# **Company Profile:**

NingBo HaiRui Machinery Technology Co., LTD is engaged in the temperature control industry has more than 10 years of experience, focus on streaming media temperature control research and development, production, and provide high quality services, especially for the domestic and foreign market demand.

The company's main products are: the screw type refrigeration units, industrial chillers, water temperature control machine, oil circulating temperature control machine, die temperature machine, plastic crusher, plastic drying machine, plastic color mixer, vacuum suction machine, industrial temperature control equipment. In plastic injection molding products, guide plate, connectors, chemical industry, die-casting, rubber tires, extrusion, mixer, printing and dyeing, drying and other industries widely used, products are exported to Europe, the Middle East, southeast Asia and other regions, we strictly to build first-class temperature control equipment, users with minimal energy consumption to produce high quality products.

The company adheres to the concept of "innovation, quality and integrity", strives for innovation by science and technology, strives for development with quality, creates brand with integrity, and sincerely hopes to cooperate with friends and develop together.



# Enterprise culture:

[Enterprise vision]: create first-class enterprise and strive for refrigeration industry standard

【Corporate mission】: continuous innovation to make industry more energy efficient

【Strategic positioning】: focus on refrigeration technology, to create high-quality refrigeration equipment

[Enterprise spirit]: integrity of the quality of the rule of harmony

【Sincere letter】: words will do, will be fruit

[Diligence]: diligence is the best shortcut to success

[Learn]: learning has a lasting competitive advantage

【Innovation】: strive for change and advance with The Times

[Employment philosophy]: people-oriented, respect the creativity of employees, pay attention to the development of employees, and encourage employees to surpass themselves

[Selection criteria]: morality-oriented, talent is everything

### Product reliability is our constant goal



# Main parts





### Control system:

Guangdong bang pu LCD display, microcomputer full - function error - proof operating system, multi - function point. Compressor overload protection; Water pump overload protection; Blower overload protection; Low water level protection; Abnormal power protection; Abnormal system pressure protection; Sensor open-circuit protection; Abnormal energy regulation protection.

#### cooling system:

Adopt Japan panasonic compressor, the Japanese sanyo compressor, Denmark danfoss compressor wheel or the valley, super cooling, energy saving and energy saving, low noise, little vibration, long life, can effect comparing common compressor high above 5%, storage tank, adjusting the refrigerant flow, balance the liquid refrigerant entering the compressor, protect compressed pilot run time.

Refrigeration accessories: ALCO (Emerson) industrial expansion







### cooling system:

Condenser: high efficiency copper tube with aluminum fin type + large air volume and low noise external rotor fan. The air-cooled finned condenser is made of nano-sized aluminum foil, which can enhance the anti-corrosion performance, heat dissipation effect, facilitate cleaning and maintenance, and facilitate installation.

### Evaporation system:

Expansion valve: Emerson, USA Drying filter: Emerson, USA

Evaporator: adopts the coiled tube design of the water tank, and the internal and external threaded tube of our company is built in, which can increase the heat exchange area by 3 times compared with the ordinary heat exchange tube, and can continuously supply the frozen water, improving the refrigeration efficiency.







#### power system:

Adopt French schneider or ABB brand, high efficiency, environmental protection, safety, long life and not easy aging. Internal integrated water cut, low temperature, low pressure, anti-freeze, phase, reverse phase, delay start, overload, motor overheating, differential oil pressure and other protection and processing functions.

### Water supply system:

Mr Frank cast iron pump/south stainless steel pump, high temperatur resistant, small volume, high efficiency, low noise, little vibration, low power consumption, pumping power, maintenance is convenient. If there are special requirements, also optional south stainless steel pump or high pressure pump. (adjustable, can add bypass).





