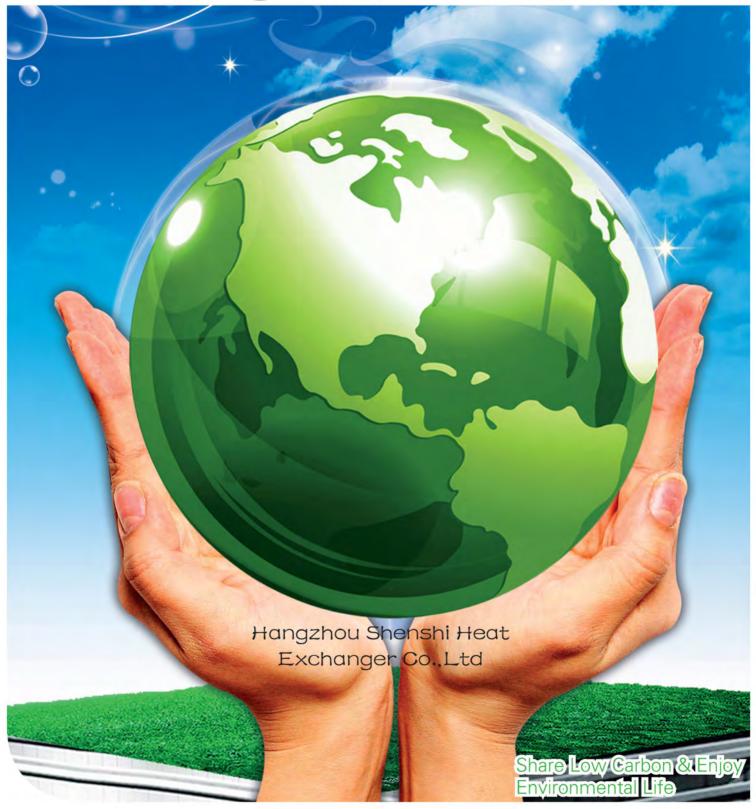


# Heat exchanger expert



## The Introduction of company

Hangzhou shenshi heat exchanger Co.,Ltd, established in 2005 in Hangzhou, is leading professional patented manufacturer of coaxial heat exchanger in China incorporating R&D, manufacturing and sales departments.

Since its inception, Shenshi has been dedicate to research and development of energy-saving, environmental-friendly and high-efficiency heat exchanger products. All products Shenshi provided features our core heat transfer technology with independent intellectual property rights. Shenshi coaxial heat exchanger tubes are available in copper, cupronickel, stainless steel, titanium and so on, widely applied on water chiller, air source/water source heat pump, geothermal heat pump, marine heat pump, pool or spa heat pump, laser chiller, oil cooler and other air-conditioner and refrigeration machines such as medical process equipment, food processing machine, chemical processing equipment.

Thanks to strong support from kind customers and social communities after establishment, the company has been identified as national new high-tech enterprises, high-tech R & D center of Hangzhou, industrial informationization application demonstrative enterprise of Jiande City in recent years.

Relying on the spirit of continuous innovation, strict quality management, advanced Production equipment and professional organization management system, Shenshi people are full of enthusiasm to face challenges and selection form market and strive to provide our customers excellent high-quality products. We also sincerely hope that more and more customers use our products in the near future and benefit from it.

Our slogan: We will be the best!





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## **Products**



### **Process Flow**



Ultrasound cleaning



Auto bending equipment



**Customized parts** 



Welding



Helium test detector



Grinding and polishing



Pressure-keeping

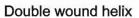


Transportation

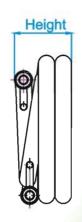


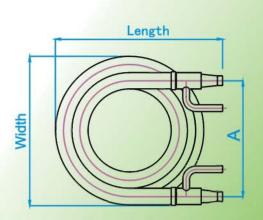
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### External Dimensions • • • •

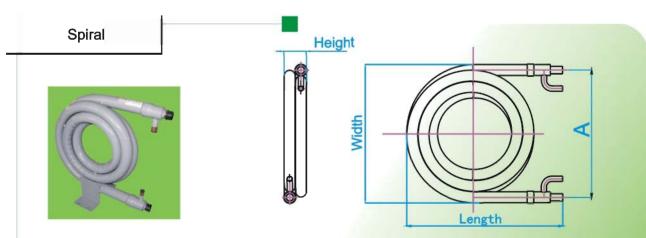








Mode I	Refrigerant connection	Water connection	Length	Height	Width	A
SS-0250GT-P	12.70	19.05	316	130	264	204
SS-0300GT-P	15.88	22.23	352	129	313	247
SS-0400GT-P	15.88	22.23	413	125	359	287
SS-0600GT-P	19.05	28.60	451	184	387	305
SS-0650GT-P	19.05	28.60	457	187	445	356



