

SLZ CEILING-RECESSED HEAT PUMP SYSTEMS

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Due to continuing improvement, above specification may be subject to change without notice.

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1. INDOOR UNITS

- SLZ-KA09NA.TH
- SLZ-KA12NA.TH
- SLZ-KA15NA.TH

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2. OUTDOOR UNITS

- SUZ-KA09NA.TH
- SUZ-KA12NA.TH
- SUZ-KA15NA.TH

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3. SYSTEM

- Four-way 2'x2' ceiling-cassette indoor unit for ceiling recessed application
- Built-in drain mechanism for condensate removal; lifts to 19-11/16"
- Choice of fan speeds: Low, Medium, and High
- Indoor unit powered from outdoor unit using A-control
- Self-check function -- onboard diagnostics
- Advanced microprocessor control
- Auto restart following a power outage
- Hand-held Wireless Remote Controller
- Anti-allergy Enzyme Filter
- Limited warranty: five years parts and seven years compressor

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3-1. SPECIFICATIONS

SLZ-KA09NA.TH SLZ-KA12NA.TH SLZ-KA15NA.TH

Model name	Indoor unit		SLZ-KA09NA.TH	SLZ-KA12NA.TH	SLZ-KA15NA.TH
	Outdoor unit		SUZ-KA09NA.TH	SUZ-KA12NA.TH	SUZ-KA15NA.TH
Cooling	Max. Capacity	Btu/h	10,900	13,300	17,700
	Rated Capacity	Btu/h	8,400	11,100	15,000
	Min. Capacity	Btu/h	3,100	3,400	3,800
	Total input	W	700	920	1,460
	EER	Btu/h	12	12	10.2
	SEER	Btu/h	15	15.4	16
	Moisture Removal	Pints/h	1.2	2.3	4.5
	SHF		0.84	0.77	0.67
Heating	Max. Capacity	Btu/h	14,100	17,100	22,200
	Rated Capacity	Btu/h	10,900	13,600	18,000
	Min. Capacity	Btu/h	3,100	3,100	3,100
	Total input	W	930	1,180	1,950
	COP	W/W	3.44	3.38	2.71
	HSPF(IV)	Btu/h/W	9.6	9.6	9.6
Heating at low ambient	Capacity	Btu/h	8,300	10,200	13,400
	Total input	W	1,040	1,310	1,970
	COP	W/W	2.33	2.28	1.99
Power supply	Phase,Cycle,Voltage		1phase, 60Hz, 208/230V		
	Breaker size	A	15		
Voltage	Indoor - Outdoor S1-S2		AC208 / 230V		
	Indoor - Outdoor S2-S3		DC 12 - 24V		
	Indoor - Remote controller		DC 12V		

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)
 (heating)-Indoor : D.B. 21.1°C(70°F), W.B. 15.6°C(60°F) Outdoor : D.B. 8.3°C(47°F), W.B. 6.1°C(43°F)
 *2.Rating conditions(heating)-Indoor : D.B. 21.1°C(70°F), W.B. 15.6°C(60°F) Outdoor : D.B. -8.3°C(17°F), W.B. -9.4°C(15°F)

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3-1. SPECIFICATIONS

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH

Model name	Indoor unit		SLZ-KA09NA.TH	SLZ-KA12NA.TH	SLZ-KA15NA.TH
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	Rated Capacity	Btu/h	8,400	11,100	15,000
	Min. Capacity	Btu/h	3,100	3,400	3,800
	Total input	W	700	920	1,460
	EER	Btu/h	12	12	10.2
	SEER	Btu/h	15	15.4	16
	Moisture Removal	Pints/h	1.2	2.3	4.5
	SHF		0.84	0.77	0.67
Heating	Max. Capacity	Btu/h	14,100	17,100	22,200
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	HSPF(IV)	Btu/h/W	9.6	9.6	9.6
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Voltage	Indoor - Outdoor S1-S2		AC208 / 230V		
	Indoor - Outdoor S2-S3		DC 12 - 24V		
	Indoor - Remote controller		DC 12V		

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3-1. SPECIFICATIONS

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH

Model name	Indoor unit		SLZ-KA09NA.TH	SLZ-KA12NA.TH	SLZ-KA15NA.TH
	Outdoor unit		SUZ-KA09NA.TH	SUZ-KA12NA.TH	SUZ-KA15NA.TH
Indoor unit	MCA	A	1		
	MOCP	A	15		
	Fan Motor (ECM)	F.L.A	0.23	0.28	0.28
	Fan Motor Output	W	15	20	20
	Air flow DRY (Lo-Mid-Hi) WET	CMM	8 - 9 - 10	8 - 9 - 11	8 - 9 - 11
		CMM	7 - 8 - 9	7 - 8 - 10	7 - 8 - 10
	Air flow DRY (Lo-Mid-Hi) WET	CFM	280 - 320 - 350	280 - 320 - 390	280 - 320 - 390
		CFM	250 - 290 - 320	250 - 290 - 350	250 - 290 - 350
	Sound level (Lo-Mid-Hi)	dB (A)	29 - 32 - 38	30 - 34 - 39	31 - 35 - 40
	Dimension Unit <Grille>	W:mm [inch]	570 <650> [22-7/16 <25-19/32>]		
		D:mm [inch]	570 <650> [22-7/16 <25-19/32>]		
		H:mm [inch]	235 <20> [9-1/4 <25/32>]		
	Weight Unit <Grille>	kg	16.5 <3>		
lbs		36 <7>			
Field Drain pipe O.D.	mm [inch]	32 [1-1/4]			
Remote Controller			Optional parts		

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)
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3-1. SPECIFICATIONS

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH

Model name	Indoor unit		SLZ-KA09NA.TH	SLZ-KA12NA.TH	SLZ-KA15NA.TH
	Outdoor unit		SUZ-KA09NA.TH	SUZ-KA12NA.TH	SUZ-KA15NA.TH
Outdoor unit	MCA	A	12		
	MOCP	A	15		
	Fan Motor (ECM)	F.L.A.	0.50		
	Fan Motor Output	W	55		
	Compressor		KNB073FQDHC	KNB092FQAHC	SNB130FQBH
		R.L.A.	6.6		7.4
		L.R.A.	8.2		9.3
	Air flow (Cooling/Heating)	CMM	32.6 / 34.7	34.8 / 33.2	35.2 / 34.8
		CFM	1,151 / 1,225	1,229 / 1,172	1,243 / 1,229
	Refrigerant Control		Linear Expansion Valve		
	Defrost Method		Reverse Cycle		
	Sound level at cooling	dB (A)	46	49	49
	Sound level at heating	dB (A)	50	51	51
	External finish		Ivory Munsell 3Y 7.8/1.1		
	Dimension	W:mm [inch]	800 [31-1/2]		
D:mm [inch]		285 [11-1/4]			
H:mm [inch]		550 [21-5/8]			
Weight	kg [lbs]	30 [66]	35 [77]	36 [80]	
Refrigerant	Type		R410A		
	Charge	kg [lbs,oz]	0.9 [1 lb 16 oz]	1.15 [2 lb 9 oz]	
	Oil	L [oz]	0.32 (NEO 22) [10.8]		0.45 (NEO 22) [15.2]
Refrigerant pipe size	Gas side O.D.	mm [inch]	9.52 [3/8]		12.7 [1/2]
	Liquid side O.D.	mm [inch]	6.35 [1/4]		
Refrigerant pipe length	Height difference		Max. 12 m [Max. 40 ft]		
	Length		Max. 20 m [Max. 65 ft]		
Refrigerant Piping		Not Supplied			
Connection Method		Flared			

NOTES : *1.Rating conditions (cooling)-Indoor : D.B. 26.7°C(80°F), W.B. 19.4°C(67°F) Outdoor : D.B. 35°C(95°F), W.B. 23.9°C(75°F)
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3-1. SPECIFICATIONS

Efficiency Ratings

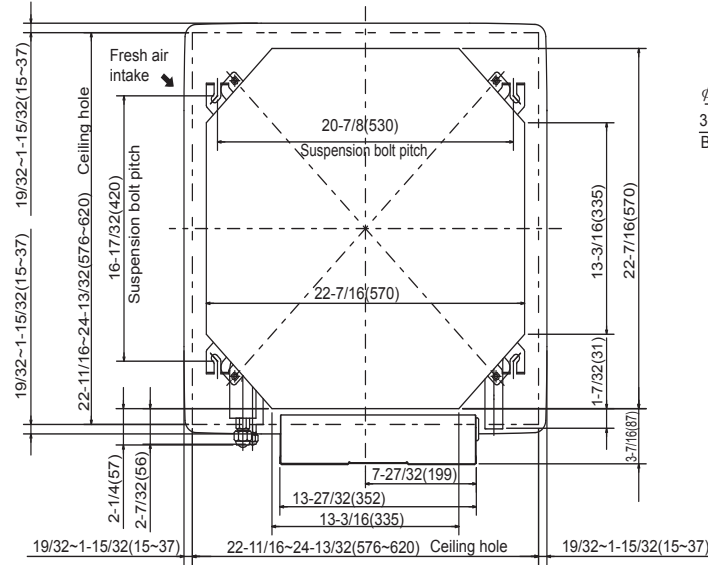
Outdoor Unit	Indoor Unit	SEER	EER	HSPF	COP @ 47° F	COP @ 17° F	Energy Star
WALL-MOUNT HEAT PUMP							
SUZ-KA09NA	SLZ-KA09NA	15.0	12.0	9.6	3.44	2.46	Yes
SUZ-KA12NA	SLZ-KA12NA	15.4	12.0	9.6	3.38	2.62	Yes
SUZ-KA15NA	SLZ-KA15NA	16.0	10.2	9.6	2.70	2.38	Yes
Note:	Efficiency values based on AHRI 210/240 test method.						

