

TECHNICAL DATA

Indoor Unit

	Class	15	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						
Y2	4-Way Cassette 60×60		S-22MY2E5	S-28MY2E5	S-36MY2E5	S-45MY2E5	S-56MY2E5						
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-15MM1E5	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		
K2	Wall Mounted		S-22MK2E5	S-28MK2E5	S-36MK2E5								
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-224ME1E5A	S-280ME1E5

IMPORTANT! Please Read Before Starting

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

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

- Carefully read this instruction booklet before beginning.
- Follow each installation or repair step exactly as shown.
- Observe all local, state, and national electrical codes.
- This product is intended for professional use.
Permission from the power supplier is required when installing the U-8ME1E81 outdoor unit that is connected to a 16 A distribution network.
- This equipment complies with EN/IEC 61000-3-12 provided that the short-circuit power S_{sc} is greater than or equals to the values corresponding to each model as shown in the table below at the interface point between the user's supply and the public system.
It is the responsibility of the installer or user of the equipment to ensure; by consultation with the distribution network operator if necessary that the equipment is connected only to supply with a short-circuit power S_{sc} greater than or equals to the values corresponding to each model as shown in the table below.

	U-10ME1E81	U-12ME1E81	U-14ME1E81	U-16ME1E81	U-18ME1E81	U-20ME1E81
S_{sc}	1,150 kVA	1,550 kVA	1,550 kVA	1,550 kVA	1,550 kVA	1,550 kVA

- This equipment complies with EN/IEC 61000-3-11 provided that the system impedance Z_{max} is less than or equal to the values corresponding to each model as shown in the table below at the interface point between the user's supply and the public system. Consult with the supply authority for the system impedance Z_{max} .

	U-10ME1E81	U-12ME1E81	U-14ME1E81	U-16ME1E81	U-18ME1E81	U-20ME1E81
Z_{max}	—	0.290 Ω	0.290 Ω	0.290 Ω	0.290 Ω	0.290 Ω

- Pay close attention to all warning and caution notices given in this manual.



WARNING

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



CAUTION

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

If Necessary, Get Help

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

In Case of Improper Installation

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

SPECIAL PRECAUTIONS

WARNING When Wiring



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

- Do not supply power to the unit until all wiring and tubing are completed or reconnected and checked.
- Highly dangerous electrical voltages are used in this system. Carefully refer to the wiring diagram and these instructions when wiring. Improper connections and inadequate grounding can cause **accidental injury or death**.
- Connect all wiring tightly. Loose wiring may cause overheating at connection points and a possible fire hazard.
- Provide a power outlet to be used exclusively for each unit.
- ELCB must be incorporated in the fixed wiring. Circuit breaker must be incorporated in the fixed wiring in accordance with the wiring regulations.

	U-8ME1E81	U-10ME1E81	U-12ME1E81	U-14ME1E81
Circuit breaker	25 A	25 A	35 A	35 A

	U-16ME1E81	U-18ME1E81	U-20ME1E81
Circuit breaker	45 A	50 A	50 A

- Provide a power outlet exclusively for each unit, and full disconnection means having a contact separation in all poles must be incorporated in the fixed wiring in accordance with the wiring rules.
- To prevent possible hazards from insulation failure, the unit must be grounded.



When Transporting

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

When Installing...

Select an installation location which is rigid and strong enough to support or hold the unit, and select a location for easy maintenance.

...In a Room

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



CAUTION

Keep the fire alarm and the air outlet at least 1.5 m away from the unit.

...In Moist or Uneven Locations

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

...In an Area with High Winds

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

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

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

When Connecting Refrigerant Tubing




WARNING

- When performing piping work do not mix air except for specified refrigerant (R410A) in refrigeration cycle. It causes capacity down, and risk of explosion and injury due to high tension inside the refrigerant cycle.
- Refrigerant gas leakage may cause fire.
- Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury, etc.
- Ventilate the room well, in the event that is refrigerant gas leaks during the installation. Be careful not to allow contact of the refrigerant gas with a flame as this will cause the generation of poisonous gas.
- Keep all tubing runs as short as possible.
- Use the flare method for connecting tubing.
- Apply refrigerant lubricant to the matching surfaces of the flare and union tubes before connecting them, then tighten the nut with a torque wrench for a leak-free connection.
- Check carefully for leaks before starting the test run.
- Do not leak refrigerant while piping work for an installation or re-installation, and while repairing refrigeration parts.
Handle liquid refrigerant carefully as it may cause frostbite.

When Servicing




WARNING

- Turn the power OFF at the main power box (mains), wait at least 10 minutes until it is discharged, then open the unit to check or repair electrical parts and wiring. 
- Keep your fingers and clothing away from any moving parts.
- Clean up the site after you finish, remembering to check that no metal scraps or bits of wiring have been left inside the unit being serviced.
- This product must not be modified or disassembled under any circumstances. Modified or disassembled unit may cause fire, electric shock or injury.
- Do not clean inside the indoor and outdoor units by users. Engage authorized dealer or specialist for cleaning.
- In case of malfunction of this appliance, do not repair by yourself. Contact to the sales dealer or service dealer for a repair.







CAUTION

- Do not touch the air inlet or the sharp aluminum fins of the outdoor unit. You may get injured. 
- Ventilate any enclosed areas when installing or testing the refrigeration system. Escaped refrigerant gas, on contact with fire or heat, can produce dangerously toxic gas.
- Confirm after installation that no refrigerant gas is leaking. If the gas comes in contact with a burning stove, gas water heater, electric room heater or other heat source, it can cause the generation of poisonous gas.

Others



CAUTION

- Do not touch the air inlet or the sharp aluminum fins of the outdoor unit. You may get injured. 
- Do not sit or step on the unit, you may fall down accidentally. 
- Do not stick any object into the FAN CASE. You may be injured and the unit may be damaged. 


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)

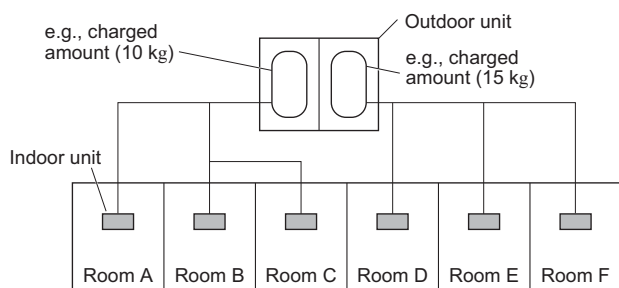
$$\text{Min. volume of the indoor unit installed room (m}^3\text{)} \leq \text{Density limit (kg/m}^3\text{)}$$

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:

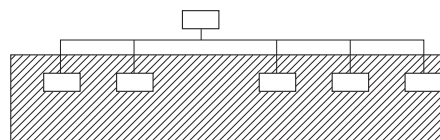


The possible amount of leaked refrigerant gas in rooms A, B and C is 10 kg.

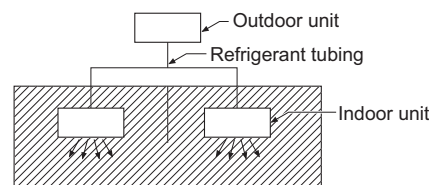
The possible amount of leaked refrigerant gas in rooms D, E and F is 15 kg.

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

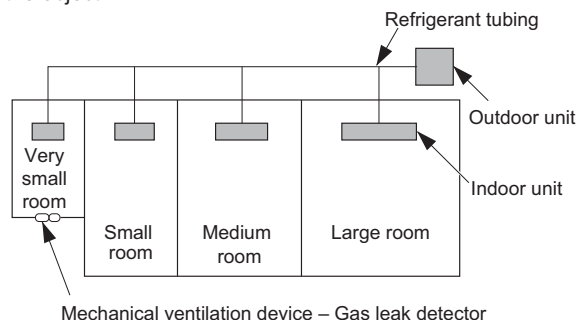
- (1) No partition (shaded portion)



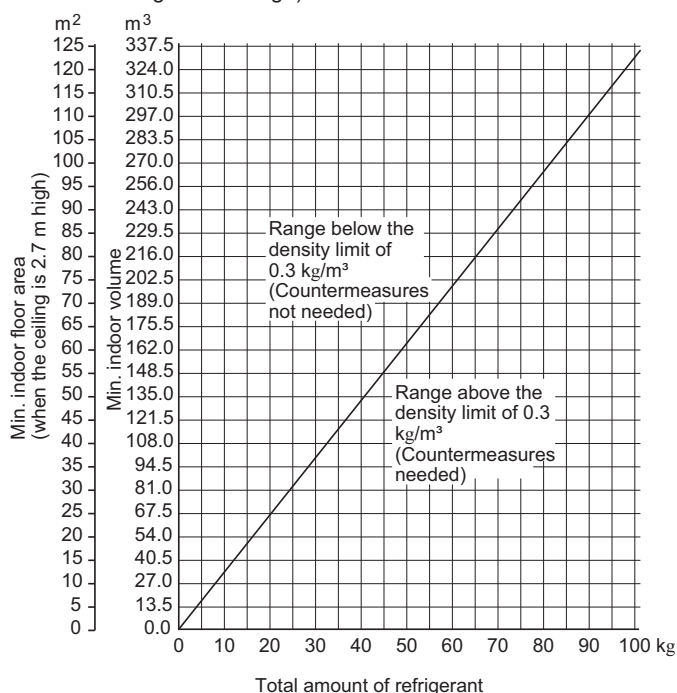
- (2) When there is an effective opening with the adjacent room for ventilation of leaking refrigerant gas (opening without a door, or an opening 0.15% or larger than the respective floor spaces at the top or bottom of the door).



- (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.

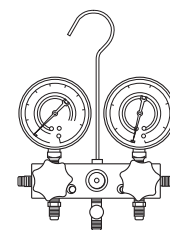
3. Different tools required

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

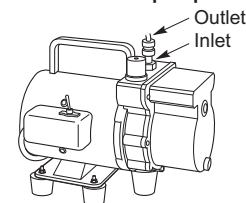
Some tools for R22- and R407C-type refrigerant systems cannot be used.

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.

Manifold gauge



Vacuum pump

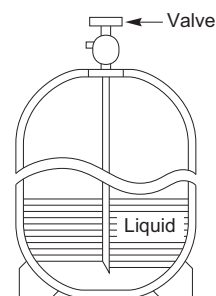


* Using tools for R22 and R407C and new tools for R410A together can cause defects.

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.



