1 Features

2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				RYN25GXV1B	RYN35GXV1B
For combination indoor units + outdoor units	Indoor Units			FTYN25GXV1B	FTYN35GXV1B
Cooling capacity	Standard	kW		2.50	3.27
		Btu/h		8,500	11,200
		Kcal/h		2,150	2,810
Heating capacity	Standard	kW		2.85	3.68
		Btu/h		9,700	12,600
		Kcal/h		2,450	3,160
Power Input	Cooling	Standard	kW	0.77	1.02
	Heating	Standard	kW	0.78	1.02
For combination indoor units + outdoor units	EER	Nominal		3.25	3.21
	COP	Nominal		3.65	3.61
	Energy Label	Cooling		A	
		Heating		A	
	Annual energy consumption		kWh	385	510

2-2 TECHNICAL SPECIFICATIONS				RYN25GXV1B	RYN35GXV1B
Casing	Colour			White	
Dimensions	Unit	Height	mm	550	550
		Width	mm	765	765
		Depth	mm	285	285
	Packing	Height	mm	611	611
		Width	mm	899	899
		Depth	mm	358	358
Weight	Unit		kg	31	34
	Packed Unit		kg	35	38
Heat Exchanger	Dimensions	Length	mm	829	803
		Nr of Rows		1	2
		Fin Pitch	mm	1.4	1.4
		Nr of Stages		24	24
	Tube type			Hi-XU (7)	
	Fin	Type		Waffle fin	
Fan	Type			Propeller	
	Air Flow Rate	Cooling (Standard)	m^3/min	34.9	31.4
		Heating (Standard)	m^3/min	31.6	28.1
		Cooling (Standard)	cfm	1,232	1,108
		Heating (Standard)	cfm	1,116	991
	Motor	Model		YYW26-6-6062	
Motor	Speed (nominal)	Cooling (Standard)	rpm	810	800
		Heating (Standard)	rpm	810	800
Fan	Motor	Output	W	26	26
Compressor	Quantity			1	1
	Motor	Model		5PS102DAK01	5PS132DBB01
		Type		Hermetic motor compressor	
		Motor Output	W	700	900

2 Specifications

2-2 TECHNICAL SPECIFICATIONS				RYN25GXV1B	RYN35GXV1B
Operation Range	Cooling	Min	×CDB	10	10
		Max	×CDB	46	46
	Heating	Min	×CWB	-10	-10
		Max	×CWB	24	24
Sound Level (nominal)	Cooling	Sound Pressure (High)	dBA	48	49
	Heating	Sound Pressure (High)	dBA	49	50
Refrigerant	Type			R-410A	
	Charge		kg	0.80	1.10
Refrigerant Oil	Type			RB68A/FREOL ALPHA68M	
	Charged Volume		l	0.35	0.35
Piping connections	Liquid (OD)	Diameter (OD)	mm	6.35	6.35
	Gas	Diameter (OD)	mm	9.52	12.7
	Drain	Diameter (OD)	mm	18	18
	Piping Length	Maximum	m	15	15
	Additional Refrigerant Charge		kg/m	0.02 > 10m	
	Installation height difference	Maximum	m	10	10
	Heat Insulation			Both liquid and gas pipes	
Notes				JIS C-9612: Cooling: indoor 27×CDB,19×CWB; outdoor: 35×CDB, 24×CWB; Heating: indoor 20×CDB; outdoor: 7×CDB, 6×CWB; piping length 5m	

2-3 ELECTRICAL SPECIFICATIONS				RYN25GXV1B	RYN35GXV1B
Power Supply	Name			V1	
	Phase			1~	
	Frequency		Hz	50	50
	Voltage		V	220-230-240	
Current	Nominal running current (RLA)	Cooling (A)	A	3.2	4.6
		Heating (A)	A	3.3	4.6
	Starting current (cooling/ heating)		A	17.0	23.5
Wiring connections	For Power Supply	Quantity			3
	For connection with indoor	Quantity			6
		Remark			Earth wire included

