

Technical Report No.: 64.181.23.02525.01 Rev.00

Date: 2023-07-27

Client: Report holder's name: Guangzhou Hiseer air conditioning Co.,Ltd

Report holder's Address: Xicheng industry zone, Renhe town, Baiyun district, Guangzhou, China

Contact person of report holder: Mrs YAN WEI

Manufacturer: Manufacturer's name: Guangzhou Hiseer air conditioning Co.,Ltd

Manufacturer's address: Xicheng industry zone, Renhe town, Baiyun district, Guangzhou, China

Factory: Factory's name: Guangzhou Hiseer air conditioning Co.,Ltd

Factory's address: Xicheng industry zone, Renhe town, Baiyun district, Guangzhou, China

Test object: Product: Inverter Air Source Heat Pump
Model: HS08V-QPNNW

Trade mark: --

Test specification: ☒ EN 14825:2022
☒ EN 12102-1:2022
☒ EN 14511-3:2022
☒ EN 14511-4:2022 Clause 4

Purpose of examination: Test according to the test specification
☒ (EU) No 813/2013
☒ EU 2016/2282:2016-11-30

Test result: The test results show that the presented product is in compliance with the above listed test specifications.

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question. It does not imply a general statement regarding the quality of products from regular production. For further details please see testing and certification regulation, chapter A-3.4.

1 Description of the test object

1.1 Function

Manufacturer's specification for intended use:
The appliance is air to water heat pump.
Manufacturer's specification for predictive use:
According to user manual

1.2 Consideration of the foreseeable use

- ☐ Not applicable
- ☒ Covered through the applied standard
- ☐ Covered by the following comment
- ☐ Covered by attached risk analysis

1.3 Technical Data

Model :	HS08V-QPNNW		
Rated Voltage (V) :	220-240V~		
Rated Frequency (Hz) :	50		
Rated Power (W) :	2860		
Rated Current (A) :	12.5		
Protection Class :	Class I		
Protection Against Moisture :	IP X4		
Construction :	Stationary		
Supply connection :	<input type="checkbox"/> Non detachable cord <input checked="" type="checkbox"/> Permanent connection to fixed wiring		
Operation mode:	<input checked="" type="checkbox"/> Continuous operation; <input type="checkbox"/> Intermittent operation; <input type="checkbox"/> Short time operation;		
Refrigerant/charge (kg) :	R290 / 0.72kg		
Declared parameters :	<input checked="" type="checkbox"/> Average <input type="checkbox"/> Warmer <input type="checkbox"/> Colder		
Sound power level dB(A) :	N/A		
Series No :	208022370001		

2 Order

2.1 Date of Purchase Order, Customer's Reference

Date of Purchase Order: 2023-06-21

Customer's Reference: Guangzhou Hiseer Air Conditioning Co., Ltd

2.2 Test Sample(s)

- Reception date(s): 2023-06-21

- Location(s) of reception:

For Energy test:

Guangzhou Customs District Technology Center

Address: No.3, Desheng East Road, Shunde, Daliang, Foshan, Guangdong, China

For Noise tests:

China Quality Certification Centre South China Laboratory

Address: No. 11 South of Shenghui Road, Nantou, Zhongshan, Guangdong, China

- Condition of test sample(s): completed and can be normal operation

2.3 Date(s) of Testing

2023-06-21 to 2023-07-12

2.4 Location(s) of Testing

Same as 2.2

2.5 Points of Non-compliance or Exceptions of the Test Procedure

N/A

3 Test Results

☒ Decision rule according to ILAC-G8:09/2019 clause 4.2.1 Binary statement for simple acceptance rule or IEC Guide 115:2021, clause 4.4.3, 4.5.1 Accuracy method was applied.

☐ Decision rule according to customer's requirements was applied. It is:

☐ Decision rule according to ILAC-G8:09/2019 clause 4.2.2 Binary statement with guard band - guard band length = 95 % extended measurement uncertainty, was applied.

☐ Decision rule (based on ILAC-G8:09/2019 clause 4.2.3 Non-binary statement with guard band, guard band length = 95 % extended measurement uncertainty) for an upper specification limit (A lower limit or specification with an up-per and a lower limit is treated similarly.):

- Compliance with the requirement: If a specification limit is not breached by a measurement result plus the expanded uncertainty with a 95% coverage probability, then compliance with the specification will be stated (e. g. Pass).