## Vortex chiller





### Introduction to industrial chillers:

HRI-A/W used in plastic processing, machinery, molding, mold cooling, can greatly improve the plastic finish, reduce grain mark and internal stress, don't make products to shrink, deformation, accelerate product, thus greatly improve the efficiency of production, improve product quality, reduce production cost, so the demands for the temperature control in the process of production is getting higher and higher. It is widely used in metal processing, plastic molding, chemical industry, printing, laser, electronics, drying, packaging, construction and military industries

# Design features:

- ◆Brand compressor and efficient condenser, evaporator combination, super refrigeration, energy saving, low noise, long life
- $\blacklozenge \mbox{Cooling range: 5 } \mbox{$\mathbb{C}$}$  to 35  $\mbox{$\mathbb{C}$}$
- ullet Microcomputer control, accurate temperature control at + / 1  $^{\circ}$ C temperature difference
- ◆Low noise + high volume fan
- ulletLow pressure cast iron pump is standard, stainless steel or high pressure pump is optional
- ◆Multiple protective devices ensure system safety
- ◆Cistern coil evaporator design, not only can supply the continuous and stable frozen water, but also can cool the water inside the cistern, reduce the absorption of environmental heat, improve the refrigeration efficiency
- ♦HRI-W watercooled type adopts shell and tube condenser, which has fast heat conduction and good refrigeration effect, and is suitable for areas with high temperature and abundant water sources
- ♦HRI-A air-cooled type adopts finned condenser, good heat dissipation effect, easy to clean and maintain, easy to install



### Air-cooled industrial chiller

#### Unit features and functions:

- 1, the use of international famous brand high efficiency scroll compressor, super refrigeration, energy saving, low noise, small vibration, long life, energy efficiency is more than 5% higher than the ordinary compressor
- 2. Panasonic compressor from Japan, sanyo compressor from Japan, danfoss compressor from Denmark or u. s. gorgon compressor are adopted
- 3, the shell is made of high strength steel plate after coating, the most advanced patent technology and high precision processing, ensure that used in the acid gas does not rust
- 4, air cooling fin condenser USES water nano aluminum foil, enhance corrosion resistance, heat dissipation effect is good, easy to clean maintenance, easy to install
- 5. The evaporator adopts the coil-tube design of the water tank, with the built-in high-efficiency internal and external threaded pipe, which can increase the heat exchange area by three times compared with the ordinary heat exchange pipe, and can continuously supply frozen water, improving the refrigeration energy efficiency.
- 6, standard equipment with frank cast iron pump, high efficiency, low power consumption, pumping power, low noise, low temperature rise, easy maintenance. If you have special request (optional south stainless steel pump or high-pressure pump)
- 7, low noise external rotor fan, or large air flow axial fan, long life, good heat dissipation
- 8, microcomputer control, built-in comprehensive intelligent monitoring and protection, including motor temperature control, phase sequence monitoring, manual reset lock, oil temperature monitoring, accurate temperature control in 1 degree temperature difference. Precise temperature control in 1 degree temperature difference, special models can reach plus or minus 0.1 degree
- 9, electrical appliances with German schneider, high efficiency, environmental protection, safety, long life is not easy to aging, internal integration of water, low temperature, low pressure, anti-freeze, phase, reverse phase, delay start, overload, motor overheating, differential oil pressure and other protection and processing functions
- 10. The standard of refrigerant is stable and high strength R22 (environmental refrigerant R407C, R410A, R134A, R404A and so on are also available).

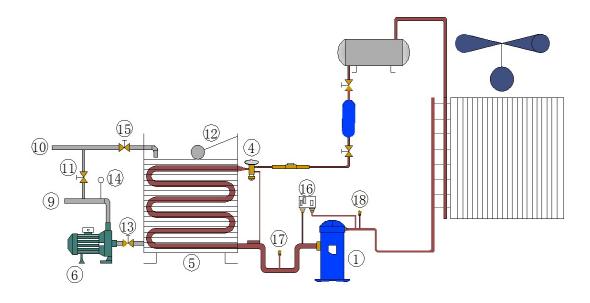




# Product figure



Schematic diagram of air refrigeration system:



HRI - A industrial air cooled refrigerator simple operation, reasonable design, excellent quality, specifications and there are hundreds of, is indispensable to modern industrial production. Need not equipped with air cooled water tower, it is more convenient to use.

