

CHAPTER 1. SPECIFICATION**[1] SPECIFICATION****1. AY-XP9GHR – AE-X9GHR**

ITEMS	MODEL	INDOOR UNIT AY-XP9GHR	OUTDOOR UNIT AE-X9GHR
Cooling capacity(Min. - Max.)	kW	2.50 (0.9 - 3.0)	
Heating capacity(Min. - Max.)	kW	3.20 (0.9 - 5.0)	
Moisture removal(at cooling)	Liters/h	0.3	

Electrical data

Phase			Single	
Rated frequency	Hz		50	
Rated voltage	V		230	
Rated current ☆ (Min - Max.)	Cool	A	2.8 (0.8 - 3.8)	
	Heat	A	3.4 (0.7 - 5.9)	
Rated input ☆ (Min - Max.)	Cool	W	540 (150 - 750)	
	Heat	W	700 (130 - 1300)	
Power factor ☆	Cool	%	84	
	Heat	%	90	
Compressor	Type		Hermetically sealed rotary type	
	Model		5RS092XDF	
	Oil charge		320cc (RB68A or Freil Alphc 68M)	
Refrigerant system	Evaporator		Louver Fin and Grooved tube type	
	Condenser		Corrugate Fin and Grooved tube type	
	Control		Expansion valve	
	Refrigerant (R410A)		1000g	
	De-ice system		Micro computer controled reversed systems	
Noise level (at cooling)	High	dB(A)	42	46
	Low	dB(A)	37	–
	Soft	dB(A)	26	–

Fan system

Drive	Direct drive			
Air flow quantity (at cooling)	High	m3/min.	10.3	28.1
	Low	m3/min.	8.2	–
	Soft	m3/min.	5.1	–
Fan	Cross flow fan		Propeller fan	

Connections

Refrigerant coupling	Flare type			
Refrigerant tube size Gas, Liquid	3/8", 1/4"			
Drain piping mm	O.D φ18			

Others

Safety device	Compressor: Thermal protector			
	Fan motors: Thermal fuse			
	Fuse, Micro computer control			
Air filters	Polypropylene net (Washable)			
Net dimensions	Width	mm	790	780
	Height	mm	278	540
	Depth	mm	198	265
Net weight	kg	10	37	

NOTE: The condition of star"☆" marked item are 'EN 14511': 2004(E).

2. AY-XP12GHR – AE-X12GHR

ITEMS	MODEL	INDOOR UNIT	OUTDOOR UNIT
		AY-XP12GHR	AE-X12GHR
Cooling capacity(Min. - Max.)	kW	3.5 (0.9 - 4.0)	
Heating capacity(Min. - Max.)	kW	4.2 (0.9 - 6.0)	
Moisture removal(at cooling)	Liters/h	1.1	

Electrical data

Phase		Single		
Rated frequency	Hz	50		
Rated voltage	V	230		
Rated current ☆ (Min - Max.)	Cool	A	4.3 (0.8 - 6.0)	
	Heat	A	4.5 (0.7 - 7.5)	
Rated input ☆ (Min - Max.)	Cool	W	900 (150 - 1300)	
	Heat	W	970 (130 - 1700)	
Power factor ☆	Cool	%	91	
	Heat	%	94	
Compressor	Type	Hermetically sealed rotary type		
	Model	5RS092XDF		
	Oil charge	320cc (RB68A or Freil Alphc 68M)		
Refrigerant system	Evaporator	Louver Fin and Grooved tube type		
	Condenser	Corrugate Fin and Grooved tube type		
	Control	Expansion valve		
	Refrigerant (R410A)	1000g		
	De-ice system	Micro computer controlled reversed systems		
Noise level (at cooling)	High	dB(A)	43	49
	Low	dB(A)	39	–
	Soft	dB(A)	27	–

Fan system

Drive	Direct drive			
Air flow quantity (at cooling)	High	m3/min.	10.7	30.2
	Low	m3/min.	9.3	–
	Soft	m3/min.	6.0	–
Fan	Cross flow fan		Propeller fan	

Connections

Refrigerant coupling	Flare type			
Refrigerant tube size Gas, Liquid	1/2", 1/4"			
Drain piping mm	O.D φ18			

