

# 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



1  
1

## 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 <sup>3</sup> /min	48.9	50.9	
		Heating	m <sup>3</sup> /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

1  
2

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 Power	dBA	48.0		49.0	
		Sound Pressure	dBA				
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

1

3



# 4 Capacity tables

## 4 - 1 Cooling/Heating capacity tables

FTYN50F+RYN50E																					
Cooling																		AFR		14.7	
50Hz 220-240V																		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												AFR		16.1	
50Hz 220-240V												BF			
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				

3D051923A

SYMBOLS			NOTES		
AFR:	Air flow rate	(m <sup>3</sup> /min)	1	Ratings shown are net capacities which include a deduction for indoor fan motor heat	
BF:	Bypass factor		2	shows nominal (rated) capacities and power input.	
EWB:	Entering wet bulb temp.	(°C)	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.)	
EDB:	Entering dry bulb temp.	(°C)	4	About SHC which are not mentioned on the table, please calculate them with around values in direct proportion.	
TC:	Total capacity	(kW)	5	Capacities are based on following conditions: Corresponding refrigerant piping length: 7.5 m Level difference: 0 m	
SHC:	Sensible heating capacity	(kW)	6	Air flow rate (AFR) and Bypass factor (BF) are tabulated above.	
PI:	Power input	(kW)			

# 4 Capacity tables

## 4 - 1 Cooling/Heating capacity tables

FTYN50FV1B+RYN50E3V1B

### Cooling

50Hz 220-240V

AFR	14.7
BF	0.28

Indoor		Outdoor temperature (°CDB)																	
EWB (°C)	EDB (°C)	20			25			30			32			35			40		
		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 (°C)		-10		-5		0		6		10	
		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

3D051923A

#### SYMBOLS

AFR:	Air flow rate	(m <sup>3</sup> /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 tabulated above.

# 4 Capacity tables

## 4 - 1 Cooling/Heating capacity tables

FTYN60FV1B+RYN60E3V1B																					
Cooling																		AFR		16.2	
50Hz 220-240V																		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												AFR		17.4	
50Hz 220-240V															
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				

3D051924A

SYMBOLS				NOTES			
AFR:	Air flow rate	(m <sup>3</sup> /min)	1	Ratings shown are net capacities which include a deduction for indoor fan motor heat			
BF:	Bypass factor		2	shows nominal (rated) capacities and power input.			
EWB:	Entering wet bulb temp.	(°C)	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.)			
EDB:	Entering dry bulb temp.	(°C)	4	About SHC which are not mentioned on the table, please calculate them with around values in direct proportion.			
TC:	Total capacity	(kW)	5	Capacities are based on following conditions: Corresponding refrigerant piping length: 7.5 m Level difference: 0 m			
SHC:	Sensible heating capacity	(kW)	6	Air flow rate (AFR) and Bypass factor (BF) are tabulated above.			
PI:	Power input	(kW)					



# 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 (°C)	EDB (°C)	20			25			30			32			35			40		
		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	1.90	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 (°C)		-10		-5		0		6		10	
		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

