1 Features

- Outdoor units for pair application
- Daikin outdoor units are neat and sturdy and can be mounted easily on a roof or terrace or simply placed against an outside wall.
- Outdoor units are fitted with a swing compressor, renowned for its low noise and high energy efficiency

2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				RYN50E3V1B	RYN60E3V1B
For combination indoor units + outdoor units	Indoor Units			FTYN50EV1B	FTYN60EV1B
Cooling capacity	Standard	kW		5.0	6.0
Heating capacity	Standard	kW		5.8	7.0
Nominal input	Cooling	Standard	kW	1.55	1.99
	Heating	Standard	kW	1.60	2.04
For combination indoor units + outdoor units	EER	Nominal		3.23	3.02
	COP	Nominal		3.63	3.43
	Energy Labeling Directive	Cooling		A	B
		Heating		A	B
	Annual energy consumption		kWh	775	995
	Indoor Units			FTYN50FV1B	FTYN60FV1B
Cooling capacity	Standard	kW		5.0	6.0
Heating capacity	Standard	kW		5.8	7.0
Nominal input	Cooling	Standard	kW	1.55	1.99
	Heating	Standard	kW	1.60	2.04
For combination indoor units + outdoor units	EER	Nominal		3.23	3.02
	COP	Nominal		3.63	3.43
	Energy Labeling Directive	Cooling		A	B
		Heating		A	B
	Annual energy consumption		kWh	775	995

2-2 TECHNICAL SPECIFICATIONS				RYN50E3V1B	RYN60E3V1B
Casing	Colour			Ivory White	
Dimensions	Unit	Height	mm	735	735
		Width	mm	825	825
		Depth	mm	300	300
	Packing	Height	mm	797	797
		Width	mm	960	960
		Depth	mm	390	390
Weight	Unit		kg	48	48
	Packed Unit		kg	53	53
Heat Exchanger	Dimensions	Length	mm	845	845
		Nr of Rows		2	2
		Fin Pitch	mm	1.80	1.80
		Nr of Stages		32	32
	Tube type			Hi-Xa(8)	
	Fin	Type		Waffle fin	
		Treatment		Anti-corrosion treatment (PE)	
Fan	Type			Propeller	
	Quantity			1	1
	Air Flow Rate (nominal at 230V)	Cooling	m^3/min	48.9	50.9
		Heating	m^3/min	45.0	46.3
	Motor	Quantity		1	1
		Model		KFD-380-50-8A	
Motor	Speed (nominal)	Cooling	rpm	780	810
		Heating	rpm	720	740
Fan	Motor	Output	W	53	53

2 Specifications

2-2 TECHNICAL SPECIFICATIONS				RYN50E3V1B	RYN60E3V1B
Compressor	Quantity			1	1
	Motor	Model		2YC36BXD#A	
		Type		Hermetically sealed swing compressor	
		Motor Output	W	1100	1100
Operation Range	Cooling	Min	°CDB	-10.0	-10.0
		Max	°CDB	46.0	46.0
	Heating	Min	°CWB	-15	-15
		Max	°CWB	18	18
Sound Level (nominal)	Cooling	Sound Power	dBA	61.0	63.0
		Sound Pressure	dBA	47.0	49.0
	Heating	Sound Pressure	dBA	48.0	49.0
Refrigerant	Type			R-410A	
	Charge		kg	1.5	1.5
Refrigerant Oil	Type			FVC50K	
	Charged Volume		l	0.65	065
Piping connections	Liquid (OD)	Diameter (OD)	mm	6.35	6.35
	Gas	Diameter (OD)	mm	12.7	12.7
	Drain	Diameter (OD)	mm	18	18
	Piping Length	Maximum	m	30	30
	Additional Refrigerant Charge		kg/m	0.02/>10m	
	Max. internunit level difference		m	20.0	20.0
	Heat Insulation			Both liquid and gas pipes	
Standard Accessories	Item			Drain plug	
	Quantity			1	1
	Item			Installation manual	
	Quantity			1	1
Notes				Nominal cooling capacities are based on : indoor temperature : 270CDB, 190CWB, outdoor temperature : 350CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.	
				Nominal heating capacities are based on : indoor temperature : 200CDB, outdoor temperature : 70CDB, 60CWB, equivalent refrigerant piping : 7.5m, level difference : 0m	
				Sound levels are measured in an anechoic room	
				Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings of this chapter.	
				The sound power level is an absolute value indicating the power which a sound source generates.	