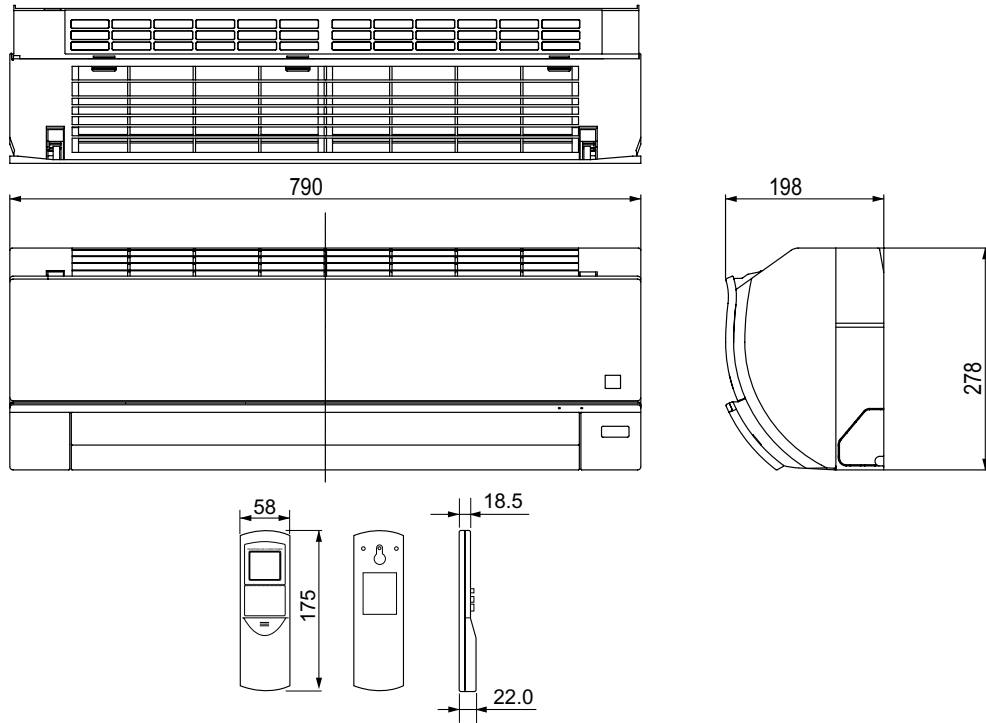
Others

Safety device	Compressor: Thermal protector			
	Fan motors: Thermal fuse			
	Fuse, Micro computer control			
Air filters	Polypropylene net (Washable)			
Net dimensions	Width	mm	790	780
	Height	mm	278	540
	Depth	mm	198	265
Net weight	kg	10	37	

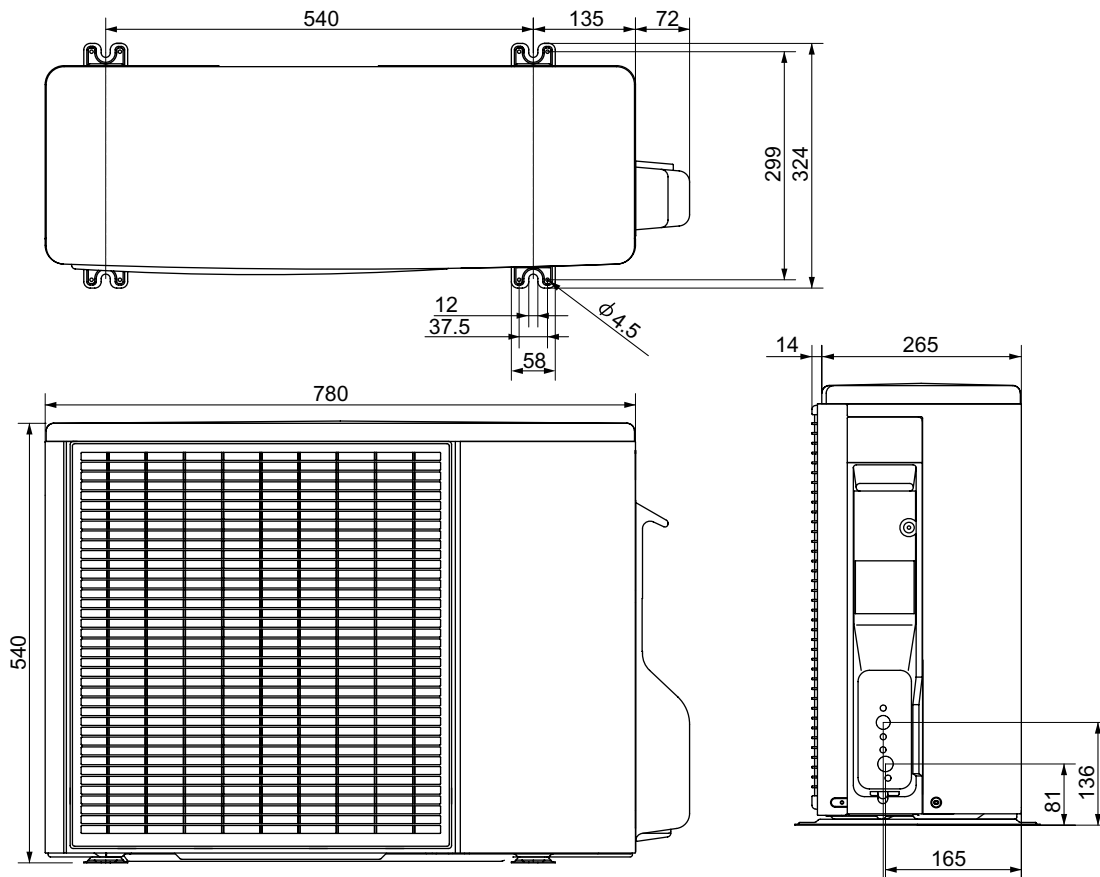
NOTE: The condition of star"☆" marked item are 'EN 14511': 2004(E).

