

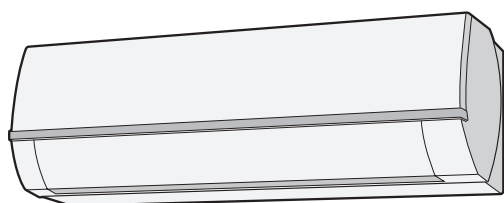
SHARP SERVICE MANUAL

S3214A3AHAP8LMBT

SPLIT TYPE

MODEL ROOM AIR CONDITIONER

INDOOR UNIT	OUTDOOR UNIT
AH-PS19	AU-PS19
AH-PS24	AU-PS24



In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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Parts Guide

Parts marked with "⚠" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

SHARP CORPORATION

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The contents are subject to change without notice.

2. AH-PS19 , AU-PS19

ITEMS			INDOOR UNIT		OUTDOOR UNIT	
			AH-PS19		AU-PS19	
Cooling capacity ☆		kW	5.2			
Moisture removal ☆		Liters/h	1.8			
Electrical data						
Phase		-	Single			
Rated frequency		Hz	50			
Rated voltage		V	220			
Rated current ☆		A	7.7			
Rated input ☆		kW	1.609			
Rated factor ☆		%	98			
Compressor	Type		Hermetically sealed rotary type			
	Model		55R433VU+5ASI			
	Oil charge		560cc [SUNISO4GSD or EQUIVALENT]			
Refrigerant system	Evaporator		Louver fin and Grooved tube type			
	Condenser		Louver fin and Grooved tube type			
	Control		Capillary tube			
	Refrigerant volume		R22 1540g			
	De-ice system		N/A			
Noise level (at cooling)	High	dB(A)	46		54	
	Low	dB(A)	44		-	
	Soft	dB(A)	37		-	
Fan system						
Drive			Direct drive			
Air flow quantity (at cooling)	Turbo	m³/min.	18.7		39.9	
	High	m³/min.	18.2			
	Low	m³/min.	16.4			
	Soft	m³/min.	13.7			
Fan			Cross flow fan		Propeller fan	
Connections						
Refrigerant coupling			Flare type			
Refrigerant tube size Gas, Liquid			5/8", 1/4"			
Drain piping mm			O.DØ20			
Others						
Safety device			Compressor: Internal protector			
			Fan motors: Thermal protector (Internal)			
			Fuse, Micro computer control			
Air filters			Polypropylene net (Washable)			
Net dimensions	Width	mm	1040		890	
	Height	mm	325		645	
	Depth	mm	222		290	
Net weight		kg	14		54	

Note: The condition of star (☆) marked item are 'TIS2134-2545'.

