

TECHNICAL DATA

Indoor Unit

	Class	22	28	36	45	56	60	73	90	106	140	160
U1	4-Way Cassette	S-22MU1E51 S-22MU1E5	S-28MU1E51 S-28MU1E5	S-36MU1E51 S-36MU1E5	S-45MU1E51 S-45MU1E5	S-56MU1E51 S-56MU1E5	S-60MU1E51	S-73MU1E51 S-73MU1E5	S-90MU1E51	S-106MU1E51 S-106MU1E5	S-140MU1E51 S-140MU1E5	S-160MU1E51 S-160MU1E5
Y1	4-Way Cassette 60×60	S-22MY1E5	S-28MY1E5	S-36MY1E5	S-45MY1E5	S-56MY1E5						
L1	2-Way Cassette	S-22ML1E5	S-28ML1E5	S-36ML1E5	S-45ML1E5	S-56ML1E5		S-73ML1E5				
D1	1-Way Cassette		S-28MD1E5	S-36MD1E5	S-45MD1E5	S-56MD1E5		S-73MD1E5				
F1	Low Silhouette Ducted	S-22MF1E5	S-28MF1E5	S-36MF1E5	S-45MF1E5	S-56MF1E5		S-73MF1E5	S-90MF1E5	S-106MF1E5	S-140MF1E5	S-160MF1E5
F2	Low Silhouette Ducted	S-22MF2E5	S-28MF2E5	S-36MF2E5	S-45MF2E5	S-56MF2E5	S-60MF2E5	S-73MF2E5	S-90MF2E5	S-106MF2E5	S-140MF2E5	S-160MF2E5
M1	Slim Low Static Ducted	S-22MM1E5	S-28MM1E5	S-36MM1E5	S-45MM1E5	S-56MM1E5						
T1	Ceiling			S-36MT1E5	S-45MT1E5	S-56MT1E5		S-73MT1E5		S-106MT1E5	S-140MT1E5	
K1	Wall Mounted	S-22MK1E5	S-28MK1E5	S-36MK1E5	S-45MK1E5	S-56MK1E5		S-73MK1E5		S-106MK1E5		
R1	Concealed Floor Standing	S-22MR1E5	S-28MR1E5	S-36MR1E5	S-45MR1E5	S-56MR1E5		S-71MR1E5				
P1	Floor Standing	S-22MP1E5	S-28MP1E5	S-36MP1E5	S-45MP1E5	S-56MP1E5		S-71MP1E5				

	Class	73	106	140	224	280
E1	High Static Pressure Ducted	S-73ME1E5	S-106ME1E5	S-140ME1E5	S-224ME1E5	S-280ME1E5

Check of Density Limit

The room in which the air conditioner is to be installed requires a design that in the event of refrigerant gas leaking out, its density will not exceed a set limit.

The refrigerant (R410A), which is used in the air conditioner, is safe, without the toxicity or combustibility of ammonia, and is not restricted by laws imposed to protect the ozone layer. However, since it contains more than air, it poses the risk of suffocation if its density should rise excessively. Suffocation from leakage of refrigerant is almost non-existent. With the recent increase in the number of high density buildings, however, the installation of multi air conditioner systems is on the increase because of the need for effective use of floor space, individual control, energy conservation by curtailing heat and carrying power, etc.

Most importantly, the multi air conditioner system is able to replenish a large amount of refrigerant compared to conventional individual air conditioners. If a single unit of the multi air conditioner system is to be installed in a small room, select a suitable model and installation procedure so that if the refrigerant accidentally leaks out, its density does not reach the limit (and in the event of an emergency, measures can be made before injury can occur).

In a room where the density may exceed the limit, create an opening with adjacent rooms, or install mechanical ventilation combined with a gas leak detection device. The density is as given below.

Total amount of refrigerant (kg)

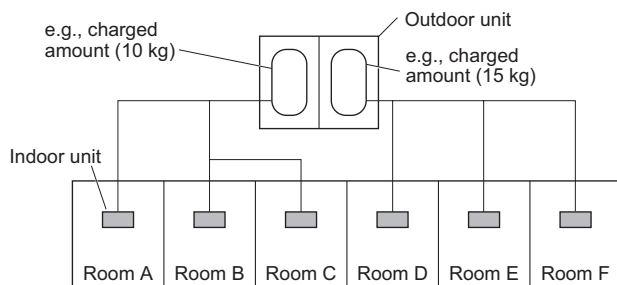
$$\text{Min. volume of the indoor unit installed room (m}^3\text{)} \leq \text{Density limit (kg/m}^3\text{)}$$

The density limit of refrigerant which is used in multi air conditioners is 0.3 kg/m^3 (ISO 5149).

NOTE

1. If there are 2 or more refrigerating systems in a single refrigerating device, the amount of refrigerant should be as charged in each independent device.

For the amount of charge in this example:

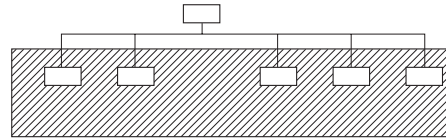


The possible amount of leaked refrigerant gas in rooms A, B and C is 10 kg.

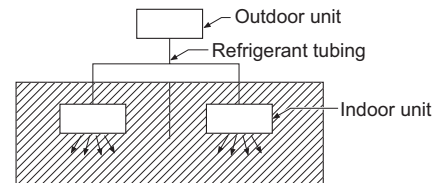
The possible amount of leaked refrigerant gas in rooms D, E and F is 15 kg.

2. The standards for minimum room volume are as follows.

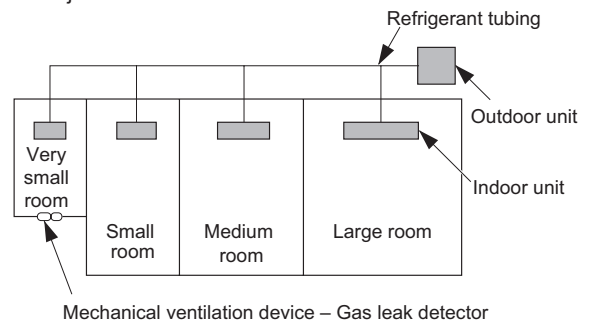
- (1) No partition (shaded portion)



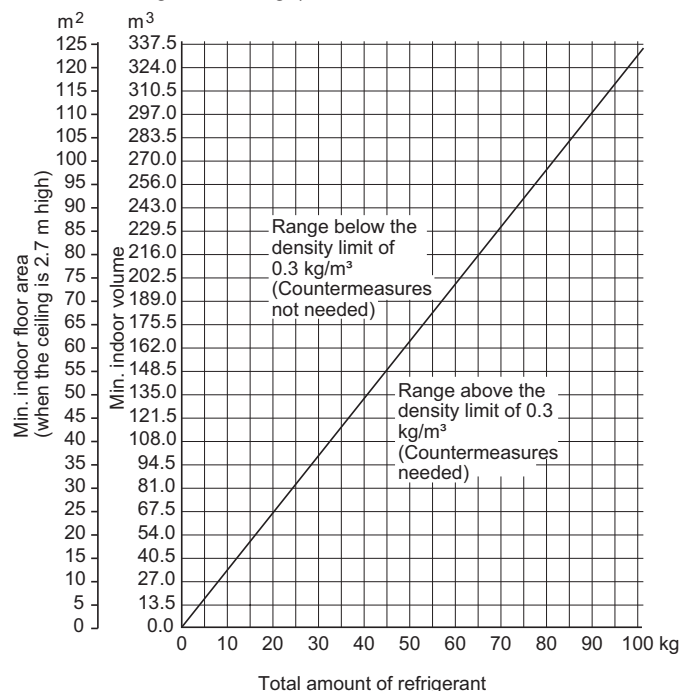
- (2) When there is an effective opening with the adjacent room for ventilation of leaking refrigerant gas (opening without a door, or an opening 0.15% or larger than the respective floor spaces at the top or bottom of the door).



- (3) If an indoor unit is installed in each partitioned room and the refrigerant tubing is interconnected, the smallest room of course becomes the object. But when mechanical ventilation is installed interlocked with a gas leakage detector in the smallest room where the density limit is exceeded, the volume of the next smallest room becomes the object.



3. The minimum indoor floor space compared with the amount of refrigerant is roughly as follows: (When the ceiling is 2.7 m high)



Precautions for Installation Using New Refrigerant

1. Care regarding tubing

1-1. Process tubing

- Material: Use C1220 phosphorous deoxidized copper specified in JIS H3300 "Copper and Copper Alloy Seamless Pipes and Tubes." For tubes of $\phi 22.22$ or larger, use C1220 T-1/2H material or H material, and do not bend the tubes.
- **Tubing size: Be sure to use the sizes indicated in the table below.**
- Use a tube cutter when cutting the tubing, and be sure to remove any flash. This also applies to distribution joints (optional).
- When bending tubing, use a bending radius that is 4 times the outer diameter of the tubing or larger.



CAUTION

Use sufficient care in handling the tubing. Seal the tubing ends with caps or tape to prevent dirt, moisture, or other foreign substances from entering. These substances can result in system malfunction.

Unit: mm

Material		O				
Copper tube	Outer diameter	6.35	9.52	12.7	15.88	19.05
	Wall thickness	0.8	0.8	0.8	1.0	1.2

Unit: mm

Material		1/2 H, H					
Copper tube	Outer diameter	22.22	25.4	28.58	31.75	38.1	41.28
	Wall thickness	1.0	1.0	1.0	1.1	over 1.35	over 1.45

1-2. Prevent impurities including water, dust and oxide from entering the tubing. Impurities can cause R410A refrigerant deterioration and compressor defects. Due to the features of the refrigerant and refrigerating machine oil, the prevention of water and other impurities becomes more important than ever.

2. Be sure to recharge the refrigerant only in liquid form.

- 2-1. Since R410A is a non-azeotrope, recharging the refrigerant in gas form can lower performance and cause defects in the unit.
- 2-2. Since refrigerant composition changes and performance decreases when gas leaks, collect the remaining refrigerant and recharge the required total amount of new refrigerant after fixing the leak.

