



# Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for HAIER HSU-12HSA03-R2. You'll find the answers to all your questions on the HAIER HSU-12HSA03-R2 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual HAIER HSU-12HSA03-R2  
User guide HAIER HSU-12HSA03-R2  
Operating instructions HAIER HSU-12HSA03-R2  
Instructions for use HAIER HSU-12HSA03-R2  
Instruction manual HAIER HSU-12HSA03-R2

**Haier** Haier air conditioner Edition: 20070116

**Haier**  
Inspired living

Domestic  
Air conditioner

**SERVICE MANUAL**

HSU-09HSA03/R2(DB)  
HSU-12HSA03/R2(DB)

**CAUTION**

- READ THIS MANUAL CAREFULLY TO DIAGNOSE TROUBLE CORRECTLY BEFORE OFFERING SERVICE.
- THIS MANUAL IS USED BY QUALIFIED APPLIANCE TECHNICIANS ONLY.
- HAIER DOES NOT ASSUME ANY RESPONSIBILITY FOR PROPERTY DAMAGE OR PERSONAL INJURY FOR IMPROPER SERVICE PROCEDURES DONE BY ONE UNQUALIFIED PERSON.



- 1 -



[You're reading an excerpt. Click here to read official HAIER HSU-12HSA03-R2 user guide](http://yourpdfguides.com/dref/3801375)  
<http://yourpdfguides.com/dref/3801375>

**Manual abstract:**

@@-1- Haier air conditioner Edition: 20070116 CONTENTS 1. @@@@ELECTRICAL CONTROL.....

.....  
.....  
.....  
.....  
.....  
.....  
.....

.....8 4. THERMISTER RESISTANCE CHART..

.....  
.....  
.....  
.....  
.....  
.....

...30 5. TROUBLE SHOOTING.....

.....  
.....  
.....  
.....  
.....  
.....  
.....

..40 6. PERFORMANCE CURVES DIAGRAM.....

.....  
.....  
.....  
.....  
.....

.46 6.1 High drop and long pipe capacity modification curves...

.....  
.....  
.....  
.....

...46 6.2.1 Cooling capacity-temperature curves .....

.....  
.....  
.....  
.....

...47 6.2.

2 Heating capacity-temperature curves.....

.....  
.....  
.....  
.....

...49 6.3 Air outlet temp.  
-ambient temperature curves.....

.....

.....  
.....  
.....  
.....

*.51 6.4.1 Cooling discharge pressure curves.....*

.....  
.....  
.....

.....  
.....  
.....  
.....

*53 6.4.2 Cooling suction pressure curves...*

.....  
.....  
.....

.....  
.....  
.....  
.....

.....  
.....  
.....

*...55 6.4.3 Heating discharge pressure curves....*

.....  
.....  
.....  
.....

.....  
.....  
.....  
.....

*...57 6.4.4 Heating suction pressure curves.....*

.....  
.....  
.....

.....  
.....  
.....  
.....

.....  
.....

*59 6.5 Sensible cooling value-temperature curves....*

.....  
.....  
.....

.....  
.....  
.....

*...61 6.6 Power consumption-temperature curves.*

.....  
.....  
.....

.....  
.....

.....  
.....  
.....  
.....  
*63 6.7 Noise curves....*  
.....

.....  
.....  
.....  
.....

.....  
.....  
.....  
.....

.....  
.....  
.....  
.....

*65 6.8 Compressor performance curves.....*

.....  
.....  
.....

.....  
.....  
.....  
.....

*...66 7. WIRING DIAGRAM.....*

.....  
.....  
.....

.....  
.....  
.....  
.....

.....  
.....

*...68 8. SCHEMATIC DIAGRAM OF PCB.*

.....

.....  
.....  
.....  
.....

*.70 9. INSTALLATION...*

.....  
.....

.....  
.....  
.....  
.....

.....  
.....  
.....  
.....

..72 -2- Haier air conditioner Edition: 20070116 1. General information This Service Manual describes the operation, disassembly, troubleshooting, and repair of Haier Room Air Conditioners, etc. It is intended for use by authorized services who troubleshoot and repair these units. It is assumed that users of this manual are familiar with the use of tools and equipment used to troubleshoot and repair electrical, mechanical, and refrigeration systems; and understand the terminology used to describe and discuss them. Haier urges you read and follow all safety precautions and warnings contained in this manual. Failure to comply with safety information may result in severe personal injury or death. Related Publications This is a base service manual, covering a range of similar models. It is intended to be used in conjunction with the Parts Manual and Technical Sheet covering specific model being serviced.

NOTE: General Precautions and Warnings WARNING To avoid risk of personal injury or death due to electrical shock, disconnect electrical power to unit before attempting to service the unit. WARNING To avoid risk of personal injury or death due to electrical shock, DO NOT, under any circumstances, alter the grounding plug .Air conditioner must be grounded at all times. Do not remove warning tag from power cord. If a two-prong (non-grounding) wall receptacle is encountered, contact a qualified electrician and have the receptacle replaced with a properly grounded wall receptacle in accordance with the National Electrical Code.

WARNING To avoid risk of heat exposure, which may cause death or severe illness, air conditioner must be monitored when failures or shuts down. WARNING To avoid risk of personal injury or death due to electrical shock, grounding wires and wires colored like grounding wires are NOT to be used as current carrying conductors. The standard accepted color coding for ground wires is green or green with a yellow stripe. Electrical components such as the compressor and fan motor are grounded through an individual wire attached to the electrical component and to another part of the air conditioner.

Grounding wires should not be removed from individual components while servicing, unless the component is to be removed and replaced.

It is extremely important to replace all removed grounding wires before completing service. -3- Haier air conditioner Edition: 20070116 MODEL: HSU-09HSA03/R2(DB) Product Features Healthy negative ion Intelligent airflow Entire auto mode ESF filter Easy clean design Main Specification Cooling Capacity: 2400W Power Input: 680W Current Input:3.50A EER:3.53 Heating Capacity: 2650W Power Input:730W Current Input: 3.8A COP: 3.63 Air Volume(Indoor/outdoor): 400m3/h Power Supply: 1PH/230V/ 50Hz -4- Haier air conditioner Edition: 20070116 MODEL: HSU-12HSA03/R2(DB) Product Features Healthy negative ion Intelligent airflow Entire auto mode ESF filter Easy clean design Main Specification Cooling Capacity: 3300W Power Input: 1078W Current Input: 4.9A EER:3.06 Heating Capacity: 3600W Power Input:1230W Current Input: 5.4A COP: 2.93 Air Volume(Indoor/outdoor): 450m3/h Power Supply: 1PH/230V/ 50Hz -5- Haier air conditioner Edition: 20070116 2.

Specification Item Power Climate Type Starting Current Cooling Capacity Rated Power Cooling Rated Current Max Power Max Current EER Heating Capacity Rated Power Heating Rated Current Max Power Max Current EER Operating temp. range Cooling Heating H Indoor fan Velocity M L Outdoor fan Velocity Indoor Air Volume (High) Max. pressure at warm side Moisture Removal Noise Level Indoor Outdoor Indoor Weight Net Gross Outdoor Weight Net Gross Indoor Dimension Net Package Net Package Manufacture Compressor Type Oil Charge ml -(H/M/L) rpm rpm rpm rpm m -3 3 Unit PH, V, Hz HSU-09HSA03 /R2(DB) 1, 230, 50 T1 HSU-12HSA03 /R2(DB) 1,230,50 T1 12 3300 1078 4.9 1350 6.0 3.06 3600 1230 5.4 1480 6.8 2.93 18~46 -15~24 1300 950 740 800 450 4.15 1.

2 42/40/38 52 8.6 10.8 33 36 760× 182× 285 837× 282× 312 780× 245× 540 790× 366× 484 SANYO C-6RZ092H1A 320 A W W A W A W/W W W A W A W/W 10 2400 680 3.50 870 3.8 3.

53 2650 730 3.8 1100 4.4 3.63 18~46 -15~24 1150 950 740 400 4.15 0.

83 42/40/38 48 8.6 10.8 31 34 760× 182× 285 837× 282× 312 780× 245× 540 790× 366× 484 TOSHIBA DA89X1C-20FZ 370 3 MPa 10 m /h dB(A) dB(A)

Kg Kg Kg Kg mm mm mm mm Outdoor Dimension Haier air conditioner Type Refrigerant Net Charge Charge if over standard pipe length Liquid pipe Diameter Refrigerant Pipe Gas pipe Diameter Standard length Max length Drain Hose Length Diameter Drainage pipe material diameter Remote Controller Model Class of electric Shock Protection Class of Water Proof Power Cord (Model × Sectional Area) g /m mm mm m m mm mm mm R410A 800 12 6.35 9.52 5 15 2000 16 16 YR-H04 I IP 24 H05VV-F 3G2.5mm 2 Edition: 20070116 R410A 1200 12 6.35 12.7 5 15 2000 16 16 YR-H04 I IP 24 H05VV-F 3G2.5mm 2 -7- Haier air conditioner Edition: 20070116 3. Electrical control .

