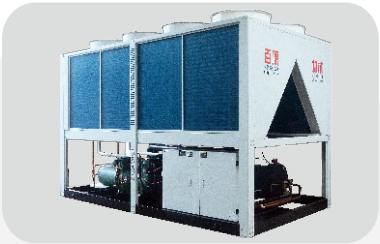
Baikang 百康 ®

Focus on manufacturing of cold and hot temperature control equipment for 20 years

Listen to customers voice,
Focus on customers needs



宁波百康冷热机械设备有限公司

NINGBO BAIKANG COLD AND HOT MECHANICAL EQUIPMENT CO.,LTD

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National free service hotline

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CATALOG

Company Profile

NINGBO BAIKANG COLD AND HOT MECHANICAL EQUIPMENT CO.,LTD is Located in Yuyao City, Zhejiang Province with beautiful scenery and long cultural history, we are a professional enterprise specializing in the production and manufacturing of high/low temperature industrial water chillers, oil chillers, high temperature hot water chillers, our company own a professional technical team for many years experiences, We would provide the best temperature control solutions for customers wholeheartedly.

Our company adhere to the principle of taking product quality as the basis, rely on strong technical force, advanced technical equipment, scientific management system, perfect after–sales service, and excellent cost performance, and taking the pursuit of customer satisfaction as our responsibility. Guided by market demands, honesty, cooperation, hard work, enterprising and continuous development and innovation.

Our main products including: box–type air–cooled chiller, box–type water–cooled chiller, screw–type chiller, full–liquid type chiller, falling–film type chiller, modular water chiller, high–speed precision chiller, laser type chiller, industrial oil cooler, opening type chiller, closed type cooling tower, mold temperature controller, ethylene glycol for chemical industry, salt water low–temperature unit, water source heat pump unit, air source heat pump heating water unit, hard aluminum anodizing cooler,ordinary aluminum anodizing refrigerator, electroplating bath liquid direct–cooling refrigerator, etc.

The equipment developed and produced by our company have many advantages, such as stable performance, reliable quality, high efficiency, energy conservation, environmental protection, strong adaptability to the working environment, convenient maintenance and so on. The products are exported to many regions abroad, and received better valuation from new and old customers.

Products are widely used in plastic, electroplating, aluminum oxidation, leather embossing, medicine, chemical industry, food, electronics, electric furnace, casting, forging, heat treatment, textile, paper, biology, commercial office and other industries.

Based on the business philosophy of "seeking development with quality, creating brand with integrity, unity and cooperation, mutual benefit and win–win", sincerely welcome domestic and foreign customers come to negotiate and cooperate and create a better and harmonious future.

Company Culture

Enterprise spirit: Devotion Profession, Fighting ,Innovation

Company purpose: Make stronger and bigger, achieve the life values together

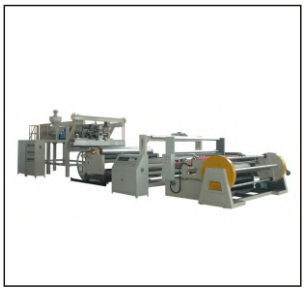
Working attitude : Every works must be handled personally

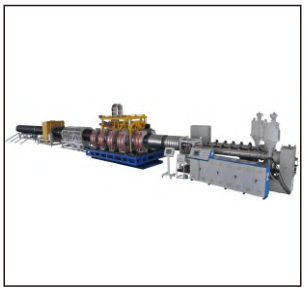
Management idea : Cooperate with absolute sincerity

Talent concept: No pains,no gains, Opportunities and challenges coexist

Serve for customers! Be responsible for customers! Satisfy for customers!

Product application scope


Casting machine

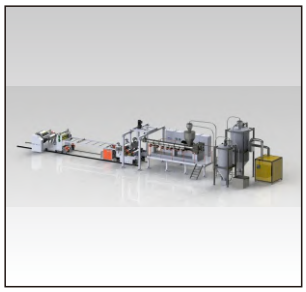

Corrugated pipe extrusion production line


Dropper tape production line


Electroplating – Aluminum Oxidation


Chemical reaction kettle


Leather embossing

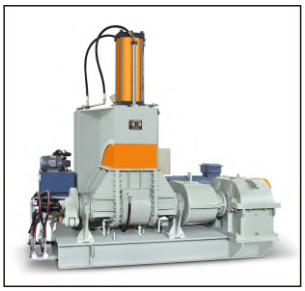

Sheet extruder

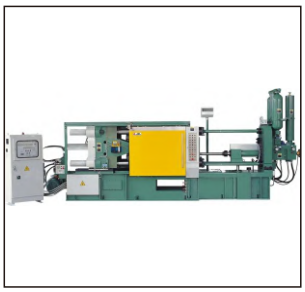

Bottle cap press molding machine


Film blowing machine


Aquaculture


Rubber milling machine


Rubber mixering machine


Die casting machine


Beverage Filling


Oil press machine

Injection molding

Product models representation

Chiller Units

BK □–**□□□□□

- E:Environmental refrigerant:R407C/R410A/R134；omission is R22 refrigerant
- C:Corrosion resistant；EH:electrical heating；omission is none
- D:Full liquid type；F:Falling film type
- R:With sensible heat recycle；H:High efficiency& pressure type；L:Low temp type；O:cold oil type；M:Economical coil type；omission is Standard shell and tube type
- A:air–cooled type；W:water–cooled type；
- Unit model
- S:screw type；M:module type；B:Variable frequency type（omission is Box type）
- Baikang brand

Mold temperature controller

BK □—□□□□

- The figure is the models type qty
- M:Multiple models
- H:High temp type,the suffix number is the maximum temperature
- Electric heating power（Kw）
- W:Water type；O:Oil type
- Baikang brand

Box-type air-cooled chiller

Product features

●**Machine plates metal:**The plate is designed with 3D software, the overall style is European combined detachable structure, and the surface is sprayed with polyester powder paint, which is beautiful and generous, with strong color fastness and corrosion resistance

●**System components:** The machine adopts international famous brand intelligent fully closed scroll refrigeration compressor and refrigeration unit components. Match the efficient and optimized special heat exchanger components. Combine excellent system design and high-precision assembly process to ensure full play of unit energy efficiency。

●**Finned condenser:** 1. The air side heat exchanger is made of copper tube and hydrophilic corrugated sheet aluminum foil, which is mechanically and tightly expanded, with high heat exchange effect and low wind resistance coefficient. 2. Economical units adopt high-efficiency micro-channel all-aluminum heat exchanger with high heat transfer coefficient; Two options are available.

●**Shell-and-tube evaporator:** The heat exchanger uses the latest CAD/CAM design and processing technology, and cooperates with CNC machining center to complete it. The baffle has been specially processed to increase the disturbing effect of the circuitous flow of chilled water. The evaporator inlet design makes the distribution of refrigerant in each exchanger tube more uniform, the heat exchange effects is more prominent, and the energy efficiency ratio is higher. The shell has stainless steel/carbon steel/PP plastic to choose, the core material has copper tube/304 stainless steel tube/pure titanium tube/316L stainless steel tube/aluminum brass tube/nickel white copper tube/etc., and the 304/316 stainless steel coil evaporator can also be used, variety of styles to choose.

●**Outer rotor axial flow fan:** The fan adopts domestic famous brand products. The fan is an all-aluminum housing copper core low-speed motor with a large elevation multi-blade structure. It has many advantages, such as large air volume, high static pressure, low noise, maintenance-free, long service life, etc. Automatic control devices can be installed as required in cold areas!

●**Electrical components:** The electrical components and contactors are all world famous brands, and the temperature control unit is a high-precision liquid crystal temperature controller in the professional field. All protection functions are complete, ensuring the long-term stable and reliable operation of the unit.

●**Fluid components:** equipped with international famous pipe pump, high-quality SUS/304 stainless steel water storage tank, and stainless steel pipes are subject to strict control of the assembly process, without leakage.

●**Comprehensive safety protection makes unit operation more reliable:**

1、High and low pressure protection and overtemperature protection of refrigeration system。
2、Compressor overload soft and hard dual protection。
3、Phase loss, reverse phase, undervoltage and overvoltage protection of power supply。
4、Anti-ice protection and undercurrent protection of waterway system。

●**Tailored:** Special models can be customized according to different operating conditions of various industries. For example, the overall dimensions of the model, the refrigerant used by the unit include: pure water, glycol solution, saline solution, acid solution, alkali solution, electroplating bath solution, hydraulic oil, sea water, etc.), and the unit outlet flow/pressure can be designed and manufactured according to the actual use needs. The outlet water temperature of the unit ranges from – 40 ℃ to 30 ℃, and a wide range of models are available, which can fully meet the various needs of customers.

●**Unit cooling widely used:** Plastic, injection molding, extrusion, hydraulic equipment, ordinary aluminum anodizing, hard aluminum anodizing, electroplating, foam mold, bottle blowing machine film coating machine, leather embossing machine, composite floor, bio-food, chemical, pharmaceutical, electronics, mariculture and other industries.

Air-cooled vortex chiller (economic type)

Model			BK-**AM									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity		kW	7.9	12	19.8	25.2	29.6	37.5	50.4	59.2	75.6	100	118
		$\times 10^4$kcal/h	6.79	10.3	17	21.7	25.5	32.3	43.3	50.9	65	86	102
Water pressure		Bar	2.0	2.5	1.8	2.2	2.2	2.4	2.3	2.3	2.3	2.3	2.5
Total power		kW	3.02	4.96	7.61	10.1	11.2	15.3	20.6	23.9	31.1	40.8	47.6
Copper core wires spec		MM^2	4	4	6	6	10	10	16	16	25	25	35
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50%-100%								0-50%-75%-100%		
	Quantity		1~2								2~4		
	Rated power	kW	2.42	3.96	6.1	8.1	9.15	12.2	16.2	18.3	24.8	32.4	36.6
	Current	A	4.16	6.8	10.5	13.9	15.7	20.9	27.9	31.5	42.7	55.7	63
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		304/316 Stainless steel coil evaporator										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M^3/h	1.2	2	3.6	6	6	8	10	10	16	20	25
	Maxi. water		4.8	5	12	18	18	20	25	25	35	40	50
	Water	Kpa	28	29	31	31	32	32	33	35	38	40	41
Condenser			High-efficiency microchannel pure aluminum heat exchanger/high-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser										
fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	3500	6000	9500	12000	14000	14500	24000	24000	36000	48000	60000
	Number of fans		1	2							2~4		
water pump	Input power	KW	0.55	0.75	1.1	1.5	1.5	2.2	3	3	4	4	5.5
	Current	A	1.05	1.4	2.1	2.9	2.9	4.2	5.8	5.8	7.8	7.8	10.6
Water tank volume		L	60	60	140	140	250	250	380	380	650	650	760
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.										
Outline dimension		(L)mm	950	1150	1430	1430	1680	1680	2000	2000	2300	2300	2580
		(W)mm	600	600	753	753	780	780	850	850	1140	1140	1250
		(H)mm	1220	1320	1580	1580	16500	1650	1875	1875	2250	2250	2375
N. weight		KG	105	165	265	305	340	420	560	685	840	1120	1350
G. weight			145	212	315	368	402	485	630	755	925	1210	1445

Remarks

1、The inlet temperature of chilled water is 12 ℃, and the outlet temperature of chilled water is 7 ℃; Ambient temperature 35 ℃;
2、Temperature range: chilled water outlet temperature 7 ℃ ~ 30 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3、The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator water side is 1.0MPa;
4、If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5、Technical improvement, external dimensions will be modified, dimensions are for reference only
6、In addition to the above specifications, we can also provide you with non-standard customized products。

Air-cooled vortex chiller unit (standard type)

Model			BK-**A									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity	kW		7.9	12	19.8	25.2	29.6	37.5	50.4	59.2	75.6	100	118
	$\times 10^3$kcal/h		6.79	10.3	17	21.7	25.5	32.3	43.3	50.9	65	86	102
Water pressure		Bar	2.0	2.5	1.8	2.2	2.2	2.0	2.3	2.3	2.2	2.2	2.8
Total power		kW	3.02	4.96	7.61	10.1	11.2	15.3	20.6	23.9	31.1	40.8	47.6
Copper core wires spec		MM^2	4	4	6	6	10	10	16	16	25	25	35
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50%-100%								0-50%-75%-100%		
	Quantity		1～2								2～4		
	Rated power	kW	2.42	3.96	6.1	8.1	9.15	12.2	16.2	18.3	24.8	32.4	36.6
	Current	A	4.16	6.8	10.5	13.9	15.7	20.9	27.9	31.5	42.7	55.7	63
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		304 stainless steel coil/shell and tube type efficient internal thread U-tube heat exchanger										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M^3/h	1.2	2	3.6	6	6	8	10	10	16	20	25
	Maxi. water		4.8	5	12	18	18	20	25	25	35	40	50
	Water	Kpa	28	29	31	31	32	32	33	35	38	40	41
Condenser			Double-plate V-type high-efficiency tandem hydrophilic aluminum foil tightly connected with										
fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	3500	6000	9500	12000	14000	14500	24000	24000	36000	48000	60000
	Number of fans		1	2									
water pump	Input power	KW	0.55	0.75	1.1	1.5	1.5	2.2	3	3	4	4	5.5
	Current	A	1.05	1.4	2.1	2.9	2.9	4.2	5.8	5.8	7.8	7.8	10.6
Water tank volume		L	60	60	160	160	200	200	300	300	415	外置	外置
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.										
Outline dimension		(L)mm	1000	1250	1500	1500	1950	1950	2120	2120	2300	2300	2580
		(W)mm	630	630	830	830	830	830	1008	1008	1145	1145	1250
		(H)mm	1250	1250	1650	1650	1650	1650	1955	1955	2265	2265	2375
N. weight		KG	130	210	315	390	435	450	730	785	850	1170	1380
G. weight			170	245	378	450	505	520	805	865	950	1280	1500