Techn	ical 1	param	eters									
						HR	I-A					
Mod		3A	5A	8A	10AD	12AD	15AD	20AD	25AD	30AD	40AD	
	44°F kcal/h	7654	11506	18816	23013	28620	36756	46629	54025	68146	93258	
Nominal	44°F kw	8. 9	13. 38	21.88	26. 76	33. 28	42.74	54. 22	62. 82	79. 24	108. 4	
cooling capacity	54°F kcal/h	9253	13846	22755	27692	35070	45046	55452	64500	81510	110854	
	54°F kw	10. 76	16. 1	26. 46	32. 2	40.78	52. 38	64. 48	75	94. 78	128. 9	
Input power	KW	3. 15	4.71	7. 15	9. 76	11.02	15. 3	18.6	20. 82	28. 64	36. 9	
supply v	oltage				3P	H 230V-460	OV 50HZ/60	OHZ			!	
refrigeran	type	R22/R407C										
t	control mode					Expandsi	ion valve.					
	type				Fu1	ly enclose	ed turbine	type	external transmission fan.			
Compressor	power (HP)	2. 5	3. 68	6	3. 68*2	4. 31*2	5. 95*2	7. 4*2	8. 51*2	11. 27*2	7. 4*4	
	type	Hig	h efficie	ncy copper	clad alum	inum fin t	type + low	noise ext	ernal tran	25 68146 82 79. 24 00 81510 5 94. 78 82 28. 64  1*2 11. 27*2  transmission f 00 30000 0. 8*3  06 13. 6 0 445 /2 3 2 2. 2 0 30  ction, overtemper ection, anti-free 8 102 0 40 8 76. 7	fan.	
Condenser	Cooling air	3000	5000	8000	10000	12000	15000	20000	25000		40000	
	kw fan power	0. 14*2	0.14*2	0. 25*2	0. 45*2	0. 45*2	0. 6*2	0. 8*2	0.8*2	0. 8*3	0. 8*4	
	type			W	ater tank	copper co	il/dry she	ll tube ty	ype			
Evaporator	m³/h Chilled water	1.36	2. 22	3. 52	4. 44	5. 03	7. 1	8. 84	10.06	13.6	17. 75	
-	Tankvolum e	50	60	120	200	180	350	350	350	445	670	
	inch waterpipe	1	1	1 1/2	2	2	2 1/2	2 1/2	2 1/2	3	3	
	power (HP)	0.37	0.75	0.75	1.5	1.5	1. 5	2. 2	2. 2	2. 2	4	
pump	Lift(M)	20	25	25	25	25	25	30	30	30	40	
Safetypro			, flow prote									
	Length inch	40	51.2	60	60	60	69	74. 8	74. 8	102	78. 7	
Dimension	Width inch	2	23. 6	27. 5	35. 4	35. 4	37. 4	40	40	40	67	
	Hdight inch	47	47	51	63	63	67	72.8	72.8	76. 7	76. 7	
Weight	LBS	287	372	540	856	856	1120	1395	1395	2006	2630	

# Water cooled industrial chiller

<sup>1,</sup> chilled water in/out temperature of  $54\mbox{\,°F}$  /  $44\mbox{\,°F}$ 

<sup>2,</sup> cooling air in/out temperature  $86^{\circ}\!F$  /  $100^{\circ}\!F$ 

### Unit features and functions:

- 1. The main compressor is a brand new compressor imported from America and Japan (sanyo, Hitachi, panasonic, gu ren, danfoss), with built-in safety protection, low noise, energy saving and durable.
- 2. using R22 refrigerant, refrigeration effect is good.
- 3. The electrical part adopts the original products of the international brand "schneider" to ensure stable operation and long service life of the machine.
- 4. domestic and foreign famous brand water pump, large flow, high efficiency, durable.
- 5. equipped with sophisticated type digital temperature controller, can accurately control temperature to + / 33.8°F
- 6. 41°F and 104°F set temperature range
- 7. The unit energy efficiency ratio is as high as 85% to 95%.
- 8. all stainless steel thick water tank type evaporator, built-in automatic water refill device, cleaning and maintenance is convenient and fast; It saves the installation of the peng bilged water tank and is convenient for installation and maintenance. It is suitable for occasions of large temperature difference and small flow.
- 9. The condenser of the water cooling unit is bushing type with copper pipe with internal thread. The design is reasonable and the heat exchange effect is good.
- 10. static plastic spraying enclosure, European design and elegant appearance, appearance board in the form of quick disassembling, easy to use and maintain.