3 Electrical data

Representative Unit Combination		Power Supply				Comp		OFM		IFM	
Indoor Unit	Outdoor Unit	Hz-Volts	Voltage Range	MCA	MFA	LRA	RLA	W	FLA	W	FLA
FTYN35GXV1B	RYN35GXV1B	50 - 230	MAX. 50Hz 253V MIN. 50Hz 207V	4.0	10	16.5	2.9	26	0.27	18	0.14
FTYN35GXV1B	RYN35GXV1B	50 - 230	MAX. 50Hz 253V MIN. 50Hz 207V	5.8	10	23	4.3	26	0.27	18	0.14

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Simbols

MCA	:	Min. circuit amps.	(A)
MFA	:	Max. Fuse Amps.	(A)
RLA	:	Rated Load Amps.	(A)
OFM	:	Outdoor Fan Motor	
IFM	:	Indoor Fan Motor	
FLA	:	Full Load Amps	(A)
W	:	Fan Motor Rated Output	(W)
RHz	:	Rated Operated Frequency	(Hz)

Notes

1 RLA is based on the following conditions.
Indoor temp. 27C°DB/19°CWB
Outdoor Temp. 35°CDB.
2 Maximum allowable voltage variation between phases is 2%.
3 Select wire size based on the lager value of MCA.
4 Instead of fuse, use circuit breaker.

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

FTYN25GXV1B + RYN25GXV1B

Cooling **50Hz 220-240V**

AFR	9.5
BF	0.20

Indoor		Outdoor temperature (°C DB)																				
EWB	EDB	20			25			30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	2.56	2.03	0.59	2.44	1.97	0.65	2.33	1.92	0.70	2.28	1.89	0.73	2.21	1.86	0.76	2.10	1.81	0.82	1.96	1.74	0.89
16.0	22	2.68	1.99	0.59	2.56	1.94	0.65	2.44	1.89	0.71	2.40	1.87	0.73	2.33	1.84	0.76	2.21	1.79	0.82	2.07	1.73	0.89
18.0	25	2.79	2.11	0.60	2.68	2.06	0.65	2.56	2.01	0.71	2.51	1.99	0.73	2.44	1.96	0.77	2.33	1.92	0.83	2.19	1.86	0.89
19.0	27	2.85	2.24	0.60	2.73	2.19	0.66	262	2.15	0.71	2.57	2.13	0.74	2.50	2.10	0.77	2.38	2.05	0.83	2.24	2.00	0.90
22.0	30	3.02	2.17	0.60	2.91	2.12	0.66	2.79	2.08	0.72	2.74	2.07	0.74	2.67	2.04	0.78	2.56	2.00	0.83	2.42	1.96	0.90
24.0	32	3.14	2.11	0.61	3.02	2.08	0.66	2.90	2.04	0.72	2.86	2.02	0.874	2.79	2.00	0.78	2.67	1.97	0.84	2.53	1.92	0.90

Heating **50Hz 220-240V**

AFR	9.7

Indoor	Outdoor temperature (°C DB)											
EDB	-10		-5		0		6		10		18	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	1.92	0.66	2.24	0.69	2.56	0.72	2.95	0.76	3.21	0.79	3.72	0.84
20.0	1.82	0.68	2.14	0.71	2.46	0.74	2.85	0.78	3.11	0.81	3.62	0.86
22.0	1.78	0.68	2.10	0.72	2.42	0.75	2.81	0.79	3.07	0.81	3.58	0.86
24.0	1.74	0.69	2.06	0.72	2.39	0.76	2.77	0.79	3.03	0.82	2.54	0.87
25.0	1.72	0.69	2.04	0.73	2.37	0.76	2.75	0.80	3.01	082	3.52	0.87
27.0	1.68	0.70	2.00	0.73	2.33	0.77	2.71	0.80	2.97	0.83	3.48	0.88

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SYMBOLS

AFR	:	Air flow rate	(m3/mim.)
BF	:	Bypass factor	
EWB	:	Entering wet bulb temp.	(°C)
EDB	:	Entering dry bulb temp.	(°C)
TC	:	Total capacity	(kW)
SHC	:	Sensible heat capacity	(kW)
PI	:	Power input	(kW)

NOTES

1 Ratings shown are net capacities which include a deduction for indoor fan motor heat.
2 ☐ shows nominal (rated) capacities and power input.
3 TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should be used for calculation.)
4 About SHC which are not mentioned on the table.
please calculate them with around values in direct proportion.
5 Capacities are based on the following conditions.
Corresponding refrigerant piping lenght : 5m
Level difference : 0m
6 Air flow rate (AFR) and Bypass factor (BF) are tabulated above table.

