8)	ø28.58(1-1/8)
P217~234	ø28.58(1-1/8)	ø15.88(5/8)	ø28.58(1-1/8)
P235~288	ø28.58(1-1/8)	ø19.05(3/4)	ø34.93(1-3/8)
P289~	ø28.58(1-1/8)	ø19.05(3/4)	ø41.28(1-5/8)



Unit: mm (in)

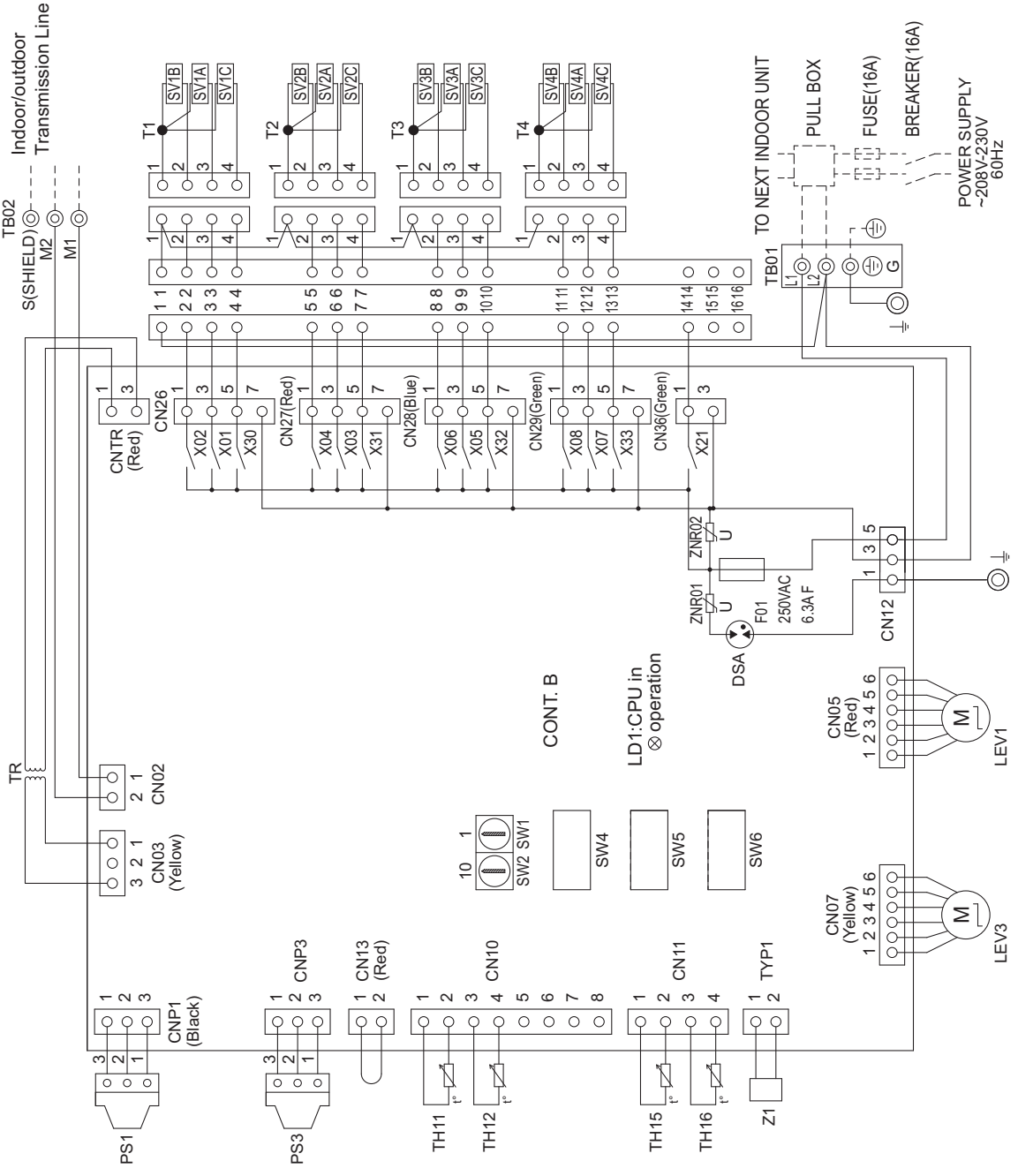
BC controller

CMB-P104NU-J2

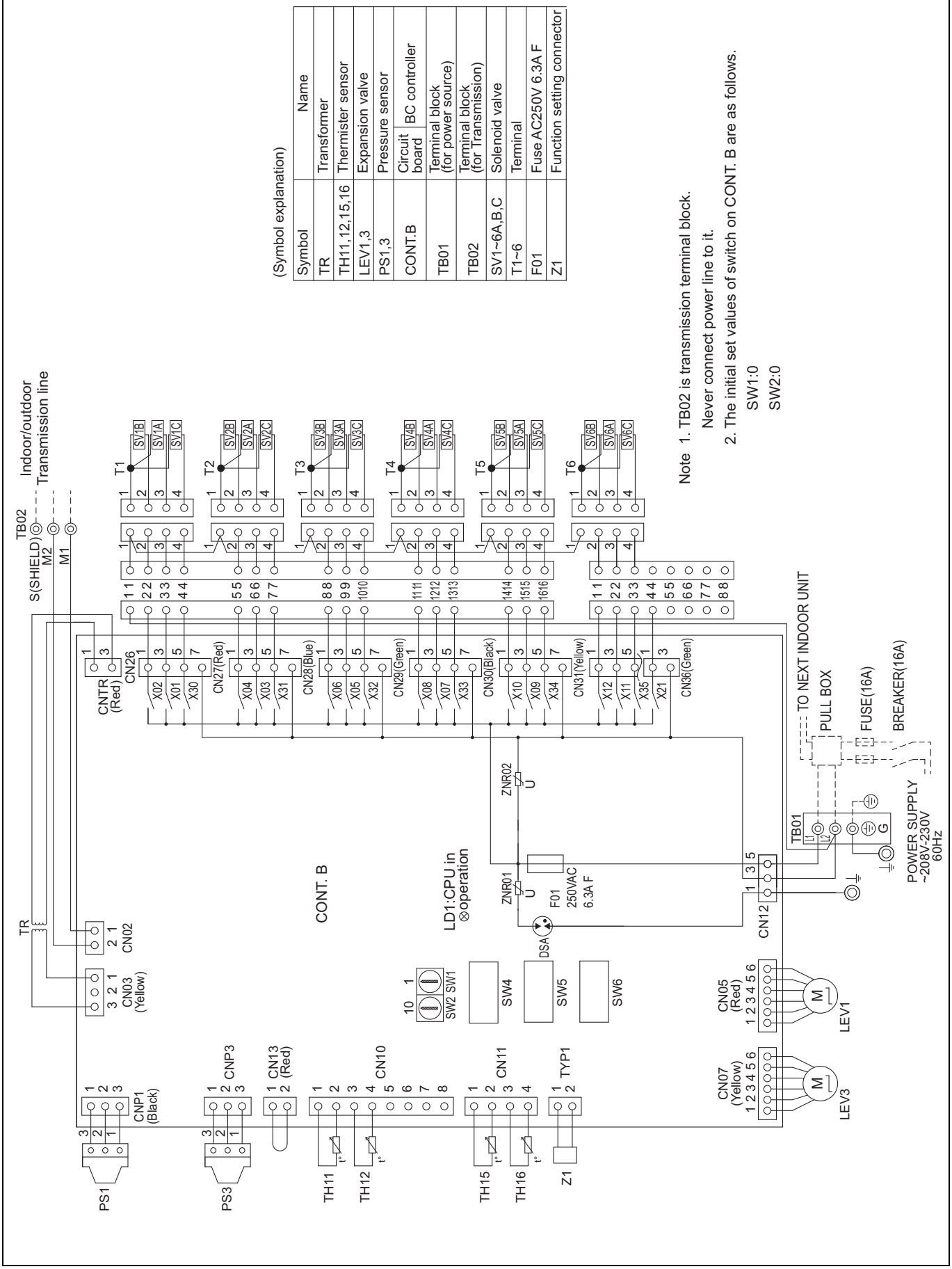
(Symbol explanation)

Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
CONT.B	Circuit board BC controller
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
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-P106NU-J2

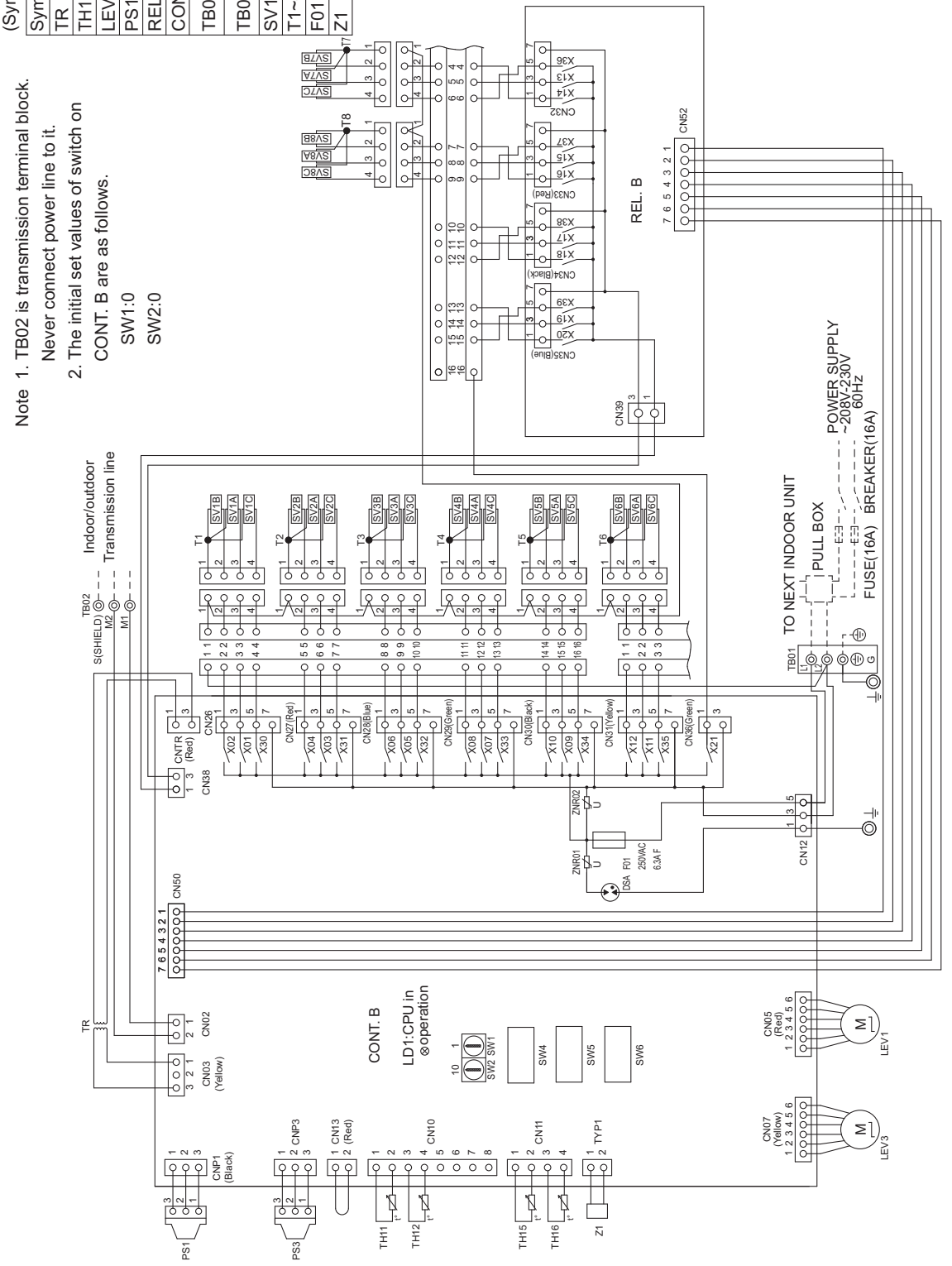


CMB-P108NU-J2

(Symbol explanation)

Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3	Expansion valve
PS1,3	Pressure sensor
REL.B	Circuit board Relay BC controller
CONT.B	
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
Z1	Function setting connector