Scope of Application This specification use for HSU-09/12HSA03/R2 DB frequency conversion air condition are manufactured by Haier air condition parent company. "Setting value" (express in parameter) in this specification means is a parameter that is stored in EEPROM. Refer to [EEPROM parameter table]. 1. Chip pin definition This controller adopts MOTROLA MC68HC908 AB32; Chip each pin definition as following: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 PTC4 IRQ RST PTF0/TACH2 PTF1/TACH3 PTF2/TBCH2 PTF3/TBCH3 PTF4/TBCH0 NC PTF7 PTF5/TBCH1 PTF6 PTE0/TXD PTE1/RXD PTE2/TACH0 PTE3/TACH1 PTE4/SS PTE5/MISO PTE6/MOSI PTE7/SPSCK VSS VDD PTG0/KBD0 PTG1/KBD1 PTG2/KBD2 PA0 selection panel 1 PA1 high/low drive model PA2 large/small model PA3 A/B code selection PA4 panel selection 2 PA5 door switch over-zero detection remote control receiving SDA SCL Buzzer Swing stepping motor A Swing stepping motor D Swing stepping motor B Swing stepping motor C network output network output PG feedback PG output fresh air negative ion output self check/ decrease time empty GND VCC ultraviolet ray A empty empty sliding stepping motor A sliding stepping motor B sliding stepping motor C sliding stepping motor D pushup stepping motor A pushup stepping motor B -8- Haier air conditioner 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 PA6 PA7 PTB0/ATD0 PTB1/ATD1 PTB2/ATD2 PTB3/ATD3 PTB4/ATD4 PTB5/ATD5 PTB6/ATD6 PTB7/ATD7 PTD0 PTD1 VDDAREF AVSS/VREFL PTD2 PTD PTH0/KBD3 PTH1/KBD4 PTD4/TBCLK PTD5 PTD6/TACLK PTD7 VREFH VDDA VSSA CGMXFC OSC2 OSC1 PTC0 PTC1 PTC2/MCLK PTC3 PTC5 emergency switch empty K timer pushup stepping motor C pushup stepping motor D output outdoor communication input outdoor communication room temperature inner coil swing left stepping motor D swing left stepping motor C swing left stepping motor B swing left stepping motor A swing right stepping motor D swing right stepping motor C VCC GND swing right stepping motor B swing right stepping motor A central control input central control output empty G/V LCS K health H heat G/V WR K operation H dry G/V DA K power supply H cool VCC VCC GND Edition: 20070116 G/V green light K green light H operation G/V blue light K blue light H timer G/V red light K red light H health II.



[You're reading an excerpt. Click here to read official HAIER HSU-12HSA03-R2 user guide](http://yourpdfguides.com/dref/3801375)  
<http://yourpdfguides.com/dref/3801375>

Temperature adjustment function 2.1 During temperature adjustment function, the operation frequency of outdoor unit will be based on indoor temperature and the set temperature. When air capacity operates automatically; the indoor fan will be controlled on the basis of the requirements of temperature adjustment. When the unit operates to make heat, the indoor wind unit will be controlled based on scrolling temperature. -9- Haier air conditioner 2.

1.1 Standard of temperature sensor under indoor environment. Edition: 20070116 When the line is in short circuit or open circuit, the indicator light will be alarming and the indoor fan motor will be off. It will resume to the original state automatically after it returns normally, and operates as usual. Short circuit:

Temperature: above 126 degrees, Hex: Above F8H, Value of Resistance: Below 0.

65K, above 4.85V. Normal temperature: Temp: 25 degrees, Hex: 40H, Value of Resistance: 23K, Voltage: 2.33V. Power failure: Temp: below -31 degrees, Hex: below 08H, Value of Resistance: Below 620K, Voltage: Below 0.

15V. B parameter=4200 R (25degrees) =23K 2.1.2 Value of Resistance of indoor temperature sensor is ignored, when the heat mode is ON and the indoor fan is OFF, as well as after warm start indoor fan operate for 30 seconds. (in order to avoid affection of heat exchanger) 2.2 When frequency increase to holding frequency In order to oil return fully during operating, the system will must keep some frequencies for a period of time. Time Indication Drying in cool mode 60 seconds Heat 60 seconds Defrosting in heat mode 30 seconds Frequency indication Holding frequency 58Hz After Forced operation OFF at the start status, system will begin to control the temperature area. 2.3 Preset temperature correction The preset temperature is corrected according to the operating mode, air capacity and forced operation status. Only in the heat mode to correct the air capacity, confine to the low and middle speed of the air capacity.

Corrected value table for preset temperature: - 10 - Haier air conditioner Mode Corrected contents Correct the operating mode Correct forced operating mode Heat When the air capacity is low to correct it When the air capacity is low to correct it Cool and dry mode Correct the operating mode Correct the forced operating mode Corrected variable ETBL0 ETBL1 ETBL2 ETBL3 ETBL4 ETBL5 Edition: 20070116 Corrected parameter 4.67 6 4.67 4.67 -0.33 -4

2.4 Control the temperature the area 2.4.1 Deviation Calculation the deviation of the temperature area, as following: Heat: E= (remote control preset temperature + corrected value)-room temperature Cool and dry: E=room temperature - (remote control preset temperature+ corrected value) 2.4.2

Compressor OFF OFF When E is negative and |E|>?T: Heat ?T After ?T variation ?T variation condition TCHACL TCHAC 0.

67 0.67 Cool TCHACL TCHAC the maximum speed of indoor fan be set middle or low speed, the upper limit of indication frequency shown respectively as following: Frequency number of air capacity limit table: Limiting frequency variable Air capacity middle limit Air capacity low limit Upper and down limit of fresh air capacity frequency FQLIMMD FQLIMLO FUPHEAL Limiting frequency 90Hz 52Hz 30Hz Estimate the limiting frequency condition in heat mode; first, estimate it whether is the limiting frequency condition of set low fan or health fan. If there have set low fan, health fan or both of them, to - 13 - Haier air conditioner correction the limit frequency according to the following condition: Outdoor temperature condition 011(20 more than) ) 010(15-20 001(10-15 Indication frequency Low fan or health fan limited frequency Low fan or health fan limited frequency +FUPHEA1 Low fan or health fan limited frequency +FUPHEA2 In general frequency Edition: 20070116 48Hz 50Hz 52Hz 000(10 downward) . Indoor fan motor control Objective revolutions: When air capacity is set for controlling by hand; it is the revolution of (High + Low)/2. When it runs automatically, it is the revolution of (automatically high + automatically low)/2.

(No account the revolution when it doesn't reach 10rpm) 3.1 Heat operation 3.1.1 Warm start A, Control cool air during heating Heat exchange temperature - 14 - Haier air conditioner Edition: 20070116 Based on the heat exchange temperature to control the indoor fan as the above shown. 1.

When the heat exchange temperature rise, to distinguish the fan speed based on the heat exchange temperature: The heat exchange temperature is less than 35.2 , the speed of fan motor is weak (for the first power and on, when the system operating in heat mode or OFF the defrost mode, and when the heat exchange temperature is less than 25.2 , the fan motor will OFF; if the temperature is between 25.2 35.2 , the fan motor will be weak speed operating); The fan motor operating with low speed when heat exchange temperature is between 35.2 37 The heat exchange temperature is more than 37 , fan motor operating by the set speed. and 2. When drop of the heat exchange temperature, to distinguish the fan speed based on the heat exchange temperature: The fan motor operating with low speed when heat exchange temperature is between 35.2 25.2 ; and The fan motor always operates with little-low speed when heat exchange temperature is less than 25.

2 . (for the first power on, when the system operating in heat mode or stopping the defrost mode, and when the heat exchange temperature is between 25.2 and 16 , the fan motor will operating with weak speed; when the temperature is drop down to under16 , the fan motor will be stopped. 3. During the heat exchange temperature is rising fan speed is in the weak and low speed status, if the heat exchange temperature don't return to previous value after 4 minutes, the fan speed will rise and continuously operating by the set temperature for 4 minutes, the system will adjustment the fan speed based on the heat exchange temperature; 4. When the heat exchange temperature is dropping down, the fan speed will go up to the set speed if the fan motor operate continuously by the low speed for more than 4 minutes. - 15 - Haier air conditioner 3.1.2 Compressor OFF and waiting for 3 minutes Edition: 20070116 1. The compressor is OFF (the flamestat is OFF), the air capacity will change from small to little small after 20 seconds (is SSLO in silence mode); 2.

To heat operating in stand-by time (when the mode switch, the compressor will OFF), the air capacity keep to weak. 3. Power off by remote control then the indoor fan motor will OFF. 3.1.

3 Compressor restart It is set air capacity by remote control after the system warm start. System will be based on the temperature to determine its ventilation. Reference the control function in temperature area. 3.1.

4 Defrosting operation Fan motor is off after being low for 20 minutes. The system received command from the outdoor unit communication I21=11 during low temperature and defrosting in heat mode to control the air capacity, it is the same with through the heat exchange temperature transducer go to warm start to control.



[You're reading an excerpt. Click here to read official HAIER](http://yourpdfguides.com/dref/3801375)

[HSU-12HSA03-R2 user guide](http://yourpdfguides.com/dref/3801375)

<http://yourpdfguides.com/dref/3801375>

(3-1-1). After defrosting operation, if the compressor is on, the system will go to warm start to control the air capacity. If compressor is off, the air capacity is weak. 3.2 Cool operation When set the air capacity is high, middle and low which represents its air capacity separately. When air capacity is running on automatically, it is based on temperature. Refer to Temperature adjustment Functions. reference 2-4-8 3.