Remarks

1、The inlet temperature of chilled water is 12 ℃, and the outlet temperature of chilled water is 7 ℃; Ambient temperature 35 ℃;
2、Temperature range: chilled water outlet temperature 7 ℃ ~ 30 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3、The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator water side is 1.0MPa;
4、If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5、Technical improvement, external dimensions will be modified, dimensions are for reference only
6、In addition to the above specifications, we can also provide you with non-standard customized products。

Air-cooled vortex chiller unit (high efficiency/high pressure type)

Model			BK-**AH									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity	kW		8.6	14.2	22.7	30	34.5	44	60	69	88	120	138
	$\times 10^3$kcal/h		7.4	12.21	19.52	25.8	29.67	37.84	51.6	59.34	75.68	103.2	118.7
Water pressure	Bar		3.6	3.4	3.8	3.8	3.8	3.9	3.6	3.6	3.6	3.6	4.0
Total power	kW		3.1	5	8.4	10.4	12.5	16.5	24.3	26.4	32.1	42.3	49.6
Copper core wires spec	MM^2		4	4	6	6	10	10	16	16	25	25	35
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50-100%								0-25-50-100%		
	Quantity		1~2								2~4		
	Rated power	kW	2.42	4	6.1	8.1	9.15	12.4	16.2	18.3	24.8	32.4	36.6
	Current	A	4.4	7.6	10.5	14.6	16.2	23.9	29.2	32.4	47.8	58.4	64.8
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		304 stainless steel coil/shell and tube type efficient internal thread U-tube										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M^3/h	1.5	2	5	5	7	8	15	15	20	20	30
	Maxi. water		3.5	6	10	10	12	16	30	30	40	40	50
	Water	Kpa	30	31	32	33	33	35	36	38	40	41	43
Condenser			Double-plate V-type high-efficiency tandem hydrophilic aluminum foil tightly connected with										
fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	3500	6000	9500	12000	14000	14500	24000	24000	36000	48000	60000
	Number of fans		1	2							2~4		
water pump	Input power	KW	0.55	0.75	1.5	1.5	2.2	2.4	5.5	5.5	7.5	7.5	9.2
	Current	A	1.05	1.4	2.8	2.8	4.2	4.5	10.5	10.5	14.4	14.4	17.5
Water tank volume	L		55	55	130	130	160	160	340	340	445	外置	外置
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.										
Outline dimension	(L)mm		1000	1150	1500	1500	1950	1950	2120	2120	2300	2300	2580
	(W)mm		650	650	850	850	850	850	1008	1008	1145	1145	1250
	(H)mm		1300	1300	1650	1650	1720	1720	1955	1955	2265	2265	2375
N. weight	KG		145	230	357	451	485	552	758	815	858	1170	1430
G. weight			185	265	420	519	555	626	833	895	953	1280	1550

Remarks

1、The inlet temperature of chilled water is 12 ℃, and the outlet temperature of chilled water is 7 ℃; Ambient temperature 35 ℃;
2、Temperature range: chilled water outlet temperature 7 ℃ ~ 30 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3、The chilled water outlet pressure is 3kgf/c m^2, 6kgf/c m^2 and 8kgf/c m^2, which can be customized.
4、The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator water side is 1.0MPa;
5、If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
6、Technical improvement, external dimensions will be modified, dimensions are for reference only
7、In addition to the above specifications, we can also provide you with non-standard customized products。

Box-type water-cooled chiller

Product features

●**Shell sheet metal:** The shell is designed with 3D software, the overall style is European combination detachable structure, the surface is painted with polyester powder, beautiful and generous, and has strong color fastness and corrosion resistance.

●**System components:** The machine adopts international famous brand intelligent fully closed scroll refrigeration compressor and refrigeration unit components. Match the efficient and optimized special heat exchanger components. Combined with excellent system design and high-precision assembly process, ensure the full play of unit energy efficiency.

●**Shell tube condenser:** it adopts high-efficiency outer tooth flanging process condenser tube, with large heat transfer coefficient, middle expansion process proprietary technology, optimized process design, simple structure, convenient maintenance, small volume and high efficiency.

●**Shell tube evaporator:** the heat exchanger uses the latest CAD/CAM design and processing technology, and cooperates with CNC machining center to complete it. The baffle has been specially processed to increase the disturbing effect of the circuitous flow of chilled water. The evaporator inlet design makes the distribution of refrigerant in each exchanger tube more uniform, the heat exchange effect is more prominent, and the energy efficiency ratio is higher. The shell is available in stainless steel/carbon steel/PP plastic! The core material includes copper tube/304 stainless steel tube/pure titanium tube/316L stainless steel tube/aluminum brass tube/nickel white copper tube/etc., and 304/316 stainless steel coil evaporator can also be used, with a variety of styles to choose!

●**Electrical components:** the electrical components and contactors are world famous brands, and the temperature control unit is a high-precision controller in the professional field. All protection functions are complete, ensuring the long-term stable and reliable operation of the unit.

●**Fluid components:** select international famous pipe pump, high-quality SUS/304 stainless steel water storage tank, stainless steel pipe, strictly controlled assembly process, watertight.

●**Comprehensive safety protection makes unit operation more reliable:**

1. High and low pressure protection of refrigeration system, overheat fusible plug protection, safety valve protection.
2. The overload protection of compressor is soft and hard.
3. Power supply phase loss, reverse phase, undervoltage and overvoltage protection.
4. Anti-ice protection and undercurrent protection of the waterway system.

●**Tailored:** special models can be customized according to different operating conditions of various industries. For example, the overall dimensions of the model, the use of refrigerant (water type, salt water type, acid corrosion resistance, alkali corrosion resistance) and the water flow/pressure of the unit can be designed and manufactured according to the actual use needs. The outlet water temperature of the unit ranges from – 40 ℃ to 30 ℃, and a wide range of models are available, which can fully meet the various needs of customers.

●**The unit cooling is widely used in:** plastic, injection molding, extrusion, hydraulic equipment, ordinary aluminum anodizing, hard aluminum anodizing, electroplating, foaming mold, bottle blowing machine film coating

Water-cooled scroll chiller (economic type)

Model			BK-**WM									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity	kW		9.5	14.2	23.3	29.4	34.5	44	58.8	69	88.2	118	138
	$\times 10^3$kcal/h		8.17	12.2	20	25.3	29.7	37.8	50.6	59.3	75.9	101	119
Water pressure		Bar	2.0	2.5	1.8	2.2	2.2	2.4	2.3	2.3	2.3	2.3	2.5
Total power		kW	2.35	3.82	5.71	7.65	8.9	11.6	15.3	17.8	23.2	30.2	35
Copper core wires spec		MM^2	2.5	4	6	6	10	10	16	16	25	25	25
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50-100%								0-25-50-100%		
	Quantity		1~2								3~4		
	Rated power	kW	1.98	3.27	4.96	6.55	7.4	10.1	13.1	14.8	20.2	26.2	29.6
	Current	A	3.9	6	9.9	12.7	13.7	21	25.4	27.4	37.2	50.8	54.8
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		SUS304 Stainless steel coil type										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M^3/h	1.2	2	3.6	6	6	8	10	10	16	20	25
	Maxi. water		4.8	5	12	18	18	20	25	25	35	40	50
	Water	Kpa	28	29	31	31	32	32	33	35	38	40	41
fan	Condenser		High-efficiency shell tube water-cooled condenser										
	Form		DN25		DN40				DN50			DN65	
	blowing	M^3/h	2.2	3.5	5.4	7.5	8.2	10.6	14	16.5	21	28	33
	Number of fans		26	27	29	28	29	30	30	32	35	36	37
water pump	Input power	KW	0.55	0.75	1.1	1.5	1.5	2.2	3	3	4	4	5.5
	Current	A	1.05	1.4	2.1	2.9	2.9	4.2	5.8	5.8	7.8	7.8	10.6
Water tank volume		L	60	60	230	230	260	260	360	360	500	560	520
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.										
Outline dimension		(L)mm	1000	1000	1450	1450	1600	1600	1850	1850	2200	2300	2600
		(W)mm	600	600	700	700	750	750	800	800	900	1000	1100
		(H)mm	1000	1000	1260	1260	1260	1260	1550	1550	1650	1700	1700
N. weight		KG	105	175	245	280	370	450	495	700	840	1080	1300
G. weight			130	205	275	310	410	495	540	755	900	1140	1375

Remarks

1、The inlet temperature of chilled water is 12 ℃, and the outlet temperature of chilled water is 7 ℃; Ambient temperature 35 ℃;
2、Temperature range: chilled water outlet temperature 7 ℃ ~ 30 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3、The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator water side is 1.0MPa;
4、If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5、Technical improvement, external dimensions will be modified, dimensions are for reference only
6、In addition to the above specifications, we can also provide you with non-standard customized products。

Water-cooled scroll chiller (standard type)

Model			BK-**W									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity	kW		9.5	14.2	23.3	29.4	34.5	44	58.8	69	88.2	118	138
	$\times 10^3$kcal/h		8.17	12.2	20	25.3	29.7	37.8	50.6	59.3	75.9	101	119
Water pressure		Bar	2.0	2.5	1.8	2.2	2.2	2.4	2.3	2.3	2.3	2.3	2.5
Total power		kW	2.53	4.02	6.06	8.05	8.9	13.8	16.1	17.8	24.2	30.2	35.1
Copper core wires spec		MM^2	2.5	4	6	6	10	10	16	16	25	25	25
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50-100%								0-25-50-100%		
	Quantity		1~2								3~4		
	Rated power	kW	1.98	3.27	4.96	6.55	7.4	10.1	13.1	14.8	20.2	26.2	29.6
	Current	A	3.9	6	9.9	12.7	13.7	21	25.4	27.4	37.2	50.8	54.8
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		High efficiency coil/shell tube type high efficiency internal thread U-tube heat exchanger										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M^3/h	1.2	2	3.6	6	6	8	10	10	16	20	25
	Maxi. water		4.8	5	12	18	18	20	25	25	35	40	50
	Water	Kpa	28	29	31	31	32	32	33	35	38	40	41
fan	Condenser		High-efficiency shell tube water-cooled condenser										
	Form		DN25		DN40				DN50			DN65	
	blowing	M^3/h	2.2	3.5	5.4	7.5	8.2	10.6	14	16.5	21	28	33
	Number of fans		26	27	29	28	29	30	30	32	35	36	37
water pump	Input power	KW	0.55	0.75	1.1	1.5	1.5	2.2	3	3	4	4	5.5
	Current	A	1.05	1.4	2.1	2.9	2.9	4.2	5.8	5.8	7.8	7.8	10.6
Water tank volume		L	60	60	170	170	200	200	250	250	360	500	620
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.										
Outline dimension	(L)mm		1000	1000	1450	1450	1600	1600	1850	1850	2200	2300	2600
	(W)mm		600	600	700	700	750	750	800	800	900	1000	1100
	(H)mm		1000	1000	1260	1260	1260	1260	1550	1550	1650	1700	1700
N. weight		KG	105	175	245	280	370	450	495	700	840	1080	1300
G. weight			130	205	275	310	410	495	540	755	900	1140	1375

Remarks

1、The inlet temperature of chilled water is 12 ℃, and the outlet temperature of chilled water is 7 ℃; Ambient temperature 35 ℃;
2、Temperature range: chilled water outlet temperature 7 ℃ ~ 30 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3、The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator water side is 1.0MPa;
4、If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5、Technical improvement, external dimensions will be modified, dimensions are for reference only
6、In addition to the above specifications, we can also provide you with non-standard customized products。

Water-cooled scroll chiller (fast/efficient)

Model			BK-**WH									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity		kW	9.5	15.7	25.1	33	38	49	66	76	98	132	152
		×10³kcal/h	8.17	13.51	21.59	28.38	32.68	42.14	56.76	65.36	84.28	114	131
Water pressure		Bar	3.6	3.4	3.8	3.8	3.8	3.9	3.6	3.6	3.6	3.6	4.0
Total power		kW	2.53	4.04	6.46	8.05	9.6	13.1	17.1	18.8	24.2	31.7	37.1
Copper core wires spec		MM²	2.5	4	6	6	10	10	16	16	25	25	25
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50-100%								0-25-50-100%		
	Quantity		1~2								3~4		
	Rated power	kW	1.98	3.29	4.96	6.55	7.4	10.1	13.1	14.8	20.2	26.2	29.6
	Current	A	3.9	6.6	9.9	12.7	13.7	21	25.4	27.4	37.2	50.8	54.8
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		304 stainless steel shell-and-tube high-efficiency internal thread U-tube heat exchanger										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M³/h	1.5	2	5	5	7	8	15	15	20	20	30
	Maxi. water		3.5	6	10	10	12	16	30	30	40	40	50
	Water	Kpa	28	29	31	31	32	32	33	35	38	40	41
Condenser			High-efficiency shell-and-tube water-cooled condenser										
fan	Form		DN25		DN40				DN50			DN65	
	blowing	M³/h	2.1	3.4	5.4	7.1	8.2	10.6	14.2	16.4	21.1	28.4	32.7
	Number of fans		26	27	29	28	29	30	30	32	35	36	37
water pump	Input power	KW	0.55	0.75	1.5	1.5	2.2	3	4	4	4	5.5	7.5
	Current	A	0.95	1.29	2.6	2.6	3.8	5.2	6.9	6.9	6.9	9.5	12.8
Water tank volume		L	55	55	175	175	200	200	250	250	360	500	620
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.										
Outline dimension		(L)mm	1000	1000	1450	1450	1600	1600	1850	1850	2200	2300	2600
		(W)mm	600	600	700	700	750	750	800	800	900	1000	1100
		(H)mm	1000	1000	1260	1260	1260	1260	1550	1550	1650	1700	1700
N. weight		KG	110	185	260	295	390	475	525	730	875	1120	1350
G. weight			135	215	290	325	430	520	570	785	935	1180	1425

Remarks

1、The inlet temperature of chilled water is 12 ℃, and the outlet temperature of chilled water is 7 ℃; Ambient temperature 35 ℃;
2、Temperature range: chilled water outlet temperature 7 ℃ ~ 30 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3、The fouling coefficient of evaporator is 0.018 ㎡. ℃/kw, and the design pressure of evaporator water side is 1.0MPa;
4、If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5、Technical improvement, external dimensions will be modified, dimensions are for reference only
6、In addition to the above specifications, we can also provide you with non-standard customized products。

Air-cooled vortex oil cooling unit

Product features

● **Shell sheet metal:** the shell is designed with 3D software, the overall style is European combination detachable structure, the surface is painted with polyester powder, beautiful and generous, and has strong color fastness and corrosion resistance.