- Non-compliance with the requirement: If a specification limit is exceeded by the measurement result minus the expanded uncertainty with a 95% coverage probability, then non-compliance with the specification will be stated (e. g. Fail).

- Inconclusive result: If a measurement result plus/minus the expanded uncertainty with a 95 % coverage probability overlaps the limit it will be stated that it is not possible to state compliance or non-compliance.

3.1 Positive Test Results

See Appendix I

4 Remarks

4.1 General

The user manual has been examined according to the minimum requirements described in the product standard. The manufacturer is responsible for the accuracy of further particulars as well as of the composition and layout.

4.2

When the product is placed on the market, it must be accompanied with safety Instructions written in official language of the country. The instructions shall give information re-garding safe operation, installation and maintenance.

5 Documentation

- Appendix I: Test results
- Appendix II: Marking plate
- Appendix III: photo documentation
- Appendix IV: Construction data form
- Appendix V: Test equipment list

6 Test History

- 1) The appliance is Air to Water Heat Pump Unit, including a whole compression type refrigerant circuit to heat water in another circuit. The appliance was for cooling and heating water function, this report only for heating capacity test.
- 2) The main power is supplied by a 3-pole supply cord connecting to fixed wiring.
- 3) Water enthalpy method was adopted in this report.
- 4) Standby mode power, off mode power and thermostat-off mode power were tested according to clause 12 of standard EN 14825:2022.

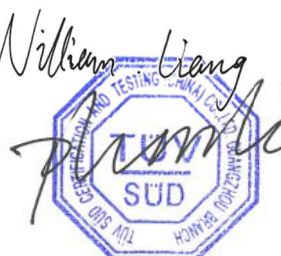
TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch TÜV SÜD Group

Tested by: William Liang, Project Handler

printed name, function & signature

Approved by: Plum Li, Designated Reviewer

printed name, function & signature



Appendix I Test results

Table 1.	Heating mode(Low temperature application):						P	
Model	HS08V-QPNNW							
Product type	Air to Water	Heating season	<input checked="" type="checkbox"/>	Average	<input type="checkbox"/>	Warmer	<input type="checkbox"/>	Colder
1. Test conditions:								
Condition	Part Load Ratio in %				Outdoor heat exchanger	Indoor heat exchanger		
	Formula	A	W	C	Inlet dry (wet) bulb temperature °C	Inlet/outlet water temperatures (°C)		
A	$(-7-16)/(T_{designh}-16)$	88	N/A	N/A	-7(-8)	a / 34		
B	$(+2-16)/(T_{designh}-16)$	54	N/A	N/A	2(1)	a / 30		
C	$(+7-16)/(T_{designh}-16)$	35	N/A	N/A	7(6)	a / 27		
D	$(+12-16)/(T_{designh}-16)$	15	N/A	N/A	12(11)	a / 24		
E	$(TOL-16)/(T_{designh}-16)$				TOL	a / 35.3		
F	$(T_{bivalent}-16)/(T_{designh}-16)$				Tbiv	a / 34		
G	$(-15-16)/(T_{designh}-16)$	N/A	N/A	N/A	-15	N/A		
Remark: a) With the water flow rate as determined at the standard rating conditions given in EN14511-2 at 30/35 conditions, the capacity is 7.298kW, the power is 1.481kW, the COP is 4.93kW/kW.								
2.Tested data/correction data(Average):								
General test conditions/ Part-Load	Unit	A(-7)/W34 (88%)	A2/W30 (54%)	A7/W27 (35%)	A12/W24 (15%)	A(-10)/W35.3 (100%)	A(-7)/ W34 (88%)	
	--	A	B	C	D	E	F	
Data collection period	hh: min:sec	1:10:00	1:10:00	1:10:00	1:10:00	1:10:00	1:10:00	
The heat pump defrosts	--	No	No	No	No	No	No	
Complete Cycles	--	0	0	0	0	0	0	
Barometric pressure	kPa	101.02	101.01	101.01	101.02	101.01	101.02	
Voltage	V	231.0	230.2	230.1	230.3	230.9	231.0	
Current input of the unit	A	7.92	3.74	2.74	2.53	8.00	7.92	
Power input of the unit	kW	1.820	0.835	0.592	0.538	1.839	1.820	
Test conditions indoor unit								
Inlet Water temperature, DB	°C	30.10	27.60	25.51	23.29	31.40	30.10	
Outlet Water temperature, DB	°C	34.01	30.03	27.52	25.48	34.98	34.01	

