



ROOM AIR CONDITIONER

INDOOR UNIT

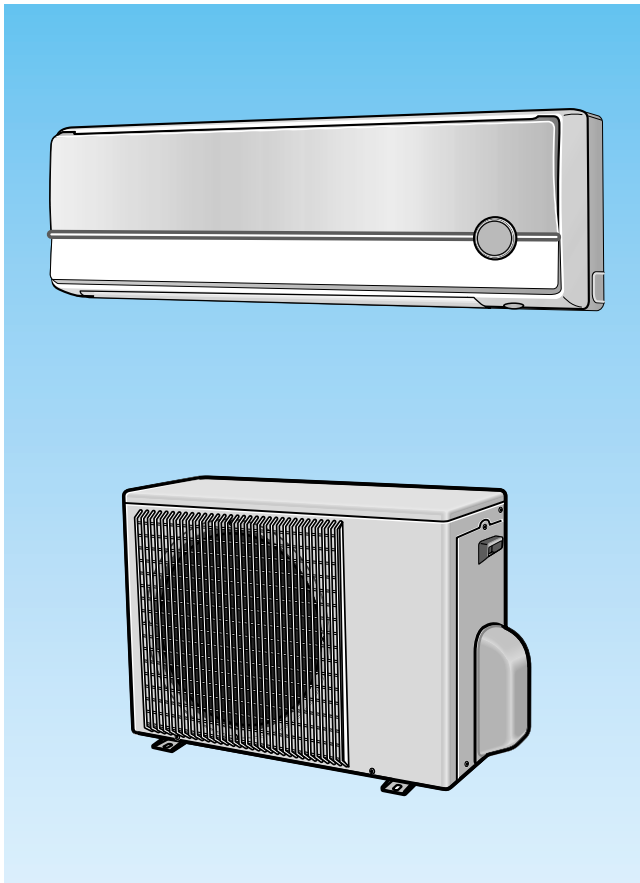
AQ12PGGE
SH12ZPG
SH12ZPGA
SH09ZPG
SH09ZPGA
SH07ZPG
SH07ZPGA

OUTDOOR UNIT

UQ12PGGE
SH12ZPGX
SH12ZPGAX
SH09ZPGX
SH09ZPGAX
SH07ZPGX
SH07ZPGAX

SERVICE Manual

AIR CONDITIONER



CONTENTS

1. Product Specifications
2. Operating Instructions
3. Disassembly and Reassembly
4. Exploded Views and Parts List
5. Block Diagrams
6. PCB Diagrams
7. Wiring Diagrams
8. Schematic Diagrams