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

FTYN35GXV1B + RYN35GXV1B

Cooling **50Hz 230V**

AFR	9.8
BF	0.22

Indoor		Outdoor temperature (°C DB)																					
EWB	EDB	20			25			30			32			35			40			46			
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
14.0	20	3.35	2.43	0.78	3.20	2.35	0.86	3.05	2.27	0.93	2.98	2.24	0.96	2.89	2.19	1.01	2.74	2.12	1.08	2.56	2.03	1.17	
16.0	22	3.50	2.38	0.79	3.35	2.31	0.86	3.20	2.24	0.94	3.14	2.21	0.97	3.04	2.17	1.01	2.89	2.10	1.09	2.71	2.01	1.18	
18.0	25	3.65	2.49	0.79	3.50	2.42	0.87	3.35	2.35	0.94	3.29	2.32	0.97	3.19	2.28	1.02	3.04	2.22	1.09	2.86	2.14	1.18	
19.0	27	3.73	2.61	0.79	3.57	2.55	0.87	3.42	2.48	0.94	3.36	2.46	0.97	3.27	2.42	1.02	3.12	2.35	1.10	2.94	2.28	1.19	
22.0	30	3.95	2.52	0.80	3.80	2.46	0.88	3.65	2.40	0.95	3.59	2.38	0.98	3.50	2.34	1.03	3.34	2.29	1.10	3.16	2.22	1.19	
24.0	32	4.10	2.45	0.81	3.95	2.39	0.88	3.80	2.34	0.96	3.74	2.32	0.99	3.65	2.29	1.03	3.49	2.24	1.11	3.31	2.18	1.20	

Heating **50Hz 230V**

AFR	10.5

Indoor	Outdoor temperature (°C DB)											
EDB	-10		-5		0		6		10		18	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.48	0.86	2.89	0.90	3.31	0.95	3.81	1.00	4.14	1.03	4.80	1.10
20.0	2.35	0.89	2.77	0.93	3.18	0.97	3.68	1.02	4.01	1.05	4.68	1.12
22.0	2.30	0.89	2.72	0.94	3.13	0.98	3.63	1.03	3.96	1.06	4.63	1.13
24.0	2.25	0.90	2.66	0.95	3.08	0.99	3.58	1.04	3.91	1.07	4.58	1.14
25.0	2.22	0.91	2.64	0.95	3.05	0.99	3.55	1.04	3.89	1.08	4.55	1.14
27.0	2.17	0.92	2.59	0.96	3.00	1.00	3.50	1.05	3.83	1.09	4.50	1.15

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SYMBOLS

AFR	:	Air flow rate	(m3/mim.)
BF	:	Bypass factor	
EWB	:	Entering wet bulb temp.	(°C)
EDB	:	Entering dry bulb temp.	(°C)
TC	:	Total capacity	(kW)
SHC	:	Sensible heat capacity	(kW)
PI	:	Power input	(kW)