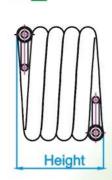
Refrigerant connection	Water connection	Length	Height	Width	A
9.52	12.70	295	54	238	212
9.52	15.88	352	60	289	260
15.88	22.20	397	73	344	305
15.88	22.20	438	73	389	352
15.88	22.20	460	81	394	352
19.05	28.60	498	94	433	387
19.05	28.60	518	94	468	420
22.20	28.60	568	92	509	464
	9.52 9.52 15.88 15.88 15.88 19.05 19.05	connection         connection           9.52         12.70           9.52         15.88           15.88         22.20           15.88         22.20           15.88         22.20           15.88         22.20           19.05         28.60           19.05         28.60	connection         connection         Length           9.52         12.70         295           9.52         15.88         352           15.88         22.20         397           15.88         22.20         438           15.88         22.20         460           19.05         28.60         498           19.05         28.60         518	connection         Length         Height           9.52         12.70         295         54           9.52         15.88         352         60           15.88         22.20         397         73           15.88         22.20         438         73           15.88         22.20         460         81           19.05         28.60         498         94           19.05         28.60         518         94	connection         Length         Height         Width           9.52         12.70         295         54         238           9.52         15.88         352         60         289           15.88         22.20         397         73         344           15.88         22.20         438         73         389           15.88         22.20         460         81         394           19.05         28.60         498         94         433           19.05         28.60         518         94         468

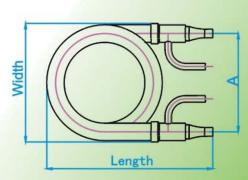
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## External Dimensions • • • • •

### Round



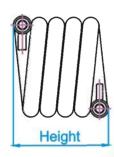


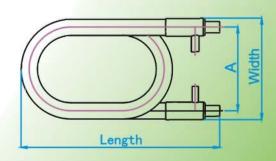


Mode I	Refrigerant connection	Water connection	Length	Height	Width	A
SS-0050GT	9.52	12.70	252	98	168	143
SS-0075GT	9.52	12.70	252	121	168	143
SS-0100GT	9.52	12.70	252	144	168	143
SS-0150GT	9.52	15.88	252	133	259	230

### **Trombone**







Mode I	Refrigerant connection	Water connection	Length	Height	Width	Α
SS-0150GT-U	9.52	15.88	502	87	162	133
SS-0300GT-U	16.00	22.20	635	102	218	185
SS-0400GT-U	16.00	22.20	727	117	264	226
SS-0500GT-U	19.05	28.60	586	184	290	245
SS-0600GT-U	19.05	28.60	687	184	290	245

#### **Dual/multi-circuits**

dual circuits and mnlti-circuits is available for your bigger heat transferring requirement.
 Flexible designings and customized manufacturing can meet your various requirements.











## Coaxial heat exchanger for air source heat pump heater •

Air source heat pump heater is one electrically driven heating system which provides hot water or household heating using outside air as a heat source. Coaxial heat exchanger is used in water side to heat water.

#### Features:

### 1. High efficiency

The patented convoluted inner tube increases heat transfer area and strongly enhances heat transfer between water and refrigerant.

#### 2. Anti-freezing capability

Multi-spiral structure of inner tube imparts outstanding anti-freezing capability to coaxial heat exchanger.

#### 3. Cleanness

Multi-spiral structure of inner tube allows water flow in high-speed turbulent state which will remove foul automatically to remain channel a high cleanness in long-term running.

#### 4. Convenient installation

Heat exchanger features simple overall structure where compressor and other components can be placed within.

#### 5. Running stable

Overall structure facilitates collection of condensed liquid refrigerant. Drain valve and release valve can place in water connection to make sure running safety reliability.

## Direct heating type — Performance:

Compressor	Model	Condenser Capacity kW	Water flow rate m/h	Water pressure drop kPa
3HP	SS-0270GT	12	2.1	35
4HP	SS-0300GT	16	2.8	40
5HP	SS-0325GT	20	3.5	60
8HP	SS-0300GT-S	31	5.6	45
10HP	SS-0325GT-S	39	7	65



#### Notes:

- 1) Direct heating type working conditions: inlet/outlet water temperature 15℃/55℃,Condensing temperature 60℃.
- 2) Refrigerant: R22、R410A、R407C、R134a、R404A、R417A。
- 3) Dimensional configuration are available in Helix, Trombone ,Rectangle etc.
- 4) Designing pressure:

	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Water side	1.5MPa	1.5MPa

## Cycle heating type—Performance:

Style	Model	Condenser Capacity kW	Water flow rate m³/h	Water pressure drop kPa
	SS-0050GT	2.1	0.4	10
	SS-0075GT	3.2	0.6	15
	SS-0100GT	4.3	0.8	18
	SS-0150GT	6.2	1.1	25
	SS-0150GT-U	6.2	1.1	22
	SS-0200GT-U	9	1.5	25
	SS-0250GT-U	12	2.1	35
	SS-0300GT-U	15	2.6	35
	SS-0360GT-U	18	3.1	55
	SS-0420GT-U	22	3.8	65
	SS-0400GT-U	18	3.1	30
	SS-0500GT-U	20.2	3.5	35
	SS-0525GT-U	24	4.2	40
	SS-0600GT-U	28.3	4.9	45
	SS-0250GT-P	9	1.5	22.5
	SS-0300GT-P	10.8	1.9	27.5
M Tu	SS-0400GT-P	13.2	2.3	20.5
	SS-0500GT-P	18	3.1	24
	SS-0600GT-P	21.7	3.7	22.5
	SS-0650GT-P	25.8	4.4	42.5
	SS-0130GT-W	4.8	0.8	25
	SS-0160GT-W	7.6	1.3	30
	SS-0240GT-W	8.8	1.5	54
	SS-0360GT-W	10.6	1.8	44
	SS-0430GT-W	12.3	2.1	37
43	SS-0480GT-W	14.7	2.5	38
	SS-0520GT-W	16.5	2.8	21
	SS-0650GT-W	21.2	3.6	32



#### Notes:

- 1) Cycle heating type working conditions: R22 inlet/outlet water temperature 15°C/55°C, Variable condensing temperature.
- 2) Refrigerant: R22、R410A、R407C、R134a、R404A、R417A,
- 3) Working pressure:

	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Water side	1.5MPa	1.5MPa

4) Dimension and shape are subject to customers' requirement.