3 Dry operation 3.3.1 Compressor OFF and waiting for 3 minutes When the compressor is OFF, the fan motor will stop. It will switch to weak after wait for 3 minutes. The compressor will change to ON after wait for 3 minutes, and it will in the on-control mode. - 16 - Haier air conditioner 3.3.2 Compressor ON Edition: 20070116 When the air capacity is set High, Middle and Low, the compressor will operate by the set mode. When the air capacity is set auto fan, the air capacity will be adjusted by the temperature. .

Enhanced operation Enhanced operation will continue for 15 minutes. Enhanced operation will finish if the operation is off or after 15 minutes. Enhanced operation will finish when the status be changed. Enhanced operation will finish if the unit enters the status of "silence", operates normally or on-timer signal control. In the auto mode, there are enhanced /silence function; the main unit operating is based on enhanced cool /silence function in the cool mode; the main unit operated by the enhanced heat/silence function in the heat mode; the main unit will operate is based on no-enhanced/silence function in the fan mode.

4.1 Enhanced heat Modify the set temperature. It has temperature-adjustment function. Air capacity will be automatic middle fan speed. When operating for defrosting, outdoor unit will not receive the communication signal of enhanced operation.

After operation for defrosting, the system will operate enhanced function only in the remaining time. After enhanced operation continues for 15 minutes, compressor is forbidden to be OFF for 10 minutes. (Except the error) 4.2 Enhanced Cool Modify the set temperature. It has temperature-adjustment function. The high air capacity will be set for hand controlling. - 17 - Haier air conditioner After compressor starts, it's not on the low load protection within 3 minutes. Edition: 20070116 4.3 No enhanced function for fan and defrosting mode. .

Silence operation Send silence operation signal to outdoor unit. 5.1 Heating in the silence mode When compressor is on, air capacity is SSLO. When compressor is off, air capacity is SSLO within 20 seconds, and then it changes to be tenuity. 5.2 Cooling in the silence mode Air capacity is SSLO. 5.3 No silence functions during dry operating and fan operating in the silence mode. .Fresh air After the system receives remote control command, the negative ion generator will be activated to emit the negative ion if the fan motor is operating.

When the fan motor is OFF, the negative ion generator will OFF. When the negative ion generator is OFF, if the fresh air mode is ON, the fan motor operating again and the negative ion generator will ON automatically. .Timer operating Use the timer to time counting is according to the time difference between time clock and current time. During timer operating, the timer indicator light will light.

7.1 Timer off When the timer is off, the character display of the panel running status does not change, once the timer time is time-up, its operating will OFF.

7.2Timer ON When the timer is ON, the panel only displays the timer character, once the on-timer time, the system will operate start by the set mode. - 18 - Haier air conditioner 7.

3 Timer ON/OFF The executing order is based on the direction from the board. Edition:20070116 . Sleep operating 8.1 During cool/ dry operation, the fixed temperature will rise by 1 another hour the temperature will rise by another 1 after it operates for 1 hour. After . After 6 hours, the unit is off. after 1 hour. After another 2 after three hours. After the last 8.2 During heat-making operation, the fixed temperature will rise by 2 hours the temperature will rise by 2 3 hours, the unit is off.

. The temperature will rise by 1 8.3 Indoor fan unit will be high fan before the unit is set for sleeping state. After it is set for sleeping state, fan speed indoors will change into middle fan speed. If indoor fan unit is middle fan speed before it is set for sleeping state, fan speed indoors will change into low fan after it is set for sleeping state. If indoor unit is low fan before it is set for sleeping state, fan speed indoors will keep the same. . Automatic operation The automatic operation is divided into automation and full automation by use the variant selection mode. 9.1 Automation operating mode: Automation operating is on, MCU will select corresponding operation mode based on the room temperature to preserve the set temperature (set temperature is 23 in the heat mode; it is 26 in the cool mode).

For the first power on, if the indoor temperature  $T=23$   $T>23$  operating in the cool mode. the system will operate in the heat mode, The system will perform the heat program in the heat mode (set temperature is 23 ), when system temperature arrive at stop value of compressor, the compressor to off and waiting for 3 minutes; after the compressor stop continuance for 15 minutes, if the system detected the ventilation temperature is more than 23 , it will enter cool mode, or else it will continuously operate in the heat mode. When enter the cool mode and the system operating in cool mode (set temperature 26 ), the compensation temperature contrast will be canceled automatically, when it arrive at the stop temperature of the compressor, the compressor to off and wait for 3 minutes; after the compressor stop continuously for 15 minutes, the system detected the ventilation temperature  $T=23$  , then it will enter heat mode and automatically add the compensation temperature. or else it will continuously operate in the cool mode. - 19 - Haier air conditioner Edition:20070116 When the system switch from other mode to auto mode, if the operation status change (i.

e. first determine and then operation), it will stop for 3 minutes and then determine temperature based on the indoor ventilation temperature. 9.2 Full-automation operation After system is on and the operation mode will switches to auto mode, the system determine operating mode by the difference between current set temperature and the room temperature, and then operate in the determined mode. In the following selection condition,  $T_r$  indicate room temperature  $T_s$  indicate set temperature.

In First enter auto mode, select operating mode as following condition:  $T_r=T_s-3$   $T_r T_s-3$  select cool mode select heat mode When system enter the auto mode, the operation mode will switch between cool and heat according to change of the indoor temperature: if the unit operating in the cool mode, when system temperature arrive at stop value of compressor, the compressor to off and stop continuously for 15 minutes, and then to detect the room temperature, at this point, if  $T_r T_s-3$  , then the system enter the heat mode, otherwise it will operate continuously in the cool mode; if the unit operating in the heat mode, when system temperature arrive at stop value of compressor, the compressor to off and stop continuously for 15 minutes, and then to detect the room temperature, at this point, if  $T_r T_s+3$  enter the cool mode, otherwise it will operate continuously in the heat mode.



[You're reading an excerpt. Click here to read official HAIER HSU-12HSA03-R2 user guide](http://yourpdfguides.com/dref/3801375)  
<http://yourpdfguides.com/dref/3801375>

, then the system This mode has timer and sleep function, if the system enter the cool mode, then enter the cool+ sleep mode, if enter the heat mode then enter heat + sleep mode. Select swing or sticking on one position for the fan blade, and fan speed including: low, middle, high and auto fan, you can select any one of them without control. . Running-in In the Running-in mode the indication frequency is 58Hz, the air capacity is enhanced. Running-in is off after 30 minutes. When the system received the remote control signal in the running-in mode, the system will exit this mode. No taking activities under low load protection. . Low load protection controlling The standard of heat alternating temperature sensor B destiny=3700 R (25 degrees) =10KO When it operates for coolness making or defrosting, low load protection will be taken based on Heat exchange temperature as the following picture shows Controlling under low load protection If selection model is GANGDA communication, the indoor unit have not this function.

- 20 - Haier air conditioner Heat exchange temperature sensor format: Fixed number B =3700 R (25 degree) =10KO Edition:20070116 In CoolDry operation mode, the unit performs low load protection operating according to Heat exchange temperature as following figure show. Low load protection control When it is on running-in process, low load protection controlling will be ignored. After enhanced cool operation start, release temporarily the low load protection control for 3 minutes. (THLH[3 2 1 0]= 7 4.6 2.2 -0.5) . High load protection control If selection model is GANGDA communication, the indoor unit has not this function. In heat operation mode, the unit performs high load protection operating according to Heat exchange temperature as following figure show: When operating for heat, the unit is under high load controlling based on Heat exchange temperature as the following picture shows. - 21 - Haier air conditioner Edition: 20070116 High load protection activities are limited twice within 30 minutes, and then high load protection starts to be alarming.

When Heat exchange temperature doesn't reach "THHEAT[2]", the unit will return to state of normal temperature area control . The lesser value of High load frequency and area frequency is used for the operation data. .low temperature treatment in the heat mode If the case that four-direction valve couldn't be switched, or the compressor restarts except the defrosting mode in the heat operation, if the temperature of heat exchanger keeps below "THHOTLTH" (-4.5 ) for "TMHOTLTH" 90 seconds , compressor will be off and wait for 3 minutes.

Heat exchange temperature higher than "THHOTLTH" (-4.5 ) will reset. .EEPROM control When outdoor power on, if the value unconformity between total parameter of EEPROM and check sum, indication the EEPROM disorder. Indoor received disorder signal of EEPROM from outdoor, indicating outdoor EEPROM disorder.

Control and emergency operating does not be received. Cancel it by power OFF only. - 22 - Haier air conditioner . Error list record It indicates nothing if error code has not is recorded. Fault signal show for 10s to auto off. Edition: 20070116 Remote control only receives the 'off' signal. Based on the 'on/off' or off signal of remote control, the error list will stop show. Have component of EEPROM, after power on again, the list will be recorded. . Special function 1.