AH-PS19

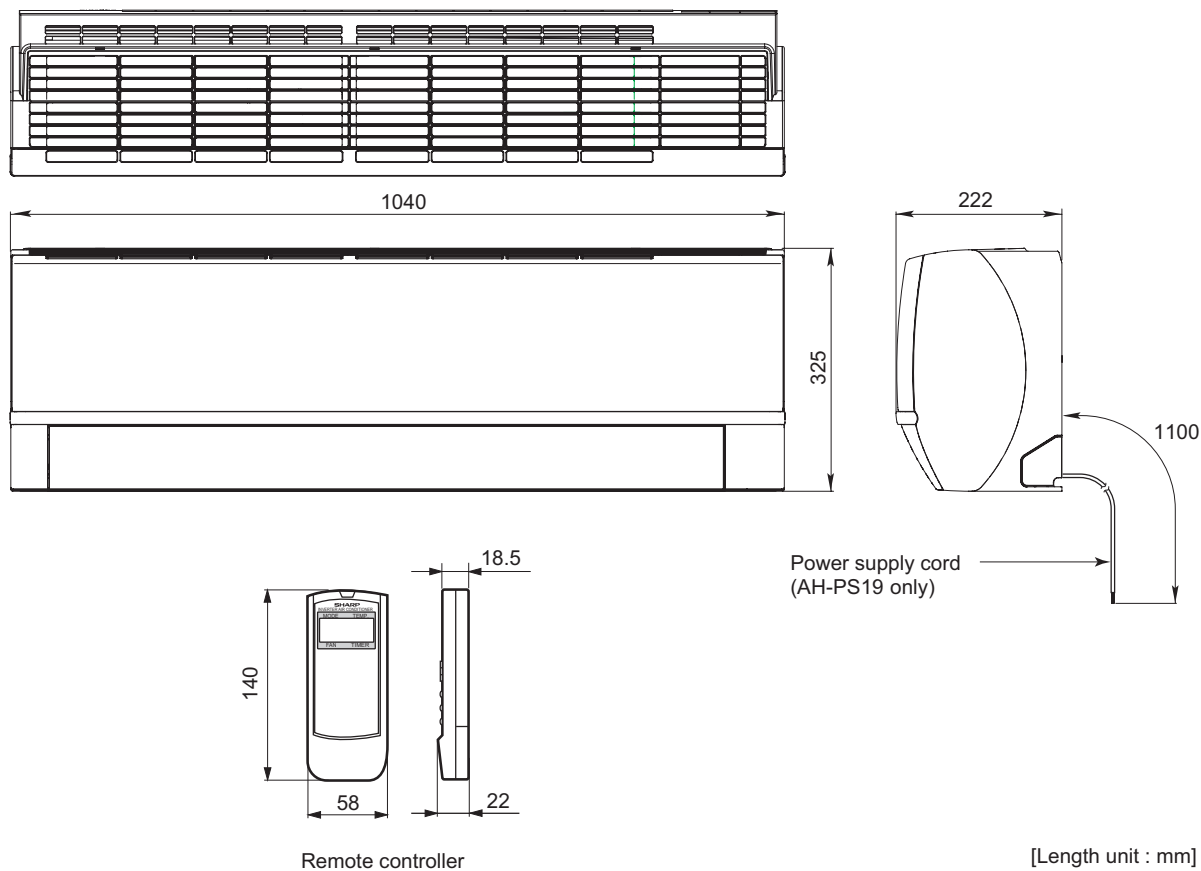
2. AH-PS24 , AU-PS24

ITEMS			INDOOR UNIT		OUTDOOR UNIT	
			AH-PS24		AU-PS24	
Cooling capacity ☆		kW	6.5			
Moisture removal ☆		Liters/h	2.4			
Electrical data						
Phase		-	Single			
Rated frequency		Hz	50			
Rated voltage		V	220			
Rated current ☆		A	9.6			
Rated input ☆		kW	2.012			
Rated factor ☆		%	98			
Compressor	Type		Hermetically sealed rotary type			
	Model		QP390PAA			
	Oil charge		700cc [SUNISO4GSD or EQUIVALENT]			
Refrigerant system	Evaporator		Louver fin and Grooved tube type			
	Condenser		Louver fin and Grooved tube type			
	Control		Capillary tube			
	Refrigerant volume		R22 1450g			
	De-Ice system		N/A			
Noise level (at cooling)	High	dB(A)	46	56		
	Low	dB(A)	44	-		
	Soft	dB(A)	37	-		
Fan system						
Drive			Direct drive			
Air flow quantity (at cooling)	Turbo	m³/min.	18.7	50		
	High	m³/min.	18.2			
	Low	m³/min.	16.4			
	Soft	m³/min.	13.7			
Fan			Cross flow fan		Propeller fan	
Connections						
Refrigerant coupling			Flare type			
Refrigerant tube size Gas, Liquid			5/8", 1/4"			
Drain piping mm			O.D Ø20			
Others						
Safety device			Compressor: Internal protector			
			Fan motors: Thermal protector (Internal)			
			Fuse, Micro computer control			
Air filters			Polypropylene net (Washable)			
Net dimensions	Width	mm	1040	800		
	Height	mm	325	890		
	Depth	mm	222	320		
Net weight		kg	14	55		