1. Line-up

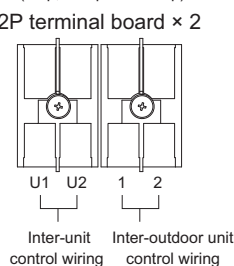
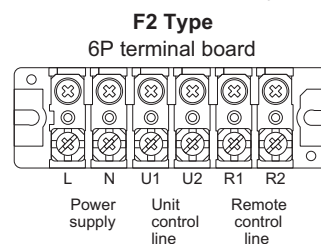
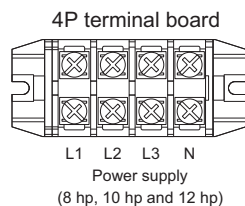
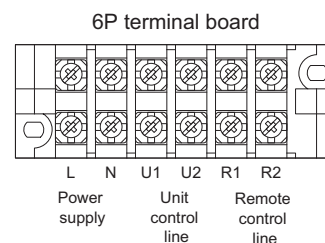
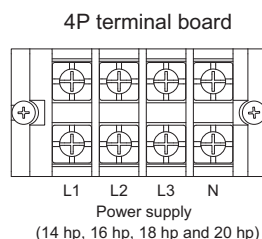
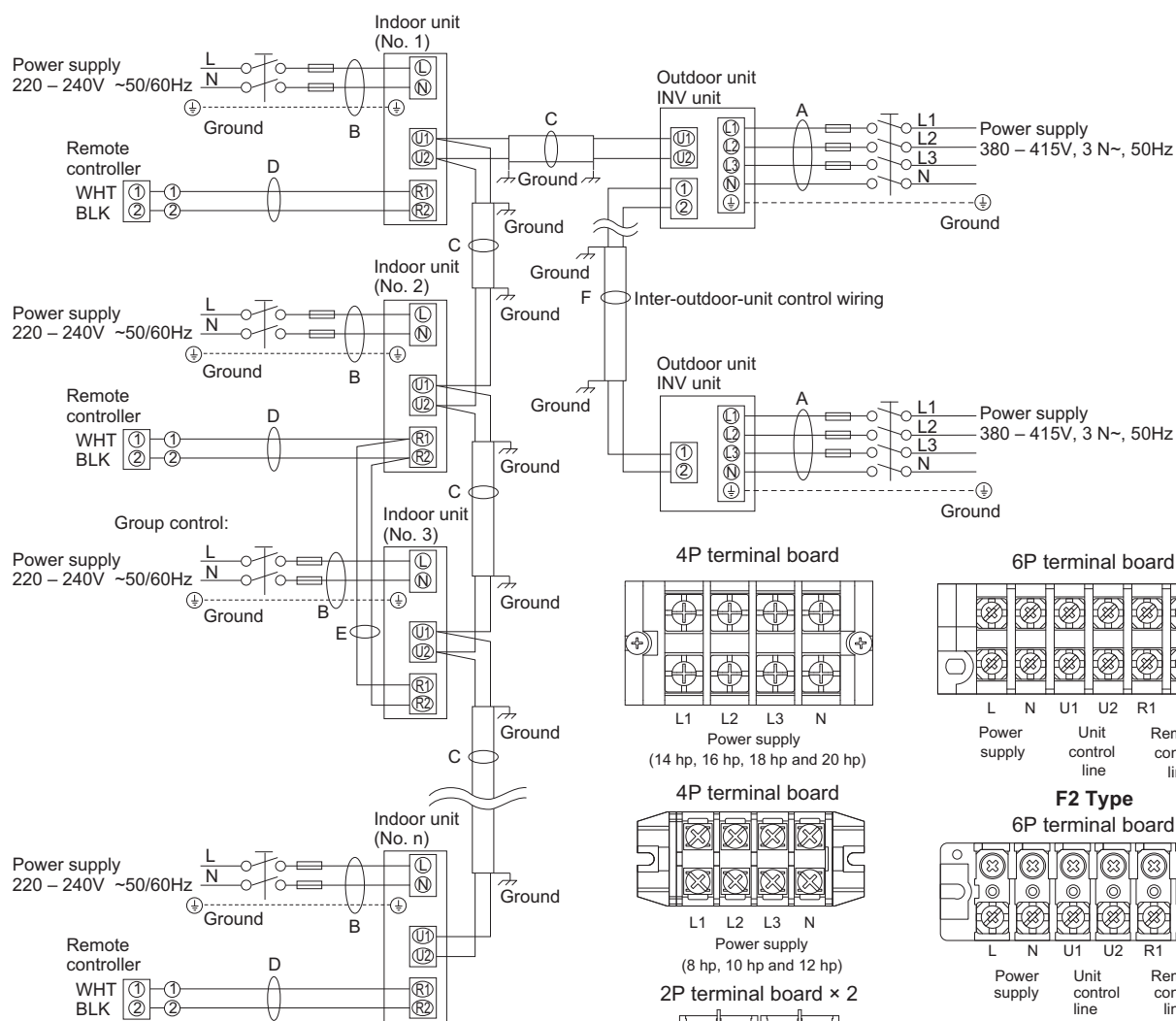
Indoor units

Type	22	28	36	45	56	60	73	90	106	140	160
Capacity: kW (BTU/h) Cooling Heating	2.2 (7,500) 2.5 (8,500)	2.8 (9,600) 3.2 (11,000)	3.6 (12,000) 4.2 (14,000)	4.5 (15,000) 5.0 (17,000)	5.6 (19,000) 6.3 (21,000)	6.0 (20,500) 7.1 (24,200)	7.3 (25,000) 8.0 (27,000)	9.0 (30,000) 10.0 (34,000)	10.6 (36,000) 11.4 (39,000)	14.0 (47,800) 16.0 (54,600)	16.0 (54,600) 18.0 (61,500)
4-Way Cassette Type (U1 Type)	 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
4-Way Cassette 60×60 Type (Y1 Type)	 S-22MY1E5	 S-28MY1E5	 S-36MY1E5	 S-45MY1E5	 S-56MY1E5						
4-Way Cassette 60×60 Type (Y2 Type)	 S-22MY2E5	 S-28MY2E5	 S-36MY2E5	 S-45MY2E5	 S-56MY2E5						
2-Way Cassette Type (L1 Type)	 S-22ML1E5	 S-28ML1E5	 S-36ML1E5	 S-45ML1E5	 S-56ML1E5		 S-73ML1E5				
Wall Mounted Type (K1 Type)	 S-22MK1E5	 S-28MK1E5	 S-36MK1E5	 S-45MK1E5	 S-56MK1E5		 S-73MK1E5		 S-106MK1E5		
Wall Mounted Type (K2 Type)	 S-22MK2E5	 S-28MK2E5	 S-36MK2E5								
Ceiling Type (T1 Type)			 S-36MT1E5	 S-45MT1E5	 S-56MT1E5		 S-73MT1E5		 S-106MT1E5	 S-140MT1E5	
1-Way Cassette Type (D1 Type)		 S-28MD1E5	 S-36MD1E5	 S-45MD1E5	 S-56MD1E5		 S-73MD1E5				
Low Silhouette Ducted Type (F1 Type)	 S-22MF1E5	 S-28MF1E5	 S-36MF1E5	 S-45MF1E5	 S-56MF1E5		 S-73MF1E5	 S-90MF1E5	 S-106MF1E5	 S-140MF1E5	 S-160MF1E5
Low Silhouette Ducted Type (F2 Type)	 S-22MF2E5	 S-28MF2E5	 S-36MF2E5	 S-45MF2E5	 S-56MF2E5	 S-60MF2E5	 S-73MF2E5	 S-90MF2E5	 S-106MF2E5	 S-140MF2E5	 S-160MF2E5
Slim Low Static Ducted Type (M1 Type)	 S-22MM1E5	 S-28MM1E5	 S-36MM1E5	 S-45MM1E5	 S-56MM1E5						
Floor Standing Type (P1 Type)	 S-22MP1E5	 S-28MP1E5	 S-36MP1E5	 S-45MP1E5	 S-56MP1E5		 S-71MP1E5				
Concealed Floor Standing Type (R1 Type)	 S-22MR1E5	 S-28MR1E5	 S-36MR1E5	 S-45MR1E5	 S-56MR1E5		 S-71MR1E5				

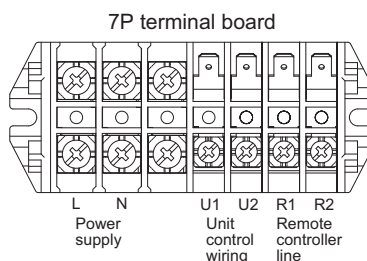
Type	73	106	140	224	280
High Static Pressure Ducted Type (E1 Type)	 S-73ME1E5	 S-106ME1E5	 S-140ME1E5	 S-224ME1E5 S-224ME1E5A	 S-280ME1E5

3. Electrical Wiring

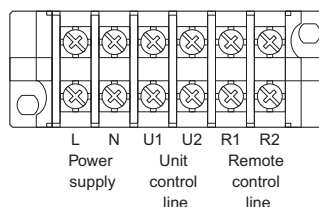
3-3. Wiring System Diagrams



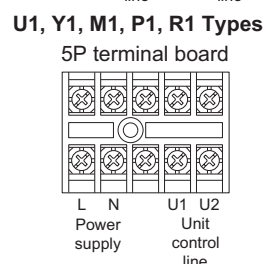
ME1 Type



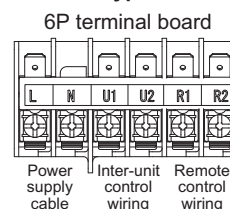
T1, F1, E1, D1, L1 Types 6P terminal board



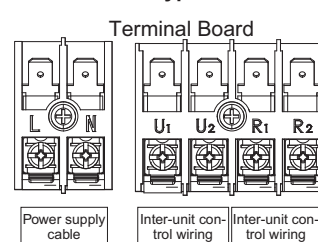
U1 Type



K1 Type



K2 Type



Y2 Type

- (1) Refer to Section 3-2. "Recommended Wire Length and Wire Diameter for Power Supply System" for the explanation of "A", "B", "C", "D", "E" and "F" in the above diagram.
- (2) The basic connection diagram of the indoor unit shows the 7P terminal board, so the terminal boards in your equipment may differ from the diagram.
- (3) Refrigerant Circuit (R.C.) address should be set before turning the power on.
- (4) Address setting can be executed by remote controller automatically. Refer to Section 5.
- (5) Regarding S-280ME1E5, the power supply is 220-240V, 50Hz.