Indoor unit single operating a. Enter conditions The system be set high heat mode by remote control, set temperature is 30 , power on for the first time, press the sleep key 6 times in 7 seconds, the buzzer resound 6 times. b. Enter indoor unit single operation mode, indoor unit processing as following program:

Indoor unit operating and communication in set mode it will not process communication signal of outdoor but send communication signal to outdoor continuously. c. Exit condition Once the system received remote control off or emergency off signal, it will exit indoor single operation status; when power fault, once power on it will exit single operation mode. During indoor single operating, simulation outdoor send following information to indoor: Output frequency 58 Hz, error defrosting status is 17654=0001, 13=0,121=01, outdoor temperature elever K54=00, indoor heat exchange temperature fixed to 47degree. 2. Power failure compensation a. enter condition press the sleep key 10 times in 7 seconds, the buzzer resound 4 times, simultaneity , store the current operation status into EEPROM of indoor unit.

b. Enter indoor unit power failure mode, indoor unit processing as following program: Remote control the emergency signal, unit will operate according to the remote controller and emergency set status and store the current operation status into indoor EEPROM. Main unit operating based on the panel set status and store the current operation status in EEPROM. Enter power failure compensation power restart, main send the current status and power failure compensation signal to indoor panel, once the panel received to reply information and keep power failure compensation bit. c. exit condition Press the sleep key 10 times in 7 seconds, the buzzer resound 2 times. d. Set timer and sleep at power failure compensation status; after power restart, the main unit memory status is 'off' status. - 23 - Haier air conditioner 2. Rating operating rating cool: a.

G code enter condition high speed cool set temp. is 16 Edition: 20070116 press temperature "-" key and set key together, enter mode after resound 2 times. b. then operate as following: Enter rated frequency operation mode; panel shown cool status; in communication rated shown. c. Exit condition Exit rated operate mode and enter remote control set status after received remote control signal. middle capacity: a. G code enter conditions High fan cool, set temp. is 16 , press 4 times continuantly in 7s Enter rated frequency operation; Panel show cool status; have ration in communication. Reso Enter rated frequency operation; Panel show cool status; have ration in communication.

Resound 5 times. b. then operating as following: enter middle capacity rated frequency operating; c. Exit condition Exit rated operate mode and enter remote control set status after received remote control signal. min capacity cool a. G code enters condition: remote control high fan cool, set temp. is 16 in 7s resound 7 times. , press 8 times continuantly b. then operating as following: enter min capacity rated frequency operating; panel show cool status; have ration in communication. Enter rated frequency operation; Panel show cool status; have ration in communication.

c. Exit condition Exit rated operate mode and rated heat: rating heat a. G code enter condition high speed cool set temp. is 16 press temperature "-" key and set key together, enter mode after resound 2 times. b.

Then operation as following program: Panel show heat status; have ration in communication.



[You're reading an excerpt. Click here to read official HAIER](#)

[HSU-12HSA03-R2 user guide](#)

<http://yourpdfguides.com/dref/3801375>



Enter rated frequency operation; Panel show cool status; have ration in communication. c. Exit condition: enter remote control set status after received remote control signal. middle capacity heat: a.

G code enters condition Remote control high fan heat, set temp. is 30.7, press 4 times continually in 7s resound 7 times. b. Then operation as following program: panel show cool status; have ration in communication. Enter rated frequency operation; Panel show cool status; have ration in communication. c. Exit condition Exit rated operate mode and enter remote control set status after received remote control signal. min capacity heat: a. G code enters condition Remote control high fan heat, set temp.

is 30 - 24 - , press 8 times continually Haier air conditioner in 7s resound 7 times. Edition: 20070116 b. Then operation as following program: Enter min capacity rated frequency operation; panel show cool status; have ration in communication. Enter rated frequency operation; Panel show cool status; have ration in communication. c. Exit condition Exit rated operate mode and enter remote control set status after received remote control signal. .Fault explain LCD fault code Indoor unit fault code Fault code E1 E2 E3 E4 E5 E6 E7 E8 E9 E10 E11 E12 E13 E14 E15 E16 E17 E18 E19 Contents Room temperature sensor fault Heat exchange sensor fault Total current Over Current EEPROM error Cool icing Reset Communication fault(between indoor and outdoor unit) communication between panel and indoor unit High load protection Humidity Sensor Stepping motor fault High voltage static electricity apparatus Power off moment Indoor fan motor fault Central control fault High voltage electrostatic dust collection fault reserved reserved reserved Heat overload Use in split unit

Remark Outdoor unit fault code Fault code F1 F2 F3 F4 F5 Contents Module fault (overheat, over current, short circuit) No load Communication fault Compressor overheat Total current Over Current - 25 - Remark Ventilation protection temperature Haier air conditioner F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16 F17 F18 F19 F20 F21 F22 F23 F24 F25 F26 F27 F28 F29 Ambient temperature Sensor fault Heat exchange Sensor Fan unusual start PFC protection Cool overload Compressor rotor circuit fault Outdoor EEPROM error Compressor forced switching failure Fan hall element fault Fan IPM overheat Fan over current Single-chip microcomputer ROM badly Power supply over voltage protection Power supply under voltage protection Pressure protection Defrosting temperature Sensor unusual AC current protection DC current protection CT broken line protection Ventilation temperature Sensor electron expansion valve fault reserved reserved reserved Edition: 20070116 Emergency switch When power off, press emergency switch less 5s to start emergencies operating. When power off, Press the emergency switch in 5s-10s to start running-in. When power off, continues Press the emergency switch in 10s-15s to indicate last fault.

When power off, Press the emergency switch, the panel shown auto mode. When power off, continues Press the emergency switch in 15s or at hand leave switch, unit don't receive the remote control. More than 15s, unit enter "Off" status More than 15s, unit can received signal During operating, press the emergency switch may be power off. Occur unusual circumstance, press this switch to off or cancel the unusual mode. When occur fault, press this switch to off the fault indication.

During operating, occur normal or unusual circumstance (e.g. @@@@) During showing the fault status, don't receive other signal.  
@@@@@..  
. circulating ... @@circulating. ... 20.1.

5 Dispose on swing indoor. @@@@20.1.5.2 When operation is off. @@@@ When operate starting, alarming to keep current position.  
@@@@Cool/dry: Pulse scope 45degree. Heat: Pulse scope 60degree. At the both points waiting for 0.5s to return.

@@During swing, appears alarm, the swing will continues. @@When switch mode, based on the position of panel send. Under fixed position mode, alarm position keeps in the current position. During heat swing, when switch to cool mode by the received signal, its acting position based on indicator of remote control. Adjust position based on the received contents, no delay 1s.

Up/down swing Full off swing angle in cool 60° Position 1(cool normal position make an angle of 10° with horizontal) Position 2 make an angle of 25° with horizontal) Position 3 make an angle of 40° with horizontal) Position 4 make an angle of 55° with horizontal) swing angle in heat 45° Full opening position 5 normal position in heat mode make an angle of 70°with horizontal) Reference position Swing angle in the cool and dry mode 45° Swing angle in the heat mode 60° - 28 - Haier air conditioner Edition: 20070116 4. Thermistor resistance chart Room temperature sensor Temp. ( ) -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 R (KO) 281.34 263.56 247.

84 231.66 217.35 204.02 191.61 180.04 169.24 159.17 149.77 140.99 132.

78 126.11 117.93 111.22 104.93 98.04 93.52 88.35 83.50 78.94 74.

67 70.65 66.88 63.33 60.00 56.

88 53.91 51.15 48.51 46.04 43.

72 41.52 39.45 37.50 35.66 33.92 32.27 - 30 - Power Input (V) 0.33 0.35 0.37 0.

40 0.42 0.45 0.47 0.50 0.53 0.56 0.59 0.62 0.65 0.

69 0.73 0.76 0.80 0.84 0.

88 0.92 0.97 1.01 1.06 1.

10 1.15 1.20 1.25 1.00 1.35 1.41 1.46 1.51 1.57 1.

63 1.68 1.74 1.80 1.85 1.91 Haier air conditioner 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

54 55 56 57 58 59 60 61 62 30.72 29.25 27.85 26.54 25.

30 24.12 23.00 21.94 20.94 19.

99 19.09 18.23 17.42 16.65 15.

92 15.22 14.56 13.93 13.04 12.77 12.23 11.71 11.22 10.76 10.

31 9.89 9.46 9.10 8.74 8.39 8.05 7.73 7.43 7.14 6.

86 6.60 6.34 6.10 5.87 5.

65 5.44 5.24 5.04 4.86 - 31 - Edition: 20070116 1.

97 2.00 2.09 2.15 2.21 2.27 2.33 2.38 2.44 2.50 2.

56 2.62 2.67 2.73 2.78 2.84 2.89 2.95 3.00 3.05 3.

10 3.15 3.20 3.25 3.30 3.

35 3.39 3.44 3.48 3.52 3.

57 3.51 3.65 3.68 3.72 3.76 3.80 3.83 3.37 3.90 3.

93 3.96 3.99 4.02 Haier air conditioner 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 4.68 4.51 4.35 4.13 4.04 3.90 3.

76 3.63 3.50 3.38 3.26 3.

15 3.04 2.94 2.84 2.74 2.

65 2.56 4.05 4.08 4.11 4.13 4.16 4.18 4.21 4.23 4.