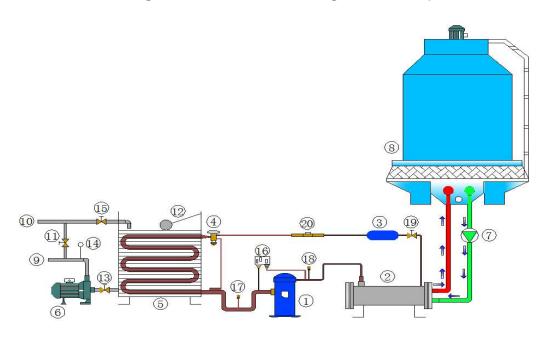


# Product figure





# Schematic diagram of water refrigeration system:



HRI-W water-cooled industrial chillers are characterized by simple operation, reasonable design, excellent quality and hundreds of specifications, making them an indispensable companion for modern industrial production.

Techn	Technical parameters											
Mod	- 1					HR]	[ <b>-</b> W					
MOG		3W	5W	8W	10WD	12WD	15WD	20WD	25WD	30WD	40WD	
	44°F kcal/h	8737	12968	21464	25936	33264	41228	50722	59271	71802	101445	
Nominal	44°F kw	10. 16	15.08	24.96	30. 16	38.68	47.94	58.98	68. 92	86.98	117. 96	
capacity k	54°F kcal/h	10526	15583	25886	31166	41056	50722	60165	70554	89130	120331	
	54°F HP	12. 24	18. 12	30.01	36. 24	47.74	58.98	69.96	82.04	103.64	139. 92	
Input1 power	HP	2. 38	3.73	5. 49	7. 46	8. 3	12.02	14. 54	16. 48	22. 16	28. 38	
supply v	oltage				3P	H 380V-415	V 50HZ/60	)HZ				
refrigeran	type					R22/I	R407C					
t	control mode					Expandsi	on valve.					
	type				Ful	ly enclose	d turbine	type				
cooling capacity 5 k 5 5	power(KW)	2.01	2. 98	4.74	2. 98*2	3. 4*2	4. 91*2	6 <b>.</b> 17 <b>*</b> 2	7. 14*2	9. 23*2	6. 17*4	

	type				売管	武 Shell	and tube t	уре					
冷凝器 Condenser	m <sup>3</sup> /h Cooling Water Flow inch	1.67	2.93	4.98	5. 85	7. 24	9. 37	13. 3	15. 5	18. 58	24. 7		
	inch waterpipe	1	1	1 1/2	2	2	2	2 1/2	2 1/2	3	3		
	type	Stainless steel coils (dry-shell tube type heat exchanger)											
Evaporator	Chilled water	1.55	2.58	4. 13	5. 2	6. 2	7.74	10. 3	12. 9	15.8	20.6		
	Tankvolum e incn	60	60	150	200	200	330	330	350	450	580		
	uaterpipe	1	1	1 1/2	2	2	2 1/2	2 1/2	2 1/2	3	3		
pump	power(KW)	0.37	0.75	0.75	1.5	1.5	2. 2	2. 2	2.2	4	4		
ришр	Lift(M)	20	25	25	25	25	30	30	30	40	40		
Safetypro	otection	overtempe		tection, f	low protec	ction, pha		~	pressure use protect	•	*		
	Length inch	40	51. 2	60	60	60	69	74.8	74.8	102	78. 7		
Dimension	Width inch	2	23. 6	27. 5	35. 4	35. 4	37. 4	40	40	40	67		
	Hdight inch	47	47	51	63	63	67	72.8	72.8	76. 7	76. 7		
Weight	LBS	287	372	540	856	856	1120	1395	1395	2006	2630		

