

SERVICE MANUAL (Basic Information)

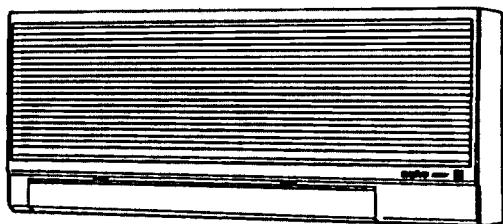
**KHS0921 / CH0921
KHS0922 / CH0922
KHS1222 / CH1222**



SPLIT SYSTEM AIR CONDITIONER

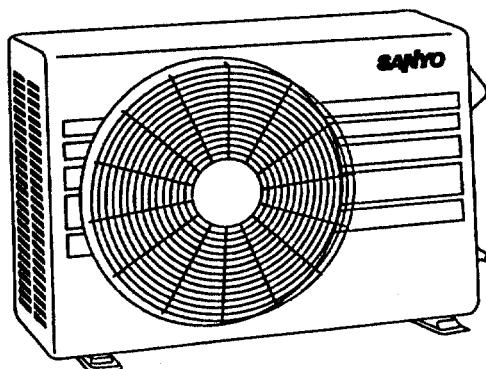
REVISED

Indoor Unit

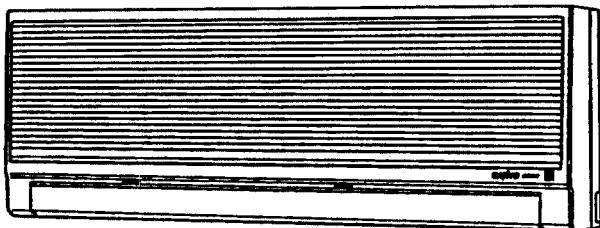


KHS0921 / KHS0922

Outdoor Unit



CH0921 / CH0922 / CH1222



KHS1222



8526481017200

REFERENCE NO. WM-700698

(W)

SERVICE MANUAL

**KHS0921 / CH0921
KHS0922 / CH0922
KHS1222 / CH1222**

(Basic Information)

IMPORTANT! **Please Read Before Starting**

This air conditioning system meets strict safety and operating standards. As the installer or service person, it is an important part of your job to install or service the system so it operates safely and efficiently.

For safe installation and trouble-free operation, you must:

- Carefully read this instruction booklet before beginning
- Follow each installation or repair step exactly as shown
- Observe all local, state, and national electrical codes
- Pay close attention to all warning and caution notices given in this manual



WARNING:

This symbol refers to a hazard or unsafe practice which can result in severe personal injury or death.



CAUTION:

This symbol refers to a hazard or unsafe practice which can result in personal injury or product or property damage.

If Necessary, Get Help

These instructions are all you need for most installation sites and maintenance conditions. If you require help for a special problem, contact our sales/service outlet or your certified dealer for additional instructions.

In Case of Improper Installation

The manufacturer shall in no way be responsible for improper installation or maintenance service, including failure to follow the instructions in this document.

SPECIAL PRECAUTIONS

When Wiring

ELECTRICAL SHOCK CAN CAUSE SEVERE PERSONAL INJURY OR DEATH. ONLY A QUALIFIED, EXPERIENCED ELECTRICIAN SHOULD ATTEMPT TO WIRE THIS SYSTEM.

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause accidental injury or death.
- Ground the unit following local electrical codes.
- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.

When Transporting

Be careful when picking up and moving the indoor and outdoor units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin aluminum fins on the air conditioner can cut your fingers.

When Installing...

...In a Ceiling or Wall

Make sure the ceiling/wall is strong enough to hold the unit's weight. It may be necessary to construct a strong wood or metal frame to provide added support.

...In a Room

Properly insulate any tubing run inside a room to prevent "sweating" that can cause dripping and water damage to walls and floors.

...In Moist or Uneven Locations

Use a raised concrete pad or concrete blocks to provide a solid, level foundation for the outdoor unit. This prevents water damage and abnormal vibration.

...In an Area with High Winds

Securely anchor the outdoor unit down with bolts and a metal frame. Provide a suitable air baffle.

...In a Snowy Area (for Heat Pump-type Systems)

Install the outdoor unit on a raised platform that is higher than drifting snow. Provide snow vents.

When Connecting Refrigerant Tubing

- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.

NOTE:

Depending on the system type, liquid and gas lines may be either narrow or wide. Therefore, to avoid confusion the refrigerant tubing for your particular model is specified as either "narrow" or "wide" rather than as "liquid" or "gas."

When Servicing

- Turn the power OFF at the main power box (mains) before opening the unit to check or repair electrical parts and wiring.
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.

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1. OPERATING RANGE

KHS0921 / CH0921, KHS0922 / CH0922 and KHS1222 / CH1222

	Temperature	Indoor Air Intake Temp.	Outdoor Air Intake Temp.
Cooling	Maximum	95°F DB / 71°F WB	115°F DB
	Minimum	67°F DB / 57°F WB	67°F DB
Heating	Maximum	80°F DB / 67°F WB	75°F DB / 65°F WB
	Minimum	— DB / — WB	17°F DB / 15°F WB

2. SPECIFICATIONS

Unit Specifications

Model No.	Indoor unit	KHS0921	
	Outdoor unit	CH0921	
Performance	Capacity	Cooling BTU/h	9,000
		kW	2.64
	Air circulation (High)	cu. ft/min.	220
	Moisture removal (High)	Pints/h	2.7
Electrical Rating	Phase, Frequency	Hz	Single, 60
	Voltage rating	V	115
	Available voltage range	V	103 to 127
	Running amperes	A	8.2
	Power input	W	930
	Power factor	%	99
	Starting amperes	A	49
	S. E. E. R.	BTU/Wh	10.0
	Heater element	kW – HSPF	—
Features	Controls	Microprocessor	
	Control unit	Wireless remote control unit	
	Temperature control	IC thermostat	
	Timer	ON/OFF, 24-hours & Program	
	Fan speeds	Indoor / Outdoor	3 and Auto / 1
	Air deflector	Horizontal / Vertical	Manual / Manual
	Air filter	Washable, easy access	
	Compressor	Rotary	
	Refrigerant amount charged at shipment	lbs. (kg)	R22: 2.84 (1.29)
	Refrigerant control	Capillary tube	
	Refrigerant tubing connections	Flare type	
	Operation sound	In-Hi / Me / Lo	40 / 35 / 30
		Out-Hi	49
	Max. allowable tubing length at shipment	ft. (m)	33 (10)
	Limit of tubing length	ft. (m)	50 (15)
	Limit of elevation difference between the 2 units	ft. (m)	Outdoor unit is higher than indoor unit: 23 (7) Outdoor unit is lower than indoor unit: 23 (7)
	Refrigerant tube o.d.	Narrow tube	1/4 (6.35)
		Wide tube	3/8 (9.52)
	Refrigerant tube kit	Optional	
	Accessories	Mounting bracket	
Dimensions & Weight	Indoor unit		Outdoor unit
	Height	in. (mm)	13-19/32 (345)
	Width	in. (mm)	31-1/2 (800)
	Depth	in. (mm)	7-3/32 (180)
	Net weight	lbs. (kg)	24.3 (11)
	Shipping volume	cu. ft. (cu. m)	3.3 (0.10)
	Shipping weight (Approx.)	lbs. (kg)	28.7 (13)

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are:

Cooling: Outside air temperature 95°F DB/75°F WB
 Indoor unit entering air temperature 80°F DB/67°F WB
 Heating: Outside air temperature 47°F DB/43°F WB
 Indoor unit entering air temperature 70°F WB

Unit Specifications

Model No.	Indoor unit		KHS0922 CH0922	
	Outdoor unit		Cooling	Heating
Performance	Capacity	BTU/h kW	9,000 / 8,800 2.64 / 2.59	10,900 / 10,700 3.19 / 3.14
	Air circulation (High)	cu. ft/min.	220	
	Moisture removal (High)	Pints/h	2.7	
	Phase, Frequency	Hz	Single, 60	
Electrical Rating	Voltage rating	V	230 / 208	230 / 208
	Available voltage range	V	187 to 253	187 to 253
	Running amperes	A	4.5 / 4.6	4.7 / 4.8
	Power input	W	950 / 930	1,030 / 980
	Power factor	%	92 / 98	96 / 99
	Starting amperes	A	30	
	S. E. E. R.	BTU/Wh	10.0 / 10.0	
	Heat element	kW – HSPF	—	1.0 / 0.82 – 6.8 / 6.8
Features	Controls		Microprocessor	
	Control unit		Wireless remote control unit	
	Temperature control		IC thermostat	
	Timer		ON/OFF, 24-hours & Program	
	Fan speeds	Indoor / Outdoor	3 and Auto / 1	
	Air deflector	Horizontal / Vertical	Manual / Manual	
	Air filter		Washable, easy access	
	Compressor		Rotary	
	Refrigerant amount charged at shipment	lbs. (kg)	R22: 2.91 (1.32)	
	Refrigerant control		Capillary tube	
	Refrigerant tubing connections		Flare type	
	Operation sound	In-Hi / Me / Lo	dB-A	40 / 35 / 30
		Out-Hi	dB-A	49
	Max. allowable tubing length at shipment	ft. (m)	33 (10)	
	Limit of tubing length	ft. (m)	50 (15)	
	Limit of elevation difference between the 2 units	ft. (m)	Outdoor unit is higher than indoor unit: 23 (7) Outdoor unit is lower than indoor unit: 23 (7)	
	Refrigerant tube o.d.	Narrow tube	in. (mm)	1/4 (6.35)
		Wide tube	in. (mm)	3/8 (9.52)
	Refrigerant tube kit		Optional	
	Accessories		Mounting bracket	
Dimensions & Weight			Indoor unit	Outdoor unit
	Height	in. (mm)	13-19/32 (345)	20-7/8 (530)
	Width	in. (mm)	31-1/2 (800)	29-17/32 (750)
	Depth	in. (mm)	7-3/32 (180)	11-1/32 (280)
	Net weight	lbs. (kg)	24.3 (11)	90.4 (41)
	Shipping volume	cu. ft. (cu. m)	3.3 (0.10)	6.7 (0.19)
	Shipping weight (Approx.)	lbs. (kg)	28.7 (13)	97.1 (44)

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Remarks: Rating conditions are:

- Cooling: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB
- Heating: Outside air temperature 47°F DB/43°F WB
Indoor unit entering air temperature 70°F WB