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)

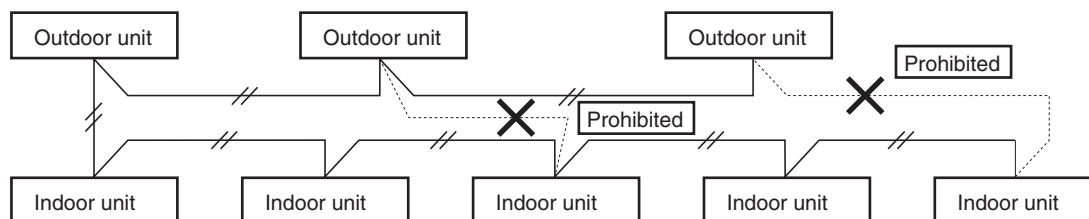


Fig. 2-2

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

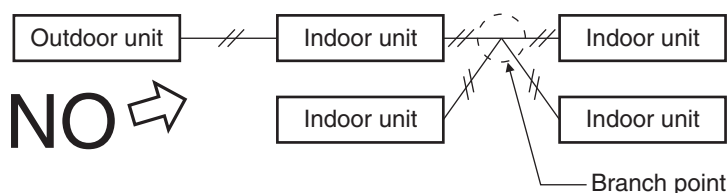


Fig. 2-3

- (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)

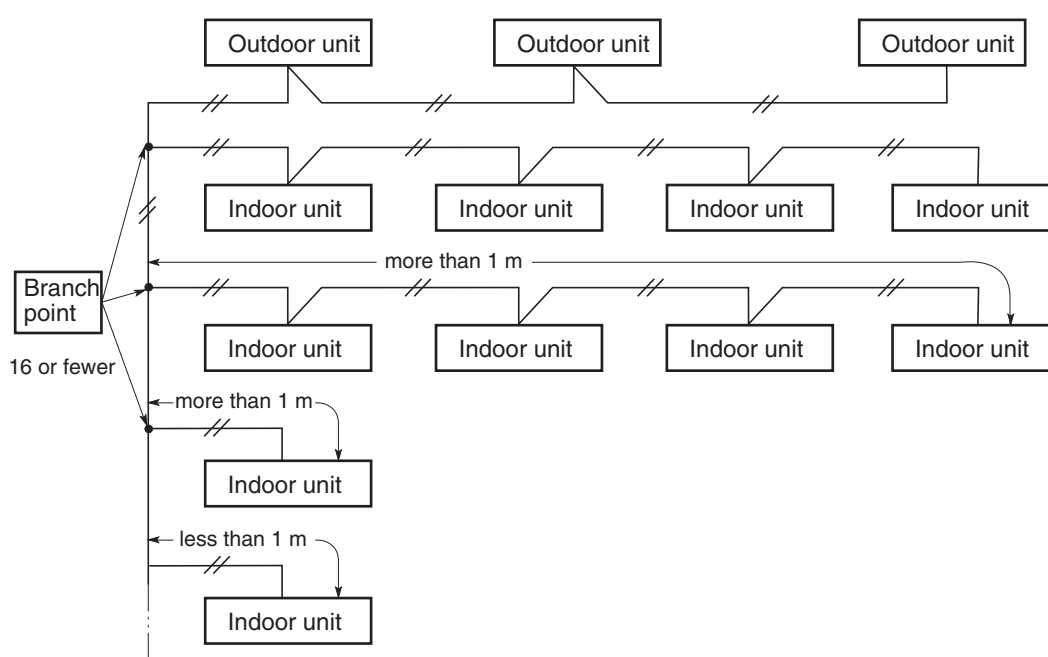


Fig. 2-4

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. (60245 IEC57, 60245 IEC66)

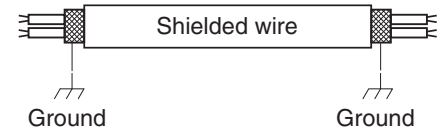


Fig. 2-5



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)

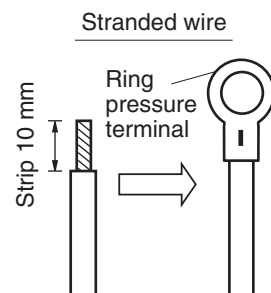


Fig. 2-6

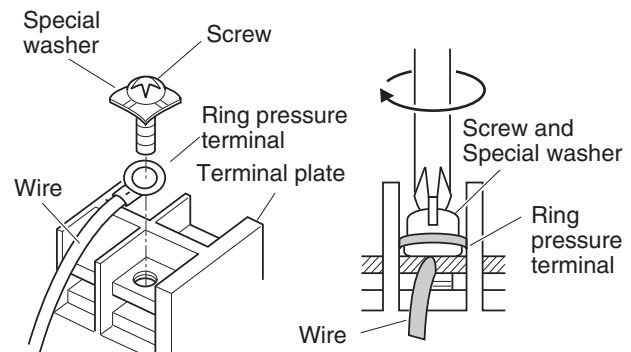


Fig. 2-7

■ 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

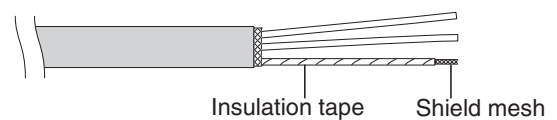


Fig. 2-9

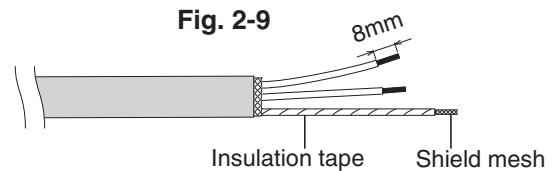


Fig. 2-10

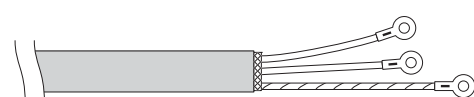


Fig. 2-11

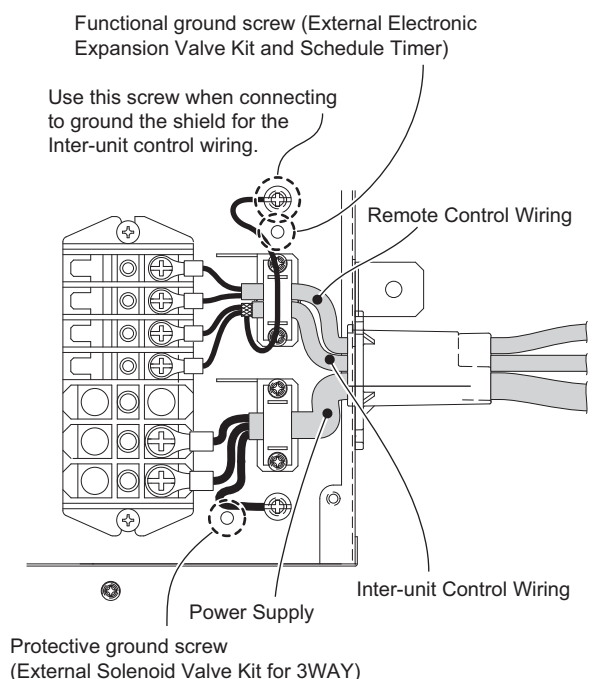
■ Earth wire for power supply

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

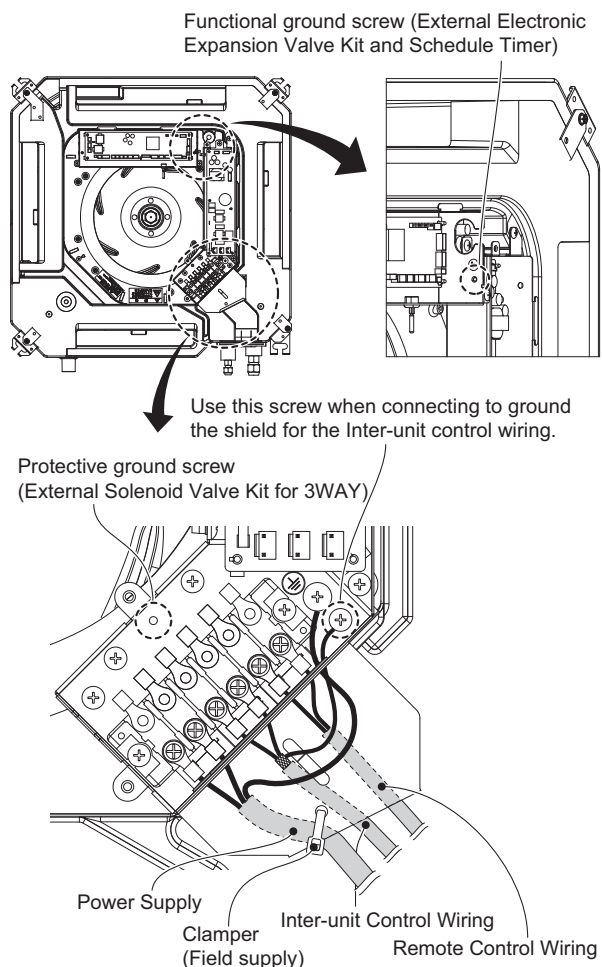
3. Electrical Wiring

■ Wiring sample

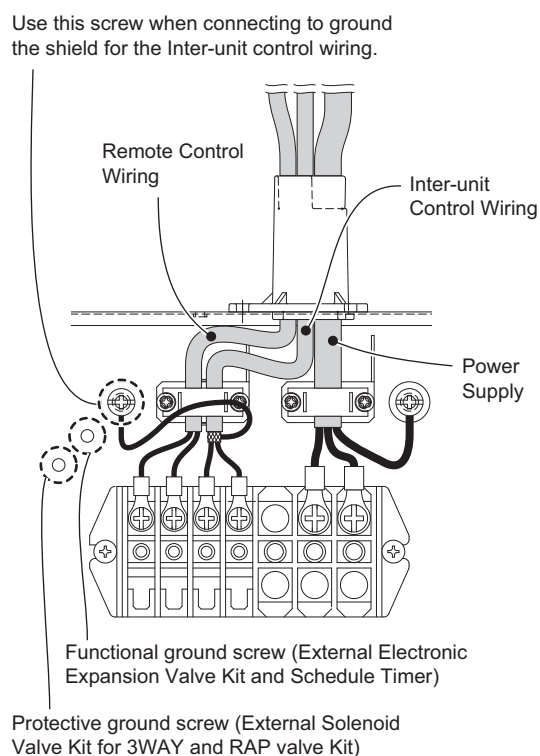
Indoor Unit : E1 Type (73, 106, 140)



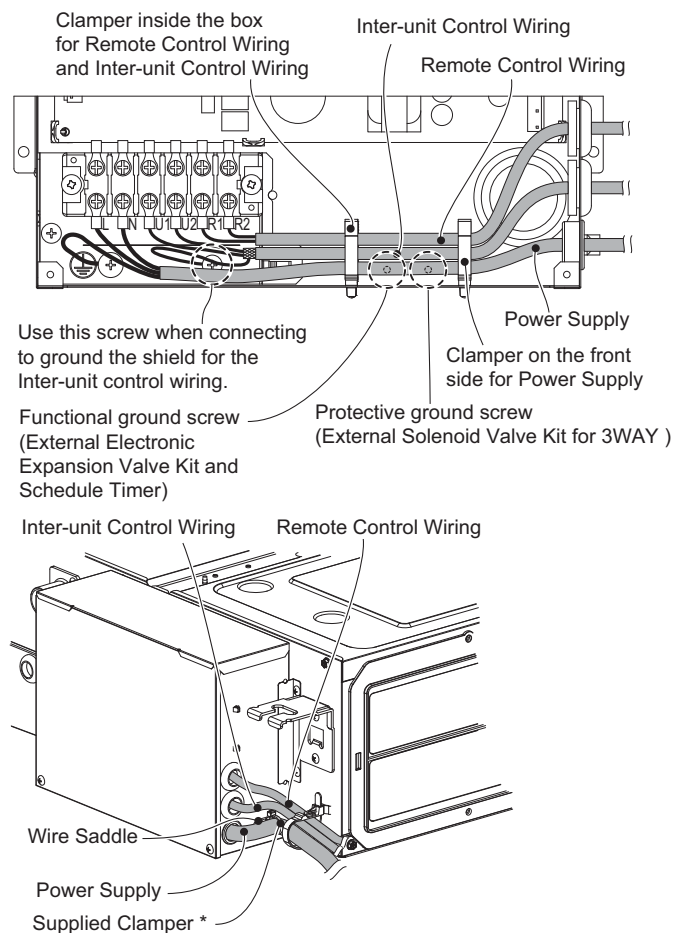
Indoor Unit : Y1 Type



Indoor Unit : E1 Type (224, 280)



Indoor Unit : M1 Type



* Route the power supply cord through the ring of the supplied wire saddle and clamp the cord.