2-3 ELECTRICAL SPECIFICATIONS				RYN50E3V1B	RYN60E3V1B
Power Supply	Name			V1	
	Phase			1	1
	Frequency		Hz	50	50
	Voltage		V	220-240	
	Voltage range	Minimum	V	-10%	
		Maximum	V	+10%	
Current	Nominal running current (RLA)	Cooling (A)	A	6.75	8.62
		Heating (A)	A	6.94	8.80
	Starting current (cooling/ heating)		A	7.1	9.0
	Z-max	List		No requirements	

2 Specifications

2-3 ELECTRICAL SPECIFICATIONS			RYN50E3V1B	RYN60E3V1B
Wiring connections	For Power Supply	Quantity	3	3
	For connection with indoor	Quantity	4	4
		Remark	Including earth wiring	
Power Supply Intake			Outdoor unit only	

3 Features

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

FTYN50F+RYN50E

Cooling **50Hz 220-240V**

AFR	14.7
BF	0.28

Indoor		Outdoor temperature (°CDB)																	
EWB	EDB	20			25			30			32			35			40		
(°C)	(°C)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	5.12	3.61	1.19	4.89	3.49	1.30	4.66	3.37	1.42	4.56	3.32	1.46	4.42	3.25	1.53	4.19	3.13	1.65
16.0	22	5.35	3.55	1.20	5.12	3.43	1.31	4.89	3.32	1.43	4.79	3.27	1.47	4.65	3.21	1.54	4.42	3.10	1.65
18.0	25	5.58	3.69	1.20	5.35	3.58	1.32	5.12	3.47	1.43	5.02	3.43	1.48	4.88	3.37	1.55	4.65	3.26	1.66
19.0	27	5.70	3.86	1.21	5.47	3.75	1.32	5.23	3.65	1.44	5.14	3.61	1.48	5.00	3.55	1.55	4.77	3.45	1.66
22.0	30	6.04	3.71	1.22	5.81	3.62	1.33	5.58	3.52	1.45	5.49	3.49	1.49	5.35	3.43	1.56	5.11	3.35	1.67
24.0	32	6.27	3.60	1.22	6.04	3.52	1.34	5.81	3.43	1.45	5.72	3.40	1.50	5.58	3.35	1.57	5.34	3.27	1.68

Heating **50Hz 220-240V**

AFR	16.1

Indoor	Outdoor temperature (°CWB)									
EDB	-10		-5		0		6		10	
(°C)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.90	1.35	4.56	1.42	5.21	1.48	6.00	1.56	6.52	1.62
20.0	3.70	1.39	4.36	1.46	5.01	1.52	5.80	1.60	6.32	1.65
22.0	3.62	1.40	4.28	1.47	4.93	1.54	5.72	1.61	6.24	1.67
24.0	3.54	1.42	4.20	1.48	4.85	1.55	5.64	1.63	6.16	1.68
25.0	3.50	1.43	4.16	1.49	4.81	1.56	5.60	1.64	6.12	1.69
27.0	3.42	1.44	4.08	1.51	4.73	1.57	5.52	1.65	6.04	1.70

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SYMBOLS

AFR:	Air flow rate	(m^3/min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°C)
EDB:	Entering dry bulb temp.	(°C)
TC:	Total capacity	(kW)
SHC:	Sensible heating 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 not 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 following conditions:
Corresponding refrigerant piping length: 7.5 m
Level difference: 0 m