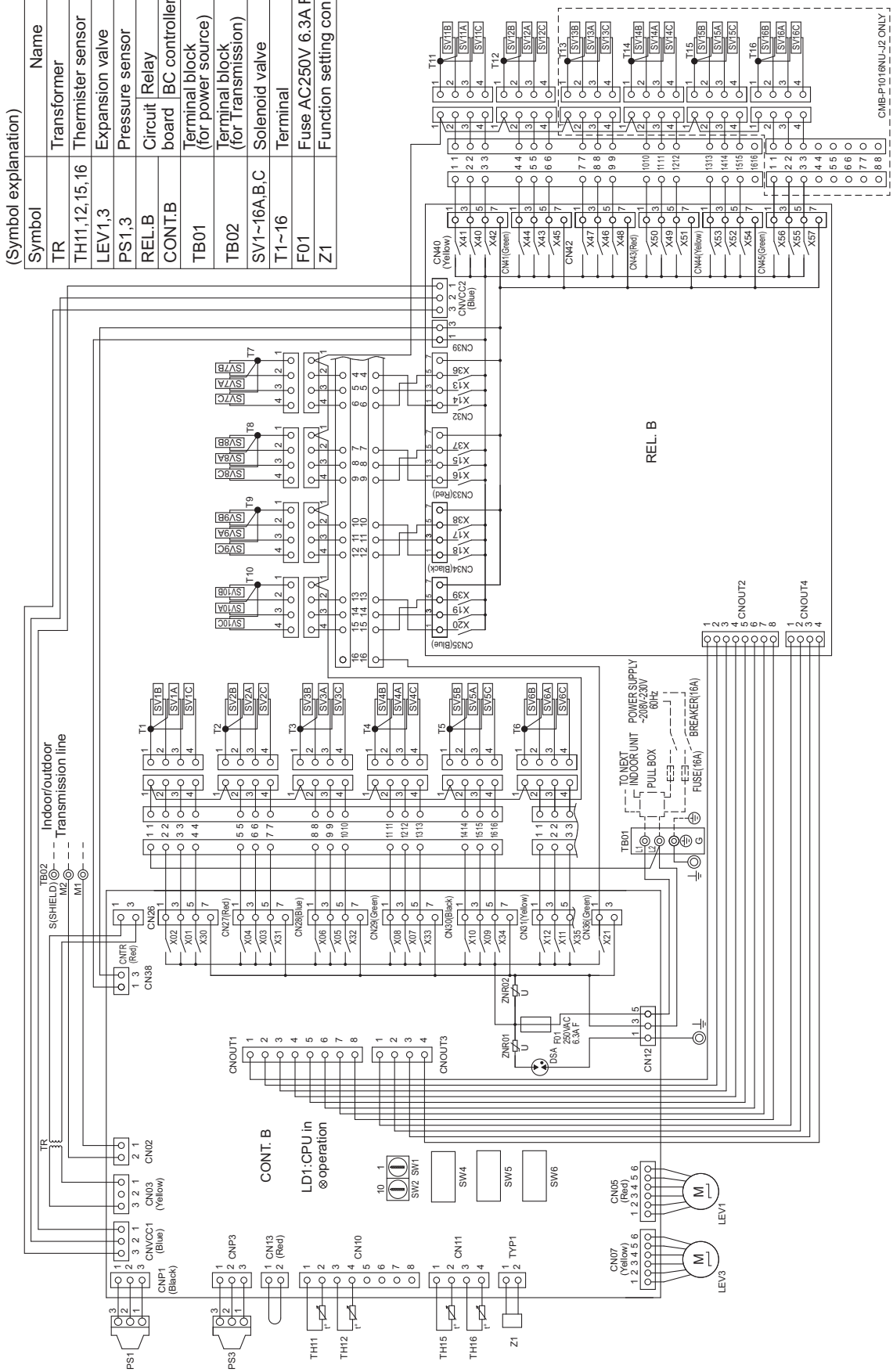
Note 1. TB02 is transmission terminal block.
Never connect power line to it.
2. The initial set values of switch on CONT. B are as follows.
SW1:0
SW2:0



CMB-P1012, 1016NU-J2

(Symbol explanation)

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

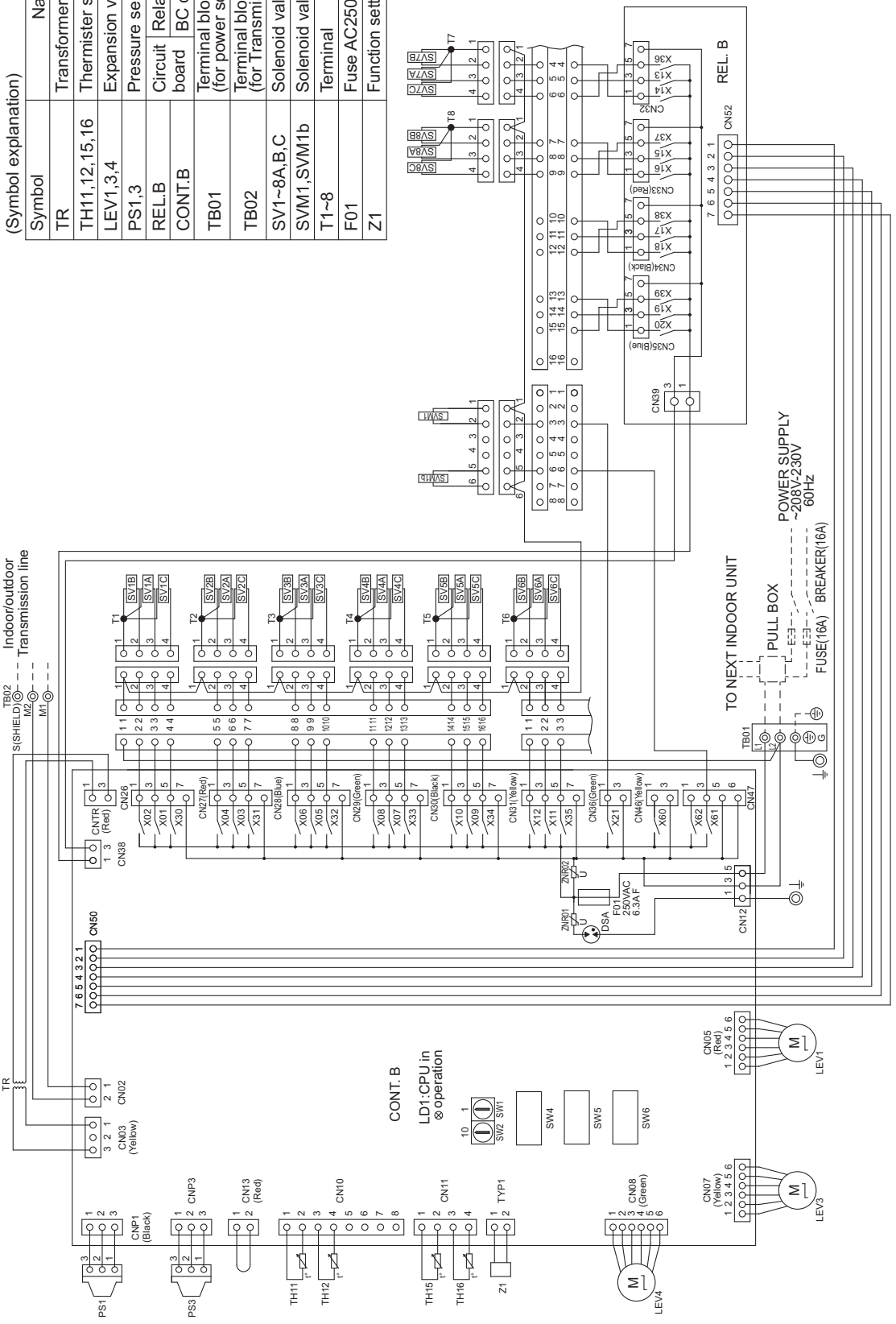


Note 1. TB02 is transmission terminal block.
Never connect power line to it.
2. The initial set values of switch on CONT. B are as follows.
SW1:0
SW2:0

CMB-P108NU-JA2

(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
CONT.B	board BC controller
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~8A,B,C	Solenoid valve
SVM1,SVM1b	Solenoid valve
T1~8	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting connector

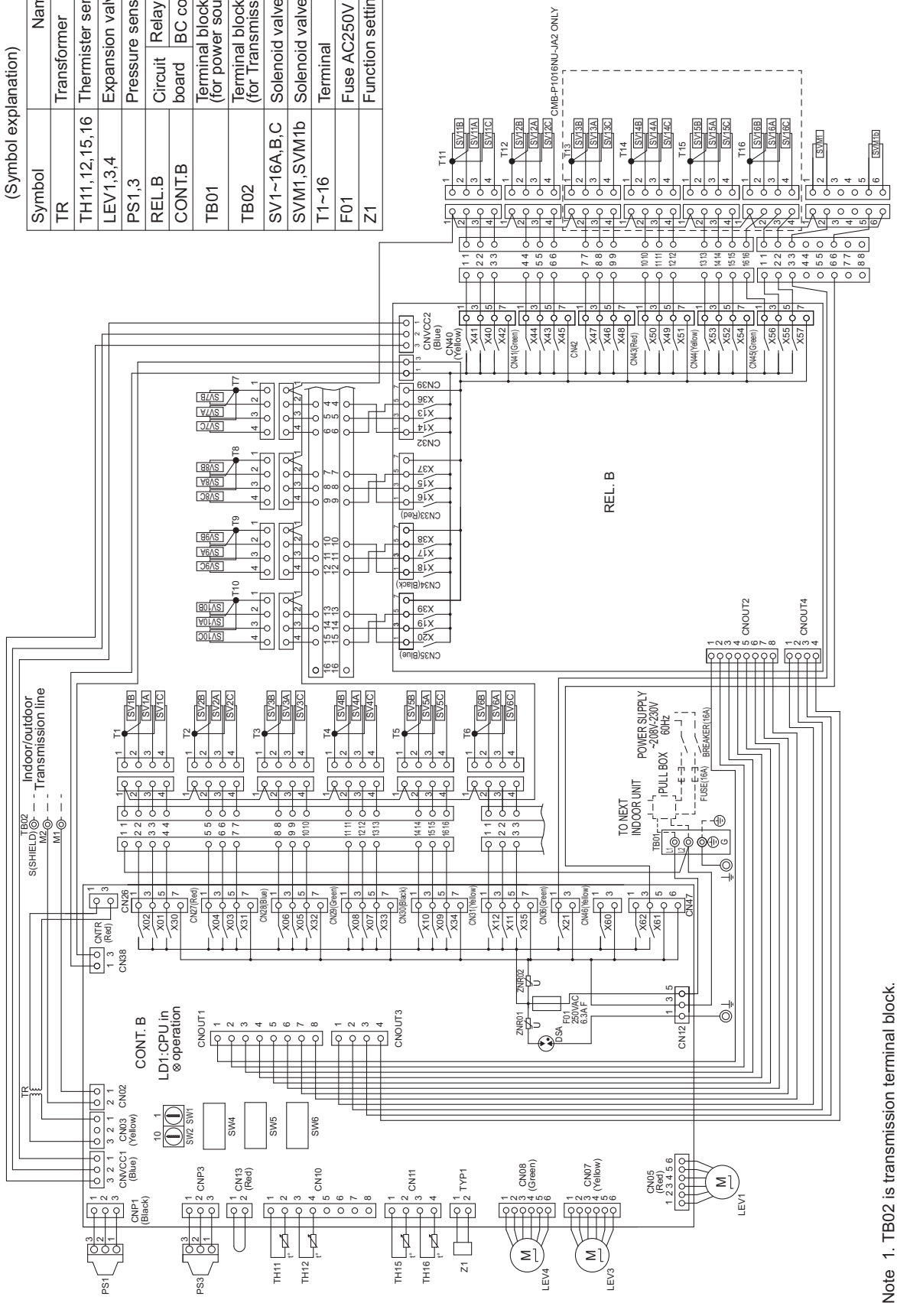


Note 1. TB02 is transmission terminal block.
Never connect power line to it.
2. The initial set values of switch on CONT. B are as follows.
SW1:0
SW2:0

CMB-P1012, 1016NU-JA2

(Symbol explanation)

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

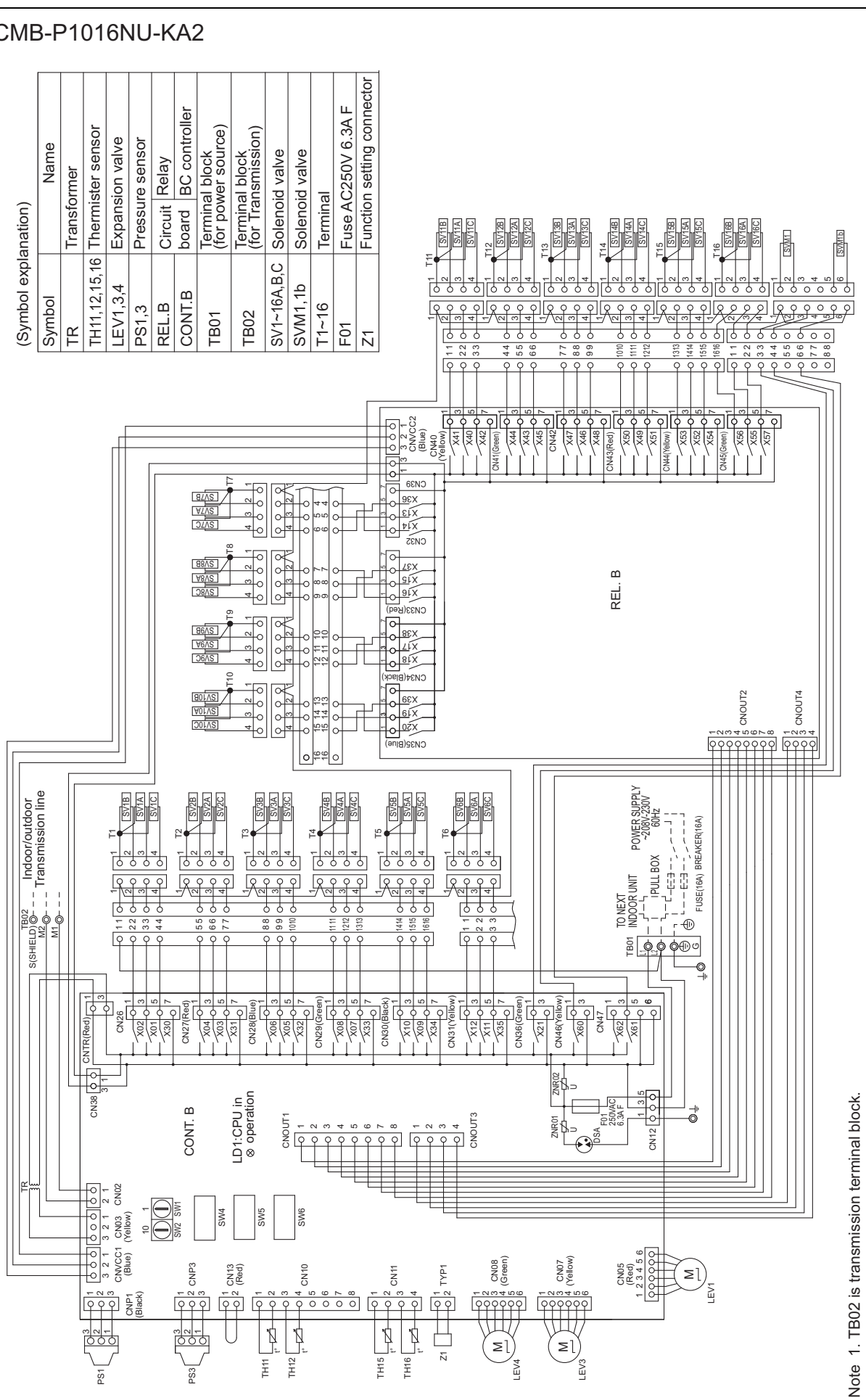


Note 1. TB02 is transmission terminal block.
Never connect power line to it.
2. The initial set values of switch on CONT. B are as follows.
SW1:0
SW2:0