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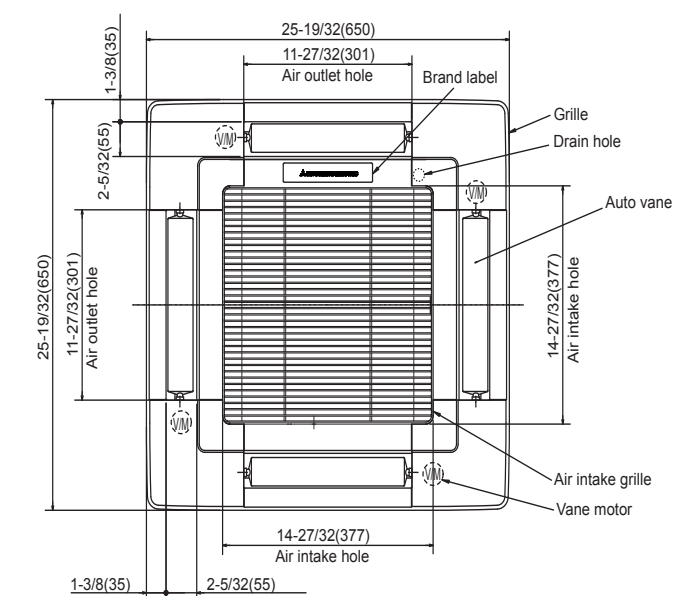
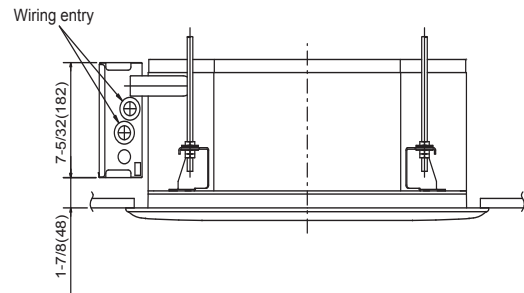
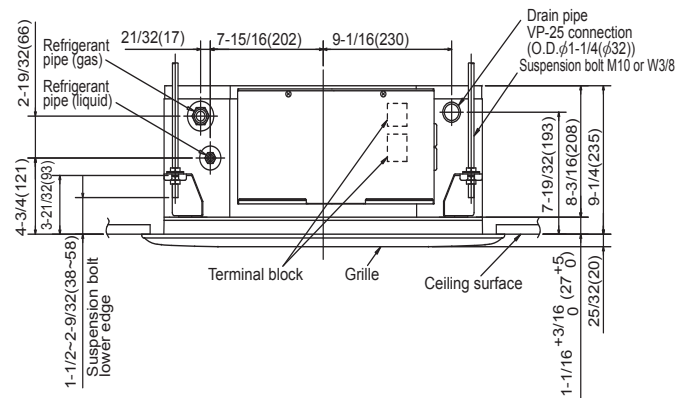
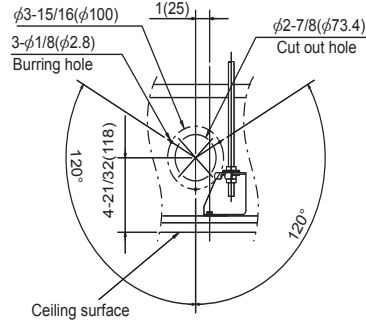
3-2. EXTERNAL DIMENSIONS

SLZ-KA09NA.TH SLZ-KD12NA.TH SLZ-KA15NA.TH

Unit: mm (inch)



Detail drawing of fresh air intake



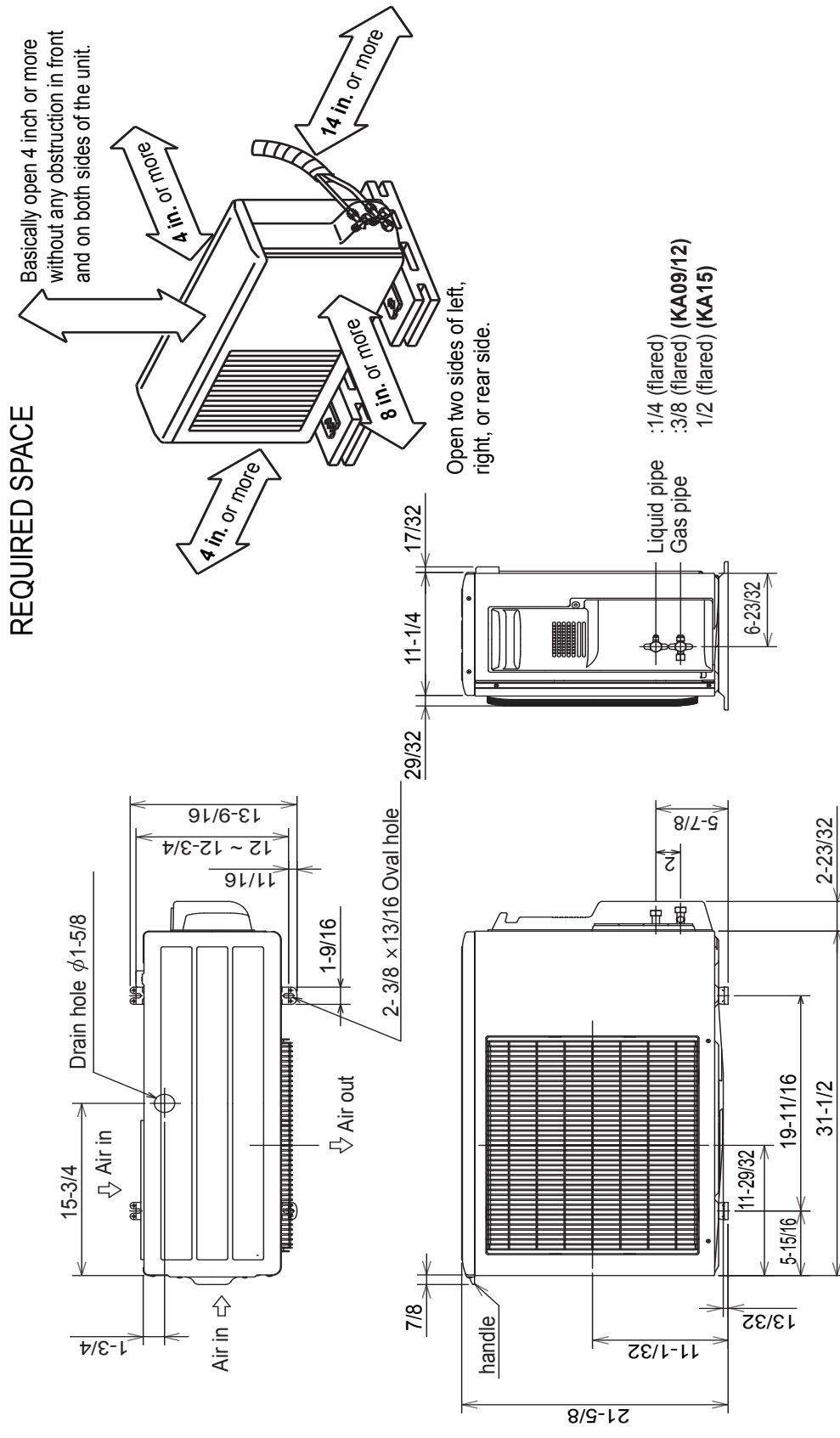
Models	Refrigerant pipe (liquid)	Refrigerant pipe (gas)
SLZ-KA09NA	1/4 inch (φ 6.35mm) flared connection	3/8 inch (φ 9.52mm) flared connection
SLZ-KA12NA	1/4 inch (φ 6.35mm) flared connection	3/8 inch (φ 9.52mm) flared connection
SLZ-KA15NA	1/4 inch (φ 6.35mm) flared connection	1/2 inch (φ 12.7mm) flared connection

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3-2. EXTERNAL DIMENSIONS

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH

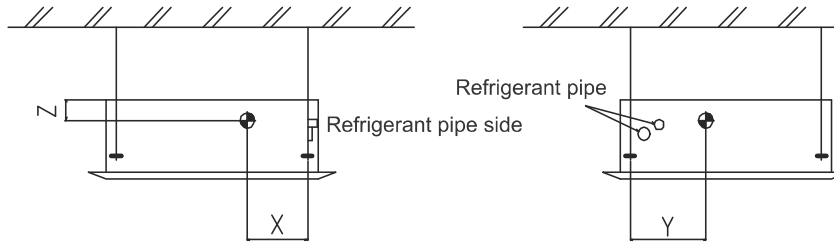
Unit: mm (inch)



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3-3. CENTER OF GRAVITY

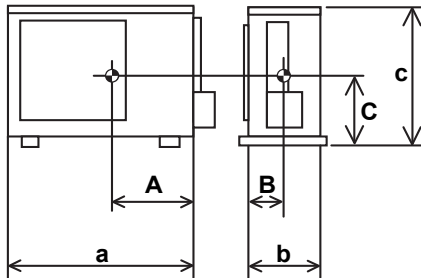
SLZ-KA09NA.TH SLZ-KD12NA.TH SLZ-KA15NA.TH



Model name	X	Y	Z
SLZ-KA09NA	150 [5-29/32]	260 [10-1/4]	105 [4-5/32]
SLZ-KA12NA	150 [5-29/32]	260 [10-1/4]	105 [4-5/32]
SLZ-KA15NA	150 [5-29/32]	260 [10-1/4]	105 [4-5/32]

(mm)[in]