6 Air flow rate (AFR) and Bypass factor (BF) are taburated above.

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

FTYN50FV1B+RYN50E3V1B

Cooling **50Hz 220-240V**

AFR	14.7
BF	0.28

Indoor EWB (°C)	Indoor EDB (°C)	Outdoor temperature (°CDB) 20 TC	20 SHC	20 PI	25 TC	25 SHC	25 PI	30 TC	30 SHC	30 PI	32 TC	32 SHC	32 PI	35 TC	35 SHC	35 PI	40 TC	40 SHC	40 PI
14.0	20	5.12	3.61	1.19	4.89	3.49	1.30	4.66	3.37	1.42	4.56	3.32	1.46	4.42	3.25	1.53	4.19	3.13	1.65
16.0	22	5.35	3.55	1.20	5.12	3.43	1.31	4.89	3.32	1.43	4.79	3.27	1.47	4.65	3.21	1.54	4.42	3.10	1.65
18.0	25	5.58	3.69	1.20	5.35	3.58	1.32	5.12	3.47	1.43	5.02	3.43	1.48	4.88	3.37	1.55	4.65	3.26	1.66
19.0	27	5.70	3.86	1.21	5.47	3.75	1.32	5.23	3.65	1.44	5.14	3.61	1.48	5.00	3.55	1.55	4.77	3.45	1.66
22.0	30	6.04	3.71	1.22	5.81	3.62	1.33	5.58	3.52	1.45	5.49	3.49	1.49	5.35	3.43	1.56	5.11	3.35	1.67
24.0	32	6.27	3.60	1.22	6.04	3.52	1.34	5.81	3.43	1.45	5.72	3.40	1.50	5.58	3.35	1.57	5.34	3.27	1.68

Heating **50Hz 220-240V**

AFR	16.1

Indoor EDB (°C)	Outdoor temperature (°CWB) -10 TC	-10 PI	-5 TC	-5 PI	0 TC	0 PI	6 TC	6 PI	10 TC	10 PI
15.0	3.90	1.35	4.56	1.42	5.21	1.48	6.00	1.56	6.52	1.62
20.0	3.70	1.39	4.36	1.46	5.01	1.52	5.80	1.60	6.32	1.65
22.0	3.62	1.40	4.28	1.47	4.93	1.54	5.72	1.61	6.24	1.67
24.0	3.54	1.42	4.20	1.48	4.85	1.55	5.64	1.63	6.16	1.68
25.0	3.50	1.43	4.16	1.49	4.81	1.56	5.60	1.64	6.12	1.69
27.0	3.42	1.44	4.08	1.51	4.73	1.57	5.52	1.65	6.04	1.70

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SYMBOLS

AFR:	Air flow rate	(m^3/min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°C)
EDB:	Entering dry bulb temp.	(°C)
TC:	Total capacity	(kW)
SHC:	Sensible heating 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 not 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 following conditions:
Corresponding refrigerant piping length: 7.5 m
Level difference: 0 m

6 Air flow rate (AFR) and Bypass factor (BF) are taburated above.

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

FTYN60FV1B+RYN60E3V1B

Cooling **50Hz 220-240V**

AFR	16.2
BF	0.29

Indoor		Outdoor temperature (°CDB)																	
EWB	EDB	20			25			30			32			35			40		
(°C)	(°C)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	5.60	3.94	1.49	5.60	3.94	1.66	5.59	3.94	1.82	5.48	3.88	1.88	5.31	3.79	1.97	5.03	3.64	2.12
16.0	22	6.42	4.17	1.54	6.14	4.02	1.68	5.86	3.88	1.83	5.75	3.82	1.89	5.59	3.74	1.98	5.31	3.60	2.12
18.0	25	6.70	4.31	1.54	6.42	4.17	1.69	6.14	4.04	1.84	6.03	3.99	1.90	5.86	3.91	1.99	5.58	3.78	2.13
19.0	27	6.84	4.49	1.55	6.56	4.36	1.70	6.28	4.23	1.84	6.17	4.18	1.90	6.00	4.10	1.99	5.72	3.98	2.14
22.0	30	7.25	4.31	1.56	6.97	4.19	1.71	6.69	4.08	1.86	6.58	4.04	1.91	6.41	3.97	2.00	6.14	3.86	2.15
24.0	32	7.53	4.18	1.57	7.25	4.07	1.72	6.97	3.97	1.86	6.86	3.93	1.92	6.69	3.87	2.01	6.41	3.77	2.16

Heating **50Hz 220-240V**

AFR	17.4

Indoor	Outdoor temperature (°CWB)									
EDB	-10		-5		0		6		10	
(°C)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.71	1.73	5.50	1.81	6.29	1.89	7.24	1.99	7.87	2.06
20.0	4.47	1.77	5.26	1.86	6.05	1.94	7.00	2.04	7.63	2.11
22.0	4.37	1.79	5.16	1.87	5.95	1.96	6.90	2.06	7.54	2.13
24.0	4.28	1.81	5.07	1.89	5.86	1.98	6.81	2.08	7.44	2.14
25.0	4.23	1.82	5.02	1.90	5.81	1.99	6.76	2.09	7.39	2.15
27.0	4.13	1.84	4.92	1.92	5.71	2.00	6.66	2.10	7.29	2.17