Unit Specifications

Model No.		Indoor unit	KHS1222			
		Outdoor unit	CH1222			
Performance	Capacity	BTU/h kW	Cooling 11,400 / 11,200 3.34 / 3.28	Heating 13,300 / 12,700 3.90 / 3.72		
	Air circulation (High)	cu. ft/min.	360 / 330			
Electrical Rating	Moisture removal (High)	Pints/h	4.0			
	Phase, Frequency	Hz	Single, 60			
	Voltage rating	V	230 / 208	230 / 208		
	Available voltage range	V	187 to 253	187 to 253		
	Running amperes	A	5.6 / 5.9	5.2 / 5.5		
	Power input	W	1,210 / 1,180	1,190 / 1,140		
	Power factor	%	94 / 97	99 / 99		
	Starting amperes	A	—	32		
	S. E. E. R.	BTU/Wh	—	10.0 / 10.0		
Features	Heat element	kW - HSPF	—	1.5 / 1.23 - 6.8 / 6.8		
	Controls	Microprocessor				
	Control unit	Wireless remote control unit				
	Temperature control	IC thermostat				
	Timer	ON/OFF, 24-hours & Program				
	Fan speeds	Indoor / Outdoor				
	Air deflector	Horizontal / Vertical				
	Air filter	Washable, easy access				
	Compressor	Rotary				
	Refrigerant amount charged at shipment	lbs. (kg)	R22: 2.96 / (1.34)			
	Refrigerant control	Capillary tube				
	Refrigerant tubing connections	Flare type				
	Operation sound	In-Hi / Mc / Lo Out-Hi	dB-A dB-A	43 / 39 / 36 49		
	Max. allowable tubing length at shipment	ft. (m)	33 (10)			
	Limit of tubing length	ft. (m)	65 (20)			
	Limit of elevation difference between the 2 units	ft. (m)	Outdoor unit is higher than indoor unit: 23 (7) Outdoor unit is lower than indoor unit: 23 (7)			
Dimensions & Weight	Refrigerant tube o.d.	Narrow tube Wide tube	in. (mm)	1/4 (6.35) 1/2 (12.7)		
	Refrigerant tube kit	Optional				
	Accessories	Mounting bracket				
			Indoor unit	Outdoor unit		
	Height	in. (mm)	14-3/16 (360)	20-7/8 (530)		
		Width	in. (mm)	29-17/32 (750)		
		Depth	in. (mm)	11-1/32 (280)		
		Net weight	lbs. (kg)	92.6 (42)		
		Shipping volume	cu. ft. (cu. m)	6.5 (0.19)		
		Shipping weight (Approx.)	lbs. (kg)	99.3 (45)		

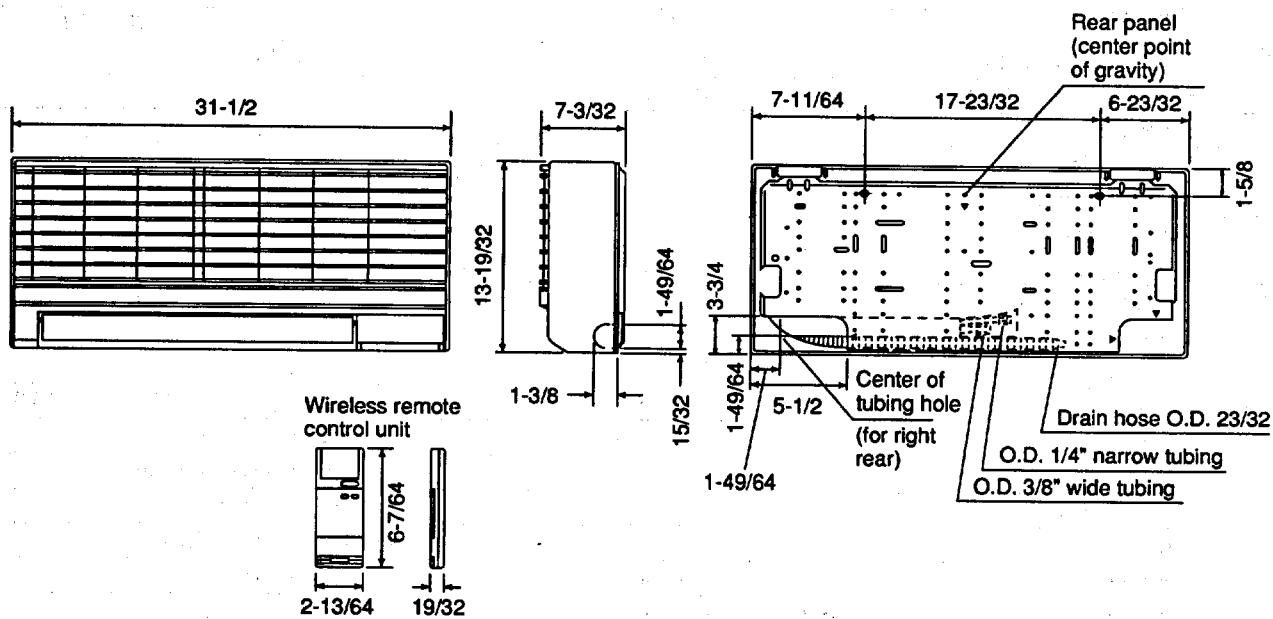
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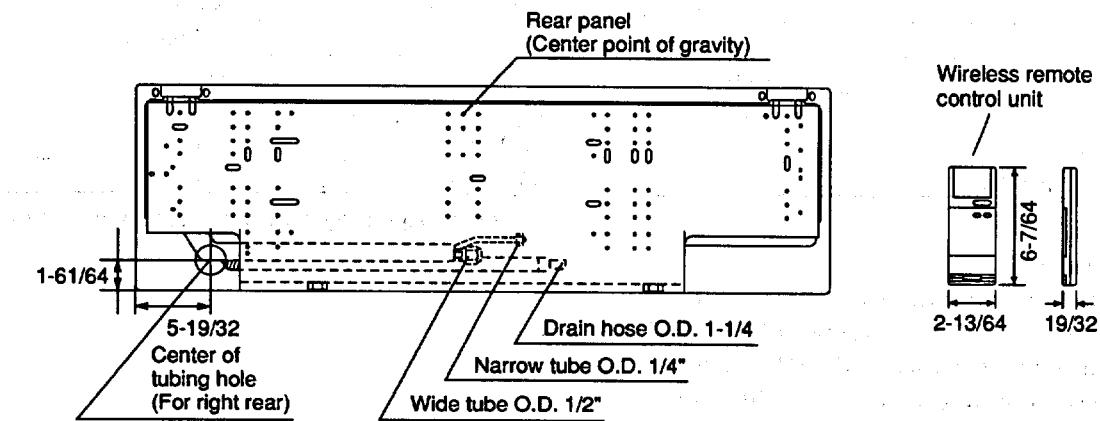
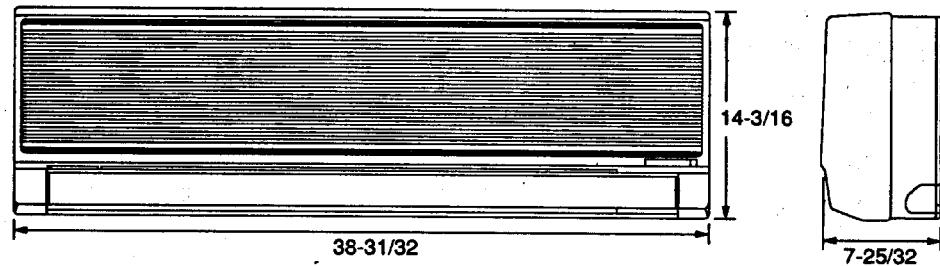
- Cooling: Outside air temperature 95°F DB/75°F WB
Indoor unit entering air temperature 80°F DB/67°F WB
- Heating: Outside air temperature 47°F DB/43°F WB
Indoor unit entering air temperature 70°F WB