NOTES

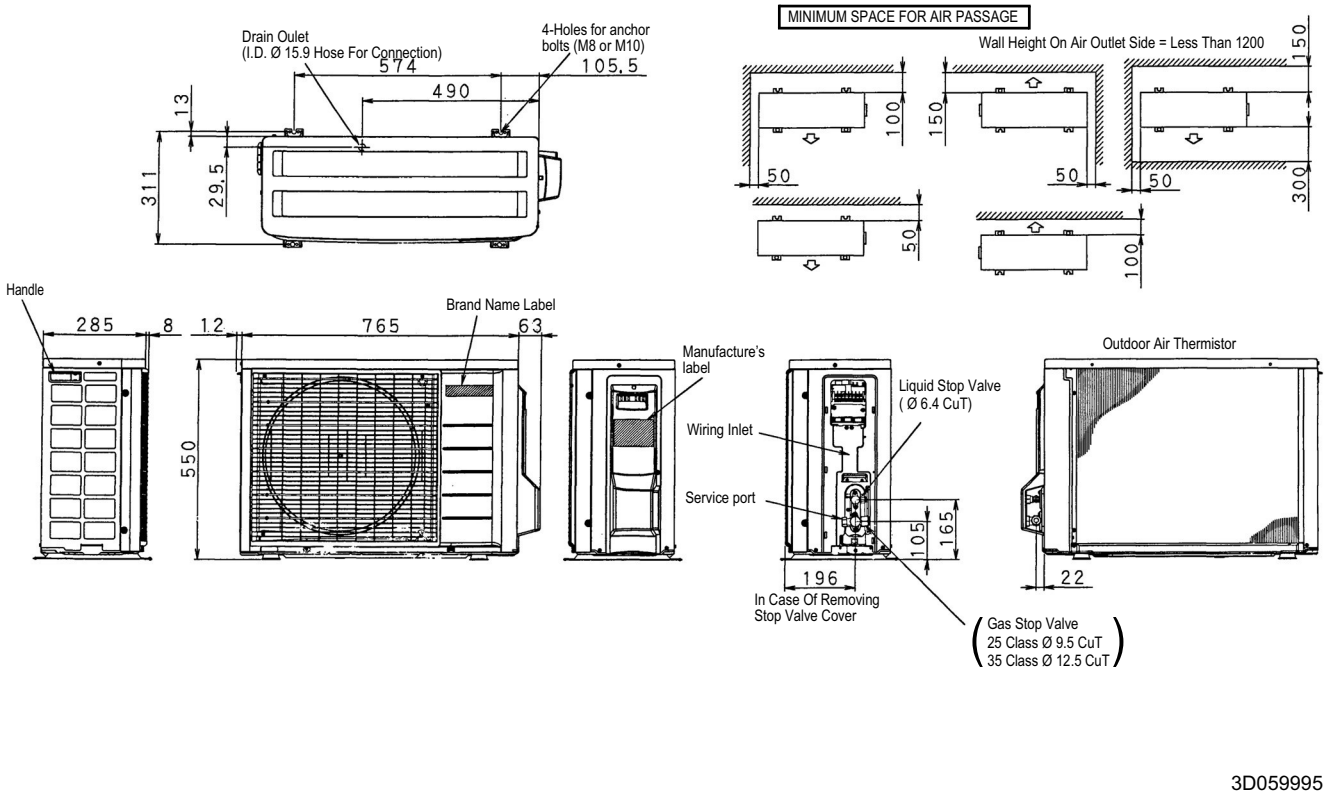
1 Capacities are based on the following conditions
Corresponding refrigerant piping lenght : 5m
Level difference : 0m

2 . ☐ shows nominal (rated) capacities and power input.