3. Different tools required

3-1. Tool specifications have been changed due to the characteristics of R410A.

Some tools for R22- and R407C-type refrigerant systems cannot be used.

Item	New tool?	R407C tools compatible with R410A?	Remarks
Manifold gauge	Yes	No	Types of refrigerant, refrigerating machine oil, and pressure gauge are different.
Charge hose	Yes	No	To resist higher pressure, material must be changed.
Vacuum pump	Yes	Yes	Use a conventional vacuum pump if it is equipped with a check valve. If it has no check valve, purchase and attach a vacuum pump adapter.
Leak detector	Yes	No	Leak detectors for CFC and HCFC that react to chlorine do not function because R410A contains no chlorine. Leak detectors for HFC134a can be used for R410A.
Flaring oil	Yes	No	For systems that use R22, apply mineral oil (Suniso oil) to the flare nuts on the tubing to prevent refrigerant leakage. For machines that use R407C or R410A, apply synthetic oil (ether oil) to the flare nuts.

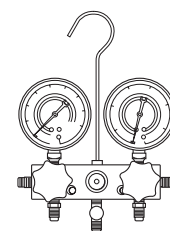
* Using tools for R22 and R407C and new tools for R410A together can cause defects.

3-2. Use R410A exclusive cylinder only.

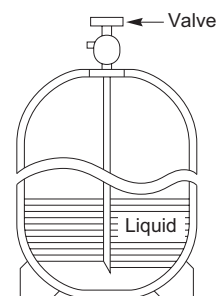
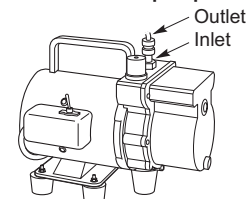
Single-outlet valve

(with siphon tube)
Liquid refrigerant should be recharged with the cylinder standing on end as shown.

Manifold gauge



Vacuum pump



3. Electrical Wiring



CAUTION

- (1) When linking outdoor units in a network, disconnect the terminal extended from the short plug (CN072, 2P Black, location: right bottom on the outdoor main control PCB) from all outdoor units except any one of the outdoor units.
(When shipping: In shorted condition.)
For a system without link (no connection wiring between outdoor units), do not remove the short plug.
- (2) Do not install the inter-unit control wiring in a way that forms a loop. (Fig. 2-2)

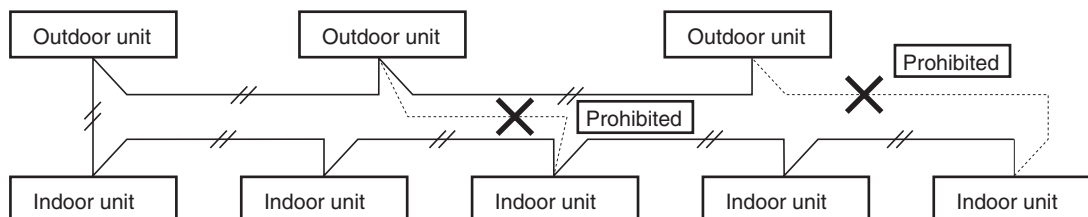


Fig. 2-2

- (3) Do not install inter-unit control wiring such as star branch wiring. Star branch wiring causes misaddress setting.

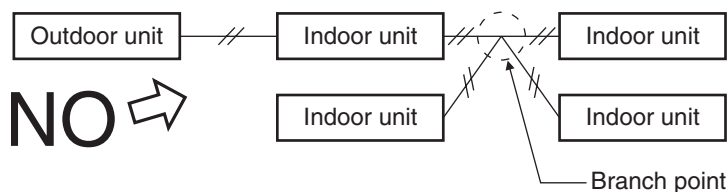


Fig. 2-3

- (4) If branching the inter-unit control wiring, the number of branch points should be 16 or fewer. (Branches less than 1 m are not included in the total branch number.) (Fig. 2-4)

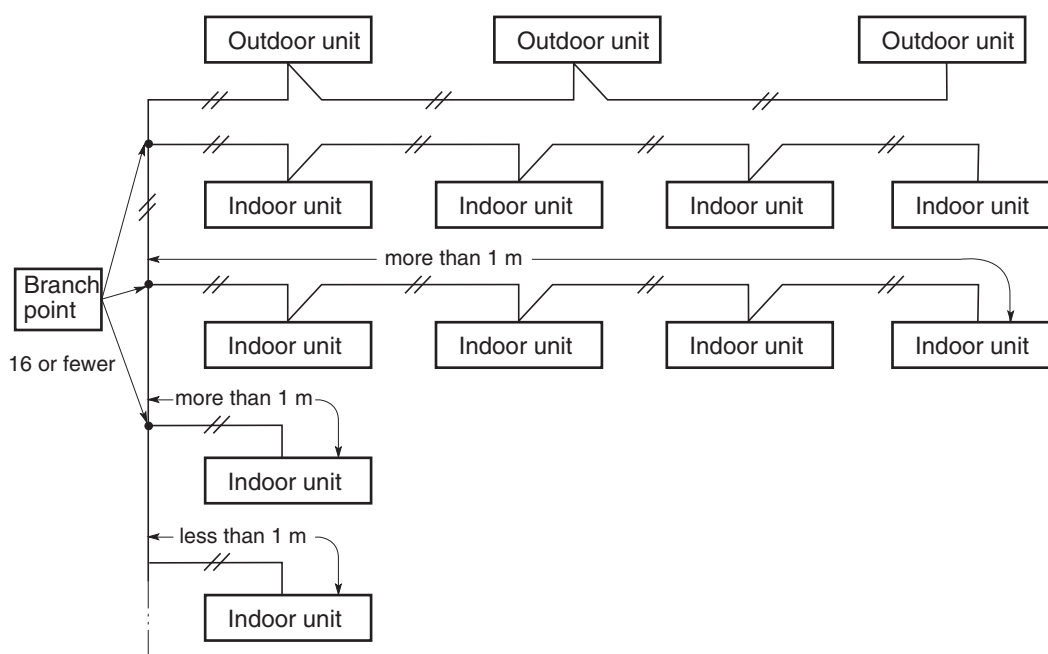


Fig. 2-4

3. Electrical Wiring

- (5) Use shielded wires for inter-unit control wiring (c) and ground the shield on both sides, otherwise misoperation from noise may occur. (Fig. 2-5)
Connect wiring as shown in Section “3-3. Wiring System Diagram.”
- (6) Use the standard power supply cables for Europe (such as H05RN-F or H07RN-F which conforms to CENELEC (HAR) rating specifications) or use the cables based on IEC standard. (245 IEC57, 245 IEC66)

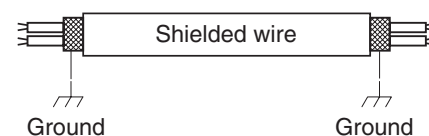


Fig. 2-5



WARNING

Loose wiring may cause the terminal to overheat or result in unit malfunction.
A fire hazard may also exist.
Therefore, ensure that all wiring is tightly connected.

When connecting each power wire to the terminal, follow the instructions on “How to connect wiring to the terminal” and fasten the wire securely with the fixing screw of the terminal plate.

How to connect wiring to the terminal

■ For stranded wiring

- (1) Cut the wire end with cutting pliers, then strip the insulation to expose the stranded wiring about 10 mm and tightly twist the wire ends. (Fig. 2-6)
- (2) Using a Phillips head screwdriver, remove the terminal screw(s) on the terminal plate.
- (3) Using a ring connector fastener or pliers, securely clamp each stripped wire end with a ring pressure terminal.
- (4) Place the ring pressure terminal, and replace and tighten the removed terminal screw using a screwdriver. (Fig. 2-7)

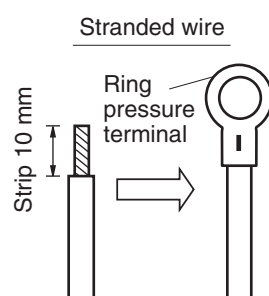


Fig. 2-6

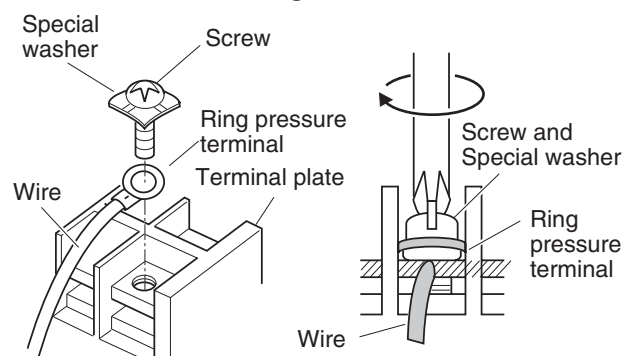


Fig. 2-7

■ Examples of shield wires

- (1) Remove cable coat not to scratch braided shield. (Fig. 2-8)
- (2) Ravel braided shield carefully and put tightly braided shield together.
Coat with insulation tube or wrap insulation tape after putting tightly. (Fig. 2-9)
- (3) Remove coat of signal wire. (Fig. 2-10)
- (4) Connect signal wire removed coat and shield wire with pressure terminal. (Fig. 2-11)



Fig. 2-8

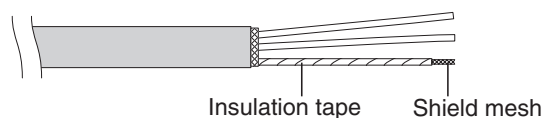


Fig. 2-9

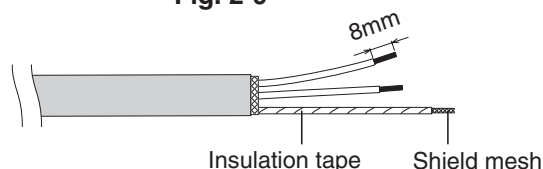


Fig. 2-10

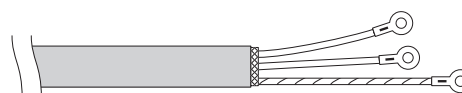


Fig. 2-11

■ Earth wire for power supply

The earth wire should be longer than the other lead wires for electrical safety.