17. Slim Low Static Ducted Type (M1 Type)

17-1. Specifications

Unit specifications (A)

MODEL No.		Indoor Unit		S-15MM1E5				
POWER SOURCE				220 - 230 - 240 V, single-phase, 50/60 Hz				
PERFORMANCE				Cooling			Heating	
	Capacity	kW	1.5			1.7		
		BTU / h	5,100			5,800		
	Air circulation (Hi / Me / Lo)	m³ / h	480 / 420 / 360					
	Moisture removal (High)	Liters / h	0.2			—		
	External static pressure (High)	Pa {mmAq}	10 {1.0}: At shipment			30 {3.1}: Using short circuit connection		
ELECTRICAL RATINGS								
	Voltage rating	V	220	230	240	220	230	240
	Available voltage range	V	198 - 264			198 - 264		
	Running amperes	A	0.26	0.26	0.26	0.23	0.23	0.23
	Power input	W	36	36	36	26	26	26
	Power factor	%	63	60	58	51	49	47
	Max. starting amperes	A	—	—	—	—	—	—
FEATURES								
	Controls		Microprocessor					
	Timer		ON / OFF Timer (Max. 72 h)					
	Fan speeds		3 and Automatic control					
	Air filter		Washable, easy access					
	Refrigerant control		Electronic expansion valve					
	Operation sound (Hi / Me / Lo)		dB-A	28 / 27 / 25				
	Using short circuit connection (Hi / Me / Lo)		dB-A	30 / 29 / 27				
	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		OD26 mm					
	Drain pump		Max. head 500 mm above drain connection					
	Remote controller		Optional (Wired / Wireless)					
	Refrigerant tubing kit / Accessories		—					
Color (Approximate value)		—						
DIMENSIONS & WEIGHT				Unit dimensions			Package dimensions	
	Unit dimensions	Height	mm (in.)	200 (7-7 / 8)			220 (8-21 / 32)	
		Width	mm (in.)	750 (29-17 / 32)			1030 (40-35 / 64)	
		Depth	mm (in.)	640 (25-13 / 64)			745 (29-21 / 64)	
	Net weight		kg (lbs.)	19 (42)				
	Shipping weight		kg (lbs.)	23 (51)				
Shipping volume		m³ (cu.ft)	0.169 (5.97)					

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

17. Slim Low Static Ducted Type (M1 Type)

Unit specifications (B)

MODEL No.		Indoor Unit		S-22MM1E5						
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	0.3			—		
	External static pressure (High)			Pa {mmAq}	10 {1.0}: At shipment		30 {3.1}: Using short circuit connection			
ELECTRICAL RATINGS										
	Voltage rating			V	220	230	240	220	230	240
	Available voltage range			V	198 - 264			198 - 264		
	Running amperes			A	0.26	0.26	0.26	0.23	0.23	0.23
	Power input			W	36	36	36	26	26	26
	Power factor			%	63	60	58	51	49	47
	Max. starting amperes			A	—	—	—	—	—	—
FEATURES										
	Controls			Microprocessor						
	Timer			ON / OFF Timer (Max. 72 h)						
	Fan speeds			3 and Automatic control						
	Air filter			Washable, easy access						
	Refrigerant control			Electronic expansion valve						
	Operation sound (Hi / Me / Lo)			dB-A	28 / 27 / 25					
	Using short circuit connection (Hi / Me / Lo)			dB-A	30 / 29 / 27					
	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			OD26 mm						
	Drain pump			Max. head 500 mm above drain connection						
	Remote controller			Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories			—						
	Color (Approximate value)			—						
DIMENSIONS & WEIGHT				Unit dimensions			Package dimensions			
	Unit dimensions	Height		mm (in.)	200 (7-7 / 8)			220 (8-21 / 32)		
		Width		mm (in.)	750 (29-17 / 32)			1030 (40-35 / 64)		
		Depth		mm (in.)	640 (25-13 / 64)			745 (29-21 / 64)		
	Net weight			kg (lbs.)	19 (42)					
	Shipping weight			kg (lbs.)	23 (51)					
	Shipping volume			m³ (cu.ft)	0.169 (5.97)					

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

17. Slim Low Static Ducted Type (M1 Type)

Unit specifications (C)

MODEL No.		Indoor Unit		S-28MM1E5					
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)		m ³ / h	510 / 450 / 390					
	Moisture removal (High)		Liters / h	0.7			—		
	External static pressure (High)		Pa {mmAq}	15 {1.5}: At shipment 30 {3.1}: Using short circuit connection					
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.30	0.30	0.30	0.27	0.27	0.27
	Power input		W	40	40	40	30	30	30
	Power factor		%	61	58	56	51	48	46
	Max. starting amperes		A	—	—	—	—	—	—
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 h)						
	Fan speeds		3 and Automatic control						
	Air filter		Washable, easy access						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	30 / 29 / 27					
	Using short circuit connection (Hi / Me / Lo)		dB-A	32 / 31 / 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		OD26 mm						
	Drain pump		Max. head 500 mm above drain connection						
	Remote controller		Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories		—						
	Color (Approximate value)		—						
DIMENSIONS & WEIGHT				Unit dimensions			Package dimensions		
	Unit dimensions	Height	mm (in.)	200 (7-7 / 8)			220 (8-21 / 32)		
		Width	mm (in.)	750 (29-17 / 32)			1030 (40-35 / 64)		
		Depth	mm (in.)	640 (25-13 / 64)			745 (29-21 / 64)		
	Net weight		kg (lbs.)	19 (42)					
	Shipping weight		kg (lbs.)	23 (51)					
Shipping volume		m ³ (cu.ft)	0.169 (5.97)						

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

17. Slim Low Static Ducted Type (M1 Type)

Unit specifications (D)

MODEL No.		Indoor Unit		S-36MM1E5					
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)		m³ / h	540 / 480 / 420					
	Moisture removal (High)		Liters / h	1.2		—			
	External static pressure (High)		Pa {mmAq}	15 {1.5}: At shipment		40 {4.1}: Using short circuit connection			
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.31	0.31	0.31	0.28	0.28	0.28
	Power input		W	42	42	42	32	32	32
	Power factor		%	62	59	56	52	50	48
	Max. starting amperes		A	—	—	—	—	—	—
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 h)						
	Fan speeds		3 and Automatic control						
	Air filter		Washable, easy access						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	32 / 30 / 28					
	Using short circuit connection (Hi / Me / Lo)		dB-A	34 / 32 / 30					
	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		OD26 mm						
	Drain pump		Max. head 500 mm above drain connection						
	Remote controller		Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories		—						
	Color (Approximate value)		—						
DIMENSIONS & WEIGHT				Unit dimensions		Package dimensions			
	Unit dimensions	Height	mm (in.)	200 (7-7 / 8)		220 (8-21 / 32)			
		Width	mm (in.)	750 (29-17 / 32)		1030 (40-35 / 64)			
		Depth	mm (in.)	640 (25-13 / 64)		745 (29-21 / 64)			
	Net weight		kg (lbs.)	19 (42)					
	Shipping weight		kg (lbs.)	23 (51)					
	Shipping volume		m³ (cu.ft)	0.169 (5.97)					

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

17. Slim Low Static Ducted Type (M1 Type)

Unit specifications (E)

MODEL No.		Indoor Unit		S-45MM1E5					
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	630 / 570 / 480					
	Moisture removal (High)		Liters / h	1.7			—		
	External static pressure (High)		Pa {mmAq}	15 {1.5}: At shipment		40 {4.1}: Using short circuit connection			
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.37	0.37	0.37	0.34	0.34	0.34
	Power input		W	49	49	49	39	39	39
	Power factor		%	60	58	55	52	50	48
	Max. starting amperes		A	—	—	—	—	—	—
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 h)						
	Fan speeds		3 and Automatic control						
	Air filter		Washable, easy access						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	34 / 32 / 30					
	Using short circuit connection (Hi / Me / Lo)		dB-A	36 / 34 / 32					
	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		OD26 mm						
	Drain pump		Max. head 500 mm above drain connection						
	Remote controller		Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories		—						
	Color (Approximate value)		—						
DIMENSIONS & WEIGHT				Unit dimensions			Package dimensions		
	Unit dimensions	Height	mm (in.)	200 (7-7 / 8)			220 (8-21 / 32)		
		Width	mm (in.)	750 (29-17 / 32)			1030 (40-35 / 64)		
		Depth	mm (in.)	640 (25-13 / 64)			745 (29-21 / 64)		
	Net weight		kg (lbs.)	19 (42)					
	Shipping weight		kg (lbs.)	23 (51)					
Shipping volume		m ³ (cu.ft)	0.169 (5.97)						

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

17. Slim Low Static Ducted Type (M1 Type)

Unit specifications (F)

MODEL No.		Indoor Unit		S-56MM1E5					
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	750 / 690 / 600					
	Moisture removal (High)		Liters / h	2.3		—			
	External static pressure (High)		Pa {mmAq}	15 {1.5}: At shipment		40 {4.1}: Using short circuit connection			
ELECTRICAL RATINGS									
	Voltage rating		V	220	230	240	220	230	240
	Available voltage range		V	198 - 264			198 - 264		
	Running amperes		A	0.48	0.48	0.48	0.45	0.45	0.45
	Power input		W	64	64	64	54	54	54
	Power factor		%	61	58	56	55	52	50
	Max. starting amperes		A	—	—	—	—	—	—
FEATURES									
	Controls		Microprocessor						
	Timer		ON / OFF Timer (Max. 72 h)						
	Fan speeds		3 and Automatic control						
	Air filter		Washable, easy access						
	Refrigerant control		Electronic expansion valve						
	Operation sound (Hi / Me / Lo)		dB-A	35 / 33 / 31					
	Using short circuit connection (Hi / Me / Lo)		dB-A	37 / 35 / 32					
	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		OD26 mm						
	Drain pump		Max. head 500 mm above drain connection						
	Remote controller		Optional (Wired / Wireless)						
	Refrigerant tubing kit / Accessories		—						
	Color (Approximate value)		—						
DIMENSIONS & WEIGHT				Unit dimensions		Package dimensions			
	Unit dimensions	Height	mm (in.)	200 (7-7 / 8)		220 (8-21 / 32)			
		Width	mm (in.)	750 (29-17 / 32)		1030 (40-35 / 64)			
		Depth	mm (in.)	640 (25-13 / 64)		745 (29-21 / 64)			
	Net weight		kg (lbs.)	19 (42)					
	Shipping weight		kg (lbs.)	23 (51)					
	Shipping volume		m³ (cu.ft)	0.169 (5.97)					