Doc No.: ITC-TTW0902.02E – Rev.12

Appendix I Test results

Test conditions outdoor unit							
Air inlet temperature, DB	°C	-7.00	2.01	7.01	12.01	-10.00	-7.00
Air inlet temperature, WB	°C	-8.09	1.00	6.06	11.10	-11.03	-8.09
Summary of the results							
Total heating capacity	kW	5.985	3.739	3.070	3.378	5.478	5.985
Effective power input	kW	1.762	0.776	0.534	0.479	1.780	1.762
Coefficient of performance (COP)	--	3.40	4.82	5.75	7.05	3.08	3.40
Compressor frequency	Hz	80	39	30	30	80	80
Water flow	m³/h	1.34	1.34	1.34	1.34	1.34	1.34

Remark: -

3.Calculation/conclusion for SCOP(Average):

Tdesignh(°C)	-10	Tbiv(°C)	-7
Pdesignh(kW)	6.765	TOL(°C)	-10

Test result A, B, C, D, E, F conditions:

Condition	Part load	Measured capacity	COP at measured capacity	Cdh	CR	COP at part load
E	6.765	5.478	3.08	0.90	1.00	3.08
F	5.985	5.985	3.40	0.90	1.00	3.40
A	5.985	5.985	3.40	0.90	1.00	3.40
B	3.643	3.739	4.82	0.90	0.97	4.82
C	2.342	3.070	5.75	0.90	0.76	5.58
D	1.041	3.378	7.05	0.90	0.31	5.76

CR: part load divided by capacity;

Appendix I Test results

Electric power consumptions	Unit	Value
Thermostat-off mode [P_{TO}]	kW	0.004
Standby mode [P_{SB}]	kW	0.002
Crankcase heater [P_{CK}]	kW	0.000
Off mode [P_{OFF}]	kW	0.002

Conclusions:	Unit	Value
SCOP _{on} :	kWh/kWh	4.73
SCOP:	kWh/kWh	4.73
Q_H :	kWh/year	13977
Q_{HE} :	kWh/year	2953
$\eta_{s,h}$	%	186.3
Seasonal space heating energy efficiency classes: (According (EU) No 811/2013 Table 2)	--	A+++

Appendix I Test results

Appendix 1 Test results

Table 2.	Heating mode(Medium temperature application):						P	
Model	HS08V-QPNNW							
Product type	Air to Water	Heating season	<input checked="" type="checkbox"/>	Average	<input type="checkbox"/>	Warmer	<input type="checkbox"/>	Colder
1. Test conditions:								
Condition	Part Load Ratio in %				Outdoor heat exchanger	Indoor heat exchanger		
	Formula	A	W	C	Inlet dry (wet) bulb temperature °C	Inlet/outlet water temperatures (°C)		
A	$(-7-16)/(T_{designh}-16)$	88	N/A	N/A	-7(-8)	a / 52		
B	$(+2-16)/(T_{designh}-16)$	54	N/A	N/A	2(1)	a / 42		
C	$(+7-16)/(T_{designh}-16)$	35	N/A	N/A	7(6)	a / 36		
D	$(+12-16)/(T_{designh}-16)$	15	N/A	N/A	12(11)	a / 30		
E	$(TOL-16)/(T_{designh}-16)$				TOL	a / 55.3		
F	$(T_{bivalent}-16)/(T_{designh}-16)$				Tbiv	a / 52		
G	$(-15-16)/(T_{designh}-16)$	N/A	N/A	N/A	-15	N/A		
Remark: a) With the water flow rate as determined at the standard rating conditions given in EN14511-2 at 47/55 conditions, the capacity is 6.003kW, the power is 2.037kW, the COP is 2.95kW/kW.								
2.Tested data/correction data(Average):								
General test conditions/ Part-Load	Unit	A(-7)/W52 (88%)	A2/W42 (54%)	A7/W36 (35%)	A12/W30 (15%)	A(-10)/W55.3 (100%)	A(-7)/W52 (88%)	
	--	A	B	C	D	E	F	
Data collection period	hh: min:sec	1:10:00	1:10:00	1:10:00	1:10:00	1:10:00	1:10:00	
The heat pump defrosts	--	No	No	No	No	No	No	
Complete Cycles	--	0	0	0	0	0	0	
Barometric pressure	kPa	99.85	99.85	99.85	99.80	99.75	99.85	
Voltage	V	230.1	229.9	229.6	230.4	229.6	230.1	
Current input of the unit	A	9.54	4.64	3.12	2.91	9.65	9.54	
Power input of the unit	kW	2.184	1.052	0.687	0.633	2.208	2.184	
Test conditions indoor unit								
Inlet Water temperature, DB	°C	44.62	37.17	33.13	29.01	48.58	44.62	
Outlet Water temperature, DB	°C	52.11	42.00	37.04	33.90	55.32	52.11	