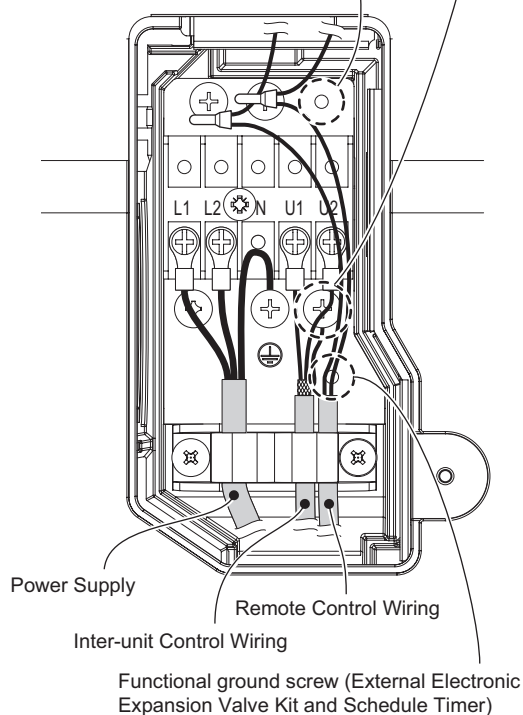
3. Electrical Wiring

■ Wiring sample

Indoor Unit : K1 Type (22, 28, 36)

Use this screw when connecting to ground the shield for the Inter-unit control wiring.

Protective ground screw (External Solenoid Valve Kit for 3WAY)



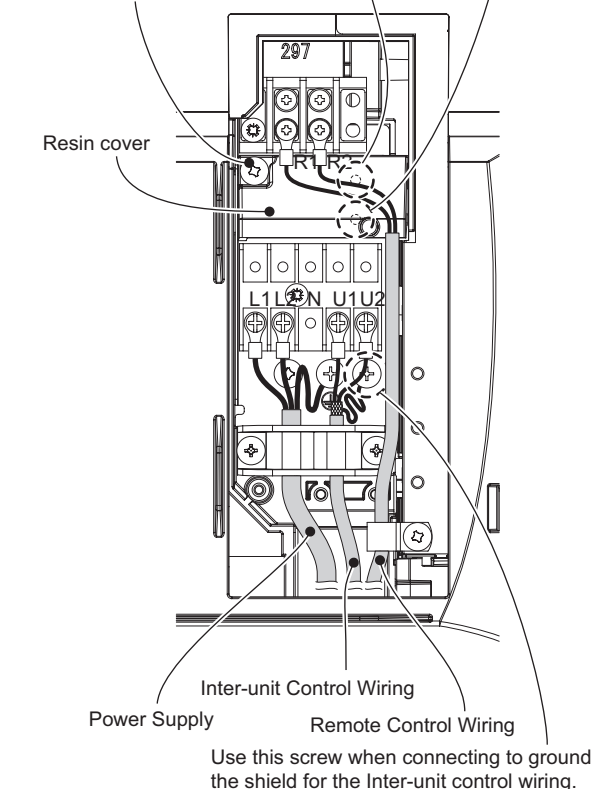
Indoor Unit : K1 Type (45, 56, 73, 106)

Functional ground screw (External Electronic Expansion Valve Kit and Schedule Timer) *

Protective ground screw (External Solenoid Valve Kit for 3WAY) *

Fixture screw for resin cover

Resin cover



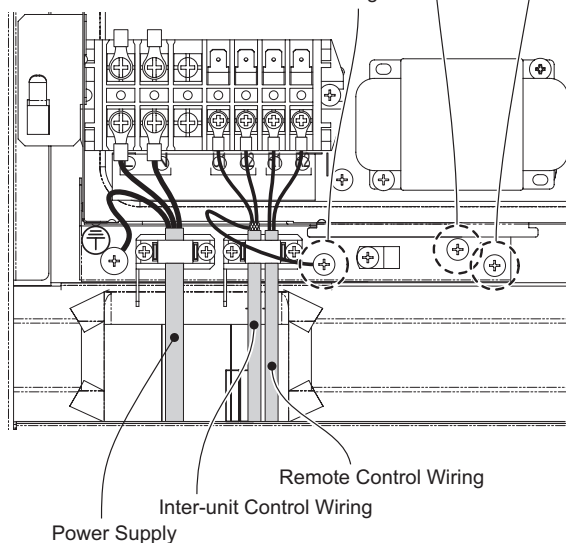
* As to functional ground screw and protective ground screw, remove the fixture screw and resin cover. Then, carry out earth ground work.

Indoor Unit : L1 Type

Protective ground screw (External Solenoid Valve Kit for 3WAY)

Functional ground screw (External Electronic Expansion Valve Kit and Schedule Timer)

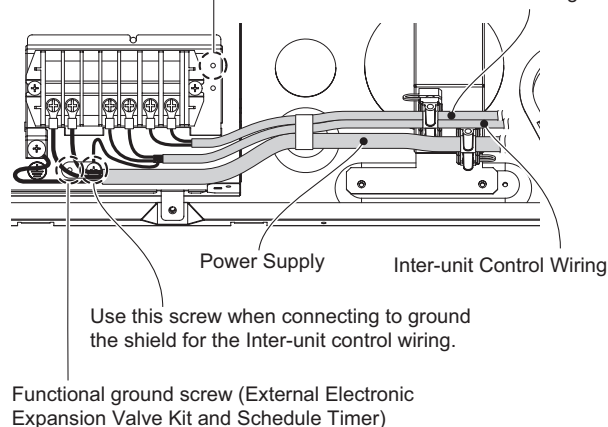
Use this screw when connecting to ground the shield for the Inter-unit control wiring.



Indoor Unit : T1 type

Protective ground screw (External Solenoid Valve Kit for 3WAY)

Remote Control Wiring



6. 2-Way Cassette Type (L1 Type)

6-1. Specifications

Unit specifications (A)

MODEL No.			Indoor Unit		S-22ML1E5					
POWER SOURCE					220 - 230 - 240 V, single-phase, 50/60 Hz					
PERFORMANCE					Cooling			Heating		
	Capacity		kW	2.2			2.5			
			BTU / h	7,500			8,500			
	Air circulation (Hi / Me / Lo)		m³ / h	480 / 420 / 360						
	Moisture removal (High)		Liters / h	0.5			–			
ELECTRICAL RATINGS										
	Voltage rating		V	220	230	240	220	230	240	
	Available voltage range		V	198 - 264			198 - 264			
	Running amperes		A	0.45	0.45	0.45	0.29	0.29	0.30	
	Power input		W	86	90	95	55	58	62	
	Power factor		%	87	87	88	86	87	86	
	Max. starting amperes		A	1	1	1	1	1	1	
FEATURES										
	Controls			Microprocessor						
	Timer			ON / OFF Timer (Max. 72 hr)						
	Fan speeds			3 and Automatic control						
	Airflow direction			Automatic (Remote control)						
	Air filter			Washable, easy access, long life (2,500 hr)						
	Refrigerant control			Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	30 / 27 / 24						
	Refrigerant tubing connections			Flare type						
	Refrigerant tube diameter	Liquid tube	mm (in.)	6.35 (1 / 4)						
		Gas tube	mm (in.)	12.7 (1 / 2)						
	Drain connection			25 A, OD32 mm						
	Drain pump			Max. head 500 mm above drain connection						
	Panel			Optional (CZ-02KPL2)						
	Remote controller			Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories			Optional / –						
Color (Approximate value)			Munsell 10Y 9.3 / 0.4, RAL 9010-GL							
DIMENSIONS & WEIGHT					Indoor unit (including panel)		Package			
			Body				Panel			
	Unit dimensions	Height	mm (in.)	358 (14-3 / 32)		310 (12-7 / 32)		165 (6-1 / 2)		
		Width	mm (in.)	1060 (41-23 / 32)		1082 (42-19 / 32)		1147 (45-5 / 32)		
		Depth	mm (in.)	680 (26-25 / 32)		658 (25-29 / 32)		789 (31-1 / 16)		
Net weight			kg (lbs.)	23+5.5 (50.7+12.1)		–		–		
Shipping weight			kg (lbs.)	–		26 (57)		8 (18)		
Shipping volume			m³ (cu.ft)	–		0.221 (7.8)		0.149 (5.3)		

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Rated conditions

Cooling: Indoor air temperature 27°C DB / 19°C WB; Outdoor air temperature 35°C DB

Heating: Indoor air temperature 20°C DB; Outdoor air temperature 7°C DB / 6°C WB

6. 2-Way Cassette Type (L1 Type)

Unit specifications (B)

MODEL No.			Indoor Unit		S-28ML1E5					
POWER SOURCE					220 - 230 - 240 V, single-phase, 50/60 Hz					
PERFORMANCE					Cooling			Heating		
	Capacity		kW		2.8			3.2		
			BTU / h		9,600			11,000		
	Air circulation (Hi / Me / Lo)		m³ / h		540 / 480 / 420					
	Moisture removal (High)		Liters / h		1.0			–		
ELECTRICAL RATINGS										
	Voltage rating		V		220	230	240	220	230	240
	Available voltage range		V		198 - 264			198 - 264		
	Running amperes		A		0.44	0.45	0.45	0.28	0.29	0.30
	Power input		W		86	92	97	55	60	64
	Power factor		%		89	89	90	89	90	89
	Max. starting amperes		A		1	1	1	1	1	1
FEATURES										
	Controls			Microprocessor						
	Timer			ON / OFF Timer (Max. 72 hr)						
	Fan speeds			3 and Automatic control						
	Airflow direction			Automatic (Remote control)						
	Air filter			Washable, easy access, long life (2,500 hr)						
	Refrigerant control			Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	33 / 29 / 26						
	Refrigerant tubing connections			Flare type						
	Refrigerant tube diameter	Liquid tube	mm (in.)	6.35 (1 / 4)						
		Gas tube	mm (in.)	12.7 (1 / 2)						
	Drain connection			25 A, OD32 mm						
	Drain pump			Max. head 500 mm above drain connection						
	Panel			Optional (CZ-02KPL2)						
	Remote controller			Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories			Optional / –						
Color (Approximate value)			Munsell 10Y 9.3 / 0.4, RAL 9010-GL							
DIMENSIONS & WEIGHT					Indoor unit (including panel)		Package			
			Body				Panel			
	Unit dimensions	Height	mm (in.)	358 (14-3 / 32)		310 (12-7 / 32)		165 (6-1 / 2)		
		Width	mm (in.)	1060 (41-23 / 32)		1082 (42-19 / 32)		1147 (45-5 / 32)		
		Depth	mm (in.)	680 (26-25 / 32)		658 (25-29 / 32)		789 (31-1 / 16)		
Net weight			kg (lbs.)	23+5.5 (50.7+12.1)		–		–		
Shipping weight			kg (lbs.)	–		26 (57)		8 (18)		
Shipping volume			m³ (cu.ft)	–		0.221 (7.8)		0.149 (5.3)		