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

17. Slim Low Static Ducted Type (M1 Type)

17-2. Major Component Specifications

Indoor unit (A)

MODEL No.		S-15MM1E5	
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz	
Controller P.C.B. Ass'y		CB-15MM1E51 (Microprocessor)	
Fan (Number...diameter)	mm	Centrifugal (1...ø190)	
Fan motor			
Model...Nominal output	W	DK8-63G280H...60 W	
Power source		280 / 340 VDC / 3 phase / 50 Hz	
No. of pole...r.p.m. (230V, High)	rpm	8P... 834	
Coil resistance (Ambient temperature 20°C)	Ω	—	
Run capacitor	VAC, μF	—	
Electronic expansion valve			
Coil		UKV-U032E	
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	3...1.4	
Face area	m ²	0.128	
Drain pump		PLD-12230ST-2	
Rated	V, W	AC 230 V, 50 Hz, 12 W	
Height from unit bottom & capacity		850 mm, 400 cc/min	

17. Slim Low Static Ducted Type (M1 Type)

Indoor unit (B)

MODEL No.		S-22MM1E5
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz
Controller P.C.B. Ass'y		CB-US075XH (Microprocessor)
Fan (Number...diameter)	mm	Centrifugal (1...ø190)
Fan motor		
Model...Nominal output	W	DK8-63G280H...60 W
Power source		280 / 340 VDC / 3 phase / 50 Hz
No. of pole...r.p.m. (230V, High)	rpm	8P... 834
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		UKV-U032E
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	3...1.4
Face area	m ²	0.128
Drain pump		PLD-12230ST-2
Rated	V, W	AC 230 V, 50 Hz, 12 W
Height from unit bottom & capacity		850 mm, 400 cc/min

17. Slim Low Static Ducted Type (M1 Type)

Indoor unit (C)

MODEL No.		S-28MM1E5
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz
Controller P.C.B. Ass'y		CB-US075XH (Microprocessor)
Fan (Number...diameter)	mm	Centrifugal (1...ø190)
Fan motor		
Model...Nominal output	W	DK8-63G280H...60 W
Power source		280 / 340 VDC / 3 phase / 50 Hz
No. of pole...r.p.m. (230V, High)	rpm	8P... 834
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		UKV-U032E
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	3...1.4
Face area	m ²	0.128
Drain pump		PLD-12230ST-2
Rated	V, W	AC 230 V, 50 Hz, 12 W
Height from unit bottom & capacity		850 mm, 400 cc/min

17. Slim Low Static Ducted Type (M1 Type)

Indoor unit (D)

MODEL No.		S-36MM1E5
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz
Controller P.C.B. Ass'y		CB-US075XH (Microprocessor)
Fan (Number...diameter)	mm	Centrifugal (1...ø190)
Fan motor		
Model...Nominal output	W	DK8-63G280H...60 W
Power source		280 / 340 VDC / 3 phase / 50 Hz
No. of pole...r.p.m. (230V, High)	rpm	8P... 834
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		UKV-U032E
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	3...1.4
Face area	m ²	0.128
Drain pump		PLD-12230ST-2
Rated	V, W	AC 230 V, 50 Hz, 12 W
Height from unit bottom & capacity		850 mm, 400 cc/min

17. Slim Low Static Ducted Type (M1 Type)

Indoor unit (E)

MODEL No.		S-45MM1E5
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz
Controller P.C.B. Ass'y		CB-US075XH (Microprocessor)
Fan (Number...diameter)	mm	Centrifugal (1...ø190)
Fan motor		
Model...Nominal output	W	DK8-63G280H...60 W
Power source		280 / 340 VDC / 3 phase / 50 Hz
No. of pole...r.p.m. (230V, High)	rpm	8P... 1,191
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		UKV-U032E
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	3...1.4
Face area	m ²	0.128
Drain pump		PLD-12230ST-2
Rated	V, W	AC 230 V, 50 Hz, 12 W
Height from unit bottom & capacity		850 mm, 400 cc/min

17. Slim Low Static Ducted Type (M1 Type)

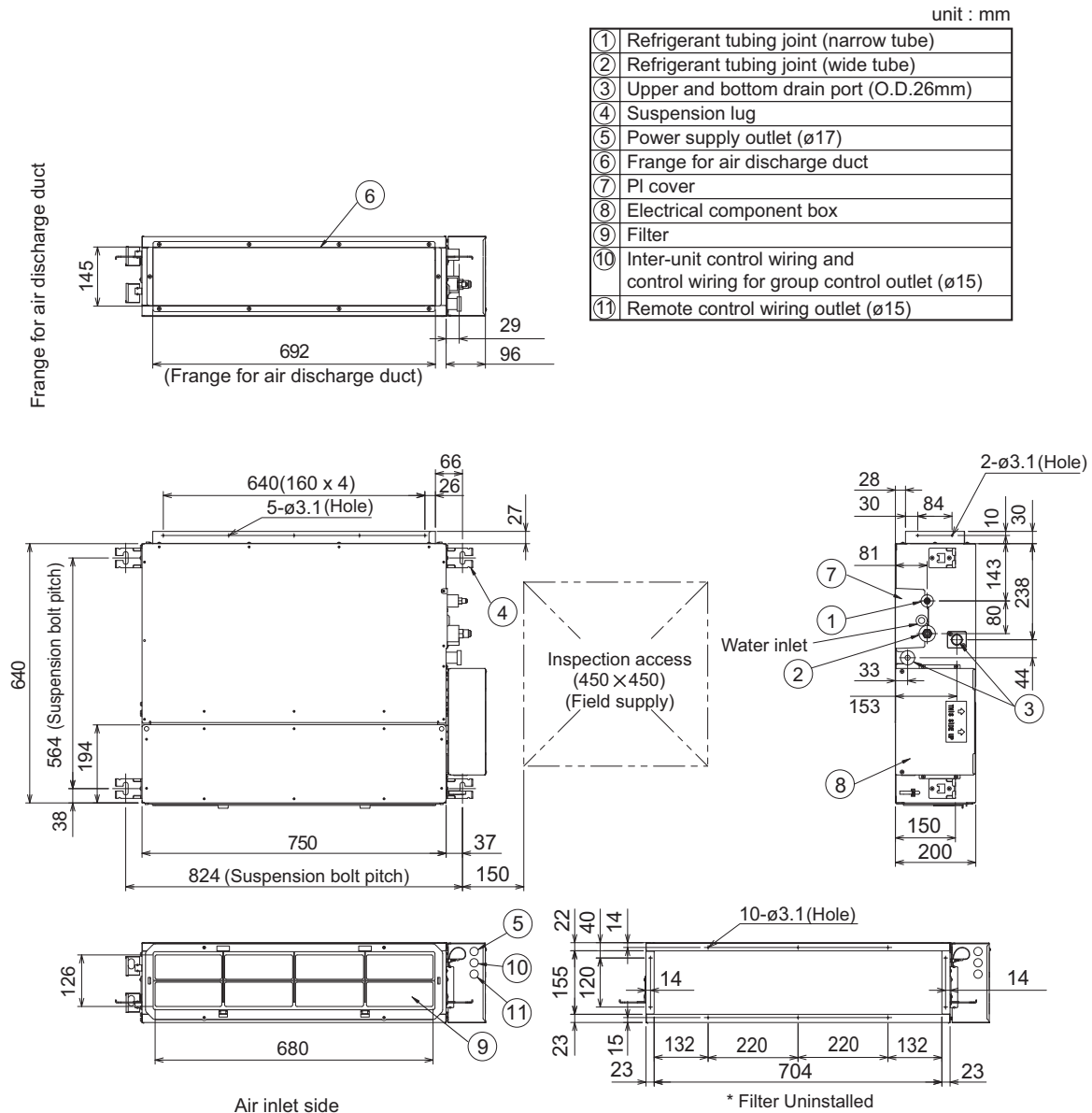
Indoor unit (F)

MODEL No.		S-56MM1E5
Power source		220 - 230 - 240 V, single-phase, 50/60 Hz
Controller P.C.B. Ass'y		CB-US075XH (Microprocessor)
Fan (Number...diameter)	mm	Centrifugal (1...ø190)
Fan motor		
Model...Nominal output	W	DK8-63G280H...60 W
Power source		280 / 340 VDC / 3 phase / 50 Hz
No. of pole...r.p.m. (230V, High)	rpm	8P... 1,191
Coil resistance (Ambient temperature 20°C)	Ω	—
Run capacitor	VAC, μF	—
Electronic expansion valve		
Coil		UKV-U032E
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	3...1.4
Face area	m ²	0.128
Drain pump		PLD-12230ST-2
Rated	V, W	AC 230 V, 50 Hz, 12 W
Height from unit bottom & capacity		850 mm, 400 cc/min

17. Slim Low Static Ducted Type (M1 Type)

17-3. Dimensional Data

Indoor unit: S-15MM1E5 / 22MM1E5 / 28MM1E5 / 36MM1E5 / 45MM1E5 / 56MM1E5



unit: mm

17. Slim Low Static Ducted Type (M1 Type)

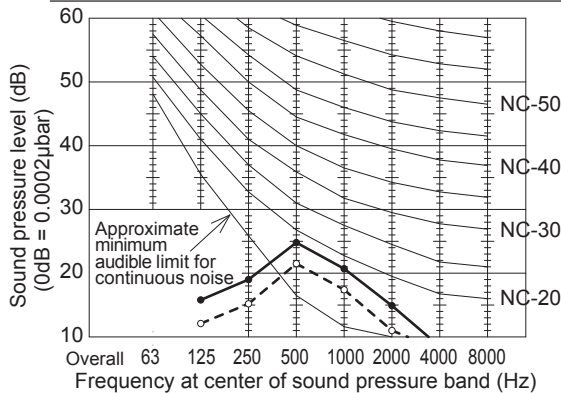
17-4. Noise Criterion Curves

MODEL : S-15MM1E5 / 22MM1E5

SOUND LEVEL : STRONG 28 dB(A)

WEAK 25 dB(A)