Appendix I Test results

Test conditions outdoor unit							
Air inlet temperature, DB	°C	-6.99	2.00	7.02	12.09	-10.00	-6.99
Air inlet temperature, WB	°C	-7.98	1.00	6.03	11.34	-10.89	-7.98
Summary of the results							
Total heating capacity	kW	5.728	3.687	2.983	3.757	5.134	5.728
Effective power input	kW	2.160	1.028	0.663	0.610	2.184	2.160
Coefficient of performance (COP)	--	2.65	3.59	4.50	6.16	2.35	2.65
Compressor frequency	Hz	80	41	30	30	80	80
Water flow	m³/h	0.66	0.66	0.66	0.66	0.66	0.66
Remark: -							
3.Calculation/conclusion for SCOP(Average):							
Tdesignh(°C)	-10		Tbiv(°C)		-7		
Pdesignh(kW)	6.475		TOL(°C)		-10		
Test result A, B, C, D, E, F conditions:							
Condition	Part load	Measured capacity	COP at measured capacity	Cdh	CR	COP at part load	
E	6.475	5.134	2.35	0.90	1.00	2.35	
F	5.728	5.728	2.65	0.90	1.00	2.65	
A	5.728	5.728	2.65	0.90	1.00	2.65	
B	3.486	3.687	3.59	0.90	0.95	3.59	
C	2.241	2.983	4.50	0.90	0.75	4.35	
D	0.996	3.757	6.16	0.90	0.27	4.83	
CR: part load divided by capacity;							

Appendix I Test results

Electric power consumptions	Unit	Value
Thermostat-off mode [P_{TO}]	kW	0.004
Standby mode [P_{SB}]	kW	0.002
Crankcase heater [P_{CK}]	kW	0.000
Off mode [P_{OFF}]	kW	0.002

Conclusions:	Unit	Value
SCOP _{on} :	kWh/kWh	3.64
SCOP:	kWh/kWh	3.64
Q_H :	kWh/year	13377
Q_{HE} :	kWh/year	3678
$\eta_{s,h}$	%	142.5
Seasonal space heating energy efficiency classes: (According (EU) No 811/2013 Table 1)	--	A++

Appendix I Test results

Table 3a.	Sound power level measurement(Low temperature application)		P
Model	HS08V-QPNNW		
	Product type :	Air to Water	
	Outdoor heat exchanger, Air temperature DB/WB (°C):	7.0 / 6.0	
	Indoor heat exchanger, Water inlet/outlet temperature (°C):	30.0 / 35.0	
	Voltage (V):	230	
	Frequency (Hz):	50	
	Working condition class :	Class A	
	Acoustical environment :	Hemi-anechoic room	
	Windshield type :	Sponge	
	Measured position amount :	14	
	Water flow (m³/h):	1.34	
	Measured quantity	L_{WA,indoors} (dB(A))	L_{WA,outdoors} (dB(A))
	Sound pressure level ` L _{p(ST)} ****	--	44
	Measurement distance d *	--	1.0m
	Sound power level L _{WA} ****	--	58
Setting of controls: according to user manual. Duct connection:-- Rounding to: *) 1 decimal places; **) 2 decimal places; ***) 3 decimal places; ****) nearest integer Fan speed: 550 r/min, compressor frequency: 70Hz.			