● **System components:** the machine adopts international famous brand intelligent fully closed scroll refrigeration compressor and refrigeration unit components, matching with efficient and optimized special heat exchanger components. Combined with excellent system design and high-precision assembly process, ensure the full play of unit energy efficiency.

● **High efficiency condenser:**

1. The air side heat exchanger is made of copper tube and hydrophilic corrugated sheet aluminum foil, which is mechanically and tightly expanded, with high heat exchange effect and low wind resistance coefficient.
2. High-efficiency microchannel all-aluminum heat exchanger with high heat transfer coefficient; Two options are available.

● **High-efficiency oil-cooled evaporator:** the brazed plate heat exchanger with special design pattern stamping plates is adopted, which has high heat exchange efficiency and is not easy to block. It is specially used for oil medium cooling. It can effectively improve the heat transfer coefficient of the carrier and save energy and electricity.

● **External rotor axial flow fan:** domestic famous brand products are adopted. The fan is made of all-aluminum shell copper core low-speed motor with large elevation and multi-blade structure. It has many advantages such as large air volume, high static pressure, low noise, maintenance-free, long service life, etc. Automatic control devices can be installed as required in cold areas!

● **Electrical components:** the electrical components and contactors are world famous brands, and the temperature control unit uses high-precision liquid crystal temperature controller in the professional field. All protection functions are complete, ensuring the long-term stable and reliable operation of the unit.

● **Fluid components:** international famous oil media pump is selected, with large flow, low noise and durability.

● **Comprehensive safety protection makes unit operation more reliable:**

1. High and low pressure protection, overheat protection, overtemperature protection and safety protection of refrigeration system.
2. The overload protection of compressor is soft and hard.
3. Power supply phase loss, reverse phase, undervoltage and overvoltage protection.
4. Anti-ice protection and under-flow protection of oil circuit system.

Air-cooled vortex oil cooling unit

Model			BK-**A0									
			3	5	8	10	12	15	20	25	30	40	50
Refrigeration capacity	kW		9.5	14.5	23.8	30.2	35.5	45	60.5	71	90.7	120	141.6
	$\times 10^3$kcal/h		8.17	12.5	20.5	26	30.5	38.7	52	61	78	103.2	121.7
Total power		kW	3.02	4.96	8.1	10.1	11.2	15.3	21.6	24.9	32.6	42.3	49.6
Copper core wires spec		MM^2	4	4	6	6	10	10	16	16	25	25	35
input voltage			3PH-380V/50Hz										
Compressor	modality		Full enclosed scroll compressor										
	Energy regulation		0-50%-100%								0-50%-75%-100%		
	Quantity		1~2								2~4		
	Rated power	kW	2.42	3.96	6.1	8.1	9.15	12.2	16.2	18.3	24.8	32.4	36.6
	Current	A	4.16	6.8	10.5	13.9	15.7	20.9	27.9	31.5	42.7	55.7	63
Cryogen			R22/R410a/R407c/R134a										
Evaporator	Modality		304/316L brazed plate high efficiency heat exchanger										
	Water	MM	DN25		DN40				DN50			DN65	
	Mini. water	M^3/h	4	5	8	8	10	10	15	15	20	25	30
	Maxi. water		8	10	20	20	25	25	30	30	40	50	70
	Water	Kpa	28	29	31	31	32	32	33	35	38	40	41
Condenser			Double-plate V-type high-efficiency tandem hydrophilic aluminum foil tightly connected with										
fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	3500	6000	9500	12000	14000	14500	24000	24000	36000	48000	48000
	Number of fans		1	2									
water pump	Input power	KW	0.75	0.75	1.5	1.5	2.2	2.2	4	4	5.5	5.5	7.5
	Current	A	1.05	1.4	2.9	2.9	4.2	4.2	7.8	7.8	10.6	10.6	14.2
Safeguard			Oil pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, oil shortage delay protection, anti-ice protection, exhaust temperature too high protection, etc.										
Outline dimension	(L)mm		1000	1250	1500	1500	1950	1950	2120	2120	2300	2300	2580
	(W)mm		630	630	830	830	830	830	1008	1008	1145	1145	1250
	(H)mm		1250	1250	1650	1650	1650	1650	1955	1955	2265	2265	2375
N. weight		KG	130	210	315	390	435	450	730	785	850	1170	1380
G. weight			170	245	378	450	505	520	805	865	950	1280	1500

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Air-cooled (cold/hot) water integrated unit

Product features

● Full–enclosed scroll refrigeration compressor with low noise and super high energy efficiency is selected.
● High–efficiency shell–and–tube evaporator, increased area of air–cooled finned condenser, energy–saving and efficient.
● Imported advanced refrigeration valve has long service life and stable operation.
● High precision liquid crystal temperature controller, accurate and reliable temperature control.
● Perfect safety protection and fault indication system.
● It can be heated and cooled to realize mutual switching, speed up production progress, reduce energy consumption, improve product molding efficiency, inhibit product defects and reduce the generation of defective products. Computer touch control, automatic calculation, automatic and accurate temperature control, can quickly reach the set temperature, and the set value and actual value are displayed separately. Isolated electrical control box, extending the service life of electrical appliances, 304 stainless steel material, built–in safety protection, low noise, high temperature resistance, corrosion prevention and rust prevention, unique heating design, power–saving and durable, suitable for use in different temperature control places. The integrated cooling and heating machine has fast temperature rise and fall speed, accurate, uniform and stable temperature, high efficiency and energy saving, and can realize adjustable temperature control of 5 ℃~55 ℃.

Performance parameter table of cold and hot water integrated unit

Model			BK-**AEH								
			3	5	8	10	12	15	20	25	30
Refrigeration capacity		kW	7.9	12	19.8	25.2	29.6	37.5	50.4	59.2	75.6
		$\times 10^4$kcal/h	6.79	10.3	17	21.7	25.5	32.3	43.3	50.9	65
Total power		kW	2.0	2.5	1.8	2.2	2.2	2.4	2.3	2.3	2.3
Copper core wires spec		MM^2	3.2	5.16	7.96	10.5	11.2	16	21.4	23.9	32.1
input voltage			3PH-380V/50Hz								
Compressor	modality		Full enclosed scroll compressor								
	Energy regulation		0-50-100%								
	Quantity		1~3								
	Rated power	kW	2.42	3.96	6.1	8.1	9.15	12.2	16.2	18.3	24.8
	Current	A	4.16	6.8	10.5	13.9	15.7	20.9	27.9	31.5	42.7
Cryogen			R22/R410a/R407c/R134a								
Evaporator	Modality		High efficiency coil/shell and tube type high efficiency internal thread U-tube heat exchanger								
	Water	MM	DN25		DN40				DN50		
	Mini.water	M^3/h	1.2	2	3.6	6	6	8	10	10	10
	Maxi.water		4.8	5	12	18	18	20	25	25	25
	Water	Kpa	28	29	31	31	32	32	33	35	38
Condenser			High-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser								
fan	Form		High efficiency axial flow fan								
	blowing	M^3/h	3500	6000	9500	12000	15000	18000	24000	24000	36000
	Number of fans		1	2							
water pump	Input	KW	0.55	0.75	1.1	1.5	1.5	2.2	3	3	4
	Current	A	1.05	1.4	2.1	2.8	2.8	4.2	5.7	5.7	7.5
Water tank volume		L	55	55	130	130	160	160	340	340	445
Heat device	Form		Electric heating pipe								
	power (KW)		6	9	12	15	20	20	25	30	36
Safeguard			Liquid level protection; Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.								
Outline dimension	(L)mm		1000	1150	1500	1500	1950	1950	2120	2120	2300
	(W)mm		650	650	850	850	850	850	1008	1008	1145
	(H)mm		1300	1300	1650	1650	1720	1720	1955	1955	2265
N.weight		KG	145	230	355	450	485	550	750	815	858
G.weight			185	265	420	520	555	620	830	895	953

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Variable frequency air-cooled chiller

Product features

● The machine adopts the combination of international famous brand variable frequency compressor+constant frequency compressor, imported electronic expansion valve, EC speed regulating fan, high–efficiency finned air–cooled condenser, environment–friendly refrigerant, stainless steel pump and other main accessories in an integrated structure. This machine is characterized by stable operation, energy conservation and environmental protection, small temperature fluctuation and high safety performance.

● **Working principle:** when the equipment is started, the variable frequency compressor will be started in advance, and loaded from 25 Hz to 110 Hz. If the cooling capacity is insufficient, the constant frequency compressor will be started. It works stably when the cooling capacity and cooling demand are balanced (such as 40 Hz, 55 Hz, 70 Hz, etc.). If the cooling demand of the production line is reduced, the frequency conversion compressor will be reduced from high frequency to low frequency. When the cooling capacity reaches 25 Hz, the control system will stop running the fixed–frequency compressor, and the frequency conversion compressor will be reduced from 110 Hz to the frequency corresponding to the cooling capacity. The adjustable range is wide and the energy–saving effect is obvious.

● **Stable operation and small temperature fluctuation:**
Due to the use of variable frequency and constant frequency compressor, the corresponding temperature control and cooling demand are precisely controlled by the frequency adjustment of the variable frequency compressor, so the temperature fluctuation is very small. Thus, the frequent start and stop of compressor is effectively eliminated.

● **High safety performance and greatly reduced mechanical failure rate:**
The structure combination of variable frequency and constant frequencycompressor can achieve accurate control of temperature control and cooling capacity demand by adjusting the frequency of variable frequency compressor. There is basically no frequent start and stop of the compressor. When the compressor is started, it is the largest consumption of electric energy, thus greatly reducing the operating cost.

Variable frequency air-cooled chiller unit technical parameter

Model			BKB-**A				
			10	15	20	25	30
Refrigeration capacity		kW	30.2	46.1	70	84	100
		×10⁴kcal/h	25.97	39.65	60.2	72.24	86
Water pressure		Bar	3.8	3.7	3.6	3.6	3.8
Total power		kW	11.1	17.4	23.2	27.5	33.1
Copper core wires spec		MM²	6	10	16	16	25
input voltage			3PH-380V/50Hz				
Compressor	modality		Full enclosed scroll compressor+totally enclosed variable frequency scroll compressor				
	Energy regulation		Constant/variable alternating stepless energy regulation 25Hz～100Hz				
	Quantity		2				
	Rated power	kW	4+4.8	4.8+8.1	8.1+8.9	8.9+12.4	8.9+16.2
	Current	A	16	23.5	31	38.8	45.7
Cryogen			R22/R410a/R407c/R134a				
Evaporator	Modality		316L brazed plate heat exchanger/high-efficiency U-shaped shell-and-tube heat exchanger				
	Water	MM	DN40		DN50		DN65
	Mini.water	M³/h	5	8	15	15	20
	Maxi.water		10	16	30	30	40
	Water	Kpa	33	35	36	38	41
Condenser			High-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser				
fan	Form		EC/High efficiency axial flow fan				
	blowing	M³/h	12000	18000	24000	36000	48000
	Number of fans		2	2	2	2	2
water pump	Input	KW	1.5	2.2	3	3	4
	Current	A	2.9	4.2	5.8	5.8	7.8
Water tank volume		L	160	200	300	300	415
Safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, exhaust temperature protection, etc.				
Outline dimension		(L)mm	1500	1950	2120	2060	2300
		(W)mm	850	850	1008	1008	1140
		(H)mm	1650	1720	1955	1995	2265
N.weight		KG	450	550	750	810	855
G.weight			520	620	830	890	953

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 ㎡. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Air-cooled modular chiller unit

Product features

● The shell is designed with 3D software, the overall style is European combined detachable structure, and the surface is sprayed with polyester powder, which is beautiful and generous, with strong color fastness and corrosion resistance.
● The machine adopts the international famous brand fully closed scroll refrigeration compressor (single compressor independent system or double compressor parallel system combination), and the main engine controls the start of the compressor according to the return water temperature to achieve maximum energy saving.
● The air side heat exchanger is designed to increase the heat transfer area and reduce the heat transfer temperature difference. Make the unit suitable for refrigeration operation under high temperature conditions in summer.
● Low-noise axial flow fan and high-performance motor fully take into account the use of standard working conditions and harsh working conditions, and further improve the unit efficiency.
● High-efficiency shell-and-tube heat exchanger is adopted for the water side heat exchanger, and the heat exchange tubes are strengthened on both sides to greatly improve the heat exchange efficiency; The heat exchanger has a compact structure, and the end plate can be removed, which is convenient for cleaning and maintenance.
● World-class refrigeration accessories – thermal expansion valve (electronic expansion valve), which can regulate the refrigerant flow of the system by regulating the system's subcooling (heating) degree, with more accurate capacity regulation.
● Man-machine interface touch screen operation system control makes the operation of the unit more simple and understandable. The operation time of each system is automatically adjusted according to the operating conditions of the compressor. The whole machine has excellent performance and high refrigeration energy efficiency.
● Modular system design, each module is composed of multiple independent compressor systems. Multi-module combination makes each refrigeration system independent and standby for each other. The abnormal condition of any refrigeration loop will not affect the normal operation of other loops. When a loop fails, the control system will send a command to let other loops in standby status take over the operation of the failed loop, so that the refrigeration of the unit will remain relatively stable.