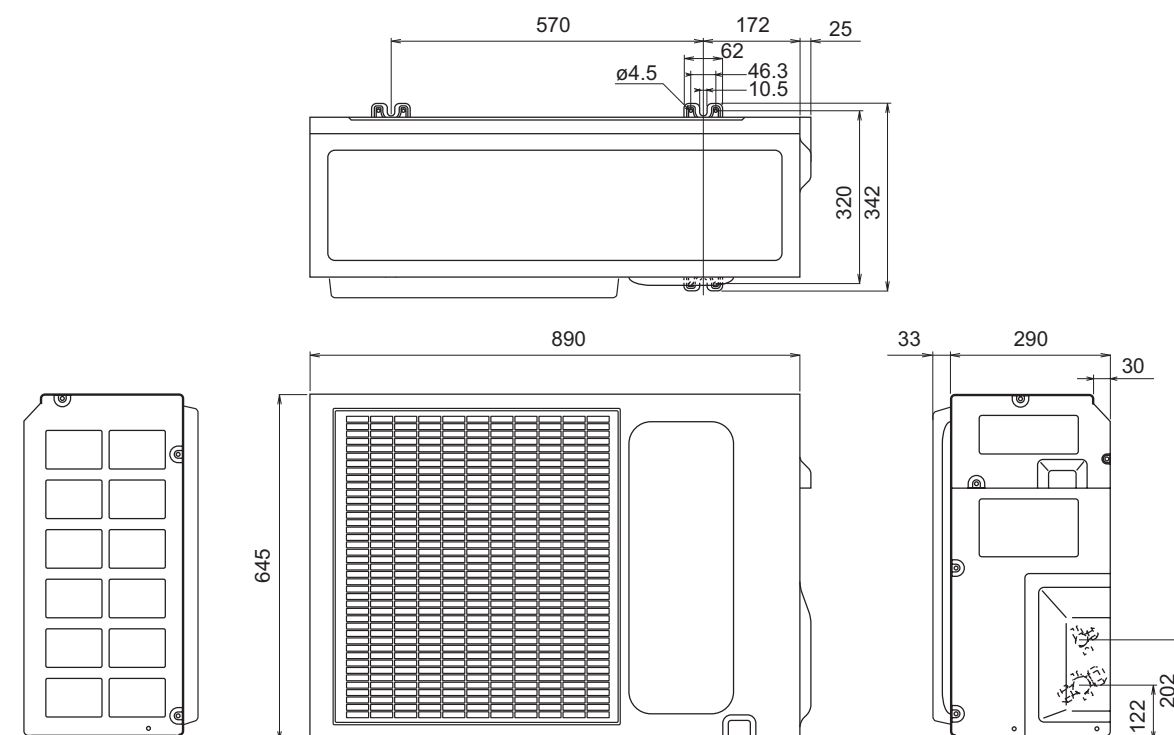
Note: The condition of star (☆) marked item are 'TIS2134-2545'.