25 4.28 4.30 4.32 4.34 4.36 4.38 4.40 4.42 4.43 Edition: 20070116 Indoor pipe sensor&outdoor ambient sensor, defrosting sensor Temperature( -20 -19 -18  
-17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 ) R(KO) 90.

79 85.72 80.96 76.51 72.33 68.

41 64.73 61.27 58.02 54.97 52.

10 49.40 46.88 44.46 42.21 40.08 38.08 36.19 34.41 32.73 31.

24 - 32 - Power Input(V) 0.90 0.95 0.99 1.04 1.08 1.13 1.18 1.23 1.28 1.

33 1.39 1.44 1.50 1.55 1.

61 1.66 1.72 1.78 1.84 1.

90 1.98 Haier air conditioner 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44  
29.84 28.22 26.88 25.61 24.41 23.27 22.20 21.18 20.

21 19.30 18.43 17.61 16.83 16.09 15.38 14.71 14.08 13.48 12.

90 12.38 11.64 11.34 10.87 10.

43 10.00 9.59 9.21 8.84 8.

48 8.15 7.83 7.52 7.23 6.95 6.68 6.43 6.19 5.95 5.

73 5.52 5.32 5.12 4.93 4.75 - 33 - Edition: 20070116 2.



[You're reading an excerpt. Click here to read official HAIER  
HSU-12HSA03-R2 user guide  
http://yourpdfguides.com/dref/3801375](http://yourpdfguides.com/dref/3801375)

01 2.07 2.13 2.19 2.

25 2.31 2.37 2.43 2.49 2.

54 2.60 2.56 2.72 2.77 2.

83 2.88 2.93 2.99 3.04 3.09 3.14 3.19 3.24 3.29 3.

33 3.38 3.42 3.47 3.51 3.55 2.59 3.63 3.67 3.71 3.

75 3.78 3.82 3.86 3.89 3.

92 3.95 3.98 4.01 4.04 Haier air conditioner 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80

4.

58 4.42 4.26 4.11 3.97 3.83 3.70 3.57 3.45 3.33 3.

22 3.11 3.00 2.90 2.81 2.72 2.63 2.54 2.45 2.36 2.

30 2.23 2.15 2.09 2.03 1.

96 1.90 1.85 1.79 1.73 1.

68 1.63 1.58 1.54 1.49 1.45 4.07 4.10 4.12 4.15 4.

17 4.20 4.22 4.24 4.26 4.28 4.31 4.33 4.35 4.37 4.

38 4.40 4.42 4.44 4.45 4.

47 4.48 4.50 4.51 4.53 4.

54 4.55 4.57 4.58 4.59 4.60 4.61 4.62 4.63 4.64 4.

65 4.66 Edition: 20070116 - 34 - Haier air conditioner Edition: 20070116 OUTDOOR discharge -temperature sensor R80 =50K ±3% B25/80 =4450K±3%  
temperature ( ) max Resistance (K) normal, Resistance (K) min Resistance (K) ( t ) -30 -29 -28 -27 -26 -25 -24 -23 -22 -21 -20 -19 -18 -17 -16 -15 -14 -13  
-12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 0 14646.0505 13654.1707 12735.8378 11885.1336 11096.6531 10365.4565 9687.0270 9057.2314 8472.

2852 7928.7217 7423.3626 6953.2930 6515.8375 6108.

5393 5729.1413 5375.5683 5045.9114 4738.4141 4451.

4586 4183.5548 3933.3289 3699.5139 3480.9407 3276.5302 3085.2854 2906.2851 2738.6777 2581.6752 2434.

5487 2296.6230 2167.2730 12061.7438 11267.8730 10531.3695 9847.7240 9212.8101 8622.8491 8074.3787 7564.

2244 7089.4741 6647.4547 6235.7109 5851.9864 5494.

2064 5160.4621 4848.9963 4558.1906 4286.5535 4032.

7098 3795.3910 3573.4260 3365.7336 3171.3148 2989.2460 2818.6731 2658.8058 2508.9126 2368.3158 2236.

3876 2112.5459 1996.2509 1887.0018 - 35 - 9924.4999 9290.2526 8700.6388 8152.2338 7641.8972 7166.7474 6724.

1389 6311.6413 5927.0206 5568.2222 5233.3554 4920.

6791 4628.5894 4355.6078 4100.3708 3861.6201 3638.

1938 3429.0191 3233.1039 3049.5312 2877.4527 2716.0828 2564.6945 2422.6139 2289.2164 2163.9230 2046.

1961 1935.5371 1831.4826 1733.6024 1641.4966 -2.96 -2.95 -2.93 -2.92 -2.91 -2.

90 -2.88 -2.87 -2.86 -2.84 -2.

83 -2.82 -2.80 -2.79 -2.77 -2.

76 -2.75 -2.73 -2.72 -2.70 -2.69 -2.67 -2.66 -2.64 -2.63 -2.

61 -2.60 -2.58 -2.56 -2.55 -2.53 2.45 2.44 2.44 2.43 2.

42 2.42 2.41 2.41 2.40 2.

39 2.39 2.38 2.37 2.37 2.

36 2.35 2.34 2.34 2.33 2.32 2.31 2.30 2.29 2.28 2.

28 2.27 2.26 2.25 2.24 2.23 2.22 Haier air conditioner Edition: 20070116 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

31 32 33 34 35 36 37 38 39 40 2045.9191 1932.0242 1825.0899 1724.

6540 1630.2870 1541.5904 1458.1938 1379.7528 1305.

9472 1236.4792 1171.0715 1109.4661 1051.4226 996.

7169 945.1404 896.4981 850.6086 807.3024 766.4212 727.8172 691.3524 656.8979 624.3328 593.

5446 564.4275 536.9865 511.0105 486.4151 463.1208 441.0535 420.1431 400.3242 381.5350 363.

7176 346.8176 330.7839 315.5682 301.1254 287.

4128 274.3905 1784.3336 1687.8144 1597.0431 1511.

6468 1431.2787 1355.6163 1284.3593 1217.2282 1153.9626 1094.3200 1038.0743 985.0146 934.9440 887.

6792 843.0486 800.8922 761.0603 723.4134 687.8205 654.1596 622.3161 592.1831 563.6604 536.

6540 511.0760 486.9352 464.0500 442.3499 421.

7683 402.2430 383.7151 366.1295 349.4341 333.

5801 318.5216 304.2151 290.6199 277.6976 265.4119 253.7288 - 36 - 1554.7931 1473.1460 1396.2333 1323.

7551 1255.4324 1191.0048 1130.2298 1072.8813 1018.7481 967.6334 919.3533 873.7359 830.6210 789.

8583 751.3077 714.8380 680.3265 647.6580 616.

7252 587.4271 559.6694 533.3634 508.4261 484.

7796 462.3510 441.1516 421.0258 401.9146 383.7626 366.5175 350.1301 334.5542 319.7460 305.

6645 292.2709 279.5286 267.4031 255.8620 244.8745 234.4118 -2.52 -2.50 -2.48 -2.  
47 -2.45 -2.43 -2.41 -2.40 -2.  
38 -2.36 -2.35 -2.33 -2.31 -2.  
29 -2.27 -2.26 -2.24 -2.22 -2.20 -2.18 -2.16 -2.14 -2.12 -2.

10 -2.09 -2.07 -2.05 -2.03 -2.01 -1.99 -1.97 -1.95 -1.93 -1.  
90 -1.88 -1.86 -1.84 -1.82 -1.  
80 -1.78 2.21 2.20 2.19 2.  
17 2.16 2.15 2.14 2.13 2.12 2.11 2.09 2.08 2.07 2.

06 2.04 2.03 2.02 2.00 1.99 1.98 1.96 1.95 1.93 1.  
92 1.90 1.89 1.87 1.86 1.  
84 1.83 1.81 1.80 1.78 1.

76 1.75 1.73 1.71 1.70 1.68 1.66 Haier air conditioner Edition: 20070116 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67  
68 69 70 71 72 73 74 75 76 77 78 79 80 262.0206 250.2676 239.0983 228.

4809 218.3860 208.7855 199.6531 190.9639 182.6945 174.8228 167.3280 160.1904 153.3914 146.  
9136 140.7403 134.8559 129.2457 123.8956 118.  
7926 113.9241 109.2784 104.8443 100.6112 96.  
5692 92.7088 89.0211 85.4976 82.1303 78.9116 75.8343 72.8916 70.0770 67.3844 64.

8080 62.3423 59.9821 57.7223 55.5583 53.4856 51.5000 242.6161 232.0436 221.9825 212.  
4060 203.2887 194.6066 186.3369 178.4584 170.  
9508 163.7951 156.9733 150.4683 144.2641 138.  
3454 132.6980 127.3081 122.1630 117.2504 112.5589 108.0776 103.7961 99.7046 95.7939 92.

0553 88.4805 85.0614 81.7908 78.6615 75.6668 72.8004 70.0561 67.4283 64.9115 62.  
5006 60.1906 57.9770 55.8552 53.8210 51.  
8706 50.0000 -37 - 224.4465 214.9529 205.9065 197.  
2844 189.0648 181.2273 173.7524 166.6217 159.8181 153.3249 147.1268 141.2090 135.5577 130.