CMB-P1016NU-KA2

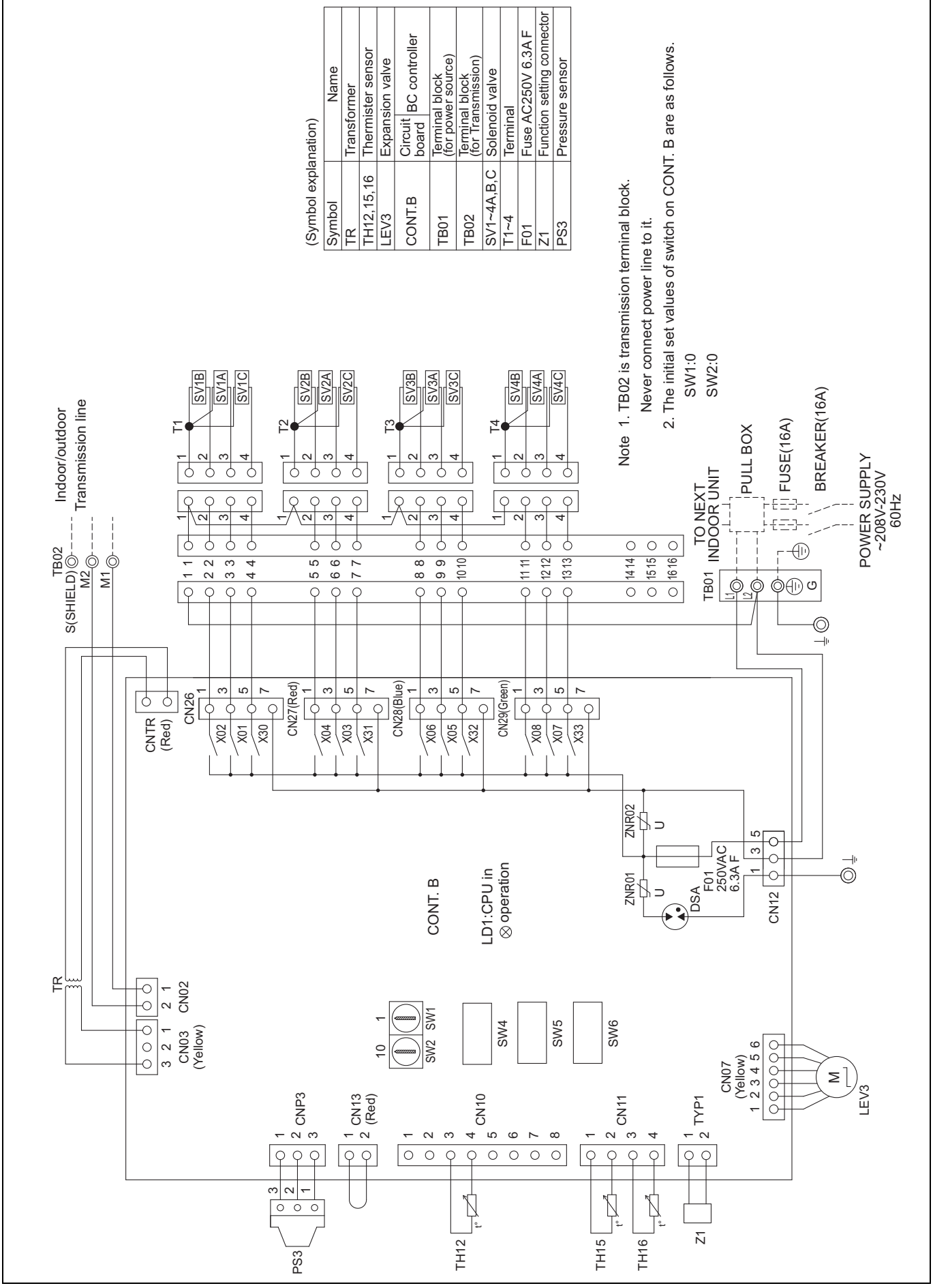
(Symbol explanation)

Symbol	Name
TR	Transformer
TH11,12,15,16	Thermister sensor
LEV1,3,4	Expansion valve
PS1,3	Pressure sensor
REL.B	Circuit board / Relay BC controller
CONT.B	
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~16A,B,C	Solenoid valve
SVM1,1b	Solenoid valve
T1~16	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-P104NU-KB2

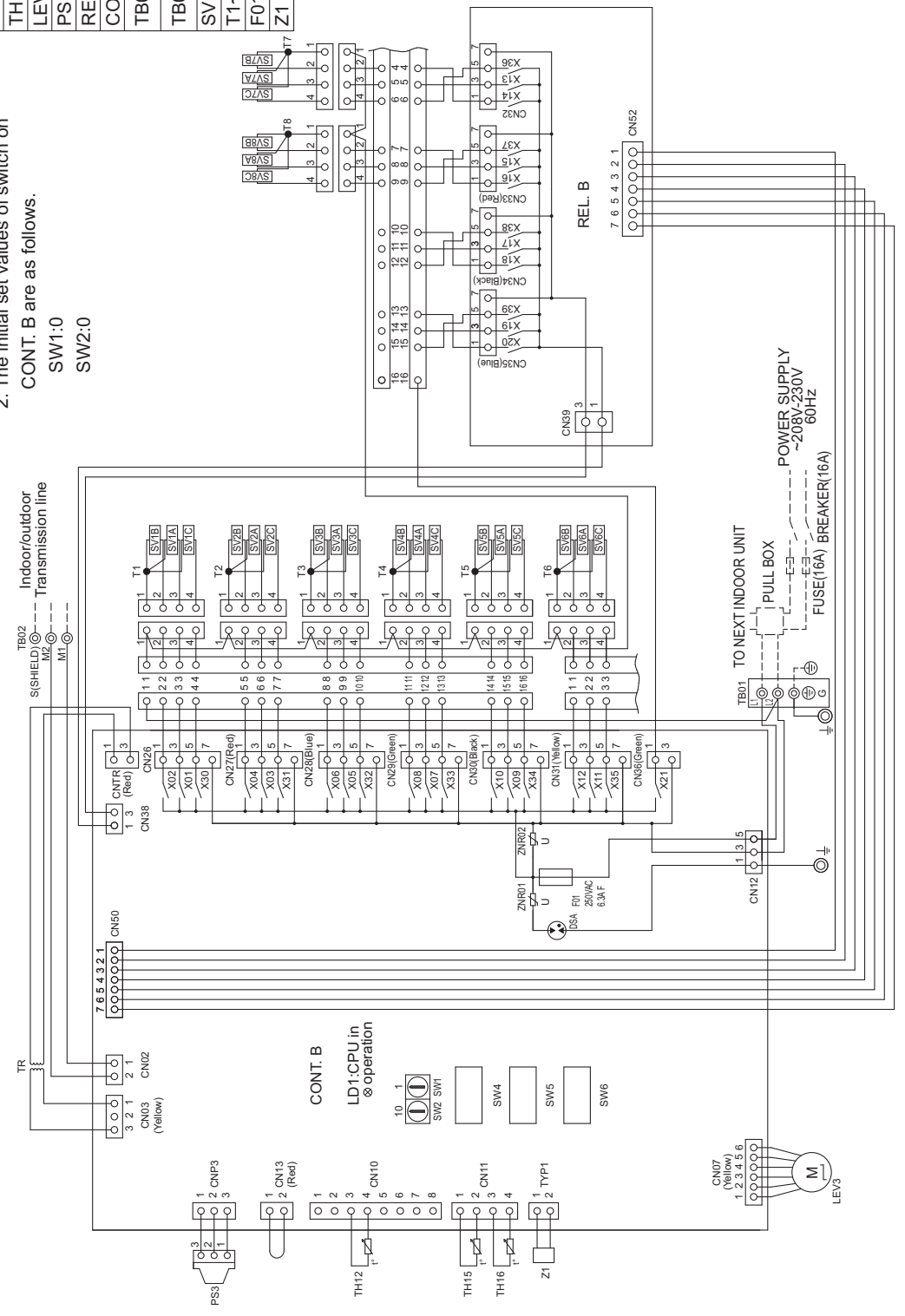


CMB-P108NU-KB2

(Symbol explanation)

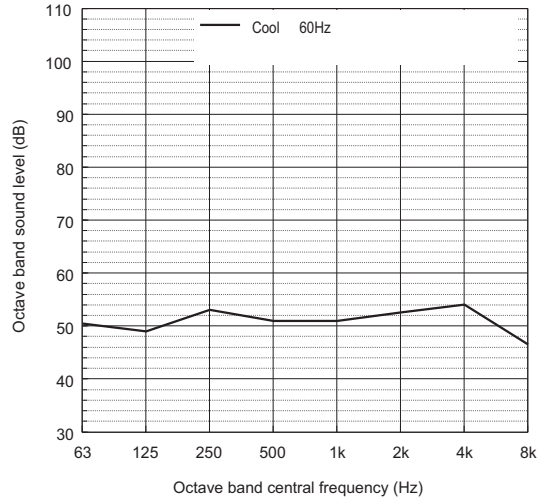
Symbol	Name
TR	Transformer
TH12,15,16	Thermister sensor
LEV3	Expansion valve
PS3	Pressure sensor
REL.B	Circuit board Relay BC controller
CONT.B	
TB01	Terminal block (for power source)
TB02	Terminal block (for Transmission)
SV1~8A,B,C	Solenoid valve
T1~8	Terminal
F01	Fuse AC250V 6.3A F
Z1	Function setting 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



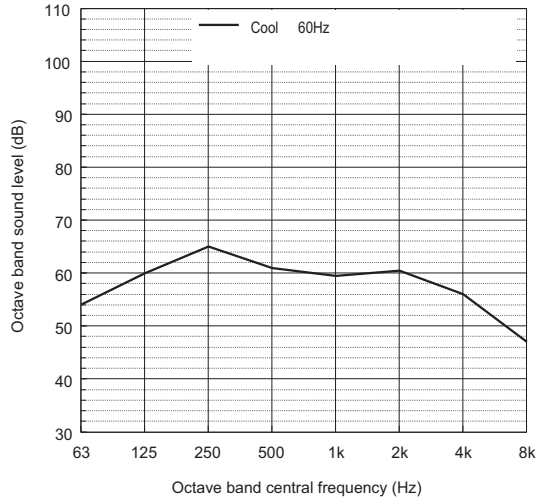
4-1. Sound levels in cooling mode

Sound level of CMB-P104-1016NU-J2



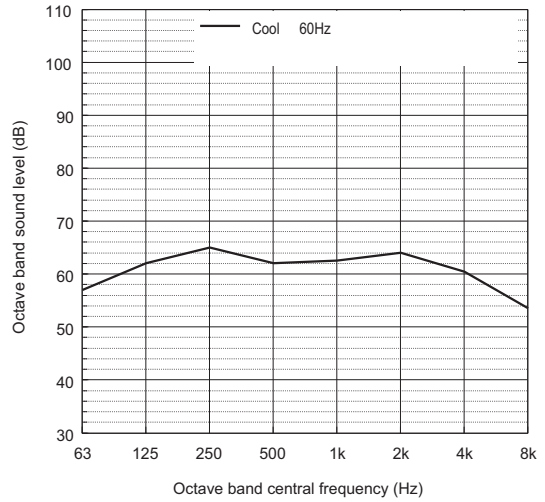
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	50.5	49.0	53.0	51.0	51.0	52.5	54.0	46.5	59.0

Sound level of CMB-P1016NU-KA2



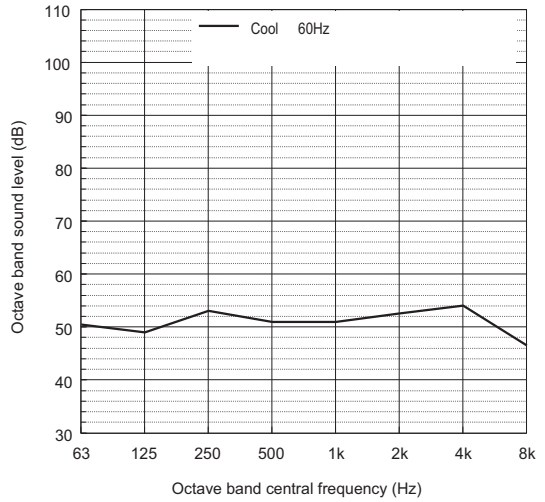
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	54.0	60.0	65.0	61.0	59.5	60.5	56.0	47.0	66.0

Sound level of CMB-P108-1016NU-JA2



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	57.0	62.0	65.0	62.0	62.5	64.0	60.5	53.5	69.0

Sound level of CMB-P104, 108NU-KB2

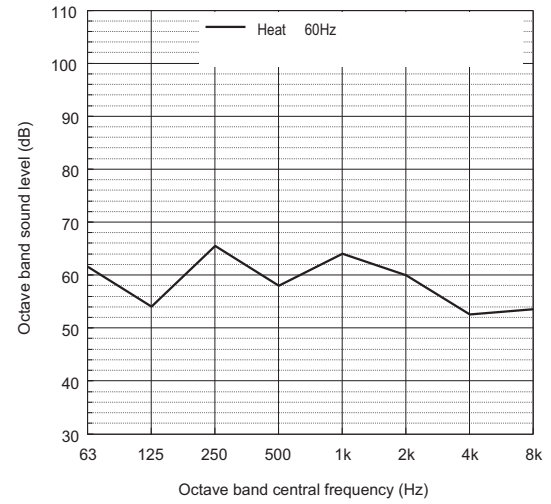


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Cooling	60Hz	50.5	49.0	53.0	51.0	51.0	52.5	54.0	46.5	59.0

- 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.
- The sound values are sound power level (PWL) based on ISO 3744:2010 (r = 3.5 m).