[2] EXTERNAL DIMENTIONS

1. Indoor unit

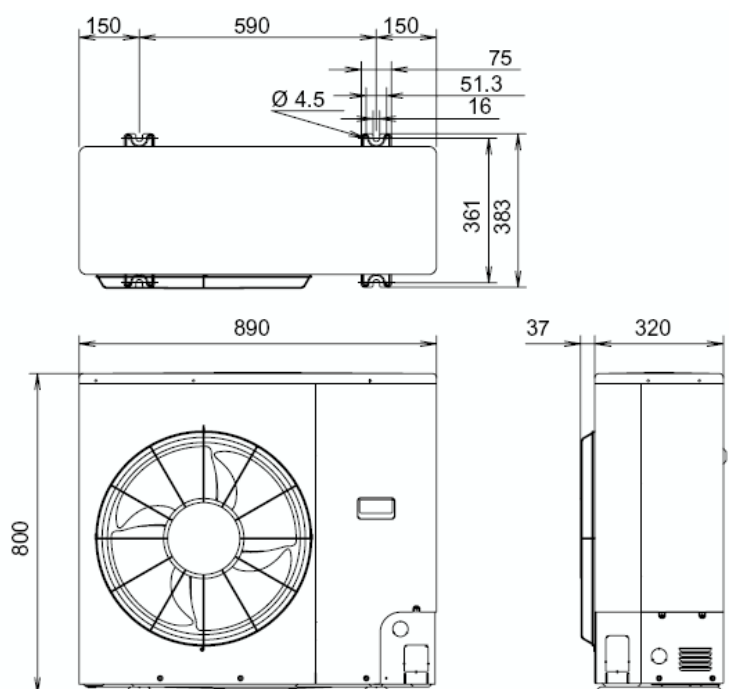


2. Outdoor unit (AU-PS19)



AH-PS19

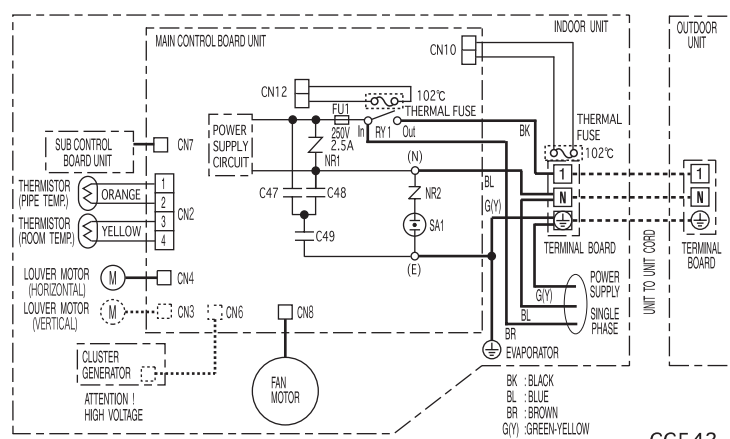
3. Outdoor unit (AU-PS24)



[3] WIRING DIAGRAMS

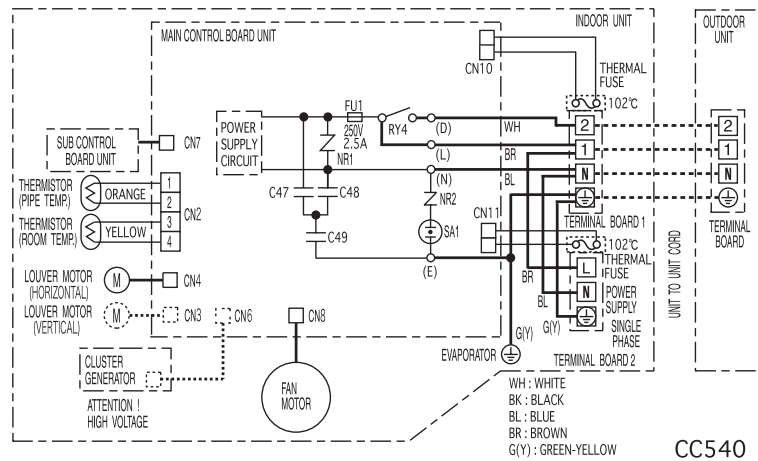
1. Indoor unit

1.1. AH-PS19



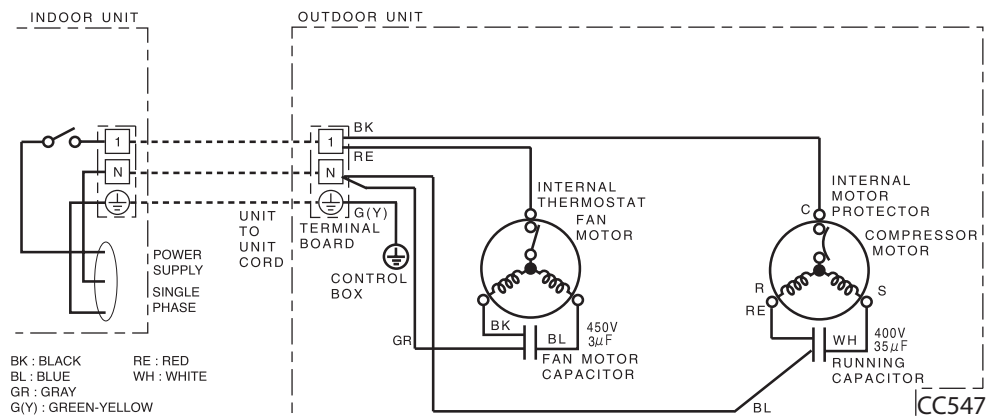
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1.2. AH-PS24

