

# *Specifications*

## 1. Applicable ambient temperature range:

			Rated	Maximum	Minimum
Cooling	Indoor	DB °C	27	32	18
		WB °C	19	23	14
	outdoor	DB °C	35	43	-5
		WB °C	24	26	--
Heating	Indoor	DB °C	20	27	15
		WB °C	14.5	--	--
	outdoor	DB °C	7	24	-15
		WB °C	6	18	--

## 2. Error display

### Indoor unit malfunction display code

Indoor unit malfunction	Display code	Indoor unit malfunction	Display code
Float switch or water motor abnormal	E0	The communication with electronic expansion box is abnormal	E7
Outdoor unit abnormal	E1		
Setting running mode is different with outdoor running mode	E2	The communication between the wire remote controller and indoor unit control board is abnormal	E8
Liquid temperature sensor is abnormal	E3		
Gas temperature sensor is abnormal	E4	The communication between indoor and outdoor unit is abnormal	E9
The communication between indoor 846 chip and communication chip is abnormal	E5		Water temp. sensor is abnormal

### Outdoor unit malfunction display code

(When the wire remote controller display E1, can check the indoor unit control board LED1 or the outdoor unit control board LED1 Outdoor unit control board LED (ALARMA or ALARMB)).

Outdoor unit malfunction	LED flashing times
Outdoor unit defrost temp. sensor is abnormal	flashing once
Outdoor unit environment temp. sensor is abnormal	flashing twice
Outdoor unit suction temp. sensor is abnormal	flashing 3 times
Outdoor unit discharge temp. sensor is abnormal	flashing 4times
Outdoor unit AC over-current protection	flashing 6times
Outdoor unit DC voltage is insufficient protection	flashing 7times
IPM protection	flashing 9times
Outdoor unit EEPROM abnormal	flashing 10times
Compressor Discharge temperature overheat protection	flashing 11times
The communication between outdoor unit 857 and communication chip is abnormal	flashing 12times
Outdoor unit system over-high pressure protection	flashing 13 times

# Specifications

## Remote controller Timer and Operation indicator malfunction code

When the unit running, Timer indicator flash stand for indoor unit malfunction  
operation indicator flashing stand for outdoor unit malfunction

### 1. Indoor unit malfunction

Timer indicator Flashing times	Indoor unit malfunction
Flashing once	The liquid tube temperature sensor is abnormal
Flashing twice	The gas tube temperature sensor is abnormal
Flashing 3 times	The environment temperature sensor is abnormal
Flashing 4 times	The communication with outdoor unit is abnormal
Flashing 5 times	The ommunication with the electronic expansion valve control board is abnormal
Flashing 6 times	The communication between indoor 846 and communication chip is abnormal
Flashing 8 times	PMV strong electricity board is abnormal
Flashing 10 times	Indoor unit PG fan motor is abnormal
Flashing 11 times	Indoor unit water overflow or float switch is abnormal
Flashing 12 times	Indoor unit EEPROM data is abnormal
Flashing 13 times	Indoor unit is overload
Flashing 14 times	The communication between indoor unit and wire remote controller is abnormal

### 2. Outdoor unit malfunction

Operation indicator flashing times	Outdoor unit Trouble contents
Flashing once	Outdoor unit defrost temp. sensor is abnormal
Flashing twice	Outdoor unit environment temp. sensor is abnormal
Flashing 3 times	ction temperature sensor is abnormal
Flashing 4 times	Outdoor unit discharging temperature sensor is abnormal
Flashing 5 times	Outdoor unit evapor ating temperature sensor is abnormal
Flashing 6 times	Outdoor unit AC over-current protection
Flashing 7 times	Outdoor unit DC voltage is insufficient protection
Flashing 9 times	IPM protection
Flashing 10 times	Outdoor unit EEPROM is abnormal
Flashing 11 times	Compressor discharging temperature overheat protection
Flashing 12 times	The communication between the 857&communication chip is abnormal
Flashing 13 times	Outdoor unit high pressure protection
Flashing 14 times	High pressure sensor PD is abnormal
Flashing 15 times	Low pressure sensor PS is abnormal

Others malfunction manual please read the outdoor unit manual.