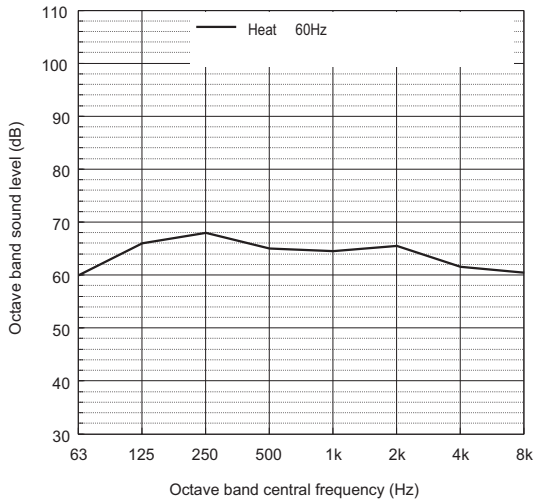
4-2. Sound levels in heating mode

Sound level of CMB-P104-1016NU-J2



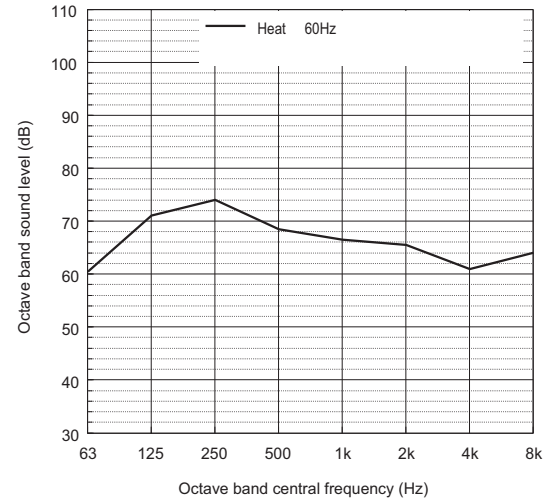
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	61.5	54.0	65.5	58.0	64.0	60.0	52.5	53.5	67.0

Sound level of CMB-P1016NU-KA2



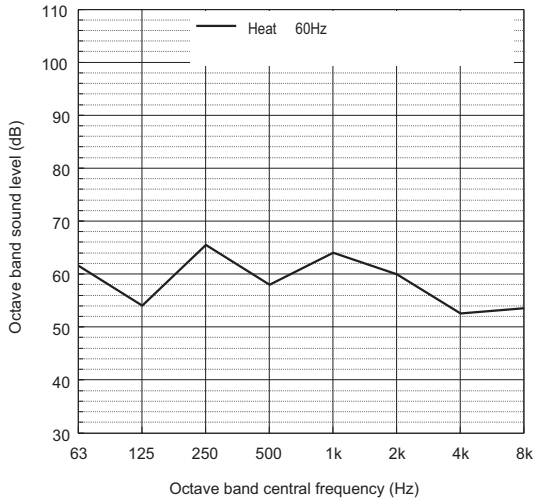
		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	60.0	66.0	68.0	65.0	64.5	65.5	61.5	60.5	71.0

Sound level of CMB-P108-1016NU-JA2



		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	60.5	71.0	74.0	68.5	66.5	65.5	61.0	64.0	73.0

Sound level of CMB-P104, 108NU-KB2

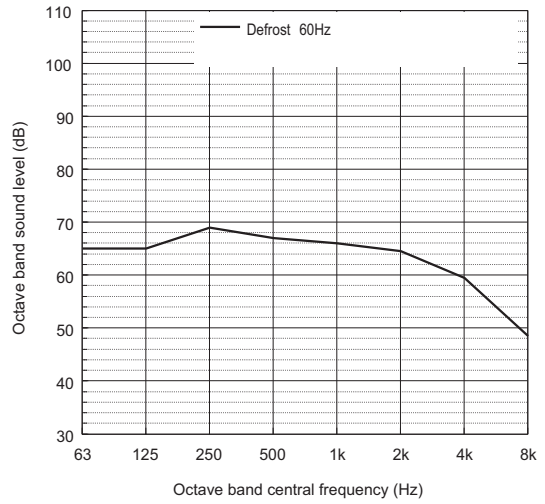


		63	125	250	500	1k	2k	4k	8k	dB(A)
Standard Heating	60Hz	61.5	54.0	65.5	58.0	64.0	60.0	52.5	53.5	67.0

- 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.
- The sound values are sound power level (PWL) based on ISO 3744:2010 (r = 3.5 m).

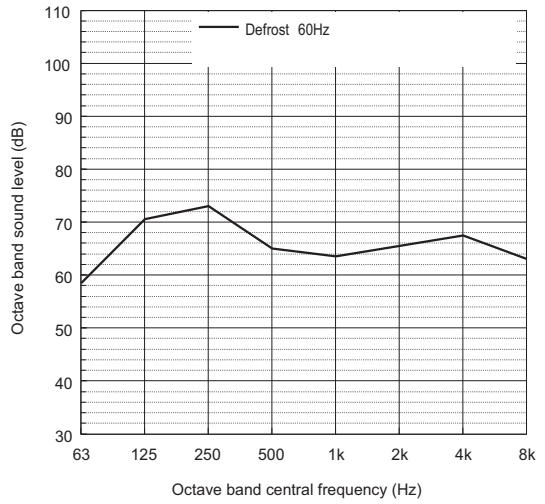
4-3. Sound levels in defrost mode

Sound level of CMB-P104-1016NU-J2



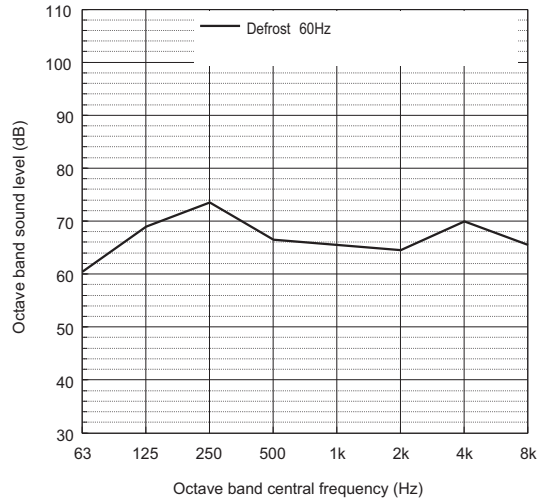
		63	125	250	500	1k	2k	4k	8k	dB(A)
Defrost	60Hz	65.0	65.0	69.0	67.0	66.0	64.5	59.5	48.5	71.0

Sound level of CMB-P1016NU-KA2



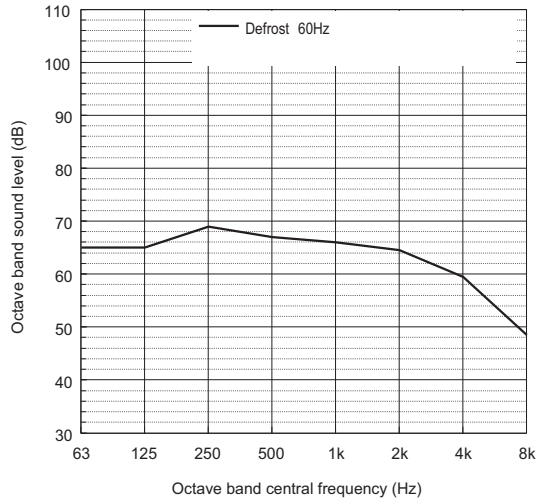
		63	125	250	500	1k	2k	4k	8k	dB(A)
Defrost	60Hz	58.5	70.5	73.0	65.0	63.5	65.5	67.5	63.0	73.0

Sound level of CMB-P108-1016NU-JA2



		63	125	250	500	1k	2k	4k	8k	dB(A)
Defrost	60Hz	60.5	69.0	73.5	66.5	65.5	64.5	70.0	65.5	74.0

Sound level of CMB-P104, 108NU-KB2



		63	125	250	500	1k	2k	4k	8k	dB(A)
Defrost	60Hz	65.0	65.0	69.0	67.0	66.0	64.5	59.5	48.5	71.0

- 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.
- The sound values are sound power level (PWL) based on ISO 3744:2010 (r = 3.5 m).

Symbols: MCA: Minimum Circuit Ampacity
FLA: Full Load Amps RLA: Rated Load Amps

Model	Hz	Volts	Voltage range	MCA(A)	FLA(A)	RLA(A)
CMB-P104NU-J2	60	208	Max.: 253V Min.: 188V	0.38	15	0.30
		230		0.44		0.35
CMB-P106NU-J2		208		0.55		0.44
		230		0.65		0.52
CMB-P108NU-J2		208		0.74		0.59
		230		0.87		0.69
CMB-P1012NU-J2		208		1.10		0.88
		230		1.29		1.03
CMB-P1016NU-J2		208		1.47		1.17
		230		1.72		1.37
CMB-P108NU-JA2		208		0.83		0.66
		230		0.97		0.77
CMB-P1012NU-JA2		208		1.19		0.95
		230		1.39		1.11
CMB-P1016NU-JA2		208		1.57		1.25
		230		1.82		1.45
CMB-P1016NU-KA2		208		1.57		1.25
		230		1.82		1.45
CMB-P104NU-KB2		208		0.38		0.30
		230		0.44		0.35
CMB-P108NU-KB2		208		0.74		0.59
		230		0.87		0.69

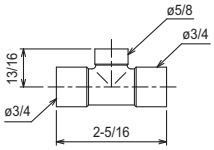
6-1. JOINT and REDUCER

CITY MULTI units can be easily connected by using Joint sets and Reducer sets provided by Mitsubishi Electric. Refer to section "Piping Design" or the Installation Manual that comes with the Joint set or Reducer set for how to install the Joint set or Reducer set.

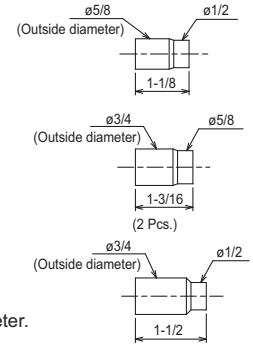
CMY-Y102SS-G2

in.

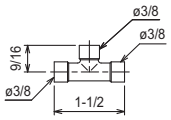
For Gas pipe:



<Reducer(Accessory)>



For Liquid pipe:



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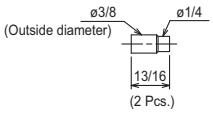
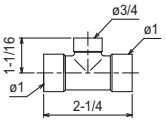


*Pipe diameter is indicated by inside diameter.

CMY-Y102LS-G2

in.