### 

Water source heat pump system is one of the most efficient, environmentally friendly heating and/or cooling system using earth ()as a heating source or a heat sink. As one key component in load side, coaxial heat exchanger features a number of advantages comparing with other types heat exchanger.

#### Features:

#### 1. High efficiency

The patented convoluted inner tube increases heat transfer area and strongly enhances heat transfer between water and refrigerant.

### 2. Anti-freezing capability

Multi-spiral structure of inner tube imparts outstanding anti-freezing capability to coaxial heat exchanger.

#### 3. Cleanness

Multi-spiral structure of inner tube allows water flow in high-speed turbulent state which will remove foul automatically to remain channel a high cleanness in long-term running.

#### 4. Convenient installation

Heat exchanger features simple overall structure where compressor and other components can be placed within.

#### 5. Running stable

Overall structure facilitates collection of condensed liquid refrigerant. Drain valve and release valve can place in water connection to make sure running safety reliability.







### Performance:

Unit: kW

	water-water		-water	water-air / water-water heat source side					Water
Style	Model	load	l side	Wate	rloop	Ground	d water	Water flow rate	pressure drop
		12/7	40/45	30/35	20/	18/29	15/	m³/h	kPa
-	SS-0050GT	1.1	2	2	1.8	2.1	1.4	0.4	10
	SS-0075GT	1.6	3	3	2.6	3.2	2.1	0.6	15
	SS-0100GT	2.2	4	4	3.5	4.2	2.8	0.8	18
	SS-0150GT	3.3	6.1	6.1	5.3	6.4	4.2	1.1	25
	SS-0150GT-U	3.3	6.1	6.1	5.3	6.4	4.2	1.1	22
	SS-0200GT-U	4.3	9	9	7.4	10	5.6	1.5	25
	SS-0250GT-U	5.4	12	12	8.5	13.7	7	2,1	35
	SS-0300GT-U	6.5	15	15	10.5	16.5	8.4	2.8	40
	SS-0360GT-U	7.6	18	18	12.3	20.5	9.8	3.5	60
	SS-0420GT-U	9.8	22	22	15.9	23.1	12.7	4.2	65
	SS-0400GT-U	8.7	16.2	18	14.1	17	11.3	2.8	30
	SS-0500GT-U	10.9	20.2	20.2	17.6	21.2	14.1	3.5	35
	SS-0525GT-U	12	22.2	22.2	19.4	23.4	15.5	3.8	38
	SS-0600GT-U	13.1	24.3	24.3	21.1	25.5	16.9	4.9	45
	SS-0250GT-P	5.5	10.1	10.1	8.8	10.6	7	1.5	22.5
	SS-0300GT-P	6.5	12.1	12.1	10.5	12.7	8.4	1.9	27.5
	SS-0400GT-P	8.7	16.2	16.2	14.1	17	11.3	2.3	20.5
	SS-0500GT-P	10.9	20.3	20.3	17.6	21.3	14	3.1	24
<b>S</b>	SS-0600GT-P	13.1	24.3	24.3	21.1	25.5	16.9	3.7	22.5
	SS-0650GT-P	14.2	26.3	26.3	22.9	27.6	18.3	4.4	42.5
	SS-0130GT-W	3.1	4.8	4.8	4.4	5.1	3.8	0.8	25
	SS-0160GT-W	4.2	7.6	7.6	7	8.4	5.4	1.3	30
	SS-0240GT-W	4.7	8.8	8.8	7.9	9.8	6.2	1.5	54
	SS-0360GT-W	6	10.6	10.6	9.4	12	7.6	1.8	44
<b>2</b> .	SS-0430GT-W	7.2	12.3	12.3	11	13.8	8.8	2,1	37
40	SS-0480GT-W	8.6	14.7	14.7	13.1	16	9.9	2.5	38
	SS-0520GT-W	10.2	16.5	16.5	14.3	17.5	11	2.8	21
	SS-0650GT-W	11.4	21.2	21.2	18.2	23,4	12.1	3.6	32