CONDITION : 1.5 m directly below unit

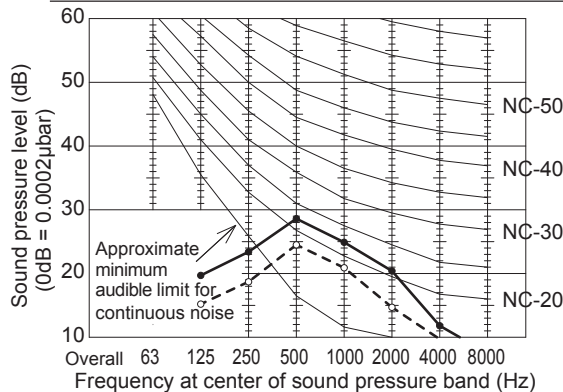


MODEL : S-36MM1E5

SOUND LEVEL : STRONG 32 dB(A)

WEAK 28 dB(A)

CONDITION : 1.5 m directly below unit

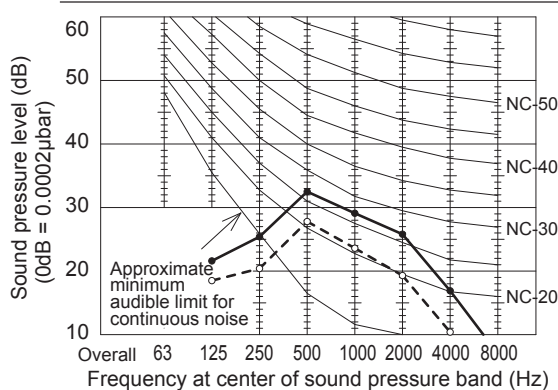


MODEL : S-56MM1E5

SOUND LEVEL : STRONG 35 dB(A)

WEAK 31 dB(A)

CONDITION : 1.5 m directly below unit



Both 50Hz and 60Hz

—●— Strong

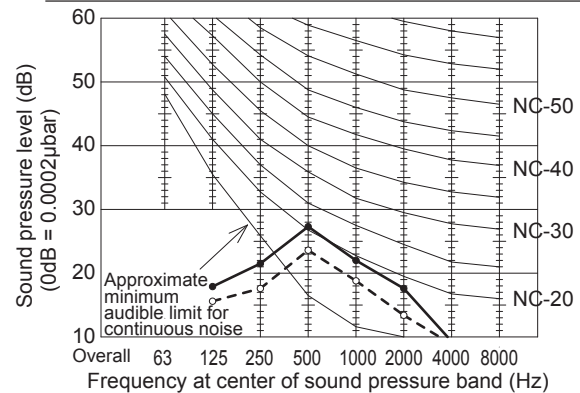
---○--- Weak

MODEL : S-28MM1E5

SOUND LEVEL : STRONG 30 dB(A)

WEAK 27 dB(A)

CONDITION : 1.5 m directly below unit

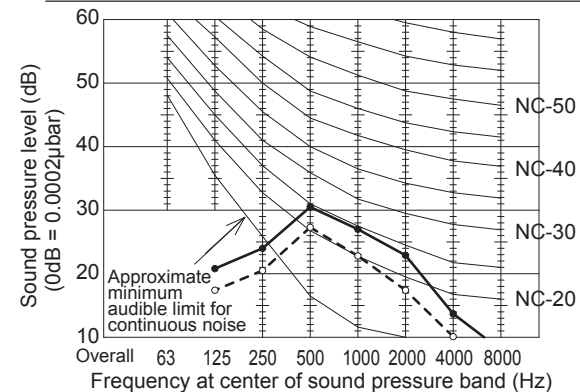


MODEL : S-45MM1E5

SOUND LEVEL : STRONG 34 dB(A)

WEAK 30 dB(A)

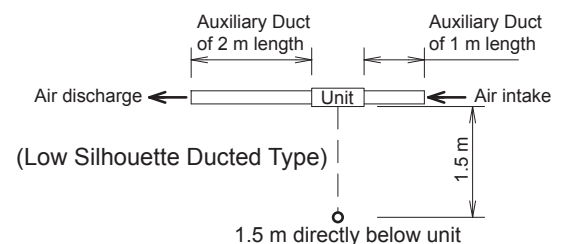
CONDITION : 1.5 m directly below unit



- REMARKS:**
1. Value obtained in the actual place where the unit is installed may be slightly higher than the values shown in this graph because of the conditions of operation, the structure of the building, the backgroundnoise and other factors.
 2. The test results were obtained from an anechoic room.
 3. The layout of the testing condition is shown at right.

NOTE

To evaluate the noise level, the maximum value of the measured sound pressure level is used. Read the value at each frequency level (on horizontal axis, center of the sound pressure band) from 63 Hz to 8000 Hz, and select the corresponding maximum value indicated on the vertical axis.



17. Slim Low Static Ducted Type (M1 Type)

17-5. Increasing the Fan Speed

■ For Short Circuit Connection

- The standard (before shipment) external static pressure is shown in the table below.
- When using with a higher static pressure, it is necessary to change to the high static pressure mode.

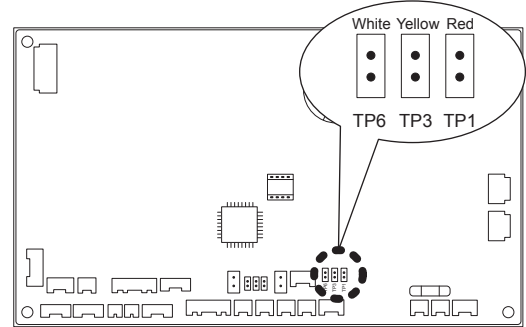
External static pressure

Type	15	22	28	36	45	56
Standard	10	10	15	15	15	15
High static pressure	30	30	30	40	40	40

When using with high static pressure mode, set the indoor unit control board as shown at right.

Follow the below procedure while the unit is turned off.

- (1) Open the cover of the electrical box and confirm that it is the indoor unit control board.
- (2) Connect the short circuit connector to the short circuit pin TP3 (2P: Yellow) of the indoor unit control board.
- In case of wired remote control setting, do not use the short circuit connector.



Indoor control board

■ For Wired Remote Control

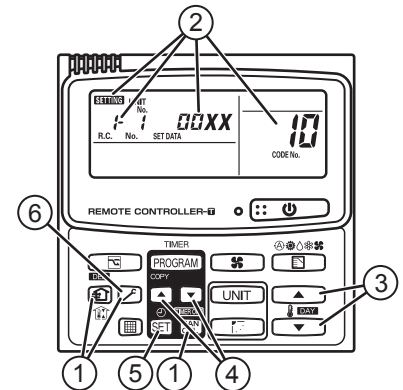
- ① Press and hold the , and buttons simultaneously for 4 seconds or longer.
- ② "SETTING," unit No. "1" (or "ALL" in the case of group control), item code "10," and settings data "00XX" are displayed blinking on the remote controller LCD display.

At this time, the indoor unit fan (or all indoor unit fans in the case of group control) begins operating.

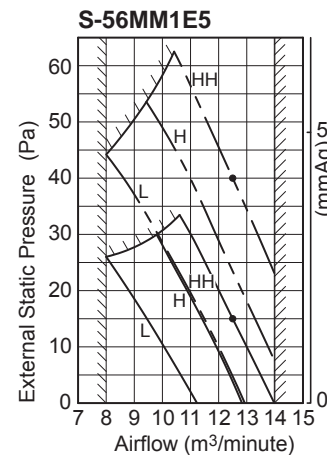
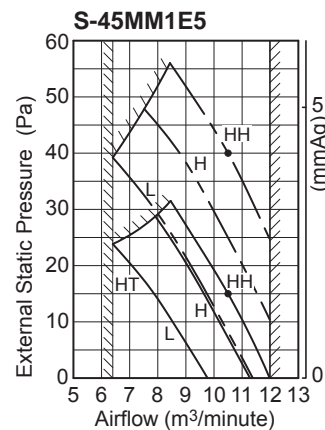
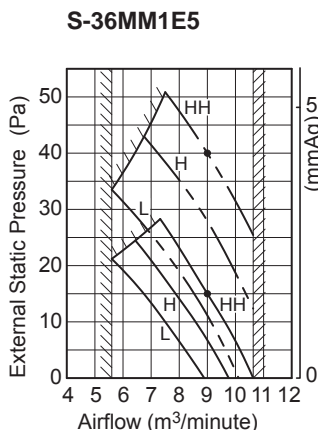
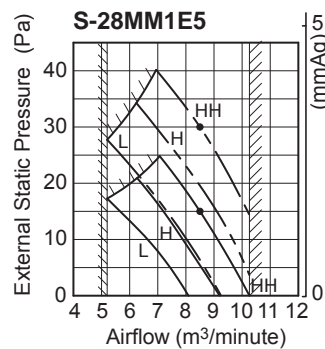
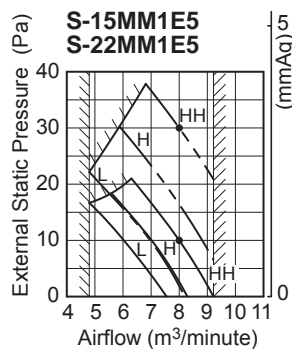
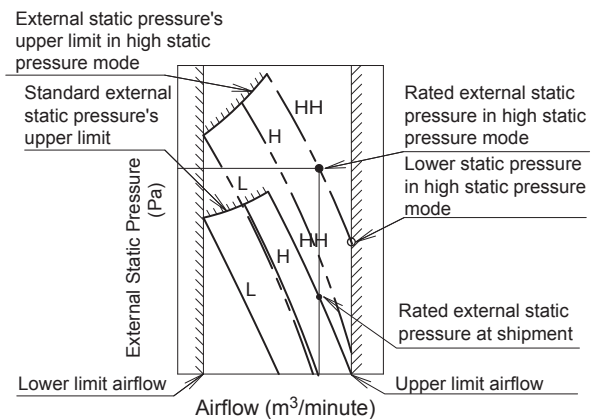
- ③ Press the temperature setting / buttons to select the item code "5d".
- ④ Press the timer time / buttons to select the desired setting data.

* For item codes and setting data, refer to the right table.

- ⑤ Press the button.
(The display stops blinking and remains lit, and setting is completed.)
- ⑥ Press the button to return to normal remote controller display.



Item code	No.	Description
5d	0000	Standard (setting at shipment)
	0003	High static-pressure



18. Intaking Fresh Air of 4-Way Cassette Type and Slim Low Static Ducted Type

● Precautions Regarding External Air Intake

(1) Ventilation Load

Ensure that the design of the air-conditioner takes air-conditioning loads into consideration when external air intake is involved.

(2) Restrictions on External Air Intake

Ensure that the design conforms to the restrictions on air intake volume stipulated in accordance with the model of the indoor unit and the intake method. Consideration must also be taken to mixed air content listed in (3) below without fail.

* If the air intake volume does not satisfy the required ventilation volume, air must be fed into the room separately with the use of a total heat exchanger or a fresh air processing air-conditioner, etc.

(3) Mixed Air

The amount of external air intake must be set within the scope of the unit's usage conditions when external air and internal air is mixed together. This is especially important in the following cases, in which it is necessary to either feed external air into the room after it has been processed or reduce the amount of external air that is fed in.

① When the external dew-point temperature is greater than the dry-bulb temperature of the air sucked into the unit.

