



Air Conditioners

# Technical Data

**VRV<sup>®</sup>III-S**

VRV<sup>®</sup>III-S Heat Pump



EEDEN11-200

RXYSQ-P8Y1B

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# 1 Features



## 2 Specifications

2-1 Technical Specifications				RXYSQ4P8Y1B	RXYSQ5P8Y1B	RXYSQ6P8Y1B		
Capacity range			HP	4	5	6		
Cooling capacity	Nom.			kW	11.2 (1)	14.0 (1)	15.5 (1)	
Heating capacity	Nom.			kW	12.5 (2)	16.0 (2)	18.0 (2)	
Capacity control		Method		Inverter controlled				
		Steps		%	24 to 100			
Power input - 50Hz	Cooling	Nom.			kW	2.89	3.61	4.65
	Heating	Nom.			kW	2.82	3.97	4.70
EER				3.88		3.33		
COP				4.43	4.03	3.83		
Maximum number of connectable indoor units				8 (12)   6 (13)		10 (12)   8 (13)	13 (12)   9 (13)	
Indoor index connection	Min.				50	62.5	70	
	Nom.				-			
	Max.				130	162.5	182	
Casing	Colour			Daikin White				
	Material			Painted galvanized steel plate				
Sound power level	Cooling	Nom.			dBA	66	67	69
Sound pressure level	Cooling	Nom.			dBA	50	51	53
	Heating	Nom.			dBA	52	53	55
Operation range	Cooling	Standard	Min.			°CDB		-5
		Max.			°CDB		46	
	Heating	Min.			°CWB		-20	
		Max.			°CWB		15.5	
Refrigerant	Type			R-410A				
	Control			Expansion valve				
	Circuits	Quantity		1				
Refrigerant oil	Type			Daphne FVC68D				
Piping connections	Liquid	Type		Flare connection				
		OD	mm	9.52				
	Gas	Type		Flare connection (VRV®)   Braze connection (RA)	Flare connection (VRV®)   Braze connection (RA)	Braze connection		
		OD	mm	15.9 (12)   19.1 (13)	15.9 (12)   19.1 (13)	19.1		
	Drain	Quantity		3				
		OD	mm	26x3				
	Heat insulation				Both liquid and gas pipes			
	Total piping length	System	Actual	m	300 (12)   115 (13)	300 (12)   135 (13)	300 (12)   145 (13)	
	Level difference	OU - IU	Outdoor unit in highest position	m	50 (12)   30 (13)	50 (12)   30 (13)	50 (12)   30 (13)	
			Indoor unit in highest position	m	40 (12)   30 (13)	40 (12)   30 (13)	40 (12)   30 (13)	
	IU - IU	Max.	m	15				
Defrost method				Reversed cycle				
Defrost control				Sensor for outdoor heat exchanger temperature				

Standard Accessories : Installation manual; Quantity : 1;

Standard Accessories : Operation manual; Quantity : 1;

Standard Accessories : Connection pipes; Quantity : 3;

## 2 Specifications

2-2 Electrical Specifications				RXYSQ4P8Y1B	RXYSQ5P8Y1B	RXYSQ6P8Y1B
Power supply	Name			Y1		
	Phase			3N~		
	Frequency	Hz		50		
	Voltage	V		380-415		
Voltage range	Min.	%		-10		
	Max.	%		10		
Current	Nominal running current (RLA) - 50Hz	Cooling	A	5.30	6.77	7.79
Current - 50Hz	Maximum running current		A	13.5		
	Starting current (MSC)		A	5.30	6.77	7.79
	Zmax	List		No requirements		
	Minimum circuit amps (MCA)		A	13.5		
	Maximum fuse amps (MFA)		A	16.0		
	Full load amps (FLA)	Fan motor	A	0.3		
		Fan motor 2	A	0.3		
Wiring connections - 50Hz	For power supply	Quantity		5		
		Remark		Earth wire included		
	For connection with indoor	Quantity		2		
		Remark		F1,F2		
Power supply intake				Both indoor and outdoor unit		
Field earth leakage breaker		mA		300		

### Notes

- (1)Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m; level difference: 0m
- (2)Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m; level difference: 0m
- (3)Sound power level is an absolute value that a sound source generates.
- (4)Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to the sound level drawings.
- (5)Sound values are measured in a semi-anechoic room.
- (6)RLA is based on following conditions: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB
- (7)Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
- (8)Maximum allowable voltage range variation between phases is 2%.
- (9)Select wire size based on the value of MCA
- (10)Use a circuit breaker instead of a fuse. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).
- (11)MSC means the maximum current during start up of the compressor
- (12)In case VRV® indoor units are connected
- (13)In case RA indoors are connected

### 3 Options

#### 3 - 1 Options

RXYSW-P8V1B

No	Item	RXYSQ4	RXYSQ5	RXYSQ6
1	Cool / Heat selector		KRC19-26A6	
2	Fixing box		KJB111A	
3	Refnet header		KHRQ22M29H	
4	Refnet joint		KHRQ22M20TA	
5	Central drain plug		KKPJ5F180	
6	Branch provider (2 rooms)		BPMKS967B2B	
7	Branch provider (3 rooms)		BPMKS967B3B	

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**NOTES**

Note: All options are kits.









# 4 Capacity tables

## 4 - 1 Cooling Capacity Tables

RXYSQ5P8Y1B		Total capacity [kW], power Input [kW] (Compressor + Outdoor fan motor)															
		Indoor air temp. [°CWB]															
Combination [%] (Capacity index)	Outdoor air temp. °CDB	14.0		16.0		18.0		19.0		20.0		22.0		24.0			
		TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW		
130% 18.20 kW	10	12.3	1.66	14.6	2.03	17.0	2.42	18.2	2.62	19.1	2.75	19.6	2.63	20.0	2.51		
	12	12.3	1.69	14.6	2.07	17.0	2.47	18.2	2.66	18.9	2.73	19.3	2.61	19.8	2.57		
	14	12.3	1.72	14.6	2.11	17.0	2.51	18.2	2.71	18.6	2.71	19.1	2.69	19.5	2.71		
	16	12.3	1.76	14.6	2.15	17.0	2.56	18.2	2.80	18.4	2.81	18.8	2.83	19.3	2.86		
	18	12.3	1.79	14.6	2.20	17.0	2.73	17.9	2.94	18.1	2.95	18.6	2.98	19.0	3.00		
	20	12.3	1.83	14.6	2.34	17.0	2.93	17.7	3.08	17.9	3.10	18.3	3.12	18.8	3.15		
	21	12.3	1.88	14.6	2.42	17.0	3.04	17.5	3.15	17.8	3.17	18.2	3.20	18.7	3.22		
	23	12.3	2.01	14.6	2.60	17.0	3.26	17.3	3.30	17.5	3.31	18.0	3.34	18.4	3.37		
	25	12.3	2.15	14.6	2.78	16.8	3.43	17.1	3.44	17.3	3.46	17.7	3.49	18.2	3.52		
	27	12.3	2.30	14.6	2.98	16.6	3.57	16.8	3.59	17.0	3.60	17.5	3.64	17.9	3.67		
	29	12.3	2.45	14.6	3.18	16.3	3.71	16.6	3.73	16.8	3.75	17.2	3.78	17.7	3.82		
	31	12.3	2.62	14.6	3.40	16.1	3.86	16.3	3.88	16.5	3.90	17.0	3.93	17.4	3.97		
	33	12.3	2.79	14.6	3.63	15.8	4.00	16.1	4.02	16.3	4.04	16.7	4.08	17.2	4.12		
	35	12.3	2.97	14.6	3.87	15.6	4.15	15.8	4.17	16.0	4.19	16.5	4.23	16.9	4.27		
	37	12.3	3.16	14.6	4.13	15.3	4.30	15.6	4.32	15.8	4.34	16.2	4.38	16.7	4.43		
	39	12.3	3.37	14.6	4.40	15.1	4.44	15.3	4.47	15.5	4.49	16.0	4.54	16.4	4.58		
120% 16.80 kW	10	11.3	1.52	13.5	1.86	15.7	2.21	16.8	2.38	17.9	2.56	19.3	2.71	19.7	2.60		
	12	11.3	1.55	13.5	1.89	15.7	2.25	16.8	2.43	17.9	2.61	19.0	2.69	19.4	2.58		
	14	11.3	1.58	13.5	1.93	15.7	2.29	16.8	2.48	17.9	2.66	18.8	2.68	19.2	2.69		
	16	11.3	1.61	13.5	1.96	15.7	2.34	16.8	2.52	17.9	2.73	18.5	2.82	18.9	2.84		
	18	11.3	1.64	13.5	2.00	15.7	2.42	16.8	2.67	17.9	2.94	18.3	2.96	18.7	2.98		
	20	11.3	1.67	13.5	2.08	15.7	2.60	16.8	2.88	17.6	3.08	18.0	3.10	18.4	3.13		
	21	11.3	1.69	13.5	2.16	15.7	2.69	16.8	2.98	17.5	3.15	17.9	3.18	18.3	3.20		
	23	11.3	1.80	13.5	2.31	15.7	2.89	16.8	3.20	17.2	3.29	17.7	3.32	18.1	3.35		
	25	11.3	1.92	13.5	2.47	15.7	3.09	16.8	3.42	17.0	3.44	17.4	3.47	17.8	3.50		
	27	11.3	2.05	13.5	2.64	15.7	3.31	16.5	3.57	16.7	3.58	17.2	3.61	17.6	3.64		
	29	11.3	2.19	13.5	2.82	15.7	3.54	16.3	3.71	16.5	3.73	16.9	3.76	17.3	3.79		
	31	11.3	2.33	13.5	3.01	15.7	3.78	16.0	3.86	16.2	3.87	16.7	3.91	17.1	3.94		
	33	11.3	2.49	13.5	3.21	15.6	3.98	15.8	4.00	16.0	4.02	16.4	4.06	16.8	4.09		
	35	11.3	2.65	13.5	3.43	15.3	4.13	15.5	4.15	15.8	4.17	16.2	4.20	16.6	4.24		
	37	11.3	2.82	13.5	3.65	15.1	4.27	15.3	4.29	15.5	4.31	15.9	4.35	16.3	4.39		
	39	11.3	3.00	13.5	3.89	14.8	4.42	15.1	4.44	15.3	4.46	15.7	4.50	16.1	4.55		
110% 15.40 kW	10	10.4	1.38	12.4	1.68	14.4	1.99	15.4	2.16	16.4	2.32	18.4	2.65	19.3	2.69		
	12	10.4	1.40	12.4	1.71	14.4	2.03	15.4	2.20	16.4	2.36	18.4	2.70	19.1	2.68		
	14	10.4	1.43	12.4	1.74	14.4	2.07	15.4	2.24	16.4	2.41	18.4	2.75	18.8	2.68		
	16	10.4	1.46	12.4	1.78	14.4	2.11	15.4	2.28	16.4	2.46	18.2	2.80	18.6	2.82		
	18	10.4	1.48	12.4	1.81	14.4	2.15	15.4	2.35	16.4	2.58	18.0	2.94	18.3	2.96		
	20	10.4	1.51	12.4	1.85	14.4	2.28	15.4	2.52	16.4	2.77	17.7	3.09	18.1	3.11		
	21	10.4	1.53	12.4	1.90	14.4	2.36	15.4	2.61	16.4	2.87	17.6	3.16	18.0	3.18		
	23	10.4	1.60	12.4	2.04	14.4	2.53	15.4	2.80	16.4	3.08	17.3	3.30	17.7	3.33		
	25	10.4	1.71	12.4	2.18	14.4	2.71	15.4	3.00	16.4	3.30	17.1	3.45	17.5	3.47		
	27	10.4	1.82	12.4	2.33	14.4	2.90	15.4	3.21	16.4	3.54	16.8	3.59	17.2	3.62		
	29	10.4	1.94	12.4	2.49	14.4	3.10	15.4	3.43	16.2	3.71	16.6	3.74	17.0	3.76		
	31	10.4	2.07	12.4	2.65	14.4	3.31	15.4	3.67	16.0	3.85	16.3	3.88	16.7	3.91		
	33	10.4	2.20	12.4	2.83	14.4	3.53	15.4	3.92	15.7	3.99	16.1	4.03	16.5	4.06		
	35	10.4	2.34	12.4	3.01	14.4	3.77	15.3	4.12	15.5	4.14	15.8	4.17	16.2	4.21		
	37	10.4	2.49	12.4	3.21	14.4	4.02	15.0	4.27	15.2	4.29	15.6	4.32	16.0	4.36		
	39	10.4	2.65	12.4	3.41	14.4	4.28	14.8	4.41	15.0	4.43	15.4	4.47	15.7	4.51		
100% 14.00 kW	10	9.45	1.24	11.3	1.51	13.1	1.79	14.0	1.93	14.9	2.08	16.7	2.37	18.6	2.67		
	12	9.45	1.27	11.3	1.54	13.1	1.82	14.0	1.97	14.9	2.12	16.7	2.42	18.6	2.72		
	14	9.45	1.29	11.3	1.56	13.1	1.86	14.0	2.00	14.9	2.16	16.7	2.46	18.5	2.76		
	16	9.45	1.31	11.3	1.59	13.1	1.89	14.0	2.04	14.9	2.20	16.7	2.51	18.2	2.80		
	18	9.45	1.34	11.3	1.62	13.1	1.93	14.0	2.08	14.9	2.24	16.7	2.66	18.0	2.94		
	20	9.45	1.36	11.3	1.66	13.1	1.99	14.0	2.19	14.9	2.40	16.7	2.86	17.7	3.09		
	21	9.45	1.37	11.3	1.67	13.1	2.06	14.0	2.27	14.9	2.49	16.7	2.96	17.6	3.16		
	23	9.45	1.41	11.3	1.78	13.1	2.20	14.0	2.43	14.9	2.67	16.7	3.18	17.4	3.30		
	25	9.45	1.51	11.3	1.91	13.1	2.36	14.0	2.60	14.9	2.86	16.7	3.41	17.1	3.45		
	27	9.45	1.60	11.3	2.04	13.1	2.52	14.0	2.78	14.9	3.06	16.5	3.57	16.9	3.59		
	29	9.45	1.71	11.3	2.17	13.1	2.69	14.0	2.97	14.9	3.27	16.3	3.71	16.6	3.74		
	31	9.45	1.82	11.3	2.31	13.1	2.87	14.0	3.17	14.9	3.49	16.0	3.85	16.4	3.88		
	33	9.45	1.93	11.3	2.46	13.1	3.06	14.0	3.39	14.9	3.73	15.8	4.00	16.1	4.03		
	35	9.45	2.05	11.3	2.62	13.1	3.26	14.0	3.61	14.9	3.97	15.5	4.15	15.9	4.18		
	37	9.45	2.18	11.3	2.79	13.1	3.48	14.0	3.85	14.9	4.24	15.3	4.29	15.6	4.33		
	39	9.45	2.32	11.3	2.97	13.1	3.70	14.0	4.10	14.7	4.40	15.0	4.44	15.4	4.47		