3. DIMENSIONAL DATA

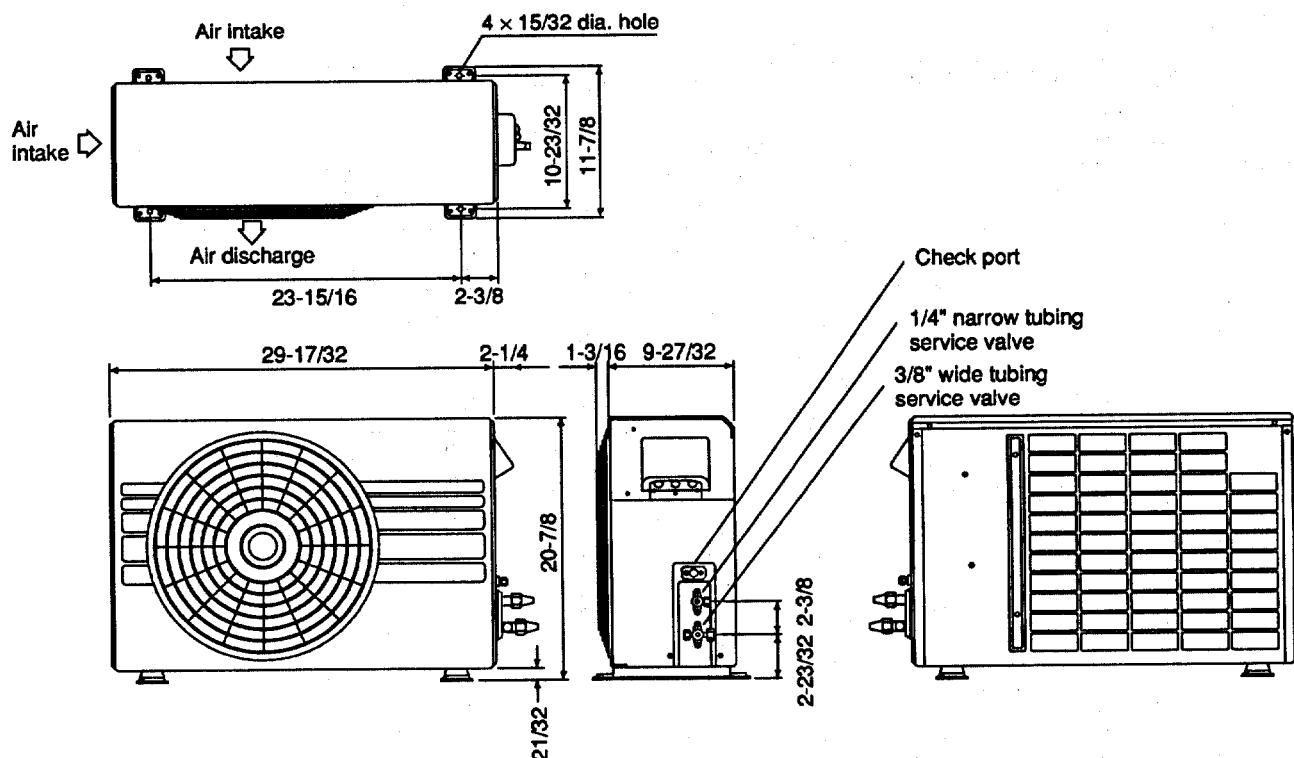
Indoor Unit: KHS0921, KHS0922



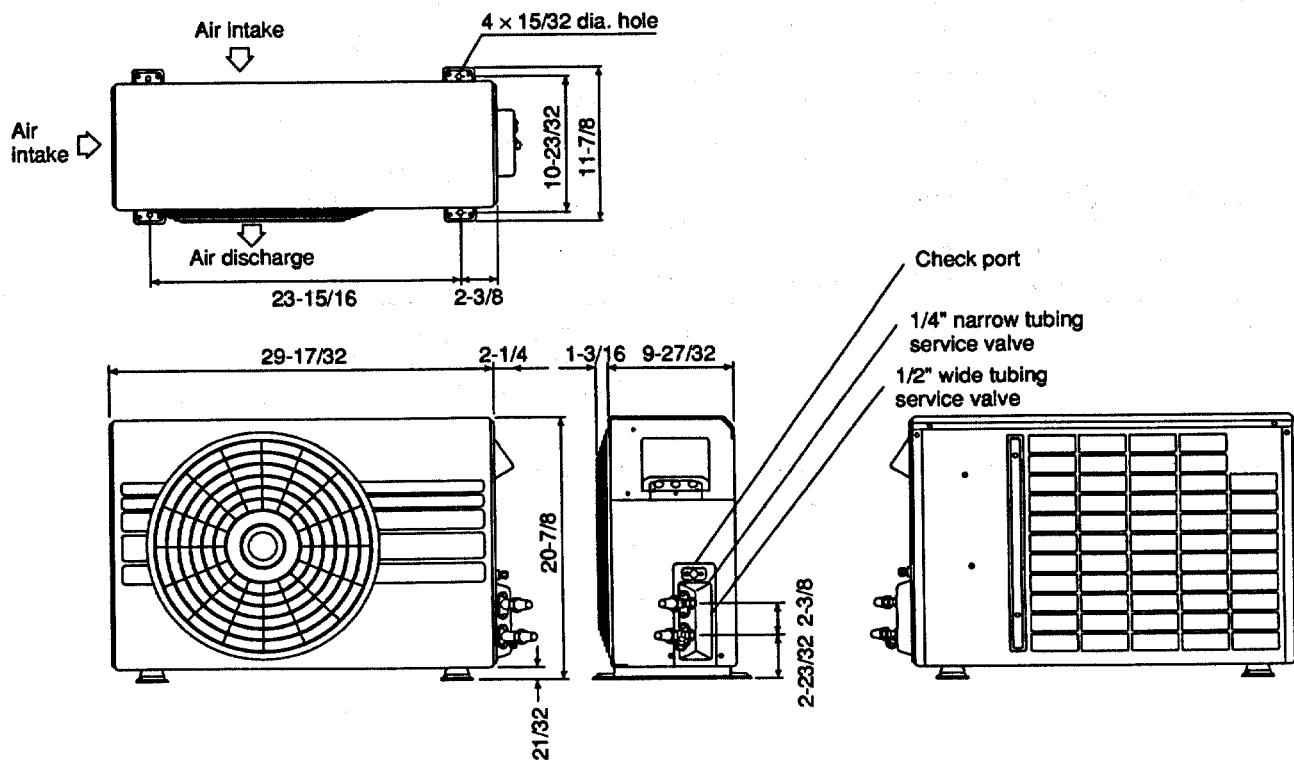
Indoor Unit: KHS1222



Outdoor Unit: CH0921, CH0922



Outdoor Unit: CH1222



4. COOLING CAPACITY

115V

KHS0921 / CH0921

Rating Capacity: 9,000 BTU/H		Air Flow Rate: 220 CFM					
Evaporator		Condenser					
Ent. Temp.	°F/(°C)		Ambient Temp.	°F/(°C)			
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC kW	8,910 0.67	8,510 0.73	8,100 0.80	7,640 0.87	7,020 0.95
	72 (22.2)	SHC	6,310	6,090	5,880	5,650	5,340
	76 (24.4)	SHC	7,050	6,830	6,620	6,390	6,080
	80 (26.7)	SHC	7,830	7,610	7,400	7,160	6,850
	84 (28.9)	SHC	8,570	8,350	8,100	7,640	7,020
63 (17.2)	88 (31.1)	SHC	8,910	8,510	8,100	7,640	7,020
		TC kW	9,220 0.68	8,930 0.74	8,580 0.81	8,110 0.88	7,470 0.97
	72 (22.2)	SHC	5,360	5,220	5,050	4,830	4,530
	76 (24.4)	SHC	6,100	5,960	5,790	5,570	5,270
	80 (26.7)	SHC	6,880	6,740	6,570	6,340	6,050
67 (19.4)	84 (28.9)	SHC	7,620	7,480	7,310	7,090	6,790
	88 (31.1)	SHC	8,360	8,220	8,050	7,830	7,470
		TC kW	9,470 0.68	9,320 0.75	*9,000 0.82	8,510 0.89	7,920 0.99
	72 (22.2)	SHC	4,380	4,310	4,170	3,950	3,710
	76 (24.4)	SHC	5,120	5,050	4,910	4,700	4,450
71 (21.7)	80 (26.7)	SHC	5,890	5,820	5,690	5,470	5,220
	84 (28.9)	SHC	6,630	6,570	6,430	6,210	5,960
	88 (31.1)	SHC	7,380	7,310	7,170	6,950	6,710
		TC kW	9,770 0.69	9,600 0.76	9,360 0.83	8,940 0.92	8,420 1.01
	72 (22.2)	SHC	3,370	3,300	3,200	3,040	2,840
75 (23.9)	76 (24.4)	SHC	4,110	4,040	3,950	3,780	3,580
	80 (26.7)	SHC	4,880	4,820	4,720	4,550	4,350
	84 (28.9)	SHC	5,630	5,560	5,460	5,300	5,090
	88 (31.1)	SHC	6,370	6,300	6,200	6,040	5,840
		TC kW	9,950 0.71	9,850 0.77	9,630 0.84	9,290 0.94	8,910 1.04
76 (24.4)	76 (24.4)	SHC	3,100	3,060	2,980	2,860	2,730
	80 (26.7)	SHC	3,870	3,830	3,760	3,640	3,500
	84 (28.9)	SHC	4,620	4,580	4,500	4,380	4,240
	88 (31.1)	SHC	5,360	5,320	5,240	5,120	4,990

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

Indoor unit entering air temperature 80°F DB/67°F WB

230V

KHS0922 / CH0922

Rating Capacity: 9,000 BTU/H		Air Flow Rate: 220 CFM					
Evaporator		Condenser					
Ent. Temp. °F/°C		Ambient Temp. °F/°C					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	8,910 0.67	8,510 0.73	8,100 0.80	7,640 0.87	7,020 0.95
		SHC	6,310	6,090	5,880	5,650	5,340
		SHC	7,050	6,830	6,620	6,390	6,080
		SHC	7,830	7,610	7,400	7,160	6,850
		SHC	8,570	8,350	8,100	7,640	7,020
		SHC	8,910	8,510	8,100	7,640	7,020
63 (17.2)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,220 0.68	8,930 0.74	8,580 0.81	8,110 0.88	7,470 0.97
		SHC	5,360	5,220	5,050	4,830	4,530
		SHC	6,100	5,960	5,790	5,570	5,270
		SHC	6,880	6,740	6,570	6,340	6,050
		SHC	7,620	7,480	7,310	7,090	6,790
		SHC	8,360	8,220	8,050	7,830	7,470
67 (19.4)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,470 0.68	9,320 0.75	*9,000 0.82	8,510 0.89	7,920 0.99
		SHC	4,380	4,310	4,170	3,950	3,710
		SHC	5,120	5,050	4,910	4,700	4,450
		SHC	5,890	5,820	5,690	5,470	5,220
		SHC	6,630	6,570	6,430	6,210	5,960
		SHC	7,380	7,310	7,170	6,950	6,710
71 (21.7)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,770 0.69	9,600 0.76	9,360 0.83	8,940 0.92	8,420 1.01
		SHC	3,370	3,300	3,200	3,040	2,840
		SHC	4,110	4,040	3,950	3,780	3,580
		SHC	4,880	4,820	4,720	4,550	4,350
		SHC	5,630	5,560	5,460	5,300	5,090
		SHC	6,370	6,300	6,200	6,040	5,840
75 (23.9)	76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,950 0.71	9,850 0.77	9,630 0.84	9,290 0.94	8,910 1.04
		SHC	3,100	3,060	2,980	2,860	2,730
		SHC	3,870	3,830	3,760	3,640	3,500
		SHC	4,620	4,580	4,500	4,380	4,240
		SHC	5,360	5,320	5,240	5,120	4,990

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

Indoor unit entering air temperature 80°F DB/67°F WB

208V

KHS0922 / CH0922

Rating Capacity: 8,800 BTU/H		Air Flow Rate: 210 CFM					
Evaporator		Condenser					
Ent. Temp. °F/(°C)		Ambient Temp. °F/(°C)					
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	8,710 0.67	8,320 0.73	7,920 0.80	7,470 0.87	6,860 0.95
		SHC	6,140	5,930	5,720	5,490	5,190
		SHC	6,860	6,640	6,440	6,200	5,900
		SHC	7,600	7,390	7,180	6,950	6,650
		SHC	8,320	8,100	7,890	7,470	6,860
		SHC	8,710	8,320	7,920	7,470	6,860
	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,010 0.68	8,730 0.74	8,390 0.81	7,930 0.88	7,300 0.97
		SHC	5,230	5,090	4,920	4,700	4,410
		SHC	5,940	5,800	5,630	5,420	5,130
		SHC	6,690	6,550	6,380	6,160	5,870
		SHC	7,400	7,260	7,090	6,880	6,580
67 (19.4)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,260 0.68	9,110 0.75	*8,800 0.82	8,320 0.89	7,740 0.99
		SHC	4,280	4,210	4,070	3,860	3,610
		SHC	4,990	4,920	4,780	4,570	4,330
		SHC	5,730	5,670	5,530	5,320	5,070
		SHC	6,450	6,380	6,240	6,030	5,790
		SHC	7,160	7,090	6,960	6,750	6,500
	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	9,550 0.69	9,390 0.76	9,150 0.83	8,740 0.92	8,230 1.01
		SHC	3,300	3,230	3,140	2,970	2,780
		SHC	4,010	3,950	3,850	3,690	3,490
		SHC	4,760	4,690	4,600	4,430	4,240
		SHC	5,470	5,410	5,310	5,150	4,950
71 (21.7)	72 (22.2) 76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	TC kW	6,190	6,120	6,030	5,860	5,660
		SHC	9,730 0.71	9,630 0.77	9,420 0.84	9,080 0.94	8,710 1.04
		SHC	3,040	3,000	2,920	2,800	2,670
		SHC	3,780	3,740	3,670	3,550	3,420
		SHC	4,490	4,460	4,380	4,260	4,130
	76 (24.4) 80 (26.7) 84 (28.9) 88 (31.1)	SHC	5,210	5,170	5,090	4,970	4,840

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB
 Indoor unit entering air temperature 80°F DB/67°F WB

230V

KHS1222 / CH1222

Rating Capacity: 11,400 BTU/H			Air Flow Rate: 360 CFM				
Evaporator		Condenser					
Ent. Temp. °F/°C)			Ambient Temp. °F/°C)				
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)
59 (15.0)		TC kW	11,290 0.89	10,770 0.97	10,260 1.05	9,680 1.14	8,890 1.25
	72 (22.2)	SHC	8,520	8,270	8,020	7,750	7,380
	76 (24.4)	SHC	9,690	9,440	9,190	8,910	8,540
	80 (26.7)	SHC	10,910	10,650	10,260	9,680	8,890
	84 (28.9)	SHC	11,290	10,770	10,260	9,680	8,890
	88 (31.1)	SHC	11,290	10,770	10,260	9,680	8,890
63 (17.2)		TC kW	11,670 0.89	11,310 0.98	10,860 1.07	10,270 1.16	9,460 1.28
	72 (22.2)	SHC	7,110	6,940	6,740	6,480	6,130
	76 (24.4)	SHC	8,270	8,110	7,910	7,650	7,300
	80 (26.7)	SHC	9,490	9,320	9,130	8,870	8,520
	84 (28.9)	SHC	10,650	10,490	10,290	10,030	9,460
	88 (31.1)	SHC	11,670	11,310	10,860	10,270	9,460
67 (19.4)		TC kW	11,990 0.90	11,800 0.99	*11,400 1.08	10,770 1.18	10,030 1.31
	72 (22.2)	SHC	5,650	5,570	5,400	5,150	4,860
	76 (24.4)	SHC	6,810	6,730	6,570	6,320	6,020
	80 (26.7)	SHC	8,030	7,950	7,790	7,530	7,240
	84 (28.9)	SHC	9,200	9,120	8,950	8,700	8,410
	88 (31.1)	SHC	10,360	10,280	10,120	9,860	9,570
71 (21.7)		TC kW	12,370 0.91	12,160 1.00	11,860 1.10	11,320 1.21	10,660 1.33
	72 (22.2)	SHC	4,150	4,070	3,960	3,760	3,520
	76 (24.4)	SHC	5,310	5,240	5,120	4,930	4,690
	80 (26.7)	SHC	6,530	6,450	6,340	6,140	5,900
	84 (28.9)	SHC	7,700	7,620	7,500	7,310	7,070
	88 (31.1)	SHC	8,860	8,780	8,670	8,470	8,230
75 (23.9)		TC kW	12,610 0.93	12,470 1.02	12,200 1.11	11,760 1.24	11,290 1.37
	76 (24.4)	SHC	3,820	3,780	3,690	3,540	3,390
	80 (26.7)	SHC	5,040	5,000	4,900	4,760	4,600
	84 (28.9)	SHC	6,210	6,160	6,070	5,930	5,770
	88 (31.1)	SHC	7,370	7,330	7,230	7,090	6,930