Ensure that processing is performed so that the external dew-point temperature is lower than the temperature of the air sucked into the unit to prevent the risk of condensation building up.

② In the case of low external temperatures.

There are cases in which the temperature of mixed air is lower than the operating range of the unit if excessive amounts of external air intake are used when the external temperature is low. This problem is to be solved by either feeding external air into the room after it has been processed or reducing the amount of external air that is fed in.

③ When used in combination with humidifiers

External air must always be processed when the external air temperature reaches freezing point to prevent the risk of the humidifier freezing.

(4) Arranging Ducts and Filters in the Field

External air intake ducting must be arranged in the field. External air filters must also be installed without fail in order to prevent the intake of dust and grit.

(5) Thermal Insulation for Ducts

Ensure that all external air intake ducting is heat-insulated without fail. Failure to observe this may result in the build-up of condensation.

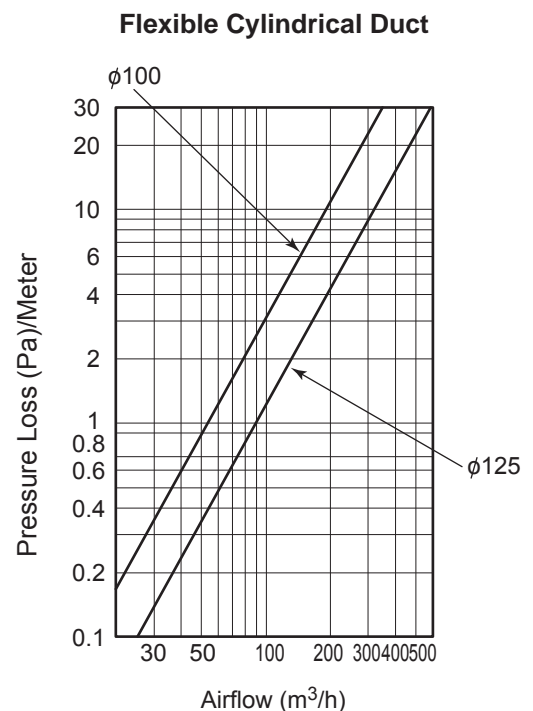
(6) External Air Intake Coupling

Ensure that the design for external air intake is coupled with the fan blower operations of the indoor unit. There are cases in which the dust that accumulates in the filter is blown into the room if the external air is fed from the filter. There are also cases in which the noise of external air being fed into the room can be heard from the indoor unit if external air is forcibly fed when the booster fan or other components on the indoor unit are not operating.

(7) Booster Fan Selection

Select the booster fan in accordance with the resistance of the external air intake duct (diagram on the pressure loss characteristics of the air flow volume for flexible cylindrical ducts) and the resistance prevalent inside the unit (volume of external air fed and the resistance within the unit).

(8) Attaching the External Air Intake Flange



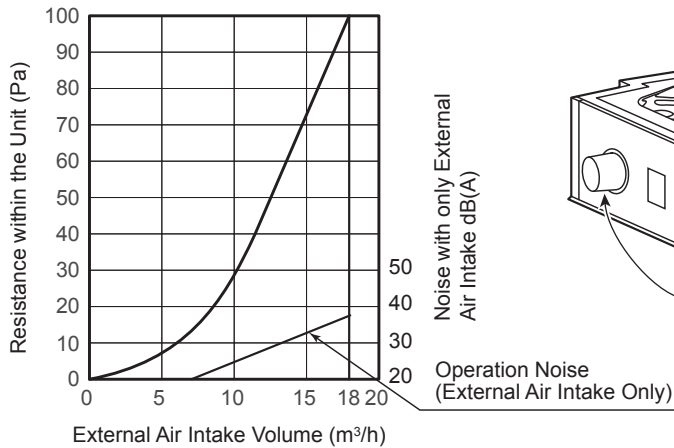
Air Flow Volume for Flexible Cylindrical Duct-Pressure Loss

18. Intaking Fresh Air of 4-Way Cassette Type and Slim Low Static Ducted Type

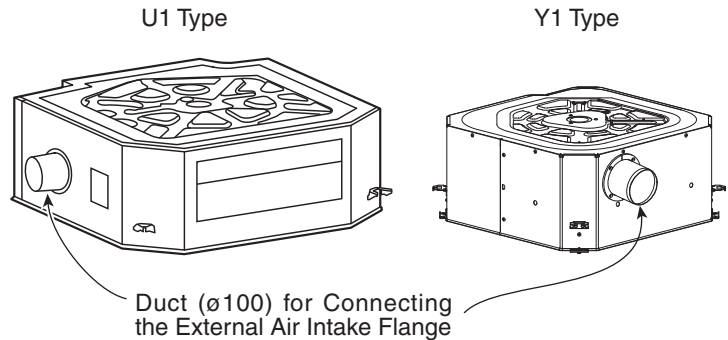
● U1, Y1 Types

When an External Air Intake Flange (ø100) is in Use

External Air Intake Volume and Resistance and Operation Noise Characteristics within the Unit



With the External Air Intake Flange Attached



- Calculate the operation noise when external air is being fed by combining the noise when only external air is being fed as shown in the graph for operation noise characteristics and the operation noise of the unit as stipulated in the catalogue.
- The operation noise conforms to JIS standards and constitute measurements taken in an anechoic chamber 1.5m directly beneath the indoor unit. Under normal circumstances, the values shown here are greater owing to the effects of surrounding noise and reverberation when the unit is actually installed.

● U1, Y1 Types

The amount of external air that is possible to feed when it is fed directly into the unit (ø100)

For use with mini cassettes

Type	22	28	36	45	56
Permissible Air Intake Volume (m³/h)	13	13	13	15	15

NOTE

The operation noise for models that use small units is lower, so use values that are within the range shown in the above table. Using values that exceed these will result in noise when only external air is fed being louder than the noise emitted from the unit.

● M1 Type

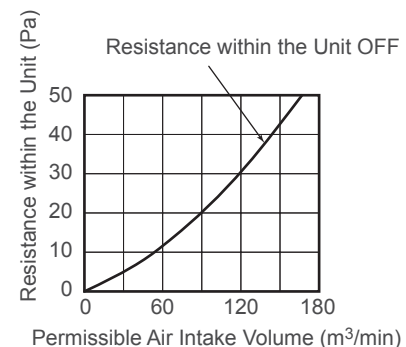
The amount of external air that is possible to feed when connected to round ducts (ø100).

Type	15	22	28	36	45	56
Permissible Air Intake Volume (m³/h)	96	96	102	108	126	150

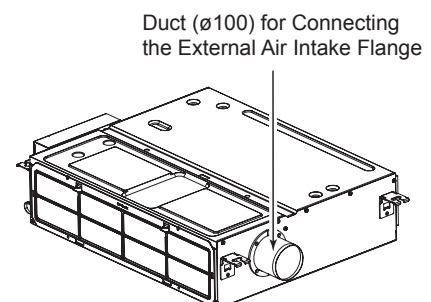
NOTE

Using values that exceed those shown in the above table will result in noise when only external air is fed being louder than the noise emitted from the indoor unit, so only use values that are within the range of the above values.

External Air Intake Volume and Resistance within the Unit



With the External Air Intake Flange Attached



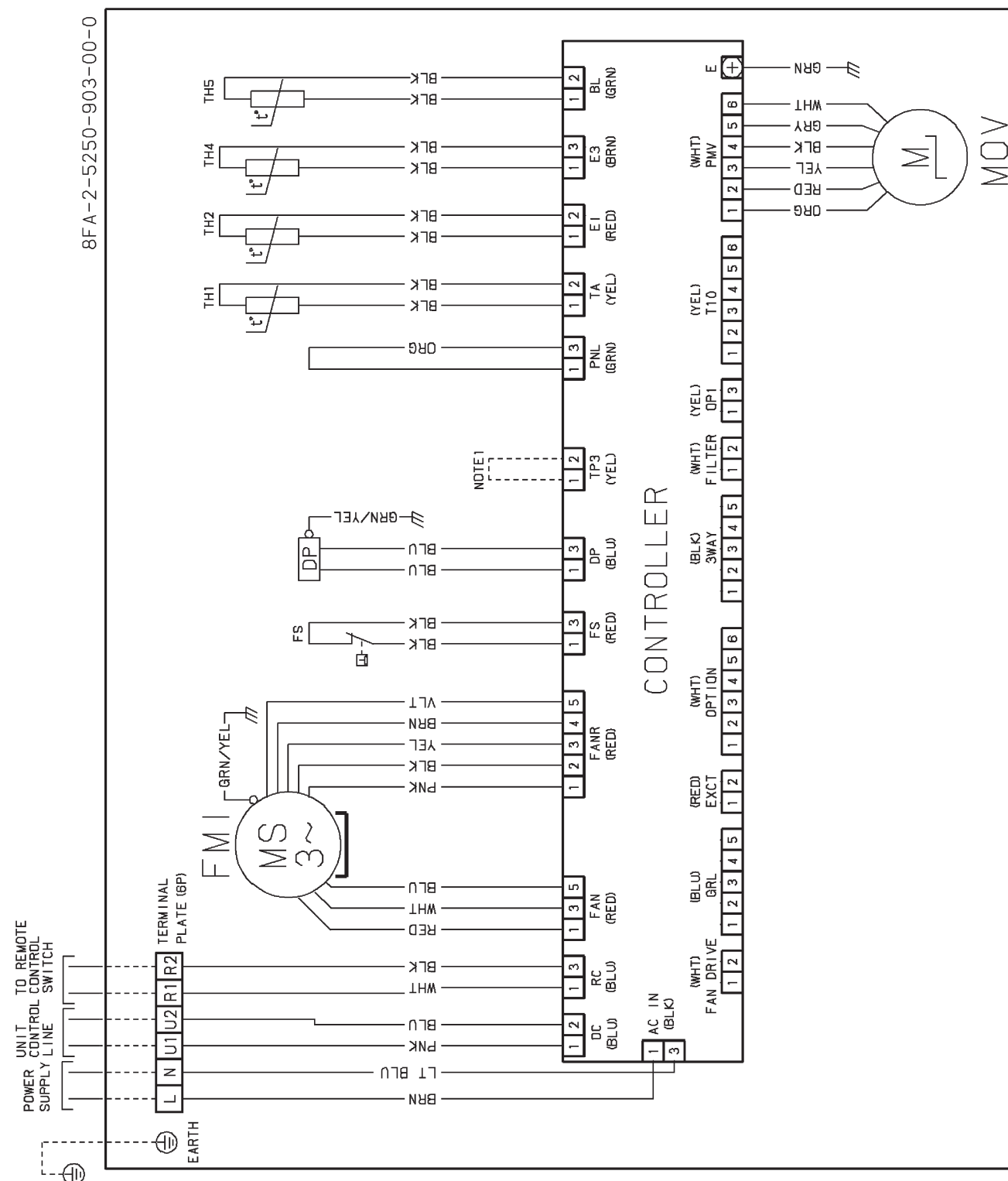
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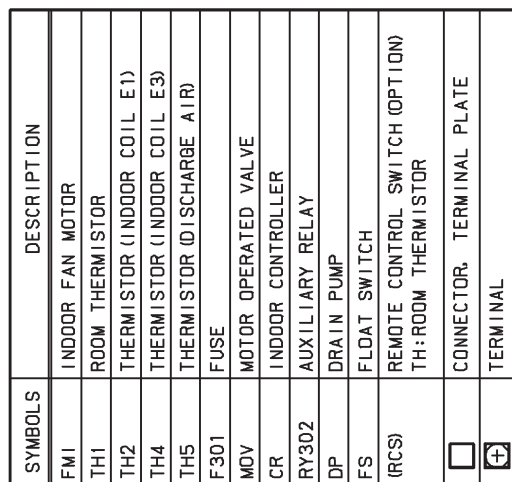
(9) Electric Wiring Diagram S-15MM1E5/22MM1E5/28MM1E5/36MM1E5/45MM1E5/56MM1E5