Air-cooled modular chiller unit parameter

Model			BKM-065A*N	BKM-130A*N
Rated cooling capacity	KW		65×N	130×N
	×10³kcal/h		56	112
Power supply			380V/3ph/50Hz	
Input power		KW	19.7×N	40×N
Transfer current		A	39.2×N	75.8×N
compressor	Form		Full enclosed scroll compressor	
	quantity	piece	2×N	4×N
	Input power	KW	2×9.1×N	4×9.1×N
cryogen	Type		R22/R410a/R407c/R134a	
	Filling volume	kg	2×6.5×N	4×5.5×N
Water side heat exchanger	Form		Shell-and-tube high-efficiency heat exchanger	
	Rated water flow	m³/h	11.2×N	22.5×N
	Rated water side resistance	kpa	54	68
	Working pressure at water side	Mpa	1	
	Pipe connection diameter		DN50	DN65
Type of air side heat exchanger			Hydrophilic efficient fin-and-tube cluster heat exchanger	
Axial fan	Form		Low noise, high efficiency, waterproof and fire-resistant axial flow type	
	quantity	piece	2×N	2×N
	Input power	KW	2×0.75×N	2×1.8×N
Outliner size	L	mm	2120	2580
	W	mm	1008	1250
	H	mm	1995	2375
Running weight		kg	800	1600

Remarks

1. Refrigeration condition: chilled water inlet/outlet temperature 12/7 ℃; Ambient temperature 35 ℃;
2. N: combined number of unit modules;
3. BKM-065A * N is optional with sensible heat recovery function, with sensible heat recovery capacity of 15KW, outlet water temperature of 45 ℃, and nozzle size of Dn25;

Water-cooled modular chiller unit

Product features

● Simple and generous appearance design; High-efficiency fully closed scroll refrigeration compressor is adopted, and the human-machine interface touch screen operation system control makes the operation of the unit more simple and easy to understand. The operation time of each system is automatically adjusted according to the operating conditions of the compressor; The whole system is optimally matched, with excellent overall performance and high refrigeration efficiency.

● The shell and tube heat exchanger is adopted, and the efficient and strengthened heat transfer copper tube is used inside to improve the heat exchange efficiency. Moreover, the shell-and-tube heat exchanger has lower requirements for water quality and wider application range;

● Adopt modular combined structure, which can be freely combined by multiple machines according to user's needs, and can also be used independently as a single machine;

● Adopt single independent system or parallel compressor, single refrigerant system; Adopt parallel compressor plus a single compressor and double refrigerant system; Each module unit can operate independently and be standby for each other. If one unit needs to be shut down for maintenance, it will not affect the normal operation of other units, so as to ensure the continuous cooling of the refrigeration unit with high reliability and no need for standby units;

● Each module can be operated and installed separately; Multiple modules can also be assembled and operated together. The modules can be the same or different. The modular design makes the transportation, installation, commissioning and maintenance of the unit more convenient, the unit structure is reasonable, the unit structure is compact, and the floor area is small;

Water-cooled modular chiller unit parameter

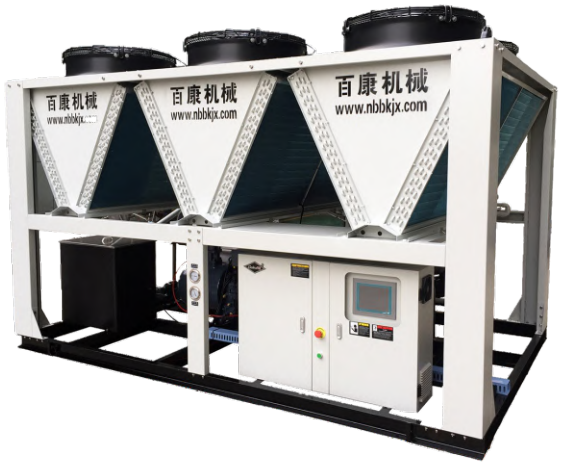
Model		BKM-20W*N	BKM-25W*N	BKM-30W*N	BKM-35W*N
Nominal cooling capacity(kW)		64*N	75*N	94*N	113*N
Input power(kW)		13.5*N	16*N	19.9*N	23.9*N
Refrigerant type		R22/R410a/R407c/R134a			
Refrigerant Charge(kg)		2*4*N	2*5*N	3*4*N	3*5*N
Running current(A)		23.6*N	27.6*N	35. 4*N	42*N
Power supply		380V/50Hz			
Energy regulation		0%-50%-100%		0%-33%-66%-100%	
compressor	Form	High efficiency vortex type			
	quantity	2*N	2*N	3*N	3*N
evaporimeter	Form	U-type dry shell and tube type (design pressure 1.0mPa)			
	Water flow(m3/h)	11.1*N	12.9*N	16.2*N	19.4*N
	Water resistance(kPa)	55	55	58	58
	Inlet and outlet pipe diameter	DN50	DN50	DN65	DN65
condenser	Form	Horizontal shell and tube type (design pressure 1.0mPa)			
	Water flow(m3/h)	13.7*N	15.9*N	20.2*N	24.3*N
	Water resistance(kPa)	30	30	45	45
	Inlet and outlet pipe diameter	DN50	DN50	DN65	DN65
Expansion valve		External balance type			
Outliner size	L(MM)	1866	1866	1866	1866
	W (MM)	500	500	500	500
	H (MM)	1248	1248	1328	1328
Machine weight(kg)		500	550	720	780
Running weight(kg)		600	650	820	880

Remarks

1. The inlet/outlet water temperature at the freezing side is 12/7 ℃, and the inlet/outlet water temperature at the cooling side is 30/35 ℃
2. N: combined number of unit modules
3. Heat recovery is optional, and the recovery is 20% of the nominal cooling capacity.

Air-cooled screw chiller unit

Product features



- **Refrigeration compressor:** adopt the semi–closed air–cooled screw refrigeration compressor of Bezel/Hanzhong brand in Germany, which is characterized by high efficiency, low noise, low wear and long service life.
- **Heat exchanger:** the air–cooled condenser is hydrophilic aluminum foil copper tube fin type. The heat exchange area and fin spacing are adjusted appropriately according to the regional environment, with high efficiency. The inlet of shell–and–tube evaporator is specially designed to make the refrigerant distribution flow in each heat exchange tube more uniform; The heat exchanger has a compact structure, and the end plate can be removed, which is convenient for cleaning and maintenance.
- **Inner rotor fan:** all–aluminum shell copper core motor, low speed, high horsepower. The fan blade adopts a large elevation multi–blade structure with large air volume, high static pressure and low noise. Long service life!
- **Refrigeration valves:** all adopt famous brand accessories such as Emerson of the United States, Lugong of Japan, Castor of Italy, Danfoss of Denmark, etc. Make the unit always work in a reliable and efficient state.
- **Electrical components:** the electrical components of the unit are all international famous products. The Chinese/English double–display human–machine interface touch screen equalization controller is intuitive in operation (the unit's normal operation status, setting parameters, fault alarm and other information are directly reflected on the controller in Chinese/English), which makes the operation of the unit easier to understand. In the case of multi–compressor system, the unit automatically adjusts the operating time of the system according to the operating conditions of the compressor, Stable performance.
- Energy regulation: the unit has multi–level energy regulation to meet the demand of cooling load change, maximize the energy saving effect, and save maintenance and operation costs.

Safeguard

- **Exhaust stop valve:** ensure compressor operation – prevent gas backflow at high–pressure exhaust end after stopping.
- **Phase sequence protection:** prevent overvoltage, undervoltage, open–phase protection and reverse–phase protection of the power grid, and prevent the compressor from being damaged due to reverse rotation.
- **Oil heating protection:** before the operation of the cold machine, the oil heating procedure is mandatory to ensure the dilution and fluidity of the oil and meet the lubrication conditions before operation.
- **Thermal protection of motor winding inside the compressor:** prevent the compressor from burning down due to excessive coil temperature caused by excessive load or poor working conditions.
- **High and low pressure protection:** in case of bad working conditions and faults, the high and low pressure switches act to protect the compressor and system.
- **Safety valve:** ensure that the condenser works within the safety range.
- **Water flow protection:** prevent the unit from running without water.
- **Anti–icing protection:** prevent the evaporator from being damaged due to the formation of ice inside the evaporator due to the low outlet water temperature when the unit is running.
- **Overload protection:** soft and hard dual protection to ensure compressor overload safety.
- **Compressor oil pressure protection:** when the unit is running, the oil pressure is not enough due to the blocked oil circuit of the system, so the compressor shall be protected in time.
- **Oil level protection:** the compressor shall be protected in time when the system is short of oil.

Air-cooled screw chiller (single unit type)

Model			BKS-**A									
			70	100	130	140	180	190	220	230	260	280	310
Refrigeration capacity	kW		83.7	116.5	152.2	163.3	211.2	218.4	258.1	272	304.6	329.7	355.7
	$\times 10^3$kcal/h		72	100.2	130.9	140.5	181.6	187.8	220	233.9	262	283.5	305.9
Total power	kW		30.4	41	51.2	56.8	72.7	74.6	84	88.8	97.6	104.6	115
Cooling medium			Water										
Input power supply			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-25-50-75-100%										
	quantity		1										
	Rated power	kW	27.1	36.6	46	50.4	63.9	65.8	73	80.8	87.2	94.2	104.1
	Current	A	46.1	62.2	78.9	85.7	109.3	112.4	124.5	137	148.2	159.6	175.6
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water connection	MM	DN65			DN80			DN100				
	Water flow	M^3/h	15	21	27	29	37	39	45	48	53	58	62
	Water	Kpa	43	44	44	46	47	48	50	53	55	57	58
condenser			High-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser										
Fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	36000	48000	60000	72000	96000	96000	108000	108000	120000	120000	145000
	Number of fans		2	2	4	4	6	6	8	8	8	8	8
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2150	2150	2300	2300	3200	3200	4250	4250	4250	4050	4050
	(W)mm		1150	1150	2200	2200	2200	2200	2200	2200	2200	2200	2200
	(H)mm		2050	2050	2180	2180	2250	2250	2250	2250	2250	2700	2700
Net weight	KG		1250	1350	1510	1620	1695	1750	1960	2060	2210	2310	2480
Running weight			1320	1430	1600	1720	1780	1855	2080	2190	2250	2450	2630

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Air-cooled screw chiller (dual type)

Model			BKS-**A2									
			140	200	260	280	360	380	440	470	520	570	610
Refrigeration capacity	kW		167.4	233	304.4	326.6	422.4	436.8	516.2	544	609.2	659.4	711.4
	$\times 10^3$kcal/h		144	200.4	261.8	280.9	363.3	375.7	443.9	467.8	523.9	567.7	611.8
Total power	kW		60.8	82	102.4	113.6	145.4	149.2	168	177.6	195.2	209.2	230
Cooling medium			Water										
Input power supply			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-12.5-25-37.5-50-62.5-75-87.5-100%										
	quantity		2										
	Rated	kW	54.2	73.2	92	100.8	127.8	131.6	146	161.6	174.4	188.4	108.2
	Current	A	92.2	124.4	157.8	171.4	218.6	224.8	249	274	296.4	319.2	351.2
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water	MM	DN65			DN80			DN100				
	Water flow	M^3/h	30	42	55	60	75	80	90	98	108	118	126
	Water	Kpa	52	52	53	53	54	54	58	58	60	62	65
condenser			High-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser										
Fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	72000	96000	120000	144000	192000	192000	216000	216000	240000	240000	29000
	Number of fans		4	6	8	8	10	10	10	12	12	12	14
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2300	3200	4250	4050	4950	4950	4950	5850	5850	5850	6800
	(W)mm		2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	(H)mm		2180	2250	2250	2700	2700	2700	2700	2700	2700	2700	2700
Net weight	KG		2125	2295	2570	2590	2710	2800	3130	3300	3540	3690	3970
Running weight			2250	2430	2720	2740	2870	2970	3310	3500	3750	3910	4210

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Air-cooled screw chiller (single low-temperature type)

Model			BKS-**AL									
			40	60	70	80	100	110	130	140	150	160	170
Refrigeration capacity	kW		48	65	85	92.9	113	124	146	154	166.7	180.4	194.5
	×10⁴kcal/h		41.3	56	73	80	98	106	126	133	143.4	155.1	167.3
Total power	kW		27.5	36	45.5	50.5	61.5	65.5	74.6	78.6	87	93.5	105
Cooling medium			Brine/glycol solution/dilute sulfuric acid solution										
Input power supply			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-25-50-75-100%										
	quantity		1										
	Rated power	kW	25	33	41	45	55	60	68	72	78.6	85	94
	Current	A	42	55	69	76	92	101	114	120	134.7	144.7	158.6
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water	MM	DN65			DN80			DN100				
	Water flow	M³/h	10	13.5	17.6	19.3	23.5	25.8	30.3	32	35	37.5	40.4
	Water	Kpa	52	52	53	54	58	58	60	61	63	64	66
condenser			High-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser										
Fan	Form		High efficiency axial flow fan										
	blowing	M³/h	30000	40000	50000	62000	82000	82000	92000	92000	108000	108000	125000
	Number of fans		2	2	4	4	6	6	8	8	8	8	8
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2150	2150	2300	2300	3200	3200	4050	4050	4250	4250	4250
	(W)mm		1150	1150	2200	2200	2200	2200	2200	2200	2200	2200	2200
	(H)mm		2050	2050	2180	2180	2250	2250	2700	2700	2250	2250	2250
Net weight	KG		1185	1280	1435	1200	1610	1660	2190	2350	1860	1957	2100
Running weight			1260	1370	1520	1630	1700	1780	2320	2490	1970	2080	2230