**NOTES**

1. The above table shows the average value of conditions which may occur

4TW33652-1















# 4 Capacity tables

## 4 - 2 Heating Capacity Tables

**RYXSQ6P8Y1B** Total capacity [kW], power Input [kW] (Compressor + Outdoor fan motor)

Combination [%] (Capacity index)	Outdoor air temp.		Indoor air temp. [°CDB]											
			16.0		18.0		20.0		21.0		22.0		24.0	
			TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW	TC kW	PI kW
130% 23.40 kW	-19.8	-20.0	11.3	2.89	11.3	3.11	11.2	3.34	11.2	3.45	11.2	3.56	11.1	3.79
	-18.8	-19.0	11.6	3.01	11.6	3.23	11.6	3.45	11.5	3.56	11.5	3.67	11.5	3.89
	-16.7	-17.0	12.3	3.23	12.3	3.44	12.2	3.65	12.2	3.75	12.2	3.85	12.1	4.06
	-14.7	-15.0	13.0	3.43	12.9	3.63	12.9	3.82	12.9	3.92	12.8	4.02	12.8	4.22
	-12.6	-13.0	13.6	3.61	13.6	3.80	13.6	3.99	13.5	4.08	13.5	4.17	13.5	4.36
	-10.5	-11.0	14.3	3.78	14.3	3.95	14.2	4.13	14.2	4.22	14.2	4.31	14.1	4.48
	-9.5	-10.0	14.6	3.85	14.6	4.03	14.6	4.20	14.5	4.28	14.5	4.37	14.5	4.54
	-8.5	-9.1	14.9	3.92	14.9	4.09	14.9	4.26	14.8	4.34	14.8	4.43	14.8	4.59
	-7.0	-7.6	15.4	4.02	15.4	4.19	15.4	4.35	15.3	4.43	15.3	4.51	15.3	4.67
	-5.0	-5.6	16.1	4.15	16.1	4.31	16.0	4.46	16.0	4.54	16.0	4.62	15.9	4.77
	-3.0	-3.7	16.7	4.26	16.7	4.41	16.7	4.56	16.6	4.64	16.6	4.71	16.6	4.86
	0.0	-0.7	17.7	4.42	17.7	4.56	17.7	4.70	17.6	4.78	17.6	4.85	17.6	4.99
	3.0	2.2	18.7	4.56	18.7	4.69	18.6	4.83	18.6	4.90	18.6	4.96	18.5	5.10
	5.0	4.1	19.3	4.64	19.3	4.77	19.3	4.90	19.2	4.97	19.2	5.03	19.2	5.16
	7.0	6.0	20.0	4.72	19.9	4.85	19.9	4.97	19.9	5.04	19.9	5.10	19.8	5.22
	9.0	7.9	20.6	4.80	20.6	4.92	20.5	5.04	20.5	5.10	20.5	5.16	20.4	5.26
11.0	9.8	21.2	4.87	21.2	4.98	21.2	5.10	21.1	5.16	21.1	5.22	20.4	5.07	
13.0	11.8	21.9	4.94	21.9	5.05	21.8	5.16	21.8	5.22	21.8	5.28	20.4	4.88	
15.0	13.7	22.6	5.00	22.5	5.11	22.5	5.22	22.4	5.27	21.9	5.13	20.4	4.71	
120% 21.60 kW	-19.8	-20.0	11.2	3.19	11.2	3.40	11.2	3.61	11.1	3.71	11.1	3.82	11.1	4.03
	-18.8	-19.0	11.6	3.30	11.5	3.51	11.5	3.71	11.5	3.81	11.5	3.91	11.4	4.11
	-16.7	-17.0	12.2	3.51	12.2	3.70	12.2	3.89	12.2	3.99	12.1	4.08	12.1	4.28
	-14.7	-15.0	12.9	3.70	12.9	3.88	12.8	4.06	12.8	4.15	12.8	4.24	12.8	4.42
	-12.6	-13.0	13.6	3.86	13.5	4.04	13.5	4.21	13.5	4.29	13.5	4.38	13.4	4.55
	-10.5	-11.0	14.2	4.02	14.2	4.18	14.2	4.34	14.2	4.42	14.1	4.50	14.1	4.67
	-9.5	-10.0	14.6	4.09	14.5	4.25	14.5	4.40	14.5	4.48	14.5	4.56	14.4	4.72
	-8.5	-9.1	14.9	4.15	14.8	4.30	14.8	4.46	14.8	4.54	14.8	4.61	14.7	4.77
	-7.0	-7.6	15.4	4.24	15.3	4.39	15.3	4.54	15.3	4.62	15.3	4.69	15.2	4.84
	-5.0	-5.6	16.1	4.36	16.0	4.50	16.0	4.65	16.0	4.72	15.9	4.79	15.9	4.94
	-3.0	-3.7	16.7	4.46	16.6	4.60	16.6	4.74	16.6	4.81	16.6	4.88	16.5	5.02
	0.0	-0.7	17.7	4.61	17.7	4.74	17.6	4.87	17.6	4.94	17.6	5.00	17.5	5.14
	3.0	2.2	18.7	4.74	18.6	4.87	18.6	4.99	18.6	5.05	18.5	5.11	18.5	5.24
	5.0	4.1	19.3	4.82	19.3	4.94	19.2	5.06	19.2	5.12	19.2	5.18	18.8	5.16
	7.0	6.0	19.9	4.89	19.9	5.01	19.8	5.12	19.8	5.18	19.8	5.24	18.8	4.96
	9.0	7.9	20.6	4.96	20.5	5.07	20.5	5.18	20.5	5.24	20.2	5.20	18.8	4.77
11.0	9.8	21.2	5.03	21.2	5.13	21.1	5.24	20.9	5.22	20.2	5.01	18.8	4.60	
13.0	11.8	21.9	5.09	21.8	5.19	21.6	5.23	20.9	5.03	20.2	4.83	18.8	4.43	
15.0	13.7	22.5	5.15	22.5	5.25	21.6	5.05	20.9	4.85	20.2	4.66	18.8	4.29	
110% 19.80 kW	-19.8	-20.0	11.2	3.50	11.2	3.69	11.1	3.88	11.1	3.97	11.1	4.07	11.0	4.26
	-18.8	-19.0	11.5	3.60	11.5	3.79	11.5	3.97	11.4	4.06	11.4	4.16	11.4	4.34
	-16.7	-17.0	12.2	3.79	12.2	3.97	12.1	4.14	12.1	4.23	12.1	4.32	12.1	4.49
	-14.7	-15.0	12.9	3.96	12.8	4.13	12.8	4.29	12.8	4.38	12.8	4.46	12.7	4.62
	-12.6	-13.0	13.5	4.12	13.5	4.27	13.5	4.43	13.4	4.51	13.4	4.59	13.4	4.74
	-10.5	-11.0	14.2	4.25	14.2	4.40	14.1	4.55	14.1	4.63	14.1	4.70	14.1	4.85
	-9.5	-10.0	14.5	4.32	14.5	4.47	14.5	4.61	14.4	4.68	14.4	4.76	14.4	4.90
	-8.5	-9.1	14.8	4.37	14.8	4.52	14.8	4.66	14.7	4.73	14.7	4.80	14.7	4.95
	-7.0	-7.6	15.3	4.46	15.3	4.60	15.3	4.74	15.2	4.81	15.2	4.88	15.2	5.02
	-5.0	-5.6	16.0	4.57	16.0	4.70	15.9	4.84	15.9	4.90	15.9	4.97	15.9	5.10
	-3.0	-3.7	16.6	4.67	16.6	4.79	16.6	4.92	16.5	4.98	16.5	5.05	16.5	5.18
	0.0	-0.7	17.6	4.80	17.6	4.92	17.6	5.04	17.5	5.10	17.5	5.16	17.3	5.17
	3.0	2.2	18.6	4.92	18.6	5.04	18.5	5.15	18.5	5.21	18.5	5.26	17.3	4.84
	5.0	4.1	19.2	4.99	19.2	5.10	19.2	5.21	19.1	5.27	18.5	5.06	17.3	4.65