For Gas pipe:



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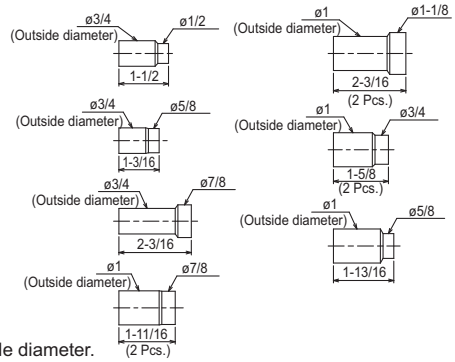
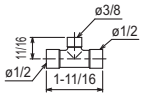
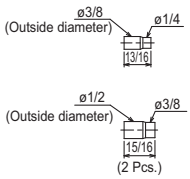


For Liquid pipe:



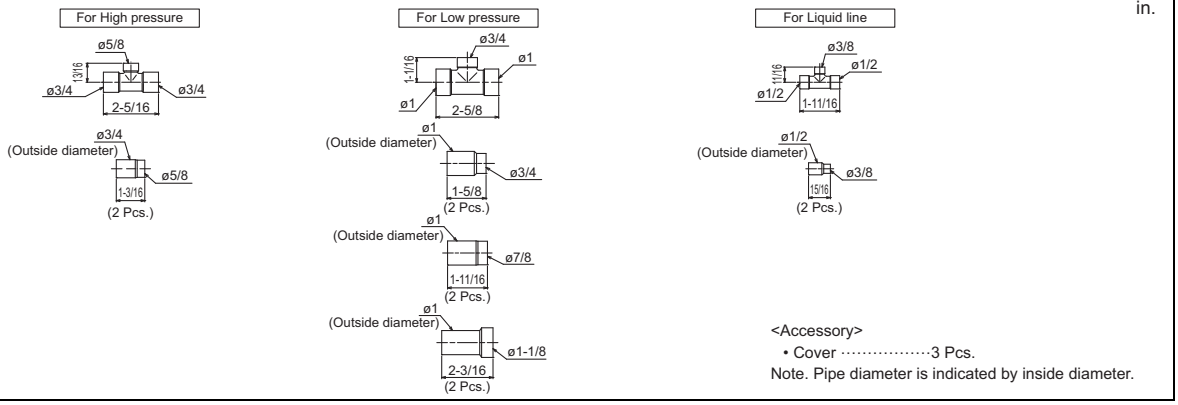
<Reducer(Accessory)>



*Pipe diameter is indicated by inside diameter.

CMY-R201S-G

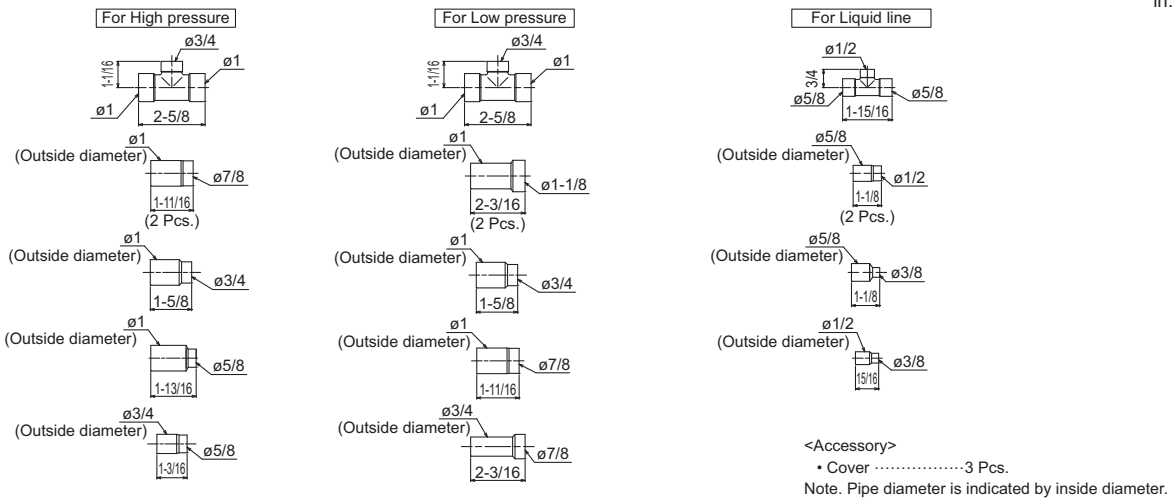
in.



<Accessory>
• Cover ·····3 Pcs.
Note. Pipe diameter is indicated by inside diameter.

CMY-R202S-G

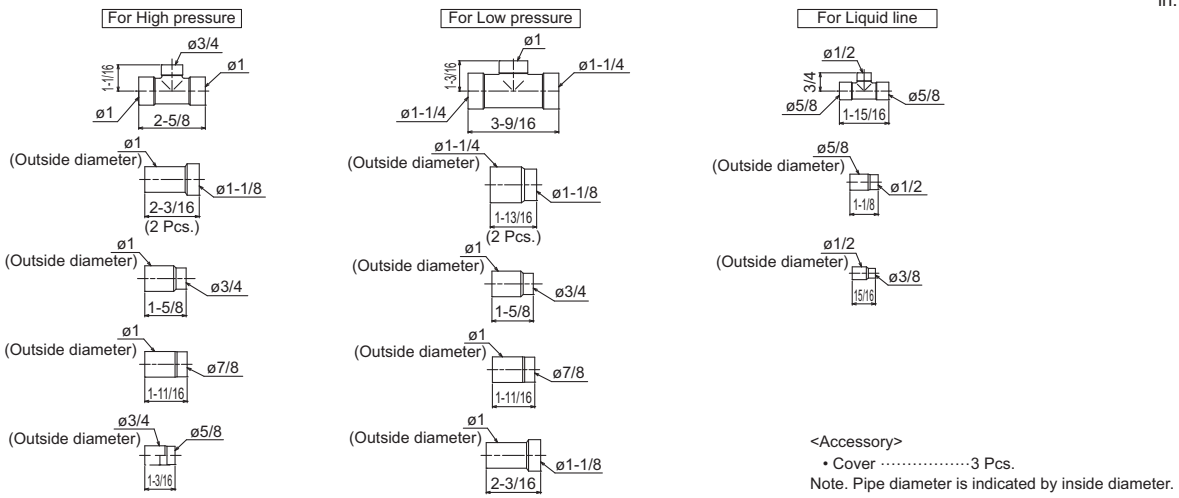
in.



<Accessory>
• Cover ·····3 Pcs.
Note. Pipe diameter is indicated by inside diameter.

CMY-R203S-G

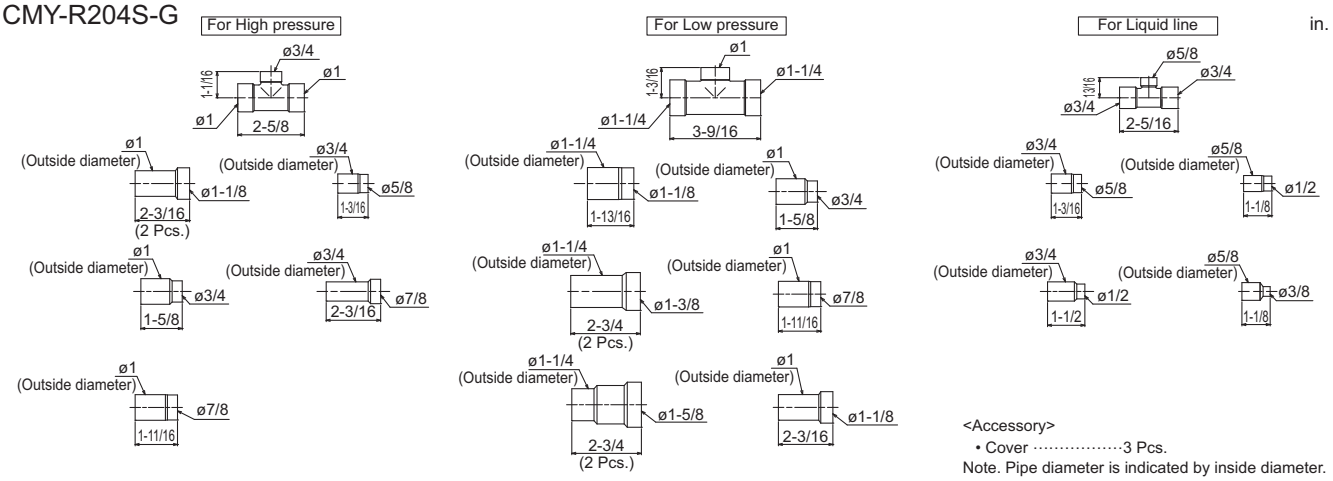
in.



<Accessory>
• Cover ·····3 Pcs.
Note. Pipe diameter is indicated by inside diameter.

CMY-R204S-G

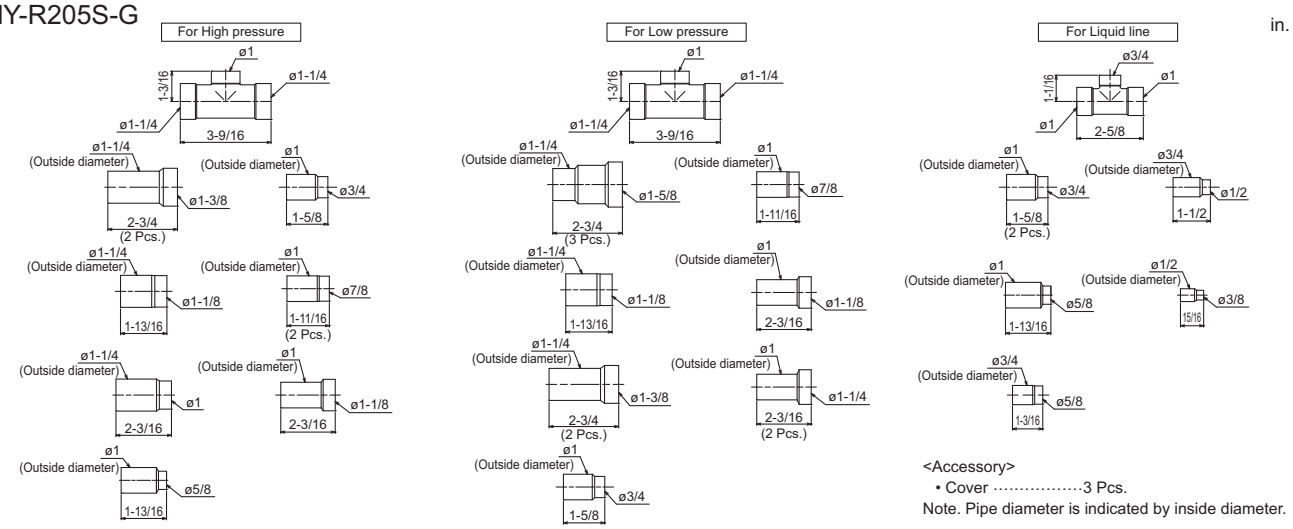
in.



<Accessory>
• Cover ·····3 Pcs.
Note. Pipe diameter is indicated by inside diameter.

CMY-R205S-G

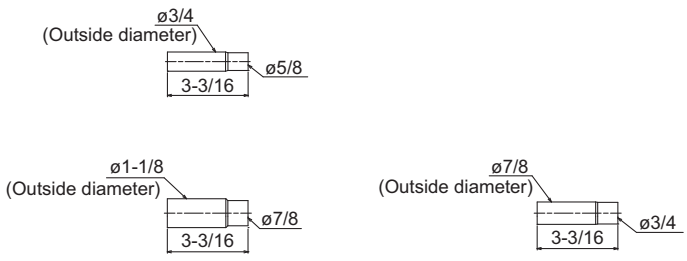
in.



<Accessory>
• Cover ·····3 Pcs.
Note. Pipe diameter is indicated by inside diameter.

CMY-R301S-G

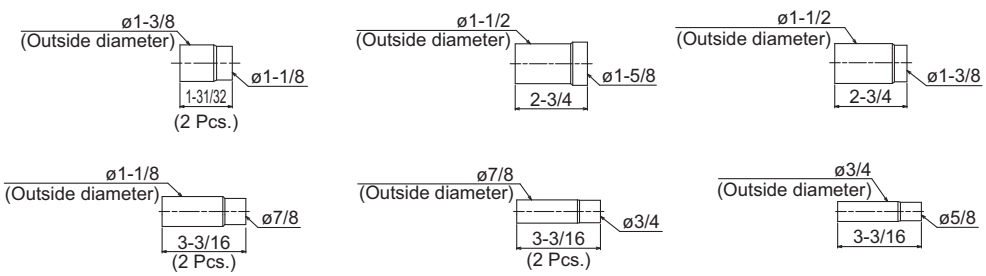
in.



Note. Pipe diameter is indicated by inside diameter.

CMY-R302S-G1

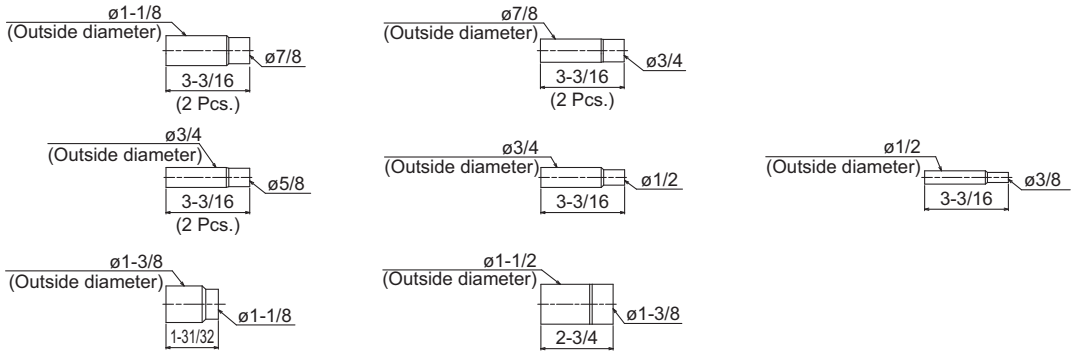
in.



Note. Pipe diameter is indicated by inside diameter.