5 Dimensional drawing & centre of gravity

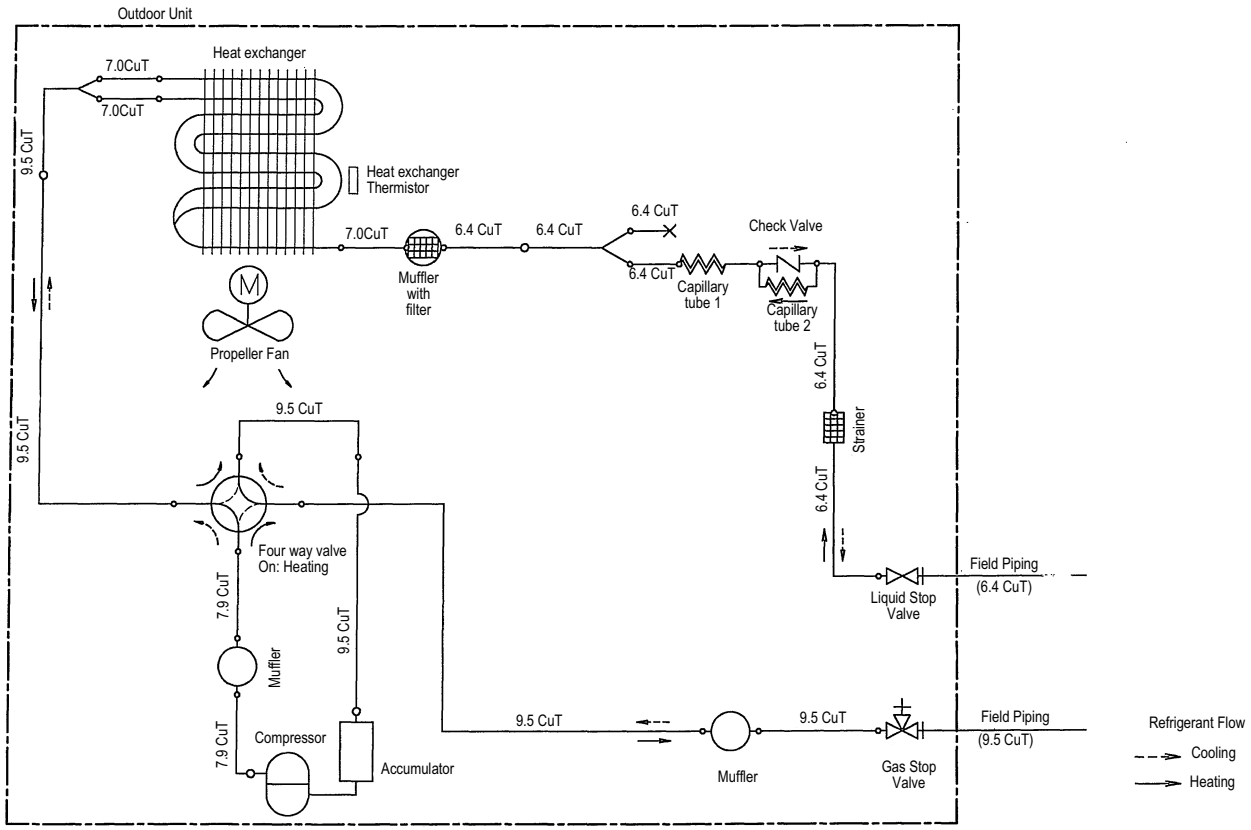
5 - 1 Dimensional drawing

RYN25-35GX



6 Piping diagram

RYN25GX



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