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH



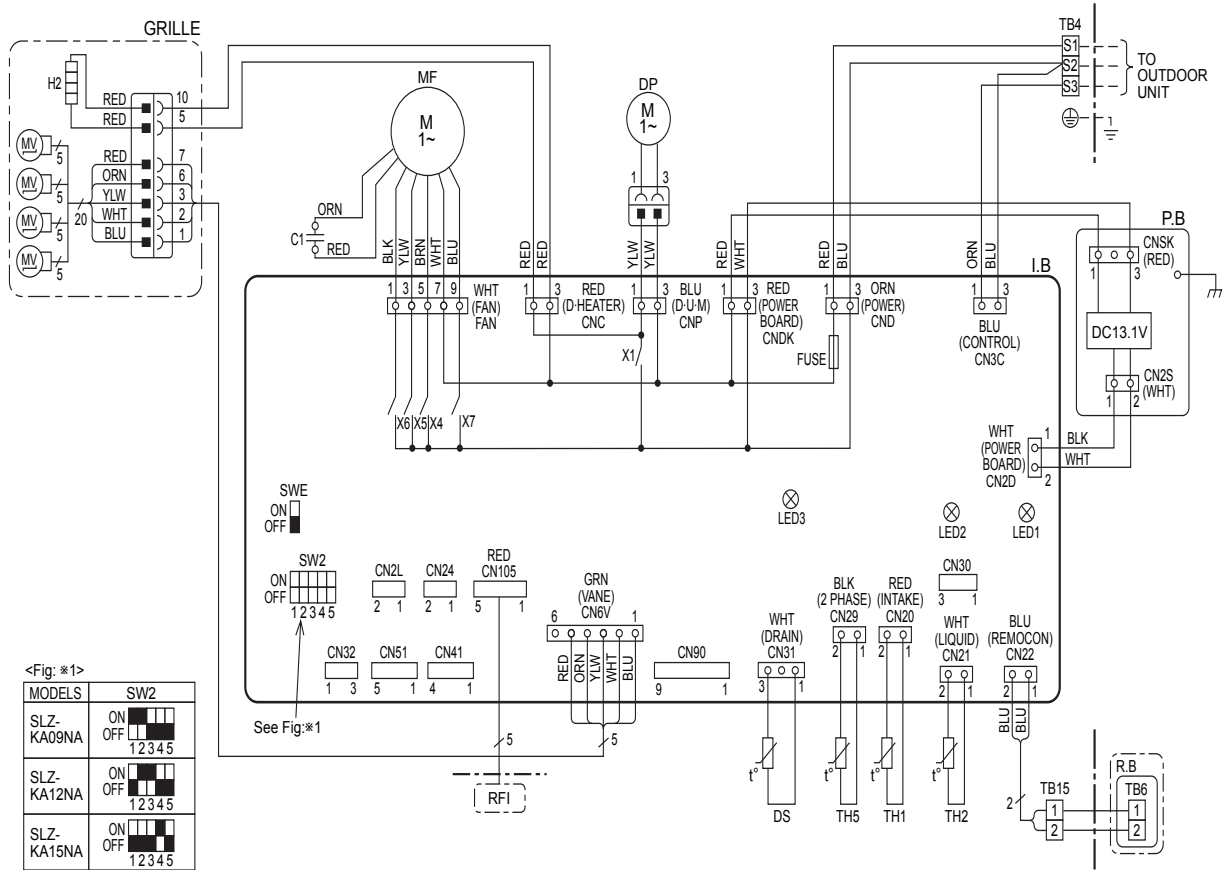
Unit: inch(mm)

Model name	A	B	C	a	b	c
SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH	11-1/16 (280)	5-9/16 (140)	9-1/2 (240)	31-1/2 (800)	11-1/4 (285)	21-5/8 (550)
SUZ-KA18NA.TH	11-13/16 (300)	5-7/8 (150)	13-3/8 (340)	33-1/16 (840)	13 (330)	33-7/16 (850)

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3-4. ELECTRICAL WIRING DIAGRAMS

SLZ-KA09NA.TH SLZ-KD12NA.TH SLZ-KA15NA.TH



[LEGEND]

SYMBOL	NAME	SYMBOL	NAME
P.B	INDOOR POWER BOARD	C1	CAPACITOR (FAN MOTOR)
I.B	INDOOR CONTROLLER BOARD	DP	DRAIN PUMP
CN2L	CONNECTOR (LOSSNAY)	DS	DRAIN SENSOR
CN24	CONNECTOR (BACK-UP HEATING)	RFI	RADIO FREQUENCY INTERFACE FOR RF THERMOSTAT
CN30	CONNECTOR (LLC)	H2	DEW PREVENTION HEATER
CN32	CONNECTOR (REMOTE SWITCH)	MF	FAN MOTOR (WITH THERMAL FUSE)
CN41	CONNECTOR (HA TERMINAL-A)	MV	VANE MOTOR
CN51	CENTRALLY CONTROL	TB4	TERMINAL BLOCK (INDOOR/OUTDOOR CONNECTING LINE)
CN105	CONNECTOR (RADIO FREQUENCY INTERFACE)	TB15	TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)
FUSE	FUSE (T6.3AL250V)	TH1	ROOM TEMP. THERMISTOR (32°F / 15kΩ, 77°F / 5.4kΩ DETECT)
LED1	POWER SUPPLY (I.B)	TH2	PIPE TEMP. THERMISTOR/LIQUID (32°F / 15kΩ, 77°F / 5.4kΩ DETECT)
LED2	POWER SUPPLY (I.B)	TH5	COND. / EVA. TEMP. THERMISTOR (32°F / 15kΩ, 77°F / 5.4kΩ DETECT)
LED3	TRANSMISSION (INDOOR-OUTDOOR)		
SW2	SWITCH (CAPACITY CODE)		
SWE	SWITCH (EMERGENCY OPERATION)		
X1	DRAIN PUMP/DEW PREVENTION HEATER		
X4	RELAY (FAN MOTOR LL)		
X5	RELAY (FAN MOTOR Lo)		
X6	RELAY (FAN MOTOR Hi)		
X7	RELAY (FAN MOTOR Me)		
		OPTION PART	
		R.B	WIRED REMOTE CONTROLLER BOARD
		TB6	TERMINAL BLOCK (REMOTE CONTROLLER TRANSMISSION LINE)

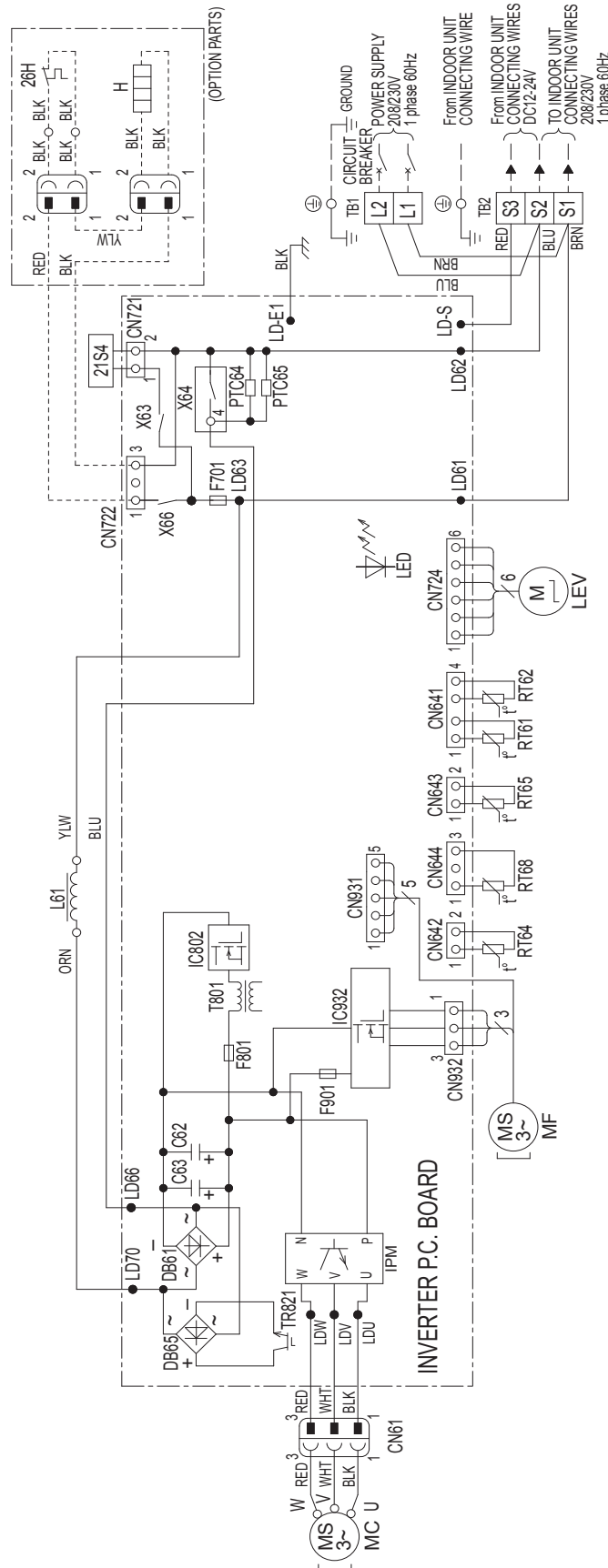
- NOTES: 1. Since the outdoor side electric wiring may change be sure to check the outdoor unit electric wiring for servicing.
 2. Indoor and outdoor connecting wires are made with polarities, make wiring matching terminal numbers (S1, S2, S3).
 3. Use copper supply wires.
 4. Symbols used in wiring diagram above are, □○□: Connector, □□□: Terminal (block).

*For details on how to operate self-diagnosis refer to the technical manuals etc.