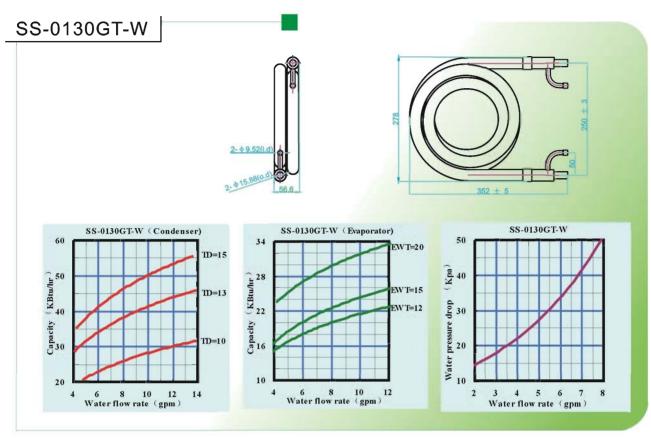
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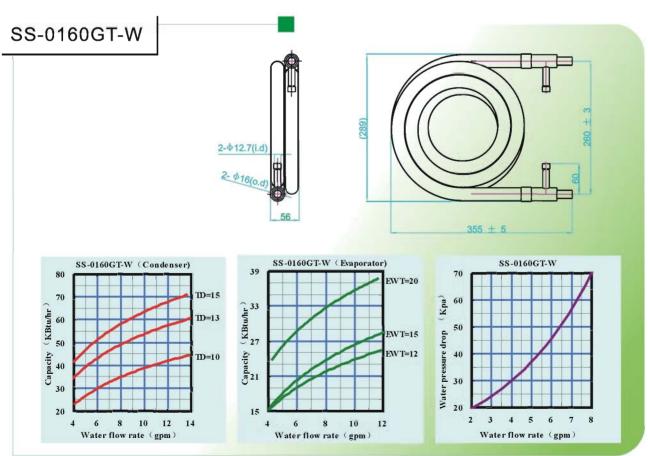
- 1) Applicable both in load side and source side for water-water heat pump unit.
- 2) Applicable in source side for water-air heat pump unit.
- 3) Refrigerant: R22、R410A、R407C、R134a、R404A、R417A。
- 4) Working pressure:

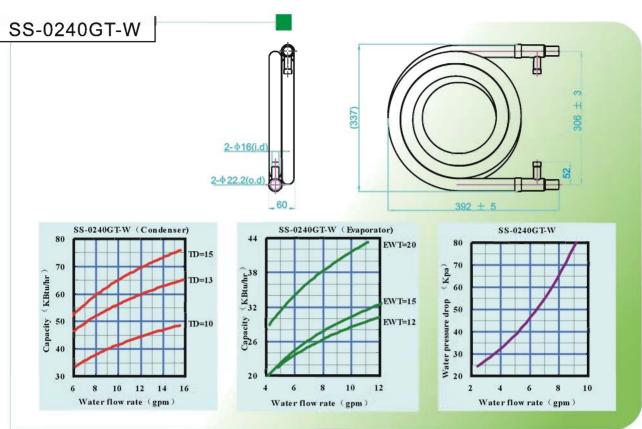
	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Waterside	1.5MPa	1.5MPa

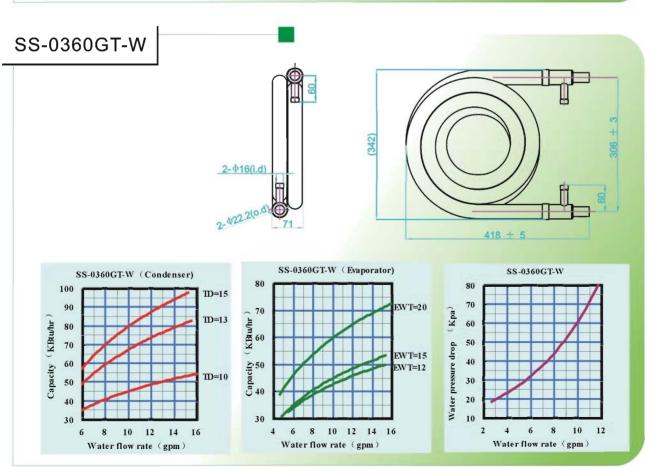
5) Due to a continuous program of product improvement, specification and dimensions are subject to change without notice.

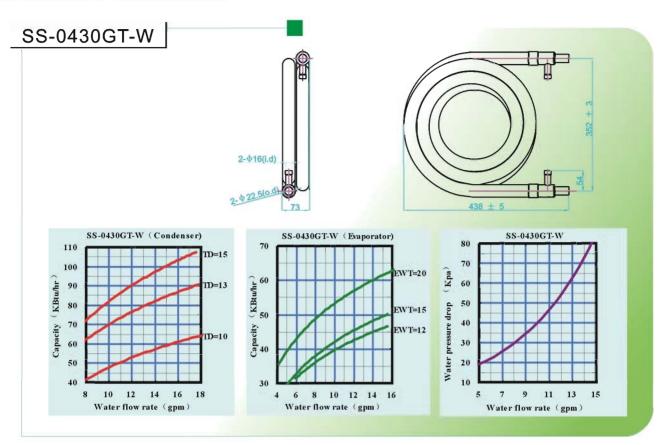
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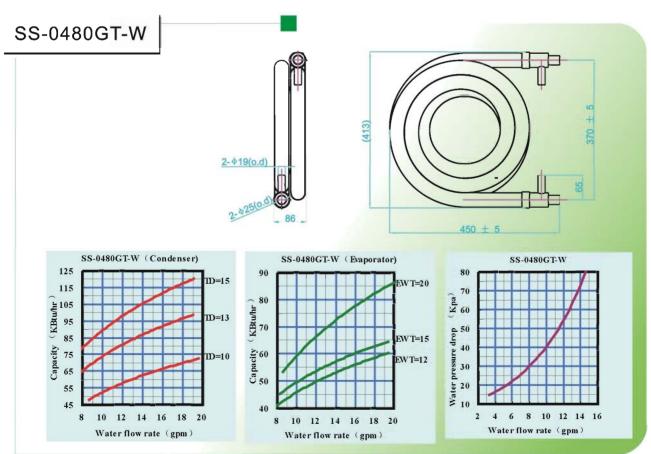