3D051924A

#### SYMBOLS

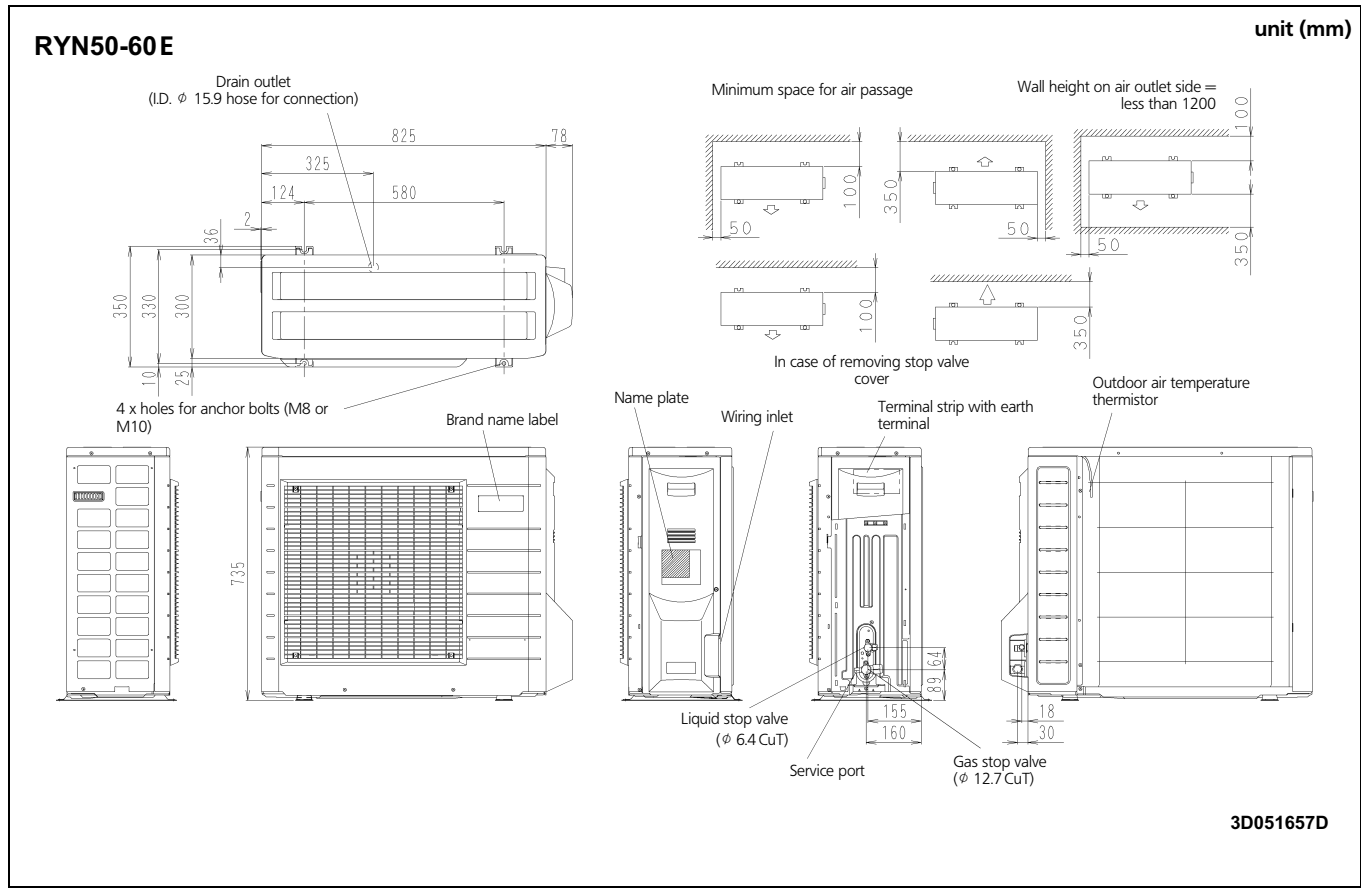
AFR:	Air flow rate	(m <sup>3</sup> /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°C)
EDB:	Entering dry bulb temp.	(°C)
TC:	Total capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)

#### NOTES

- Ratings shown are net capacities which include a deduction for indoor fan motor heat
-  shows nominal (rated) capacities and power input.
- 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.)
- About SHC which are not mentioned on the table, please calculate them with around values in direct proportion.
- Capacities are based on following conditions:  
Corresponding refrigerant piping length: 7.5 m  
Level difference: 0 m
- Air flow rate (AFR) and Bypass factor (BF) are tabulated above.