1598 125.0027 120.0746 115.3645 110.8618 106.5564 102.4388 98.5000 94.7315 91.1253 87.  
6735 84.3690 81.2048 78.1744 75.2715 72.  
4902 69.8249 67.2703 64.8213 62.4731 60.  
2211 58.0609 55.9885 53.9998 52.0912 50.2591 48.5000 -1.76 -1.74 -1.71 -1.

69 -1.67 -1.65 -1.63 -1.60 -1.58 -1.56 -1.53 -1.51 -1.49 -1.  
47 -1.44 -1.42 -1.40 -1.37 -1.  
35 -1.32 -1.30 -1.28 -1.25 -1.  
23 -1.20 -1.18 -1.15 -1.13 -1.10 -1.08 -1.05 -1.03 -1.00 -0.

98 -0.95 -0.92 -0.90 -0.87 -0.85 -0.85 1.64 1.63 1.61 1.  
59 1.57 1.55 1.54 1.52 1.  
50 1.48 1.46 1.44 1.42 1.  
40 1.38 1.36 1.34 1.32 1.30 1.28 1.26 1.23 1.21 1.

19 1.17 1.15 1.12 1.10 1.08 1.06 1.03 1.01 0.99 0.  
96 0.94 0.92 0.89 0.87 0.

84 0.84 Haier air conditioner Edition: 20070116 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110  
111 112 113 114 115 116 117 118 119 49.7063 47.9835 46.3286 44.  
7385 43.2105 41.7386 40.3241 38.9643 37.6569 36.3996 35.1903 34.0269 32.9075 31.

8302 30.7933 29.7950 28.8337 27.9078 27.0160 26.1569 25.3290 24.5311 23.7620 23.  
0205 22.3055 21.6159 20.9508 20.3091 19.  
6899 19.0924 18.5157 17.9590 17.4214 16.  
9023 16.4010 15.9167 15.4489 14.9968 14.5599 48.2057 46.4842 44.8323 43.2468 41.

7248 40.2604 38.8545 37.5045 36.2078 34.9622 33.7653 32.6151 31.5096 30.4467 29.  
4246 28.4417 27.4961 26.5864 25.7110 24.  
8685 24.0574 23.2765 22.5245 21.8002 21.  
1025 20.4303 19.7825 19.1582 18.5564 17.9761 17.4166 16.8769 16.3564 15.8542 15.

3696 14.9020 14.4506 14.0149 13.5942 - 38 - 46.7083 44.9911 43.3452 41.7672 40.2540 38.  
7996 37.4048 36.0668 34.7831 33.5513 32.  
3689 31.2338 30.1438 29.0970 28.0915 27.

1254 26.1970 25.3048 24.4470 23.6222 22.8291 22.0662 21.3323 20.6261 19.9465 19.  
2924 18.6626 18.0563 17.4723 16.9098 16.3680 15.8458 15.3427 14.8577 14.3902 13.  
9394 13.5047 13.0855 12.6811 -0.85 -0.  
89 -0.93 -0.96 -1.00 -1.03 -1.  
07 -1.11 -1.14 -1.18 -1.22 -1.26 -1.30 -1.33 -1.37 -1.41 -1.  
45 -1.49 -1.53 -1.57 -1.61 -1.65 -1.69 -1.73 -1.77 -1.81 -1.  
85 -1.89 -1.93 -1.98 -2.02 -2.  
06 -2.10 -2.15 -2.19 -2.23 -2.  
27 -2.32 -2.36 0.85 0.89 0.92 0.95 0.99 1.02 1.06 1.  
09 1.13 1.16 1.19 1.23 1.27 1.30 1.34 1.37 1.41 1.  
44 1.48 1.52 1.55 1.59 1.  
63 1.66 1.70 1.74 1.77 1.  
81 1.85 1.89 1.93 1.96 2.00 2.04 2.08 2.12 2.16 2.

19 2.23 Haier air conditioner Edition: 20070116 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 14.1376 13.7294  
13.3347 12.9531 12.5840 12.2270 11.8817 11.5475 11.  
2242 10.9112 10.6084 10.3151 10.0312 9.  
7563 9.4901 9.2322 8.9824 8.7404 8.  
5059 8.2787 8.0584 13.1879 12.7955 12.4165 12.0503 11.6965 11.3545 11.0240 10.  
7046 10.3957 10.0970 9.8082 9.5288 9.2586 8.9971 8.7441 8.4993 8.2623 8.  
0329 7.8108 7.5958 7.3875 12.2909 11.  
9144 11.5510 11.2003 10.8617 10.5348 10.  
2191 9.9142 9.6197 9.3352 9.0602 8.7945 8.5378 8.2895 8.



[You're reading an excerpt. Click here to read official HAIER  
HSU-12HSA03-R2 user guide  
http://yourpdfguides.com/dref/3801375](http://yourpdfguides.com/dref/3801375)

0495 7.8175 7.

5931 7.3760 7.1660 6.9629 6.7664 -2.41 -2.45 -2.50 -2.54 -2.58 -2.

63 -2.68 -2.72 -2.77 -2.81 -2.

86 -2.91 -2.95 -3.00 -3.05 -3.

09 -3.14 -3.19 -3.24 -3.29 -3.33 2.27 2.31 2.35 2.39 2.

43 2.47 2.51 2.55 2.59 2.63 2.67 2.71 2.75 2.80 2.

84 2.88 2.92 2.96 3.00 3.

04 3.09 - 39 - Haier air conditioner Edition: 20070116 5. Trouble shooting Indoor E1 E2 Outdoor // With the malfunction, LED1 F21 on the outdoor mainboard blinks 10 times at frequency of 1 Hz With the malfunction, LED1 F25 on the outdoor mainboard blinks 13 times at frequency of 1 Hz With the malfunction, LED1 on the outdoor mainboard F6 blinks once at 12 times of 1 Hz and interval of 2 seconds or so. 1) Exhaust temperature sensor 2) Outdoor PCB 1) Defrosting temperature sensor 2) Outdoor PCB Possible Reasons 1)Room-temperature sensor 2) Indoor PCB 1)Heat-exchange sensor 2)Indoor PCB 1) Ambient temperature sensor 2) Outdoor PCB 1)The outdoor mainboard needs dehumidification 2)The outdoor mainboard needs With the malfunction, LED1 E7 on the outdoor mainboard blinks 15 times dehumidification 3)The linking cable between the indoor and outdoor units is not well connected or the core wires are not well insulated 4)The indoor PCB might be broken 5)The outdoor PCB might be broken 6)The SPDU might be broken 1) The wiring of compressor is incorrect or the connection is poor 2)The SPDU might be broken 3) Compressor might be damaged. 1) The cryogen may have been leaked With the malfunction, LED1 on the outdoor mainboard blinks 8 times at frequency of 1 Hz during installation, or there may be leakage in the piping system. 2)Exhaust temperature sensor is broken 3) The outdoor mainboard is damaged and needs to be replaced F11 With the malfunction, LED1 on the outdoor mainboard blinks 17or18 times at frequency of 1 Hz F4 -40 - Haier air conditioner Edition: 20070116 With this malfunction, LED1 F22 on the outdoor mainboard blinks 3 times. 1)The SPDU is broken 2)The power supply is not good 3) The system may have been over or under charged with gas With the malfunction, LED1 F1 on the outdoor mainboard blinks 2 times at frequency of 1 Hz With the malfunction, LED1 E9 on the outdoor mainboard blinks 21 times at frequency of 1 Hz 1)IPM Module might be poorly radiated 2)IPM Module might be broken 3)Compressor might be broken 1)Check whether the indoor unit blows poorly due to blocked filters or poor condition of the fan 2)The system is over charged with gas 3)Temperature of coil pipes on the indoor unit too high E4,F12 With outdoor EEPROM, LED1 on the outdoor mainboard blinks once at frequency of 1 Hz 1)E4 the indoor PCB might be damaged 2)F12 the outdoor PCB might be damaged E14 / 1) Whether Terminal CN2 on the indoor mainboard is well inserted or not? 2) The indoor mainboard is damaged 3) The motor of the indoor unit is damaged 1)The installation on terminal CN2 might be not good 2)The mainboard of the indoor unit is damaged 3)The motor of the Outdoor unit is damaged 1)The connection between IPM and the outdoor PCB might be not good 2)The mainboard of the outdoor unit is damaged 3)The IPM module is damaged 1)The IPM module is damaged 2)Check power supply 3)The reactor of outdoor is damage 4)The rectifying bridge or IPM module is damage With the malfunction, LED1 F8 on the outdoor mainboard blinks 9 times at frequency of 1 Hz With the malfunction, LED1 F3 on the outdoor mainboard blinks 4 times at frequency of 1 Hz With the malfunction, LED1 on the outdoor mainboard blinks 6 times at frequency of 1 Hz F19 - 41 - Haier air conditioner Edition: 20070116 E1: Room temperature sensor failure E2: Heat-exchange sensor failure CN8 Firstly check whether Terminal CN8(CN6) on the indoor mainboard contact well or not? No Pull out the terminals on the indoor mainboard and reinsert them. Yes Pull the sensor out of the mainboard 1) Measure the value of resistance between its two jumpers 2) Measure the temperature at the room temperature sensing head. Check the specifications of the sensor to decide whether the sensor is damaged or not? Yes Sensor is broken Replace with new indoor PCB No The Indoor PCB is broken Replace with new indoor PCB - 42- Haier air conditioner Edition: 20070116 F21: Frost-removing temperature sensor failure F25: Exhaust temperature sensor failure F6: Ambient temperature sensor failure CN10 CN11 CN9 Firstly check whether Terminal CN10 (or CN11, or CN9) on the outdoor mainboard contact well or not? No Pull out the terminals on the outdoor mainboard and reinsert them. Yes Pull the sensor out of the mainboard 1) Measure the value of resistance between its two jumpers 2) Measure the temperature at the room temperature sensing head. Check the specifications of the sensor to decide whether the sensor is damaged or not? Yes Sensor is broken Replace with a new sensor No The Outdoor PCB is broken Replace with new outdoor PCB - 43 - 44 45 Haier air conditioner Edition: 20070116 F11: The malfunction of the compressor' rotor circuit Within 3 minutes after the machine is supplied with power and turned on with the remote controller, the outdoor unit stops shortly after startup, and the compressor will start up again 10 seconds after the machine stops. The above process repeats again and again. 1. The wiring of compressor is Yes incorrect or the connection is poor; 2. The compressor is damaged No At the stopped state, LED2 on the outdoor PCB blinks 1Hz for several times, and after pause of 2 seconds or so, it blinks for the same times again.