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Rated conditions

Cooling: Indoor air temperature 27°C DB / 19°C WB; Outdoor air temperature 35°C DB

Heating: Indoor air temperature 20°C DB; Outdoor air temperature 7°C DB / 6°C WB

6. 2-Way Cassette Type (L1 Type)

Unit specifications (C)

MODEL No.		Indoor Unit		S-36ML1E5					
POWER SOURCE				220 - 230 - 240 V, single-phase, 50/60 Hz					
PERFORMANCE				Cooling			Heating		
	Capacity	kW	3.6			4.2			
		BTU / h	12,000			14,000			
	Air circulation (Hi / Me / Lo)		m ³ / h	580 / 520 / 460					
	Moisture removal (High)		Liters / h	1.6			–		
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.44	0.45	0.45	0.28	0.29	0.30
	Power input		W	88	93	99	57	61	66
	Power factor		%	91	90	92	93	91	92
	Max. starting amperes		A	1	1	1	1	1	1
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 hr)						
	Fan speeds		3 and Automatic control						
	Airflow direction		Automatic (Remote control)						
	Air filter		Washable, easy access, long life (2,500 hr)						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	34 / 31 / 28					
	Refrigerant tubing connections		Flare type						
	Refrigerant tube diameter	Liquid tube	mm (in.)	6.35 (1 / 4)					
		Gas tube	mm (in.)	12.7 (1 / 2)					
	Drain connection		25 A, OD32 mm						
	Drain pump		Max. head 500 mm above drain connection						
	Panel		Optional (CZ-02KPL2)						
	Remote controller		Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories		Optional / –						
Color (Approximate value)		Munsell 10Y 9.3 / 0.4, RAL 9010-GL							
DIMENSIONS & WEIGHT				Indoor unit (including panel)		Package			
		Body				Panel			
	Unit dimensions	Height	mm (in.)	358 (14-3 / 32)		310 (12-7 / 32)	165 (6-1 / 2)		
		Width	mm (in.)	1060 (41-23 / 32)		1082 (42-19 / 32)	1147 (45-5 / 32)		
		Depth	mm (in.)	680 (26-25 / 32)		658 (25-29 / 32)	789 (31-1 / 16)		
Net weight		kg (lbs.)	23+5.5 (50.7+12.1)		–		–		
Shipping weight		kg (lbs.)	–		26 (57)		8 (18)		
Shipping volume		m ³ (cu.ft)	–		0.221 (7.8)		0.149 (5.3)		

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Rated conditions

Cooling: Indoor air temperature 27°C DB / 19°C WB; Outdoor air temperature 35°C DB

Heating: Indoor air temperature 20°C DB; Outdoor air temperature 7°C DB / 6°C WB

6. 2-Way Cassette Type (L1 Type)

Unit specifications (D)

MODEL No.		Indoor Unit		S-45ML1E5					
POWER SOURCE				220 - 230 - 240 V, single-phase, 50/60 Hz					
PERFORMANCE				Cooling			Heating		
	Capacity		kW	4.5			5.0		
			BTU / h	15,000			17,000		
	Air circulation (Hi / Me / Lo)		m ³ / h	660 / 540 / 480					
	Moisture removal (High)		Liters / h	2.4			–		
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.45	0.45	0.45	0.29	0.29	0.30
	Power input		W	91	97	103	60	65	70
	Power factor		%	92	94	95	94	97	97
	Max. starting amperes		A	1	1	1	1	1	1
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 hr)						
	Fan speeds		3 and Automatic control						
	Airflow direction		Automatic (Remote control)						
	Air filter		Washable, easy access, long life (2,500 hr)						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	35 / 33 / 29					
	Refrigerant tubing connections		Flare type						
	Refrigerant tube diameter	Liquid tube	mm (in.)	6.35 (1 / 4)					
		Gas tube	mm (in.)	12.7 (1 / 2)					
	Drain connection		25 A, OD32 mm						
	Drain pump		Max. head 500 mm above drain connection						
	Panel		Optional (CZ-02KPL2)						
	Remote controller		Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories		Optional / –						
Color (Approximate value)		Munsell 10Y 9.3 / 0.4, RAL 9010-GL							
DIMENSIONS & WEIGHT				Indoor unit (including panel)		Package			
		Body				Panel			
	Unit dimensions	Height	mm (in.)	358 (14-3 / 32)		310 (12-7 / 32)	165 (6-1 / 2)		
		Width	mm (in.)	1060 (41-23 / 32)		1082 (42-19 / 32)	1147 (45-5 / 32)		
		Depth	mm (in.)	680 (26-25 / 32)		658 (25-29 / 32)	789 (31-1 / 16)		
Net weight		kg (lbs.)		23+5.5 (50.7+12.1)		–		–	
Shipping weight		kg (lbs.)		–		26 (57)		8 (18)	
Shipping volume		m ³ (cu.ft)		–		0.221 (7.8)		0.149 (5.3)	

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Rated conditions

Cooling: Indoor air temperature 27°C DB / 19°C WB; Outdoor air temperature 35°C DB

Heating: Indoor air temperature 20°C DB; Outdoor air temperature 7°C DB / 6°C WB

6. 2-Way Cassette Type (L1 Type)

Unit specifications (E)

MODEL No.		Indoor Unit		S-56ML1E5					
POWER SOURCE				220 - 230 - 240 V, single-phase, 50/60 Hz					
PERFORMANCE				Cooling			Heating		
	Capacity		kW	5.6			6.3		
			BTU / h	19,000			21,000		
	Air circulation (Hi / Me / Lo)		m³ / h	660 / 540 / 480					
	Moisture removal (High)		Liters / h	2.4			–		
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.45	0.45	0.45	0.29	0.29	0.30
	Power input		W	91	97	103	60	65	70
	Power factor		%	92	94	95	94	97	97
	Max. starting amperes		A	1	1	1	1	1	1
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 hr)						
	Fan speeds		3 and Automatic control						
	Airflow direction		Automatic (Remote control)						
	Air filter		Washable, easy access, long life (2,500 hr)						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	35 / 33 / 29					
	Refrigerant tubing connections			Flare type					
	Refrigerant tube diameter	Liquid tube	mm (in.)	6.35 (1 / 4)					
		Gas tube	mm (in.)	12.7 (1 / 2)					
	Drain connection			25 A, OD32 mm					
	Drain pump			Max. head 500 mm above drain connection					
	Panel			Optional (CZ-02KPL2)					
	Remote controller			Optional (Wired / Wireless)					
	Refrigerant tubing kit / Accessories			Optional / –					
Color (Approximate value)			Munsell 10Y 9.3 / 0.4, RAL 9010-GL						
DIMENSIONS & WEIGHT				Indoor unit (including panel)		Package			
		Body				Panel			
	Unit dimensions	Height	mm (in.)	358 (14-3 / 32)		310 (12-7 / 32)		165 (6-1 / 2)	
		Width	mm (in.)	1060 (41-23 / 32)		1082 (42-19 / 32)		1147 (45-5 / 32)	
		Depth	mm (in.)	680 (26-25 / 32)		658 (25-29 / 32)		789 (31-1 / 16)	
	Net weight		kg (lbs.)	23+5.5 (50.7+12.1)		–		–	
	Shipping weight		kg (lbs.)	–		26 (57)		8 (18)	
	Shipping volume		m³ (cu.ft)	–		0.221 (7.8)		0.149 (5.3)	

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Rated conditions

Cooling: Indoor air temperature 27°C DB / 19°C WB; Outdoor air temperature 35°C DB

Heating: Indoor air temperature 20°C DB; Outdoor air temperature 7°C DB / 6°C WB

6. 2-Way Cassette Type (L1 Type)

Unit specifications (F)

MODEL No.			Indoor Unit		S-73ML1E5					
POWER SOURCE					220 - 230 - 240 V, single-phase, 50/60 Hz					
PERFORMANCE					Cooling			Heating		
	Capacity		kW	7.3			8.0			
			BTU / h	25,000			27,000			
	Air circulation (Hi / Me / Lo)		m ³ / h	1,140 / 960 / 840						
	Moisture removal (High)		Liters / h	3.5			–			
ELECTRICAL RATINGS										
	Voltage rating		V	220	230	240	220	230	240	
	Available voltage range		V	198 - 264			198 - 264			
	Running amperes		A	0.64	0.65	0.66	0.46	0.48	0.49	
	Power input		W	135	145	154	100	109	117	
	Power factor		%	96	94	97	99	99	99	
	Max. starting amperes		A	1	1	1	1	1	1	
FEATURES										
	Controls			Microprocessor						
	Timer			ON / OFF Timer (Max. 72 hr)						
	Fan speeds			3 and Automatic control						
	Airflow direction			Automatic (Remote control)						
	Air filter			Washable, easy access, long life (2,500 hr)						
	Refrigerant control			Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	38 / 35 / 33						
	Refrigerant tubing connections			Flare type						
	Refrigerant tube diameter	Liquid tube	mm (in.)	9.52 (3 / 8)						
		Gas tube	mm (in.)	15.88 (5 / 8)						
	Drain connection			25 A, OD32 mm						
	Drain pump			Max. head 500 mm above drain connection						
	Panel			Optional (CZ-03KPL2)						
	Remote controller			Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories			Optional / –						
Color (Approximate value)			Munsell 10Y 9.3 / 0.4, RAL 9010-GL							
DIMENSIONS & WEIGHT					Indoor unit (including panel)		Package			
			Body				Panel			
	Unit dimensions	Height	mm (in.)	358 (14-3 / 32)		310 (12-7 / 32)		165 (6-1 / 2)		
		Width	mm (in.)	1360 (53-17 / 32)		1382 (54-13 / 32)		1447 (56-31 / 32)		
		Depth	mm (in.)	680 (26-25 / 32)		658 (25-29 / 32)		789 (31-1 / 16)		
Net weight			kg (lbs.)	30+9 (66+20)		–		–		
Shipping weight			kg (lbs.)	–		30 (66)		13 (29)		
Shipping volume			m ³ (cu.ft)	–		0.282 (10.0)		0.188 (6.7)		

DATA SUBJECT TO CHANGE WITHOUT NOTICE.