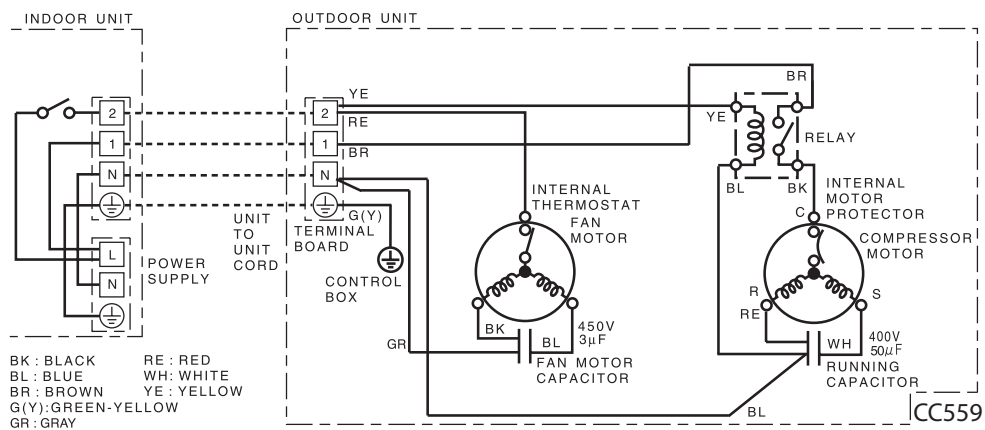


2. Outdoor unit

2.1. AU-PS19



2.2. AU-PS24



AH-PS19

[4] ELECTRICAL PARTS

1. Indoor unit

Part No.	Part Name	Items	Specifications	
			AH-PS19	AH-PS24
1	Terminal Board	Rating	300V 25A	
3	Relay-1 (RY1)	Rating	AC250V 20A Coil Volt.: 12V	—
4	Relay-2 (RY4)	Rating	—	AC250V 5A Coil Volt.: 12V
5	Printed Wiring Board	Material	Paper Base Phenolic Resin (UL 94V-0)	
7	Fan motor	Rating	DC 340V, 32W, 8-Poles	
		Type	MLB420	
8	Power Supply Cord	Rating	3G 1.5mm ²	—
		Type	H05VV-F	—
9	Louver Motor	Rating	DC12V 250	
		Type	35BYJ46-509	