# Electric wiring

## ⚠Warning



- The electric wiring work shall be conducted by qualified electricians according to the installation instructions. A separate power circuit shall be used. Insufficient power cord amperage or improper wiring will cause danger of electric shock or fire.
- During wiring connection, the power cord shall be of the specified cable and reliably fastened so that external forces applied to the cable wouldnt transfer to the terminals. Improper connection or fastening will cause danger of heating, fire etc. The power cord must be fitted with a grounding wire.
- Grounding shall be made as specified. Unreliable grounding will cause electric shock. The grounding wire shall not be connected to the gas pipeline, water pipeline, thunder arrestor and telephone wire

## ⚠Caution

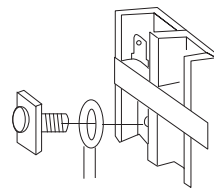


- A current leakage breaker shall be installed, otherwise it electric shock would happen easily.
- The connection method of power cord is "Y" type.
- If the power cord is damaged, it must be replaced by the manufacturer or its service center or similar personnel to avoid risks. The power supply to the indoor unit shall be laid in complying with the operational instruction manual.
- The electric wiring shall avoid contacting with the high temperature part of the piping so as to prevent the cable insulation melts and cause dangers.
- After connected on the terminal block, the wires shall be bent to U form and then fastened with wire clip.
- The control wiring and refrigerant piping may be laid and fastened together.
- Before completion of vacuum pumping of the refrigerant pipe system, do not electrify the indoor unit.
- The power cord of the indoor unit and connection wiring between indoor and outdoor units shall be laid out according to the operational instruction manual of the indoor unit.
- The connection of the power cord shall comply with the local regulations.
- The power supply wiring connection should meet the local regulation.
- After electric installation, power on them to do electric leakage test.

### Wiring connection method : (the wiring diagram is attached inside the machine)

#### 1) Ring terminal connection method

If there is a ring at the end of the connection wire, the wire connection method is as shown in the right figure. Remove the terminal screw and insert it through the ring at the connection wire end, then connect to the terminal board and fasten the screw.

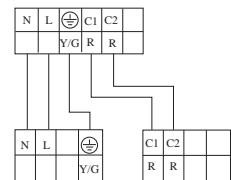


Connection method for ring terminal

#### 2) Straight terminal connection method

If there isnt a ring at the end of the connection wire, the connection method shall be: loosen the terminal screw, insert the connection wire end completely into the terminal board and fasten the screw. Pull the connection wire outwards slightly to confirm it is clamped tightly.

Block terminals for indoor unit



Block terminals for outdoor unit (different outdoor unit have different block terminals)

#### 3) Clamping method of the connection wire

After wire connection is finished, the connection wire must be pressed tightly with wire clips, which shall apply to the outer sheath of the connection wire.

# *Electric wiring*

## **Wire connection for built-in indoor unit**

- Insert from outside the connection wire and signal transmission wire through the wall hole with pipeline already arranged.
- Pull out the front ends of connection wire and signal wire and make a circle on the signal wire.
- Connect the connection wire according to the connection method and indoor and outdoor wiring diagram.
- Pull the connecting conductor outwards slightly to confirm it is clamped tightly.
- Connect the plug for connecting the signal wire with the plug of the signal wire connected from the indoor unit.
- After wire connection is finished, install wire clips using the same method for connection wire clamping.

**Note: When connecting the indoor unit and the outdoor unit, please do connect the wires with the same color terminals.**

### **Notes:**

- Before connecting the conductors between indoor unit and outdoor unit, check for the number on the indoor and outdoor units connecting terminals. Connect the terminals with the same color and number with a wire.
- Wrong connection would damage the controller of the air conditioner or the machine couldnt operate.
- Do not connect the connection wire and signal wire with the same cable. They shall be connected respectively to ensure system normal operation.
- If the fuse on PC board is broken please change it with the type of T 3.15A /250VAC.