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3-4. ELECTRICAL WIRING DIAGRAMS

SUZ-KA09NA.TH SUZ-KA12NA.TH



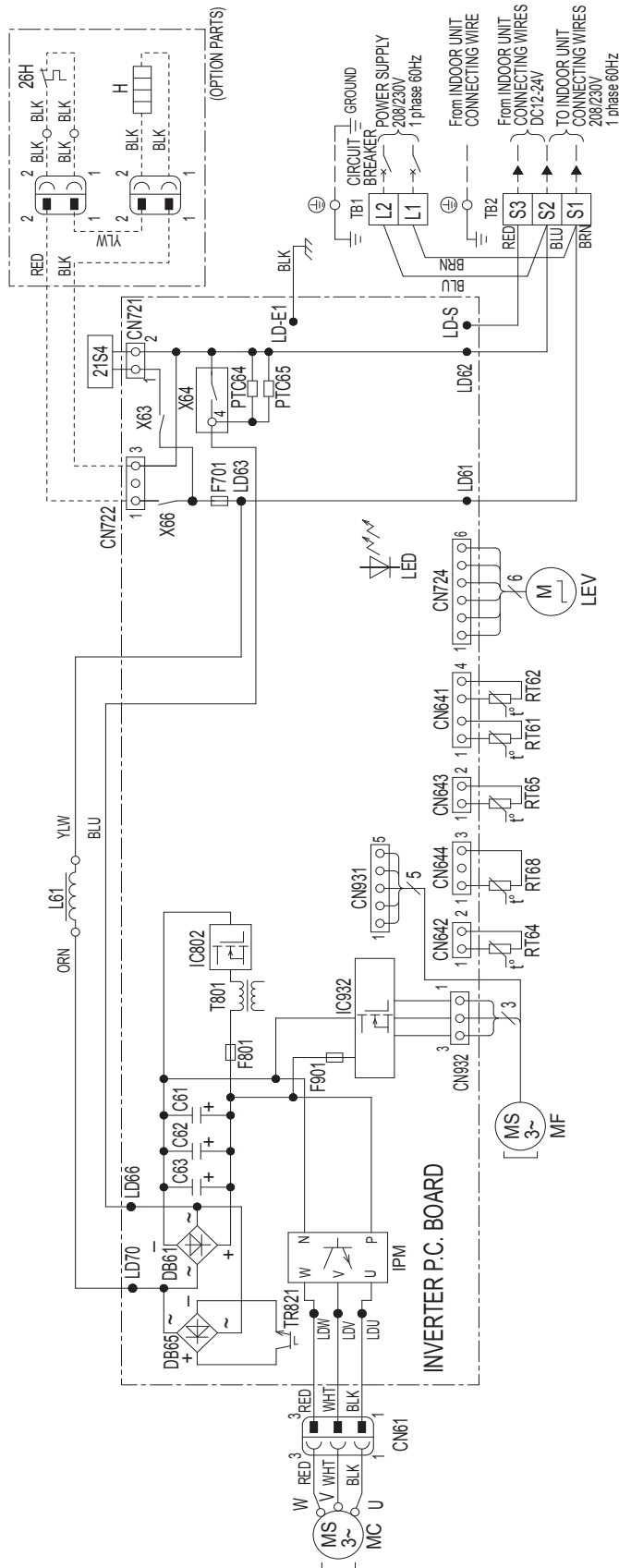
NOTES:
 1. About the indoor side electric wiring, refer to the indoor unit electric wiring diagram for servicing.
 2. Use copper conductors only. (For field wiring).

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
C62	SMOOTHING CAPACITOR	LEV	EXPANSION VALVE COIL	RT68	OUTDOOR HEAT EXCHANGER TEMP. THERMISTOR.
DB61, DB65	DIODE MODULE	MC	COMPRESSOR	TB1, TB2	TERMINAL BLOCK
F701, F801, F901	FUSE (T3.15ALZ50V)	MF	FAN MOTOR	TR821	SWITCHING POWER TRANSISTOR
IC802	DEFROST HEATER(OPTION PARTS)	PTC64	CIRCUIT PROTECTION	T801	TRANSFORMER
IPM, IC932	INTELLIGENT POWER DEVICE	RT61	DEFROST THERMISTOR	X63, X64, X66	RELAY
L61	INTELLIGENT POWER MODULE	RT62	DISCHARGE TEMP.THERMISTOR	21S4	REVERSING VALVE COIL
LED	REACTOR	RT64	FIN TEMP.THERMISTOR	26H	HEATER PROTECTOR(OPTION PARTS)
		RT65	AMBIENT TEMP.THERMISTOR		

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3-4. ELECTRICAL WIRING DIAGRAMS

SUZ-KA15NA.TH



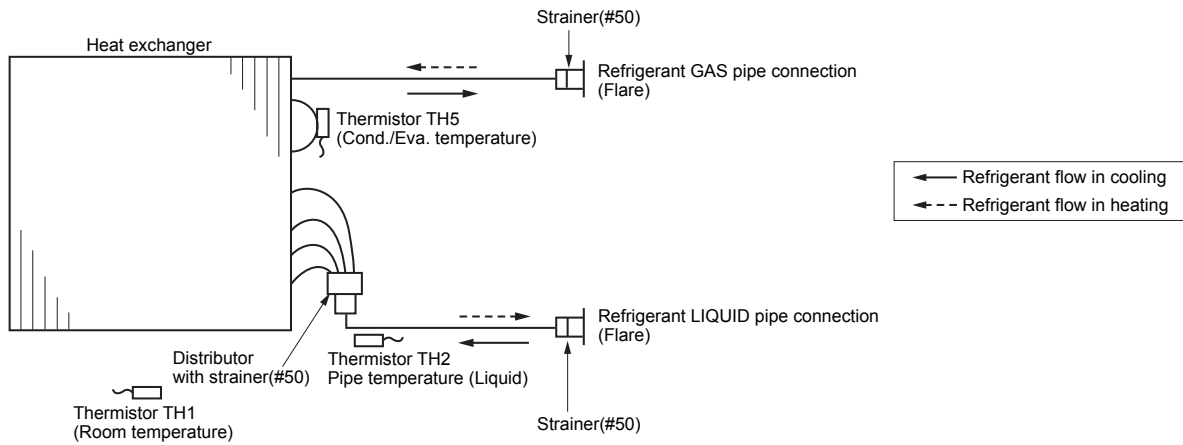
- NOTES:**
1. About the indoor side electric wiring, refer to the indoor unit electric wiring diagram for servicing.
 2. Use copper conductors only. (For field wiring).

SYMBOL	NAME	SYMBOL	NAME	SYMBOL	NAME
C61, C62, C63	SMOOTHING CAPACITOR	LEV	EXPANSION VALVE COIL	RT88	OUTDOOR HEAT EXCHANGER
DB61, DB65	DIODE MODULE	MC	COMPRESSOR	TB1, TB2	TEMP. THERMISTOR.
F701, F801, F901	FUSE (T3.15A L250V)	MF	FAN MOTOR	TR821	TERMINAL BLOCK
H	DEFROST HEATER(OPTION PARTS)	PTC64, PTC65	CIRCUIT PROTECTION	TB01	SWITCHING POWER TRANSISTOR
IC802	INTELLIGENT POWER DEVICE	RT61	DEFROST THERMISTOR	X63, X64, X66	TRANSFORMER
IPM, IC932	INTELLIGENT POWER MODULE	RT62	DISCHARGE TEMP.THERMISTOR		RELAY
L61	REACTOR	RT64	FIN TEMP.THERMISTOR	21S4	REVERSING VALVE COIL
LED	LED	RT65	AMBIENT TEMP.THERMISTOR	26H	HEATER PROTECTOR(OPTION PARTS)

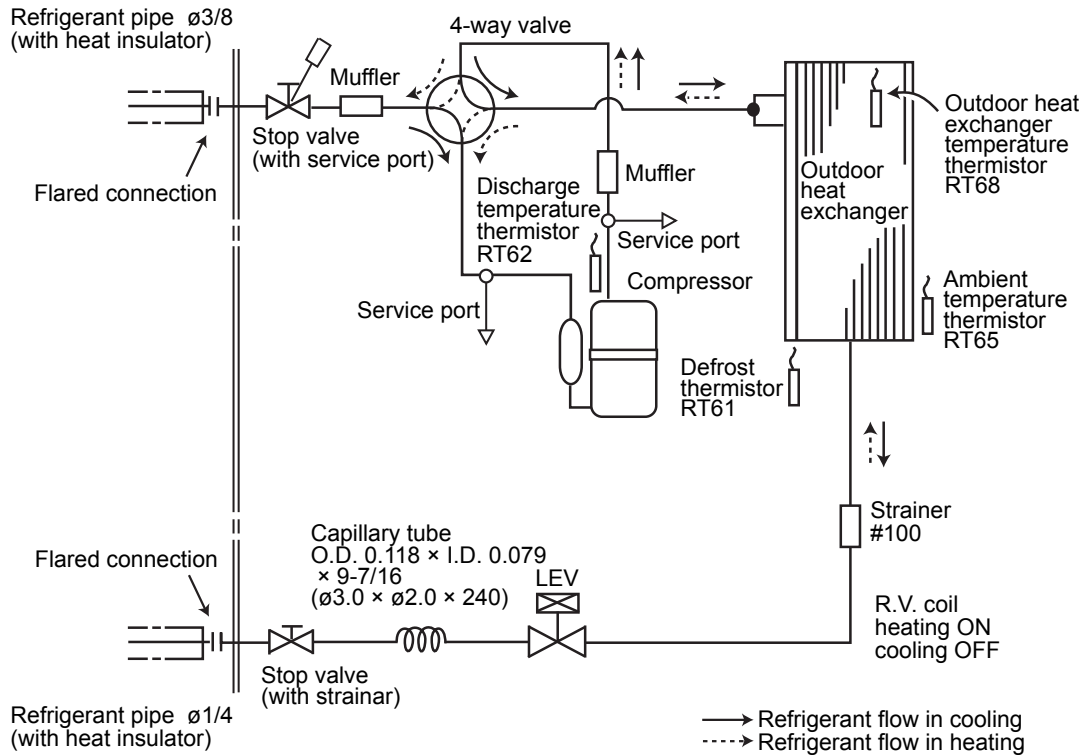
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3-5. REFRIGERANT SYSTEM DIAGRAMS