2. Outdoor unit

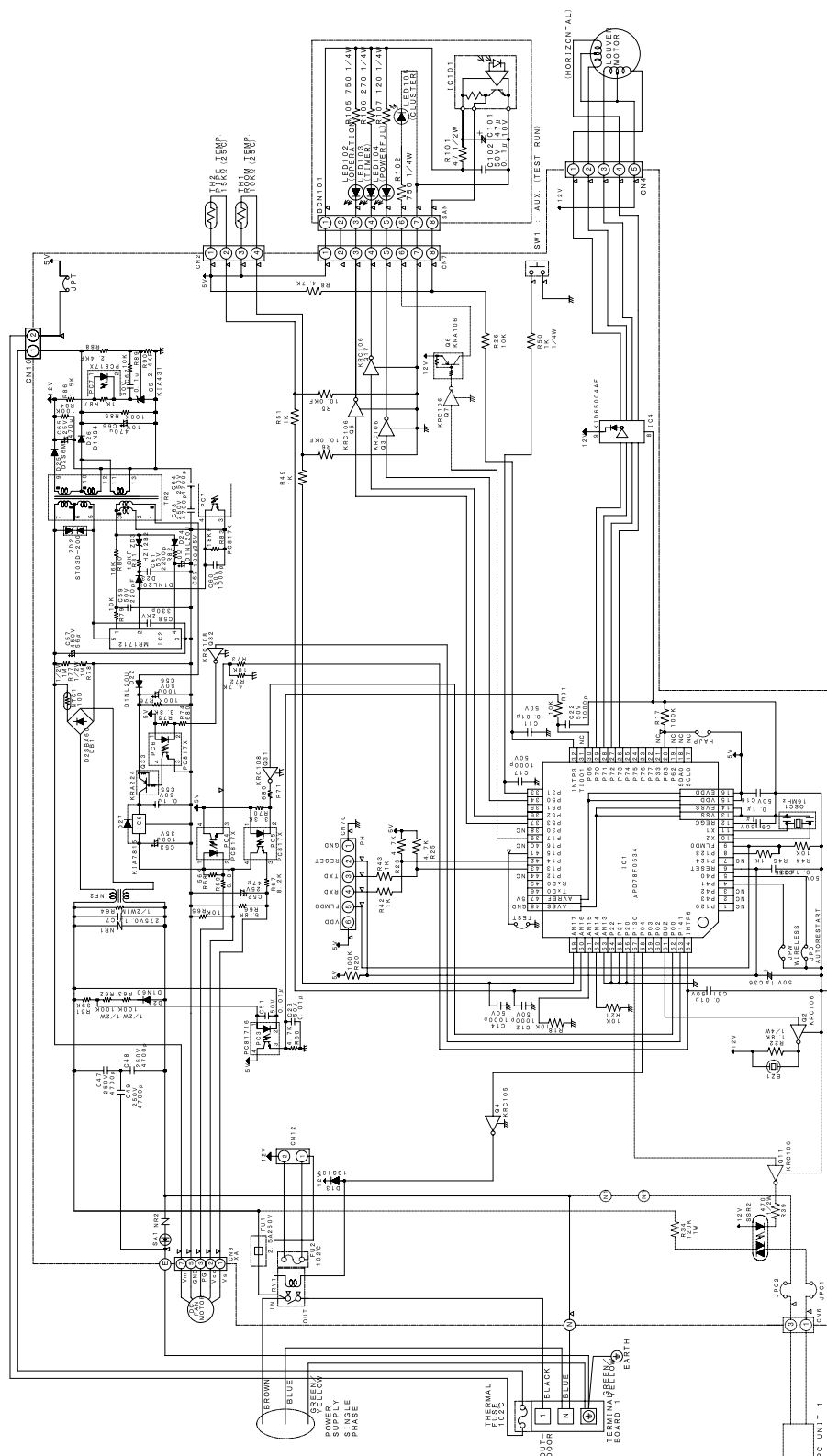
Part No.	Part Name	Items	Specifications	
			AU-PS19	AU-PS24
1	Terminal Board	Rating	300V 25A	
2	Fan motor Capacitor	Rating	450V 3μF	450V 3μF
3	Running Capacitor	Rating	400V 35μF	400V 50μF
4	Compressor	Rating	AC220 - 240V 50Hz 1601W	AC220 - 240V 50Hz 2471W
		Type	50R433VU+5ASI	QP390PAA
		Protector	INTERNAL	
5	Fan motor	Rating	220 - 240VAC 50Hz 46W 6-Pole	220 - 240VAC 50Hz 48W 6-Pole
		Type	MLB428	MLB428
		Thermal protector (Internal)	Cut off 135°C±5°C	
6	Relay 4	Rating	—	AC250V 30A Coil volt: 200 -240V