Rated conditions

Cooling: Indoor air temperature 27°C DB / 19°C WB; Outdoor air temperature 35°C DB

Heating: Indoor air temperature 20°C DB; Outdoor air temperature 7°C DB / 6°C WB

6. 2-Way Cassette Type (L1 Type)

6-2. Major Component Specifications

Indoor unit (A)

MODEL No.		S-22ML1E5	
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y		CR-UXRP71B-PE (Microprocessor)	
Fan (Number...diameter)	mm	Centrifugal (1...ø190)	
Fan motor			
Model...Nominal output	W	UF4X-31C3P...30 W	
Power source		220 - 230 - 240 V / single-phase / 50 Hz	
No. of pole...r.p.m. (230V, High)	rpm	4P... 640	
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 138.0 ORG – YEL : 25.58 WHT – VLT : 18.55 YEL – BLK : 49.31 VLT – ORG : 35.03 BLK – PNK : 84.18	
Safety device			
Operating temperature	Open °C	130 ± 5	
	Close °C	(115 ± 5)	
Run capacitor	VAC, μF	440 VAC, 0.8 μF	
Electronic expansion valve			
Coil		UKV-U030E	
Coil resistance (at 20°C)	Ω	ORG – GRY : 46 YEL – GRY : 46 RED – GRY : 46 BLK – GRY : 46	
Valve body		UKV-18D31	
Heat exchanger			
Coil		Aluminium plate fin / Copper tube	
Rows...fin pitch	mm	2...1.5	
Face area	m ²	0.255	
Panel			
Model No.		CZ-02KPL2	
Auto louver motor		MT8-3C	
Auto louver motor... Rated	VAC, W, rpm	200 ~ 240 VAC, 3 W, 2.5 rpm	
Coil resistance (at 25°C)	Ω	16,430 Ω ± 8 %	
Drain pump		ADP-1408	
Rated	V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity		500 mm, 400 cc/min	

6. 2-Way Cassette Type (L1 Type)

Indoor unit (B)

MODEL No.		S-28ML1E5	
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y		CR-UXRP71B-PE (Microprocessor)	
Fan (Number...diameter)	mm	Centrifugal (1...ø190)	
Fan motor			
Model...Nominal output	W	UF4X-31C3P...30 W	
Power source		220 - 230 - 240 V / single-phase / 50 Hz	
No. of pole...r.p.m. (230V, High)	rpm	4P... 708	
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 138.0 ORG – YEL : 25.58 WHT – VLT : 18.55 YEL – BLK : 49.31 VLT – ORG : 35.03 BLK – PNK : 84.18	
Safety device			
Operating temperature	Open °C	130 ± 5	
	Close °C	(115 ± 5)	
Run capacitor	VAC, μF	440 VAC, 1.0 μF	
Electronic expansion valve			
Coil		UKV-U030E	
Coil resistance (at 20°C)	Ω	ORG – GRY : 46 YEL – GRY : 46 RED – GRY : 46 BLK – GRY : 46	
Valve body		UKV-18D31	
Heat exchanger			
Coil		Aluminium plate fin / Copper tube	
Rows...fin pitch	mm	2...1.5	
Face area	m ²	0.255	
Panel			
Model No.		CZ-02KPL2	
Auto louver motor		MT8-3C	
Auto louver motor... Rated	VAC, W, rpm	200 ~ 240 VAC, 3 W, 2.5 rpm	
Coil resistance (at 25°C)	Ω	16,430 Ω ± 8 %	
Drain pump		ADP-1408	
Rated	V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity		500 mm, 400 cc/min	

6. 2-Way Cassette Type (L1 Type)

Indoor unit (C)

MODEL No.			S-36ML1E5	
Power source			220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y			CR-UXRP71B-PE (Microprocessor)	
Fan (Number...diameter)		mm	Centrifugal (1...ø190)	
Fan motor				
Model...Nominal output		W	UF4X-31C3P...30 W	
Power source			220 - 230 - 240 V / single-phase / 50 Hz	
No. of pole...r.p.m. (230V, High)		rpm	4P... 760	
Coil resistance (Ambient temperature 20°C)		Ω	BRN – WHT : 138.0 ORG – YEL : 25.58 WHT – VLT : 18.55 YEL – BLK : 49.31 VLT – ORG : 35.03 BLK – PNK : 84.18	
Safety device				
Operating temperature	Open °C		130 ± 5	
	Close °C		(115 ± 5)	
Run capacitor		VAC, μF	440 VAC, 1.2 μF	
Electronic expansion valve				
Coil			UKV-U030E	
Coil resistance (at 20°C)		Ω	ORG – GRY : 46 YEL – GRY : 46 RED – GRY : 46 BLK – GRY : 46	
Valve body			UKV-18D31	
Heat exchanger				
Coil			Aluminium plate fin / Copper tube	
Rows...fin pitch		mm	2...1.5	
Face area		m ²	0.255	
Panel				
Model No.			CZ-02KPL2	
Auto louver motor			MT8-3C	
Auto louver motor... Rated		VAC, W, rpm	200 ~ 240 VAC, 3 W, 2.5 rpm	
Coil resistance (at 25°C)		Ω	16,430 Ω ± 8 %	
Drain pump			ADP-1408	
Rated		V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity			500 mm, 400 cc/min	

6. 2-Way Cassette Type (L1 Type)

Indoor unit (D)

MODEL No.		S-45ML1E5	
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y		CR-UXRP71B-PE (Microprocessor)	
Fan (Number...diameter)	mm	Centrifugal (1...ø190)	
Fan motor			
Model...Nominal output	W	UF4X-31C3P...30 W	
Power source		220 - 230 - 240 V / single-phase / 50 Hz	
No. of pole...r.p.m. (230V, High)	rpm	4P... 834	
Coil resistance (Ambient temperature 20°C)	Ω	BRN - WHT : 138.0 ORG - YEL : 25.58 WHT - VLT : 18.55 YEL - BLK : 49.31 VLT - ORG : 35.03 BLK - PNK : 84.18	
Safety device			
Operating temperature	Open °C	130 ± 5	
	Close °C	(115 ± 5)	
Run capacitor	VAC, μF	440 VAC, 1.5 μF	
Electronic expansion valve			
Coil		UKV-U030E	
Coil resistance (at 20°C)	Ω	ORG - GRY : 46 YEL - GRY : 46 RED - GRY : 46 BLK - GRY : 46	
Valve body		UKV-25D32	
Heat exchanger			
Coil		Aluminium plate fin / Copper tube	
Rows...fin pitch	mm	2...1.5	
Face area	m ²	0.255	
Panel			
Model No.		CZ-02KPL2	
Auto louver motor		MT8-3C	
Auto louver motor... Rated	VAC, W, rpm	200 ~ 240 VAC, 3 W, 2.5 rpm	
Coil resistance (at 25°C)	Ω	16,430 Ω ± 8 %	
Drain pump		ADP-1408	
Rated	V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity		500 mm, 400 cc/min	

6. 2-Way Cassette Type (L1 Type)

Indoor unit (E)

MODEL No.		S-56ML1E5	
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y		CR-UXRP71B-PE (Microprocessor)	
Fan (Number...diameter)	mm	Centrifugal (1...ø190)	
Fan motor			
Model...Nominal output	W	UF4X-31C3P...30 W	
Power source		220 - 230 - 240 V / single-phase / 50 Hz	
No. of pole...r.p.m. (230V, High)	rpm	4P... 834	
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 138.0 ORG – YEL : 25.58 WHT – VLT : 18.55 YEL – BLK : 49.31 VLT – ORG : 35.03 BLK – PNK : 84.18	
Safety device			
Operating temperature	Open °C	130 ± 5	
	Close °C	(115 ± 5)	
Run capacitor	VAC, μF	440 VAC, 1.5 μF	
Electronic expansion valve			
Coil		UKV-U030E	
Coil resistance (at 20°C)	Ω	ORG – GRY : 46 YEL – GRY : 46 RED – GRY : 46 BLK – GRY : 46	
Valve body		UKV-25D32	
Heat exchanger			
Coil		Aluminium plate fin / Copper tube	
Rows...fin pitch	mm	2...1.5	
Face area	m ²	0.255	
Panel			
Model No.		CZ-02KPL2	
Auto louver motor		MT8-3C	
Auto louver motor... Rated	VAC, W, rpm	200 ~ 240 VAC, 3 W, 2.5 rpm	
Coil resistance (at 25°C)	Ω	16,430 Ω ± 8 %	
Drain pump		ADP-1408	
Rated	V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity		500 mm, 400 cc/min	

6. 2-Way Cassette Type (L1 Type)