SLZ-KA09NA.TH SLZ-KD12NA.TH SLZ-KA15NA.TH

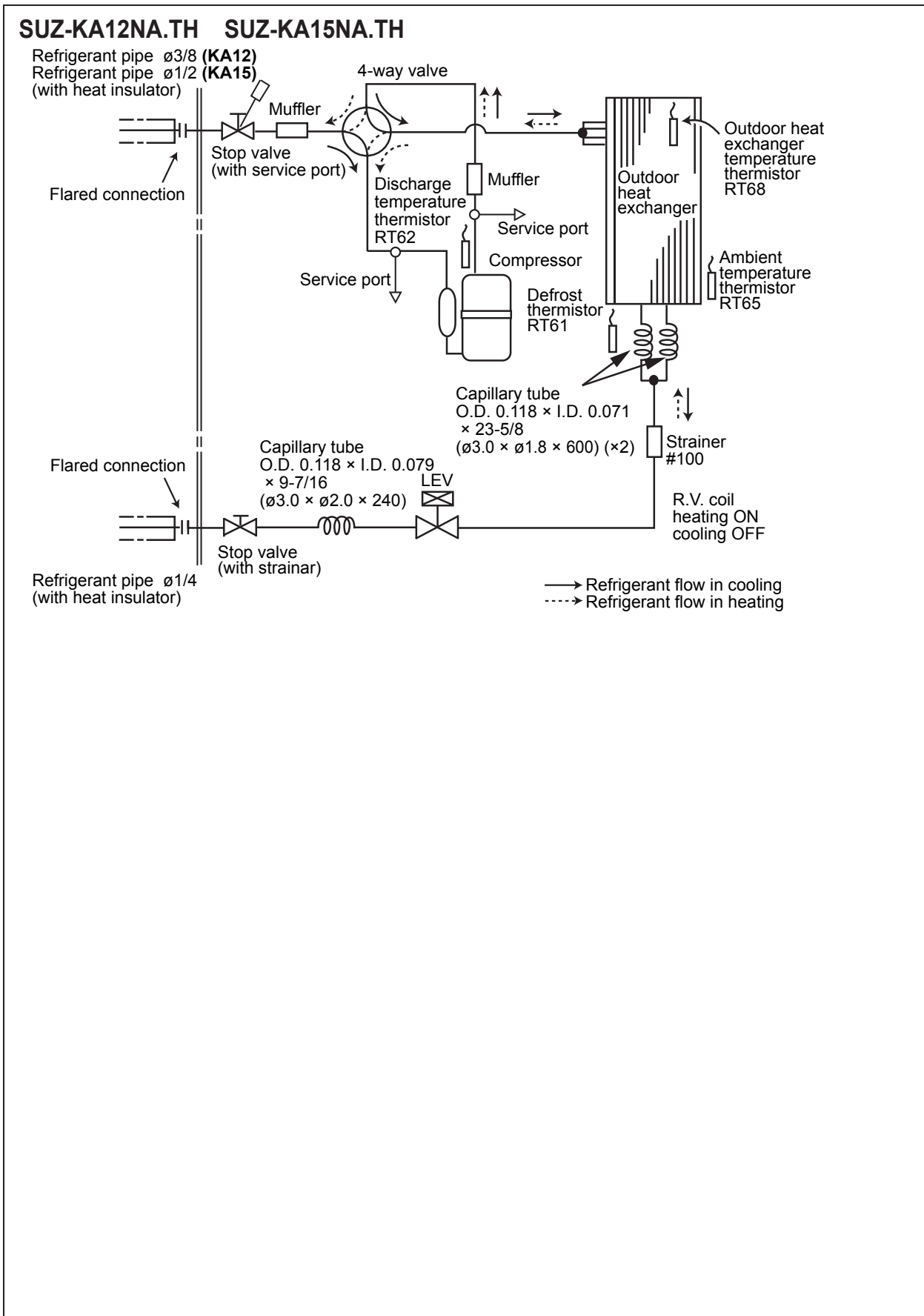


SUZ-KA09NA.TH



Due to continuing improvement, above specification may be subject to change without notice.

3-5. REFRIGERANT SYSTEM DIAGRAMS

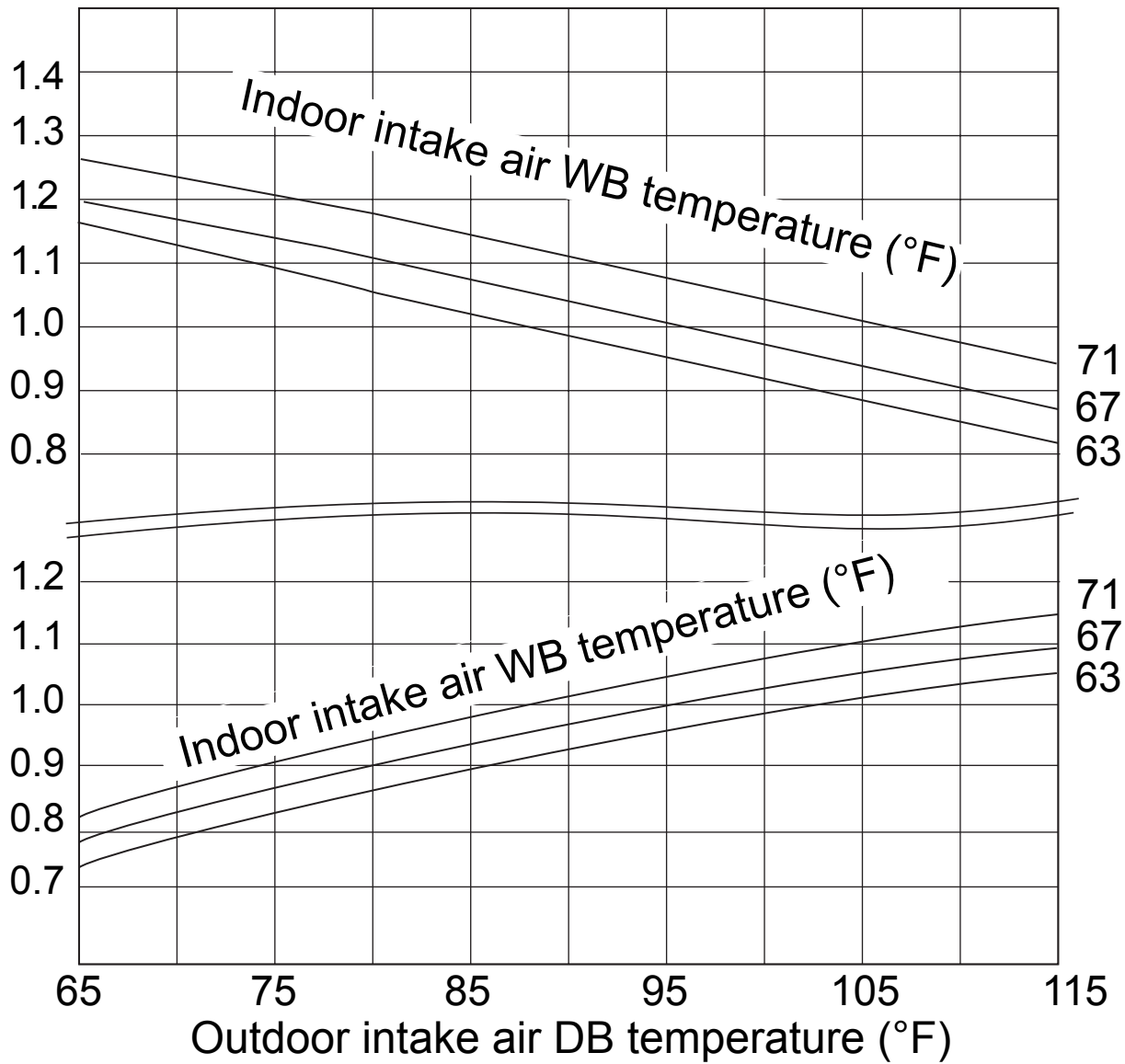


Due to continuing improvement, above specification may be subject to change without notice.

3-6. CAPACITY CORRECTION CURVE BY TEMPERATURE

(1) Cooling Performance Curve

For The Combination Of Outdoor Unit SUZ-KA·NA

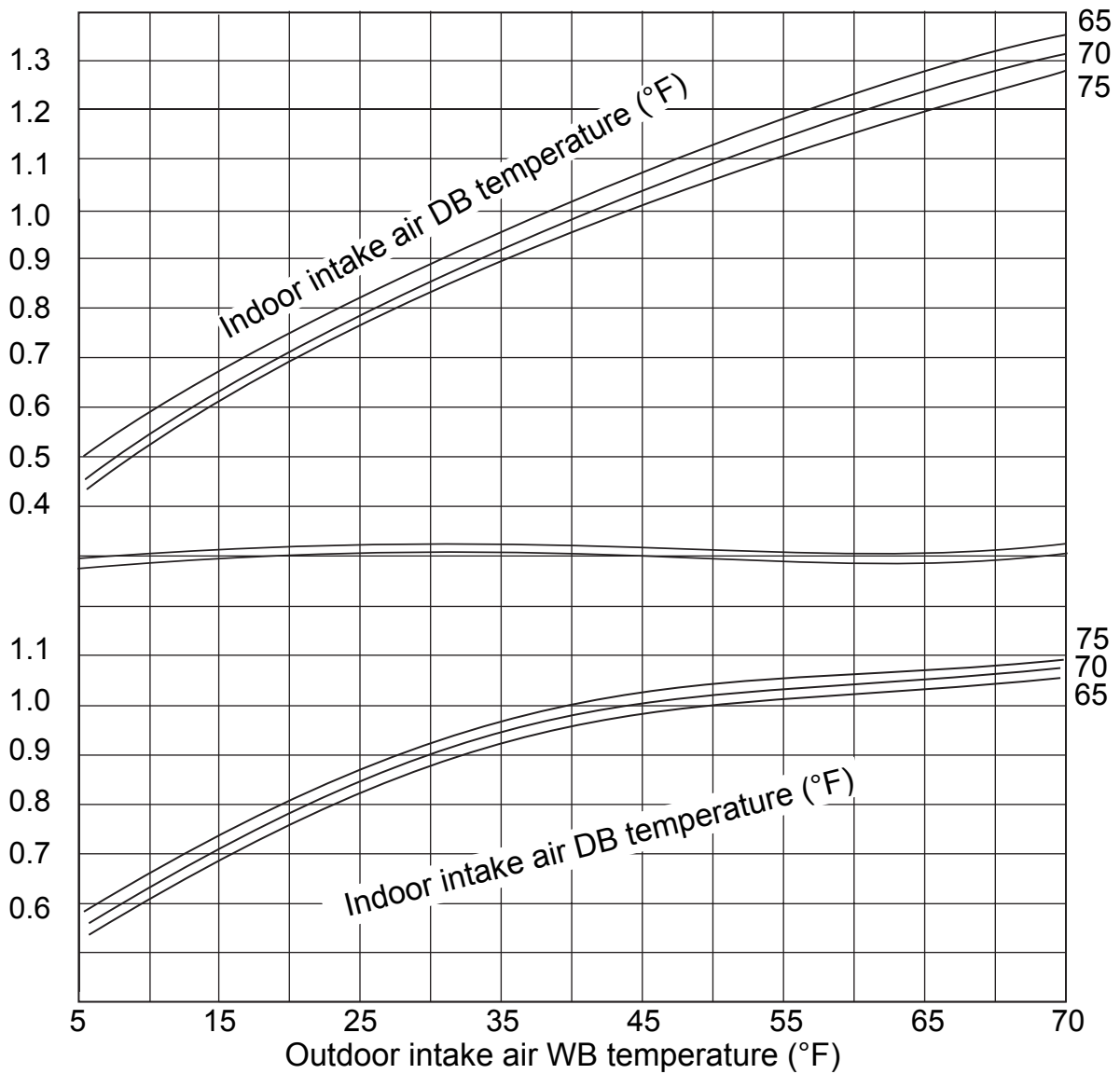


Due to continuing improvement, above specification may be subject to change without notice.