- 1, chilled water in/out temperature of  $54\ensuremath{\,^\circ\!\!F}$  /  $44\ensuremath{\,^\circ\!\!F}$
- 2, cooling air in/out temperature  $86^{\circ}\!F$  /  $100^{\circ}\!F$

(Specifications are subject to change without prior notice)

# Screw chiller

### Application of screw type refrigerator

- ◆Medium and large industrial cooling
- ◆Central air-conditioning system
- ◆Cold storage, constant greenhouse

### Design features:

- ♦World famous compressor
- 1. Original imported bizell compressor from Germany and hanzhong twin-screw compressor from Taiwan. Twin-screw 5:6 tooth ratio and advanced linear design, energy—saving and high efficiency
- 2. High efficiency live valve energy control, realize grading or stepless control. Balanced design, running static and smooth
- 3. Strict processing of moving parts, oil balance block design of special exhaust, long maintenance cycle, trouble-free operation for more than 40,000 hours
- $4. \ \, \text{Efficient oil separator, exhaust oil less than 1.5\%, effectively improve heat exchange, more energy-saving and durable}$

### ◆High efficiency evaporator

- 1. The latest efficient internal thread copper pipe, kobe, Japan to enhance heat transfer effect, more energy efficient
- 2. Using the latest CAD/CAM design and processing technology, CNC machining center is completed, with compact structure, compact size and durability
- 3. The u-shaped structure of heat exchange tube bundle, but overall clean out internal scale, convenient maintenance
- 4. Dry evaporator, convenient oil return, improve compressor life and system reliability

#### ◆Air cooled condenser

- 1. The heat dissipation fin is punched by a high-speed punch, with reliable turning quality. Second flanging, copper tube and fin more close contact, high heat transfer efficiency
- 2. Adopt imported copper pipe and automatic elbow welding, greatly enhance the oxygen tightness, eliminate the refrigerant leakage phenomenon
- 3. It is especially suitable for areas where water resources are scarce or water quality is hard

#### ◆Microprocessor control system

- 1. Industrial grade Siemens PLC control system, man-machine interface, full Chinese display, can realize the whole process, full automatic computer regulation control, make the unit control more accurate and reliable
- 1. Industrial grade Siemens PLC control system, man-machine interface, full Chinese display, can realize the whole process, full automatic computer regulation control, make the unit control more accurate and reliable
- 3. Multiple safety protection and treatment functions such as water cut off, low temperature, high and low pressure, anti-freeze, phase missing, delayed start, reverse phase, overload, motor overheating, differential oil pressure and so on are integrated internally
- 4. Full English operation interface, menu-type prompt, can set the operation state of the unit and the home electrified operation environment at will

# Air-cooled screw chiller

# Product figure



## Product introduction:

HRS - A air-cooled screw refrigerating machine adopt international famous brand screw compressor, form A complete set of high quality and efficient production to copper tube condenser, evaporator, and control component of world famous brand. The unit has small volume, low noise, big power, long life, the advantages of simple operation, its beautiful exquisite appearance design and reliable and stable highly effective quality excellence in the similar products!

### Unit features and functions:

- ♦W type aluminum fin condenser can reduce the space occupied by the fuselage and ensure large heat transfer area
- ♦ High efficiency shell and tube evaporator with internal thread
- ◆Large air volume metal blade axial flow fan, motor and net cover separation, by the metal bracket fixed in the outlet, safe and efficient
- ◆PLC control, LED touch screen operation interface
- ◆R22 refrigerant, environmental refrigerant alternative R407C
- ullet380v-415v /50HZ 3PH standard design, also can be customized according to different requirements