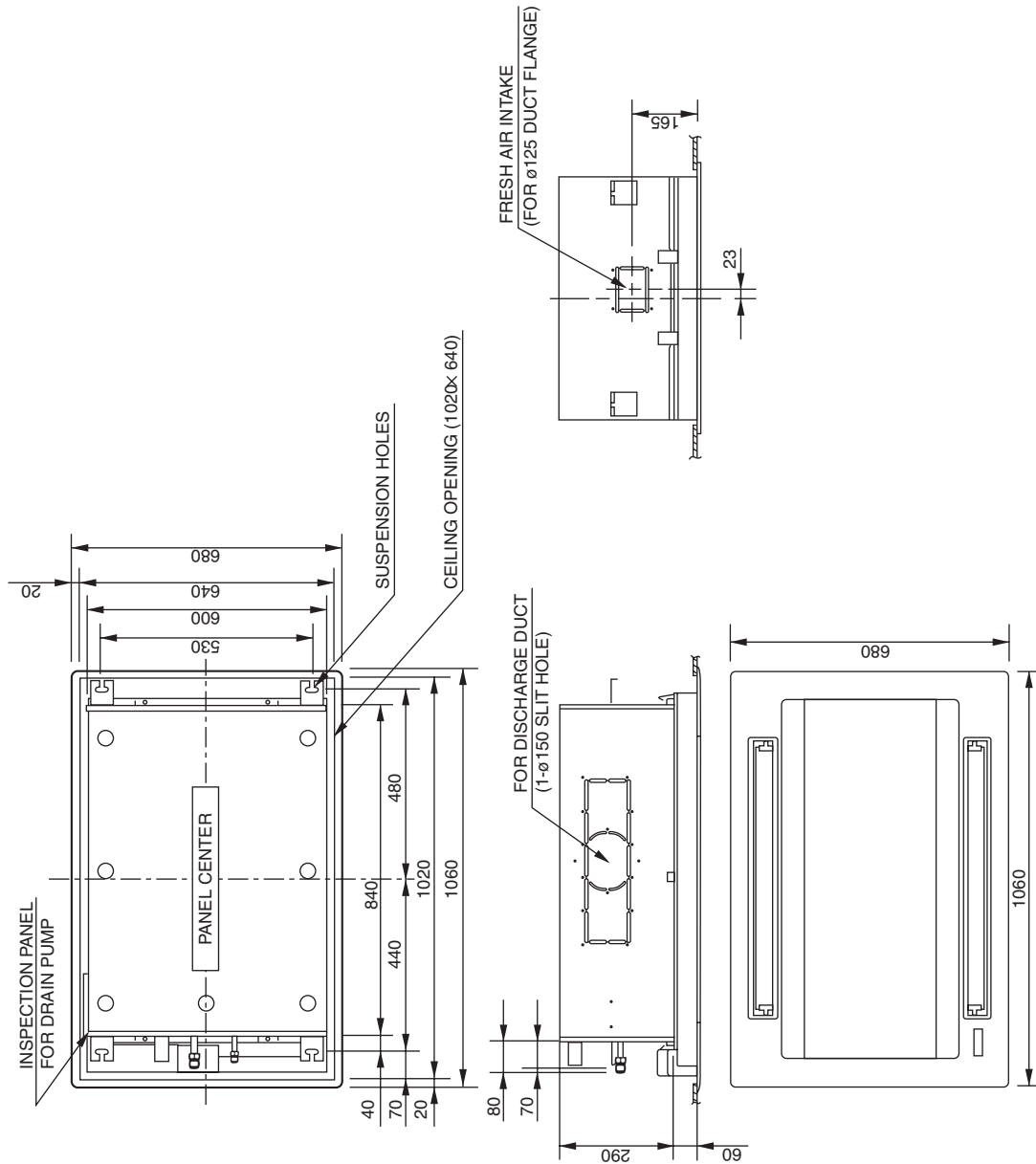
Indoor unit (F)

MODEL No.		S-73ML1E5	
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y		CR-UXRP71B-PE (Microprocessor)	
Fan (Number...diameter)	mm	Centrifugal (2...ø190)	
Fan motor			
Model...Nominal output	W	KFG4X-51F3P...50 W	
Power source		220 - 230 - 240 V / single-phase / 50 Hz	
No. of pole...r.p.m. (230V, High)	rpm	4P... 834	
Coil resistance (Ambient temperature 20°C)	Ω	BRN – WHT : 71.63 ORG – YEL : 10.94 WHT – VLT : 10.84 YEL – BLK : 28.73 VLT – ORG : 14.31 BLK – PNK : 14.94	
Safety device			
Operating temperature	Open °C	130 ± 5	
	Close °C	(115 ± 5)	
Run capacitor	VAC, μF	440 VAC, 3.0 μF	
Electronic expansion valve			
Coil		UKV-U030E	
Coil resistance (at 20°C)	Ω	ORG – GRY : 46 YEL – GRY : 46 RED – GRY : 46 BLK – GRY : 46	
Valve body		UKV-25D32	
Heat exchanger			
Coil		Aluminium plate fin / Copper tube	
Rows...fin pitch	mm	2...1.5	
Face area	m ²	0.381	
Panel			
Model No.		CZ-03KPL2	
Auto louver motor		MT8-3C	
Auto louver motor... Rated	VAC, W, rpm	200 ~ 240 VAC, 3 W, 2.5 rpm	
Coil resistance (at 25°C)	Ω	16,430 Ω ± 8 %	
Drain pump		ADP-1408	
Rated	V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity		500 mm, 400 cc/min	

6. 2-Way Cassette Type (L1 Type)

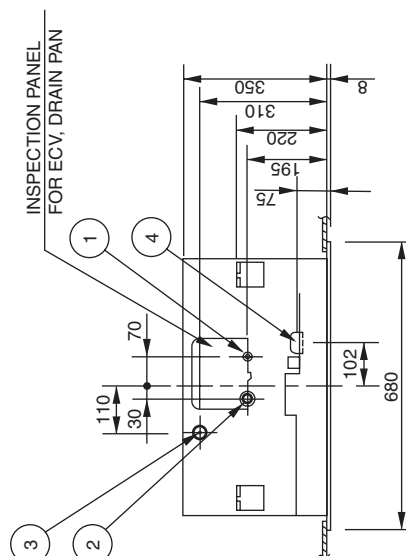
6-3. Dimensional Data

Indoor unit: S-22ML1E5 / 28ML1E5 / 36ML1E5 / 45ML1E5 / 56ML1E5



- ① Refrigerant liquid line (ø6.35)
- ② Refrigerant gas line (ø12.7)
- ③ Drain connection (25 A. O.D. 32 mm)
- ④ Power supply entry

unit: mm



6. 2-Way Cassette Type (L1 Type)

6-4. Noise Criterion Curves

Both 50Hz and 60Hz

—●— Strong
 —○— Weak

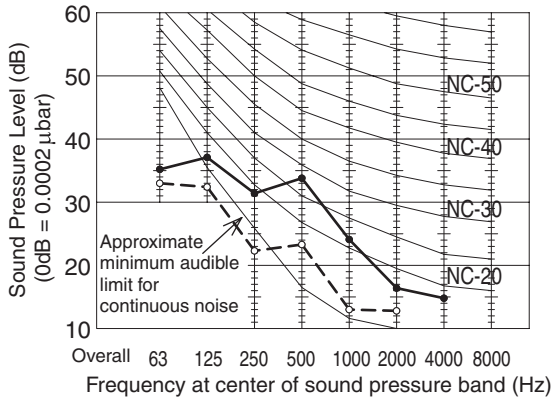
MODEL : S-22ML1E5

SOUND LEVEL : STRONG 30 dB(A)

HIGH 27 dB(A)

LOW 24 dB(A)

CONDITION : 1.5 m directly below unit



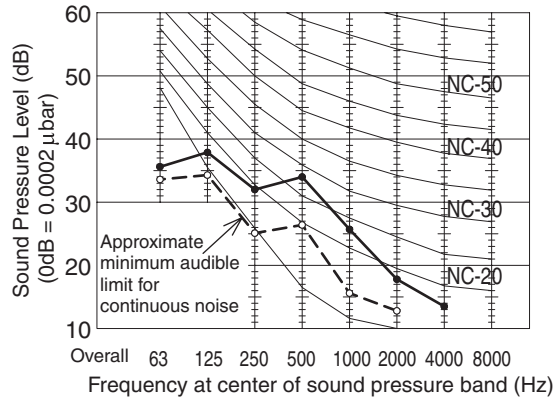
MODEL : S-28ML1E5 / 36ML1E5

SOUND LEVEL : STRONG 33 dB(A)

HIGH 29 dB(A)

LOW 26 dB(A)

CONDITION : 1.5 m directly below unit



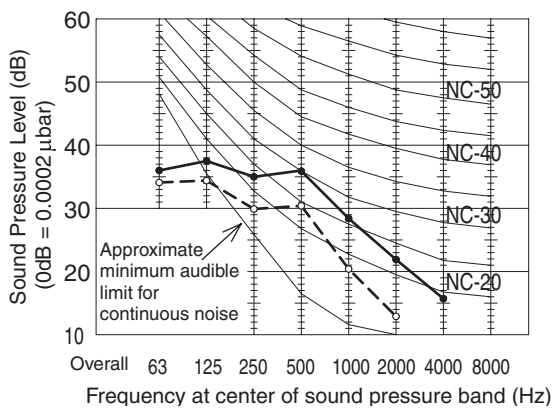
MODEL : S-45ML1E5 / 56ML1E5

SOUND LEVEL : STRONG 35 dB(A)

HIGH 33 dB(A)

LOW 29 dB(A)

CONDITION : 1.5 m directly below unit



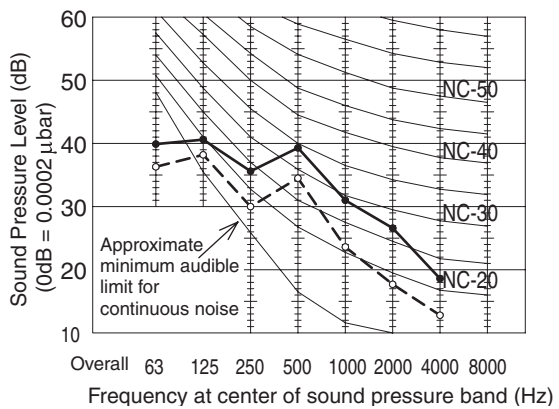
MODEL : S-73ML1E5

SOUND LEVEL : STRONG 38 dB(A)

HIGH 35 dB(A)

LOW 33 dB(A)