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SYMBOLS

AFR:	Air flow rate	(m^3/min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°C)
EDB:	Entering dry bulb temp.	(°C)
TC:	Total capacity	(kW)
SHC:	Sensible heating 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 not 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 following conditions:
Corresponding refrigerant piping length: 7.5 m
Level difference: 0 m

6 Air flow rate (AFR) and Bypass factor (BF) are taburated above.

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

FTYN60F+RYN60E

Cooling **50Hz 220-240V**

AFR	16.2
BF	0.29

Indoor		Outdoor temperature (°CDB)																	
EWB	EDB	20			25			30			32			35			40		
(°C)	(°C)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	5.60	3.94	1.49	5.60	3.94	1.66	5.59	3.94	1.82	5.48	3.88	1.88	5.31	3.79	1.97	5.03	3.64	2.12
16.0	22	6.42	4.17	1.54	6.14	4.02	1.68	5.86	3.88	1.83	5.75	3.82	1.89	5.59	3.74	1.98	5.31	3.60	2.12
18.0	25	6.70	4.31	1.54	6.42	4.17	1.69	6.14	4.04	1.84	6.03	3.99	1.90	5.86	3.91	1.99	5.58	3.78	2.13
19.0	27	6.84	4.49	1.55	6.56	4.36	1.70	6.28	4.23	1.84	6.17	4.18	1.90	6.00	4.10	1.99	5.72	3.98	2.14
22.0	30	7.25	4.31	1.56	6.97	4.19	1.71	6.69	4.08	1.86	6.58	4.04	1.91	6.41	3.97	2.00	6.14	3.86	2.15
24.0	32	7.53	4.18	1.57	7.25	4.07	1.72	6.97	3.97	1.86	6.86	3.93	1.92	6.69	3.87	2.01	6.41	3.77	2.16

Heating **50Hz 220-240V**

AFR	17.4

Indoor	Outdoor temperature (°CWB)									
EDB	-10		-5		0		6		10	
(°C)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.71	1.73	5.50	1.81	6.29	1.89	7.24	1.99	7.87	2.06
20.0	4.47	1.77	5.26	1.86	6.05	1.94	7.00	2.04	7.63	2.11
22.0	4.37	1.79	5.16	1.87	5.95	1.96	6.90	2.06	7.54	2.13
24.0	4.28	1.81	5.07	1.89	5.86	1.98	6.81	2.08	7.44	2.14
25.0	4.23	1.82	5.02	1.90	5.81	1.99	6.76	2.09	7.39	2.15
27.0	4.13	1.84	4.92	1.92	5.71	2.00	6.66	2.10	7.29	2.17

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SYMBOLS

AFR:	Air flow rate	(m^3/min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°C)
EDB:	Entering dry bulb temp.	(°C)
TC:	Total capacity	(kW)
SHC:	Sensible heating 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 not 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 following conditions:
Corresponding refrigerant piping length: 7.5 m
Level difference: 0 m