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 ㎡. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Air-cooled screw chiller (double unit low temperature type)

Model			BKS-**AL2									
			80	110	150	160	200	210	250	270	290	310	340
Refrigeration capacity	kW		96	130	170	185.8	226	248	292	308	333.4	360.8	389
	$\times 10^3$kcal/h		82.6	112	146	160	196	212	252	266	286.82	310.2	334.6
Total power		kW	55	72	91	101	123	133	153.6	161.6	178	191	216
Cooling medium			水										
Input power supply			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-12.5-25-37.5-50-62.5-75-87.5-100%										
	quantity		2										
	Rated power	kW	50	66	82	90	110	120	136	144	157.2	170	188
	Current	A	84	110	138	152	184	202	228	240	269.4	289.4	317.2
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water	MM	DN80		DN100				DN125				DN150
	Water flow	M^3/h	20	27	35.2	38.6	47	51.6	60.6	64	70	75	80.8
	Water	Kpa	52	52	53	53	54	54	58	58	60	62	65
condenser			High-efficiency tandem hydrophilic aluminum foil tightly connected with air-cooled condenser										
Fan	Form		High efficiency axial flow fan										
	blowing	M^3/h	60000	80000	100000	124000	164000	164000	184000	184000	216000	216000	250000
	Number of fans		4	6	8	8	10	10	10	12	12	12	14
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2300	3200	4250	4050	4950	4950	4950	5850	5850	5850	6800
	(W)mm		2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
	(H)mm		2180	2250	2250	2700	2700	2700	2700	2700	2700	2700	2700
Net weight	KG		2020	2180	2440	2460	2580	2660	2970	3130	3360	3505	3780
Running weight			2135	2305	2580	2605	2720	2810	3140	3310	3550	3700	3980

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Water-cooled screw chiller unit

Product features

- **Refrigeration compressor:** The semi-closed screw refrigeration compressor of Bezel/Hanzhong brand in Germany is adopted, which is characterized by high efficiency, low noise, low wear and long service life.
- **Heat exchanger:** shell and tube condenser and shell and tube evaporator are adopted, and the heat exchange tube is strengthened on both sides to greatly improve the heat exchange efficiency; The heat exchanger has a compact structure, and the end plate can be removed, which is convenient for cleaning and maintenance.
- **Refrigeration valve:** adopt famous accessories such as Emerson of the United States, Lugong of Japan, Kastol of Italy, Danfoss of Denmark, etc. Some units adopt double thermal expansion valve design control, which can ensure the energy efficiency ratio of the load, make the system applicable to a wider range of working conditions, improve the precision of cooling control regulation, and make the unit always work in a reliable and efficient state.
- **Electrical components:** the electrical components of the unit are all international famous products. The Chinese/English double-display human-machine interface touch screen equalization controller makes the operation of the unit more simple and easy to understand. In the case of multi-compressor system, the operation time of each system is automatically adjusted according to the operating conditions of the compressor, and the performance is stable.
- **Energy regulation:** the unit has multi-level energy regulation to meet the demand of cooling load change, maximize the energy saving effect, and save maintenance and operation costs.

Safeguard

- **Exhaust stop valve:** ensure compressor operation – prevent gas backflow at high-pressure exhaust end after stopping.
- Phase sequence protection: prevent overvoltage, undervoltage, open-phase protection and reverse-phase protection of the power grid, and prevent the compressor from being damaged due to reverse rotation.
- **Oil heating protection:** before the operation of the cold machine, the oil heating procedure is mandatory to ensure the dilution and fluidity of the oil and meet the lubrication conditions before operation.
- **Thermal protection of motor winding inside the compressor:** prevent the compressor from burning down due to excessive coil temperature caused by excessive load or poor working conditions.
- **High and low pressure protection:** in case of bad working conditions and faults, the high and low pressure switches act to protect the compressor and system.
- **Safety valve:** ensure that the condenser works within the safety range.
- **Water flow protection:** prevent the unit from running without water.
- **Anti-icing protection:** prevent the evaporator from being damaged due to the formation of ice inside the evaporator due to the low outlet water temperature when the unit is running.
- **Overload protection:** soft and hard dual protection to ensure compressor overload safety.
- **Compressor oil pressure protection:** when the unit is running, the oil pressure is not enough due to the blocked oil circuit of the system, so the compressor shall be protected in time.
- **Oil level protection:** the compressor shall be protected in time when the system is short of oil.
- **The unit is widely used in:** aluminum oxidation, hard aluminum oxidation, electroplating, plastic, injection molding, extrusion, hydraulic equipment, foaming machinery, bottle blowing machine, film coating machine, leather embossing machine, composite floor, biological food, chemical, pharmaceutical, electronics, and other industries.

Water-cooled screw chiller (single unit type)

Model			BKS-**W									
			80	110	150	160	200	210	250	270	300	320	350
Refrigeration capacity		kW	94.9	132	172.3	184.9	239.1	247.3	291.3	307.9	343.7	372	401.5
		$\times 10^3$kcal/h	81.6	113.5	148.2	159.1	205.6	212.7	250.5	264.8	295.6	319.9	345.3
Cooling medium			water										
Input power supply			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-25-50-75-100%										
	quantity		1										
	Rated power	kW	22.6	30.4	38.2	41.9	53.1	54.7	60.7	67.1	72.4	78.2	86.5
	Current	A	39.2	52.9	67.5	72.8	92.5	95	105.1	115.2	124.9	134	146.4
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water	MM	DN65		DN80				DN100				DN125
	Water flow	M^3/h	17	23	30	32	42	43	51	54	60	65	70
	Water	Kpa	40	41	44	45	48	49	50	51	53	53	57
condenser	Form		High-efficiency shell-and-tube water-cooled condenser										
	Water	MM	DN65		DN80				DN100				DN125
	Water flow	M^3/h	21	27	37	40	52	54	63	67	74	78	87
	Water	Kpa	38	38	41	42	44	46	47	49	51	51	53
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2300	2350	2450	2600	2750	2950	2980	2980	3200	3200	3250
	(W)mm		950	950	980	980	1050	1050	1050	1150	1160	1160	1210
	(H)mm		1400	1450	1550	1550	1580	1650	1700	1725	1750	1750	1800
Net weight	KG		700	980	1270	1430	1640	1670	1720	2350	2350	2480	2600
Running weight			745	1029	1320	1560	1720	1740	1790	2550	2510	2590	2750

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Water-cooled screw chiller (dual type)

Model			BKS-**W2									
			160	230	300	320	410	430	500	530	590	640	690
Refrigeration capacity		kW	189.8	264	344.6	369.8	478.2	494.6	582.6	615.8	687.4	744	803
		$\times 10^3$kcal/h	163.2	227	296.4	318	411.3	425.4	501	529.6	591.2	639.8	690.6
Cooling medium			water										
Input voltage			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-12.5-25-37.5-50-62.5-75-87.5-100%										
	quantity		2										
	Rated power	kW	45.2	60.8	76.4	83.8	106.2	109.4	121.4	134.2	144.8	156.4	173
	Current	A	78.4	105.8	135	145.6	185	190	210.2	230.4	249.8	268	292.8
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat										
	Water	MM	DN80		DN100				DN125				DN150
	Water flow	M^3/h	34	46	60	64	84	86	102	108	120	130	140
	Water	Kpa	52	52	53	54	58	58	60	60	64	65	68
condenser	Form		High-efficiency shell-and-tube water-cooled condenser										
	Water	MM	DN80		DN100				DN125				DN150
	Water flow	M^3/h	42	54	74	80	104	104	126	134	148	156	174
	Water	Kpa	45	45	46	49	55	55	58	58	60	61	63
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2800	2900	3100	3100	3280	3280	3580	3580	3630	3710	3780
	(W)mm		1200	1200	1260	1260	1380	1380	1380	1400	1400	1450	1480
	(H)mm		1650	1700	1800	1800	1900	1900	1900	1950	1950	1980	2080
Net weight	KG		1480	1780	2300	2430	2870	3450	3760	3950	4210	4500	5130
Running weight			1700	2070	2580	2730	3190	3800	4100	4320	4580	4920	5560

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Water-cooled screw chiller (single low-temperature type)

Model			BKS-**WL									
			50	70	90	100	130	140	160	170	190	200	220
Refrigeration capacity		kW	60	83.6	109	117	151.3	156.5	184.4	194.9	217.5	235.5	254.1
		×10⁴kcal/h	51.6	71.9	93.8	100.6	130.1	134.6	158.6	167.6	187.1	202.5	218.5
Cooling medium			Glycol solution										
Input voltage			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-25-50-75-100%										
	quantity		1										
	Rated power	kW	21.8	29.5	37	40.5	51.3	52.9	58.7	64.9	70.1	75.7	83.7
	Current	A	38.1	51.4	65.7	70.8	89.8	92.3	102.1	111.8	121.2	130	141.8
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water	MM	DN65		DN80				DN100				DN125
	Water flow	M³/h	12.5	17.4	22.6	24.3	31.4	32.5	38.3	40.5	45.2	48.9	52.8
	Water	Kpa	40	41	44	45	48	49	50	51	53	53	57
condenser	Form		High-efficiency shell-and-tube water-cooled condenser										
	Water	MM	DN65		DN80				DN100				DN125
	Water flow	M³/h	15.8	22	28.6	30.7	39.8	41.1	48.5	51.2	57.2	61.9	66.8
	Water	Kpa	38	38	41	42	44	46	47	49	51	51	53
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size		(L)mm	2300	2350	2450	2600	2750	2950	2980	2980	3200	3200	3250
		(W)mm	950	950	980	980	1050	1050	1050	1050	1160	1160	1210
		(H)mm	1400	1450	1550	1550	1580	1650	1700	1700	1750	1750	1800
Net weight		KG	700	980	1270	1430	1640	1670	1720	1830	2350	2480	2600
Running weight			745	1029	1320	1560	1720	1740	1790	1900	2510	2590	2750

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 ㎡. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Water-cooled screw chiller (double unit low temperature type)

Model			BKS-**WL2									
			100	140	190	200	260	270	320	340	370	410	440
Refrigeration capacity	kW		120	167.2	218	234	302.6	313	368.8	389.8	435	471	508.2
	$\times 10^3$kcal/h		103.2	143.8	187.6	201.2	260.2	269.2	317.2	335.2	374.2	405	437
Cooling medium			Glycol solution										
Input voltage			3PH-380V/50Hz										
compressor	Form		Semi-closed twin-screw refrigeration compressor										
	Energy regulation		0-12.5-25-37.5-50-62.5-75-87.5-100%										
	quantity		2										
	Rated power	kW	43.6	59	74	81	102.6105.	105.8	117.4	129.8	140.2	151.4	167.4
	Current	A	76.2	102.8	131.4	141.6	179.6	184.6	204.2	223.6	242.4	260	283.6
Cryogen			R22/R410a/R407c/R134a										
evaporimeter	Form		Shell and tube type high efficiency internal thread tube heat exchanger										
	Water	MM	DN65		DN80				DN100				DN125
	Water flow	M^3/h	25	34.8	45.2	48.6	62.8	65	76.6	81	90.4	97.8	105.6
	Water	Kpa	80	82	88	90	96	98	100	102	106	106	114
condenser	Form		High-efficiency shell-and-tube water-cooled condenser										
	Water	MM	DN65		DN80				DN100				DN125
	Water flow	M^3/h	31.6	44	57.2	61.4	79.6	82.2	97	102.4	114.4	123.8	133.6
	Water	Kpa	76	76	82	84	88	92	94	98	102	102	106
Throttling mode			thermal expansion valve										
safeguard			Water pump interlock protection; Phase loss and phase sequence protection; High/low pressure protection; Overtemperature protection; Motor overload protection, water cut-off delay protection, antifreeze protection, oil level protection, exhaust temperature protection, etc.										
Outline size	(L)mm		2800	2900	3100	3100	3280	3280	3580	3580	3630	3710	3780
	(W)mm		1200	1200	1260	1260	1380	1380	1380	1400	1400	1450	1480
	(H)mm		1650	1700	1800	1800	1900	1900	1900	1950	1950	1980	2080
Net weight	KG		1480	1780	2300	2430	2870	3450	3760	3950	4210	4500	5130
Running weight			1700	2070	2580	2730	3190	3800	4100	4320	4580	4920	5560

Remarks

1. The inlet temperature of refrigerant oil is 40 ℃, and the outlet temperature of refrigerant oil is 35 ℃; Ambient temperature 35 ℃;
2. Temperature range: refrigerant oil outlet temperature: 25 ℃ ~ 50 ℃, ambient temperature range: 5 ℃ ~ 40 ℃;
3. The fouling coefficient of evaporator is 0.018 m^2. ℃/kw, and the design pressure of evaporator oil side is 1.0MPa;
4. If you need a model with special voltage and refrigerant R134a/R407C/R410A, please contact us.
5. Technical improvement, external dimensions will be modified, dimensions are for reference only
6. In addition to the above specifications, we can also provide you with non-standard customized products.

Water-cooled (full liquid/falling film) chiller unit

Product features

The unit adopts the semi-closed screw refrigeration compressor of Bezel/Hanzhong brand in Germany, which is characterized by high efficiency, low noise, low wear and long service life. High-efficiency shell-and-tube water-cooled condenser has high heat exchange efficiency and simple maintenance.

Falling film evaporator

The theoretical heat transfer coefficient of falling film evaporation outside the heat exchange tube is high; The liquid distributor distributes the liquid evenly and forms a film evenly outside the heat exchange tube to reduce the presence of dry steam zone; Under partial load, the refrigerant can still form a uniform film outside all heat exchanger tubes to ensure high heat exchange performance; Excellent oil return performance.