Appendix I Test results



Table 3b.	Sound power level measurement(Medium temperature application)		P
Model	HS08V-QPNNW		
	Product type :	Air to Water	
	Outdoor heat exchanger, Air temperature DB/WB (°C):	7.0 / 6.0	
	Indoor heat exchanger, Water inlet/outlet temperature (°C):	47.0 / 55.0	
	Voltage (V):	230	
	Frequency (Hz):	50	
	Working condition class :	Class A	
	Acoustical environment :	Hemi-anechoic room	
	Windshield type :	Sponge	
	Measured position amount :	14	
	Water flow (m³/h):	0.66	
	Measured quantity	L_{WA,indoors} (dB(A))	L_{WA,outdoors} (dB(A))
	Sound pressure level ` L _{p(ST)} ****	--	40
	Measurement distance d *	--	1.0m
	Sound power level L _{WA} ****	--	55
Setting of controls: according to user manual. Duct connection:-- Rounding to: *) 1 decimal places; **) 2 decimal places; ***) 3 decimal places; ****) nearest integer Fan speed: 480 r/min, compressor frequency: 70Hz.			

Appendix I Test results

Table 4. Clause 4 of EN 14511-4:2022					P
Customer Code	Execution Date [dd-mm-yyyy]	Testing item	Standard Reference	Comment	Test Response
TEST 1	11-07-2023	STARTING TEST	EN14511-4:2022, § 4.2.1.2 Table 3	The "lower" starting operating conditions declared by the manufacturer for the heating mode- i.e. T _{air} =-25.11°C, T _{out water} 25.12°C, Flow rate 0.65m ³ /h have been set and obtained. At those conditions, the machine was switched on. It started without any problem and worked for 30 minutes without showing any warning or alarm. During the test the machine operated in automode. No damage was recorded on the machine during and after the test.	Passed
TEST 2	11-07-2023	OPERATING TEST	EN14511-4:2022, § 4.2.1.2 Table 3	From the machine "lower" starting conditions - i.e. - the machine was brought to the lower operating conditions declared by the manufacturer for the heating mode- i.e. T _{air} =-25.22°C, T _{out water} 50.17°C, Flow rate 0.65m ³ /h. Once these conditions were obtained, the machine was let operate for over 1 hour in automode. During the test, no warning or alarm were showed. No damage was recorded on the machine during and after the test.	Passed
TEST 3	11-07-2023	SHUTTING OFF WATER FLOW	EN14511-4:2022, § 4.5	The water flow rate was shutted off through manual and automatic valves of the test rig. The machine switched off and only the flow switch Protection appeared on the user interface of indoor unit. Perform error reset operation , once the water flow rate was restored, the machine restarted automatically and worked for 30 minutes normally. No damage was recorded on the machine during and after the test.	Passed
TEST 4	11-07-2023	SHUTTING OFF AIR FLOW	EN14511-4:2022, § 4.5	The air flow rate was shutted off through a plastic sheet and a panel. The machine never turned off. It continued to operate with continuous frosting and defrosting cycles. After more than half an hour, the air flow rate was restored and the machine started to operate normally. During the test, no warning or alarm were showed. No damage was recorded on the machine during and after the test.	Passed
TEST 5	11-07-2023	COMPLETE POWER SUPPLY FAILURE	EN14511-4:2022, § 4.6	The power supply was cut off for about 10 seconds. The unit restarted automatically within about 3 minutes after the power supply was reactivated.	Passed