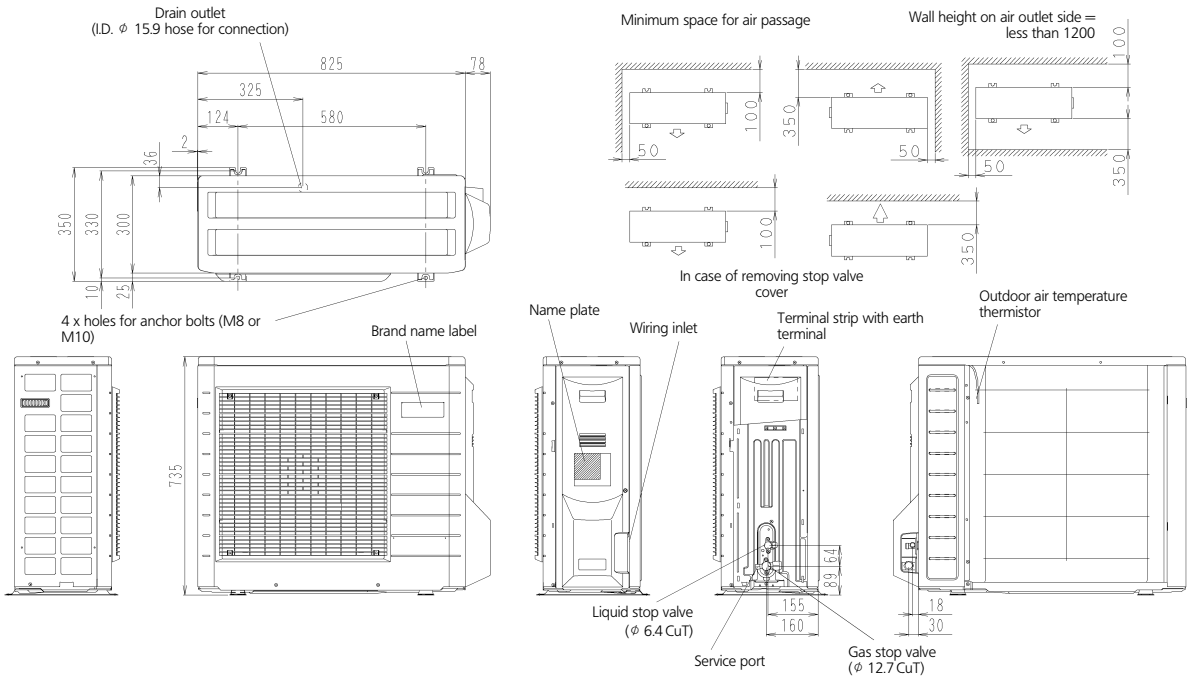
6 Air flow rate (AFR) and Bypass factor (BF) are taburated above.

5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing

unit (mm)

RYN50-60E



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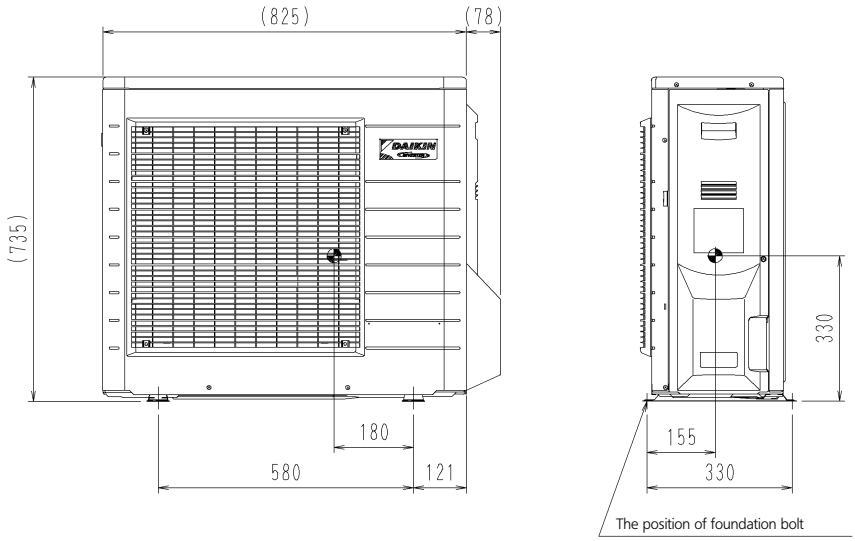
5 Dimensional drawing & centre of gravity