CMY-R303S-G1

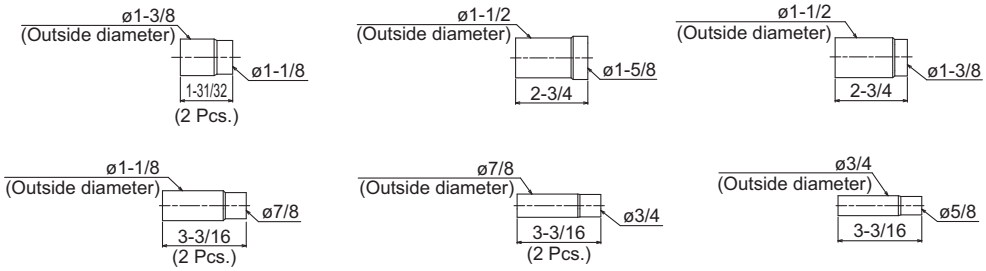
in.



Note. Pipe diameter is indicated by inside diameter.

CMY-R304S-G1

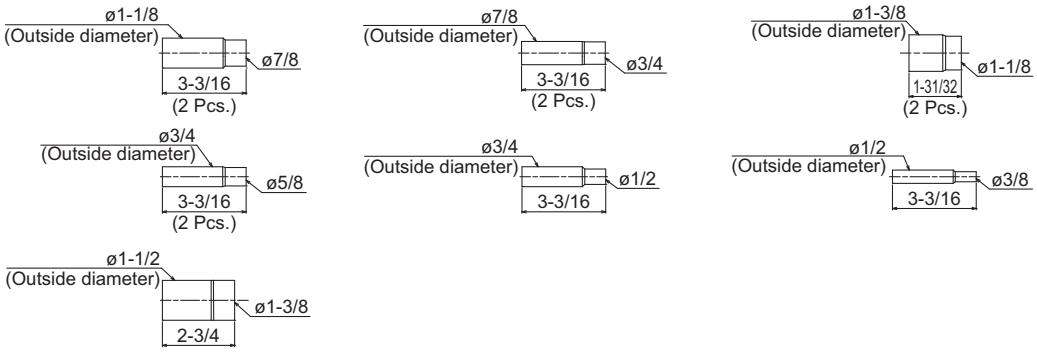
in.



Note. Pipe diameter is indicated by inside diameter.

CMY-R305S-G1

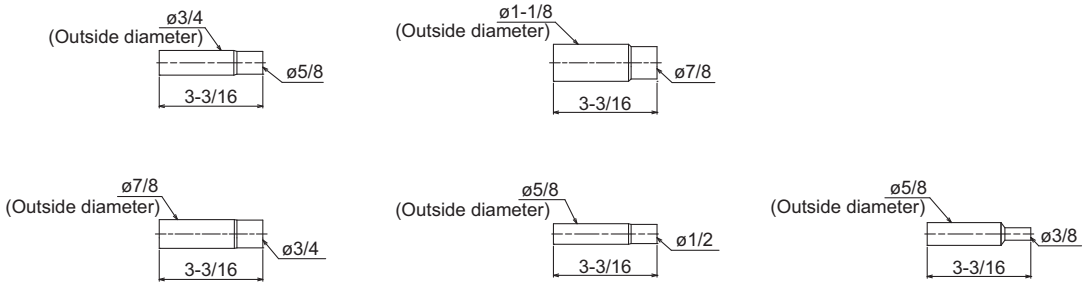
in.



Note. Pipe diameter is indicated by inside diameter.

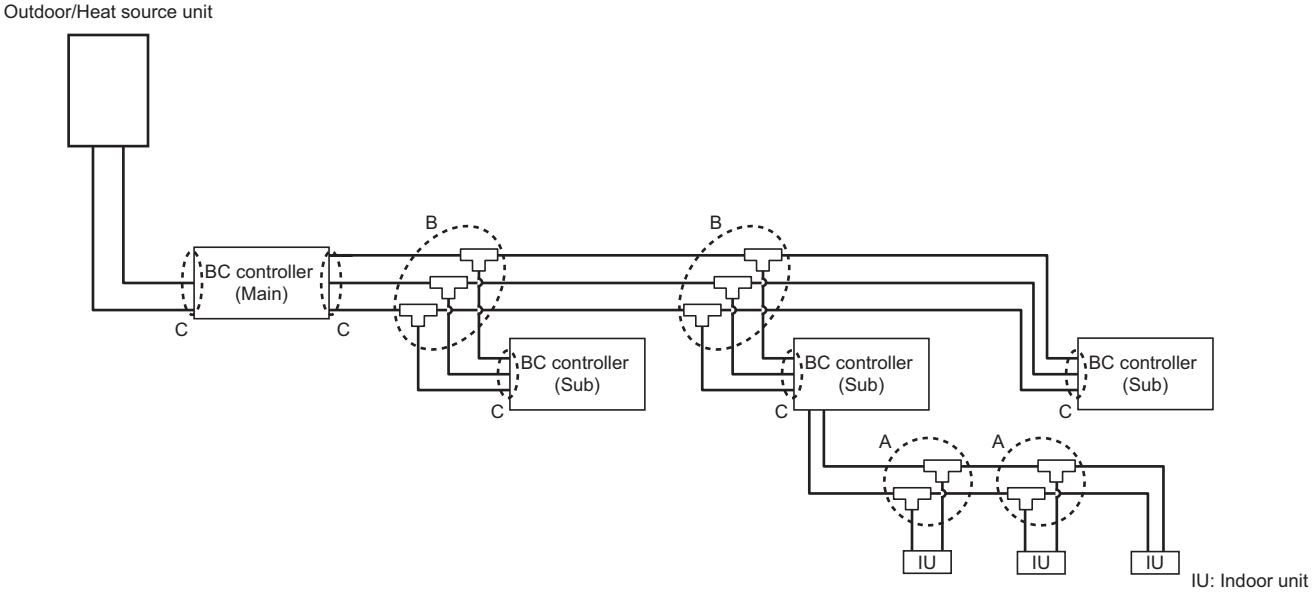
CMY-R306S-G

in.



Note. Pipe diameter is indicated by inside diameter.

How to select Joint and Reducer



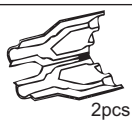
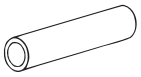
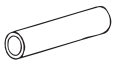
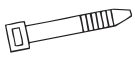
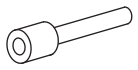
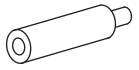
A	Branch joint	Between BC and indoor units	CMY-Y102SS-G2	Total down-stream indoor unit capacity: -P72
			CMY-Y102LS-G2	Total down-stream indoor unit capacity: P73-P96
B	Branch joint	Between Main BC and Sub BC	CMY-R201S-G	Total down-stream indoor unit capacity: -P126
			CMY-R202S-G	Total down-stream indoor unit capacity: P127-P216
			CMY-R203S-G	Total down-stream indoor unit capacity: P217-P234
			CMY-R204S-G	Total down-stream indoor unit capacity: P235-P360
			CMY-R205S-G	Total down-stream indoor unit capacity: P361-
C	Reducer	Between outdoor units and BC	CMY-R301S-G	For J2 type (Outdoor unit capacity: P72-P120)
			CMY-R302S-G1	For JA2 type (Outdoor unit capacity: P72-P336)
			CMY-R304S-G1	For KA2 type (Outdoor unit capacity: P72-P432)
		Between Main BC and Sub BC	CMY-R303S-G1	For JA2 type (When using the Sub BC controller)
			CMY-R305S-G1	For KA2 type (When using the Sub BC controller)
			CMY-R306S-G	For KB2 type

♦Item “B” is not necessary when J2-type BC controller is used.

6-2. JOINT KIT "CMY-R160-J1" FOR BC CONTROLLER

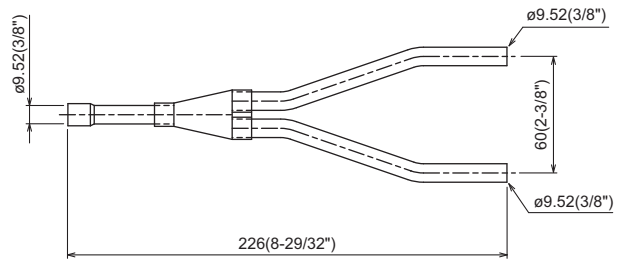
Joint kit "CMY-R160-J1" for BC controller is used to combine 2 ports of the BC controller at a PURY/PQRY system so as to enable down-stream Indoor capacity above P54 as shown in Fig. 1.

The Joint kit include following items:

①Instruction	②Joint pipe(Small)	③Joint pipe(Large)	④Cover 1	⑤Cover 2	⑥Cover 3	⑦Band	⑧Reducer 1	⑨Reducer 2
							OD19.05-ID22.2 	OD19.05-ID15.88 
This sheet 1pc	1pc	1pc	2pcs	1pc for gas side	1pc for liquid side	8pcs	1pc	1pc

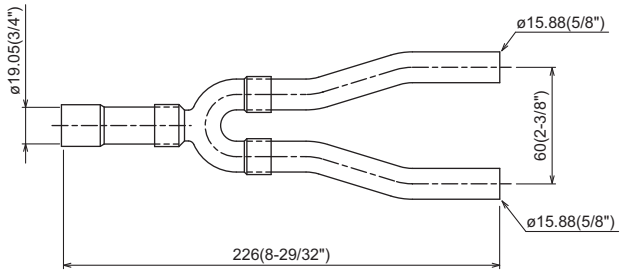
Please prepare the following items in the field. ①Tape for insulation material sealing ②Extension pipe for refrigerant circuit

②Joint pipe (for liquid side)



③Joint pipe (for gas side)

mm (in.)



1. Designing CMY-R160-J1 to a PURY/PQRY system

The maximum down-stream Indoor capacity for 1 port of BC controller is P54. When the down-stream Indoor capacity is above P54, Joint kit CMY-R160-J1 is needed to combined 2 ports of BC controller to enlarge the capacity, like Group 2 and 3 in Fig. 1.

Maximum 3 Indoor units are allowed to connect to 1 port of BC controller or 2 combined ports of BC controller using CMY-R160-J1.

When connecting Indoor units to 1 port of BC controller or 2 combined ports of BC controller using CMY-R160-J1 or CMY-Y102SS-G2 is applicable, like Group 1 and 2 in Fig. 1

Caution: Mixed cooling and heating mode at the same time for Indoor units connecting to 1 port or 2 combined ports is not available.

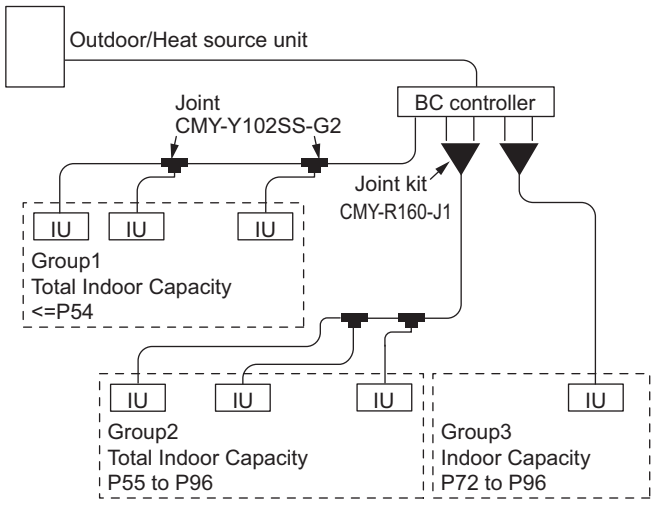


Fig.1. CMY-R160-J1 applying scheme

2. Piping at the installation site

The connection of CMY-R160-J1 to BC controller and pipe leading to Indoor units is referable to Fig. 2. Non-oxidized brazing is necessary. All piping must be careful to avoid foreign material getting inside.

After piping and air-tight testing, insulation work to the Joint and pipe should be done. Details is available at the Installation Manual.

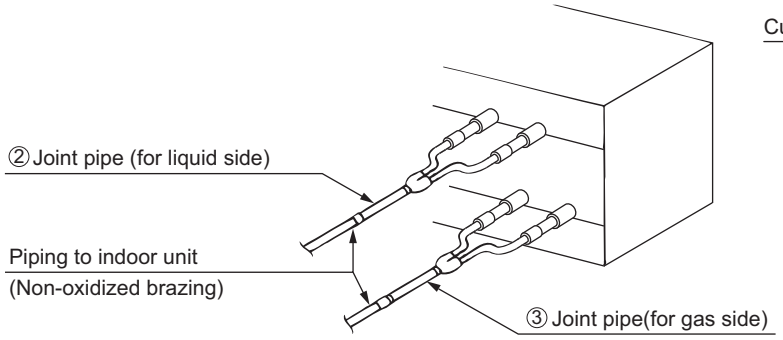
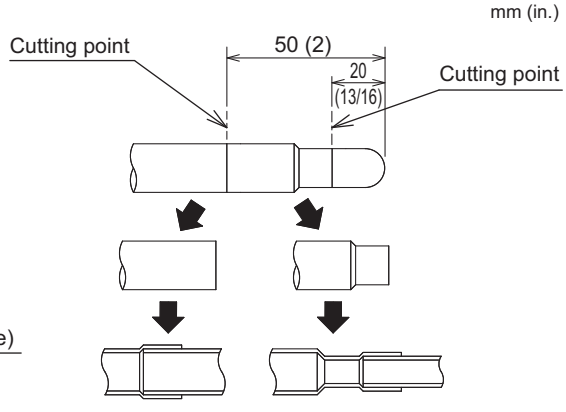


Fig.2. Connecting CMY-R160-J1

mm (in.)