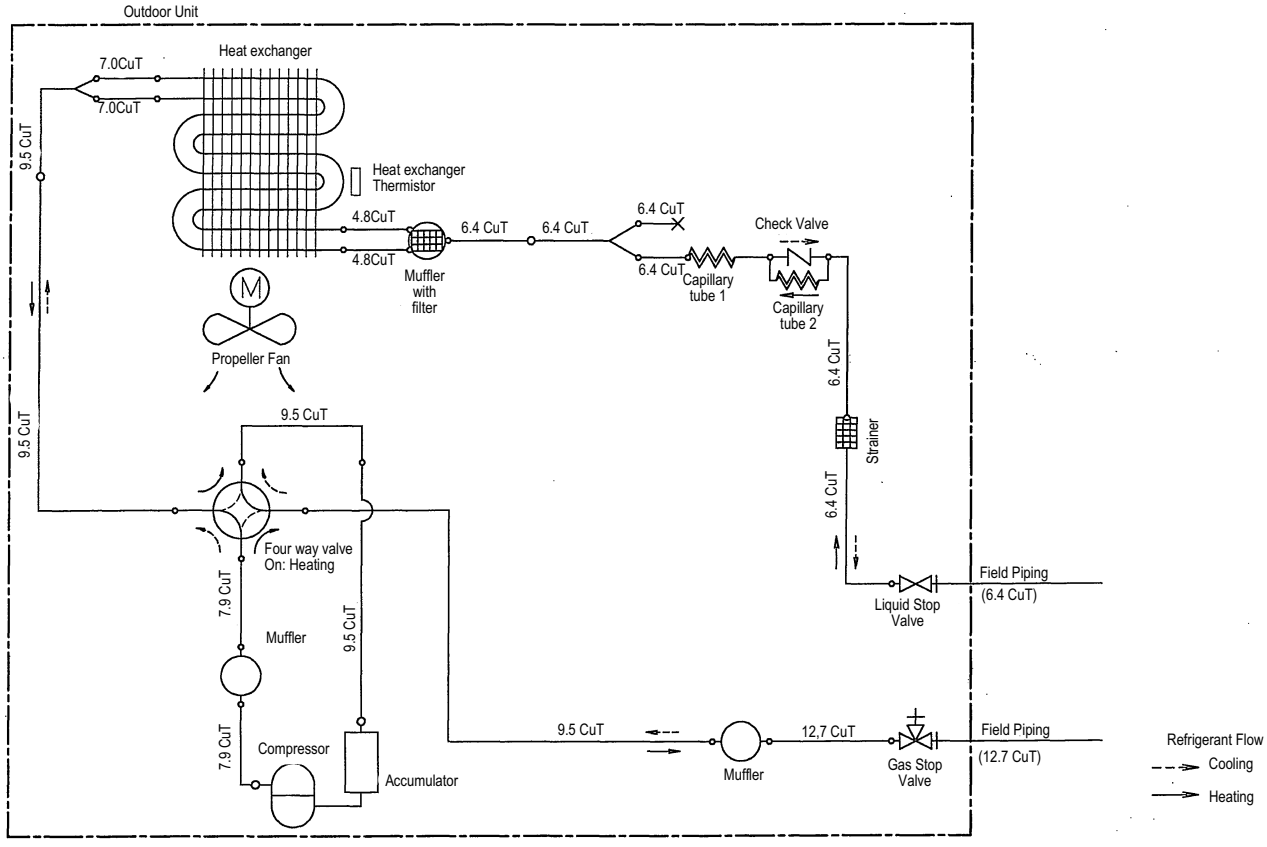

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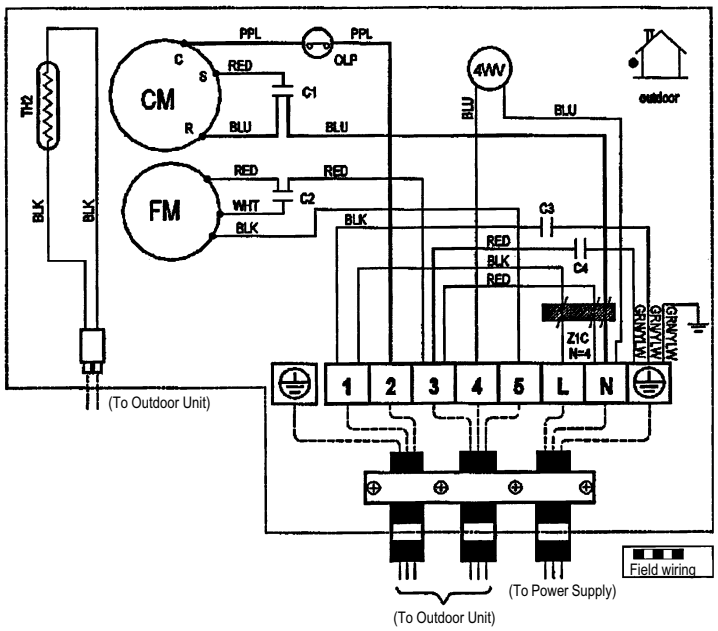
7 Wiring diagram

7 - 1 Wiring diagram

RYN25-35GX

OUTDOOR UNIT WIRING DIAGRAM



Key:

CM	Compressor Motor	BLK	: Black
OLP	Overload Protector	BLU	: Blue
FM	Fan Motor	BRN	: Brown
TH2	Outdoor Thermistor	GRN	: Green
4WV	4 Way Valve	ORG	: Orange
C1, C2, C3, C4	Capacitor	RED	: Green
Z1C	Ferrite Core	WHT	: White
⏚	Protective Earth	YLW	: Yellow

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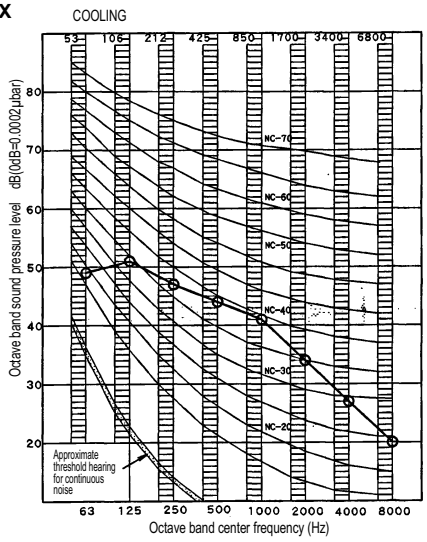
8 Sound data

8 - 1 Sound pressure spectrum

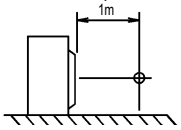
RYN25GX



3D060144

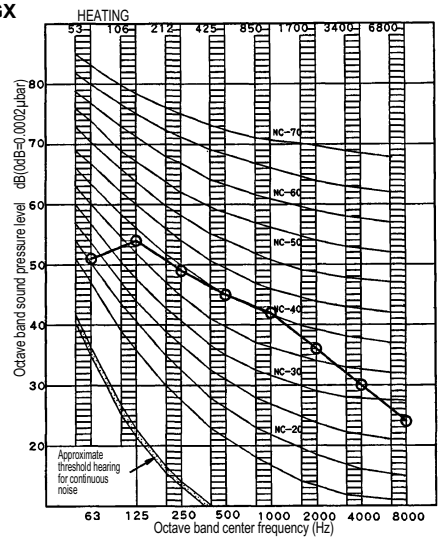
NOTES

1 Operating conditons:
○———○ : 50 Hz 220-240V (dB) Overall (dB)
Cooling
2 Measure in anechoic room
3 Location of microphone



4 Operation noise differs with operation and ambient conditions.

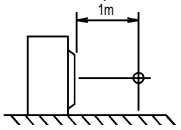
RYN25GX



3D060144

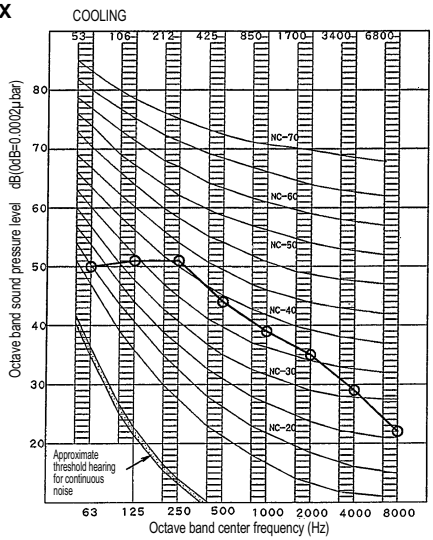
NOTES

1 Operating conditons:
○———○ : 50 Hz 220-240V (dB) Overall (dB)
Heatng
2 Measure in anechoic room
3 Location of microphone



4 Operation noise differs with operation and ambient conditions.

RYN35GX



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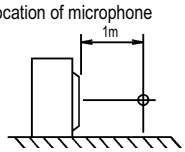
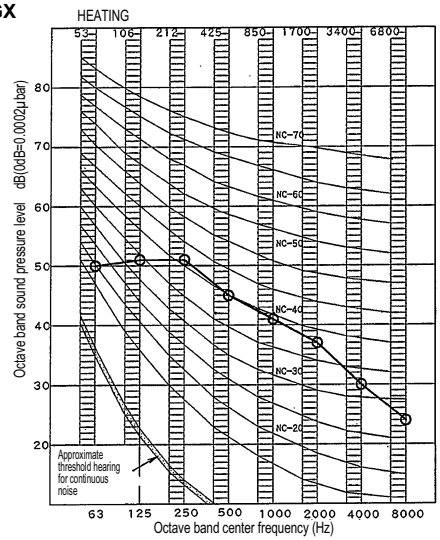
NOTES