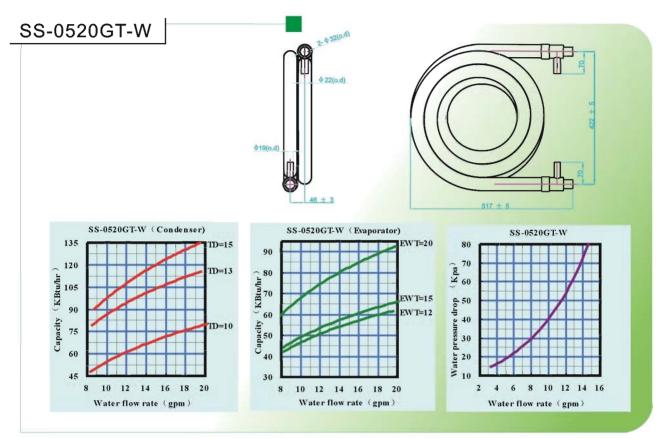


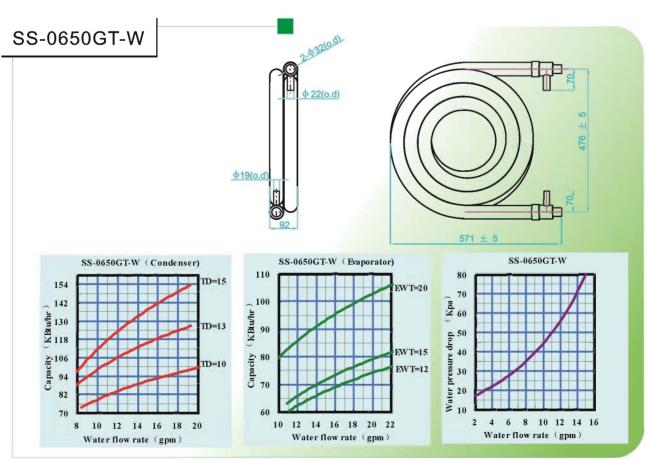












### Doublewall coaxial heat exchanger • • • • •

### Features:

### 1. Widespread application

Doublewall inner tube can widely used in domestic hot water heater ,food industry ,chemistry and other professional fields.

### 2. Safety

Unique double twisted inner tube effectively avoids contact between water and refrigerant when there is a leak happens.

### 3. Anti-freezing capability

Multi-spiral structure of inner tube imparts outstanding anti-freezing capability to coaxial heat exchanger.

#### 4. Cleanness

Multi-spiral structure of inner tube allows water flow in high-speed turbulent state which will remove foul automatically to remain channel a high cleanness in long-term running.

#### 5. Convenient installation

Heat exchanger features simple overall structure available in Helix, Trombone and Rectangle according to customers' requirement.



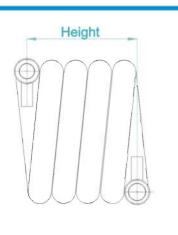


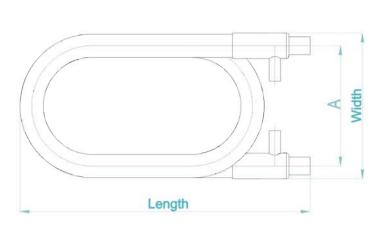


SS HZSS

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### **Dimensions:**





Unit: mm

Model	Refrigerant Connection In/Out	Water Connection In/Out	Length	Height	Width	A
SS-0085GTT-U	9.52/12.7	19	499	111	221	185
SS-0130GTT-U	12.7/19	19	587	134	221	185
SS-0300GTT-F-S	9.52/12.7	28	688	233	288	250

### Performance:

Compressor	Model	Capacity kW	Water flow rate <sup>m³</sup> /h	Water pressure drop kPa
1HP	SS-0085GTT-U	3	1.2	10
1. 5HP	SS-0130GTT-U	4	1.2	15
2HP	SS-0300GTT-F-S	7. 2	1.2	18

#### Notes:

- 1) Heat pump heat working conditons: inlet/outlet water temperature 15°C/55°C, water flow rate 1.2 m³/h, variable condensing temperature.
- 2) Refrigerant: R22、R410A、R407C、R404A、R417A.
- 3) All performance data are based on refrigerant R22.
- 4) Working pressure:

	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Water side	1.5MPa	1.5MPa

5) Due to a continuous program of product improvement, Specification and dimensions are subject to change without notice.

## Titanium coaxial heat exchanger ● • • • •

#### Features:

#### 1. Corrosion resistance

Applicable to bad-quality water conditions such as swimming pool, aquarium, sea bathing due to excellent corrosion resistance of inner tube industrial pure titanium.

### 2. High efficiency

The patented convoluted inner tube increases heat transfer area and strongly enhances heat transfer between water and refrigerant.

### 3. Anti-freezing capability

Multi-spiral structure of inner tube imparts outstanding anti-freezing capability to coaxial heat exchanger.