	7.0	6.0	19.9	5.06	19.8	5.17	19.8	5.27	19.2	5.07	18.5	4.87	17.3	4.47
	9.0	7.9	20.5	5.12	20.5	5.23	19.8	5.07	19.2	4.88	18.5	4.68	17.3	4.31
11.0	9.8	21.1	5.18	21.1	5.27	19.8	4.89	19.2	4.70	18.5	4.52	17.3	4.15	
13.0	11.8	21.8	5.24	21.1	5.07	19.8	4.71	19.2	4.53	18.5	4.35	17.3	4.01	
15.0	13.7	22.3	5.26	21.1	4.90	19.8	4.55	19.2	4.38	18.5	4.21	17.3	3.87	
100% 18.00 kW	-19.8	-20.0	11.1	3.80	11.1	3.98	11.1	4.15	11.1	4.24	11.0	4.32	11.0	4.50
	-18.8	-19.0	11.5	3.90	11.4	4.07	11.4	4.23	11.4	4.32	11.4	4.40	11.3	4.57
	-16.7	-17.0	12.1	4.07	12.1	4.23	12.1	4.39	12.1	4.47	12.0	4.55	12.0	4.71
	-14.7	-15.0	12.8	4.23	12.8	4.38	12.7	4.53	12.7	4.60	12.7	4.68	12.7	4.83
	-12.6	-13.0	13.5	4.37	13.4	4.51	13.4	4.65	13.4	4.72	13.4	4.79	13.3	4.94
	-10.5	-11.0	14.1	4.49	14.1	4.63	14.1	4.76	14.1	4.83	14.0	4.90	14.0	5.04
	-9.5	-10.0	14.5	4.55	14.4	4.68	14.4	4.82	14.4	4.88	14.4	4.95	14.3	5.08
	-8.5	-9.1	14.8	4.60	14.7	4.73	14.7	4.86	14.7	4.93	14.7	4.99	14.6	5.12
	-7.0	-7.6	15.3	4.68	15.2	4.81	15.2	4.93	15.2	5.00	15.2	5.06	15.1	5.19
	-5.0	-5.6	15.9	4.78	15.9	4.90	15.9	5.02	15.9	5.08	15.8	5.14	15.7	5.20
	-3.0	-3.7	16.6	4.87	16.5	4.99	16.5	5.10	16.5	5.16	16.5	5.22	15.7	4.95
	0.0	-0.7	17.6	5.00	17.5	5.10	17.5	5.21	17.4	5.23	16.8	5.02	15.7	4.61
	3.0	2.2	18.5	5.10	18.5	5.21	18.0	5.09	17.4	4.90	16.8	4.70	15.7	4.32
	5.0	4.1	19.2	5.17	19.1	5.27	18.0	4.89	17.4	4.70	16.8	4.52	15.7	4.15
	7.0	6.0	19.8	5.23	19.2	5.07	18.0	4.70	17.4	4.52	16.8	4.34	15.7	4.00
	9.0	7.9	20.3	5.23	19.2	4.87	18.0	4.53	17.4	4.35	16.8	4.19	15.7	3.86
11.0	9.8	20.3	5.04	19.2	4.70	18.0	4.36	17.4	4.20	16.8	4.04	15.7	3.72	
13.0	11.8	20.3	4.85	19.2	4.53	18.0	4.21	17.4	4.05	16.8	3.90	15.7	3.59	
15.0	13.7	20.3	4.69	19.2	4.37	18.0	4.07	17.4	3.92	16.8	3.77	15.7	3.48	

**NOTES**  
1. The above table shows the average value of conditions which may occur



## 4 Capacity tables

### 4 - 3 Integrated Heating Capacity Correction Factor

RXYSQ-P8Y1B

#### INTEGRATED HEATING CAPACITY COEFFICIENT

The heating capacity tables do not take account of the reduction in capacity, when frost has accumulated or while the defrosting operation is in progress.

The capacity values, which take these factors into account, in other words, the integrated heating capacity values, can be calculated as follows:

Formula:

Integrated heating capacity = A

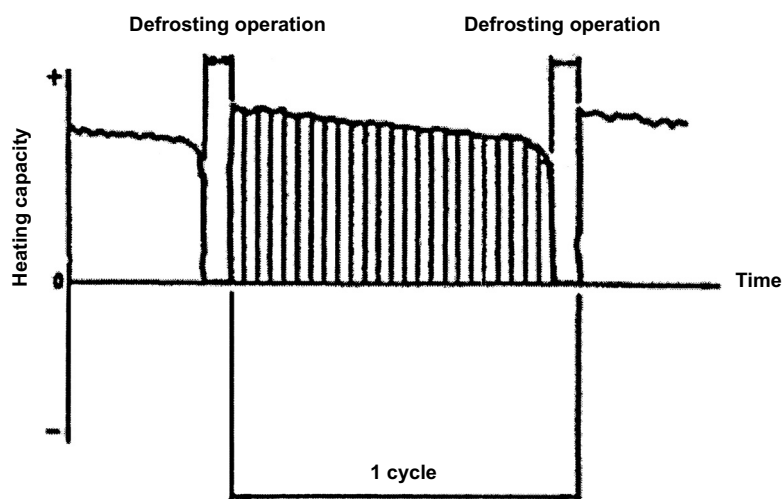
Value given in table of capacity characteristics = B

Integrating correction factor for frost accumulation (kW) = C

$A = B \times C$

Correction factor for finding integrated heating capacity.

Inlet port temperature of heat exchanger (°C/RH 85%)	-7	-5	-3	0	3	5	7
Integrating correction factor for frost accumulation	0,88	0,86	0,8	0,75	0,76	0,82	1.0



3TW30402

#### NOTES

1. The figure shows that the integrated heating capacity expresses the integrated capacity for a single cycle (from defrost operation to defrost operation) in terms of time.
2. When there is an accumulation of snow against the outside surface of the outdoor unit heat exchanger, there will always be a temporary reduction in capacity, although this will of course vary in degree in accordance with a number of other factors, such as the outdoor temperature (°CDB), relative humidity (RH) and the amount of frosting which occurs.

# 4 Capacity tables

## 4 - 4 Capacity Correction Factor

### RXYSQ-P8Y1B

#### Capacity Correction Factor by the Length of Refrigerant Piping

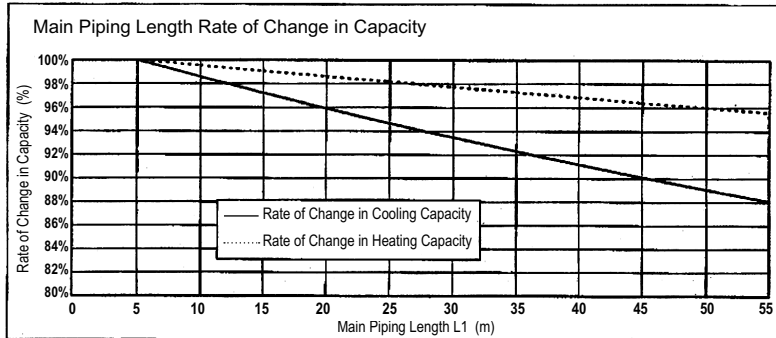
• Rate of Change in Capacity by the Main Piping Length

Rate of Change in Cooling Capacity

Main Piping Length	5	10	15	20	25	30	35	40	45	50	55
Rate of Change in Cooling Capacity	100.0%	98.6%	97.2%	95.9%	94.7%	93.5%	92.3%	91.2%	90.1%	89.1%	88.1%

Rate of Change in Heating Capacity

Main Piping Length	5	10	15	20	25	30	35	40	45	50	55
Rate of Change in Heating Capacity	100.0%	99.5%	99.1%	98.6%	98.2%	97.7%	97.3%	96.9%	96.4%	96.0%	95.6%



Both cases outdoor unit in inferior or superior for indoor unit, the rate of change in capacity is same

• Rate of Change in Capacity by Branch Piping Length

(1) Refrigerant Piping Connection Diameter  
liquid ø 6.4  
gas ø 15.9

Piping length	Rate of Change in Capacity	
	Cooling	Heating
3	100.0%	100.0%
5	99.6%	99.9%
10	98.7%	99.6%
15	97.9%	99.3%