CHAPTER 2. EXPLANATION OF CIRCUIT AND OPERATION

[1] MICROCOMPUTER CONTROL SYSTEM

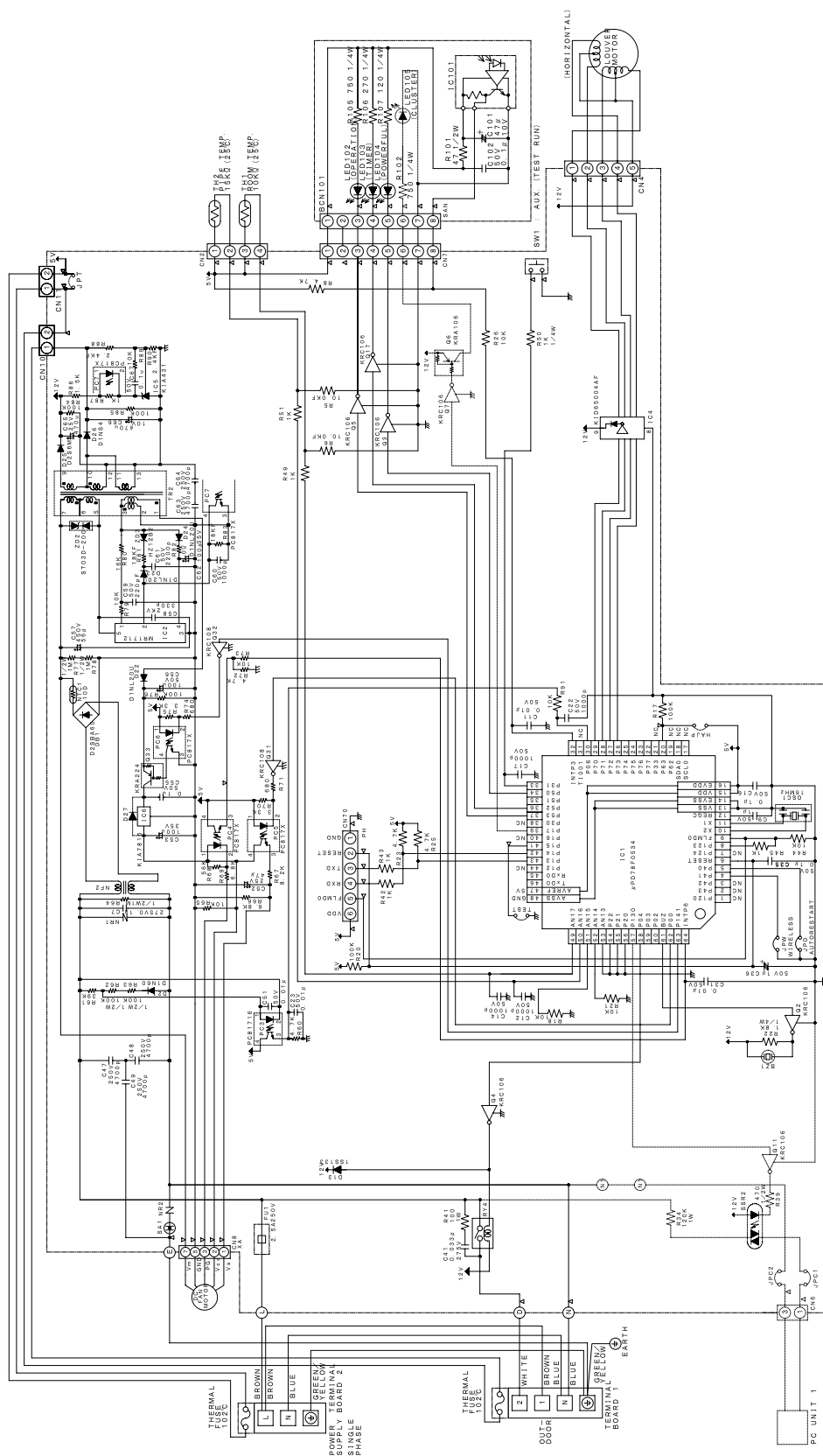
1. Electronic control circuit diagram

1.1. AH-PS19



AH-PS19

1.2. AH-PS24



2. Printed wiring diagram

2.1. AH--PS19