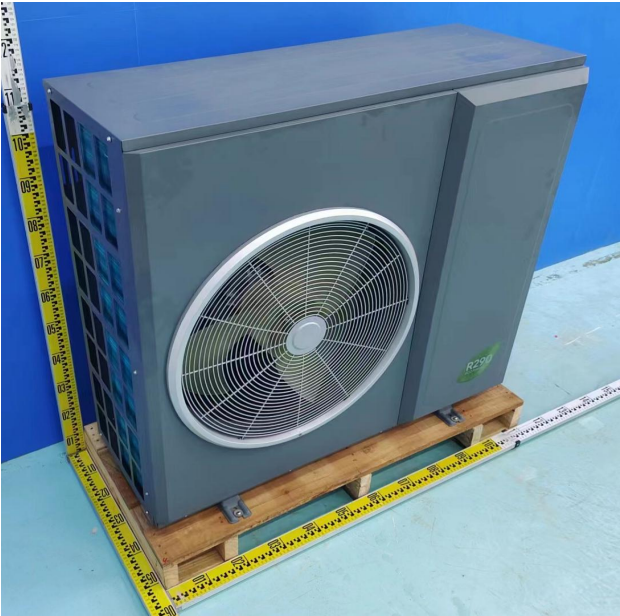
Doc No.: ITC-TTW0902.02E - Rev.12

Appendix II Marking plate

Nameplate																																																	
Model: <u>HS08V-QPNNW</u>																																																	
<p>Inverter Air Source Heat Pump</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Model:</td> <td style="width: 50%;">HS08V-QPNNW</td> </tr> <tr> <td>Cooling capacity (A35/W7°C):</td> <td>1.9-5.35 kW</td> </tr> <tr> <td>Heating capacity (A7/W35°C):</td> <td>2.9-8.2 kW</td> </tr> <tr> <td>Max EER Cooling (A35/W7°C):</td> <td>2.74W/W</td> </tr> <tr> <td>Max COP Heating (A7/W35°C):</td> <td>4.78W/W</td> </tr> <tr> <td>Power supply:</td> <td>220-240V~ 50Hz</td> </tr> <tr> <td>Input Power–Cooling:</td> <td>0.68-1.96 kW</td> </tr> <tr> <td>Input Power–Heating:</td> <td>0.67-1.90 kW</td> </tr> <tr> <td>Rated power input:</td> <td>2.86 kW</td> </tr> <tr> <td>Rated current:</td> <td>12.5 A</td> </tr> <tr> <td>Refrigerant:</td> <td>R290</td> </tr> <tr> <td>Filling weight:</td> <td>0.72 kg</td> </tr> <tr> <td>Pipe connector:</td> <td>G1 "</td> </tr> <tr> <td>Anti electric shock grade:</td> <td>I</td> </tr> <tr> <td>Water proof grade:</td> <td>IPX4</td> </tr> <tr> <td>Nominal flow heating medium:</td> <td>0.65-1.6 m³/h</td> </tr> <tr> <td>Max outlet heating medium temperature:</td> <td>70°C</td> </tr> <tr> <td>Max.Operation pressure of low side:</td> <td>3.0MPa</td> </tr> <tr> <td>Max.Operation pressure of high side:</td> <td>3.0MPa</td> </tr> <tr> <td>Max allowable pressure:</td> <td>3.3MPa</td> </tr> <tr> <td>Internal pressure drop at nominal flow:</td> <td>21kPa</td> </tr> <tr> <td>N.W:</td> <td>106kg</td> </tr> <tr> <td>Series No.:</td> <td></td> </tr> <tr> <td>Manufacture date:</td> <td></td> </tr> </table>		Model:	HS08V-QPNNW	Cooling capacity (A35/W7°C):	1.9-5.35 kW	Heating capacity (A7/W35°C):	2.9-8.2 kW	Max EER Cooling (A35/W7°C):	2.74W/W	Max COP Heating (A7/W35°C):	4.78W/W	Power supply:	220-240V~ 50Hz	Input Power–Cooling:	0.68-1.96 kW	Input Power–Heating:	0.67-1.90 kW	Rated power input:	2.86 kW	Rated current:	12.5 A	Refrigerant:	R290	Filling weight:	0.72 kg	Pipe connector:	G1 "	Anti electric shock grade:	I	Water proof grade:	IPX4	Nominal flow heating medium:	0.65-1.6 m³/h	Max outlet heating medium temperature:	70°C	Max.Operation pressure of low side:	3.0MPa	Max.Operation pressure of high side:	3.0MPa	Max allowable pressure:	3.3MPa	Internal pressure drop at nominal flow:	21kPa	N.W:	106kg	Series No.:		Manufacture date:	
Model:	HS08V-QPNNW																																																
Cooling capacity (A35/W7°C):	1.9-5.35 kW																																																
Heating capacity (A7/W35°C):	2.9-8.2 kW																																																
Max EER Cooling (A35/W7°C):	2.74W/W																																																
Max COP Heating (A7/W35°C):	4.78W/W																																																
Power supply:	220-240V~ 50Hz																																																
Input Power–Cooling:	0.68-1.96 kW																																																
Input Power–Heating:	0.67-1.90 kW																																																
Rated power input:	2.86 kW																																																
Rated current:	12.5 A																																																
Refrigerant:	R290																																																
Filling weight:	0.72 kg																																																
Pipe connector:	G1 "																																																
Anti electric shock grade:	I																																																
Water proof grade:	IPX4																																																
Nominal flow heating medium:	0.65-1.6 m³/h																																																
Max outlet heating medium temperature:	70°C																																																
Max.Operation pressure of low side:	3.0MPa																																																
Max.Operation pressure of high side:	3.0MPa																																																
Max allowable pressure:	3.3MPa																																																
Internal pressure drop at nominal flow:	21kPa																																																
N.W:	106kg																																																
Series No.:																																																	
Manufacture date:																																																	
<div style="display: flex; justify-content: space-around; align-items: center;">   </div>																																																	
<p>Importer:xxx</p> <p>Manufacturer:Guangzhou Hiseer air conditioning Co.,Ltd</p> <p>Xicheng industryzone,Renhe town,Baiyun</p> <p>district,Guangzhou China</p>																																																	
<p>MADE IN CHINA</p>																																																	