# 5 Dimensional drawing & centre of gravity

## 5 - 1 Dimensional drawing



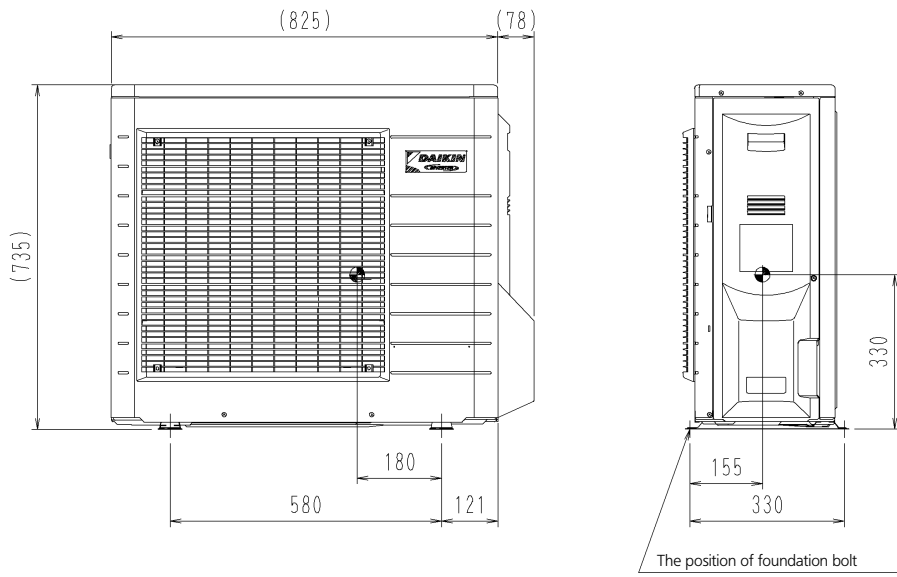
## 5 Dimensional drawing & centre of gravity

