

Technical Report No. 64.110.09.1472.01

Rev. 00

Dated 2009-11-17

Client: Guangzhou Hiseer Air conditioning Co., Ltd.
Xicheng industry zone, Renhe town, Baiyun district, Guangzhou
P.R. China
Mr. Zhou

Manufacturing place: Guangzhou Hiseer Air conditioning Co., Ltd.
Xicheng industry zone, Renhe town, Baiyun district, Guangzhou
P.R. China

Test subject: Product: Geothermal Heat Pump

Type: GHP15

Test specification: EN 14511-2:2007 Clause 4
EN 14511-3:2007 Clause 4

Purpose of examination: Test according to the test specification
The tests were carried out at following condition specified by
client.

Indoor water inlet temperature (°C): 30;
Indoor water outlet temperature (°C): 35;
Outdoor water inlet temperature (°C): 10;
Outdoor water outlet temperature (°C): 7.

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1 Description of the test subject

1.1 General Product Information

1. The appliance is a water source heat pump used for water heating. The main power is supplied by a three phase, 4-pole power supply cord supplied by the manufacture.
2. Attachment no. 1: 5 pages photos of the appliances
Attachment no. 2: 1 page construction data of the appliances
Attachment no. 3: 1 page labels of the appliances

1.2 Technical Data

Model:	GHP15
Serial number:	N.A
Year of production:	2009
Rated Voltage:	380-415VAC 3PH
Max. permissible pressure reference (if ducted):	N.A
Rated Frequency:	50Hz
Rated Power Input:	3.5kW
Rated Current:	6.6A
Protection Class:	Class I
Protection Against Moisture:	IPX4
Construction:	Fixed appliance
Supply connection:	Fixed wiring
Operation mode:	Continuous
Type of refrigerant:	R410A
Mass of refrigerant:	2000g
Water flow rate:	2.67m ³ /h (indoor side) 3.44m ³ /h (outdoor side)
Vent-pipe(if ducted):	N.A.

2. Order

2.1 Date of Test Order, applicant's Reference

2009-10-23
Mr. Zhou Fuhua

2.2 Receipt of Test Sample, Location

2009-10-23

Guangzhou Vkan Certification and Testing Institute



Product Service

Guangzhou Vkan Certification and Testing Institute

No.3 Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, P. R. China

2.3 Date of Testing

2009-10-23~2009-11-11

2.4 Location of testing

Guangzhou Vkan Certification and Testing Institute

No.3 Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, P. R. China

3. Test result

See the test data in the following pages.

4. Remark

4.1 Remarks to Factory

The assembly of the product has to comply with the documentation (CDF). Before the implementation of relevant modifications to the product into the ongoing production the product must be assessed for acceptance. The results must be implemented to the documentation and if necessary a retest must e performed.

Jiangsu TÜV Product Service Ltd.-Guangzhou Branch
TÜV SÜD Group

Engineer: 

(Ivan Sun)



Technical Report checked: 

(Gary Sun)

Model		GHP15	
Compressor built-in		Hitachi: E605DH-59D2G	
Mode		Heating	
Test method		Enthalpy method	
Test condition (T1 moderate)	Environmental conditions	DB/WB (°C)	--
		DB/WB (°C)	--
Measured temperture		DB/WB (°C)	--
		DB/WB (°C)	--
Atmospheric pressure (kPa)		90.35	
Test voltage		398.0VAC	
Test frequency		50 Hz	
Length of the refrigerant line(split type)		--	
Total current (A)		6.59	
Total power input (P_T) (W)		3592	
Effective power input (P_E) (W)		3592	
Air inlet evaporator temperature, DB/WB (°C)		--	
Air outlet evaporator temperature, DB/WB (°C)		--	
Air inlet condenser temperature, DB/WB (°C)		--	
Air outlet condenser temperature, DB/WB (°C)		--	
Indoor water inlet temperature (°C)		30.0	
Indoor water outlet temperature (°C)		34.9	
Indoor water volume flow (m ³ /h)		3.56	
Outdoor water inlet temperture (°C)		10.0	
Outdoor water outlet temperture (°C)		7.1	
Outdoor water volume flow (m ³ /h)		4.65	
Total heating capacity (P_h) (W)		20170	
COP (W/W)		5.62	
Annual energy consumption (kWh)		2276	
Remark: the test was carried out at the ambient temperature of 25°C			

Photo documentations

Model: GHP15

Details of: The appliance installation



Details of: The appliance installation



Details of: General view



Details of: General view



Details of: Electric control box



Details of: Internal view



Details of: Compressor



Details of: Heat exchanger



**Construction data form**

Model: GHP15

Part		Technical data
1. Compressor		
	Manufacture	Hitachi Compressor Products (GUANGZHOU) CO., LTD
	Type	E605DH-59D2G
	Rated capacity	15500W
	Serial-number	--
	Rated input	3Ph-380~415V-50Hz, R410A,5400W
2. Heat exchanger		
	Type	V25THx40/1P-SC-M
	Manufacture	SWEP Technology (SUZHOU) Co., Ltd.
	Bauart Construction	Compact Brazed Plate Heat Exchanger
	Number of plates	40
	Heating exchange area	2.394 m ²
	Max. permissible pressure	50 bar
	Dimension	526(L)X98(H)X119(D)mm
3. Controller		
	Type	RWR470.10
	Manufacture	Siemens



Labels of the appliances

Copy of marking plate:

Geothermal

Heating only Unit

Model:	GHP15
Heating capacity:	15.5kW
Power supply:	380-415V/3/50Hz
Rated power input:	3.5kW
Rated current:	6.6A
Max power input:	5.13 kW
Max current:	9.7A
Refrigerant:	R410A
Filling weight:	2000g
Hot side volume flow:	2.67m ³ /h
Cold side volume flow:	3.44m ³ /h
Permissible operating pressure:	4.2Mpa
Pipe connector-hot side:	G1-1/4"
Pipe connector-cold side:	G1-1/4"
Anti electric shock grade:	I
Water proof grade:	IP20
Weight:	150kg
Series No.:	
Manufacture date:	