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

kW: Compressor Input (kW)

Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

Indoor unit entering air temperature 80°F DB/67°F WB

208V

KHS1222 / CH1222

		Rating Capacity: 11,200 BTU/H		Air Flow Rate: 330 CFM				
Evaporator		Condenser						
Ent. Temp.	°F/(°C)		Ambient Temp.	°F/(°C)				
WB	DB		75 (23.9)	85 (29.4)	95 (35.0)	105 (40.6)	115 (46.1)	
59 (15.0)		TC kW	11,090 0.88	10,580 0.96	10,080 1.04	9,510 1.13	8,740 1.24	
	72 (22.2)	SHC	8,220	7,970	7,720	7,440	7,080	
	76 (24.4)	SHC	9,300	9,050	8,800	8,530	8,160	
	80 (26.7)	SHC	10,440	10,190	9,940	9,510	8,740	
	84 (28.9)	SHC	11,090	10,580	10,080	9,510	8,740	
	88 (31.1)	SHC	11,090	10,580	10,080	9,510	8,740	
63 (17.2)		TC kW	11,470 0.89	11,110 0.97	10,670 1.06	10,090 1.15	9,300 1.27	
	72 (22.2)	SHC	6,890	6,720	6,520	6,260	5,910	
	76 (24.4)	SHC	7,970	7,810	7,610	7,350	7,000	
	80 (26.7)	SHC	9,100	8,940	8,740	8,480	8,130	
	84 (28.9)	SHC	10,190	10,020	9,820	9,560	9,220	
	88 (31.1)	SHC	11,270	11,110	10,670	10,090	9,300	
67 (19.4)		TC kW	11,780 0.89	11,590 0.98	*11,200 1.07	10,580 1.17	9,860 1.29	
	72 (22.2)	SHC	5,510	5,430	5,270	5,010	4,720	
	76 (24.4)	SHC	6,590	6,510	6,350	6,100	5,810	
	80 (26.7)	SHC	7,730	7,650	7,490	7,230	6,940	
	84 (28.9)	SHC	8,810	8,730	8,570	8,320	8,020	
	88 (31.1)	SHC	9,900	9,820	9,650	9,400	9,110	
71 (21.7)		TC kW	12,150 0.90	11,950 0.99	11,650 1.09	11,120 1.20	10,470 1.32	
	72 (22.2)	SHC	4,100	4,020	3,900	3,710	3,470	
	76 (24.4)	SHC	5,180	5,100	4,990	4,790	4,550	
	80 (26.7)	SHC	6,310	6,240	6,120	5,930	5,690	
	84 (28.9)	SHC	7,400	7,320	7,210	7,010	6,770	
	88 (31.1)	SHC	8,480	8,410	8,290	8,100	7,860	
75 (23.9)		TC kW	12,390 0.92	12,250 1.01	11,980 1.10	11,560 1.23	11,090 1.35	
	76 (24.4)	SHC	3,770	3,730	3,640	3,490	3,340	
	80 (26.7)	SHC	4,910	4,860	4,770	4,630	4,470	
	84 (28.9)	SHC	5,990	5,950	5,860	5,710	5,550	
	88 (31.1)	SHC	7,080	7,030	6,940	6,800	6,640	

TC: Total Cooling Capacity (BTU/H)

SHC: Sensible Heat Capacity (BTU/H)

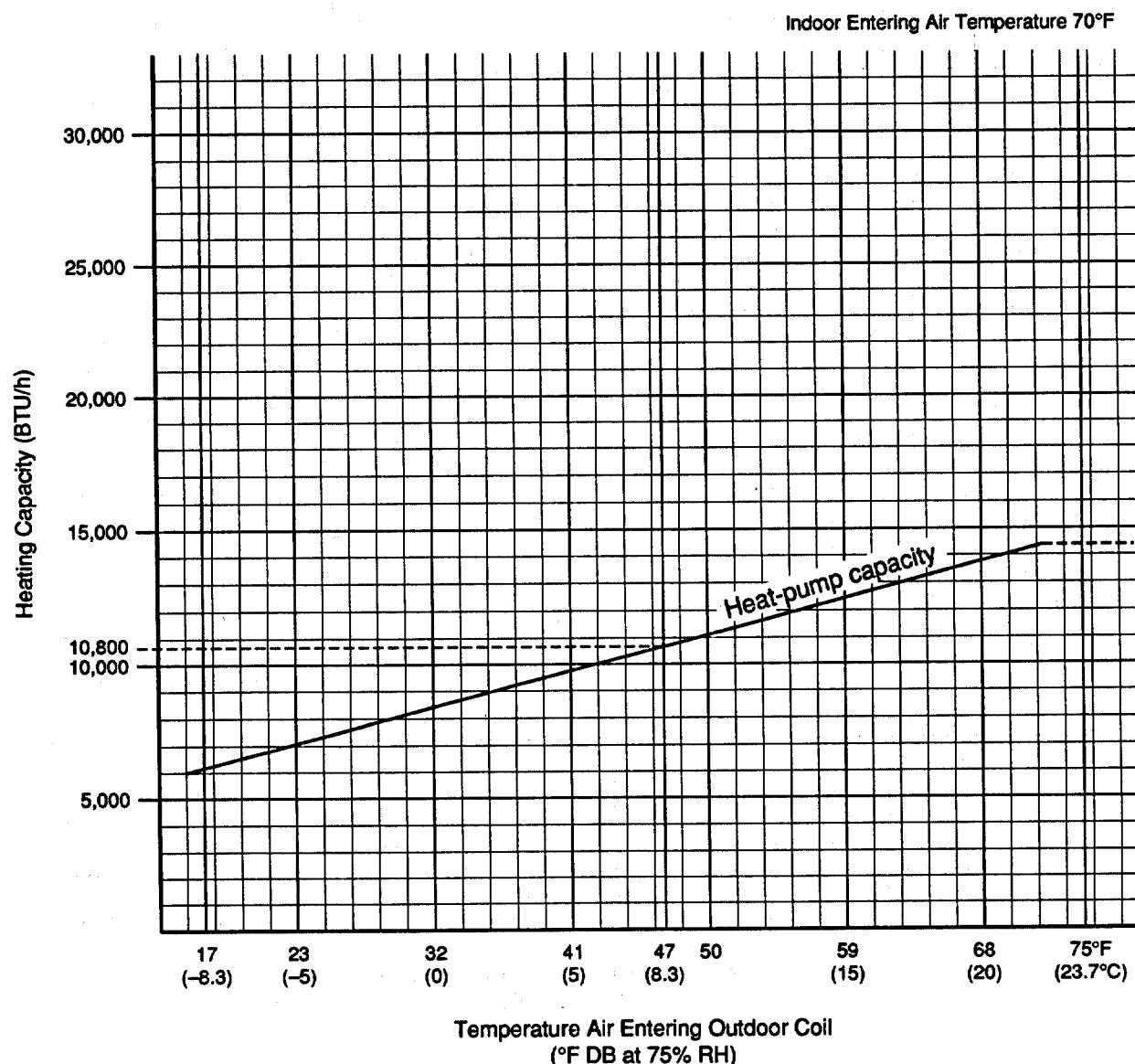
kW: Compressor Input (kW)

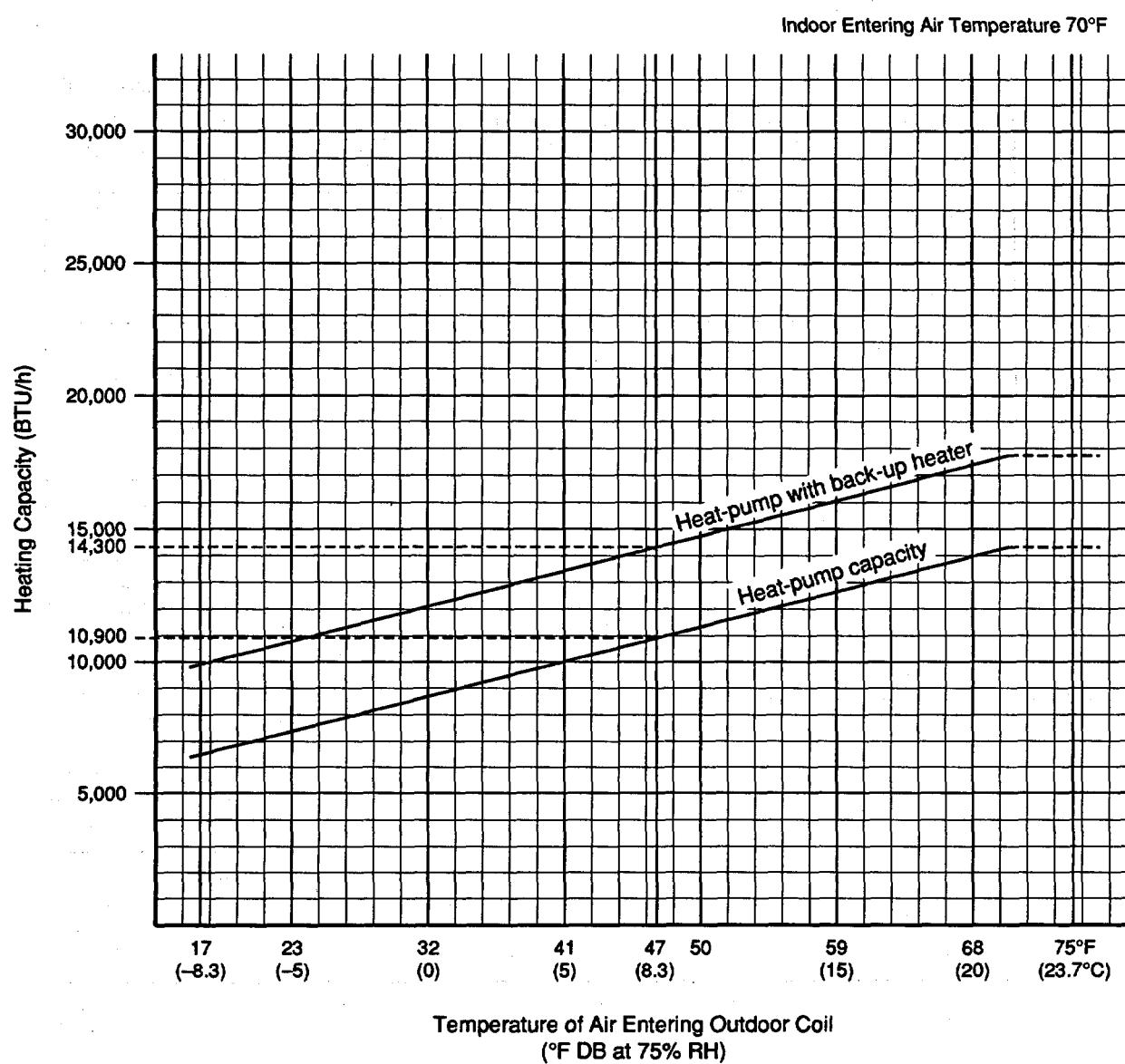
Remarks: Rating conditions (* mark) are: Outside ambient temperature 95°F DB