Liquid-filled evaporator

●Excellent heat exchange performance:
The optimized refrigerant distributor makes the temperature field of the heat exchanger uniformly distributed and the refrigerant pressure drop small; The evaporation tube is completely immersed in boiling liquid refrigerant, and its total heat transfer coefficient is more than 3 times of that of the traditional dry evaporator, effectively improving the refrigeration capacity and energy efficiency ratio of the unit. Simple maintenance and high reliability: the enhanced heat transfer rib inside the tube increases the water side disturbance and turbulent heat transfer, and can delay scaling. The chilled water flows inside the pipe, and the scale is easy to clean. Nearly saturated suction can effectively improve the compression efficiency and mass flow of the compressor. The unique evaporator condenses and ejects the return oil. Ensure that there is no oil film covering on the surface of the heat exchange tube, and improve the heat exchange efficiency. The high efficiency secondary oil separator combined with external machinery and adsorption ensures the high efficiency of oil separation.
In order to protect the ozone layer and reduce the greenhouse effect of the atmosphere, the unit can choose environment-friendly refrigerant, which is green.
The unit can select the condenser with heat recovery, which uses the exhaust heat of the compressor to produce hot water at 35~50 ℃, directly reducing the waste heat discharge to the environment and protecting the environment.
The direction of the connecting pipe can be freely changed according to the customer's requirements; The random installation of starting cabinet can save customers' extra expenses; Refrigerant and lubricating oil have been filled when leaving the factory, and can be used only by connecting water pipes and power supply on site; Users can set multiple parameters according to actual operation conditions to achieve the best operation effect; The setting method is simple and intuitive; Provide different water temperature control methods;
With advanced control logic and highly reliable throttling elements, the unit can accurately and automatically adjust the liquid supply of evaporator according to the refrigeration load; The throttling mechanism can quickly and accurately adjust the refrigerant flow to ensure the stability of the evaporator liquid level; It has higher utilization rate of heat exchange area and higher efficiency of partial load during unloading operation;
Adopt famous brand programmable controller and humanized operation interface; It has multiple protection functions such as high and low pressure, oil temperature, oil level, antifreeze, compressor overload and internal protection, water flow switch, and real-time monitoring and control of high and low pressure, exhaust temperature, operating current and water temperature to ensure safe and reliable operation of the unit;

Parameters of Water-cooled Full Liquid/Falling Film Chiller R22 (—)

Model			BKS-***WF/R								
			23	29	38	45	52	59	69	75	80	93
Refrigeratio		kW	272.3	339.1	442.2	526.1	608.2	683.9	796.6	874.8	934	1076
		×10³kcal/h	234.2	291.6	380.3	452.5	523.1	588.2	685.1	752.3	803.2	925.5
Power supply			3Φ-380V-50HZ									
Wires suggestion VV		mm²	50	70	95	150	150	150	185	185	240	300
Maxi.current		A	109.5	128.9	170.6	205.1	229	257.6	289.9	324.7	344.9	382
compressor	Form		5-6 Asymmetric toothed semi-closed screw compressor									
	qty	piece	1	1	1	1	1	1	1	1	1	1
	startup type		Y-△									
	Energy regulation		25%-50%-75%-100%有段控制									
	Input	kW	56.4	66.8	89.2	103.6	118.5	133.2	151.7	162.5	178.6	205.8
	Rated	A	94.8	112.3	149.9	178.4	199.2	224	255	280	300	345.7
evaporimeter	Form		Falling film high efficiency heat exchanger (design water bearing pressure: 1.0Mpa)									
	Water	M³/h	47.1	58.3	77.9	90.5	104.6	118.3	137	150.4	160.6	185.1
	Pipe	DN	100	100	100	125	125	150	150	150	150	200
	Water	KPa	40	42	42	50	60	65	68	70	72	72
condenser	Form		Shell and tube high efficiency heat exchanger (design water bearing pressure: 1.0Mpa)									
	Water	M³/h	57.9	69.8	91.4	108.3	129.5	140.5	163.1	178.4	191.3	220.4
	Pipe	DN	100	100	100	125	125	150	150	150	150	200
	Water	KPa	42	46	47	53	64	70	72	76	78	80
Heat recycle(option)	Recovery	kW	54	67	88	105	121	136	159	175	186	215
	Water	M³/h	9.2	11.5	15.2	18	21	23.5	27.2	30	32	37
	Water	KPa	38	36	40	39	41	36	36	37	37	37
	Pipe dia.	DN	50	50	65	65	65	65	65	65	65	65
cryogen	type		R22/R410a/R407c/R134a									
	Filling	kG	85	100	125	140	155	165	190	200	216	248
Outline size	L	mm	2960	2960	2960	3240	3240	3240	3240	3240	3240	3270
	W	mm	1250	1250	1310	1370	1370	1450	1510	1510	1510	1560
	H	mm	1720	1720	1740	1760	1840	1940	1990	2010	2010	2050
Machine weight		kG	2500	2650	2900	3100	3650	3800	4100	4200	4400	4600
Running weight		kG	2650	2800	3050	3300	3850	4050	4350	4450	4750	4950

Remarks

Note: unit cooling capacity condition: chilled water inlet temperature 12 ℃, outlet temperature 7 ℃, cooling water inlet temperature 30 ℃, outlet temperature 35 ℃.
Unit operation range: condenser inlet water temperature range 19–33 ℃; The evaporator outlet water temperature range is 5–15 ℃.
Under nominal working conditions, the inlet and outlet temperature of domestic hot water for waste heat recovery of the unit is 40/45 ℃.

Parameters of water-cooled full liquid/falling film chiller R22 (二)

Model			BKS-***WF/R								
			47	58	67	76	83	90	98	105	111	118
Refrigeratio		kW	544.6	678.2	781.3	884.4	968.3	1052	1134	1216	1292	1367
		×10³kcal/h	468.4	583.2	671.9	760.6	832.8	905	975.6	104.6	111.1	117.6
Power supply			3Φ-380V-50HZ									
Wires suggestion		mm²	50*2	70*2	70*2	95*2	120*20	120*2	120*2	120*2	150*2	150*2
Maxl. current		A	219	257.8	299.5	341.2	368.7	396.2	424.9	453.6	478.6	503.6
compressor	Form		5-6 Asymmetric toothed semi-closed screw compressor									
	qty	piece	2	2	2	2	2	2	2	2	2	2
	startup type		Y-△									
	Energy regulation		12.5%-25%-37.5%-50%-62.5%--75%-87.5%-100% Segmental control									
	Input	kW	112.8	133.6	156	178.4	192.8	207.2	222.1	237	250	263.2
	Rated	A	189.6	224.6	262.2	299.8	324	348.2	373.3	398.4	421	442.6
evaporimeter	Form		Falling film high efficiency heat exchanger (design water bearing pressure: 1.0Mpa)									
	Water	M³/h	93.7	116.6	134.4	152.1	166.5	180.9	195.1	209.2	222.2	235.2
	Pipe	DN	125	150	150	150	150	150	150	200	200	200
	Water	KPa	64	64	66	66	68	68	62	55	63	68
condenser	Form		Shell and tube high efficiency heat exchanger (design water bearing pressure: 1.0Mpa)									
	Water	M³/h	113.1	139.6	161.2	182.8	199.7	216.6	233.3	249.9	265.2	280.5
	Pipe	DN	125	150	150	150	150	150	150	200	200	200
	Water	KPa	53	56	58	58	62	62	36	36	37	40
Heat recycle(option)	Recover	kW	108	135	156	176	190	210	226	243	258	273
	Water	M³/h	18	23	26.8	30	33	36	39	41	44	47
	Water	KPa	41	41	42	41	42	42	36	36	37	40
	Pipe	DN	65	65	65	80	80	80	80	80	80	80
cryogen	type		R22/R410a/R407c/R134a									
	Filling quantit	kG	130	160	180	200	220	240	260	280	296	312
Outline size	L	mm	4270	4270	4290	4300	4350	4430	4470	4570	4570	4610
	W	mm	1560	1580	1680	1690	1720	1790	1820	1870	1880	1890
	H	mm	1710	1740	1830	1830	1840	1870	1930	1940	2020	2020
Machine weight		kG	3520	4080	4400	4800	5200	5500	5900	6100	6350	6500
Running weight		kG	3720	4280	4600	5100	5500	5850	6350	6500	6800	6900

Remarks

Note: unit cooling capacity condition: chilled water inlet temperature 12 ℃, outlet temperature 7 ℃, cooling water inlet temperature 30 ℃, outlet temperature 35 ℃.
Unit operation range: condenser inlet water temperature range 19–33 ℃; The evaporator outlet water temperature range is 5–15 ℃.
Under nominal working conditions, the inlet and outlet temperature of domestic hot water for waste heat recovery of the unit is 40/45 ℃.

Parameter of water-cooled full liquid/falling film type R134a (—)

Model			BKS-***WF/R								
			23	27	29	36	38	44	49	52	61	68
Refrigeratio		kW	270.5	309.7	336.0	422.2	444.6	510.2	565.9	608.4	711.7	790.0
		$\times 10^3$kcal/h	232.6	266.4	288.9	363	282.3	438.8	486.7	523.2	612.1	679.4
Power supply			3Φ-380V-50HZ									
Wires suggestion		mm^2	50	50	70	70	95	95	120	120	150	185
Maxi. current		A	105.1	116.6	131	156.7	169.9	191.2	211.1	226.1	260.6	308.3
compressor	Form		5-6 Asymmetric toothed semi-closed screw compressor									
	qty	piece	1	1	1	1	1	1	1	1	1	1
	startup type		Y-△									
	Energy regulation		25%-50%-75%-100% Segmental control									
	Input	kW	50.3	60.2	63.4	76.3	82.5	94.5	103.2	112.1	127.8	147.1
	Rated	A	88.2	102	109	129.9	141.6	162.2	177.7	193	218.5	259.7
evaporimeter	Form		Falling film high efficiency heat exchanger (design water bearing pressure: 1.0Mpa)									
	Water	M^3/h	46.8	53.6	58.1	73	76.9	88.3	97.9	105.2	123.1	136.7
	Pipe	DN	100	100	125	125	125	125	150	150	150	150
	Water	KPa	48	50	45	50	48	48	49	53	54	49
condenser	Form		Shell and tube high efficiency heat exchanger (design water bearing pressure: 1.0Mpa)									
	Water	M^3/h	57.6	66	71.6	89.9	94.7	108.7	120.5	129.6	151.6	168.3
	Pipe	DN	100	100	125	125	125	125	150	150	150	150
	Water	KPa	70	70	68	66	66	63	63	61	60	58
Heat recycle (option)	Recovery	kW	54.1	62	67.2	84.4	88.9	102.1	113.2	121.7	142.3	158
	Water	M^3/h	6.4	10.7	11.6	14.6	15.4	17.7	19.6	21	24.6	27.3
	Water	KPa	38	38	36	36	39	39	38	37	38	38
	Pipe	DN	40	40	40	50	50	50	50	50	65	65
cryogen	type		R22/R410a/R407c/R134a									
	Filling	kG	61	69	95	100	114	127	127	136	159	177
Outline size	L	mm	2960	2960	2960	3160	3160	3240	3240	3240	3240	3400
	W	mm	1250	1300	1300	1360	1360	1370	1470	1470	1500	1690
	H	mm	1720	1720	1720	1800	1810	1910	1950	1950	2010	2110
Machine weight		kG	2500	2550	2650	2800	2900	3100	3300	3650	3800	4100
Running weight		kG	2650	2700	2800	3000	3050	3300	3600	3850	4050	4350

Remarks

Note: unit cooling capacity condition: chilled water inlet temperature 12 ℃, outlet temperature 7 ℃, cooling water inlet temperature 30 ℃, outlet temperature 35 ℃.
Unit operation range: condenser inlet water temperature range 19–33 ℃; The evaporator outlet water temperature range is 5–15 ℃.
Under nominal working conditions, the inlet and outlet temperature of domestic hot water for waste heat recovery of the unit is 40/45 ℃.

Parameter of water-cooled full liquid/falling film type R134a (二)

Model			BKS-***WF/R									
			47	53	58	73	77	82	88	97	105	114
Refrigeratio		kW	541.1	619.5	672.0	844.3	889.3	954.8	1020	1132	1217	1320
		×10⁴kcal/h	465.3	532.7	577.9	726.1	764.7	821.1	877.5	973.4	1046	1135
Power supply			3Φ-380V-50HZ									
Wires suggestion VV		mm²	50*2	50*2	70*2	70*2	95*2	95*2	95*2	120*2	120*2	150*2
Maxi. current		A	210.2	233.2	262	313.4	339.8	361.1	382.4	422.2	452.2	521.2
compressor	Form		5-6 非对称齿形半封闭螺杆压缩机									
	qty	piece	2	2	2	2	2	2	2	2	2	2
	startup type		Y-△									
	Energy regulation		12.5%-25%-37.5%-50%-62.5%--75%-87.5%-100%有段控制									
	Input	kW	100.6	120.4	126.8	152.6	165	177	189	206.4	224.2	239.9
	Rated	A	176.4	214	218	259.8	283.2	303.8	324.4	355.4	386	411.5
evaporimeter	Form		降膜式高效换热器(设计承水压力：1.0Mpa)									
	Water	M³/h	93.6	107.2	116.3	146.1	153.8	165.2	176.5	195.8	210.5	228.4
	Pipe	DN	150	150	150	150	150	150	200	200	200	200
	Water	KPa	63	77	87	84	90	88	86	86	85	82
condenser	Form		管壳式高效换热器(设计承水压力：1.0Mpa)									
	Water	M³/h	115.3	132	143.1	179.8	189.4	203.4	217.3	241.1	259.2	281.2
	Pipe	DN	150	150	150	150	150	150	200	200	200	200
	Water	KPa	68	67	67	66	63	63	61	60	60	58
Heat recycle (option)	Recovery	kW	108.2	123.9	134.4	168.9	177.9	191	204.1	226.4	243.3	264
	Water	M³/h	18.7	21.4	23.2	29.2	30.8	33	35.3	39.2	42.1	45.7
	Water	KPa	36	36	38	37	38	38	40	39	39	41
	Pipe dia.	DN	50	50	50	5065	65	65	65	65	80	80
cryogen	type		R22/R410a/R407c/R134a									
	Filling	kG	121	139	151	189	199	214	229	254	273	296
Outline size	L	mm	4270	4270	4330	4370	4480	4590	4790	4980	5030	5090
	W	mm	1610	1650	1650	1820	1820	1850	1830	1930	1980	1980
	H	mm	1760	1770	1790	1890	1900	1970	2020	2030	2080	2080
Machine weight		kG	3520	3750	4080	4400	4800	5200	5500	5900	6100	6350
Running weight		kG	3720	4000	4280	4600	5100	5500	5850	6350	6500	6800

Remarks

Note: unit cooling capacity condition: chilled water inlet temperature 12 ℃, outlet temperature 7 ℃, cooling water inlet temperature 30 ℃, outlet temperature 35 ℃.
Unit operation range: condenser inlet water temperature range 19–33 ℃; The evaporator outlet water temperature range is 5–15 ℃.
Under nominal working conditions, the inlet and outlet temperature of domestic hot water for waste heat recovery of the unit is 40/45 ℃.