5 - 2 Centre of gravity

RYN50-60E



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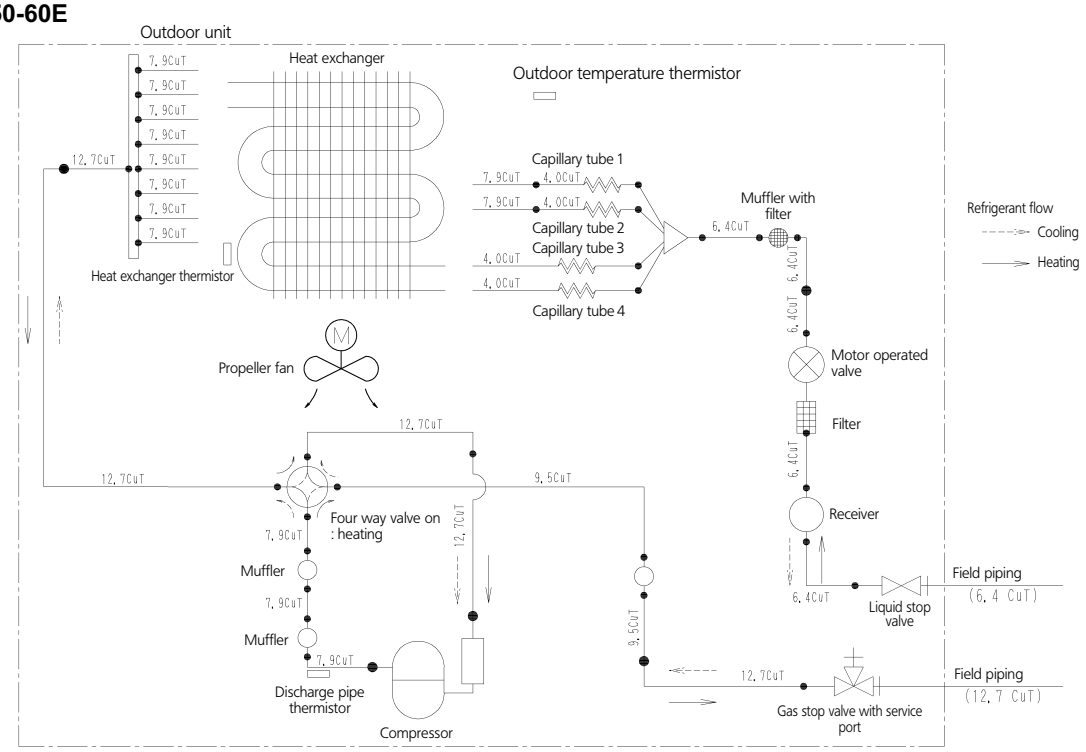
6 Piping diagram

RYN50-60E



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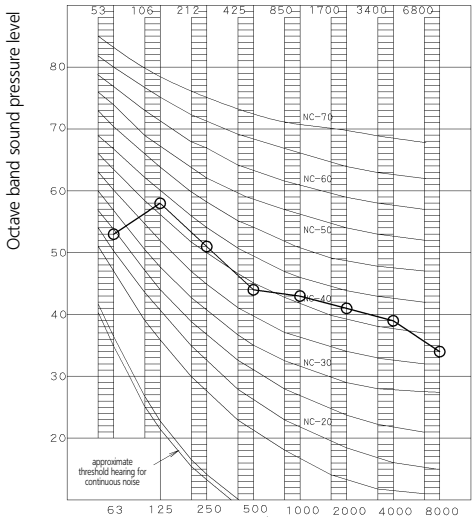
7 Sound data

7 - 1 Sound pressure spectrum

RYN50E (Cooling)



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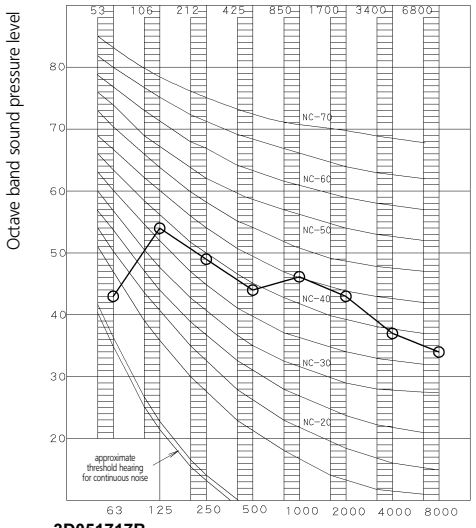
NOTES

1. Measure in anechoic room
2. Operation noise differs with operation and ambient conditions.
3. The operation noise measuring method is in accordance with JISC9612

Legend

50Hz, 220-240V

RYN50E (Heating)



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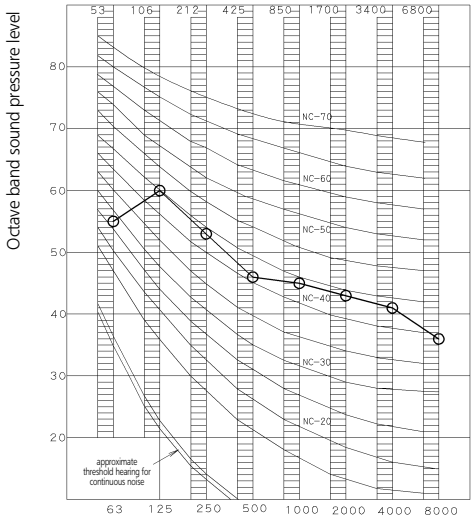
NOTES