(2) Refrigerant Piping Connection Diameter  
liquid ø 6.4  
gas ø 12.7

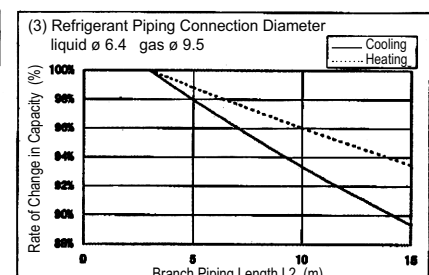
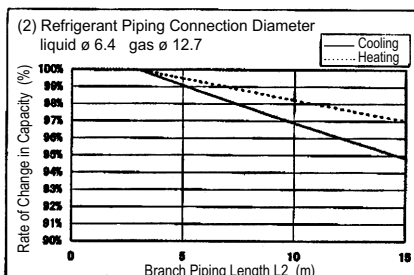
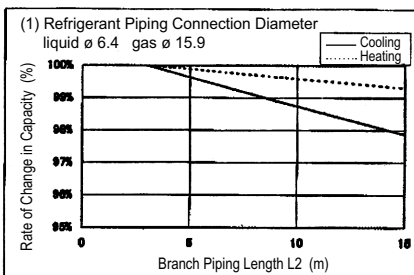
Piping length	Rate of Change in Capacity	
	Cooling	Heating
3	100.0%	100.0%
5	99.1%	99.5%
10	96.9%	98.2%
15	94.8%	97.0%

(3) Refrigerant Piping Connection Diameter  
liquid ø 6.4  
gas ø 9.5

Piping length	Rate of Change in Capacity	
	Cooling	Heating
3	100.0%	100.0%
5	98.0%	98.8%
10	93.4%	96.0%
15	89.3%	93.5%

Piping size for field connection (mm)

Class (KW)	RA				SA	
	Liquid		gas		Liquid	gas
	25	35	50	60	71	ø 9.5
ø 8.4	ø 9.5		ø 8.4		ø 15.9	
	ø 12.7		ø 9.5		ø 9.5	
	ø 15.9		ø 9.5		ø 9.5	
	ø 9.5		ø 9.5		ø 9.5	



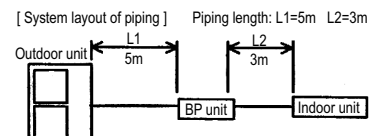
[ Method of calculating cooling/heating capacity ]

Total capacity from capacity tables x (Rate of change in capacity by main piping length x Rate of change in capacity by branch piping length)

3TW33622-5

#### NOTES

- These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.
- With the outdoor unit, evaporating pressure constant control when cooling and condensing pressure constant control when heating is carried out.
- For RXYSQ: use these correction factors in case of installation with bp unit.

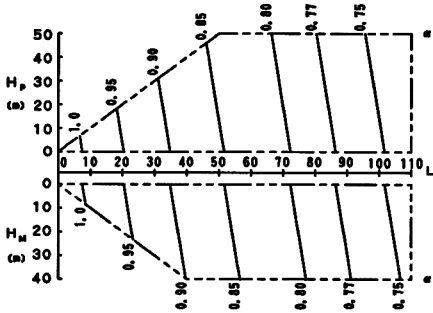


# 4 Capacity tables

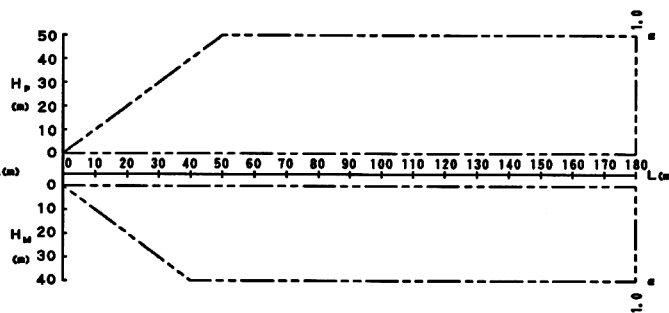
## 4 - 4 Capacity Correction Factor

RXYSQ4,5P8Y1B

1. Rate of change in cooling capacity



2. Rate of change in heating capacity



[ Explanation of symbols ]

- Hp: Level difference (m) between indoor and outdoor units where indoor unit in inferior position
- Hm: Level difference (m) between indoor and outdoor units where indoor unit in superior position
- L: Equivalent pipe length (m)
- α: Capacity correction factor

[ Diameter of pipes ]

Model	Gas	Liquid
RXYSQ4, 5P8V1	ø 15.9	ø 9.5
RXYSQ4, 5P8Y1		

3TW33622-3

### NOTES

- These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions. Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.
- With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.
- Method of calculating cooling/heating capacity (max. capacity for combination with standard indoor unit)

$$\text{cooling / heating capacity} = \text{cooling / heating capacity obtained from performance characteristics table} \times \text{each capacity rate of change}$$

In the case length of piping differs depending on the indoor unit, maximum capacity of each unit during simultaneous operation is:

$$\text{cooling / heating capacity} = \text{cooling / heating capacity of each unit} \times \text{capacity rate of change for each piping length}$$

<As for RXYSQ4, 5P8V1 - RXYSQ4, 5P8Y1>

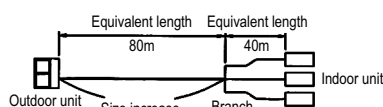
- When overall equivalent pipe length is 90m or more, the diameter of the main gas pipes (outdoor unit-branch sections) must be increased.  
[ Diameter of above case ]

Model	Gas	Liquid
RXYSQ4, 5P8V1	ø 19.1	Not increased
RXYSQ4, 5P8Y1		

- When the main sections of the interunit gas pip diameters are increased the overall equivalent length should be calculated as follows.

$$\text{Overall equivalent length} = \text{Equivalent length to main pipe} \times 0,5 + \text{Equivalent length after branching}$$

Example: RXYSQ4, 5P8V1  
RXYSQ4, 5P8Y1

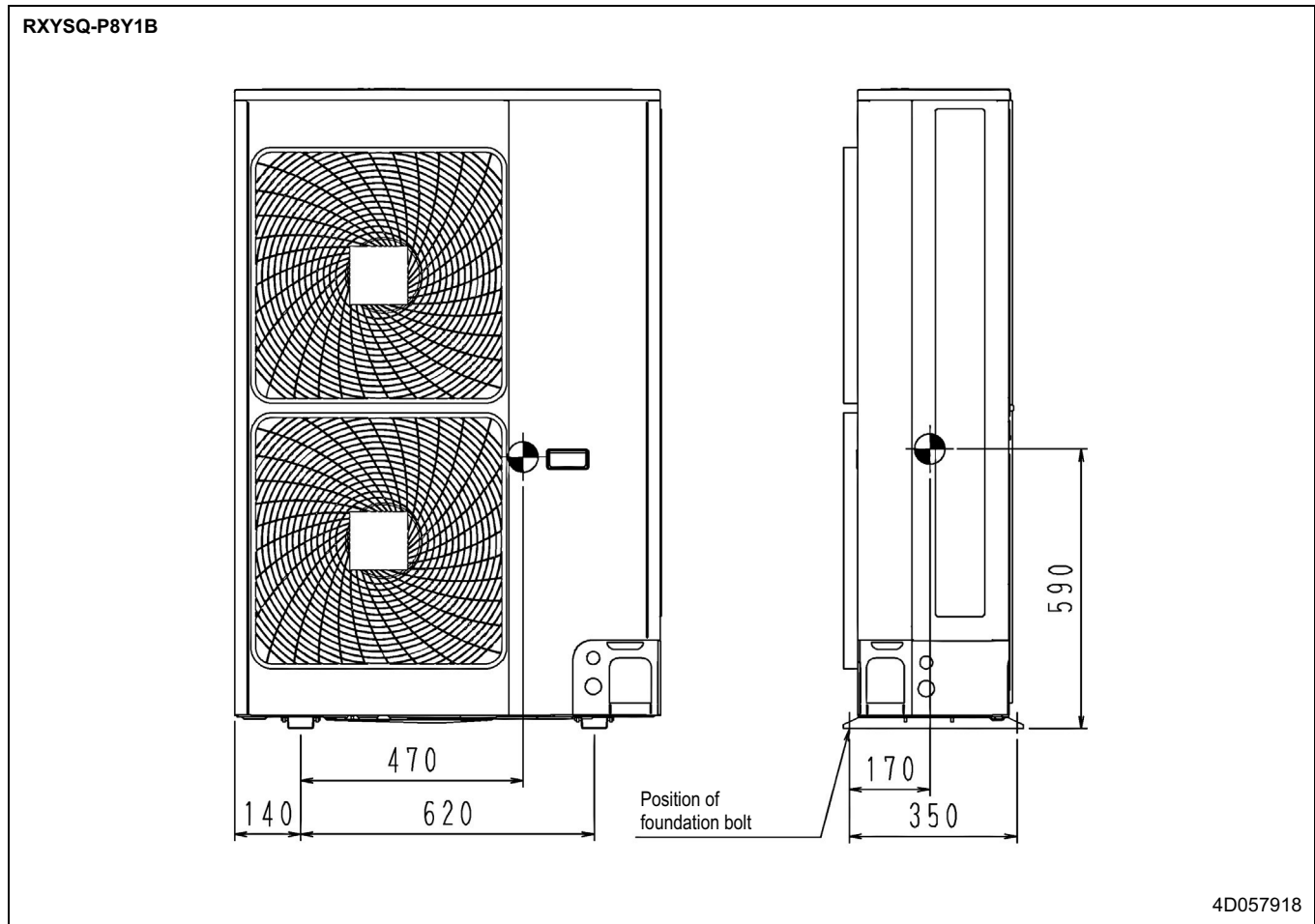


In the above case (Cooling)  
Overall equivalent length = 80m x 0.5 + 40m = 80m  
The correction factor in capacity when Hp = 0m is thus approximately 0.78

- For RXYSQ: use these correction factors in case of vrv indoor unit.