1 Operating conditons:
○———○ : 50 Hz 220-240V (dB) Overall (dB)
Cooling
2 Measure in anechoic room
3 Location of microphone



4 Operation noise differs with operation and ambient conditions.

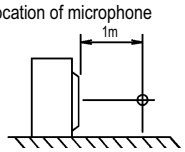
RYN35GX



3D060149

NOTES

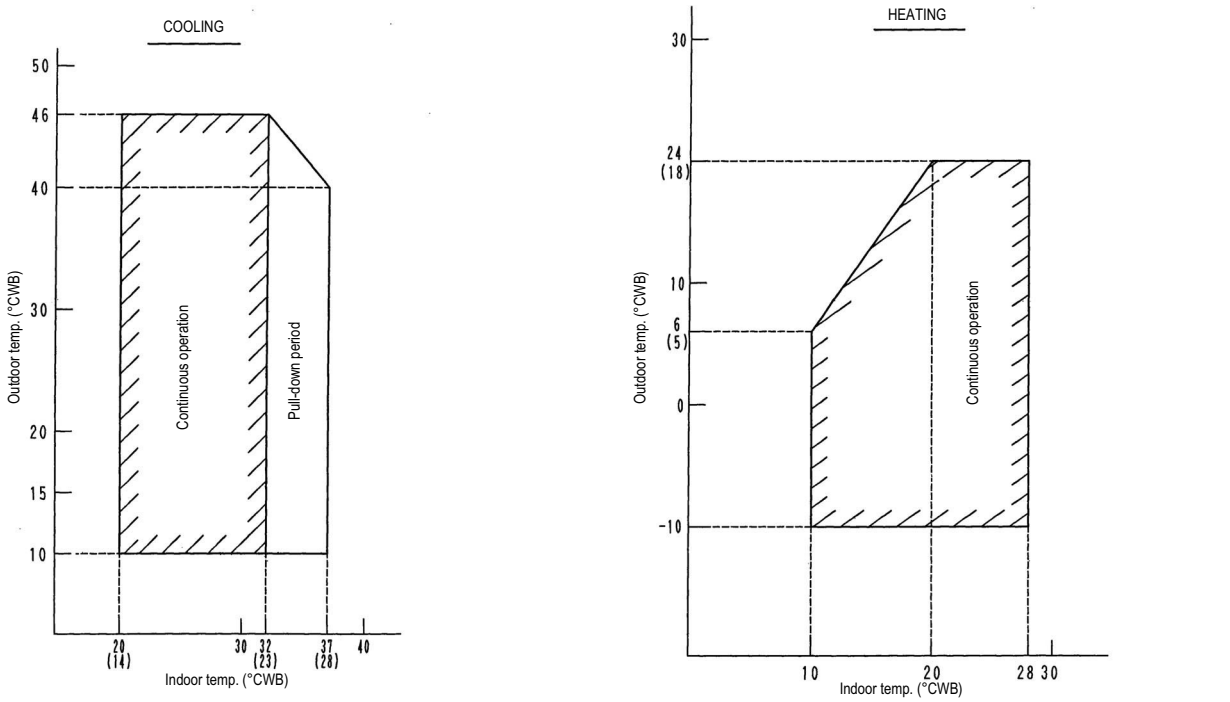
1 Operating conditons:
○———○ : 50 Hz 220-240V (dB) Overall (dB)
Cooling
2 Measure in anechoic room
3 Location of microphone



4 Operation noise differs with operation and ambient conditions.

9 Operation range

RYN25-35GX



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NOTES

1 The graphs are based on the following conditions.
- Equivalent piping length 7.5m
- Level difference 0m
- Air Flow Rate High