3-6. CAPACITY CORRECTION CURVE BY TEMPERATURE

(2) Heating Performance Curve

For The Combination Of Outdoor Unit SUZ-KA·NA



Due to continuing improvement, above specification may be subject to change without notice.

3-7. CAPACITY CORRECTION TABLE BY TEMPERATURE

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH

Model	Outdoor intake air DB temperature (°F)															
	75			85			95			105			115			
	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	TC	SHC	TPC	
SUZ-KA09NA.TH	Indoor air															
	IWB (°F)															
	71	10.3	7.3	0.62	9.6	6.8	0.68	9.0	6.4	0.74	8.4	5.9	0.77	7.7	5.5	0.81
SUZ-KA12NA.TH	71	13.6	8.7	0.82	12.7	8.1	0.90	11.9	7.6	0.97	11.1	7.1	1.02	10.2	6.5	1.06
	67	12.9	9.9	0.77	12.0	9.2	0.85	11.1	8.5	0.92	10.3	7.9	0.98	9.5	7.3	1.02
	63	12.1	10.9	0.74	11.2	10.1	0.81	10.4	9.4	0.88	9.5	8.6	0.94	8.7	7.8	0.98
SUZ-KA15NA.TH	71	18.4	9.9	1.30	17.2	9.2	1.42	16.1	8.7	1.53	15.0	8.1	1.61	13.8	7.4	1.68
	67	17.4	11.7	1.23	16.2	10.9	1.35	15.0	10.1	1.46	14.0	9.3	1.55	12.8	8.6	1.62
	63	16.4	13.1	1.17	15.2	12.2	1.29	14.1	11.3	1.39	12.8	10.3	1.49	11.7	9.4	1.55

NOTE: 1. IWB: Intake air wet-bulb temperature
 TC: Total Capacity ($\times 10^3$ Btu/h)

SHC: Sensible Heat Capacity ($\times 10^3$ Btu/h)

TPC: Total Power Consumption (kW)

2. SHC is based on 80°F of indoor Intake air DB temperature.

Due to continuing improvement, above specification may be subject to change without notice.

3-7. CAPACITY CORRECTION TABLE BY TEMPERATURE

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH

(2) Heating Capacity

Model	Indoor air		Outdoor intake air WB temperature (° F)												
	IDB (° F)	5	15		25		35		43		45		55		
			TC	TPC	TC	TPC	TC	TPC	TC	TPC	TC	TPC	TC	TPC	
SUZ-KA09NA.TH	75	4.8	0.55	6.3	0.69	7.9	0.81	9.4	0.91	10.6	0.95	11.0	0.97	12.4	1.00
	70	5.2	0.53	6.7	0.67	8.2	0.80	9.6	0.88	10.9	0.93	11.2	0.95	12.7	0.99
	65	5.5	0.50	6.9	0.64	8.6	0.77	10.0	0.86	11.2	0.91	11.6	0.92	13.0	0.97
SUZ-KA12NA.TH	75	6.0	0.70	7.9	0.88	9.9	1.03	11.8	1.15	13.3	1.21	13.7	1.23	15.5	1.27
	70	6.5	0.67	8.4	0.85	10.2	1.01	12.0	1.12	13.6	1.18	14.0	1.20	15.8	1.25
	65	6.8	0.64	8.6	0.81	10.7	0.97	12.4	1.09	14.0	1.15	14.4	1.17	16.2	1.23
SUZ-KA15NA.TH	75	7.9	1.15	10.4	1.45	13.1	1.71	15.6	1.90	17.6	2.00	18.1	2.03	20.5	2.11
	70	8.6	1.10	11.1	1.40	13.5	1.67	15.9	1.85	18.0	1.95	18.5	1.99	21.0	2.07
	65	9.0	1.05	11.3	1.35	14.1	1.61	16.5	1.80	18.5	1.90	19.1	1.93	21.4	2.03

NOTE: 1. IDB: Intake air dry-bulb temperature
 TC: Total Capacity (×10³ Btu/h)
 TPC: Total Power Consumption (kW)
 2. Above data is for heating operation without any frost.

How to operate with fixed operational frequency of the compressor.

1. Press the EMERGENCY OPERATION switch on the front of the indoor unit, and select either EMERGENCY COOL mode or EMERGENCY HEAT mode before starting to operate the air conditioner.
2. The compressor starts with operational frequency.
3. The fan speed of the indoor unit is High.
4. This operation continues for 30 minutes.
5. In order to release this operation, press the EMERGENCY OPERATION switch twice or once, or press any button on the remote controller.

Due to continuing improvement, above specification may be subject to change without notice.

3-7. CAPACITY CORRECTION TABLE BY TEMPERATURE

(3) M-Series Cooling Correction

	70	77	81	86	95	104	115
60	1.11	1.06	1.01	0.97	0.91	0.83	0.76
63	1.16	1.10	1.06	1.02	0.96	0.88	0.81
64	1.18	1.13	1.08	1.04	0.98	0.90	0.83
68	1.23	1.18	1.14	1.10	1.03	0.96	0.89
72	1.28	1.23	1.20	1.15	1.09	1.02	0.95
75	1.34	1.29	1.26	1.22	1.15	1.08	1.02
79	1.38	1.34	1.32	1.28	1.21	1.14	1.07

(4) M-Series Defrost Correction

Outdoor intake temperature W.B. [° F]	43	39	36	32	28	25	21	18	14
Outdoor intake temperature W.B. [° C]	6	4	2	0	-2	-4	-6	-8	-10
Correction factor	1.00	0.80	0.82	0.84	0.87	0.90	0.93	0.96	1.00

Due to continuing improvement, above specification may be subject to change without notice.

3-7. CAPACITY CORRECTION TABLE BY TEMPERATURE

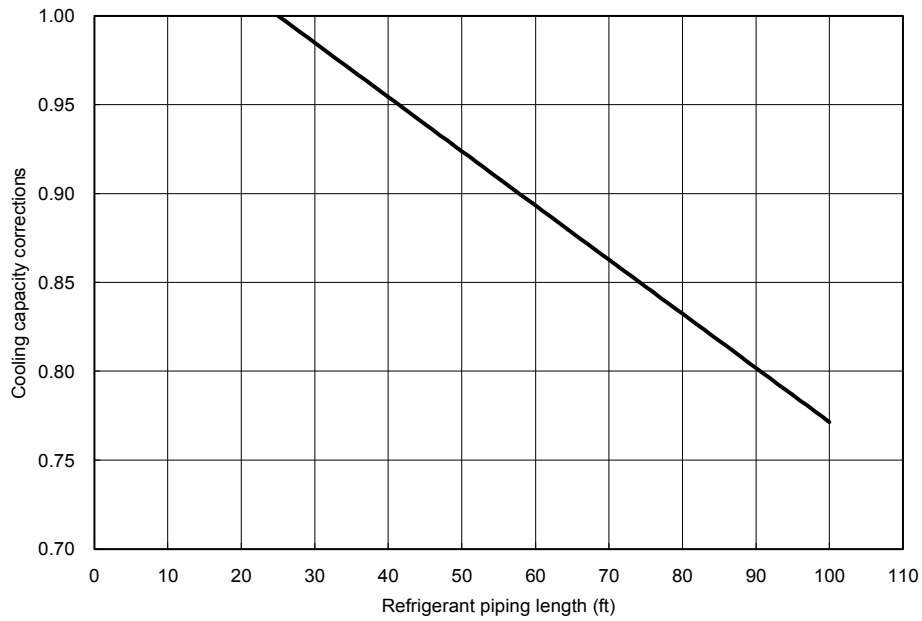
(5) M-Series Heating Correction

		Outdoor W.B. [° F]							
		-13	-4	5	14	23	32	41	50
Indoor									
EAT DB									
SUZ-KA09NA.TH	60			0.56	0.66	0.80	0.95	1.07	1.07
SUZ-KA12NA.TH	60			0.56	0.66	0.80	0.95	1.07	1.07
SUZ-KA15NA.TH	60			0.56	0.66	0.80	0.95	1.07	1.07
SUZ-KA18NA.TH	60			0.56	0.66	0.80	0.95	1.07	1.07
Interpolated Data Between 60 and 65 Indoor EAT DB data sets									
SUZ-KA09NA.TH	63			0.55	0.65	0.79	0.93	1.05	1.05
SUZ-KA12NA.TH	63			0.55	0.65	0.79	0.93	1.05	1.05
SUZ-KA15NA.TH	63			0.55	0.65	0.79	0.93	1.05	1.05
SUZ-KA18NA.TH	63			0.55	0.65	0.79	0.93	1.05	1.05
SUZ-KA09NA.TH	65			0.54	0.64	0.78	0.92	1.03	1.03
SUZ-KA12NA.TH	65			0.54	0.64	0.78	0.92	1.03	1.03
SUZ-KA15NA.TH	65			0.54	0.64	0.78	0.92	1.03	1.03
SUZ-KA18NA.TH	65			0.54	0.64	0.78	0.92	1.03	1.03
SUZ-KA09NA.TH	70			0.52	0.62	0.75	0.885	1.00	1.00
SUZ-KA12NA.TH	70			0.52	0.62	0.75	0.885	1.00	1.00
SUZ-KA15NA.TH	70			0.52	0.62	0.75	0.885	1.00	1.00
SUZ-KA18NA.TH	70			0.52	0.62	0.75	0.885	1.00	1.00
SUZ-KA09NA.TH	75			0.50	0.60	0.72	0.85	0.96	0.96
SUZ-KA12NA.TH	75			0.50	0.60	0.72	0.85	0.96	0.96
SUZ-KA15NA.TH	75			0.50	0.60	0.72	0.85	0.96	0.96
SUZ-KA18NA.TH	75			0.50	0.60	0.72	0.85	0.96	0.96
SUZ-KA09NA.TH	80			0.48	0.58	0.70	0.82	0.93	0.93
SUZ-KA12NA.TH	80			0.48	0.58	0.70	0.82	0.93	0.93
SUZ-KA15NA.TH	80			0.48	0.58	0.70	0.82	0.93	0.93
SUZ-KA18NA.TH	80			0.48	0.58	0.70	0.82	0.93	0.93

Due to continuing improvement, above specification may be subject to change without notice.