[2] EXTERNAL DIMENSION

1. Indoor unit



2. Outdoor unit



[3] WIRING DIAGRM

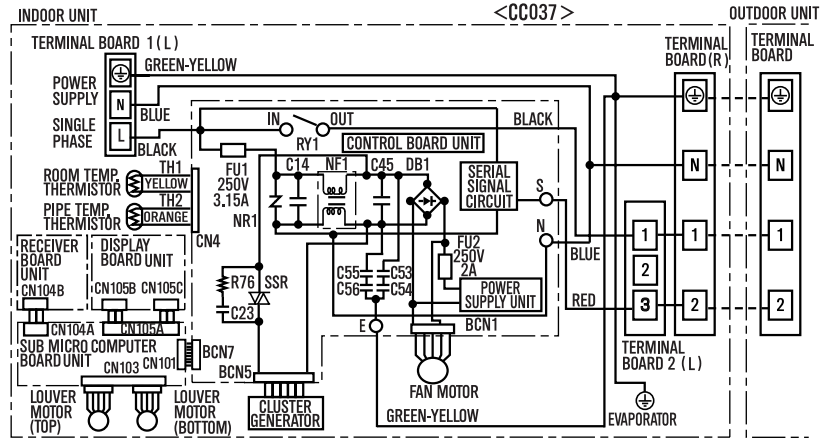
1. Indoor unit

LED INDICATION FOR SELF-DIAGNOSIS

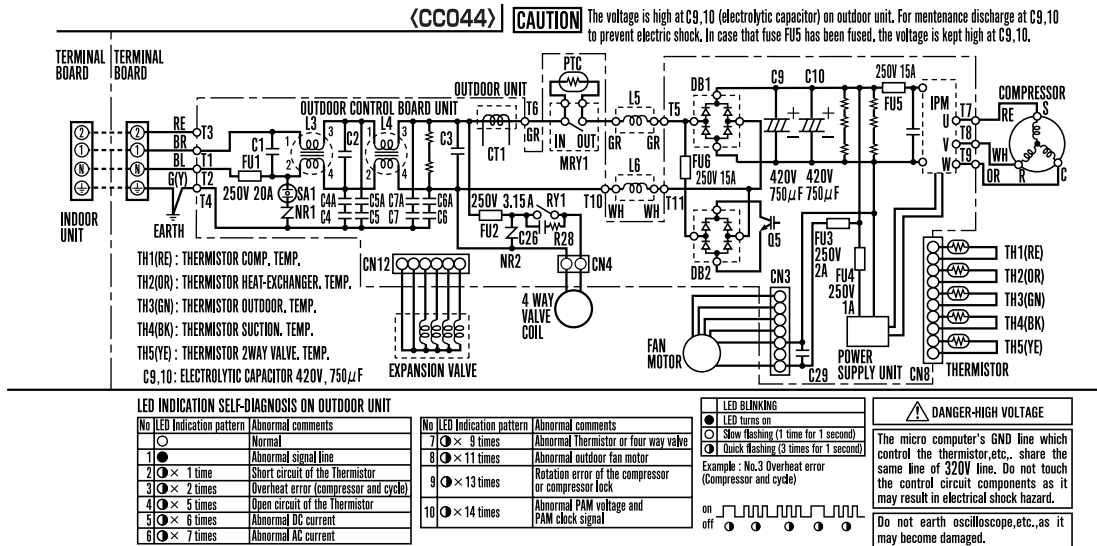
Temperature Indicator Blinking No.	Abnormal contents
1	Short circuit of the Thermistor
2	Overheat error (compressor and cycle)
5	Open circuit of the Thermistor
6	Abnormal DC current
7	Abnormal AC current
9	Abnormal Thermistor or four way valv
11	Abnormal outdoor fan motor
13	Rotation error of the compressor or compressor lock
14	Abnormal PAM voltage and PAM clock signal
17	Open circuit of serial signal line
18	Short circuit of serial signal line
19	Abnormal fan motor of indoor unit

<Indication of the abnormal condition>

LED indicator will blink, if the set is in abnormal condition.



2. Outdoor unit



[4] ELECTRICAL PARTS

1. Indoor unit

DESCRIPTION	MODEL	REMARKS
Indoor fan motor	MLB177	DC Motor
Indoor fan motor capacitor	-	-
Transformer	-	-
FUSE1	-	QFS-GA062JBZZ (250V, 3.15A)
FUSE2	-	QFS-GA063JBZZ (250V, 2A)

2. Outdoor Unit

DESCRIPTION	MODEL	REMARKS
Compressor	5RS092XDF	D.C. brush-less motor
Outdoor fan motor	MLB078	DC Motor
Outdoor fan motor capacitor	-	-
Fu4	-	QFS-GA064JBZZ(250V, 1A)
Fu3	-	QFS-GA051JBZZ(250V, 2A)
Fu2	-	QFS-GA052JBZZ(250V, 3.15A)
Fu1	-	QFS-CA001JBZZ(250V, 20A)
Fu5, 6	-	QFS-CA002JBZZ(250V, 15A)