#### 4. Cleanness

Multi-spiral structure of inner tube allows water flow in high-speed turbulent state which will remove foul automatically to remain channel a high cleanness in long-term running.

#### 5. Convenient installation

Water connection use titanium flange and titanium thread to connect making it easy and convenient to install and uninstall.

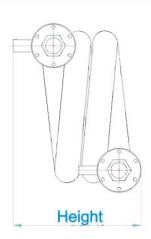


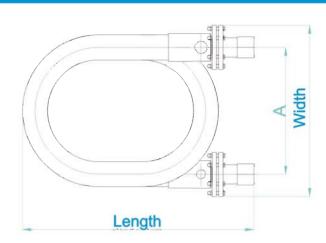




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### **Dimensions:**





Unit: mm

Model	Refrigerant Connection	Water Connection	Length	Height	Width	A
SS-0200GTi-U	16/19	G1"	420	232	310	230
SS-0250GTi-U	16/19	G1"	537	232	310	230
SS-0300GTi-U	16/19	G1"	420	278	310	230
SS-0350GTi-U	16/19	G1"	420	324	310	230
SS-0400GTi-U	19/22	G1"	473	344	310	230
SS-0500GTi-U	19/22	G1"	550	330	310	230

## Performance:

Model	Water flow rate T/h	Water pressure drop kPa	Capacity kW
SS-0200GTi-U	3.8	20.5	11
SS-0250GTi-U	5.2	37.4	15
SS-0300GTi-U	6.4	68	18.5
SS-0350GTi-U	8.1	93	23.5
SS-0400GTi-U	9.4	120	26.5
SS-0500GTi-U	10.3	130	30

#### Notes:

- 1) Above performance data are based on the given working conditions: Entering water temperature 26.7℃; Leaving water temperature 29.2℃; Condensing temperature 40℃ and R410A refrigerant
- 2) Titanium coaxial heat exchanger dimensional configurations are available in Helix, Trombone and Rectangle.
- 3) Refrigerant: R22、R410A、R407C、R134a、R404A、R417A.
- 4) Working pressure:

	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Water side	1.5MPa	1.5MPa

5) Due to a continuous program of product improvement, specification and dimensions are subject to change without notice.



## 

#### Features

Compact: Highly structured with thin metal heat transfer tube for high heat transfer coefficient;

Stability: Working safely and reliable with high-quality metal heat transfer tube withstanding

high temperatures and high pressure;

Light weight: High-strength plastic shell, low cost for transportation and installation;

Detachability: Modular design facilitates installation and cleaning regularly;

Applicability: Heat transfer tube can be copper. stainless steel and cupronickel etc.

**Application** 

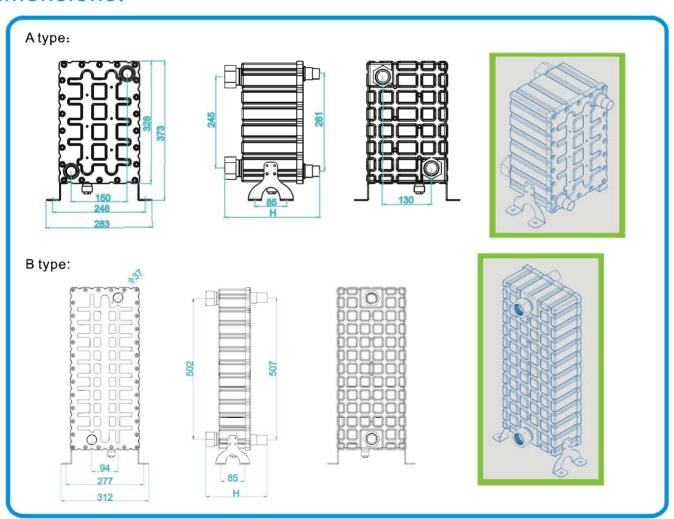
HVAC&R Condenser, Evaporator, Oil chiller, Superheater etc;

Chemistry Industry Heating and cooling process. Condensation or Evaporation;

Electricity Industry Oil chilling for transformer. Turbine oil cooling;

Metallurgy Industry Lubrication oil cooling, circulation water cooling.

### **Dimensions:**





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### Performance:

e e	Model	Туре	H (mm)	Rated cooling capacity(kW)	Rated Water flowrate(m³/h)	Water pressure drop(kPa)	Working conditions
Module	SS-F060-T		170	6	1. 04	18	
Š	SS-F090-T	Α	182	9	1. 55	20	Cooling: inlet/outlet
D	SS-F150-T	^	230	15	2. 58	26	12°C/7°C, Evaporating temp2°C
pelooo	SS-F180-T		254	18	3.1	27	
Ŝ	SS-F240-T		218	24	4. 13	20	Heating: inlet/outlet 40℃/45℃, Condensing temp 50℃.
Air.	SS-F300-T B	266	30	5. 16	25	Daniel Strain Composition	
<	SS-F360-T		314	36	6. 19	30	