3-8. CAPACITY CORRECTION CURVE BY REFRIGERANT PIPING LENGTH

SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH
SUZ-KA15NA.TH SUZ-KA18NA.TH



Due to continuing improvement, above specification may be subject to change without notice.

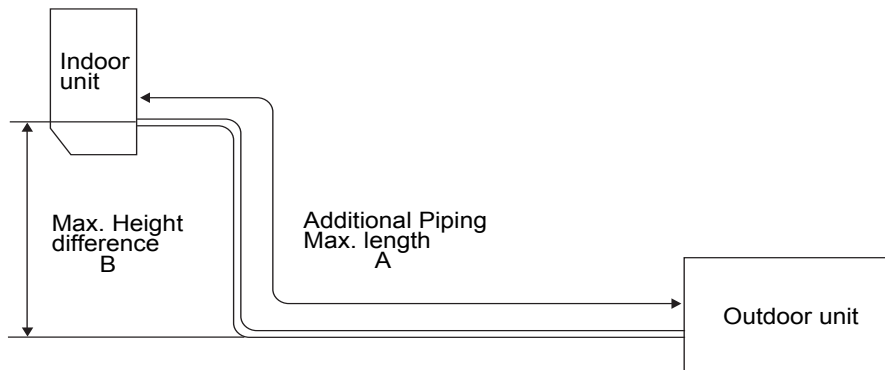
3-9. CAPACITY CORRECTION TABLE BY REFRIGERANT PIPING LENGTH

(1) Cooling Capacity Correction

Refrigerant piping length (one way: ft.)				
	25 (std.)	40	65	100
SUZ-KA09NA.TH SUZ-KA12NA.TH SUZ-KA15NA.TH	1.0	0.954	0.878	-
SUZ-KA18NA.TH	1.0	0.954	0.878	0.713

(2) Maximum Refrigerant Piping Length & Maximum Height Difference

Model	Refrigerant piping: ft		Piping size: in.			
	Additional piping Max. length A	Additional piping Max. height B	Gas		Liquid	
			Outside diameter	Minimum Wall thickness	Outside diameter	Minimum Wall thickness
SUZ-KA09NA.TH SUZ-KA12NA.TH	65	40	$\phi 3/8$	0.0315	$\phi 1/4$	0.0315
SUZ-KA15NA.TH	65	40	$\phi 1/2$	0.0315	$\phi 1/4$	0.0315
SUZ-KA18NA.TH	100	50	$\phi 1/2$	0.0315	$\phi 1/4$	0.0315



Due to continuing improvement, above specification may be subject to change without notice.

3-9. CAPACITY CORRECTION TABLE BY REFRIGERANT PIPING LENGTH

(3) M-Series Piping Correction Cooling

Refrigerant piping length (ft)			
25(std)	40	65	100
1.000	0.954	0.878	0.771

(4) M-Series Piping Correction Heating

Refrigerant piping length (ft)			
25(std)	40	65	100
1.000	0.989	0.972	0.955

Due to continuing improvement, above specification may be subject to change without notice.

3-10. CHARGE CALCULATIONS

(1) Additional Refrigerant Charge (R410A: oz.)

NOTE: Refrigerant piping exceeding 25 ft. requires additional refrigerant charge according to the calculation.

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.					
		25ft	30ft	40ft	50ft	60ft	65ft
SUZ-KA09NA.TH	2 lb. 0 oz.	0	1.62	4.86	8.10	11.34	12.96
SUZ-KA12NA.TH	2 lb. 9 oz.						
SUZ-KA15NA.TH							

NOTE: Calculation: X oz. = 1.62/5 oz./ft × (Refrigerant piping length (ft) - 25)

Model	Outdoor unit precharged	Refrigerant piping length (one way): ft.								
		25ft	30ft	40ft	50ft	60ft	70ft	80ft	90ft	100ft
SUZ-KA18NA.TH	4 lb. 0 oz.	0	1.08	3.24	5.40	7.56	9.72	11.88	14.04	16.20

NOTE: Calculation: X oz. = 1.08/5 oz./ft × (Refrigerant piping length (ft) - 25)

Due to continuing improvement, above specification may be subject to change without notice.

3-11. AIR FLOW DATA

Outlet Air Speed And Coverage

Model name		SLZ-KA09NA	SLZ-KA12NA	SLZ-KA15NA
Air flow H-M-L	m ³ /min	10 - 9 - 8	11 - 9 - 8	11 - 9 - 8
	CFM	350-320-280	390-320-280	390-320-280
Air speed at Hi	m/sec.	3.7	4.1	4.1
Coverage range	m	3.7	4.1	4.1

Due to continuing improvement, above specification may be subject to change without notice.

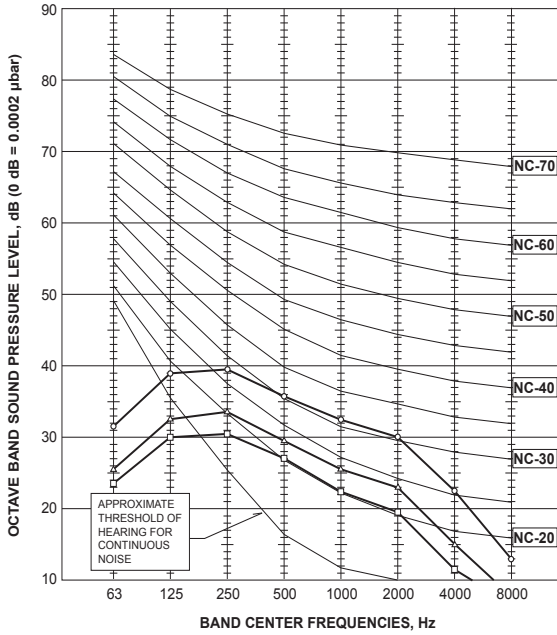
3-12. SOUND PRESSURE LEVELS

(1) Indoor Unit

SLZ-KA09NA.TH

<60Hz>

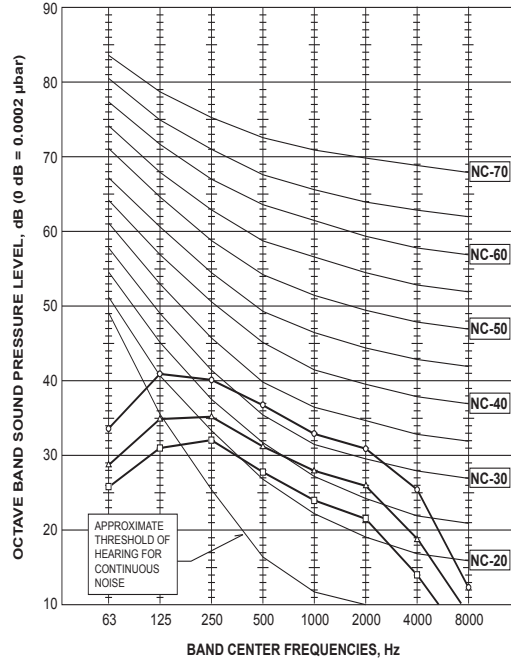
NOTCH	SPL(dB)	LINE
High	38	○—○
Medium	22	△—△
Low	29	□—□



SLZ-KA12NA.TH

<60Hz>

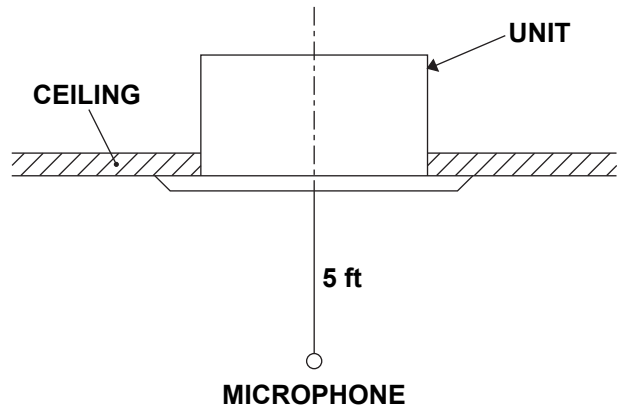
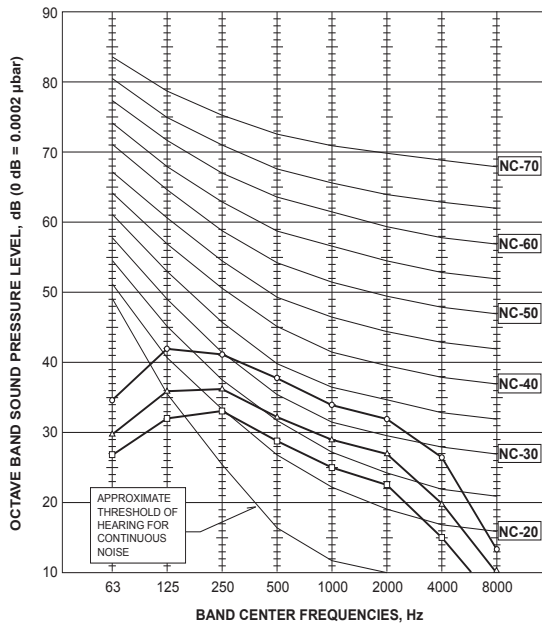
NOTCH	SPL(dB)	LINE
High	39	○—○
Medium	40	△—△
Low	30	□—□



SLZ-KA15NA.TH

<60Hz>

NOTCH	SPL(dB)	LINE
High	40	○—○
Medium	35	△—△
Low	31	□—□



NOTE: The sound level is measured in an anechoic room where echoes are few, when compressor stops. The sound may be bigger than the indicated level in actual use due to surrounding echoes. The sound level can be higher by about 2 dB than the indicated level during cooling and heating operation.