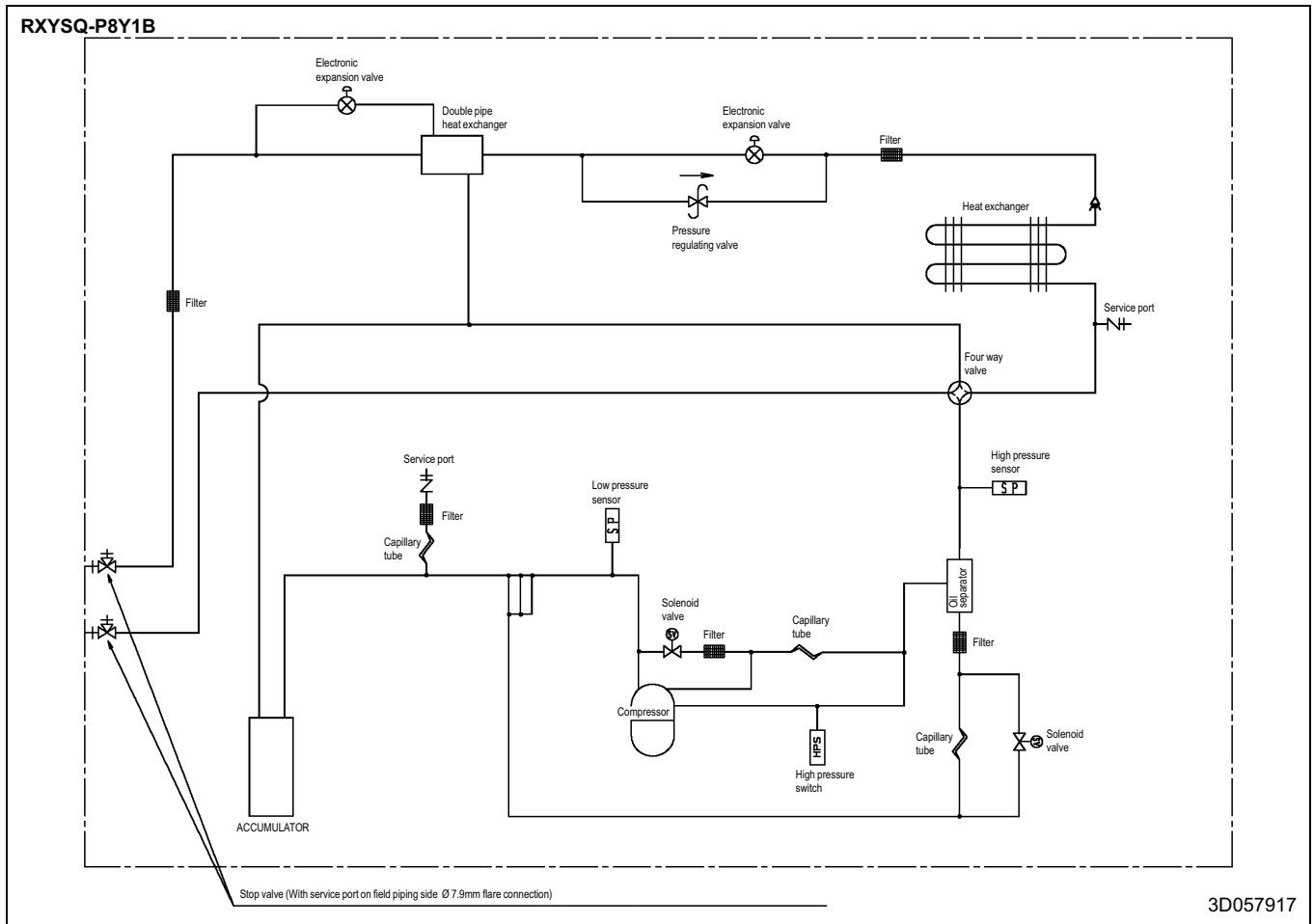
## 5 Centre of gravity

### 5 - 1 Centre of Gravity



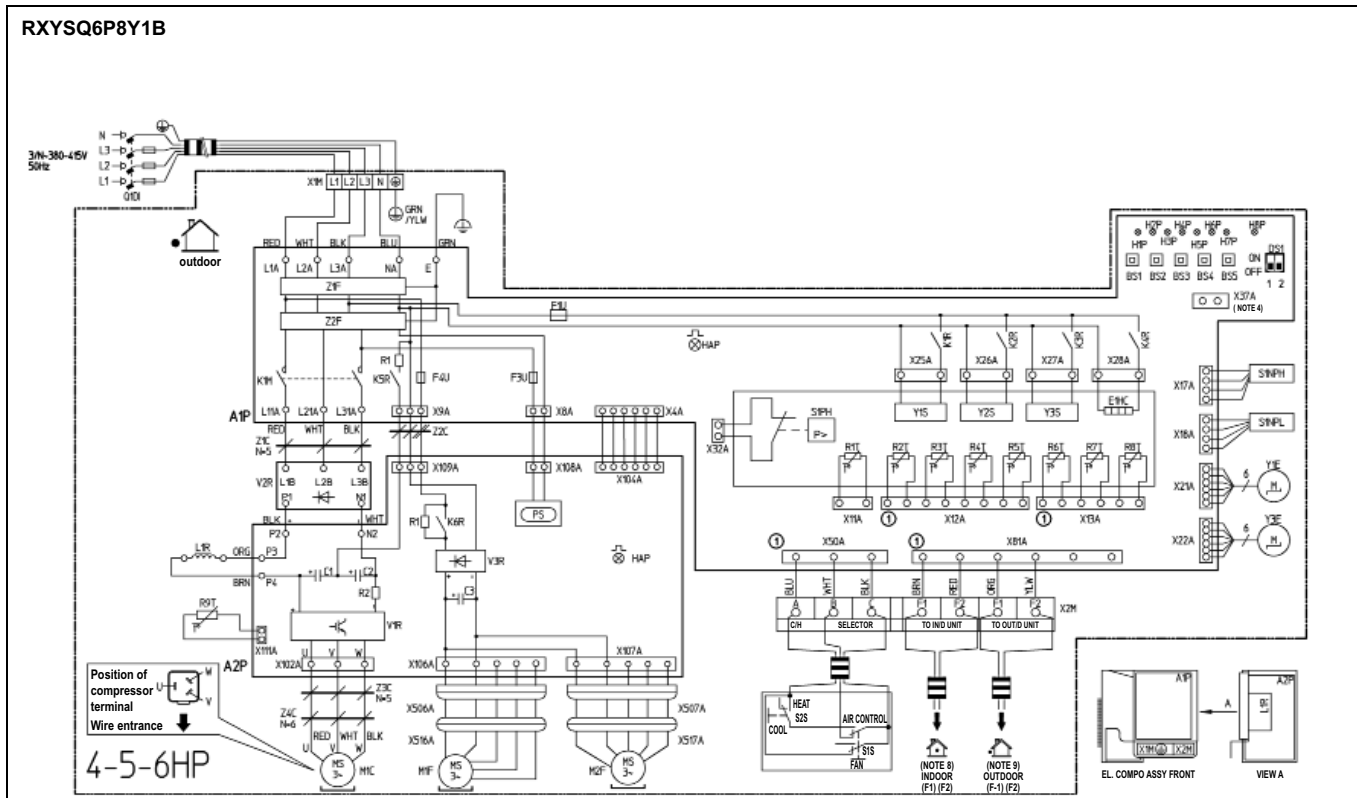
## 6 Piping diagrams

### 6 - 1 Piping Diagrams



# 7 Wiring Diagrams

## 7 - 1 Wiring Diagrams



Cool/Heat selector		HAP (A2P)	Light emitting diode (service monitor green)	R5T	Thermistor (suction 2)
S1S	Selector switch (fan / cool - heat)	K1M(A1P)	Magnetic contactor	R6T	Thermistor (heat exchanger)
S2S	Selector switch (cool - heat)	K1R	Magnetic relay (Y1S)	R7T	Thermistor (liquid 1)
Connector of option adaptor		K2R	Magnetic relay (Y2S)	R8T	Thermistor (liquid 2)
X37A (note 4)	Connector (option adaptor power supply)	K3R	Magnetic relay (Y3S)	R9T	Thermistor (power module)
		K4R	Magnetic relay (E1HC)	S1NPH	Pressure sensor (high)
L1-RED	L2-WHT	L3-BLK	N-BLU	S1PNL	Pressure sensor (low)
A1P	Printed circuit board (main)	L1R	Reactor	S1PH	Pressure switch (high)
A2P	Printed circuit board (inv.)	M1C	Motor (compressor)	V1R	Power module
BS1~BS5	Pushbuttonswitch(mode, set, return, test, reset)	M1F	Motor (fan) (upper)	V2R, V3R	Diode module
C1~C3	Capacitor	M2F	Motor (fan) (lower)	X1M	Terminal strip (power supply)
DS1-1	Dip switch	PS	Switching power supply	X2M	Terminal strip (control) (C/H selector)
DS1-2		Q1DI	Field earth leakage breaker (300mA)	Y1E	Electronic expansion valve (main)
E1HC	Crankcase heater	R1(A1P)	Resistor	Y3E	Electronic expansion valve (subcool)
F1, 3, 4U (A1P)	Fuse (T 6,3A / 250V)	R1(A2P)	Resistor	Y1S	Solenoid valve (4 way valve)
		R2(A2P)		Y2S	Solenoid valve (hot gas)
H1P~H8P	Light emit. diode (serv. monitor-orange) [H2P] Prepare, test ----- flickering Malfunction detection --- light up	R1T	Thermistor (air)	Y3S	Solenoid valve (U/L circuit)
		R2T	Thermistor (M1C discharge)	Z1C~Z4C	Noise filter (ferrite core)
		R3T	Thermistor (suction 1)	Z1F	Noise filter (with surge absorbed)
HAP (A1P)	Light emitting diode (service monitor green)	R4T	Thermistor (subcool)	Z2F	Noise filter