Doc No.: ITC-TTW0902.02E – Rev.12

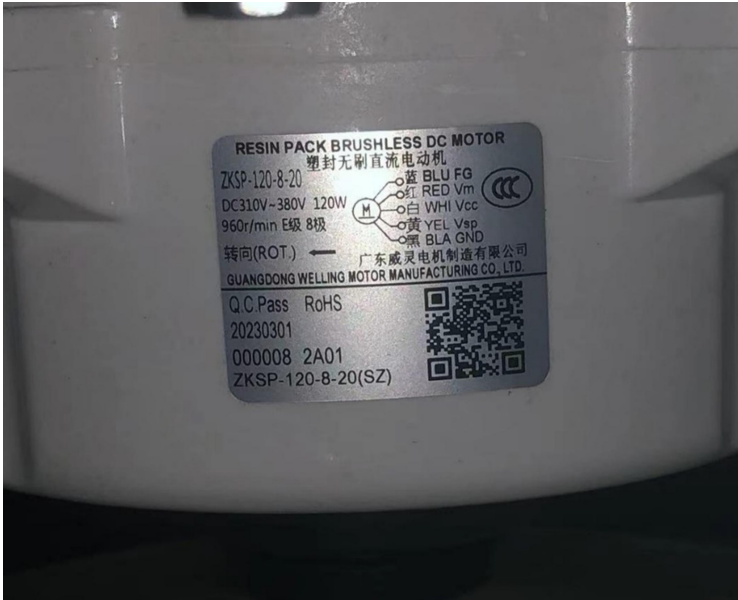
Appendix III photo documentaiton

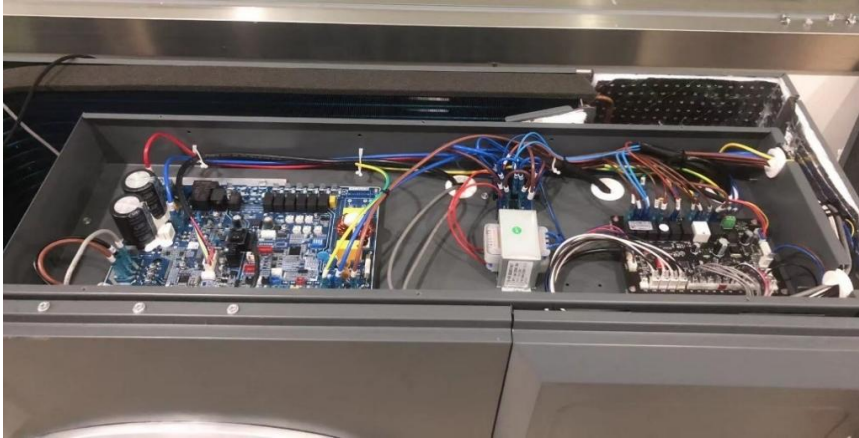
Details of:	Overall view
<div><p>View:</p><div><input type="checkbox"/> General</div><div><input type="checkbox"/> Front</div><div><input type="checkbox"/> Rear</div><div><input type="checkbox"/> Right</div><div><input type="checkbox"/> Left</div><div><input type="checkbox"/> Top</div><div><input type="checkbox"/> Bottom</div></div>	