### 5 - 2 Centre of gravity

1

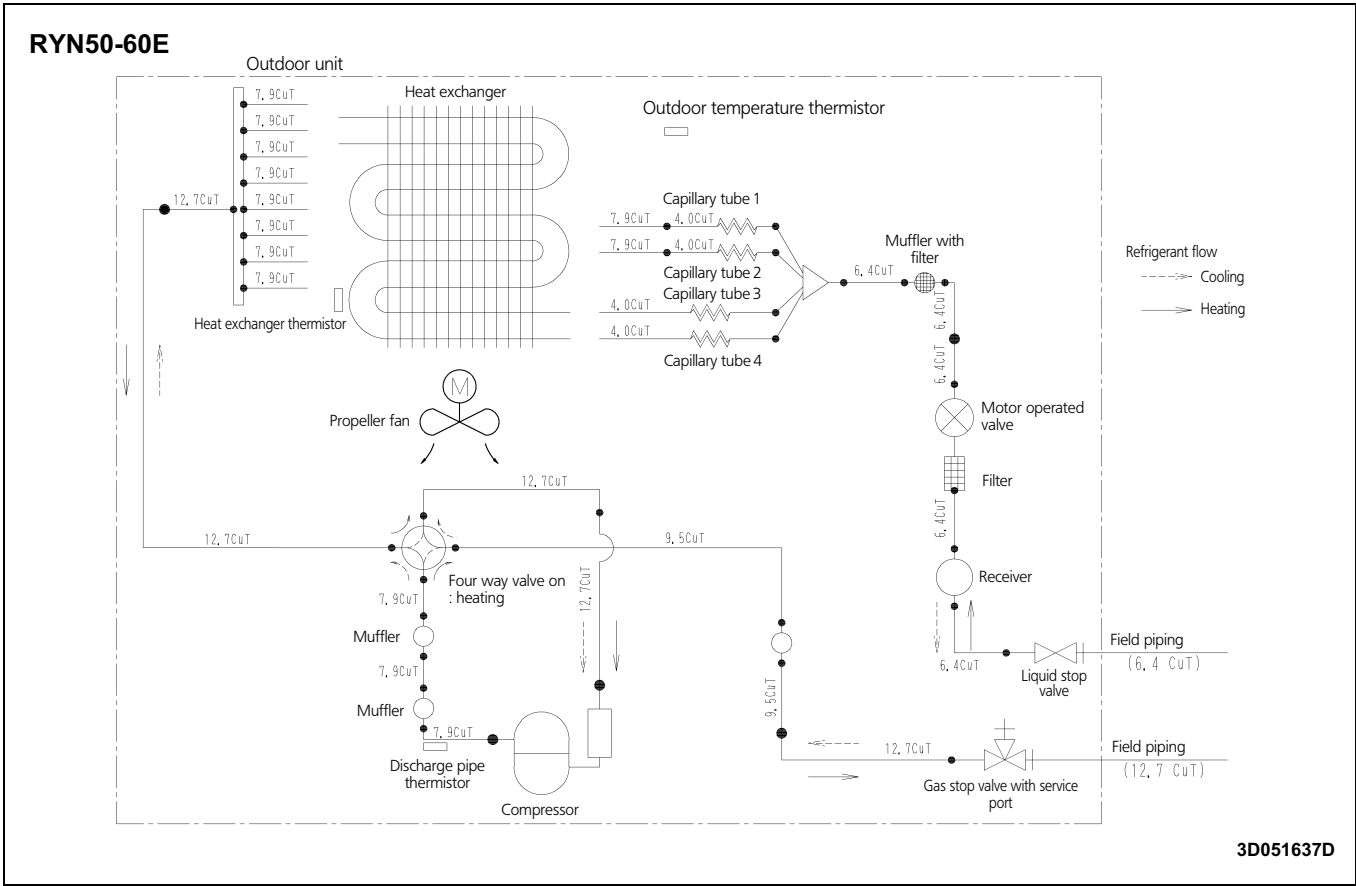
5

RYN50-60E



4D051638C

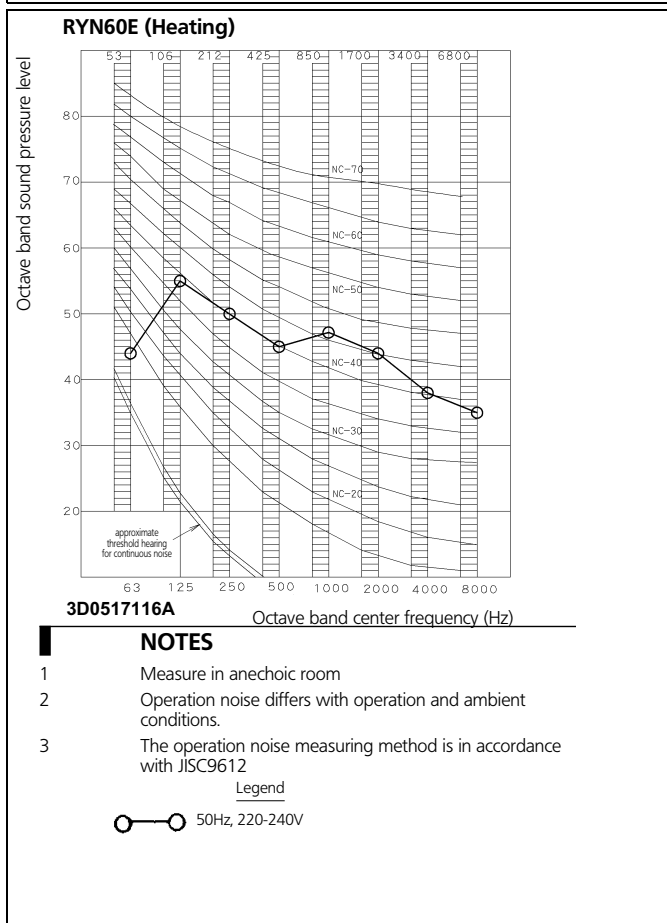