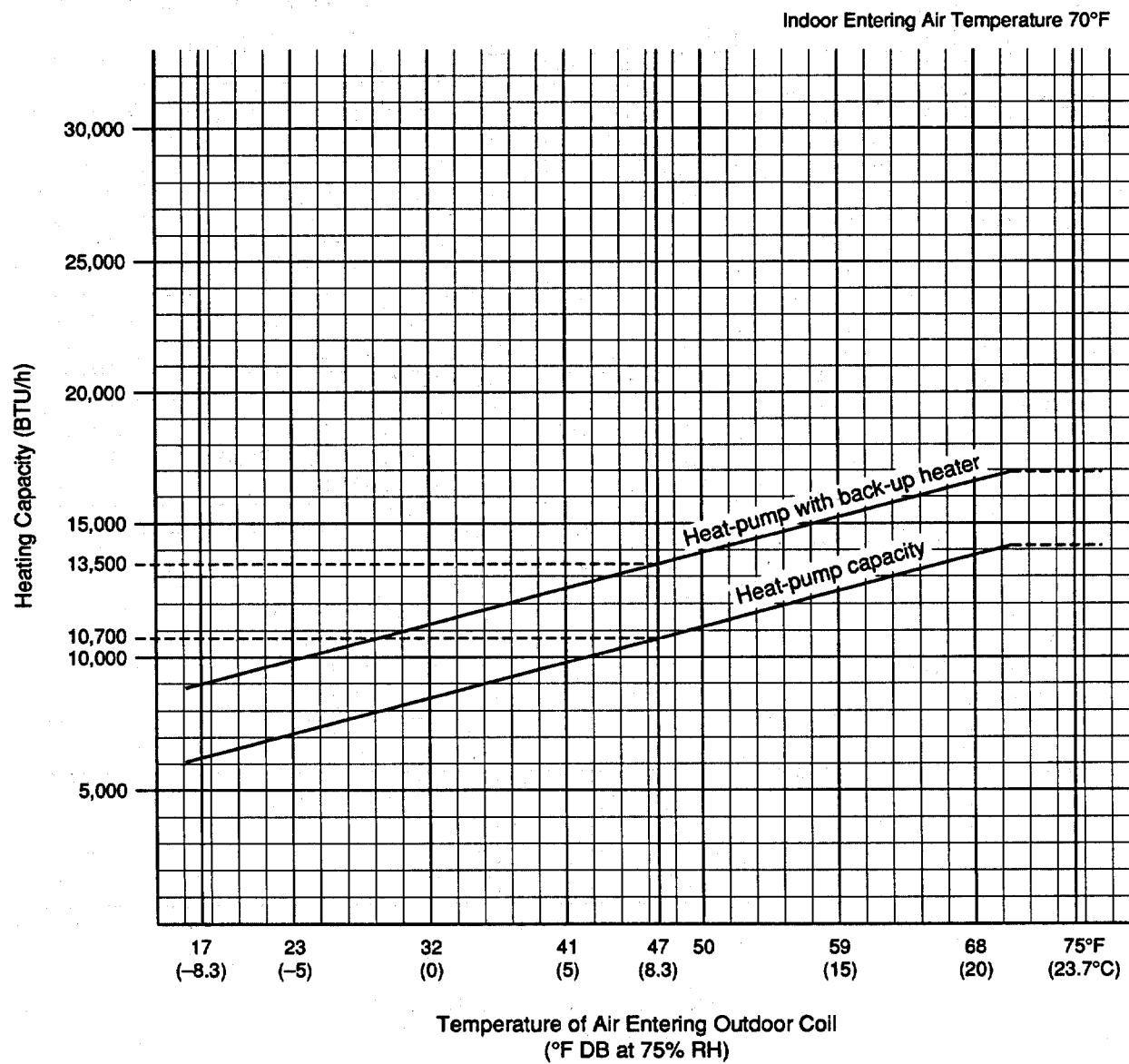
Indoor unit entering air temperature 80°F DB/67°F WB