heater	Model	Туре	H (mm)	Rated cooling capacity(kW)	Rated Water flowrate(m³/h)	Water pressure drop(kPa)	Working conditions
عّ	SS-R080-T		170	8	1.38	18	
<u>d</u>	SS-R120-T	^	182	12	2.06	30	Heating: inlet/outlet
mnd	SS-R200-T	Α	230	20	3.54	40	15°C/55°C,
	SS-R240-T		254	24	4.14	52	Variable condensing
Heat	SS-R320-T		218	32	5.5	35	temp.
<u> </u>	SS-R400-T	В	266	40	6.88	40	
	SS-R480-T		314	48	8.25	45	

water source for cool air	Model Type		Type H (mm)		source (kW)	Rated Water flowrate	Water pressure drop	Working of the American Workin	conditions urce side)
				Cooling	Heating	m <sup>3</sup> /h	kPa	Water loop	Underground Water
ate	SS-S080-T		170	8	7	1. 38	18		
3.0	SS-S120-T	A	182	12	10.5	2. 06	30	Cooling:	Cooling:
a E	SS-S200-T		230	20	18	3. 54	40	30/35℃,40℃,	18/29°C,33°C,
cooled t pump t	SS-S240-T		254	24	22	4. 14	52	Heating:	Heating:
Water-c	SS-S320-T		218	32	24	5. 5	35	20°C/, 8°C	15℃/, 2.5℃
ate he	SS-S400-T	В	266	40	30	6. 88	40		
3	SS-S480-T		314	48	36	8. 25	45		

source	Model	Туре	H (mm)	Heat source side(kW)		Rated Water flowrate Water pressure drop		Working conditions (load side)
2 2					Heating	m³/h	kPa	THE RELEASE CONTRACT
ate	SS-S060-T		170	6	8	1. 38	18	
3.0	SS-S090-T	Α	182	9	12	2.06	30	Cooling:
p de	SS-S150-T	^	230	15	20	3. 54	40	12/7℃,2℃,
ÖE	SS-S180-T		254	18	24	4.14	52	Heating:
2.2	SS-S240-T		218	24	32	5. 5	35	40/45℃, 50℃
Water-cooled water heat pump for cool	SS-S300-T	В	266	30	40	6. 88	40	
35	SS-S360-T		314	36	48	8. 25	45	4

#### Note:

- 1) Refrigerant: R22、R410A、R407C、R134a、R404A、R417A.
- 2) All above performance data are based on R22.
- 3) Working pressure:

	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Water side	1.5MPa	1.5MPa

## 

#### Features

Compact: Highly structured with thin metal heat transfer tube for high heat

transfer coefficient;

Stability: Working safely and reliable with high-quality metal heat transfer

tube withstanding high temperatures and high pressure;

Light weight: High-strength plastic shell, low cost for transportation and

installation;

**Detachability:** Modular design facilitates installation and cleaning regularly;

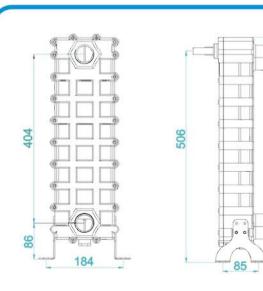
Applicability: Heat transfer tube can be titanium, erosion resistance

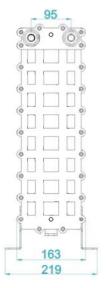
### **Application**

Swimming pool swimming pool spa
Aquaculture sea-farming

**Mechanical industry** marine cooling, engine temperature controlling

### **Dimensions:**







### Performance:

Model	Water flow rate (kW)	Water pressure drop (m³/h)	Capacity (kPa)
SS-Y150-Ti	15	5.16	10
SS-Y250-Ti	25	8.6	20
SS-Y300-Ti	30	10.32	30

#### Notes:

- 1. Working conditions inlet/outlet water temperature 26.7 ℃/29.2℃, condensing temperature 40℃; All performance data are based on refrigerant R410A。
- 2. Refrigerant: R22. R410A. R407C. R134a. R404A. R417A.
- 3. Working pressure:

	R410A	R22
Refrigerant side	4.2MPa	3.5MPa
Water side	1.5MPa	1.5MPa

4. Due to a continuous program of product improvement, specification and dimensions are subject to change without notice.

## Refrigerant heat exchanger • • • • •

### Leading role in refrigerant system:

- 1. To subcool the liquid to prevent flash gas in the liquid line improving expansion valve operation .
- 2. To evaporate any refrigerant droplets in the vapor channel to prevent possible compressor damage
- 3. To increase evaporator capacity and overall refrigeration system by subcooling the hot liquid refrigerant.

### Straight line type Features:

- 1) Multi-spiral structure of inner tube imparts turbulent state to both liquid and vapor refrigerant which greatly enhance heat transfer between two fluids.
- 2) Fluted inner tube design controls pressure drop and gas velocity for quiet operation.
- 3) Inner tube made of a whole straight copper tube gives a well welding reliability to heat Exchanger.
- 4) Available in all-copper and steel-copper construction..

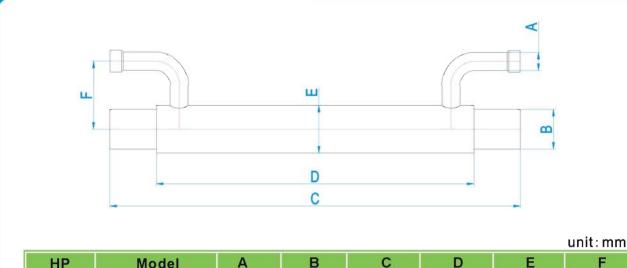
### Trombone type Features:

- 1) Long channel provides high subcooling to improve expansion valve operation
- 2) Variable inner tube construction both in twisted and smooth type.