(9) Electric Wiring Diagram S-15MM1E5/22MM1E5/28MM1E5/36MM1E5/45MM1E5/56MM1E5

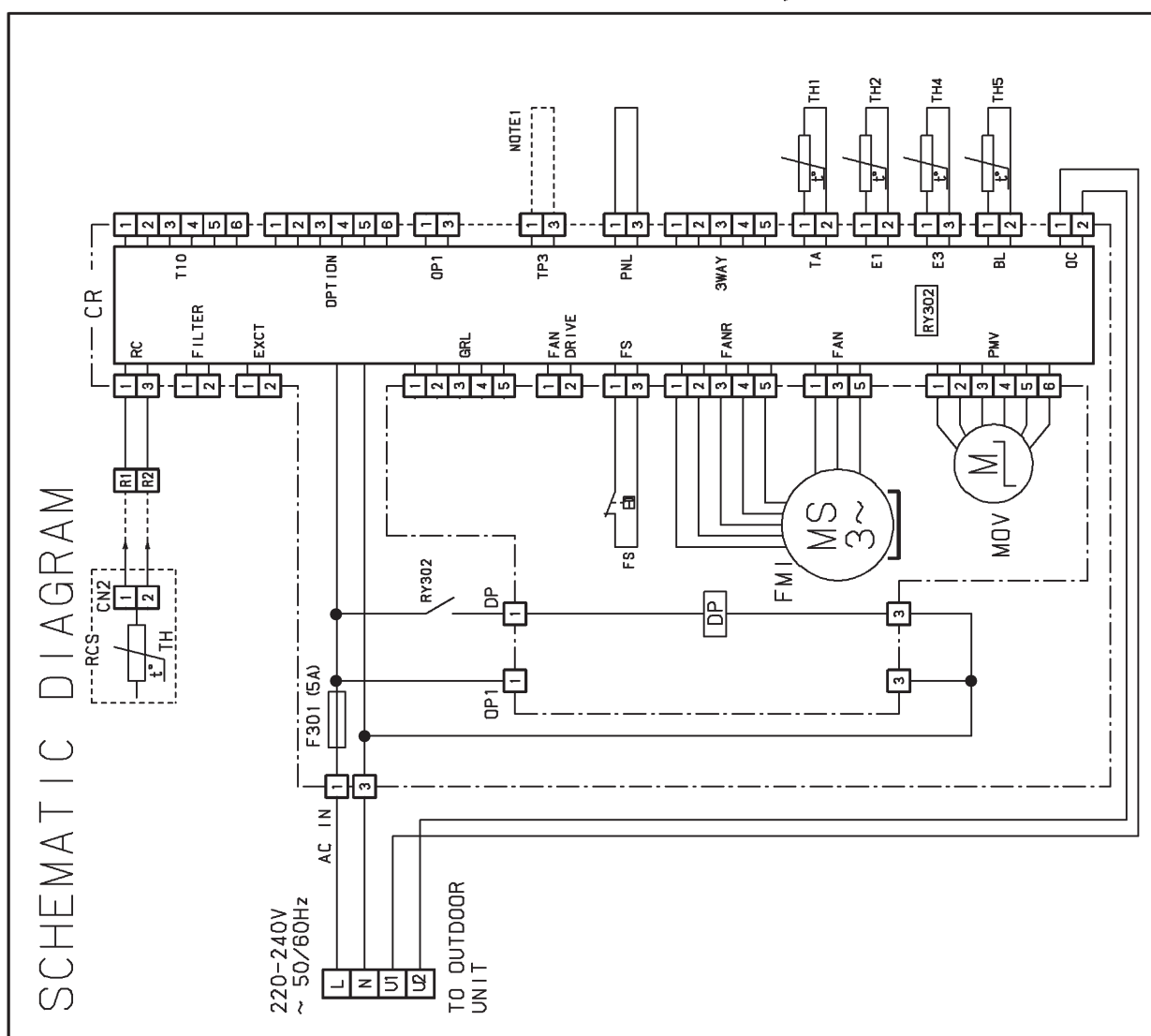


Schematic Diagram S-15MM1E5/22MM1E5/28MM1E5/36MM1E5/45MM1E5/56MM1E5

SCHEMATIC DIAGRAM



NOTE1
When using with high static pressure mode, short circuit the FAN-TAP, TP3 (2P: Yellow) on the PCB by the 2P connectors attached to the rear of the lid of the box.



3. Cooling Capacity of Indoor Unit

3-14. Slim Low Static Ducted Type (M1 Type)

● S-15MM1E5

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 16HP outdoor unit.

RATING CAPACITY:		1.5 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
14		TC	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
	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
	23	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
	25	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
	27	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
15		TC	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	1.1	1.1
	21	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	1.1	1.1
	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	1.1	1.1
	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	1.1	1.1	1.1
	27	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	1.1	1.1
16		TC	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
	21	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	1.1	1.1
	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
	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
	27	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
17		TC	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
	21	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	1.1	1.1
	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
	25	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
	27	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
18		TC	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
	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
	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
	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	1.4	1.4	1.4
	27	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
19		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
	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
	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	1.1	1.1
	25	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
	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
20		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
	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	1.1	1.1
	25	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	1.2
	27	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	29	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
21		TC	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
	23	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
	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	1.1
	27	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3
	29	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
22		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	1.7	1.7	1.6
	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	1.1	1.1	1.0
	27	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	1.2	1.2	1.2
	29	SHC	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
	31	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	1.5	1.5
23		TC	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	1.7
	25	SHC	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	0.9
	27	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	1.1	1.1	1.1
	29	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
	31	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4

3. Cooling Capacity of Indoor Unit

• S-22MM1E5

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 16HP 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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	21	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	1.1	1.1
	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
	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
	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
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
	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	1.2	1.2
	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
	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	1.8
	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	2.2	2.2	2.2
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
	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	1.1	1.1
	25	SHC	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	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
	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
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
	25	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	1.2	1.2	1.2
	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	1.5	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	1.9	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	2.2	2.2	2.1	2.1
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
	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	1.1	1.0	1.0
	27	SHC	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	1.3
	29	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	1.7	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	2.0	2.0	2.0	2.0	2.0

3. Cooling Capacity of Indoor Unit

• S-28MM1E5

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 16HP outdoor unit.

RATING CAPACITY:		2.8 kW AIR FLOW RATE: 8.5 m ³ /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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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	1.8	1.8
	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
	29	SHC	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
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
	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	1.3	1.3
	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	1.6
	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
	29	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	2.3	2.3
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
	25	SHC	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	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	1.8	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	2.2	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	2.5	2.5
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
	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
	27	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	1.7	1.6	1.6
	29	SHC	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	1.9
	31	SHC	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	2.3	2.3

3. Cooling Capacity of Indoor Unit

• S-36MM1E5

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 16HP outdoor unit.

RATING CAPACITY:		3.6 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
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
	21	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
	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
	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
	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
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
	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
	23	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
	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
	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
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
	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
	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
	25	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
	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
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
	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
	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
	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
	27	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
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
	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
	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
	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
	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
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
	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
	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
	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
	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
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
	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
	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	2.2	2.2
	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
	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	3.0
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
	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	1.6
	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	2.0	2.0
	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	2.4	2.4	2.4
	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
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
	25	SHC	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	1.8	1.8
	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	2.2	2.2	2.2
	29	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.5
	31	SHC	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.0	3.0	2.9	2.9
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
	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	1.7	1.6	1.6
	27	SHC	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	2.4	2.3
	31	SHC	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.7	2.7

3. Cooling Capacity of Indoor Unit

• S-45MM1E5

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 16HP outdoor unit.

RATING CAPACITY:			4.5 kW AIR FLOW RATE: 10.5 m ³ /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
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
	21	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
	23	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
	25	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
	27	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
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
	21	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
	23	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
	25	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
	27	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
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
	21	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
	23	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
	25	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
	27	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
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
	21	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
	23	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
	25	SHC	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
	27	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
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
	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
	23	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
	25	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
	27	SHC	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
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
	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
	23	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
	25	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
	27	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
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
	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
	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
	27	SHC	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	3.1	3.1
	29	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	3.5
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
	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	2.1	2.1	2.0
	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	2.5	2.5	2.5
	27	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	2.9	2.9
	29	SHC	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	3.3	3.3
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
	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
	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	2.7	2.7	2.6
	29	SHC	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	3.1	3.0
	31	SHC	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	3.5
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
	25	SHC	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0
	27	SHC	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.5	2.5	2.4	2.4
	29	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	2.9	2.8	2.8
	31	SHC	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.3	3.3	3.2

3. Cooling Capacity of Indoor Unit

• S-56MM1E5

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 16HP outdoor unit.

RATING CAPACITY:			5.6 kW AIR FLOW RATE: 12.5 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
14		TC	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
	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
	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	3.7	3.7
	25	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
	27	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
15		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	4.1	4.1	4.1
	21	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
	23	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
	25	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
	27	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
16		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
	21	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
	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	3.5	3.5	3.5
	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	4.0	4.0
	27	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
17		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
	21	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
	23	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
	25	SHC	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	27	SHC	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
18		TC	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
	21	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
	23	SHC	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
	25	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
	27	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
19		TC	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6
	21	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
	23	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
	25	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
	27	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
20		TC	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	5.9	5.9
	23	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
	25	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
	27	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
	29	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	4.2
21		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	6.1	6.0
	23	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	2.5
	25	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	3.0	3.0
	27	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	3.5	3.5
	29	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	4.0	4.0
22		TC	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.4	6.2	6.1
	25	SHC	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.8	2.8	2.7
	27	SHC	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.2	3.2
	29	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	3.8	3.7	3.7
	31	SHC	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.2	4.2
23		TC	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	6.9	6.7	6.5	6.3	6.2
	25	SHC	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.6	2.5	2.5	2.4
	27	SHC	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
	29	SHC	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	3.4	3.4
	31	SHC	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.1	4.0	4.0	3.9	3.9