2TW29226-1B

### NOTES

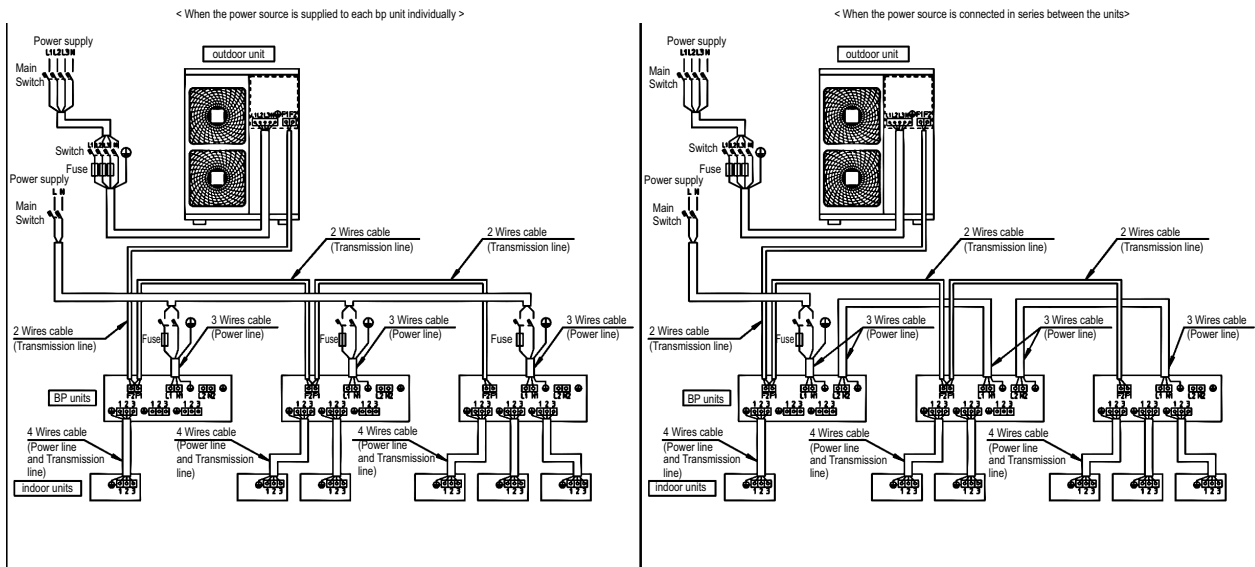
- This wiring diagram only applies to the outdoor unit.
- L: Live, N: Neutral, ---: Field wiring
- : Terminal strip, ○: Connector, ◯: Movable connector, ⊕: Protective earth (screw), ⊕: Noiseless earth, ⊖: Movable connector, ⊖: Terminal
- When using the option adapter, refer to the installation manual
- Refer to the 'Installation or service manual' on how to use BS1 ~ BS5 push button switch and DS1-1, DS1-2 dip switch.
- Do not operate the unit by short-circuiting protection device S1PH.
- Colors: BLU = BLUE, BRN = BROWN, GRN = GREEN, RED = RED, WHT = WHITE, YLW = YELLOW, ORG = ORANGE, BLK = BLACK.
- Refer to the installation manual for connection wiring to indoor - outdoor transmission F1-F2.
- When using the central control system, connect outdoor-outdoor transmission F1-F2.



# 8 External connection diagrams

## 8 - 1 External Connection Diagrams

**RXYSQ-P8Y1B**

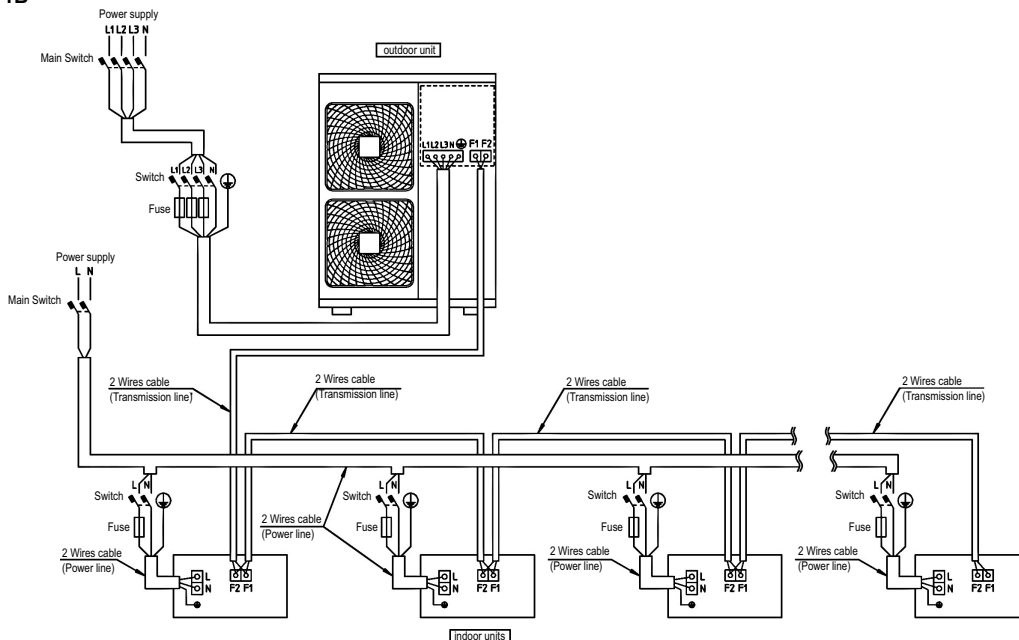


3TW33656-1

**NOTES**

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipment.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.

**RXYSQ-P8Y1B**



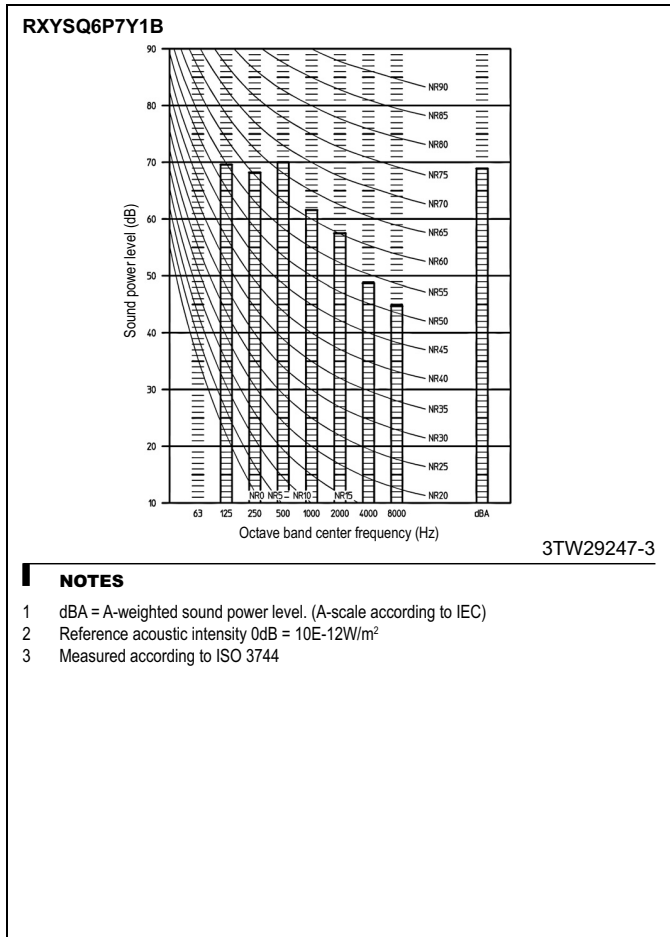
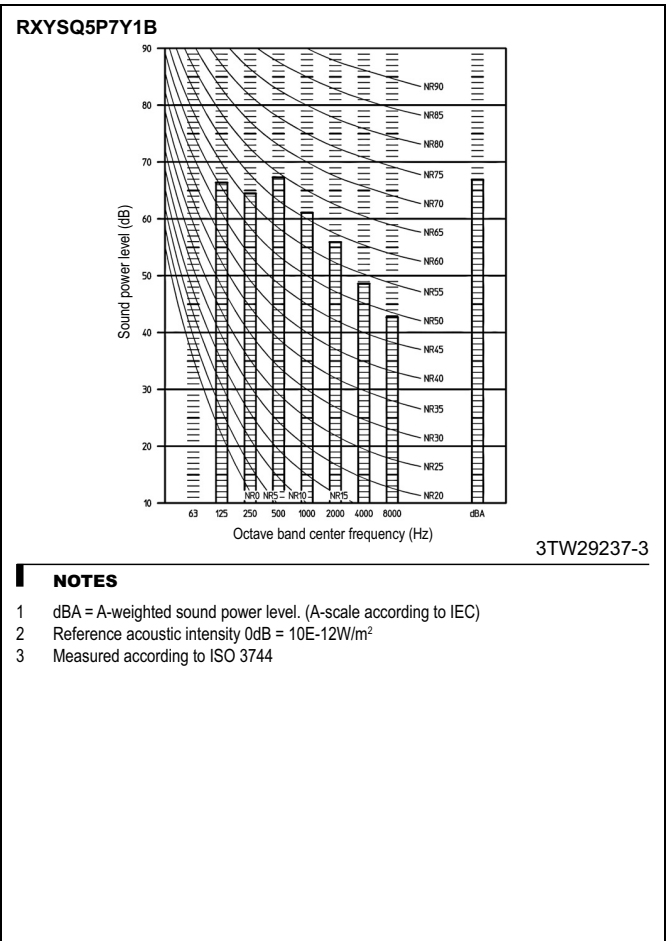
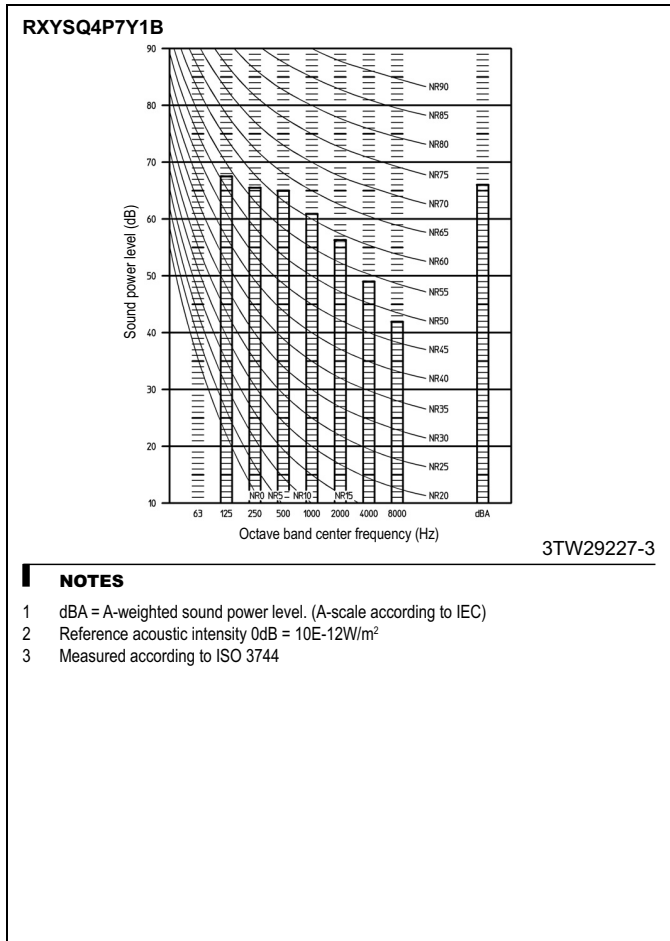
3TW33656-2

**NOTES**

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipment.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.