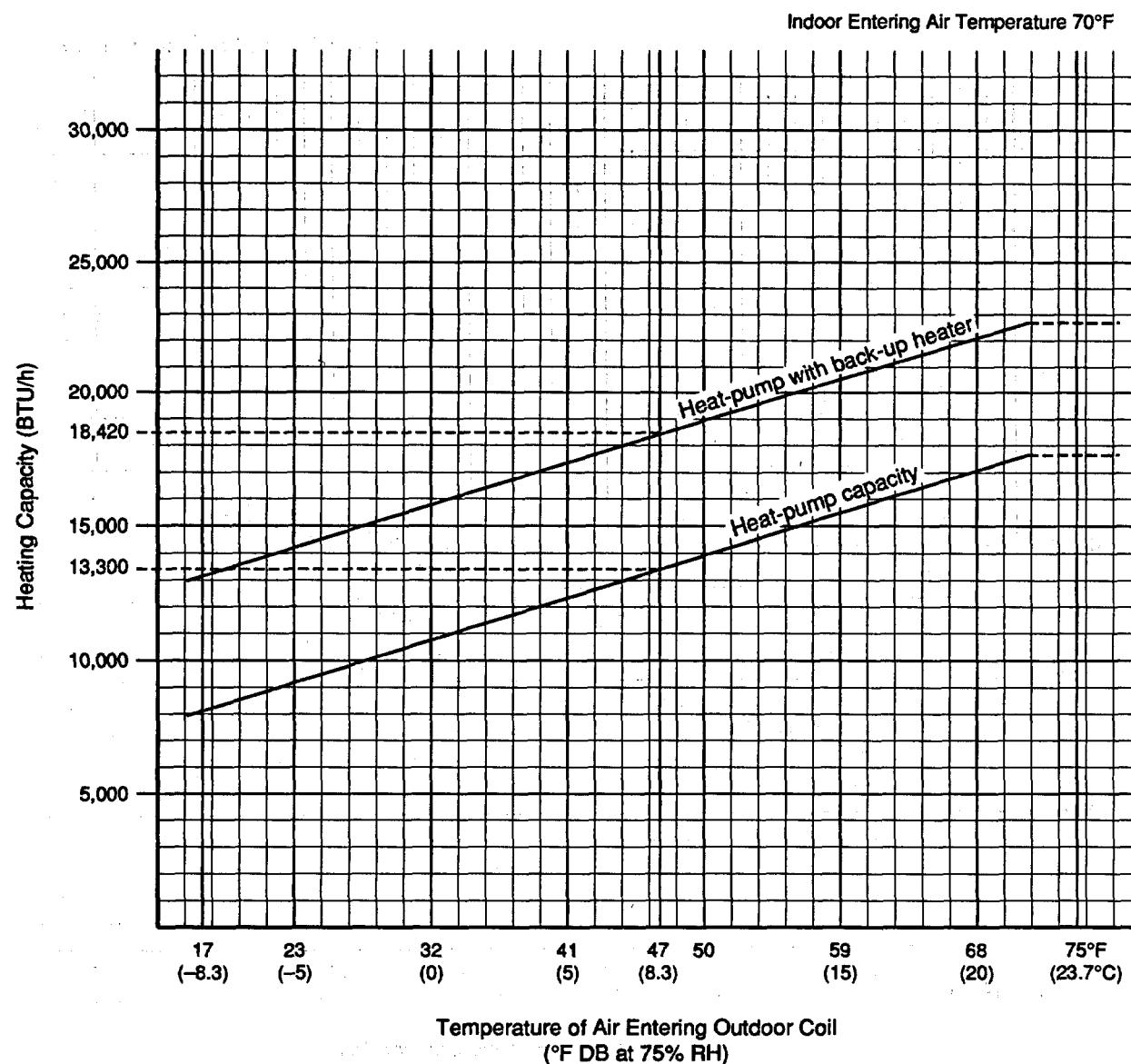
5. HEATING CAPACITY

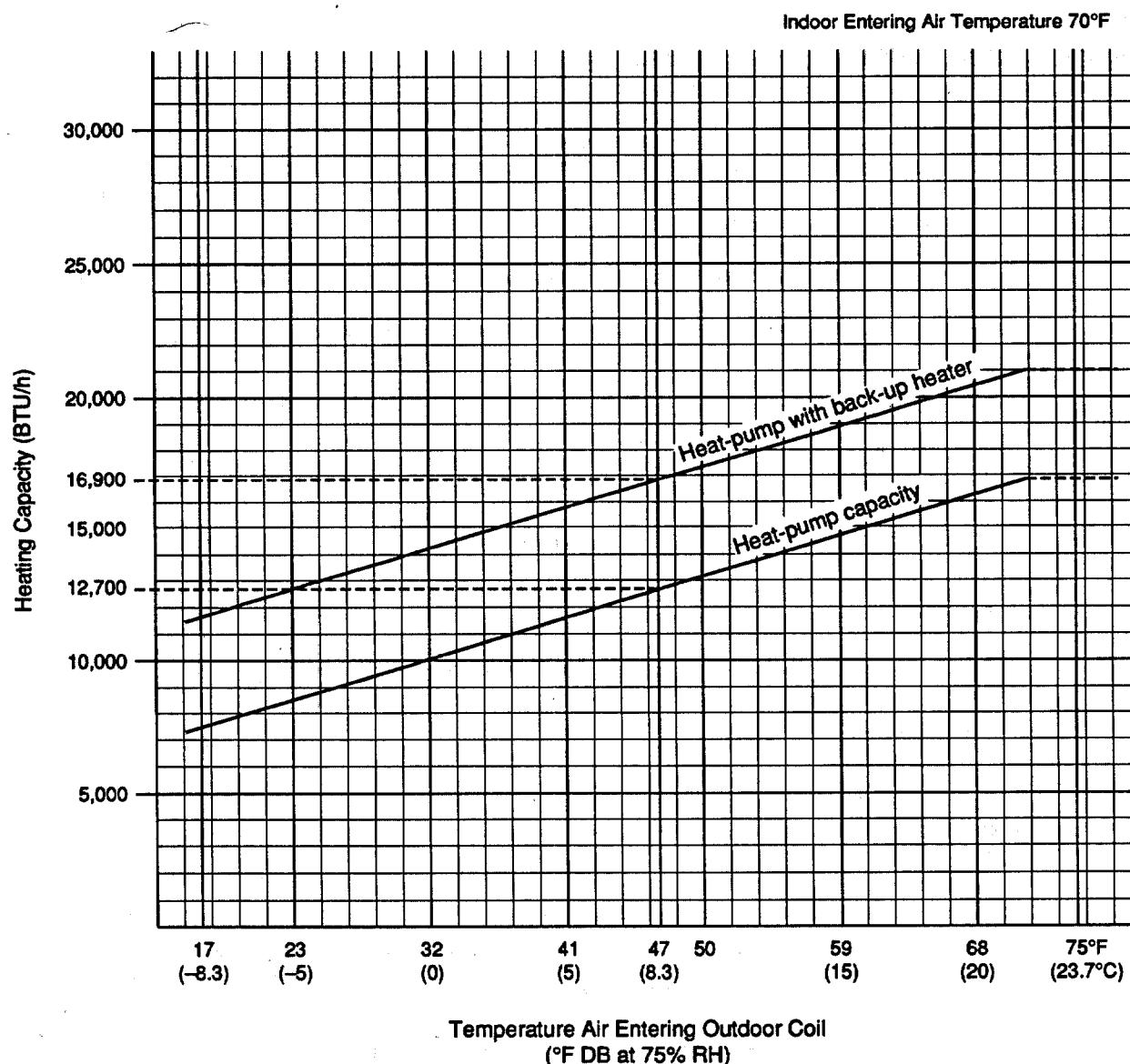
1 Phase 60Hz 115V Model Name: KHS0921







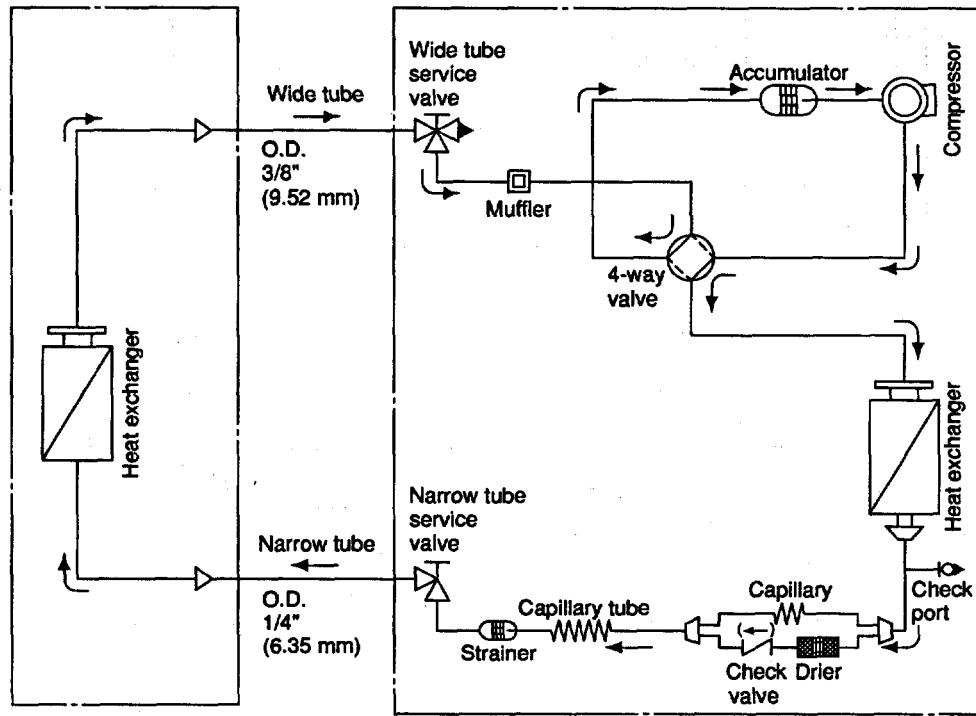




6. REFRIGERANT FLOW DIAGRAM

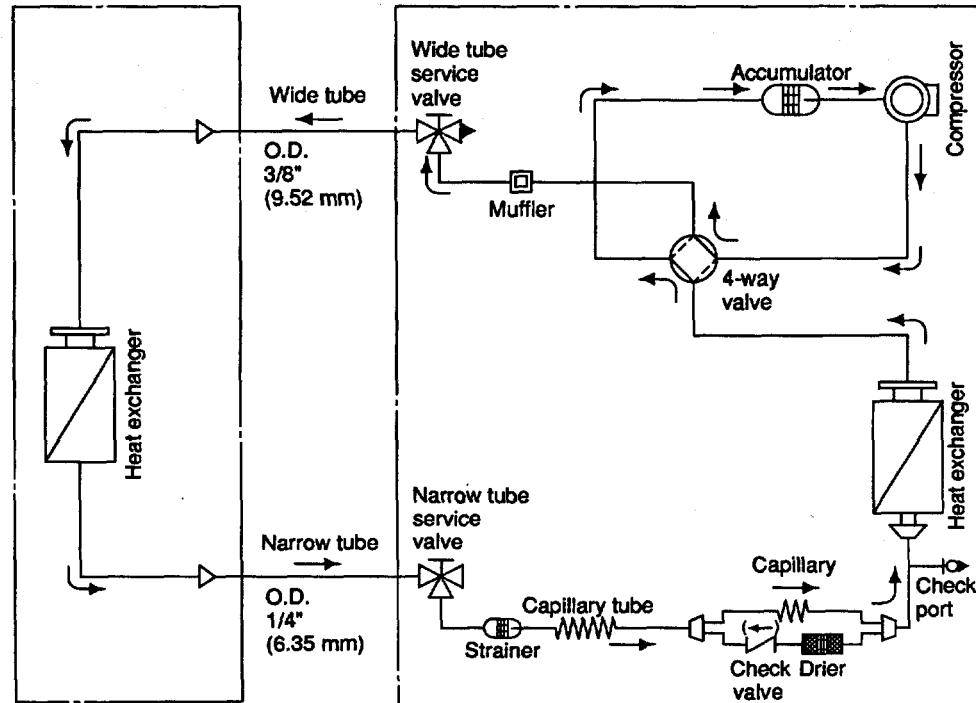
Cooling Cycle

Models: KHS0921 / CH0921, KHS0922 / CH0922



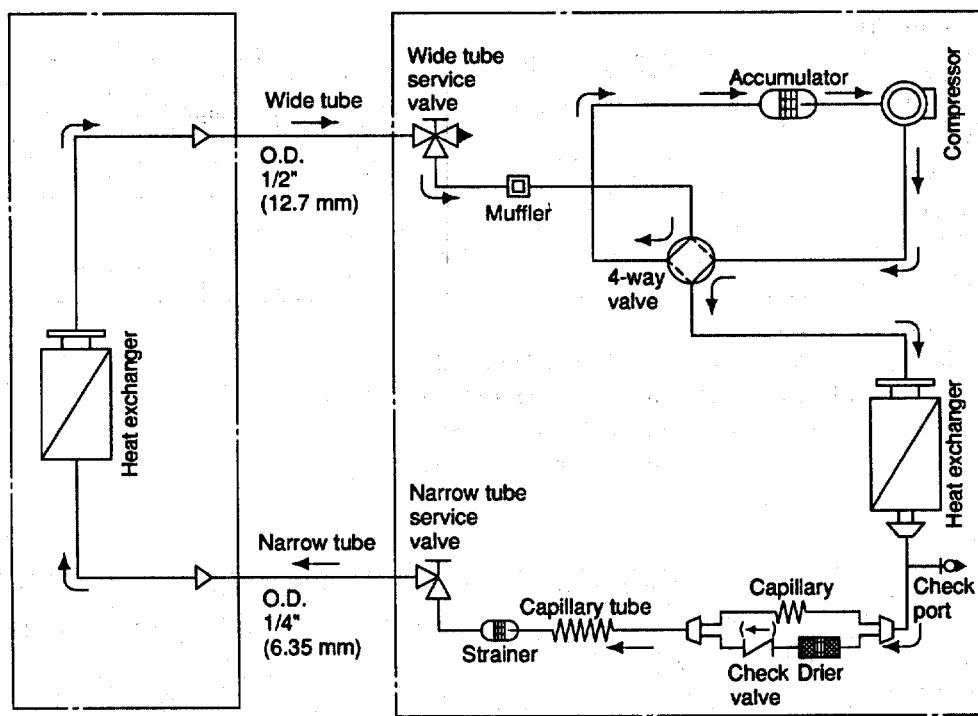
Heating Cycle

Models: KHS0921 / CH0921, KHS0922 / CH0922



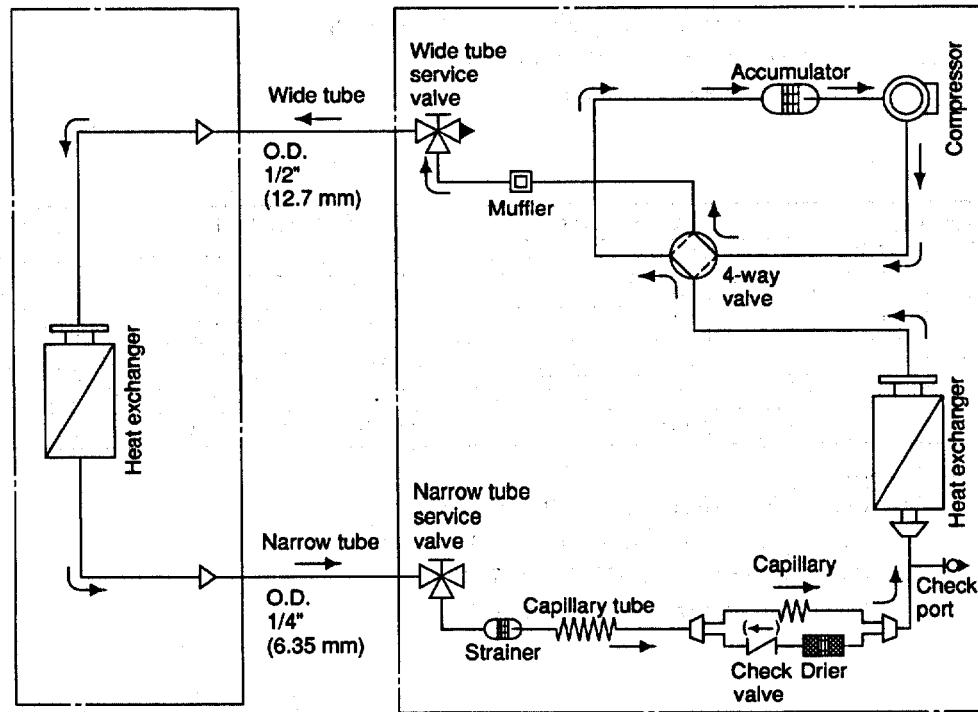
Cooling Cycle

Models: KHS1222 / CH1222



Heating Cycle

Models: KHS1222 / CH1222



7. ELECTRICAL DATA

● Electrical Characteristics

KHS0921 / CH0921

Performance at 115V - 1φ - 60Hz			Indoor Unit		Outdoor Unit		Complete Unit		
			Fan Motor	Max. Heat	Fan Motor	Compressor	Heat-pump	Max. Heat	
Cooling	Rating Conditions	A	0.26	—	0.69	7.25	8.2	—	
		W	28	—	79	823	930	—	
Heating	Rating Conditions	A	0.26	—	0.69	7.85	8.8	—	
		W	28	—	79	903	1,010	—	
Locked-Rotor Amperes			A	0.31	—	0.87	49	—	
Remarks: Rating conditions are:									

Cooling: Outside air temperature 95°F DB/75°F WB

Indoor unit entering air temperature 80°F DB/67°F WB

Heating: Outside air temperature 47°F DB/43°F WB

Indoor unit entering air temperature 70°F WB

KHS0922 / CH0922

Performance at 230/208V - 1φ - 60Hz			Indoor Unit		Outdoor Unit		Complete Unit		
			Fan Motor	Max. Heat	Fan Motor	Compressor	Heat-pump	Max. Heat	
Cooling	Rating Conditions	A	0.15 / 0.14	—	0.42 / 0.39	3.93 / 4.07	4.5 / 4.6	—	
		W	34 / 29	—	95 / 80	821 / 821	950 / 930	—	
Heating	Rating Conditions	A	0.15 / 0.14	4.35 / 3.93	0.42 / 0.39	4.13 / 4.27	4.7 / 4.8	9.05 / 8.73	
		W	34 / 29	1,000 / 818	95 / 80	901 / 871	1,030 / 980	2,030 / 1,798	
Locked-Rotor Amperes			A	0.18 / 0.17	—	0.45 / 0.41	30	—	
Remarks: Rating conditions are:									