Techn	ical j	param	eters								
	_					HRS	SA-				
Mode	el	40A	50A	60A	75A	85A	100A	120A	150A		
	44°F kcal/h	96148	126248	135622	181460	213796	251464	294550	373742		
Nominal	44°F HP	111.8	146.8	157. 7	211	248. 6	292. 4	342.5	434. 7		
	54°F kcal/h	115412	151532	162798	217752	256624	301860	353460	448748		
	54℉ HP	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	521.8								
Input1 power	HP	36. 1	44. 3	51.2	67	76. 3	88.3	105. 5	131.6		
supply v	oltage					3PH 230V-	460V 60HZ				
	type					R:	22				
refrigeran	fill LBS	61.6	77	92.4	114	132	154	184	230		
ı	control mode					Expands	ion valve				
	type					Semi-clo	sed screw				
	starting mode					Υ-					
Compressor	capacity regulator	0-25-50-75-100									
	power(KW)	33. 7	41.9	46. 4	60.6	69.9	80.3	95. 9	118.8		
	type			Dry sh	ell and tub	e type (sta	inless stee	l heat exchanger)			
ъ .	Water (m³/h)	18	23. 6	25. 7	34. 4	40.5	46. 4	55	69. 5		
Evaporator	inch waterpipe	3	3	3	3	3	4	4	5		
	Water pressure	32	35	38	42	45	43	43. 3	41		
Condenser	type		Ai	r-cooled hi	gh efficien	cy inner th	read copper	tube with aluminum fi	ns		
	type			La	rge air vol	ume and low	noise exte	rnal rotor fan			
fan	power (HP)	0.6*4	0.6*4	0.8*6	0.8*8	0.8*8	0.8*10	0.8*12	0.8*16		
Nominal cooling capacity 5  Inputl power supply vo. refrigeran f t  Compressor r  Evaporator w  Condenser	volume m³	40000	50000	60000	80000	90000	100000	116000	135000		

safety guard		Compressor overheat protection, overcurrent protection, high and low pressure protection, overtemperature protection, flow protection, phase sequence/lack phase protection, exhaust overprotection, anti-freeze protection.									
	Length inch	4796	4796         5170         2650         3310         3470         4090         4870         66								
boundary dimension	Width inch	3960	3960	3960	3960	3960	3960	3960	3960		
	Hdight inch	2510	2050	2050	2243	2243	2243	2243	2243		
The unit weight	LBS	1300	1600	1900	2350	2550	2800	2950	3200		
operating weight	LBS	1450	1750	2100	2550	2800	3050	3250	3500		

- 2, cooling air in/out temperature  $86\ensuremath{^\circ\!F}$  /  $100\ensuremath{^\circ\!F}$

(Specifications are subject to change without prior notice)

Techn	ical j	param	eters									
						HRS	SA-					
Mode	el	80AD	100AD	120AD	150AD	170AD	200AD	240AD	300AD			
	44°F kcal/h	192296	252496	271244	362920	427592	502928	589100	747684			
Nominal	44°F HP	223.6	293. 6	315. 4	422	497. 2	584.8	685	869. 4			
cooling capacity	54°F kcal/h	230824	303064	325596	135504	513248	603720	705920	897496			
	54°F HP	268. 4	352. 4	378. 6	506. 4	596.8	702	822	1043. 6			
Inputl power	HP	73.8	93. 4	102. 4	134	152.6	176. 6	211	263. 2			
supply v	oltage					3PH 230V-460V 60HZ						
	type					R:	22					
refrigeran t	fill LBS	61*2	77*2	92. 4*2	114*2	132*2	154*2	184*2	231*2			
	control mode	Expandsion valve										
	type					Semi-clo	sed screw					
	starting mode					Υ-						
Compressor	capacity regulator		0-25-50-75-100									
	power (HP)	33. 7*2	41.9*2	46. 4*2	60.6*2	69. 9*2	80. 3*2	95. 9*2	118. 8*2			
	type	Dry shell and tube type (stainless steel heat exchanger)										
_	Water(m³/h)	35. 6	46.8	50.8	68	80	92.8	110.6	139			
Evaporator	uaterpipe	3	4	4	5	6	6	8	8			
	Water pressure	45	43	43	41	42	45	42	46			
Condenser	type		Ai	r-cooled hi	gh efficien	cy inner th	read copper	tube with aluminum fi	ns			
	type			La:	rge air volu	ume and low	noise exte	rnal rotor fan				
fan	power (HP)	0.8*8	0. 8*12	0. 8*12	0. 8*16	0. 8*16	0.8*20	0.8*24	0. 8*32			
	m³/h air volume	80000	100000	116000	135000	165000	200000	236000	276000			
Compressor overheat protection, overcurrent protection, high and le overtemperature protection, flow protection, phase sequence/lack ploverprotection, anti-freeze protection.							-					
	Length inch	4796	5170	2650	3310	3470	4090	4870	6450			
boundary dimension	Width inch	3960	3960	3960	3960	3960	3960	3960	3960			
	Hdight inch	2510	2050	2050	2243	2243	2243	2243	2243			