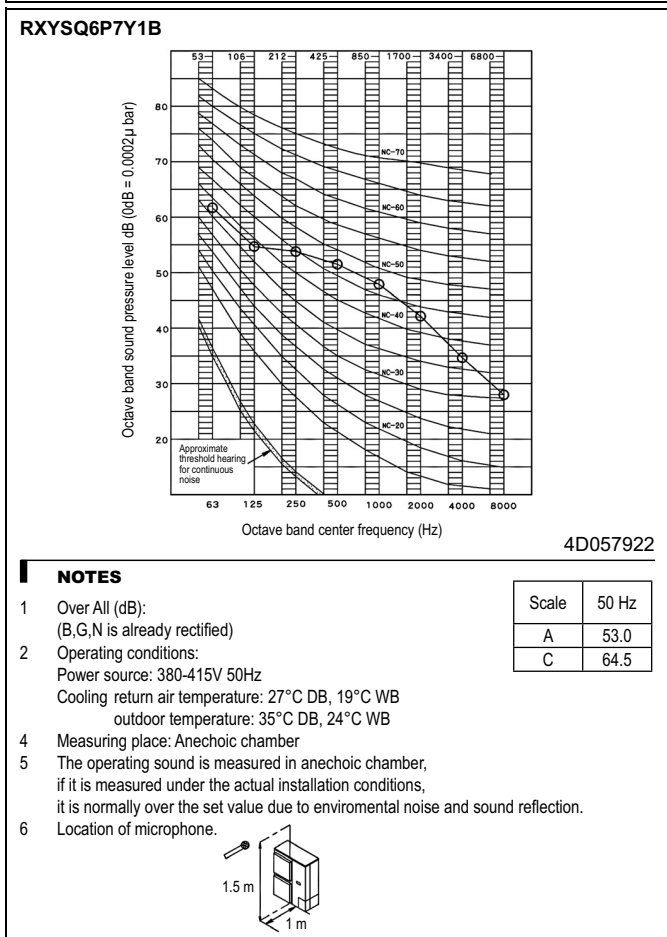
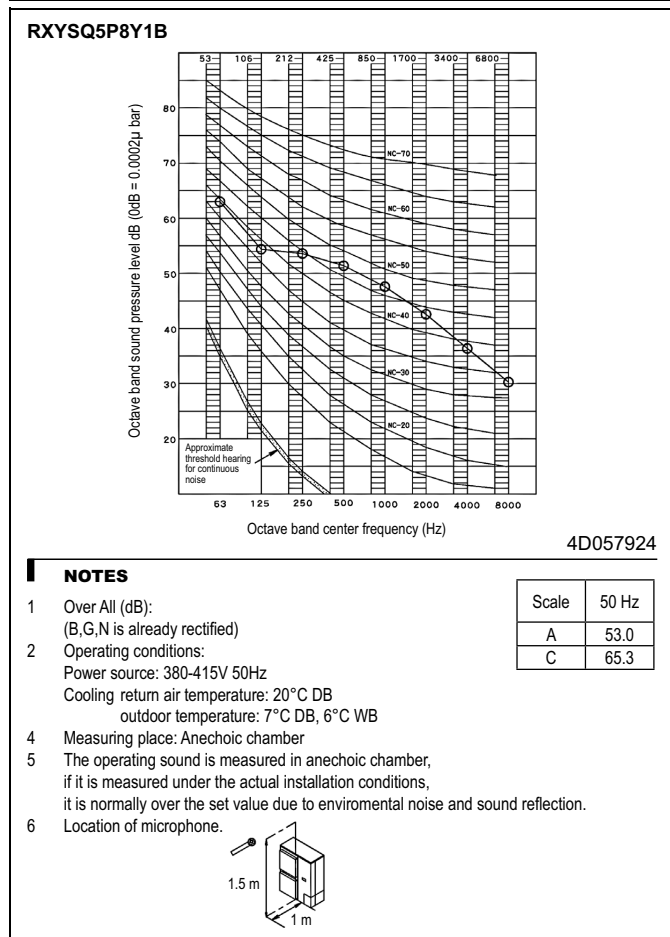
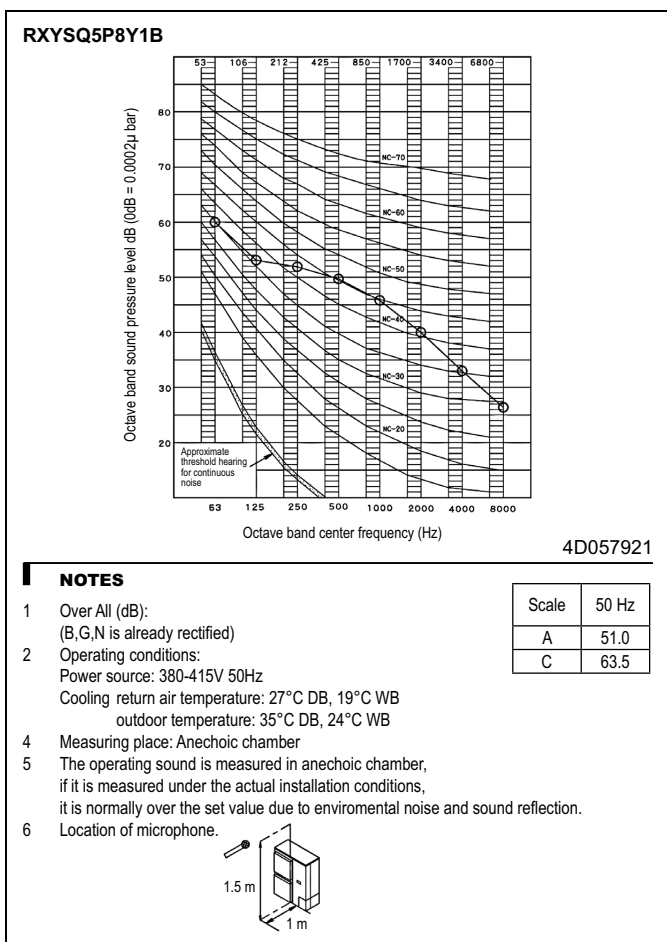
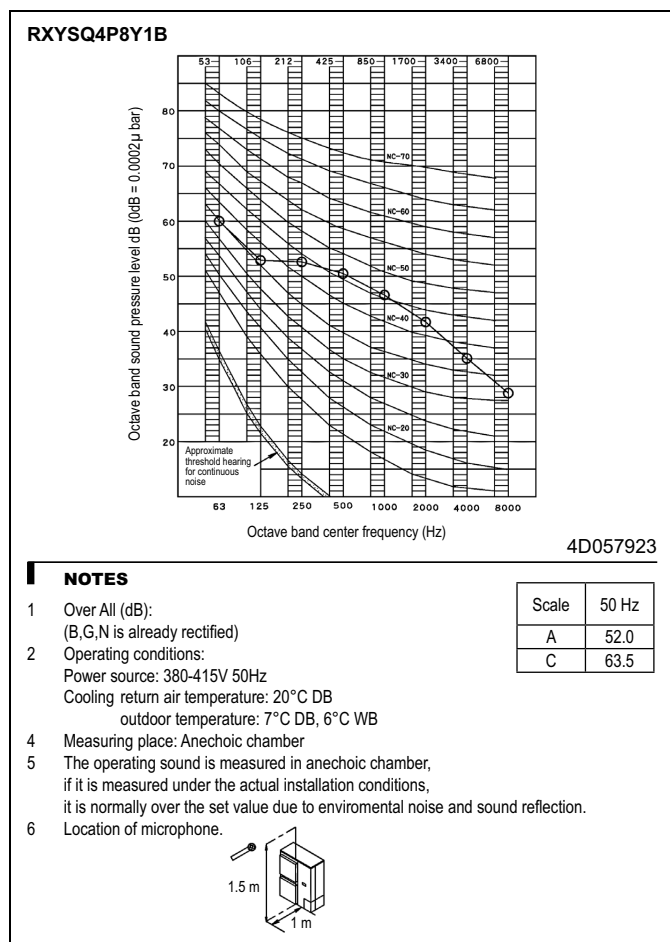
# 9 Sound data

## 9 - 1 Sound Power Spectrum



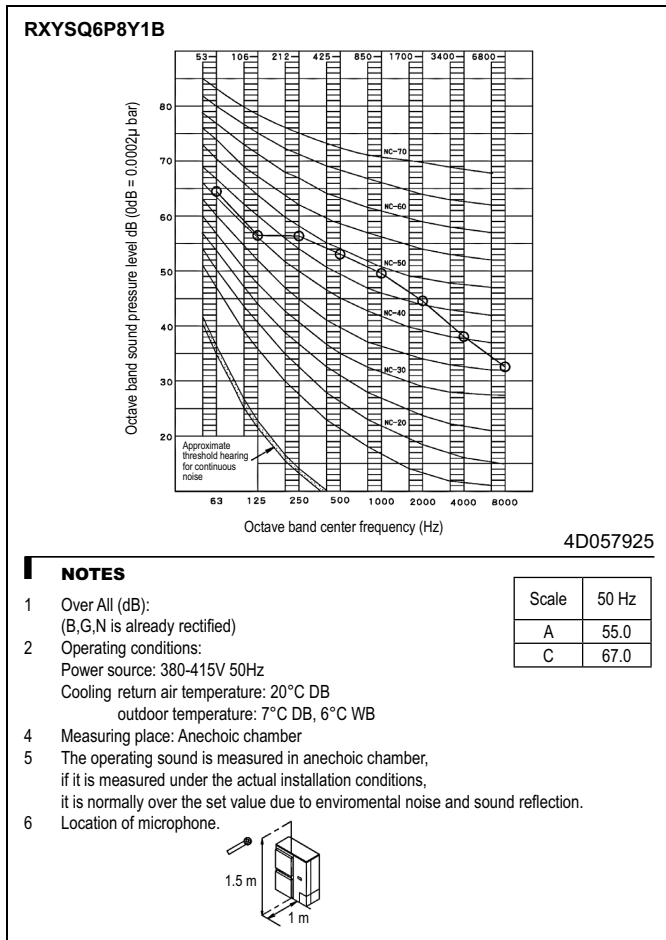
# 9 Sound data

## 9 - 2 Sound Pressure Spectrum



# 9 Sound data

## 9 - 2 Sound Pressure Spectrum



# 10 Installation

## 10 - 1 Installation Method

### RXYSQ-P8V1B

#### Required installation space

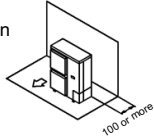
(The unit of these values is 'mm')