Cooling: Outside air temperature 95°F DB/75°F WB

Indoor unit entering air temperature 80°F DB/67°F WB

Heating: Outside air temperature 47°F DB/43°F WB

Indoor unit entering air temperature 70°F WB

KHS1222 / CH1222

Performance at 230/208V - 1φ - 60Hz			Indoor Unit		Outdoor Unit		Complete Unit		
			Fan Motor	Max. Heat	Fan Motor	Compressor	Heat-pump	Max. Heat	
Cooling	Rating Conditions	A	0.18 / 0.17	—	0.42 / 0.39	5.0 / 5.34	5.6 / 5.9	—	
		W	40 / 35	—	95 / 80	1,075 / 1,065	1,210 / 1,180	—	
Heating	Rating Conditions	A	0.18 / 0.17	6.52 / 5.90	0.42 / 0.39	4.6 / 4.94	5.2 / 5.5	11.7 / 11.4	
		W	40 / 35	1,500 / 1,227	95 / 80	1,055 / 1,025	1,190 / 1,140	2,690 / 2,367	
Locked-Rotor Amperes			A	0.21 / 0.18	—	0.45 / 0.41	32	—	
Remarks: Rating conditions are:									

Cooling: Outside air temperature 95°F DB/75°F WB

Indoor unit entering air temperature 80°F DB/67°F WB

Heating: Outside air temperature 47°F DB/43°F WB

Indoor unit entering air temperature 70°F WB

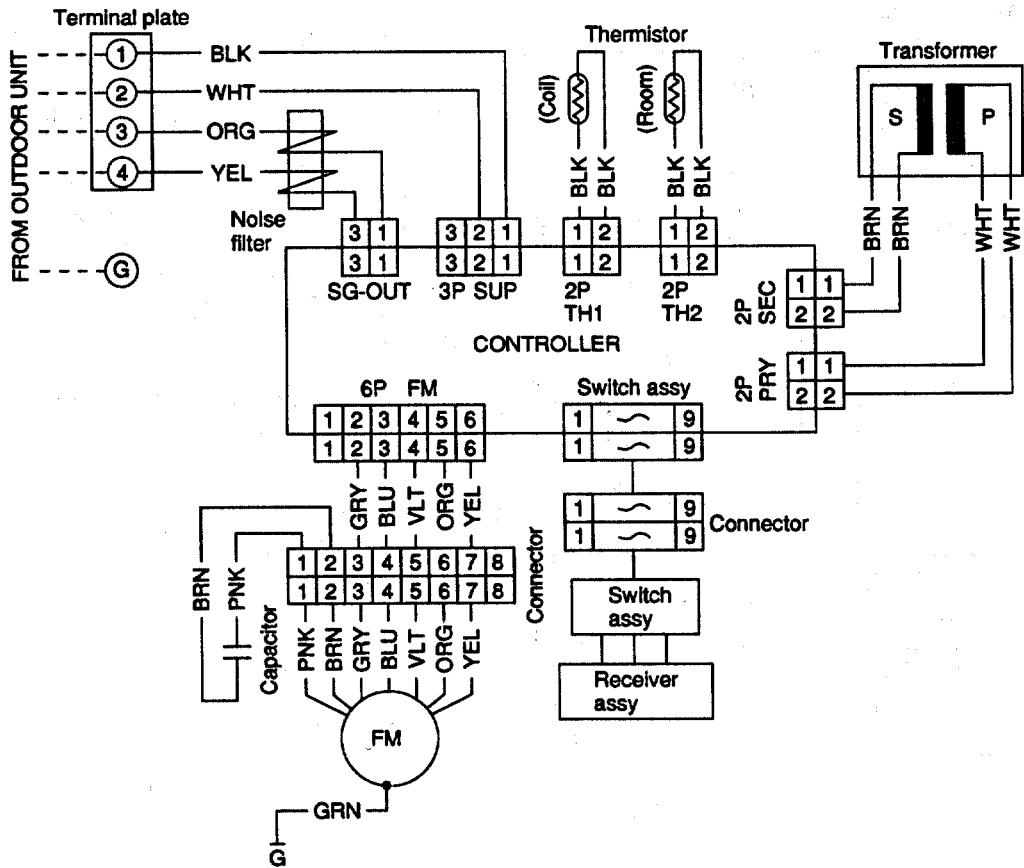
● Electric Wiring Diagram

Indoor Unit: KHS0921



WARNING:

To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.

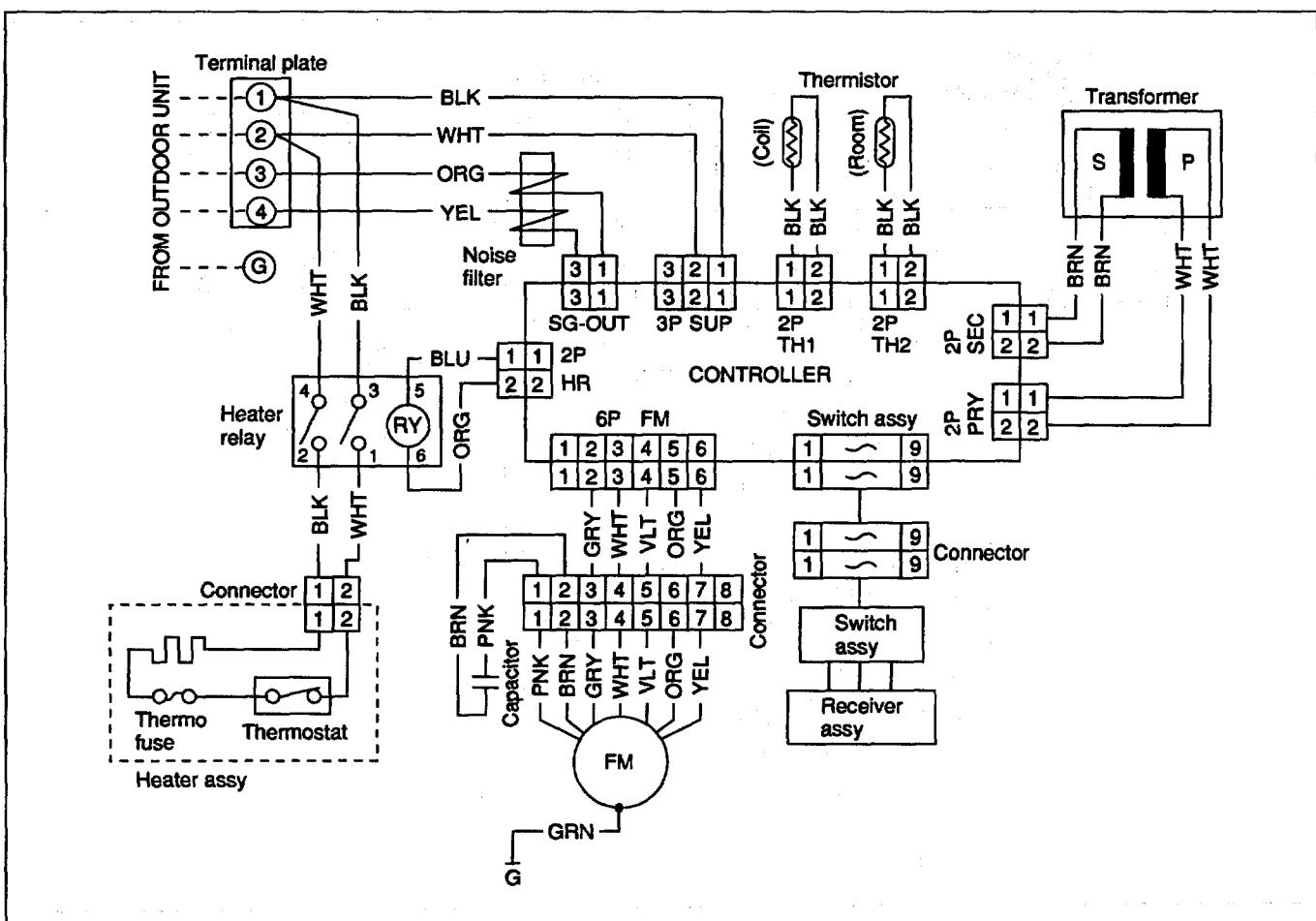


Indoor Unit: KHS0922



WARNING:

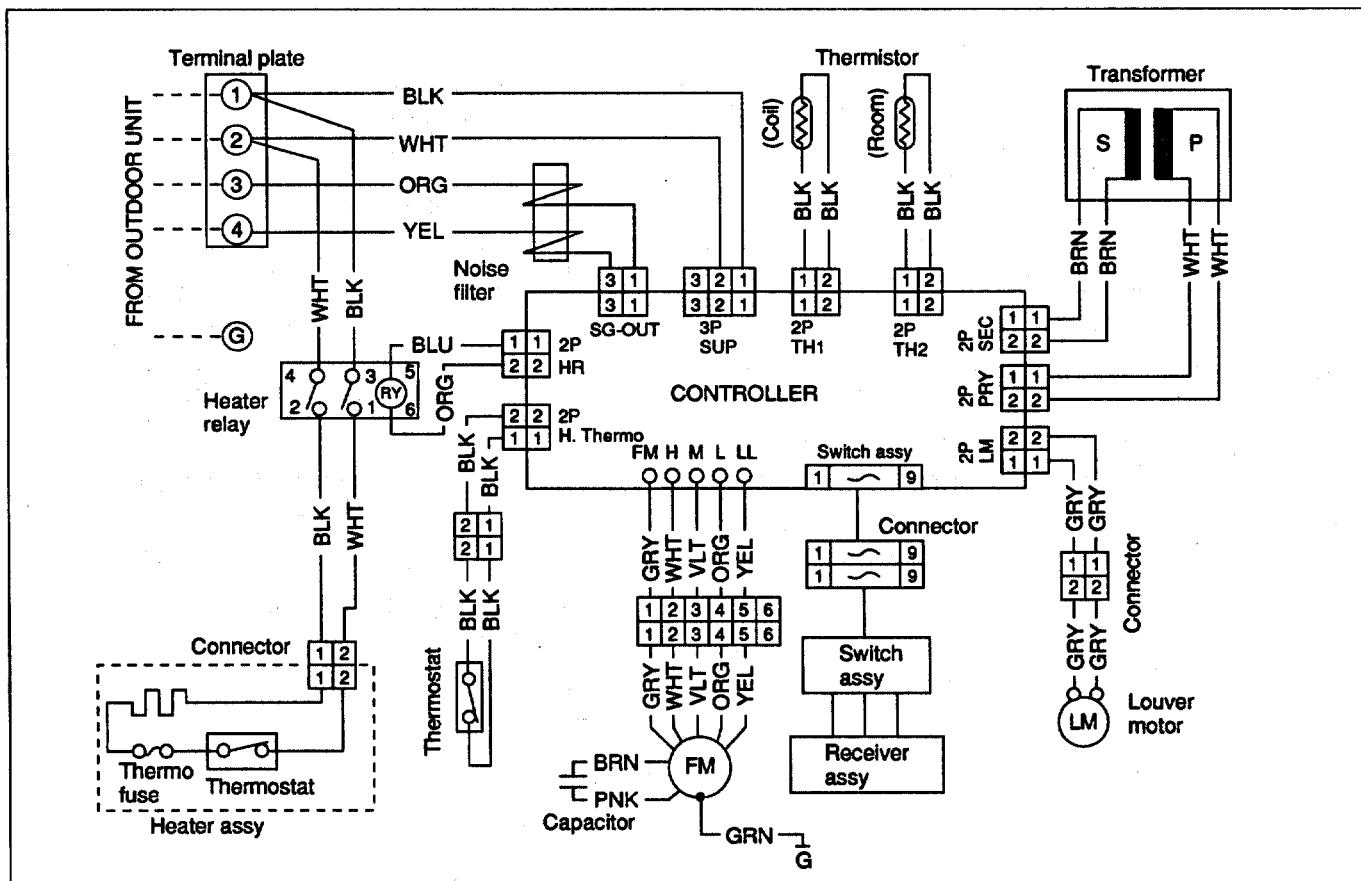
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WARNING:

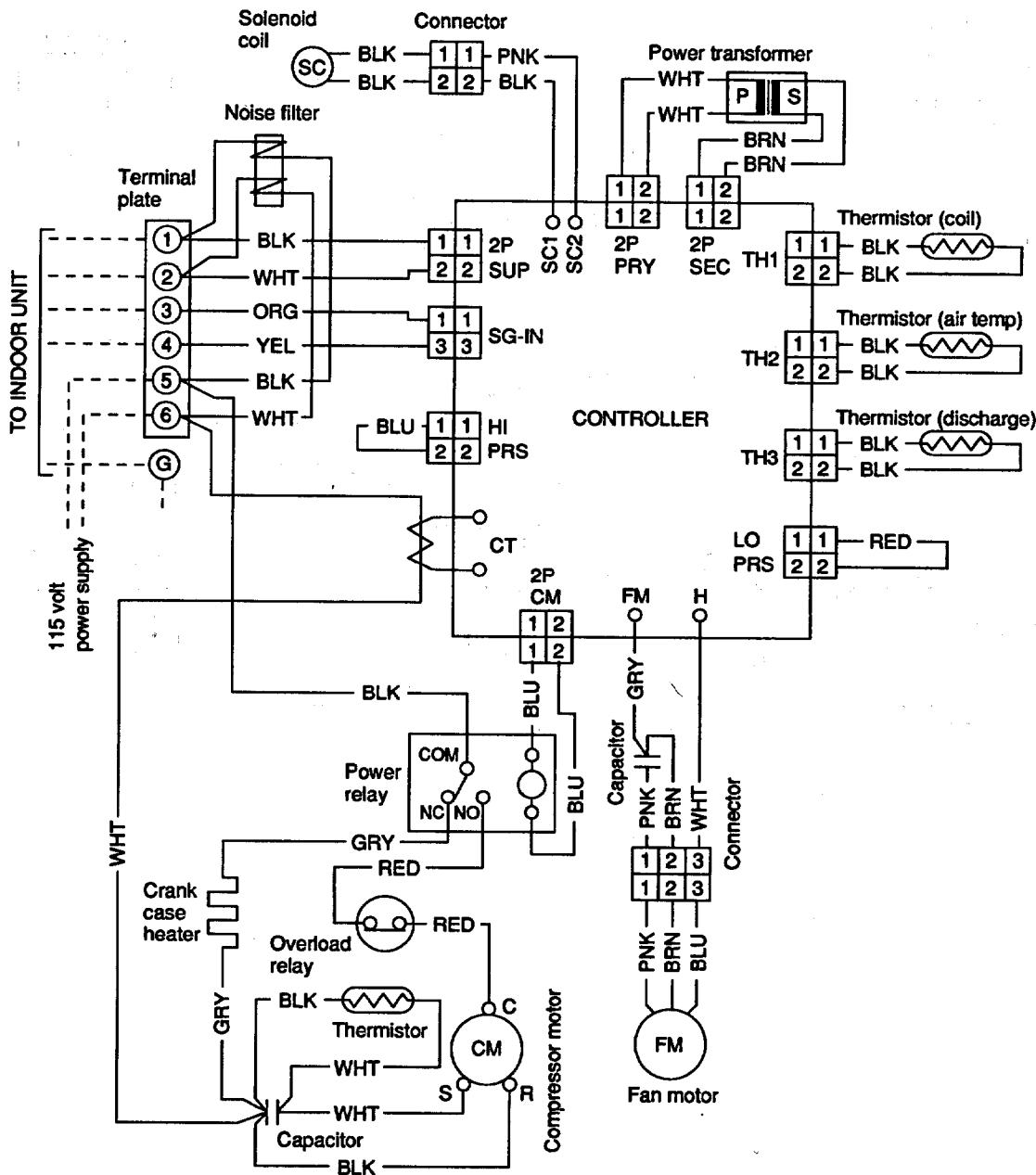
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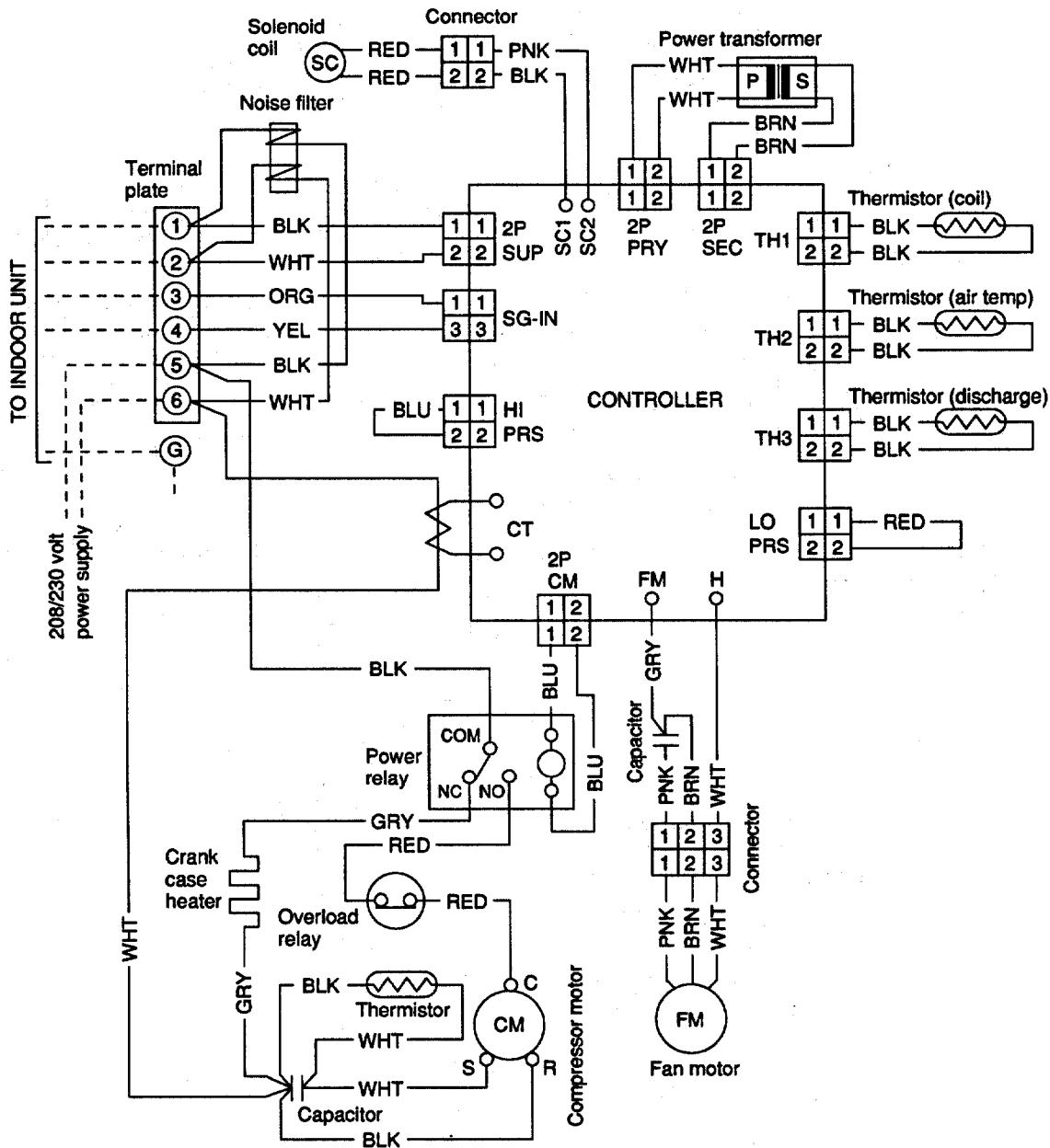
WARNING:

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**WARNING:**

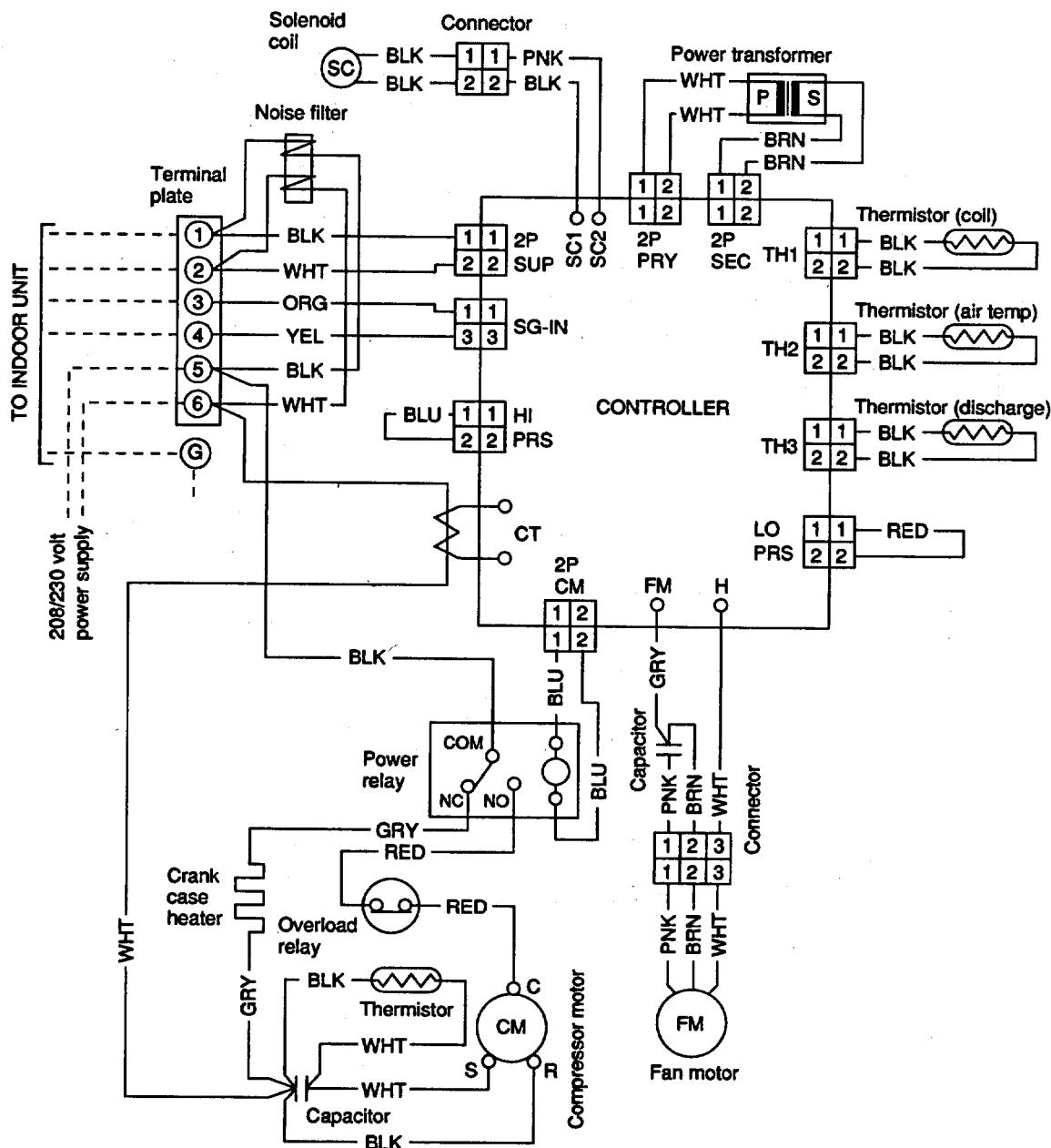
To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.





WARNING:

To avoid electrical shock hazard, be sure to disconnect power before checking, servicing and/or cleaning any electrical parts.



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