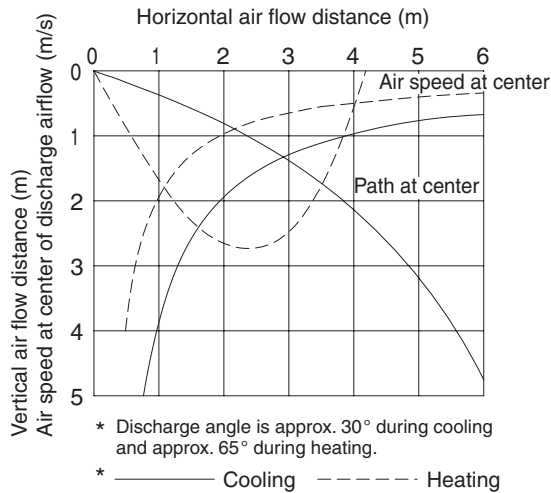
CONDITION : 1.5 m directly below unit



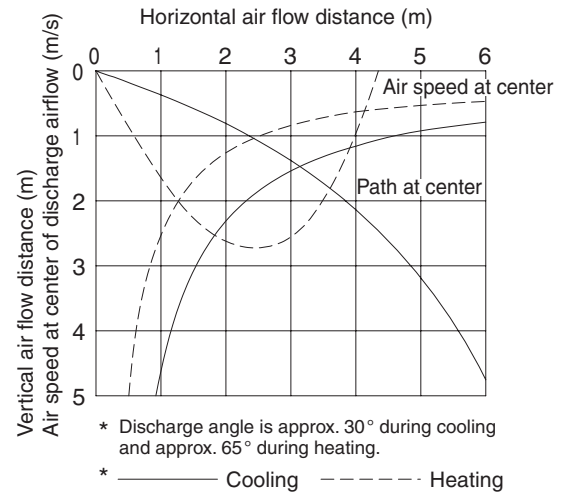
6. 2-Way Cassette Type (L1 Type)

6-5. Air Flow Distance Chart (Indoor temp.: Cooling 27°C, heating 20°C)

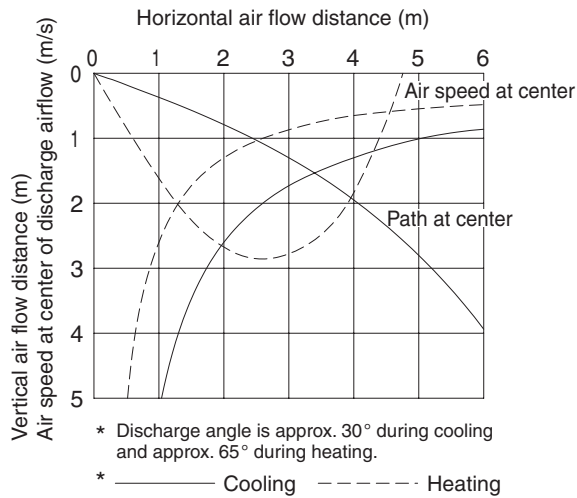
S-22ML1E5



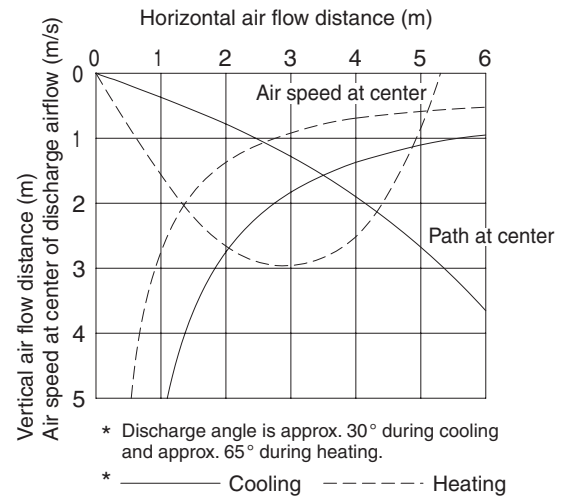
S-28ML1E5, -36ML1E5



S-45ML1E5, -56ML1E5



S-73ML1E5



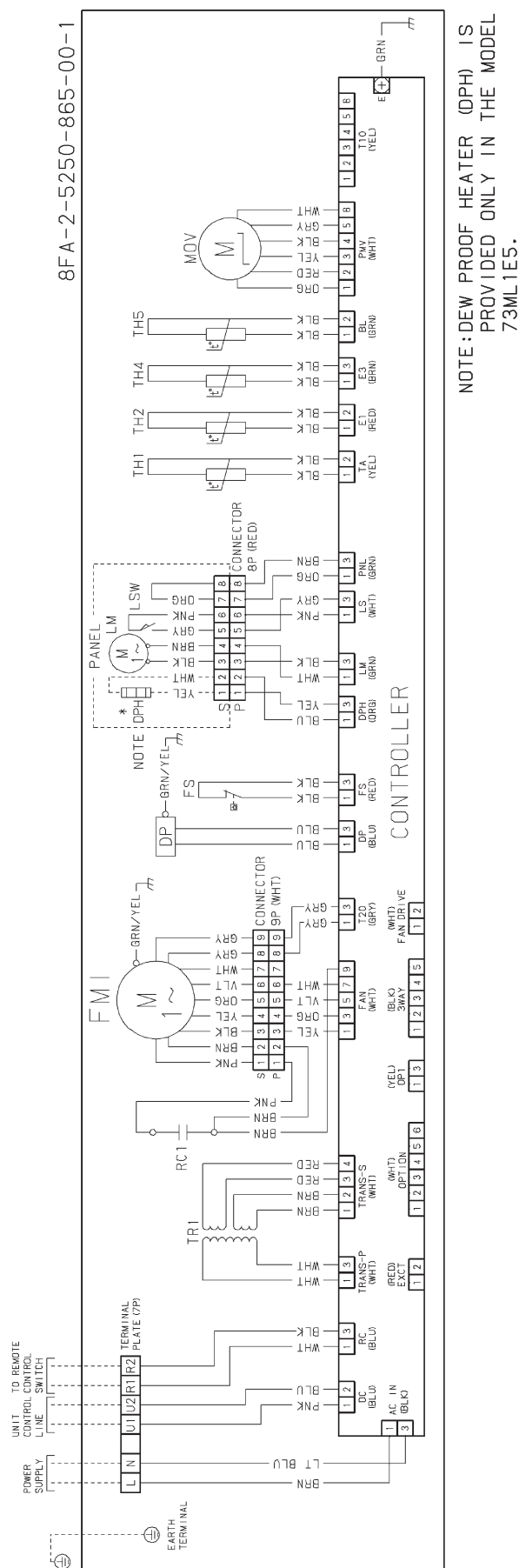
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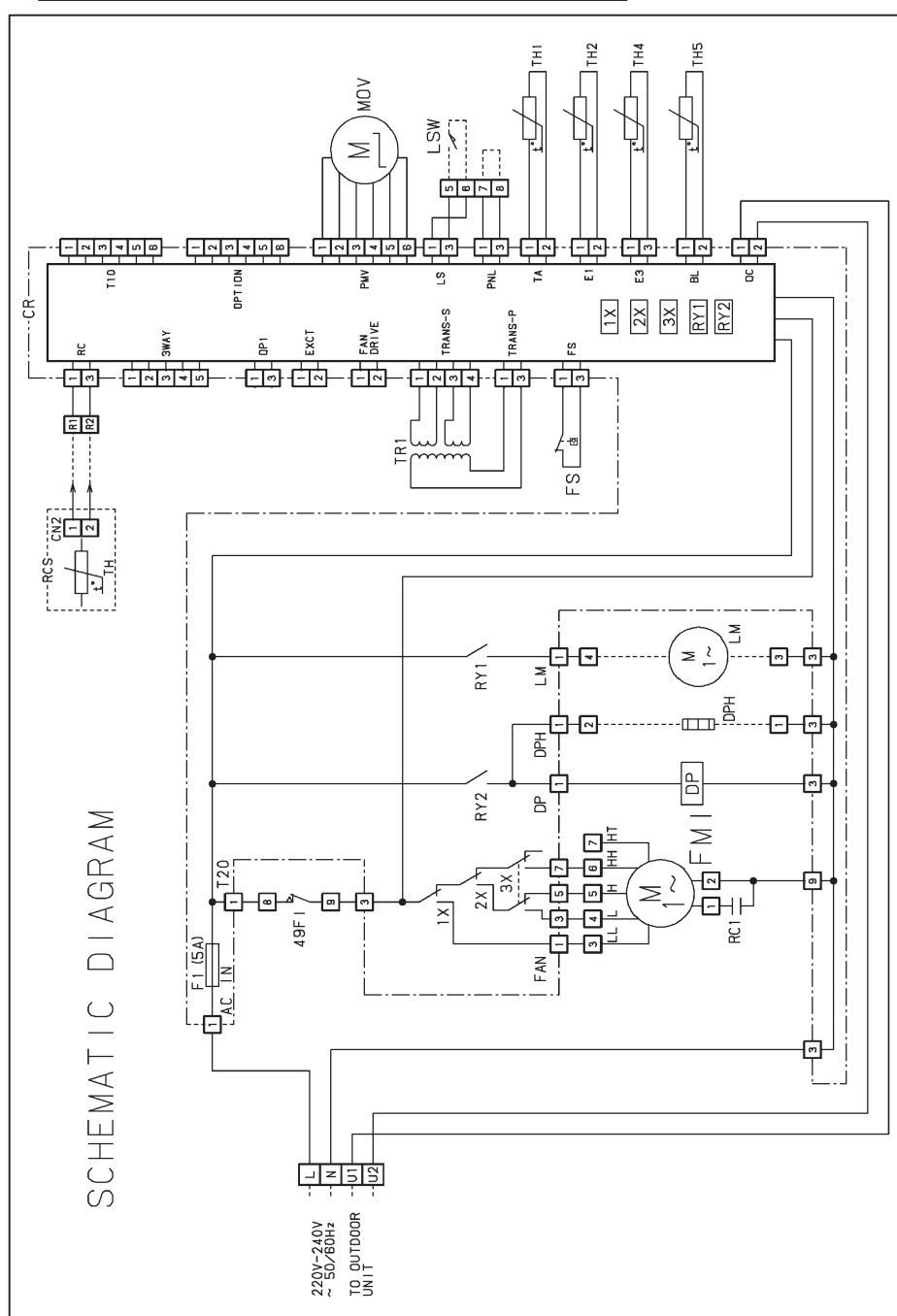
2. Indoor Unit

(3) Electric Wiring Diagram S-22ML1E5/28ML1E5/36ML1E5/45ML1E5/56ML1E5/73ML1E5



SYMBOLS	DESCRIPTION
FM1	INDOOR FAN MOTOR
MOV	MOTOR OPERATED VALVE
49F1	INDOOR MOTOR THERMAL PROTECTOR
RC1	RUNNING CAPACITOR
TR1	POWER TRANSFORMER
DP	DRAIN PUMP
FS	FLOAT SWITCH
TH1	ROOM THERMISTOR
TH2	THERMISTOR (INDOOR COIL E1)
TH4	THERMISTOR (INDOOR COIL E3)
TH5	THERMISTOR (DISCHARGE AIR)
F1	FUSE
1X-3X	AUXILIARY RELAY
RY1, 2	
CR	INDOOR CONTROLLER
(PANEL)	*DPH:DEW PROOF HEATER (OPTION) LSW:LIMIT SWITCH (OPTION) LM:AUTO LOUVER MOTOR (OPTION)
(RCS)	REMOTE CONTROL SWITCH (OPTION) TH:ROOM THERMISTOR
☐	CONNECTOR, TERMINAL PLATE
☒	TERMINAL

NOTE:DEW PROOF HEATER (DPH) IS PROVIDED ONLY IN THE MODEL 73MLIES.