Water type mold temperature controller (98℃/120℃/180℃)

Product features

Heat conduction medium:

● With water as the circulating medium, compared with heat transfer oil medium, it has the characteristics of low cost, high heat transfer efficiency, clean and environmental protection!

Main configuration:

● The whole unit is designed in 3D, and the layout is more reasonable. The sheet metal case is a Europeanized combination type, and the surface is painted with polyester powder with high color fastness, which has stronger weather resistance.

● The bottom of the case is equipped with universal rollers, which is convenient for movement.

● The mechanical heating box and the electric control box are designed with ventilation isolation, so that the service life of electrical appliances is longer.

● The pipeline system is made of 304 sanitary grade stainless steel, and is completed through multiple processes such as numerical control bending, welding, pressure test, polishing, and scale cleaning.

● The specially designed heating pipe is made of nickel–chromium alloy heating wire and alloy stainless seamless pipe, which will never rust and has a longer service life!

● Built–in water level alarm, Baikang's proprietary technology, low water make–up pressure, can also work normally.

●High–quality low–noise pump (pump power can be changed according to customer requirements/magnetic pump optional).

●Liquid crystal display microcomputer multi–function P.I.D intelligent automatic temperature controller, accurate temperature control ± 1 ℃.

●Imported brand contactor is selected for better stability (solid state relay is optional).

Safeguard:

●Automatic audible and visual alarm shutdown in case of failure, automatic exhaust at startup, automatic shutdown cooling at over–temperature, phase loss and reverse protection of power supply, water shortage protection, overload protection of water pump, leakage protection, medium overpressure protection, etc.

Application industry:

●Temperature control and material drying and conveying automation in injection molding/printing/reaction kettle/rubber/roller/extrusion and other industries!

Water type mold temperature controller 98℃/120℃/180℃(single type) parameter

Model		BK-W6	BK-W9	BK-W12	BK-W18	BK-W24	BK-W36	BK-W48
Heat transfer media		water						
Heating energy		98℃/120℃/180℃						
Power supply		AC3PH-380V/50Hz						
Cooling mode		Direct cooling/Indirect cooling						
Heat power	kw	6	9	12	18	24	36	48
Pump	Power KW	0.37	0.75	1.5	2.2	3	4	4.5
	Maxi.pressure	2.8	3.8	4	3	4	4.5	5
	Flow L/min	42	56	110	230	255	267	285
Cooling water pipe diameter		1/2'						
Heat medium pipe diameter		2*3/8	4*3/8	4*3/8	6*3/8	6*3/8	1.2'	1.2'
safeguard		Water shortage protection/overtemperature protection/phase loss, reverse protection/overload protection/medium overpressure protection						
Outline size	L (MM)	730	730	780	780	1050	1100	1100
	W (MM)	280	280	300	300	380	450	450
	H (MM)	560	560	590	590	800	1050	1050
WEIGHT (KG)		48	55	62	92	106	148	170

Due to technical updates, the above specifications are subject to change without notice, and special specifications can be designed and manufactured separately.

Water type mold temperature controller 98℃/120℃/180℃(dual type) parameter

Model		BK-W6M2	BK-W9M2	BK-W12M2
Heat transfer media		water		
Heating energy		98℃/120℃/180℃		
Power supply		AC3PH-380V/50HZ		
Cooling mode		Direct cooling/Indirect cooling		
Heat power	kw	6*2	9*2	12*2
Pump	Power KW	0.37*2	0.75*2	1.5*2
	Maxi.pressure	2.8	3.8	4
	Flow L/min	42*2	56*2	110*2
Cooling water pipe diameter		1/2'	1/2'	1/2'
Heat medium pipe diameter		2*3/8*2	4*3/8*2	4*3/8*2
safeguard		Water shortage protection/overtemperature protection/phase loss, reverse protection/overload protection/medium overpressure protection		
Outline size	L (MM)	980	980	1000
	W (MM)	380	380	440
	H (MM)	750	750	800
WEIGHT (KG)		100	120	150

Due to technical updates, the above specifications are subject to change without notice, and special specifications can be designed and manufactured separately.

Oil type mold temperature controller

Product features

Heat conduction medium:

●With high–temperature heat transfer oil as the circulating medium, the temperature rise is uniform, the service temperature is higher, and the temperature control is accurate (blowing back oil is optional).

Main configuration:

●The whole unit is designed in 3D, and the layout is more reasonable. The sheet metal shell is of European combination type, and the surface is sprayed with polyester powder with high color fastness, which has better weather resistance,.

●The mechanical heating box and the electric control box are designed with ventilation isolation, so that the service life of electrical appliances is longer.

●The pipeline system is made of 304 sanitary grade stainless steel, which is completed through multiple processes such as numerical control bending, welding, pressure test, polishing, and oxide scale cleaning, and will never rust.

●The specially designed heating pipe is made of nickel–chromium alloy heating wire and alloy stainless seamless pipe, which will never rust and has a longer service life!

●Hot oil BY–PASS pressure relief circuit.

●Built–in oil tank with oil level alarm and oil level indication.

●High–quality low–noise pump (pump power/magnetic pump/coupling pump/optional) can be changed according to customer requirements.

●The liquid crystal display microcomputer multi–function P.I.D intelligent automatic temperature controller can safely control the temperature from 35 ℃ to 350 ℃ for continuous operation, and the temperature control accuracy is ± 1 ℃.

●Imported brand contactor is selected for better stability (solid state relay is optional).

Safeguard:

●Automatic audible and visual alarm shutdown in case of fault, automatic shutdown cooling in case of overtemperature, power phase loss and reverse phase protection, oil shortage protection, hot oil pump overload protection, etc.

Application industry:

●Automatic temperature control in injection molding/printing/reaction kettle/rubber/roller/extrusion/die casting/material drying and conveying/other industries!

Parameter of oil mould temperature controller 200℃ (single type)

Model		BK-06	BK-09	BK-012	BK-018	BK-024	BK-036	BK-048
Heat transfer media		oil						
Heating energy		200℃						
Power supply		AC3PH-380V/50HZ						
Cooling mode		Indirect cooling						
Heat power	kw	6	9	12	18	24	36	48
Pump	Power KW	0.37	0.75	1.5	2.2	3	4	4.5
	Maxi.pres	2.8	3.8	4	3	4	4.5	5
	Flow	42	56	110	230	255	267	285
Cooling water pipe		1/2'						
Heat medium pipe		2*3/8	4*3/8	4*3/8	6*3/8	6*3/8	1.2'	1.2'
Oil tank volume (L)		10	10	15	20	30	40	55
safeguard		Oil level protection/over temperature protection/phase loss, reverse protection/overload protection						
Outline size	L (MM)	730	730	780	780	1050	1100	1100
	W (MM)	280	280	300	300	380	450	450
	H (MM)	560	560	590	590	800	1050	1050
WEIGHT (KG)		51	57	65	98	110	156	178

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Parameter of oil mould temperature controller 200℃ (dual type)

Model		BK-06M2	BK-09M2	BK-012M2
Heat transfer media		Oil		
Heating energy		200℃		
Power supply		AC3PH-380V/50HZ		
Cooling mode		Indirect cooling		
Heat power	kw	6*2	9*2	12*2
Pump	Power KW	0.5*2	1*2	1*2
	Maxi.pressurekg	2.5	3.5	4
	Flow L/min	35*2	45*2	45*2
Cooling water pipe diameter		1/2'	1/2'	1/2'
Heat medium pipe diameter		2*3/8*2	4*3/8*2	4*3/8*2
Oil tank volume (L)		30	30	30
safeguard		Oil level protection/over temperature protection/phase loss,		
Outline size	L (MM)	980	980	1100
	W (MM)	380	380	450
	H (MM)	750	750	1050
WEIGHT (KG)		100	120	150

Due to technical updates, the above specifications are subject to change without notice, and special specifications can be designed and manufactured separately.

High temperature Oil type mold temp. Controller300~350℃ parameter

Model		BK-09H	BK-012H	BK-018H	BK-024H	BK-036H	BK-048H
Heat transfer media		oil					
Heating energy		300～350℃					
Power supply		AC3PH-380V/460V 50HZ/HZ					
Cooling mode		Indirect cooling					
Heating power	kw	9	12	18	24	36	48
Pump	Power KW	2	2	3	4	4	5
	Maxi.pressure kg/cm²	2.8	2.8	2.8	3	3	3.2
	Flow L/min	100	100	167	167	167	267
Cooling water pipe diameter		1/2				3/4	
Heat medium pipe diameter		3/8*4	3/8*4	3/8*4	3/4	1	1-1/2
Oil tank volume (L)		40	40	40	60	60	60
safeguard		Oil shortage protection/overtemperature protection/phase					
Outline size	L (MM)	1150	1150	1150	1250	1250	1250
	W (MM)	450	450	450	500	500	500
	H (MM)	1100	1100	1100	1200	1200	1300
WEIGHT (KG)		110	125	150	180	200	240

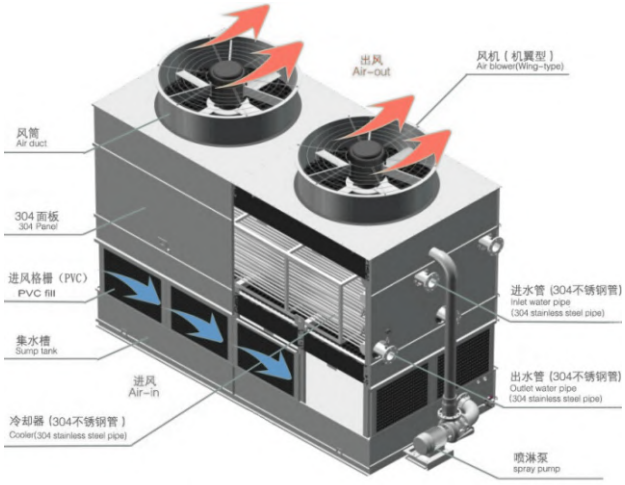
Due to technical updates, the above specifications are subject to change without notice, and special specifications can be designed and manufactured separately.

Model		BK-060H	BK-072H	BK-096H
Heat transfer media		oil		
Heating energy		300～350℃		
Power supply		AC3PH-380V/460V 50HZ/HZ		
Cooling mode		Indirect cooling		
Heating power	kw	60	72	96
Pump	Power KW	7.5	10	15
	Maxi.pressure	4	4.5	4.8
	Flow L/min	420	500	750
Cooling water pipe diameter		3/4		
Heat medium pipe diameter		1-1/2	2	2-1/2
Oil tank volume (L)		80	80	100
safeguard		Oil shortage protection/overtemperature protection/phase		
Outline size	L (MM)	1580	1580	1780
	W (MM)	600	600	700
	H (MM)	1400	1400	1500
WEIGHT (KG)		320	380	480

Due to technical updates, the above specifications are subject to change without notice, and special specifications can be designed and manufactured separately.

Counterflow closed type cooling tower

Product features



●Counter–flow cooling mode is adopted, with less heat dissipation blind area and high heat exchange efficiency;
●High–efficiency water collector, low floating rate of control operation;
●High air duct design ensures that the air volume of equipment operation meets the heat dissipation requirements;
●Compared with other forms of cooling tower, it reduces the floor area and meets the space requirements of users;
●The box body adopts closed circulation to prevent sundries from entering the tower body causing spray blockage;
●The cooler adopts antifreezing and energy–saving design to ensure that the circulating water is drained to avoid freezing damage when the gas temperature in the north is low;
●Double–circuit cycle can be designed according to user's equipment requirements. Even if one cycle fails, the other cycle can still operate normally;
●The unit design is beautiful and generous, with automatic digital display and easy operation and maintenance.