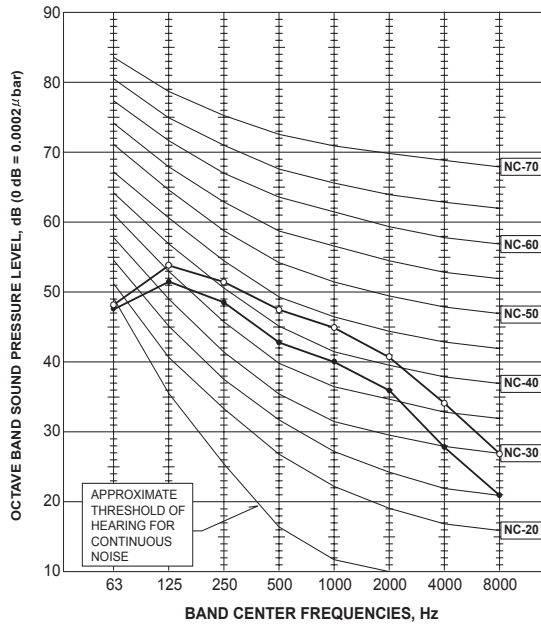
Due to continuing improvement, above specification may be subject to change without notice.

3-12. SOUND PRESSURE LEVELS

(2) Outdoor Unit

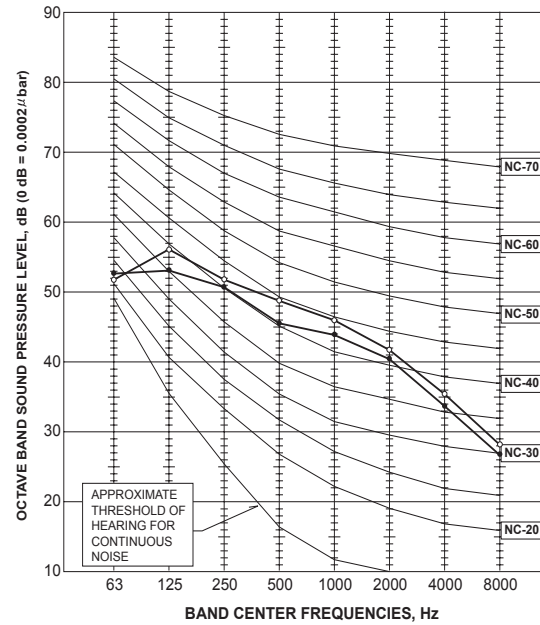
SUZ-KA09NA.TH

FUNCTION	SPL(dB(A))	LINE
COOLING	46	●—●
HEATING	50	○—○



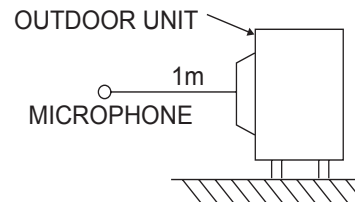
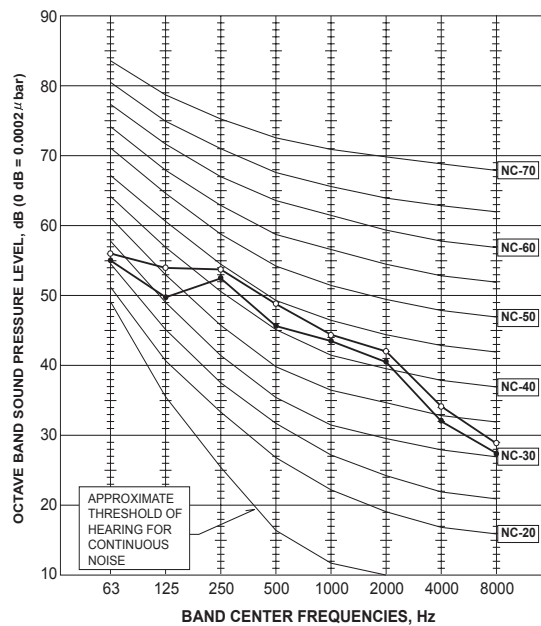
SUZ-KA12NA.TH

FUNCTION	SPL(dB(A))	LINE
COOLING	49	●—●
HEATING	51	○—○



SUZ-KA15NA.TH

FUNCTION	SPL(dB(A))	LINE
COOLING	49	●—●
HEATING	51	○—○



Due to continuing improvement, above specification may be subject to change without notice.

3-13. STANDARD OPERATION RANGE

	Rating	Guaranteed Voltage
Outdoor unit	208/230V 60Hz 1 Phase	Min. 187V 208V 230V Max. 253V ----- ----- ----- -----

Mode	Intake Air Temperature	Indoor		Outdoor	
	Condition	DB (°F)	WB (°F)	DB (°F)	WB (°F)
Cooling	Standard temperature	80	67	95	—
	Maximum temperature	90	73	115	—
	Minimum temperature	67	57	14	—
	Maximum humidity	78%		—	
Heating	Standard temperature	70	60	47	43
	Maximum temperature	80	67	75	65
	Minimum temperature	70	60	6	5

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(1) Indoor Unit

Part Number	Descriptions	Applicable model
C13-103	Blue Diamond Sensor Extension Cable - 15 Ft.	All Models
CN24RELAY-KIT-CM3	Relay Kit for external heater adapter connects to CN24 on indoor control board	
DPLS1	Portable Central Controller (PCC) - controls up to 16 RedLINK Zones - requires an MHK1 on each indoor unit	
MAC-333IF-E	System Control Interface - MA, Contact terminal, and M-NET Control Adapter, Supplemental heat and humidifier adaptor	
MCCH1	Portable Central Controller (PCC) - controls up to 16 RedLINK Zones - requires an MHK1 on each indoor unit	
MHK1	Wireless wall-mounted remote controller (MRCH1) with a signal receiver (MIFH1) and cable (MRC1) all in one kit	
MOS1	Outdoor Air Sensor - reads both outside temperature and humidity displayed on MRCH1 and MCCH1 if installed	
PAC-715AD	Wire for Remote on/off with CN32 connector	
PAC-725AD	Connector and wire for Operation status/error, booster fan control for fresh air using CN51	
PAC-SE41TS-E	Remote temperature sensor for indoor units	
PAC-SF40RM-E	Remote Operation Adapter with wire terminals for remote on/off and operation status/error	
PAR-FA32MA	Wireless Signal Receiver used with PAR-FL32MA	
PAR-FL32MA	Wireless Remote Controller used with PAR-FA32MA	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(1) Indoor Unit (cont.)

Part Number	Descriptions	Applicable model
PAC-YT53CRAU	Simple MA Remote Controller	All Models
PAR-31MAA	Wall mounted, hard wired, multi-functional controller: used specifically for grouping (up to 16 units), twinning, lead/lag, and 7 day programmable applications	
RCMKP1CB	Lockdown Bracket for wireless, hand-held, remote controllers	
SI30-115	Mini-Condensation pump - 115 volt application	
SI30-230	Mini-Condensation pump - 230 volt application	
TAZ-MS303	3-Pole Disconnect Switch 30 Amps 600 volts rated for interrupting power supply at/near indoor unit - fits 2 X 4 utility box	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(1) Indoor Unit (cont.)

Part Number	Descriptions	Applicable model	
MLS143812T-15	1/4 x 3/8 x 15' / 1/2" Twin-Tube Insulation	KA09,12	
MLS143812T-30	1/4 x 3/8 x 30' / 1/2" Twin-Tube Insulation		
MLS143812T-50	1/4 x 3/8 x 50' / 1/2" Twin-Tube Insulation		
MLS143812T-65	1/4 x 3/8 x 65' / 1/2" Twin-Tube Insulation		
MLS141212T-15	Diamondback Linesets	1/4 x 1/2 x 15' / 1/2" Twin-Tube Insulation	KA15
MLS141212T-30		1/4 x 1/2 x 30' / 1/2" Twin-Tube Insulation	
MLS141212T-50		1/4 x 1/2 x 50' / 1/2" Twin-Tube Insulation	
MLS141212T-65		1/4 x 1/2 x 65' / 1/2" Twin-Tube Insulation	
MLS141212T-100		1/4 x 1/2 x 100' / 1/2" Twin-Tube Insulation	

Due to continuing improvement, above specification may be subject to change without notice.

3-14. ACCESSORIES

(2) Outdoor Unit

Part Number	Descriptions	Applicable model
CWMB1	4 piece (1 pair) condensing unit wall mounting brackets - painted steel	All Models
DSD-400P	Outdoor Unit 3-1/4 inch Mounting Base (Pair) - Plastic	
MAC-640BH-U	Outdoor Unit Drain Pan Heater used during defrost cycle	KA09,12,15
MAC-641BH-U	Outdoor Unit Drain Pan Heater used during defrost cycle	KA18
ULTRILITE1	Condensing Unit Mounting Pad 16" x 36" x 3"	All Models

Due to continuing improvement, above specification may be subject to change without notice.