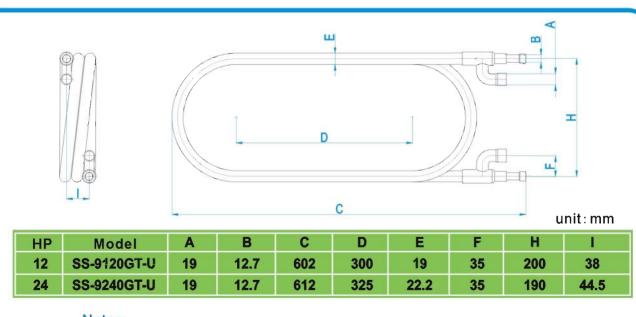


## Straight line type Dimensions



HP	Model	Α	В	C	D	Е	F
1	SS-9010TT-Z	9.52	16	350	300	28	32
1-1/2	SS-9015TT-Z	9.52	22	350	300	35	36
2	SS-9020TT-Z	9.52	28	350	270	42	39
3	SS-9030TT-Z	9.52	28	350	270	42	39
5	SS-9050TT-Z	16	35	350	270	54	60

## **Trombone type Dimensions**



#### Notes:

- 1) Working conditions: gas side inlet temperature 20  $^{\circ}$ C, outlet temperature 25  $^{\circ}$ C; liquid side inlet temperature 45  $^{\circ}$ C, outlet temperature 23  $^{\circ}$ C.
- 2) Refrigerant: R22 R410A R134A R600A.
- 3) Working pressure: Liquid side 600psi, gas side 320psi.

## CO<sub>2</sub> Coaxial heat exchanger—Gas cooler • • • • •

As key component gas cooler in CO<sub>2</sub> heat pump heater, CO<sub>2</sub> coaxial heat exchanger features:

### 1. High efficiency

The patented convoluted inner tube increases heat transfer area and strongly enhances heat transfer between water and refrigerant.

### 2. Anti-freezing capability

Multi-spiral structure of inner tube imparts outstanding anti-freezing capability to coaxial heat exchanger.

#### 3. Cleanness

Multi-spiral structure of inner tube allows water flow in high-speed turbulent state which will remove foul automatically to remain channel a high cleanness in long-term running.

#### 4. Convenient installation

Heat exchanger features simple overall structure where facilitates installation with low cost.

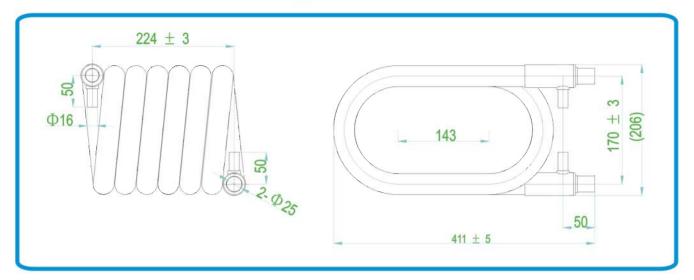
#### 5. Running stable

Shenshi CO<sub>2</sub> Heat exchanger refrigerant side can withstand 220bar high-pressure with no deformation using multi-spiral twisted small-diameter tube.





### 28kW Coaxial heat exchanger dimensions:



### Performance:

CO <sub>2</sub> WCC	Refrigerant Side					Water Side		
	WCC Capacity kW	Refrigerant Flow kg/s	Max Pressure Drop bars	Approach Temp. K	Refrigerant Unit Net Cooling Capacity kW	Water inlet temp °C	Water Flow Rate L/min	Ambient Temp. ℃
REQUIRE- MENTS	28	0.095-0.185	3-6	1.4-7.8	15.7	30	22.7	38

### CO, refrigerant properties based on test data:

Refrigerant inlet pressure is about 124 bar Refrigerant inlet temperature is about 134 °C

### Safety requirements:

Burst pressure: 3\*160 bar (refrigerant side) Burst pressure: 5\*4.14 bar (water side)

### Available space (dimensions) for the WCC

Length 432 mm (17in) Width 254 mm (10in) Height 155 mm (6in)

#### Notes:

- 1) CO₂ heat pump heater: inlet/outlet water temperature 15°C/90°C, inlet gas temperature 130°C.
- 2) Working pressure: Water side working pressure 1.5Mpa; refrigerant side 16Mpa. Refrigerant side withstands 22Mpa high pressure without deformation.
- 3) Due to a continuous program of product improvement, specification and dimensions are subject to change without notice.



Tel: +86-571-64510919 Fax: +86-571-64515888 Http://www.coaxial-coils.com

## Enterprise vista















Tel: +86-571-64510919 Fax: +86-571-64515888 Http://www.coaxial-coils.com

## **Business Enterprise Honor**





























ADD:DaDianKou Industrial Zone, Hangtou town, Jiande City, Zhejiang province, P.R.CHINA Zip:311612

International sales:

TEL:+86-571-64510919

FAX:+86-571-64515888

Email:gjb@coaxial-coils.com

Website:http://www.coaxial-coils.com http://coaxial-coils.en.alibaba.com

http://www.hzsshrq.com