#### 1. When there are obstacle on suction side:

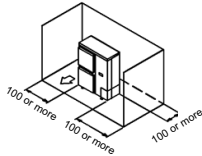
##### (a) No obstacle above

###### (1) Stand-alone installation

- Obstacle on the suction side only

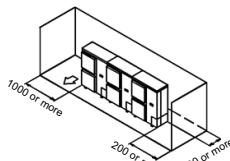


- Obstacle on both sides



###### (2) Series installation (2 or more)

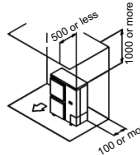
- Obstacle on both sides



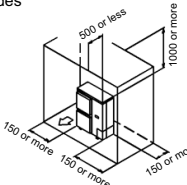
##### (b) Obstacle above, too

###### (1) Stand-alone installation

- Obstacle on the suction side, too

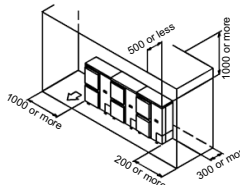


- Obstacle on both sides and suction side, too



###### (2) Series installation (2 or more)

- Obstacle on the suction side and both sides

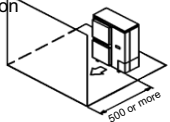


#### 2. Where there are obstacles on discharge side:

##### (a) No obstacle above

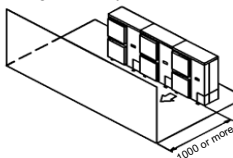
###### (1) Stand-alone installation

- Obstacle on the discharge side only



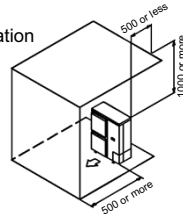
###### (2) Series installation (2 or more)

- Obstacle on the discharge side only

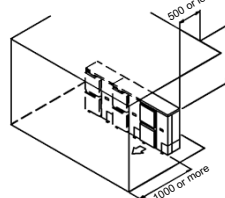


##### (a) Obstacle above, too

###### (1) Stand-alone installation



###### (2) Series installation (2 or more)



#### 3. Where there are obstacles on both suction and discharge sides:

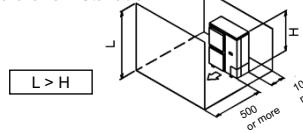
##### Pattern 1

Where the obstacles on the discharge side is higher than the unit:

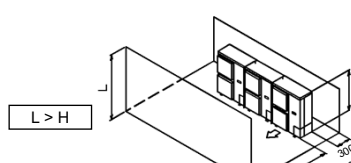
(There is no height limit for obstructions on the intake side)

##### (a) No obstacle above

###### (1) Stand-alone installation



###### (2) Series installation (2 or more)



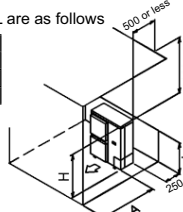
##### (b) Obstacle above, too

###### (1) Stand-alone installation (Note 2)

The relations between H, A and L are as follows

	L	A
L ≤ H	0 < L ≤ 1/2 H	750
	1/2 H < L ≤ H	1000
H < L	Set the stand as: L ≤ H	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

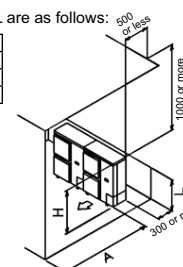


###### (2) Series installation (2 or more)

The relations between H, A and L are as follows:

	L	A
L ≤ H	0 < L ≤ 1/2 H	1000
	1/2 H < L ≤ H	1250
H < L	Set the stand as: L ≤ H	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.



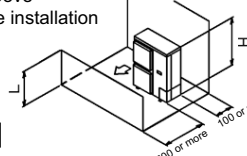
##### Pattern 2

Where the obstacle on the discharge side is lower than the unit:

(There is no height limit for obstructions on the intake side)

##### (a) No obstacle above

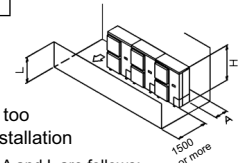
###### (1) Stand-alone installation



##### (2) Series installation (2 or more)

The relations between H, A and L are as follows

	L	A
L ≤ H	0 < L ≤ 1/2 H	250
	1/2 H < L ≤ H	300



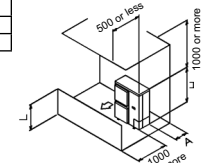
##### (a) Obstacle above, too

###### (1) Stand-alone installation

The relations between H, A and L are follows:

	L	A
L ≤ H	0 < L ≤ 1/2 H	100
	1/2 H < L ≤ H	200
H > L	Set the stand as: L ≤ H	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.



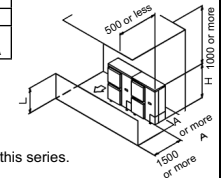
###### (2) Series installation

The relations between H, A and L are as follows

	L	A
L ≤ H	0 < L ≤ 1/2 H	250
	1/2 H < L ≤ H	300
H < L	Set the stand as: L ≤ H Refer to the column of L ≤ H for A	

Close the bottom of the installation frame to prevent the discharged air from being bypassed.

Only two units can be installed for this series.



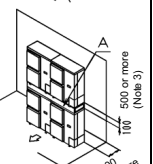
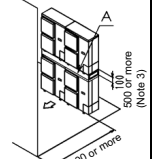
#### 4. Double-decker installation

- (a) Obstacle on the discharge side close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed.

Do not stack more than two units.

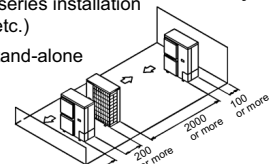
- (b) Obstacle on the suction side close the gap A (the gap between the upper and lower outdoor units) to prevent the discharged air from being bypassed.

Do not stack more than two units.



#### 5. Multiple rows of series installation (on the rooftop, etc.)

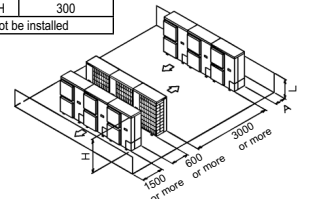
- (a) One row of stand-alone installation



- (b) Rows of series installation (2 or more)

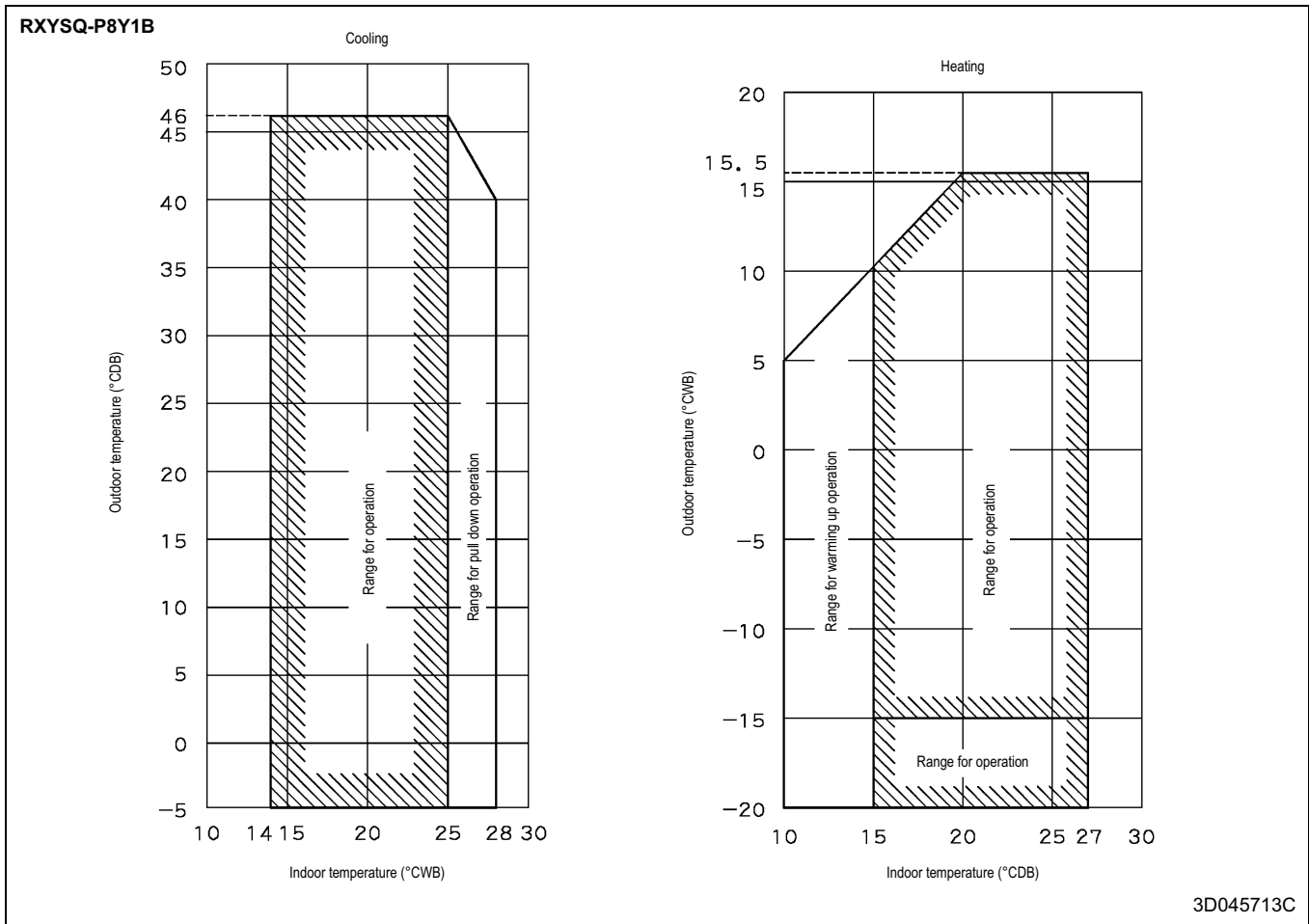
The relations between H, A and L are as follows

	L	A
L ≤ H	0 < L ≤ 1/2 H	250
	1/2 H < L ≤ H	300
H < L	Can not be installed	



# 11 Operation range

## 11 - 1 Operation Range



## 11 Operation range

### 11 - 1 Operation Range

In all of us,  
a green heart



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