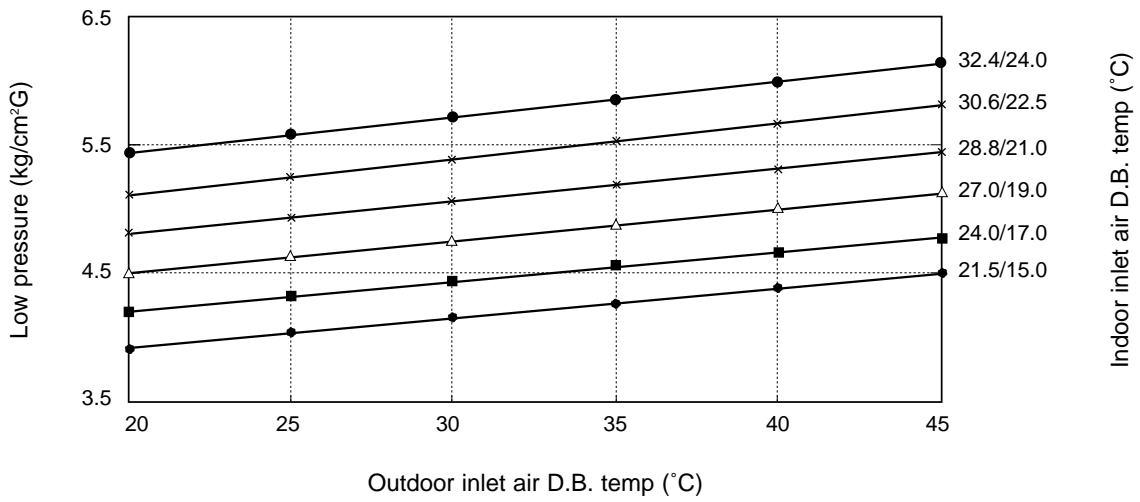
1. Product Specifications

1-1 Table

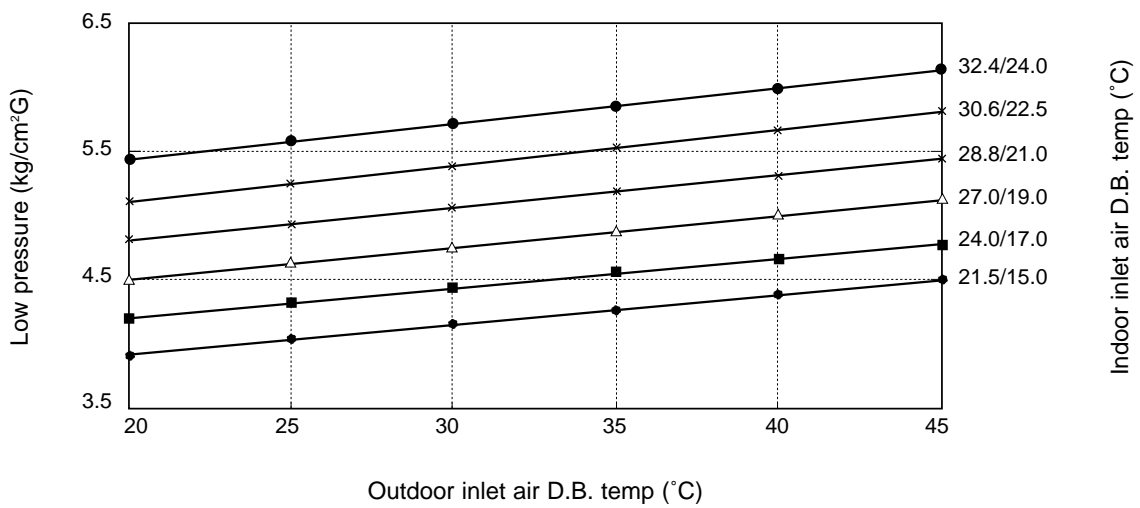
Item			Model	AQ12PGGE SH12ZPG SH12ZPGA		SH09ZPG SH09ZPGA		SH07ZPG SH07ZPGA		
				Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	Indoor unit	Outdoor unit	
Type			Wall-mounting		Wall-mounting		Wall-mounting			
Performance	Cooling		kW	3.5		2.6		2.3		
	Heating		kW	3.8		2.9		2.4		
	Dehumidifying		ℓ/h	1.9		1.4		0.9		
	Air volume	Cooling	m ³ /min	8.2	24	6.6	24	6.0	24	
		Heating		9.1	24	7.1	24	6.5	24	
	Noise	Cooling	dB	42	50	39	49	36	48	
		Heating		42	50	39	49	36	48	
	Energy efficiency ratio	Cooling	W/W	3.21		2.93		3.22		
Heating		3.41		3.29		3.43				
Power		V-Hz	1-220 / 240-50		1-220 / 240-50		1-220 / 240-50			
Power	Power Consumption	Cooling	W	1090		810		715		
		Heating		1115		870		700		
	Operating Current	Cooling	A	5.0		3.7		3.2		
		Heating		5.0		3.9		3.2		
	Power factor	Cooling	%	94.8		95.2		97.1		
		Heating		97.0		97.0		95.1		
	Starting current		A	32.0		21.0		18.0		
	Power cord	Length		m	-		-		-	
Number of core wire			-		-		-			
Capacity		A	250V-10 / 16A		250V-10 / 16A		250V-10 / 16A			
Size	Outer Dimension	Width x Height		mm	890x285x179	695x530x280	795x258x179	695x530x280	795x258x179	695x530x280
		x Depth		inch	35.0x11.2x7.0	27.4x20.9x11.0	31.3x10.2x7.0	27.4x20.9x11.0	31.3x10.2x7.0	27.4x20.9x11.0
	Weight		kg	8.5	33.0	7.5	28.0	7.5	27.5	
	Refrigerant pipe	Liquid	mm x L(MT)	ø6.35 x 5		ø6.35 x 5		ø6.35 x 5		
		GAS	mm x L(MT)	ø12.7 x 5		ø9.52 x 5		ø9.52 x 5		
	Drain hose		D x L(mm)	ø18 x 2000		ø18 x 2000		ø18 x 2000		
	Compressor	Type		Rotary		Rotary		Rotary		
		Motor	Type	-	-	-	-	-	-	
			Rated output	-	-	-	-	-	-	
	Blower	Type		Cross-flow	Propeller	Cross-flow	Propeller	Cross-flow	Propeller	
Motor		Type	steel	steel	steel	steel	steel	steel		
		Rated output	W	15	25	11	25	11	25	
Heat exchanger			2ROW 12STEP	2ROW 24STEP	2ROW 10STEP	1ROW 20STEP	2ROW 10STEP	1ROW 20STEP		
Refrigerant control unit			CAPILLARY TUBE		CAPILLARY TUBE		CAPILLARY TUBE			
Freezer oil capacity			cc	410	360		360			
Refrigerant to change(R-22)			g	980	740		700			
Protection device			RAC 12123-9622		RAC 12054-9612		RAC 12144-9622			
Cooling test Condition			INDOOR UNIT : DB27°C WB19°C			OUTDOOR UNIT : DB35°C WB24°C				
Maximum operation Condition			INDOOR UNIT : DB32°C WB23°C			OUTDOOR UNIT : DB43°C WB26°C				

1-2 Pressure Graph

■ 12K BTU



■ 9K BTU



■ 7K BTU