Yes The IPM might be broken, replace it with a new one. The Malfunctions exist also. The Malfunction unsolved compressor is damaged replace a new one - 46- Haier air conditioner Edition: 20070116 F4: Overheat protection for exhaust temperature 1) The cryogen may have been leaked during Electrify the machine again and turn it on with the remote controller, then measure the temperature at the exhaust temperature sensor of the compressor on the outdoor unit and check whether the temperature exceeds 110 shortly after the machine starts up installation, or there may Yes be leakage in the piping system. 2) There may be other causes to make the exhaust temperature too high. No Measure the temperature at the exhaust temperature sensor of the compressor on the outdoor unit and Malfunctions occur after running for some time even though the measured temperature is below 110 . Yes Exhaust temperature sensor is broken and needs to be replaced No Pull out the exhaust sensor and measure its resistance at standard temperatures. Check whether the results deviate much from those in the resistance-temperature table Yes The sensor is damaged. Replace the sensor with a new one. No The outdoor mainboard is damaged and needs to be replaced - 47- Haier air conditioner Edition: 20070116 F22: AC electricity protection Electrify the machine again and turn it on with the remote controller.



[You're reading an excerpt. Click here to read official HAIER HSU-12HSA03-R2 user guide](http://yourpdfguides.com/dref/3801375)  
<http://yourpdfguides.com/dref/3801375>

If malfunctions are reported before or upon the compressor being started up.

Yes The IPM is damaged No The compressor is started normally, but malfunctions are reported after it has run for some time. Check the power supply. If the voltage is too low or too high Yes Repair the power supply No If the power supply is in OK, judged through the pressure of the measuring system The system may have been Yes over or under charged with gas . - 48- Haier air conditioner Edition: 20070116 F1: The protection of IPM Electrify the machine again and turn it on with the remote controller, then measure temperature on the module radiator and decide whether it is too high. IPM Module might be poorly Yes radiated and need to be recoated with heat conducting paste and reinstalled.

No With a multimeter, test whether there is diode characteristic between the three terminals U/V/W and whether the two terminals P/N of IPM module and the diode characteristic is exist. No IPM Module is damaged and needs replacing. Yes Test with a multimeter, and check whether the resistance values among Phases U, V and W of compressor are equal and between 1 and 30. Yes IPM Module is damaged and needs replacing. No The compressor should be damaged.

- 49 - Haier air conditioner Edition: 20070116 E9: High work-intense protection Electrify the machine again and turn it on with the remote controller, then check whether the wind temperature is below 65 some time? and the malfunction is reported after the machine has run for Yes Check room temperature sensor. Methods is like E1 No Check whether the indoor unit blows poorly due to blocked filters or poor condition of the fan Yes 1) Clean the filters 2) Reinstall the fan. No Yes Use some tools to measure the pressure of system The system is over charged with gas - 50 - Haier air conditioner Edition: 20070116 E4: Indoor EEPROM error Replace the PCB of indoor unit F12: Outdoor EEPROM error Replace the PCB of outdoor unit - 51-

HSU-09/12HR03/R2(DB) Service diagnosis 7.3.2 Indoor fan motor malfunction E14 Indoor Display Method of Malfunction Detection Malfunction Decision Conditions Supposed Causes The rotation speed detected by the Hall IC during fan motor operation is used to determine abnormal fan motor operation when the detected rotation feedback signal don't received in 2 minutes Operation halt due to breaking of wire inside the fan motor . Operation halt due to breaking of the fan motor lead wires Detection error due to faulty indoor unit PCB whether terminal CN13 and CN7 on indoor PCB well inserted or not? NO Pull out and reinsert the terminals YES Electrify the machine again and turn it on in the cooling operation, Measure voltage between the positions 1 ( blue wire) and 3( yellow wire) of Terminal CN13 on the indoor PCB the voltage is about 90-200vac NO the indoor pcb is damaged and need replace Yes When motor is running Measure whether check whether motor can run when turn on the unit NO there is voltage pulse(12VDC) between the positions 1(middle wire) and 4( black wire) of Terminal CN7 on the indoor PCB is normal or not? Yes the indoor motor is damaged and need replace NO YES the indoor motor is damaged and need replace the indoor pcb is damaged and need replace 52 Domestic air conditioner5 Haier air conditioner Edition: 10061116 F3: Communication fault between the IPM and outdoor PCB 1, Check whether Terminal CN7 on the outdoor mainboard, CN10 on IPM module are well inserted. 2, Check whether the connected wire between IPM and outdoor is well 1, Pull out and reinsert the Yes terminals. 2, Replace connected wire No Electrify the machine again and turn it on, check whether the voltage between 1 and 4of Terminal CN7 is about 12V DC Yes Replace the outdoor IPM module with a new one. No Replace the outdoor mainboard with a new one -53- Haier air conditioner Edition: 20070116 F19: Power voltage is too high or low Check whether the voltage between P and N of Terminal CN7 of the outdoor is below 120vDC or up 400vDC. Yes The IPM module is damaged and needs replacing No Check whether there is voltage of 187-260VAC between Positions 1 and 2 on the terminal block of the outdoor unit.

No Check power supply Yes Check whether there is voltage of 187-260VAC between Positions 2 and 4 on the rectifying bridge of the outdoor unit. No The reactor of outdoor is damage and replaces a new one Yes The rectifying bridge or IPM module is damage and replaces a new one. - 54- Haier air conditioner Edition: 20070116 Other malfunctions: With the machine electrified, the unit cannot open If there is no response after the emergency button is pressed down, shoot the trouble as follows Check whether the voltage between Positions 1 and 2 on the terminal of the indoor unit is 230V AC. The power supply damage, and No the power cables might be broken Yes Check whether the FUSE of the indoor mainboard is burned or broken. Replace the fuse Yes No The indoor PCB might be broken, replace it with a new one. - 55 - Haier air conditioner Edition: 20070116 6. Performance curves diagram 6.1 High drop and long pipe capacity modification curves - 56- Haier air conditioner Edition: 20070116 6.2.1 Cooling capacity-temperature curves HSU-09HSA03/R2(DB) Cooling value - Temperature table Indoor temp.

DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 2383 2534 2610 2672 2849 2940 3045 3240 3342 20 2313 2460 2537 2625 2754 2842 3015 3173 3277 Outdoor temp. (Humidity 46%) 25 32 35 40 2243 2386 2460 2580 2671 2750 2923 3077 3208 2196 2336 2409 2493 2615 2693 2862 2971 3141 1986 2060 2179 2254 2365 2486 2588 2724 2841 1866 1986 2048 2082 2187 2247 2394 2527 2670 43 1669 1811 1854 1838 1963 2029 2140 2285 2405 46 1518 1615 1666 1729 1780 1862 1979 2083 2172 Cooling capacity(w - 57- Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Cooling value - Temperature table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 3244 3421 3524 3667 3846 3969 4171 4374 4512 20 3122 3321 3425 3544 3718 3837 4070 4283 4422 Outdoor temp. (Humidity 46%) 25 32 35 40 3027 3163 3322 3442 3605 3713 3946 4154 4331 2964 3056 3252 3365 3478 3586 3800 4018 4241 2681 2781 2941 3043 3192 3325 3494 3678 3835 2520 2680 2765 2811 2900 2990 3200 3343 3523 43 2144 2372 2417 2543 2669 2714 2795 2942 3068 46 2050 2100 2183 2345 2444 2514 2672 2812 2933 Cooling capacity(w - 58 - Haier air conditioner Edition: 20070116 6.2.

2 Heating capacity-temperature curves HSU-09HSA03/R2(DB) Heating capacity - Temp. curves Outdoor temp. DB/WB -5 0 5 7/6 10 15 24 20/15 2336 2534 2610 2742 2849 3037 3345 Indoor temp. (Humidity 46%) 20/12 20/14.