The unit weight	LBS	1300	1600	1900	2350	2550	2800	2950	3200
operating weight	LBS	1450	1750	2100	2550	2800	3050	3250	3500

- 1, chilled water in/out temperature of 12  $^{\circ}\mathrm{C}$  / 7  $^{\circ}\mathrm{C}$
- 2, cooling air in/out temperature 30  $^{\circ}\text{C}$  / 38  $^{\circ}\text{C}$

(Specifications are subject to change without prior notice)

## Water cooled screw chiller

## Product figure



### Product introduction:

HRS - W series screw refrigerating machine adopt international famous brand compressor, form a complete set of high quality and efficient production to copper tube condenser, evaporator, and control component of world famous brand. The unit has small volume, low noise, big power, long life, the advantages of simple operation, its beautiful exquisite appearance design and reliable and stable highly effective quality excellence in the similar products! It is mainly used in medium and large scale industrial refrigeration, cold storage, constant greenhouse, central air conditioning system, chemical industry, chemical fiber equipment, concrete mixing, etc

### Unit features and functions:

- ◆Shell and tube evaporator and condenser, high-efficiency threaded copper tube (material can be customized according to requirements)
- ◆PLC control, LED touch screen interface, intuitive operation, simple man-machine communication
- ◆R22 refrigerant, environmental refrigerant alternative R407C
- ◆380v-415v /50HZ 3PH standard design, also can be customized according to different requirements

Techn	ical j	param	eters										
						HRS	SW-						
Mod	el	40W	50W	60W	75W	85W	100W	120W	150W	180W	200W		
	44°F kcal/h	108962	143018	153682	205540	242176	284918	333680	423550	510926	605526		
Nominal	44°F HP	126.7	166. 3	178. 7	239	281.6	331.3	388	492.5	594. 1	704. 1		
cooling capacity	54°F kcal/h	130118	170796	183524	245444	289218	340302	398438	505852	610170	723174		
	54°F HP	151.3	198. 6	213. 4	285. 4	336. 3	395. 7	463.3	588. 2	709. 5	840. 9		
Input1 power	HP	28	34. 8	38. 5	50.3	56. 7	66.6	79.6	98.6	120. 4	140. 1		
supply v	oltage	3PH 230V-460V 60HZ											
	type					R:	22						
refrigeran t	fill LBS	48	59	72.6	92. 4	105.6	121	150	193. 6	242	266		
	control mode					Expandsi	on valve						
	type					Semi-clos	sed screw						
	starting mode	$Y-\triangle$											
Compressor	capacity regulator	0-25-50-75-100											
_	power (HP)	28	34.8	38. 5	50.3	56.7	66. 6	79.6	98.6	120. 4	140. 1		
	type			Dry sh	ell and tub	e type (sta	inless stee	l heat exch	nanger)				
	Water(m³/h)	20. 5	26. 1	29. 5	39. 5	45.6	49. 7	62.4	81	98	115		
Evaporator	inch waterpipe	3	3	3	3	3	4	4	5	6	6		
	Water pressure	32	35	38	42	42	45	40	43	45	45		
	type					Shell and	tube type						
Condenser	Water (m³/h)	25	32. 3	36. 6	49. 2	56	61.7	77	101	125	125		
	waterpipe	3	3	3	3	3	4	4	3*2	3*2	4*2		
	Water pressure	42	42	43	43	43	45	48	46	48	48		
safe	ty guard	overtempe:		tection, f	low protec	ction, pha		-	v pressure ase protec	-			
	Length inch	98. 4	100.4	102	110	110	114	118	130	150	153		
boundary dimension	inch Width inch	30. 7	30.7	30. 7	37.4	37.4	37.4	47.2	54. 3	54. 3	54. 3		
	Hdight inch	64. 9	64.9	64. 9	70.8	76. 7	76. 7	62.2	64.1	68.9	69		
The unit weight	LBS	1980	2310	2310	3960	4180	4444	5500	5830	6930	7370		
operating weight	LBS	2310	2640	2970	4356	4730	4950	5940	6556	7480	8030		