1. Measure in anechoic room
2. Operation noise differs with operation and ambient conditions.
3. The operation noise measuring method is in accordance with JISC9612

Legend

50Hz, 220-240V

RYN60E (Cooling)



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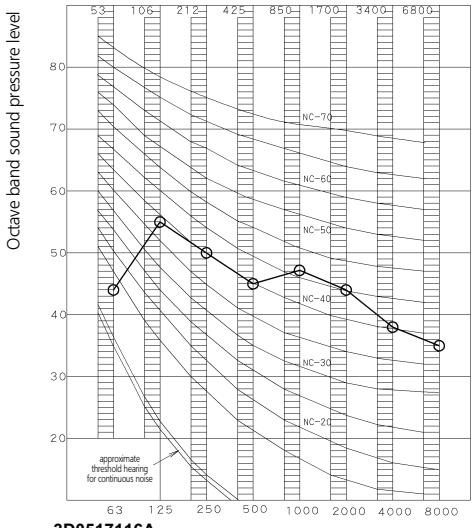
NOTES

1. Measure in anechoic room
2. Operation noise differs with operation and ambient conditions.
3. The operation noise measuring method is in accordance with JISC9612

Legend

50Hz, 220-240V

RYN60E (Heating)



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NOTES

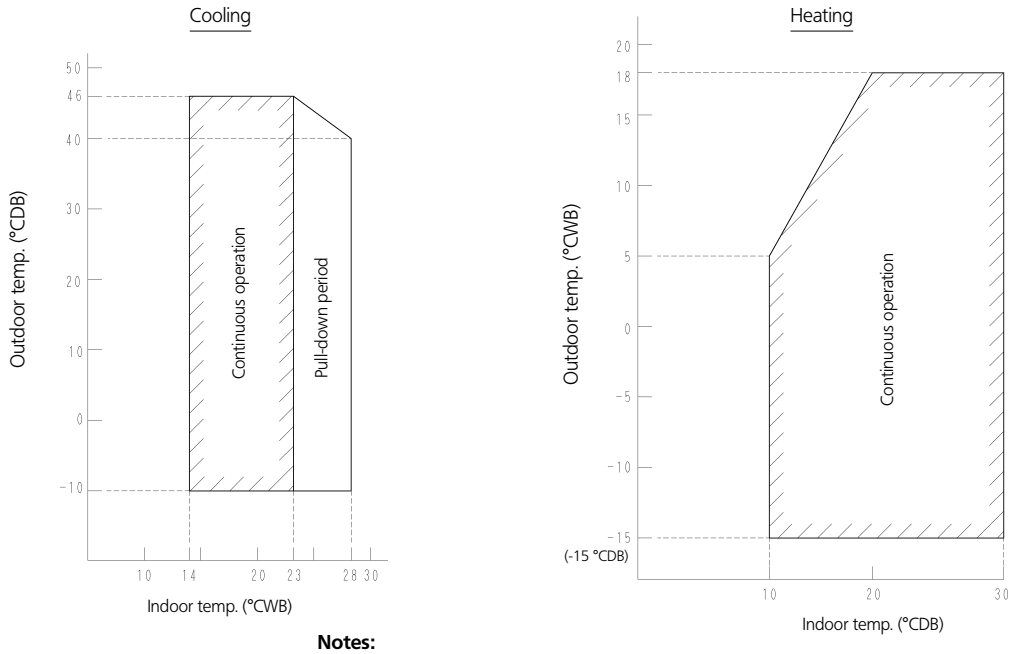
1. Measure in anechoic room
2. Operation noise differs with operation and ambient conditions.
3. The operation noise measuring method is in accordance with JISC9612

Legend

50Hz, 220-240V

8 Operation range

RYN50-60E



Notes:
The graphs are based on the following conditions:

- Equivalent piping length 7.5 m
- Level difference 0 m
- Air flow rate high

3D028318K

8 Operation range