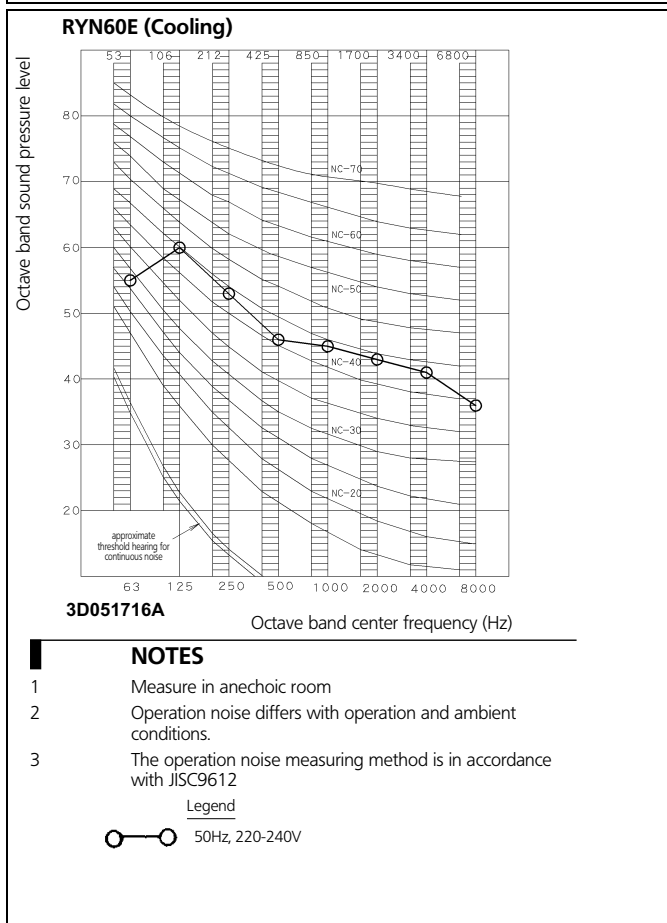
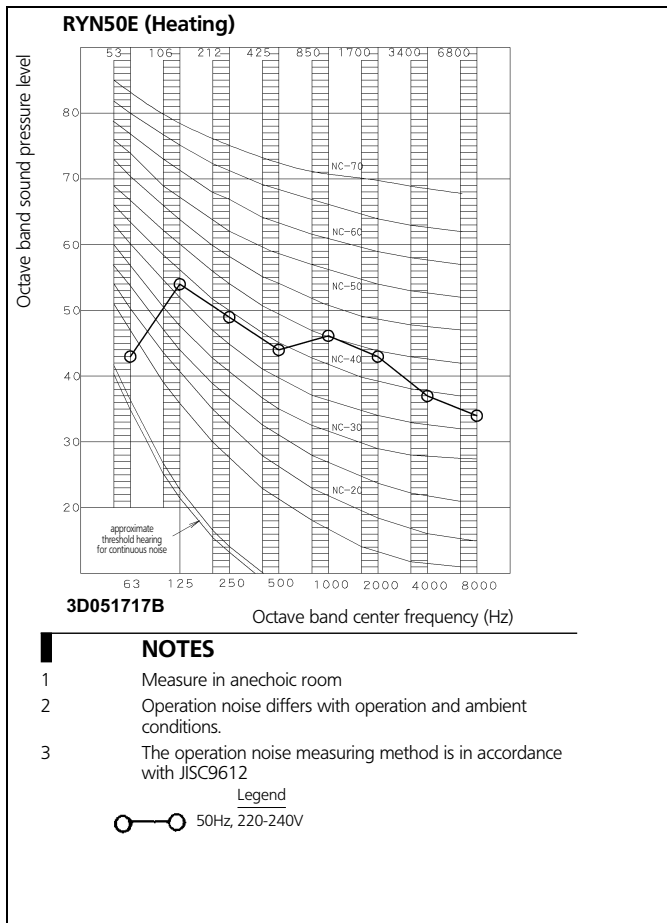
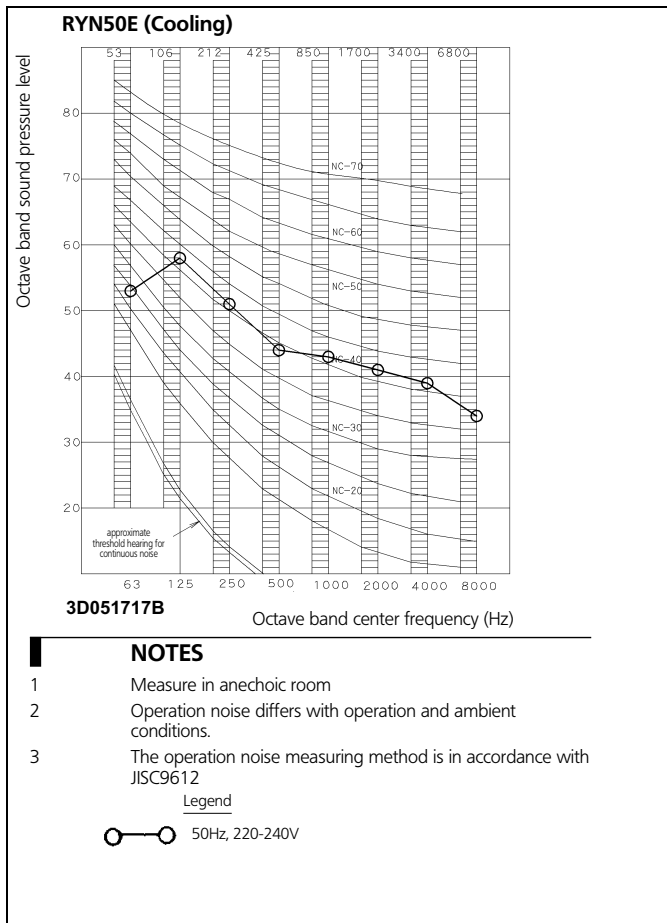
# 6 Piping diagram