Details of:	Compressor
<div><p>View:</p><div><input type="checkbox"/> General</div><div><input type="checkbox"/> Front</div><div><input type="checkbox"/> Rear</div><div><input type="checkbox"/> Right</div><div><input type="checkbox"/> Left</div><div><input type="checkbox"/> Top</div><div><input type="checkbox"/> Bottom</div></div>	

Doc No.: ITC-TTW0902.02E – Rev. 12


Appendix III photo documentaiton

Details of:	Fan Motor
View:	
<div><input type="checkbox"/> General</div> <div><input type="checkbox"/> Front</div> <div><input type="checkbox"/> Rear</div> <div><input type="checkbox"/> Right</div> <div><input type="checkbox"/> Left</div> <div><input type="checkbox"/> Top</div> <div><input type="checkbox"/> Bottom</div>	

Details of:	Main Control Board
View:	
<div><input type="checkbox"/> General</div> <div><input type="checkbox"/> Front</div> <div><input type="checkbox"/> Rear</div> <div><input type="checkbox"/> Right</div> <div><input type="checkbox"/> Left</div> <div><input type="checkbox"/> Top</div> <div><input type="checkbox"/> Bottom</div>	

Doc No.: ITC-TTW0902.02E – Rev.12

Appendix III photo documentaiton

Details of:	Water Pump
View:	
<input type="checkbox"/> General	
<input type="checkbox"/> Front	
<input type="checkbox"/> Rear	
<input type="checkbox"/> Right	
<input type="checkbox"/> Left	
<input type="checkbox"/> Top	
<input type="checkbox"/> Bottom	

Doc No.: ITC-TTW0902.02E – Rev. 12

Appendix IV Construction data form

Model: <u>HS08V-QPNNW</u>		
Part		Technical data
1. Compressor		
	Manufacture:	Shanghai Highly Electrical Appliance Co., Ltd.
	Type:	WHP07600PSDPC9KQ
	Rated capacity:	7475W
	Serial-number:	W5WN5H06K454
	Specification:	DC143.5V; R290
2. Condenser		
	Manufacture:	Multistack Thermal Co., Ltd.
	Type:	MTB085HP-35-Q(N)
	Heat exchanger:	Brazed plate heat exchanger
	Dimension(mm):	W*H*D: 126.6*541.8*86
3. Evaporator		
	Manufacture:	Foshan Nanhai Tansda Refrigeration Equipment Co., Ltd.
	Type:	HS10V.CH.00
	Heat exchanger:	aluminum finned coil heat exchanger
	Dimension(mm):	W*H*D: 779*300*966
4. Fan motor		
	Manufacture:	GUANGDONG WELLING MOTOR MANUFACTURING CO., LTD.
	Type:	ZKSP-120-8-20
	Fan type:	3 blade
	Specification:	DC310V~380V; 120W
5. Main control board		
	Manufacture:	Hefei Shiyan Electronic Technology Co.,Ltd.
	Type:	SP.KYZ1.5-4.1-V2.0
	Specification:	220-240V~/50Hz
6. Water pump		
	Manufacture:	SHIMGE PUMP INDUSTRY(JIANGSU)CO.,LTD.
	Type:	APF25-8-130E FPWM1
	Specification:	230V~; 50/60Hz; 8-90W

Appendix V Equipment List

No.	Type	Manufacture	Model	Equipment ID	Calibration Due Date
1	Heat pump energy efficiency testing system	PINXIN	10HP	2017J00001	2023-11-24
2	Electromagnetic flowmeter	KROHNE	OPTIFLUX4100 C	H17221264	2023-12-21
3	20 Channel noise and vibration testing system	RION	SA-02M	CQCSC-BE-0026	2024-01-11
4	Nosie Testing Lab	Beijing Zhongjia Zhirui Technology Co., LTD	ZR-02	CQCSC-BE-0026	2023-11-22
5	Nosie Testing Lab (environmental control system)	Beijing Zhongjia Zhirui Technology Co., LTD	ZR-02	CQCSC-BE-0026	2023-11-22

-- End of Report --