- 1, chilled water in/out temperature of  $54\mbox{\,°F}$  /  $44\mbox{\,°F}$
- 2, cooling air in/out temperature  $86^{\circ}\!F$  /  $100^{\circ}\!F$

(Specifications are subject to change without prior notice)

# Technical parameters

W 1 1	HRSW-									
Mode1	100WD	120WD	150WD	180WD	200WD	240WD	280WD	300WD		

	44°F	286036	307364	411080	511872	569836	667360	794	468	8/17	100				
Nominal	kcal/h								3. 8		58				
cooling	44°F HP 54°F	332.6	357. 4	478	595. 2	662. 6	776								
capacity	kcal/h	341592	367048	490888	611288	680604	796976	948	924	1011	1704				
	54℉ HP	397.2	426. 8	570.8	710.8	791. 4	926. 6	110	3. 4	117	6. 4				
Inputl power	HP	69.6	77	100.6	123. 4	133. 2	159. 2	183	3. 8	197	7. 2				
supply v	oltage				3P.	H 380V-415	5V 50HZ/60	HZ							
	type					R:	22								
refrigeran t	fill LBS	59. 4*2	72. 6*2	92. 6*2	105.6*2	121*2	150*2	170	)*2	193.	6*2				
v	control mode					Expands	ion valve			·					
	type					Semi-clo	sed screw								
	starting mode					Υ-									
Compressor	capacity regulator					0-25-50	-75-100								
	power (HP)	34. 8*2	38 <b>.</b> 5*2	50.3*2	61.7*2	66. 6*2	79. 6*2	91.	9*2	98. 6*2					
	type					shell	and tube								
Evananatan	Water (m³/h)	52. 2	59	79	91.2	99. 4	124. 8	151.6		16	52				
Evaporator	waterpipe	4	4	5	6	6	6	(	3	8	3				
	Water pressure	42	42	46	43	45	45	4	3	4	8				
	type					Shell and	tube type								
Condenser	Water (m³/h)	64. 6	73. 2	98. 4	112	123. 4	154	19	91	20	)2				
Condenser	inch waterpipe	4	4	3*2	3*2	4*2	4*2	4:	<b>*</b> 2	5>	<b>*</b> 2				
	Water pressure	41	42	42	45	48	46	4	8	4	8				
saf€	ty guard	overtempe	rature pro	tection, f		ction, pha	ection, hi se sequenc	~	•	•					
	Length inch	98. 4	100.4	102	110	110	114	118	130	150	153				
boundary dimension	Width inch	30. 7	30. 7	30. 7	37. 4	37.4	37.4	47.2	54.3	54.3	54. 3				
dimension	Hdight inch	64. 9	64.9	64. 9	70.8	76. 7	76.7	62. 2	64.1	68. 9	69				
The unit	LBS	1850	2200	2650	2800	3450	3950	41	00	44	50				
operating weight	LBS	2150	2500	2970	3400	4160	4350	47	00	50	50				

(Specifications are subject to change without prior notice)

<sup>1,</sup> chilled water in/out temperature of  $54\ensuremath{\,^\circ\mathrm{F}}$  /  $44\ensuremath{\,^\circ\mathrm{F}}$ 

<sup>2,</sup> cooling air in/out temperature  $86^{\circ}\!\mathrm{F}$  /  $100^{\circ}\!\mathrm{F}$