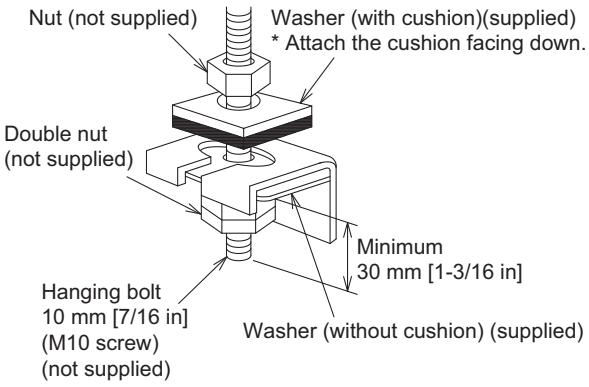


Have pipe expansion of indoor unit connecting port by cutting the piping at the cutting point.
Remove burr after cutting the piping to prevent entering the piping.
Check that there is no crack at the pipe expansion part.

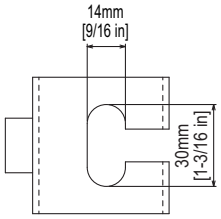
7-1. Installing BC controllers

Installing hanging bolts

Install locally procured hanging bolts (threaded rod) following the procedure given in the figure.
The hanging bolt size is 10 mm [7/16 in] (M10 screw).
To hang the unit, use a lifting machine to lift and pass it through the hanging bolts.
Suspension bracket has an oval hole. Use a large diameter washer.

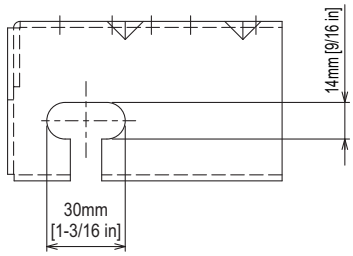


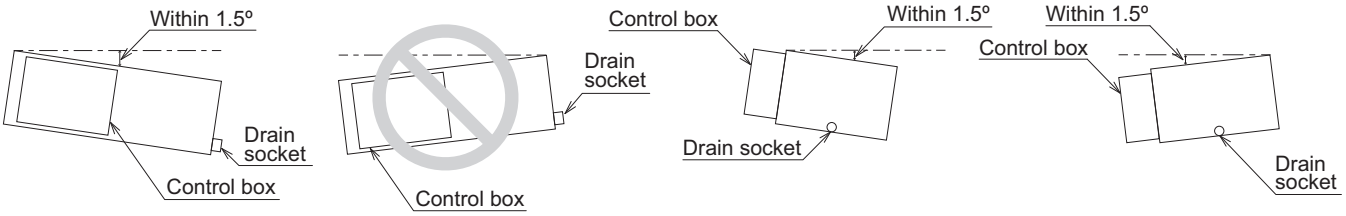
CMB-P104, 106, 108NU-J2,
CMB-P104, 108NU-KB2



(Top view)

CMB-P1012, 1016NU-J2
CMB-P108, 1012, 1016NU-JA2
CMB-P1016NU-KA2

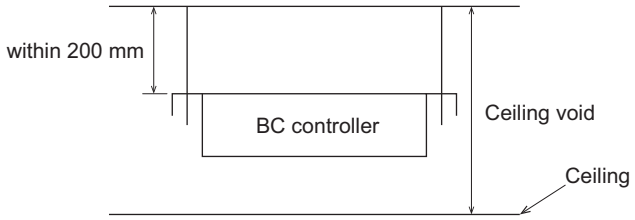




<Viewed from the front of the control box>

<Viewed from the drain socket side>

- ►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 1.5º or below to the BC controller.
- ►Do not place the BC controller directly on the floor. Doing so may cause damage to the unit or the floor.
- ►Install the BC controllers with the hanging length within 200 mm [7-7/8 in] or shorter.



⚠CAUTION

Be sure to install the unit body level.

8-1. Compatibility

Outdoor/Heat source unit	BC controller	Compatibility
PURY-(E)P-T/Y(S)NU PURY-HP-T/Y(S)NU PURY-P-T/Y(S)LMU S/W Ver. 7.08 or later PQRY-P-T/Y(S)LMU S/W Ver. 6.42 or later PURY-P-T/Y(S)KMU S/W Ver. 5.28 or later PURY-P-T/Y(S)JMU S/W Ver. 5.59 or later PURY-HP-T/Y(S)KMU S/W Ver. 5.28 or later PURY-P-Z(S)KMU S/W Ver. 6.42 or later PQRY-P-Z(S)KMU S/W Ver. 6.42 or later PQRY-P-Z(S)LMU S/W Ver. 6.42 or later	J2 type	Compatible
PURY-(E)P-T/Y(S)NU PURY-HP-T/Y(S)NU PURY-P-T/Y(S)LMU PQRY-P-T/Y(S)LMU PURY-P-T/Y(S)KMU PURY-P-T/Y(S)JMU PURY-HP-T/Y(S)KMU PURY-P-Z(S)KMU PQRY-P-Z(S)KMU PQRY-P-Z(S)LMU	G1 type	Compatible
PURY-(E)P-T/Y(S)NU PURY-HP-T/Y(S)NU PURY-P-T/Y(S)LMU PQRY-P-T/Y(S)LMU PURY-P-T/Y(S)KMU PURY-P-T/Y(S)JMU PURY-HP-T/Y(S)KMU PURY-P-Z(S)KMU PQRY-P-Z(S)KMU PQRY-P-Z(S)LMU	G type	Compatible

Outdoor/Heat source unit	BC controller			Compatibility
	Main	Sub		
PURY-(E)P-T/Y(S)NU	JA2/KA2 type	GB1/HB1 type	GB1/HB1 type	Compatible
PURY-HP-T/Y(S)NU	JA2/KA2 type	KB2 type	GB1/HB1 type	Not compatible
PURY-P-T/Y(S)LMU S/W Ver. 7.08 or later	JA2/KA2 type	GB1/HB1 type	GB/HB type	Compatible
PQRY-P-T/Y(S)LMU S/W Ver. 6.42 or later	JA2/KA2 type	GB/HB type	GB/HB type	Compatible
PURY-P-T/Y(S)KMU S/W Ver. 5.28 or later	JA2/KA2 type	KB2 type	GB/HB type	Not compatible
PURY-P-T/Y(S)JMU S/W Ver. 5.59 or later	JA2/KA2 type	GB1/HB1 type	-	Compatible
PURY-HP-T/Y(S)KMU S/W Ver. 5.28 or later	JA2/KA2 type	GB/HB type	-	Compatible
PURY-P-Z(S)KMU S/W Ver. 6.42 or later	GA1/HA1 type	KB2 type	KB2 type	Compatible
PQRY-P-Z(S)KMU S/W Ver. 6.42 or later	GA1/HA1 type	KB2 type	GB1/HB1 type	Not compatible
PQRY-P-Z(S)LMU S/W Ver. 6.42 or later	GA1/HA1 type	KB2 type	GB/HB type	Not compatible
	GA1/HA1 type	KB2 type	-	Compatible
	GA/HA type	KB2 type	KB2 type	Compatible
	GA/HA type	KB2 type	GB1/HB1 type	Not compatible
	GA/HA type	KB2 type	GB/HB type	Not compatible
	GA/HA type	KB2 type	-	Compatible

Outdoor/Heat source unit	BC controller		Compatibility
	Main	Sub	
PURY-(E)P-T/Y(S)NU PURY-HP-T/Y(S)NU PURY-P-T/Y(S)LMU S/W Ver. 7.08 or later PQRY-P-T/Y(S)LMU S/W Ver. 6.42 or later PURY-P-T/Y(S)KMU S/W Ver. 5.28 or later PURY-P-T/Y(S)JMU S/W Ver. 5.59 or later PURY-HP-T/Y(S)KMU S/W Ver. 5.28 or later PURY-P-Z(S)KMU S/W Ver. 6.42 or later PQRY-P-Z(S)KMU S/W Ver. 6.42 or later PQRY-P-Z(S)LMU S/W Ver. 6.42 or later	JA2/KA2 type	KB2 type	Compatible(*)

*Up to 11 Sub BC controllers can be connected.

GA(1)/HA(1)/GB(1)/HB(1) type and JA2/KA2/KB2 type can be mixed.
The only combination that is not available is mix of GB(1)/HB(1) type and KB2 type.
When mixing GA(1)/HA(1)/GB(1)/HB(1) type and JA2/KA2/KB2 type, specifications and restrictions are according to GA(1)/HA(1)/GB(1)/HB(1) type. (piping length, connectable number of Sub BC)

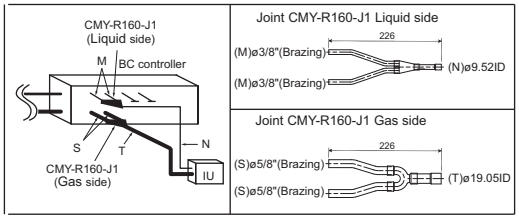
BC controller

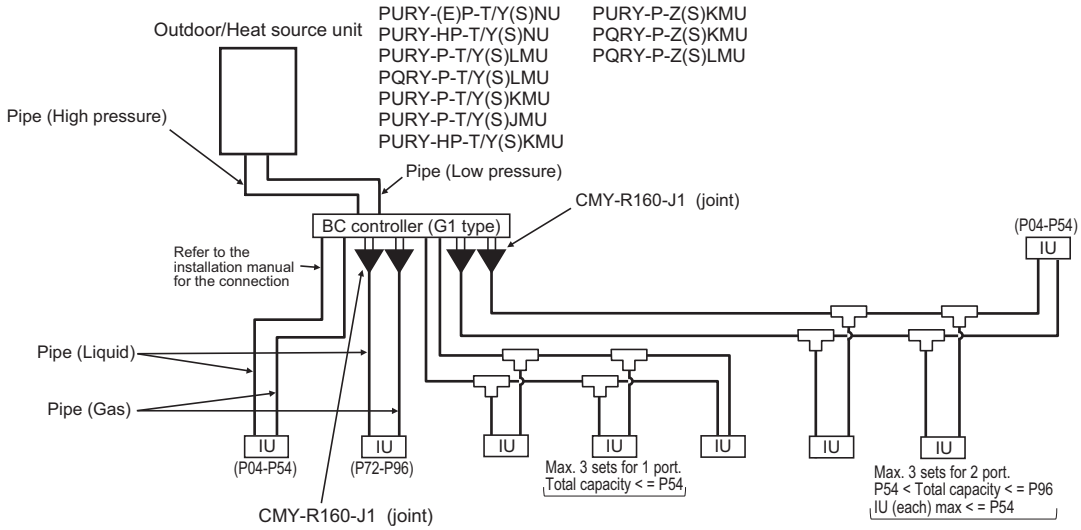
8-2. System examples

Refer to “6-1. JOINT and REDUCER” and “Piping Design of Outdoor/Heat source Units” for joint/reducer selection rules, pipe length restrictions, and pipe diameter.

8-2-1. When G1-type BC controller is used

Note1. No Header usable on PURY system.
Note2. Indoor unit sized P72-P96 should be connected to BC controller via Y shape joint CMY-R160-J1.
Note3. Indoor unit sized P72-P96 does NOT share BC controller ports with other Indoor units;
Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;
Piping length needs to consider the actual length and equivalent length which bents are counted.
Equivalent piping length (m) = Actual piping length + "M" × Number of bent.
Note5. Set DIP-SW 4-6 to ON of BC controller, in case of connected Indoor unit sized P72-P96 with 2 ports.
Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.
Note7. Indoor capactiy is described as its model size. For example, PEFY-P24NMAU-**, its capacity is P24.
Note8. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example, PEFY-P24NMAU-** + PEFY-P06NMAU-**: Total Indoor capacity = P24 + P06 = P30.