# 7 Sound data

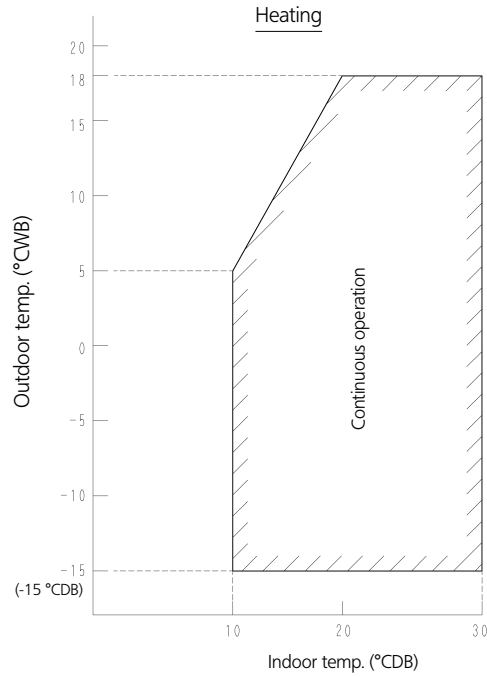
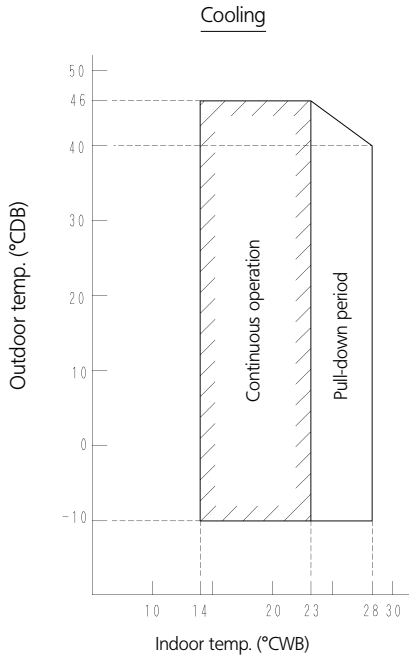
## 7 - 1 Sound pressure spectrum

1  
7



# 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

1

8