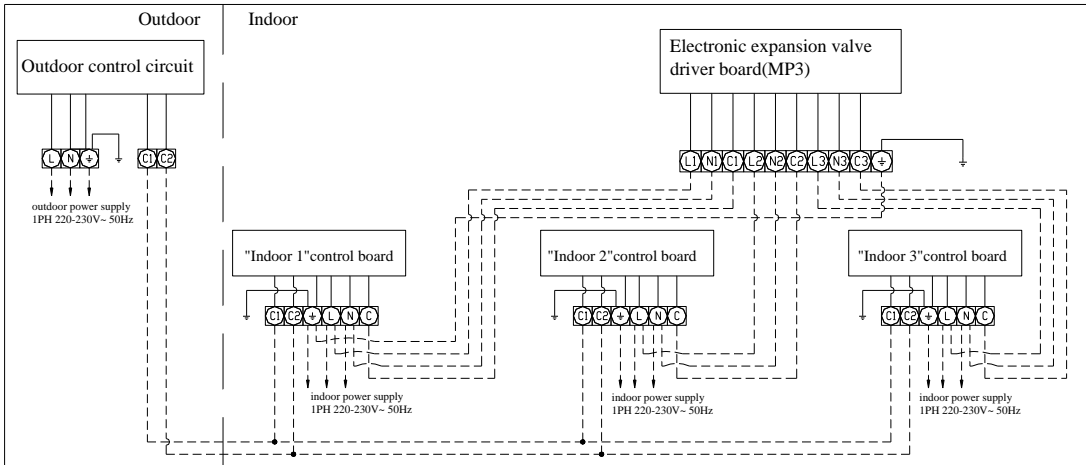
power cable	connecting cable
H05RN-F:3G 1.5mm <sup>2</sup>	H05RN-F :2* (0.5~1.5)mm <sup>2</sup>

- A specialized power supply wire, which shall be installed by a competent person as per the rules of the national standard.
- Power supply must be grounded effectively.
- An electric leakage breaker shall be installed.
- Layout of power supply wiring shall be Y connection. If the power supply wire is damaged,it must be replaced by the manufacturer or its service center or professional person(the power supply wire shall be self-contained).
- For connection of the power supply plug, L shall be connected with the live wire, N shall be connected with netural line, ⊕ shall be connected with earth wire.
- All the cables shall have got the European authentication certificate.
- The breaker of the air conditioner should be all-pole switch; and the distance between its two contacts should be no less 3mm. Such means for disconnection must be incorporation in the fixed wiring.
- The waste battery should be disposed properly.

**Note: 1.**The power cable,singnal wire and connection wire should be provided for oneself.  
**2.**The singnal wire must be shielded wire.

# Electric wiring

- NOTE: 1. Ceiling concealed type must be connected MP2 or MP3  
(TES indoor units not included).  
2. Connect method of MP3 is following



- NOTE 1. The power supply and communication wiring of indoor electronic expansion valve must be connected with their corresponding indoor unit. And their phase sequence must correspond with the remarks strictly respectively, or will cause control board of indoor unit and electronic expansion valve box abnormal or damaged.  
2. Because the power supply of MP3 control board is joined from "indoor 1", "indoor 1" must be always electrified in running mode, or will cause performance abnormal.  
3. MP3 wiring and indoor wiring: H05RNF 4 x (0.5-1.5)mm<sup>2</sup>, H05RNF 3x(0.5-1.5)mm<sup>2</sup>.

## Field setting

### Field setting the unit number

In order to realize central control of the MRV air conditioning system, its necessary to set the indoor unit number (control address).

### Indoor unit number setting

Indoor unit number setting switch and confirmation of the settings.

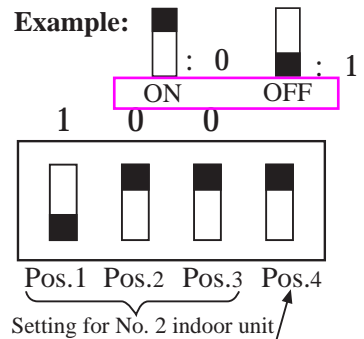
There is a 4-position dial switch for setting the indoor unit number and fan speed level on the computer board of the indoor unit.

Setting way is as follows:

Before connecting the power supply, please set the indoor unit number manually according to the following table

### Matrix of the dial switch and indoor unit number

Position 1	Position 2	Position 3	Representing unit number
0	0	0	1
1	0	0	2
0	1	0	3
1	1	0	4
0	0	1	5
1	0	1	6
0	1	1	7
1	1	1	8



"ON" means that the indoor unit fan speed can be choosed to middle and low level. "OFF" means that the indoor unit fan speed can be choosed to high, middle and low level. After producing in plant , the position is "OFF".