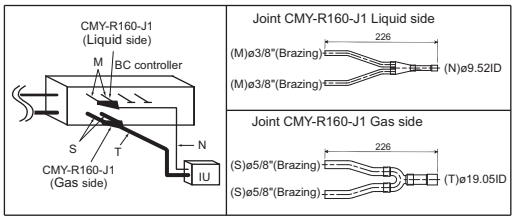


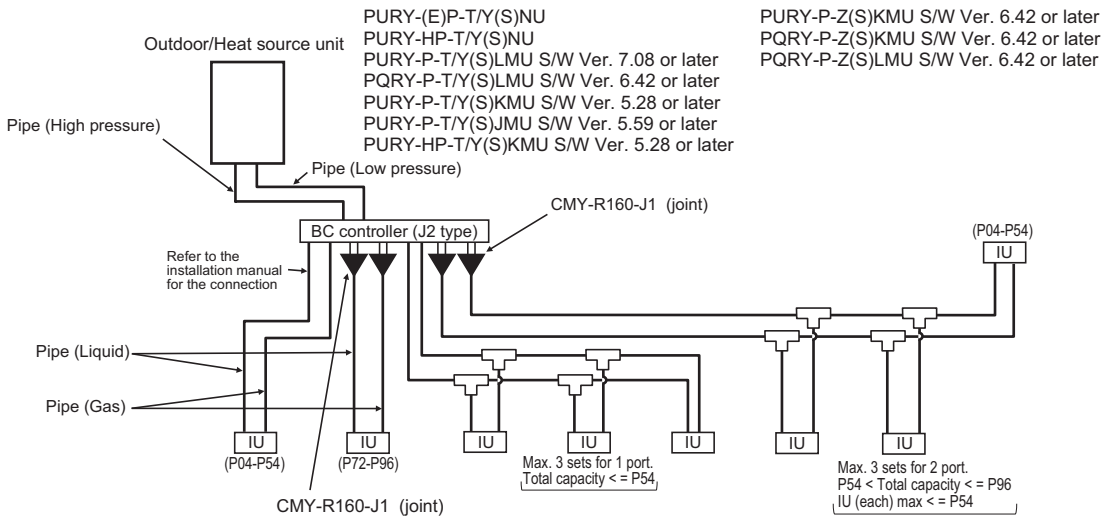


IU: Indoor unit

8-2-2. When J2-type BC controller is used

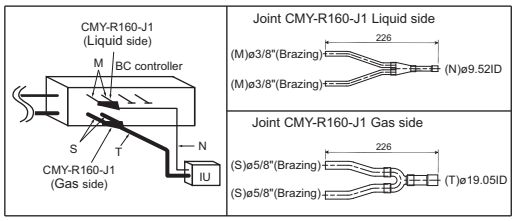
Note1. No Header usable on PURY system.
Note2. Indoor unit sized P72-P96 should be connected to BC controller via Y shape joint CMY-R160-J1.
Note3. Indoor unit sized P72-P96 does NOT share BC controller ports with other Indoor units;
Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;
Piping length needs to consider the actual length and equivalent length which bents are counted.
Equivalent piping length (m) = Actual piping length + "M" × Number of bent.
Note5. Set DIP-SW 4-6 to ON of BC controller, in case of connected Indoor unit sized P72-P96 with 2 ports.
Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.
Note7. Indoor capactiy is described as its model size. For example, PEFY-P24NMAU-**, its capacity is P24.
Note8. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example, PEFY-P24NMAU-** + PEFY-P06NMAU-**: Total Indoor capacity = P24 + P06 = P30.
Note9. To connect the BC controller to the main pipe, use the reducer (CMY-R301S-G).



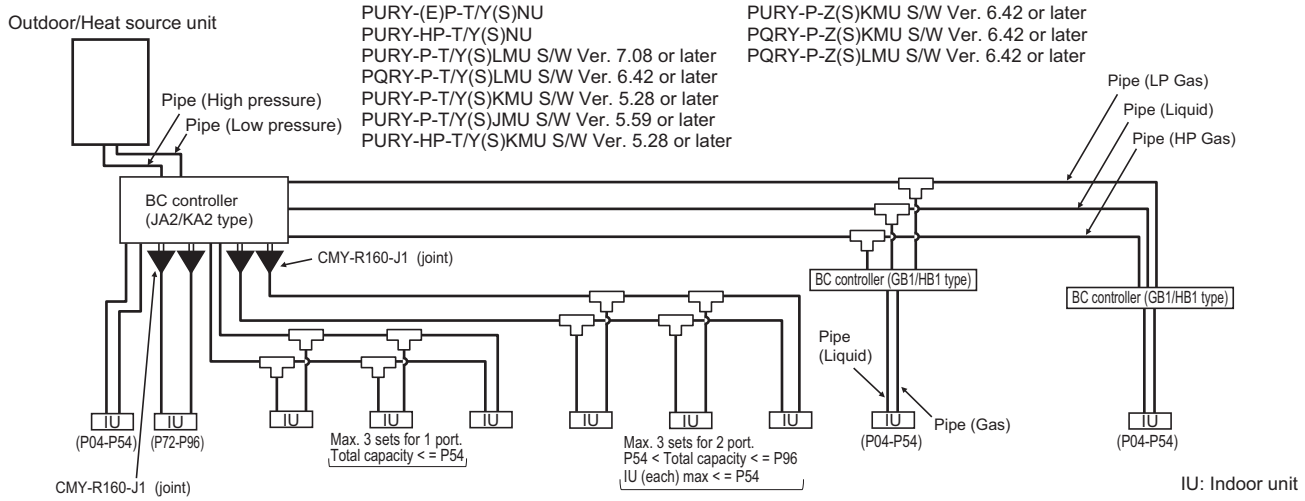


IU: Indoor unit

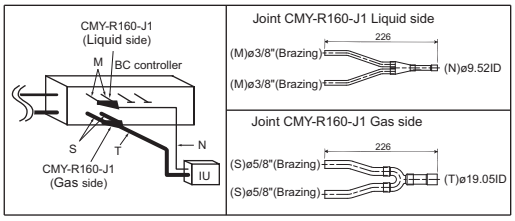
8-2-3. When JA2/KA2- and GB1/HB1-type BC controllers are used together



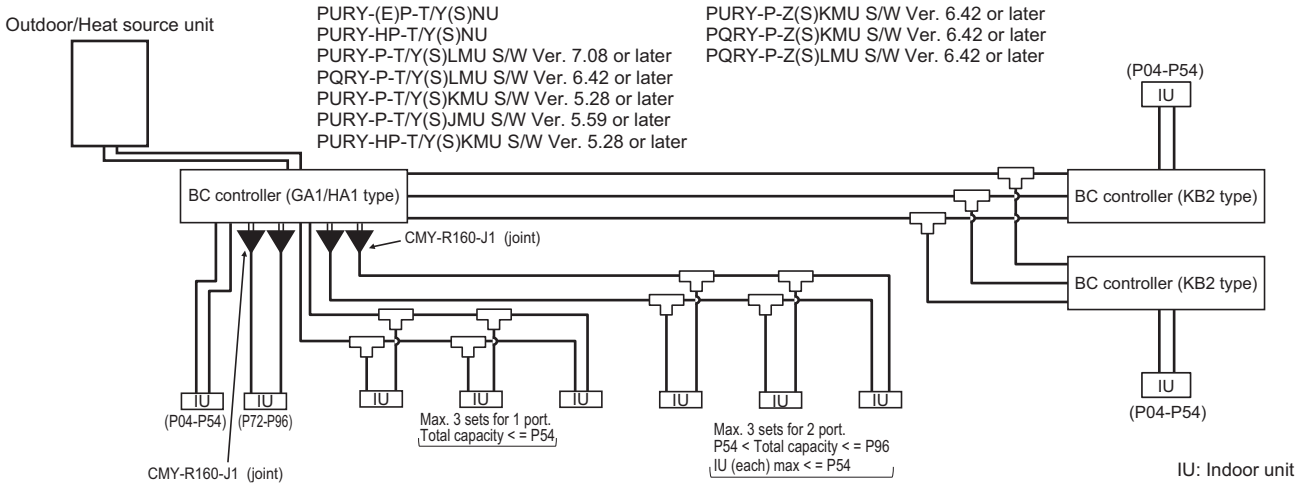
Note1. No Header usable on PURY system.
Note2. Indoor unit sized P72-P96 should be connected to BC controller via Y shape joint CMY-R160-J1.
Note3. Indoor unit sized P72-P96 does NOT share BC controller ports with other Indoor units;
Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;
Piping length needs to consider the actual length and equivalent length which bents are counted.
Equivalent piping length (m) = Actual piping length + "M" × Number of bent.
Note5. Set DIP-SW 4-6 to ON of BC controller, in case of connected Indoor unit sized P72-P96 with 2 ports.
Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.
Note7. For sub BC controller CMB-P•NU-GB1 the connectable indoor unit capacities may sum to equal that of a P126 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 of a P126 unit.
For sub BC controller CMB-P1016NU-HB1 the connectable indoor unit capacities may sum to equal that or a P126 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 of a P168 unit.
Note8. Indoor capactiy is described as its model size. For example, PEFY-P24NMAU-**, its capacity is P24.
Note9. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example,
PEFY-P24NMAU-** + PEFY-P06NMAU-**: Total Indoor capacity = P24 + P06 = P30.
Note10. To connect the BC controller to the main pipe, use the reducer (CMY-R302S-G1 or CMY-R304S-G1).
Note11. To connect the sub BC controller to the main BC controller, use the reducer (CMY-R303S-G1, CMY-R305S-G1, or CMY-R306S-G).



8-2-4. When GA1/HA1- and KB2-type BC controllers are used together

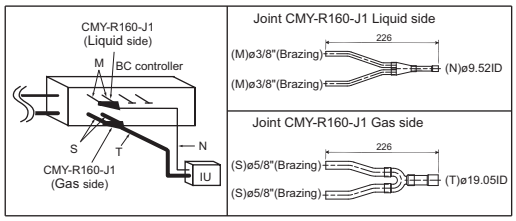


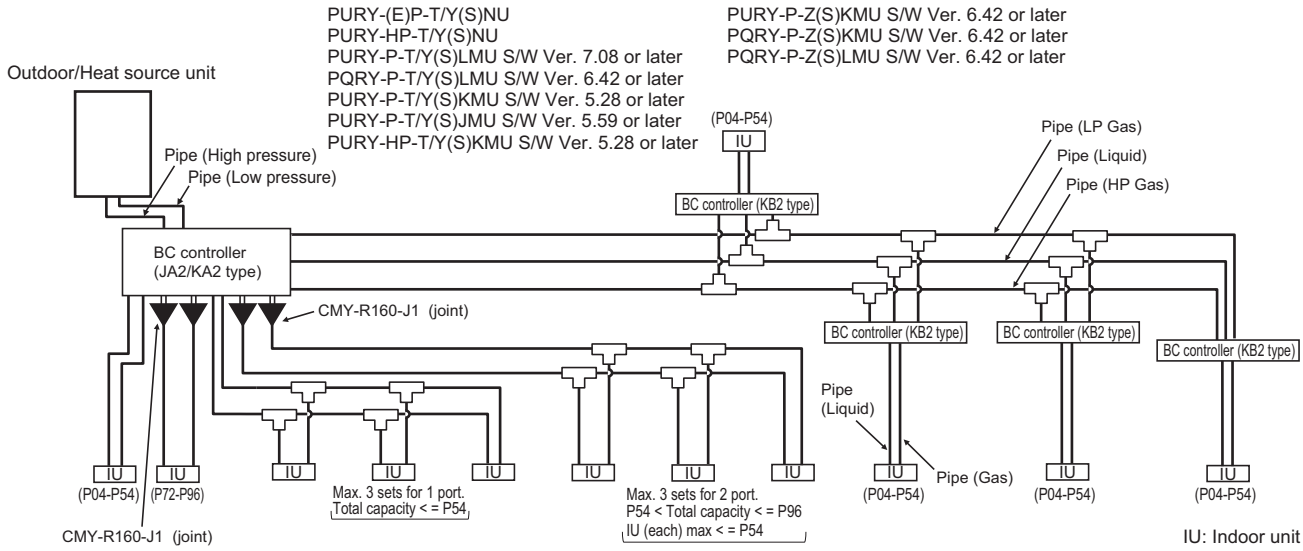
Note1. No Header usable on PURY system.
Note2. Indoor unit sized P72-P96 should be connected to BC controller via Y shape joint CMY-R160-J1.
Note3. Indoor unit sized P72-P96 does NOT share BC controller ports with other Indoor units;
Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;
Piping length needs to consider the actual length and equivalent length which bents are counted.
Equivalent piping length (m) = Actual piping length + "M" × Number of bent.
Note5. Set DIP-SW 4-6 to ON of BC controller, in case of connected Indoor unit sized P72-P96 with 2 ports.
Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.
Note7. The maximum total capacity of indoor units that can be connected to each sub BC controller CMB-P•NU-KB2 is P126.
Note8. Indoor capactiy is described as its model size. For example, PEFY-P24NMAU-**, its capacity is P24.
Note9. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example,
PEFY-P24NMAU-** + PEFY-P06NMAU-**: Total Indoor capacity = P24 + P06 = P30.
Note10. To connect the sub BC controller to the main BC controller, use the reducer (CMY-R306S-G).



8-2-5. When JA2/KA2- and KB2-type BC controllers are used together

Note1. No Header usable on PURY system.
Note2. Indoor unit sized P72-P96 should be connected to BC controller via Y shape joint CMY-R160-J1.
Note3. Indoor unit sized P72-P96 does NOT share BC controller ports with other Indoor units;
Note4. As bents cause pressure loss on transportation of refrigerant, fewer bents design is better;
Piping length needs to consider the actual length and equivalent length which bents are counted.
Equivalent piping length (m) = Actual piping length + "M" × Number of bent.
Note5. Set DIP-SW 4-6 to ON of BC controller, in case of connected Indoor unit sized P72-P96 with 2 ports.
Note6. Do not connect multiple indoor units to the same port when operating each of them in different mode (cooling, heating, stop, and thermo-off). In case of connecting multiple indoor units to the same port, connecting all indoor units to one remote controller and switching SW1-1 ON in the all connected indoor units (switch to thermostat built in the remote controller) are recommended.
Note7. The maximum total capacity of indoor units that can be connected to each sub BC controller CMB-P•NU-KB2 is P126.
Note8. Indoor capactiy is described as its model size. For example, PEFY-P24NMAU-**, its capacity is P24.
Note9. Total down-stream Indoor capacity is the summary of the model size of Indoors down-stream. For example, PEFY-P24NMAU-** + PEFY-P06NMAU-**: Total Indoor capacity = P24 + P06 = P30.
Note10. To connect the BC controller to the main pipe, use the reducer (CMY-R302S-G1 or CMY-R304S-G1).
Note11. To connect the sub BC controller to the main BC controller, use the reducer (CMY-R303S-G1, CMY-R305S-G1, or CMY-R306S-G).





⚠Warning

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

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

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