[You're reading an excerpt. Click here to read official HAIER HSU-12HSA03-R2 user guide](http://yourpdfguides.com/dref/3801375)  
<http://yourpdfguides.com/dref/3801375>

5 2313 2488 2600 2697 2880 3007 3297 2341 2437 2575 2661 2905 2992 3246 27/18 2280 2397 2564 2605 2819 2946 3276 - 59 - Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Heating capacity - Temp. curves Outdoor temp. DB/WB -5 0 5 7/6 10 15 24 20/15 2536 2734 2810 2942 3049 3237 3545 Indoor temp. (Humidity 46%) 20/12 20/14.5 2513 2688 2800 2897 3080 3207 3497 2541 2637 2775 2861 3105 3192 3446 27/18 2480 2597 2764 2805 3019 3146 3476 - 60 - Haier air conditioner Edition: 20070116 6.3 Air outlet temp.-ambient temperature curves HSU-09HSA03/R2(DB) Air outlet temp. - Ambient temp. table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 9.30 9.

47 10.29 10.74 11.63 12.41 12.69 12.69 12.76 20 9.69 9.74 10.  
64 11.20 12.14 12.80 13.04 13.

15 13.15 Outdoor temp. (Humidity 46%) 25 32 35 40 9.81 10.10 10.  
91 11.68 12.52 13.42 13.75 14.00 13.97 10.10 10.64 11.65 12.

31 12.93 13.89 14.29 14.46 14.54 12.10 12.16 13.46 14.19 14.  
85 15.99 16.08 16.32 16.42 12.  
66 12.85 13.97 15.00 15.50 16.

37 16.72 16.71 16.81 43 11.52 11.77 12.82 13.51 14.44 15.23 15.

31 15.44 15.64 46 10.67 11.19 12.39 12.80 14.10 14.60 14.75 15.

12 15.11 Air outlet temp. ( ) - 61- Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Air outlet temp. - Ambient temp. table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 7.63 7.77 8.38 8.81 9.  
65 10.18 10.41 10.46 10.46 20 7.94 7.98 8.72 9.18 9.95 10.

50 10.69 10.78 10.78 Outdoor temp. (Humidity 46%) 25 32 35 40 8.05 8.43 8.95 9.56 10.27 11.  
00 11.28 11.32 11.37 8.28 8.

92 9.55 10.09 10.60 11.39 11.

72 11.70 11.81 9.92 10.17 11.03 11.63 12.18 13.01 13.18 13.

26 13.50 10.15 10.63 11.54 12.30 12.82 13.42 13.50 13.70 13.

78 43 9.45 9.65 10.51 11.08 11.

84 12.49 12.65 12.74 12.82 46 8.

75 9.18 10.00 10.50 11.27 11.97 12.10 12.18 12.16 Air outlet temp. ( ) - 62 - Haier air conditioner Edition: 20070116 6.

4.1 Cooling discharge pressure curves HSU-09HSA03/R2(DB) Cooling discharge pressure table Outdoor temp. (Humidity 46%) DB/WB 15 25 30 35 40 45 16 2183 2469 2864 3143 3275 3311 Indoor temp. 19 2315 2640 2990 3290 3490 3531 22 2560 2800 3260 3480 3700 3760 DISCHARGE PRESSURE Outdoor Temp - 63 - Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Cooling discharge pressure table Outdoor temp. (Humidity 46%) DB/WB 15 25 30 35 40 45 16 2286 2530 2864 3165 3355 3440 Indoor temp. 19 2469 2689 3114 3400 3575 3663 22 2725 2908 3267 3553 3744 3824 DISCHARGE PRESSURE Outdoor Temp - 64- Haier air conditioner Edition: 20070116 6.4.2 Cooling suction pressure curves HSU-09HSA03/R2(DB) Cooling suction pressure table Outdoor temp. (Humidity 46%) DB/WB 15 25 30 35 40 45 16 718 727 744 749 782 846 Indoor temp. 19 749 768 782 779 821 896 22 798 817 820 820 864 948 DISCHARGE PRESSURE Outdoor Temp - 65- Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Cooling suction pressure table Outdoor temp.

(Humidity 46%) DB/WB 15 25 30 35 40 45 16 718 735 751 755 780 834 Indoor temp. 19 760 782 792 792 832 896 22 821 830 849 849 881 940

DISCHARGE PRESSURE Outdoor Temp - 66 - Haier air conditioner Edition: 20070116 6.4.3 Heating discharge pressure curves HSU-09HSA03/R2(DB) Heating discharge pressure table Outdoor temp. (Humidity 46%) DB/WB 15 10 5 0 5 10 15 20 15 2109 2155 2256 2430 2527 2595 2631 2743 Indoor temp. 20 2226 2277 2467 2615 2697 2779 2815 2945 25 2400 2454 2600 2734 2851 2952 3036 3145 DISCHARGE PRESSURE Outdoor Temp - 67- Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Heating discharge pressure table Outdoor temp. (Humidity 46%) DB/WB 15 10 5 0 5 10 15 20 15 2087 2179 2309 2446 2520 2590 2713 2728 Indoor temp. 20 2226 2320 2417 2569 2668 2779 2903 2945 25 2400 2462 2560 2734 2877 2990 3067 3145 DISCHARGE PRESSURE Outdoor Temp - 68 - Haier air conditioner Edition: 20070116 6.4.4 Heating suction pressure curves HSU-09HSA03/R2(DB) Heating suction pressure table Outdoor temp.

(Humidity 46%) DB/WB 15 10 5 0 5 10 15 20 15 550 571 589 605 648 703 745 872 Indoor temp. 20 607 622 629 637 708 755 810 924 25 662 660 675 719 760 820 866 984 DISCHARGE PRESSURE Outdoor Temp - 69 - Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Heating suction pressure table Outdoor temp. (Humidity 46%) DB/WB 15 10 5 0 5 10 15 20 15 550 571 600 605 651 695 754 855 Indoor temp. 20 607 622 653 664 708 755 831 924 25 660 660 688 712 760 824 901 984 DISCHARGE PRESSURE Outdoor Temp - 70 - Haier air conditioner Edition: 20070116 6.5 Sensible cooling value-temperature curves HSU-09HSA03/R2(DB) Sensible cooling value - Temperature table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 1885 1917 1982 2061 2137 2232 2320 2430 2501 20 1783 1866 1920 1969 2066 2132 2261 2348 2404 Outdoor temp. (Humidity 46%) 25 32 35 40 1720 1800 1845 1935 2003 2063 2192 2260 2302 1647 1720 1764 1870 1961 2020 2147 2181 2218 1489 1545 1634 1691 1774 1885 1941 2051 2056 1400 1489 1536 1562 1667 1713 1769 1834 1920 43 1315 1400 1408 1445 1491 1570 1630 1699 1723 46 1236 1310 1315 1347 1366 1459 1486 1562 1574 - 71- Haier air conditioner Edition: 20070116 HSU-12HSA03/R2(DB) Sensible cooling value - Temperature table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 2530 2614 2676 2782 2885 2977 3113 3228 3313 20 2407 2519 2592 2658 2789 2878 3052 3146 3245 Outdoor temp. (Humidity 46%) 25 32 35 40 2296 2415 2491 2612 2704 2802 2960 3051 3132 2223 2365 2410 2524 2648 2700 2808 2895 3058 2089 2180 2263 2383 2448 2525 2621 2700 2876 1890 2010 2073 2108 2251 2313 2388 2454 2592 43 1775 1887 1936 1951 2089 2120 2201 2294 2326 46 1669 1783 1827 1818 1931 1931 2056 2149 2199 - 72- Haier air conditioner Edition: 20070116 6.6 Power consumption-temp.

Curves HSU-09HSA03/R2(DB) Power consumption value - Temp. table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18 27/19 30/22 32/23 32/24 18 602 611 594 641 657 663 701 702 690 20 710 721 720 756 723 779 817 828 851 Outdoor temp. (Humidity 46%) 25 32 35 40 823 827 857 870 880 905 930 926 956 963 978 1011 1026 1074 1125 1107 1101 1154 1156 1173 1213 1231 1261 1267 1329 1348 1384 1240 1245 1302 1320 1337 1360 1426 1431 1485 43 1300 1360 1365 1385 1419 1480 1495 1487 1557 46 1392 1452 1492 1540 1551 1558 1633 1625 1694 ower consumption Power consumption(w -73- Haier air conditioner HSU-12HSA03/R2(DB) Edition: 20070116 Power consumption value - Temp. table Indoor temp. DB/WB 18/12 18/14 20/15 22/16 25/18



27/19 30/22 32/23 32/24 18 843 855 846 897 920 924 956 940 966 20 969 1009 1008 1059 1066 1090 1143 1160 1191 Outdoor temp. (Humidity 46%) 25 32  
35 40 1152 1158 1200 1218 1232 1280 1302 1319 1338 1348 1369 1416 1436 1467 1478 1550 1541 1615 1564 1642 1699 1723 1766 1774 1860 1830 1938  
1687 1762 1823 1849 1872 1903 1996 1971 2079 43 1820 1904 1911 1985 1987 2072 2093 2108 2180 46 1972 2072 2088 2156 2171 2181 2257 2282 2372  
ower consumption Power consumption(w - 74 - Haier air conditioner Edition: 20070116 6.



[You're reading an excerpt. Click here to read official HAIER  
HSU-12HSA03-R2 user guide  
http://yourpdfguides.com/dref/3801375](#)