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3. Cooling Capacity of Indoor Unit

3-3. 2-Way Cassette Type (L1 Type)

- S-22ML1E5

Power supply : 220/230/240V 1phase-50,60Hz TC : Total Cooling Capacity (kW) SHC : Sensible Heat Capacity (kW)

This data is when the indoor unit connects with 10HP outdoor unit.

RATING CAPACITY:		2.2 kW																	AIR FLOW RATE: 8.0 m³/min																
EVAPORATOR		CONDENSER																																	
AIR INTAKE TEMP		AMBIENT TEMP. (°C)																																	
W.B.	D.B.		15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	46																	
14		TC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
	21	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
	23	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
	25	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
	27	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
15		TC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
	21	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
	23	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
	25	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
	27	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
16		TC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8																	
	21	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4																	
	23	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
	25	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8																	
	27	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8																	
	29	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8																	
17		TC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9																	
	21	SHC	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3																	
	23	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5																	
	25	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8																	
	27	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9																	
	29	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9																	
18		TC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1																	
	21	SHC	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2																	
	23	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4																	
	25	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7																	
	27	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0																	
	29	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1																	
	31	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1																	
19		TC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2																	
	21	SHC	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0																	
	23	SHC	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3																	
	25	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
	27	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9																	
	29	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1																	
	31	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2																	
20		TC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3																	
	23	SHC	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2																	
	25	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4																	
	27	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7																	
	29	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0																	
	31	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3																	
21		TC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.3	2.3																	
	23	SHC	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0																	
	25	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3																	
	27	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6																	
	29	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8																	
	31	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1																	
22		TC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.4	2.4																	
	25	SHC	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1																	
	27	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4																	
	29	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7																	
	31	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0																	
23		TC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.6	2.6	2.5	2.4	2.4																	
	25	SHC	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0																	
	27	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3																	
	29	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.5																	
	31	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8																	

3. Cooling Capacity of Indoor Unit

• S-28ML1E5

Power supply : 220/230/240V 1phase-50,60Hz TC : Total Cooling Capacity (kW) SHC : Sensible Heat Capacity (kW)

This data is when the indoor unit connects with 10HP outdoor unit.

RATING CAPACITY:		2.8 kW AIR FLOW RATE: 9.0 m³/min																
EVAPORATOR		CONDENSER																
AIR INTAKE TEMP		AMBIENT TEMP. (°C)																
W.B.	D.B.		15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	46
14		TC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	21	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	23	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	25	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	27	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
15		TC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	21	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	23	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	25	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	27	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
16		TC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	21	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	23	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	25	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	27	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
17		TC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	21	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	23	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	25	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	27	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
18		TC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	21	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	23	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	25	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	27	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
19		TC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	21	SHC	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	23	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	25	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	27	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
20		TC	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9
	23	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4
	25	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	27	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	29	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2
21		TC	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.0	3.0	2.9
	23	SHC	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
	25	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5
	27	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8
	29	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1
22		TC	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.2	3.1	3.1	3.0
	25	SHC	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4
	27	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.6
	29	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9
	31	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2
23		TC	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.3	3.3	3.2	3.1	3.1
	25	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.2	1.2
	27	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5
	29	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8
	31	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.0	2.0

3. Cooling Capacity of Indoor Unit

● S-36ML1E5

Power supply : 220/230/240V 1phase-50,60Hz TC : Total Cooling Capacity (kW) SHC : Sensible Heat Capacity (kW)

This data is when the indoor unit connects with 10HP outdoor unit.

RATING CAPACITY:			3.6 kW AIR FLOW RATE: 9.7 m³/min															
EVAPORATOR			CONDENSER															
AIR INTAKE TEMP			AMBIENT TEMP. (°C)															
W.B.	D.B.		15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	46
14		TC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	21	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	23	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	25	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	27	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
15		TC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	21	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	23	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	25	SHC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	27	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
16		TC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
	21	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	23	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	25	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	27	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	29	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
17		TC	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	21	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	23	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	25	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	27	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	29	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
18		TC	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
	21	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
	23	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
	25	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	27	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	29	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	31	SHC	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
19		TC	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	21	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	23	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
	25	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	27	SHC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	29	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	31	SHC	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
20		TC	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7
	23	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
	25	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0
	27	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3
	29	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6
	31	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
21		TC	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.8	3.8
	23	SHC	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6
	25	SHC	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9
	27	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2
	29	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.4
	31	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
22		TC	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.1	4.0	3.9	3.9
	25	SHC	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.7	1.7
	27	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0
	29	SHC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.3	2.3	2.3
	31	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.5
23		TC	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.4	4.3	4.2	4.1	4.0	3.9
	25	SHC	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.6	1.6	1.6	1.5
	27	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.8	1.8
	29	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.1	2.1	2.1
	31	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.4	2.4	2.4

3. Cooling Capacity of Indoor Unit

● S-45ML1E5

Power supply : 220/230/240V 1phase-50,60Hz TC : Total Cooling Capacity (kW) SHC : Sensible Heat Capacity (kW)

This data is when the indoor unit connects with 10HP outdoor unit.

RATING CAPACITY:		4.5 kW AIR FLOW RATE:11.0 m³/min																
EVAPORATOR		CONDENSER																
AIR INTAKE TEMP		AMBIENT TEMP. (°C)																
W.B.	D.B.		15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	46
14		TC	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	21	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	23	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	25	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	27	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
15		TC	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	21	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	23	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	25	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	27	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
16		TC	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	21	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	23	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	25	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	27	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
17		TC	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	21	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	23	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	25	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	27	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
18		TC	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
	21	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	23	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	25	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	27	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
19		TC	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	21	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
	23	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	25	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	27	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
20		TC	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.7	4.6
	23	SHC	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2
	25	SHC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4
	27	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.7
	29	SHC	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9
21		TC	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.0	4.9	4.8	4.7
	23	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1
	25	SHC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.3	2.3
	27	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.5
	29	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.7
22		TC	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3	5.1	5.0	4.9	4.8
	25	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.2	2.1
	27	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.4	2.4
	29	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.7	2.7	2.6	2.6
	31	SHC	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	2.9	2.9	2.8
23		TC	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.5	5.4	5.2	5.1	5.0	4.9
	25	SHC	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.2	2.1	2.0	2.0	2.0
	27	SHC	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.4	2.4	2.3	2.2	2.2
	29	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7	2.6	2.5	2.5	2.4
	31	SHC	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	2.9	2.8	2.7	2.7	2.7

3. Cooling Capacity of Indoor Unit

● S-73ML1E5

Power supply : 220/230/240V 1phase-50,60Hz TC : Total Cooling Capacity (kW) SHC : Sensible Heat Capacity (kW)

This data is when the indoor unit connects with 10HP outdoor unit.

RATING CAPACITY:		7.3 kW AIR FLOW RATE: 19.0 m³/min																
EVAPORATOR		CONDENSER																
AIR INTAKE. TEMP		AMBIENT TEMP. (°C)																
W.B.	D.B.		15	17	19	21	23	25	27	29	31	33	35	37	39	41	43	46
14		TC	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	21	SHC	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
	23	SHC	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
	25	SHC	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	27	SHC	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
15		TC	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
	21	SHC	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	23	SHC	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	25	SHC	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
	27	SHC	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
16		TC	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	21	SHC	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7
	23	SHC	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
	25	SHC	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	27	SHC	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
17		TC	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	21	SHC	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	23	SHC	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
	25	SHC	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
	27	SHC	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1
18		TC	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
	21	SHC	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
	23	SHC	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
	25	SHC	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	27	SHC	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
19		TC	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
	21	SHC	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	23	SHC	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	25	SHC	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	27	SHC	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
20		TC	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.5
	23	SHC	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.5
	25	SHC	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.0
	27	SHC	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.6
	29	SHC	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1
21		TC	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.2	7.9	7.8	7.7
	23	SHC	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.3	3.3	3.2
	25	SHC	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.8	3.8	3.7
	27	SHC	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.3	4.2
	29	SHC	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.8	4.8	4.8
22		TC	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.8	8.6	8.3	8.1	8.0	7.8
	25	SHC	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.7	3.6	3.5	3.5	3.4
	27	SHC	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.2	4.1	4.0	4.0	3.9
	29	SHC	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.7	4.6	4.5	4.5	4.4
	31	SHC	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.1	5.0	5.0	4.9
23		TC	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.0	8.7	8.5	8.2	8.1	8.0
	25	SHC	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.4	3.3	3.2	3.2	3.1
	27	SHC	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	3.9	3.8	3.7	3.7	3.6
	29	SHC	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.5	4.4	4.3	4.2	4.2	4.1
	31	SHC	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.0	4.9	4.8	4.7	4.7	4.6