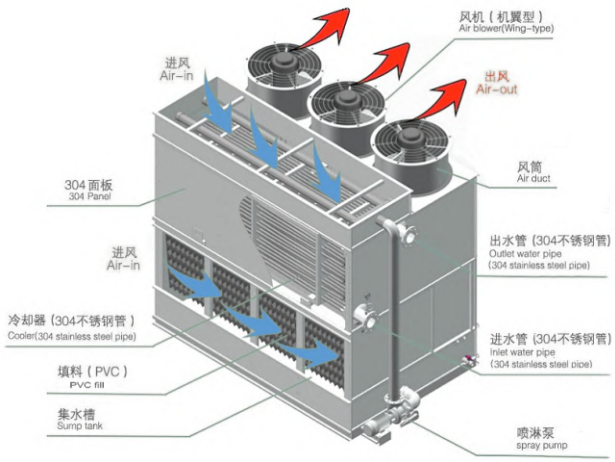
Counterflow closed type cooling tower _Technical parameters

型号 Model	冷却量能力 cooling capacity	设计流量 water flow	风机 fan	喷淋泵 spray pump	外形尺寸 outline size	进出水口径	补水口径	排污口径	重量 weight	
			功率 power	功率 power	长×宽×高 L×W×H	water in/out diameter	Water supply caliber	Discharge diameter	自重 N.W.	运行 operation weight
Type	Kcal	m3/h	Kw	Kw	mm	DN	DN	DN	Kg	Kg
BKN-6	30000	6	1.1x1	0.75	1400x1200x2200	65	20	25	450	700
BKN-10	50000	10	1.1x1		1600x1200x2200	65	20	25	550	850
BKN-15	75000	15	1.1x2	0.75	2050x1200x2400	65	20	25	750	1150
BKN-20	100000	20	1.1x2		2350x1200x2400	65	20	25	800	1250
BKN-25	125000	25	1.1x2	1.5	2900x1200x2800	80	25	32	1200	2700
BKN-30	150000	30	1.1x2		2900x1200x2800	80	25	32	1250	2750
BKN-40	200000	40	2.2x2		2900x1750x2900	80	25	32	1600	3350
BKN-50	250000	50	2.2x2		2900x1750x2900	100	25	32	1700	3550
BKN-60	300000	60	2.2x2	1.5	3700x1750x3200	100	25	32	1950	3850
BKN-70	350000	70	3x2		3700x1750x3200	125	25	32	2050	4050
BKN-80	400000	80	3x2	2.2	3900x2200x3500	125	32	40	2500	4850
BKN-90	450000	90	3x2		3900x2200x3500	100x2	32	40	2700	5050
BKN-100	500000	100	3x2		3900x2200x3500	100x2	32	40	3050	6100
BKN-125	625000	125	4x2		4350x2400x3600	125x2	32	40	3300	6800
BKN-150	750000	150	7.5x2	4	5000x2400x3850	125x2	40	50	4000	8800
BKN-180	900000	180	7.5x2		5300x2600x3850	125x2	40	50	4200	9350
BKN-200	1000000	200	7.5x2	7.5	6000x2700x3900	150x2	40	50	5100	11500
BKN-230	1150000	230	7.5x2		6000x3000x4350	150x2	40	50	5300	12500
BKN-250	1250000	250	7.5x2	7.5	6300x3000x4550	150x2	40	50	6000	13500
BKN-280	1400000	280	11x2		6300x3000x4550	150x2	50	65	6300	14000
BKN-300	1500000	300	11x2	5.5x2	7000x3000x4750	200x2	50	65	6900	15000
BKN-350	1750000	350	15x2		7000x3000x4750	200x2	50	65	7600	15600
BKN-400	2000000	400	15x2		7800x3000x5000	200x2	50	65	8300	16500

Note:Pictures and technical parameters in catalog are for you reference only. The parameter changes caused by product improvement are subject to our proposal without prior notice.

Closed type cooling tower (Compound flow single inlet air)

Product features



●Adopt compound flow cooling mode, high-efficiency dehydrator, and low water drift rate. It can cool the medium with high temperature and large temperature difference requirements;
●The cooling medium is closed and circulated in the coil, without other impurities entering, so as to ensure that the medium is clean;
●Soft water shall be used for water circulation without scaling and blocking the pipeline;
●The spray water completely wets the outer wall of the cooling coil to avoid the formation of scale at the dry point and ensure the high efficiency of the system;
●The floor area is small, and it can be moved, placed and maintained as required with low cost;
●The cooler adopts antifreezing energy-saving design. When the equipment is not running, the water in the cooler will automatically return to the water tank. When the gas temperature in the north is low, ensure that the circulating water is drained to avoid freezing damage;
●Automatic digital display temperature control, energy saving and environmental protection.

Closed type cooling tower (Compound flow single inlet air) _Technical parameters

型号 Model	冷却量能力 cooling capacity	设计流量 water flow	风机 fan	喷淋泵 spray pump	外形尺寸 outline size	进出水口径	补水口径	排污口径	重量 weight	
			功率 power	功率 power	长×宽×高 L×W×H	water in/out dia.	Water supply caliber	Discharge diameter	自重 N. W.	运行 operation weight
Type	Kcal	m3/h	Kw	KW	mm	DN	DN	DN	Kg	Kg
BKS-30	150000	30	1.5x2	1.5	2900x1750x2700	80	25	32	1100	2550
BKS-40	200000	40	1.5x2		2900x1750x2700	80	25	32	1300	2850
BKS-50	250000	50	1.5x2		2900x1950x2700	100	25	32	1490	3250
BKS-60	300000	60	2.2x2		2900x2250x2850	100	25	32	1760	3750
BKS-70	350000	70	2.2x2		2900x2250x2850	125	25	32	1850	3850
BKS-80	400000	80	1.5x3	1.5	3700x2250x3050	125	32	40	2000	4300
BKS-90	450000	90	2.2x3		3900x2250x3050	100x2	32	40	2350	4850
BKS-100	500000	100	2.2x3		3900x2450x3050	100x2	32	40	2450	5300
BKS-125	625000	125	1.5x4	2.2	4350x2450x3250	125x2	32	40	3050	6500
BKS-150	750000	150	2.2x4		5350x2750x3350	125x2	40	50	3800	7900
BKS-180	900000	180	3x4		5350x2750x3600	125x2	40	50	4100	9100
BKS-200	1000000	200	4x4	3	6000x2750x3650	150x2	40	50	4800	11000
BKS-230	1150000	230	4x4		6000x2750x3650	150x2	40	50	5200	12500
BKS-250	1250000	250	4x4	4	6300x2850x3850	150x2	40	50	5800	13100
BKS-280	1400000	280	5.5x4		6300x2850x3850	150x2	50	65	6100	13650
BKS-300	1500000	300	5.5x4	7.5	7000x3000x4250	200x2	50	65	6700	14650
BKS-350	1750000	350	7.5x4		7000x3000x4550	200x2	50	65	7400	15350
BKS-400	2000000	400	7.5x4	4x2	7600x3000x4900	200x2	50	65	7950	16100

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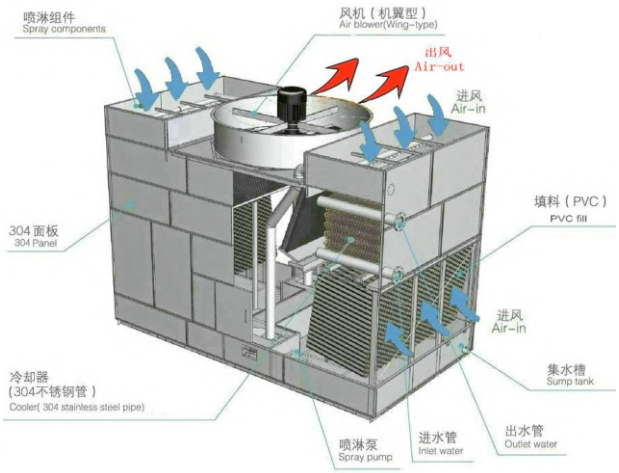
Closed type cooling tower (compound flow double inlet air)

Product features

●Double-inlet closed cooling tower is based on the design of single air inlet. A second coil and PVC heat exchange layer are added in the system of single common fan, so as to achieve higher performance and lower energy consumption in the minimum plane area; Built-in maintenance platform, large internal space, convenient maintenance;
●Only one single module of the double-inlet evaporative condenser can reach the maximum industrial capacity, so the double-inlet compound flow closed cooling tower is the ideal choice for large projects; And the noise is low, the wearing parts adopt domestic well-known brands, the failure rate is low, and the maintenance cost is low;
●Two-way coil can realize the purpose of cooling different media in the same tower.



Closed type cooling tower (compound flow double inlet air)_Technical parameters

型号 Model	冷却量能力 cooling capacity	设计流量 water flow	风机 fan	喷淋泵 spray pump	外形尺寸 O.D.	进出水口径	补水口径	排污口径	重量 weight	
			功率 power	功率 power	长×宽×高 L×W×H	water in/out	water supply dia.	dischange dia.	自重 N.W.	运行 operation weight
Type	Kcal	m3/h	Kw	KW	mm	DN	DN	DN	Kg	Kg
BKD-80S	400000	80	5.5x1	2.2	4250x2250x3000	DN100×2	32	40	2450	5950
BKD-90S	450000	90	5.5x1		4250x2250x3000	DN100×2	32	40	2500	6050
BKD-100S	500000	100	5.5x1		4250x2450x3250	DN100×2	32	40	2650	6600
BKD-125S	625000	125	7.5x1	3	5250x2550x3250	DN100×2	32	40	3100	8050
BKD-150S	750000	150	11x1	4	5250x2550x3350	DN125×2	40	50	3700	9600
BKD-180S	900000	180	11x1		5550x3000x3550	DN125×2	40	50	3800	12000
BKD-200S	1000000	200	15x1		6050x3000x3550	DN125×2	40	50	4600	14100
BKD-230S	1150000	230	15x1	7.5	6550x3000x3550	DN150×2	40	50	5200	15200
BKD-250S	1250000	250	18.5x1		6950x3200x4050	DN150×2	40	50	7100	18000
BKD-280S	1400000	280	18.5x1	3x2	6950x3200x4050	DN150×2	50	65	8300	19800
BKD-300S	1500000	300	22x1		7550x3400x5050	DN200×2	50	65	9800	22400
BKD-350S	1750000	350	22x1	4x2	7550x3600x5050	DN200×2	50	65	10800	24000
BKD-400S	2000000	400	30x1	7.5x2	8000x3650x5250	DN200×2	50	65	12000	26000

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Circular cooling tower

Product features

●**Tower body:** made of FRP composite material, the surface gel coat is made of imported raw materials, resistant to ultraviolet radiation, smooth and clean surface, and aging resistance.
●**Fan:** large chord length, space twist, forward tilt blade fan is selected, with uniform air volume, low noise and energy saving. The blade angle can be adjusted to meet the requirements of various working conditions to the maximum.
●**Motor:** totally enclosed waterproof motor, imported bearing, stable performance and low noise.
●**Filler:** corrosion–resistant corrugated sheet plastic filler, with uniform water flow distribution and excellent turbulence performance of water and gas channels.
●**Water distribution system:** rotary pipe type water distributor (ABS/bronze alloy material) is adopted, with uniform water dispersion.
●**Steel parts:** all are treated by derusting hot–dip galvanizing process, with corrosion resistance and high strength.

Technical parameter

型号 Model	流量 (M^3/H) Water flow	风机直径 (MM) Fan dia.	理论风量 (M^3/H) Theoretical air volume	电机功率 (KW) Motor power	额度电流 (A) Rated current	外形尺寸 (MM) outline size		标准型 standard type		低噪音型 low noise type	
						塔高 Tower height	最大外径 MAX. outside dia.	重量 weight (KG) 净重 N.W	运行重 Running weight	重量 weight (KG) 净重 N.W	运行重 running weight
BKL-6	6	584	3400	0.18	0.31	2220	1344	76	162	61	148
BKL-8	8	584	4500	0.18	0.31	2340	1344	85	177	64	156
BKL-10	10	584	5700	0.25	0.43	2440	1426	106	238	85	221
BKL-12	12	760	6800	0.37	0.65	2470	1514	127	276	94	241
BKL-16	16	760	9100	0.37	0.65	1760	1634	157	327	124	295
BKL-20	20	760	11200	0.37	0.65	2920	1634	198	415	158	334
BKL-25	25	760	15000	0.55	0.94	3060	1634	224	448	174	404
BKL-30	30	884	17000	0.75	1.3	2940	2284	229	454	185	410
BKL-40	40	884	23000	0.75	1.3	2945	2284	249	512	192	430
BKL-50	50	884	28000	1.1	1.87	2945	2284	260	525	215	481
BKL-60	60	1000	33000	1.1	1.87	3680	3730	470	876	412	810
BKL-70	70	1190	40000	1.5	2.6	3680	2730	542	905	476	839
BKL-80	80	1470	45000	2.2	3.74	3990	3970	768	1225	680	1137
BKL-90	90	1470	48000	2.2	3.74	3990	2970	884	1362	730	1180
BKL-100	100	1470	50000	4	6.8	4075	3390	960	1520	776	1255
BKL-125	125	1800	57000	4	6.8	4725	4120	1075	1755	954	1625
BKL-150	150	1800	70000	4	6.8	4725	4120	1182	2242	1062	2112
BKL-175	175	1800	85000	4	6.8	4965	4120	1742	2367	1468	2857
BKL-200	200	1800	99000	4	6.8	5530	4400	2163	4000	1797	3671
BKL-225	225	2400	113000	5.5	9.35	6080	5350	2290	4164	1987	3866
BKL-250	250	2400	142000	5.5	9.35	6080	5350	2568	4499	2370	4301
BKL-300	300	3000	171000	7.5	12.8	7260	5900	2790	6620	2495	4426
BKL-350	350	3000	210000	11	18.7	7260	6300	3136	7320	2702	6751
BKL-400	400	3400	228000	11	18.7	7447	7070	3961	9441	3592	8597
BKL-450	450	3400	285000	15	25	7447	7070	4311	10894	3741	9855
BKL-500	500	3700	342000	15	25	8350	8050	4618	12439	4276	11643
BKL-600	600	3700	40000	18.5	33.3	5145	6800	4084	11679	4457	11738

Esign conditions: water inlet temperature 37 ℃, water outlet temperature 32 ℃; The wet bulb temperature is 28 ℃ and the dry bulb temperature is 31.5 ℃. Atmospheric pressure: 9.94 * 104Pa

Listen to customers voice,
Focus on customers needs

NINGBO BAIKANG COLD AND HOT MECHANICAL EQUIPMENT CO.,LTD

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