



COMPANY PROFILE

Founded in 1970, Kaori's goal is the pursuit of modernization of heat-treating technology. Our staff has made every effort to improve on hardware and software, research & development, and acquire the latest technology. The JIS marking and certificate from McDonnell Douglas were awarded to Kaori in 1988 and 1994, respectively, for Kaori's outstanding quality and performance. Kaori continues to grow in the areas of financial assets, labor force, and experiences in the heat treatment field.

Based on our heat-treating and brazing experience, in 1992, Kaori began to manufacture Sendzimir work rolls and industrial brazed plate heat exchangers. Again, Kaori was awarded the certificate of qualification for ISO9001:2000, UL and CE, thus proving Kaori's capability in manufacturing and management. By combining the available technologies, we plan to step into the thermal management industry and clean room assembly parts.

We continue to focus our business on the manufacturing of plate heat exchangers and related components. With production plants in Taiwan and China, we are well equipped to deliver outstanding products and services to meet the on-going global demand.



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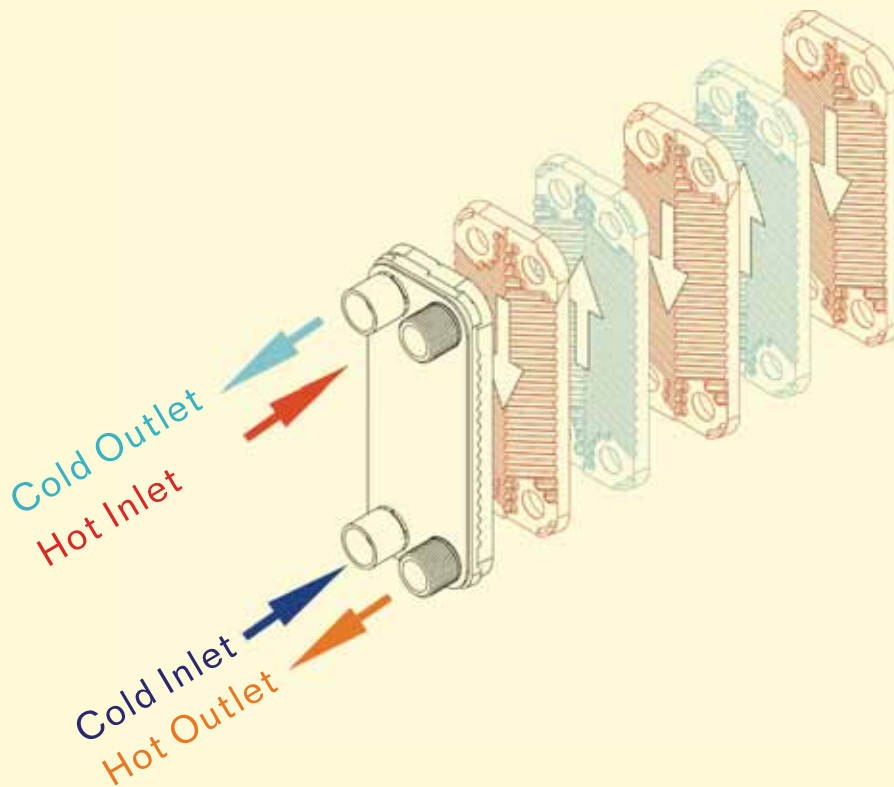
KAORI BRAZED PLATE HEAT EXCHANGER



OUR PRODUCTS-BPHE

Kaori's brazed type heat exchanger consists a series of thin and corrugated stainless steel plates. These plates are compressed and brazed together with copper or nickel depending on the application. This creates flowing channels between plates, with one fluid in odd number channels and the other in the even number channels, thus reaching the purpose of heat exchanging.

Different from the gasket seal type, brazing type uses soldering material (copper or nickel depending on the application) to seal the exchanger. By applying high temperature in the vacuum environment at the manufacturing process, it melts down the soldering material to form the seal between each plate.



ADVANTAGES ON THE BRAZED PLATE HEAT EXCHANGER

1. High corrosion resistant

All plates use AISI316 material. Brazing materials are offered in copper or nickel. These materials offer high corrosion resistance against many kinds of fluids.

2. High pressure resistant

Thanks to the brazing process, plate heat exchangers are pressure resistant up to 653psi (45bar).*

3. High thermal efficiency

Carefully designed plate patterns of the corrugated plates easily achieve high thermal transfer rates in either counter flow or parallel flow arrangements.

4. High working temperature

BPHE's AISI316 material structure offers a higher working temperature range up to 392°F (200°C).

5. Compactness





BPHE is much lighter and smaller in weight and size compared to shell tube exchangers; about 1/5 the size of the shell tube exchanger with the same capacity. This advantage makes BPHE easier to install and replace.

6. Low maintenance

The corrugated plates are designed to achieve turbulence flow at low flow rates, no need for frequent maintenance.

* Maximum value may vary with products. Please refer to the tables for particular type of heat exchanger.

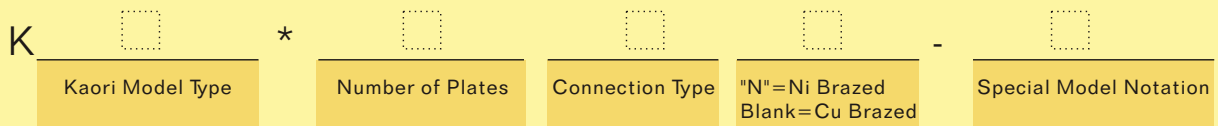
WHAT BPHE DO WE OFFER

	K025	K030	K050	K070
				
Cu Brazing	○	○	○	○
Ni Brazing	○	○	○	○
Heat Transfer Area/ Plate	0.0120m ²	0.0117m ²	0.0255m ²	0.0300m ²
Plate Material	AISI316	AISI316	AISI316	AISI316

Kaori Model Performance Range Diagram

	K030		K050/K070		K095/K105		K205		K215	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Capacity (KW)	0.72	5.7	1.76	17.58	10.55	43.95	35.16	105.49	35.16	140.65
Flow Rate (LPM)	2	16	5	50	30	125	100	300	100	400

Model Code



Ex: K095*30B-TMK1

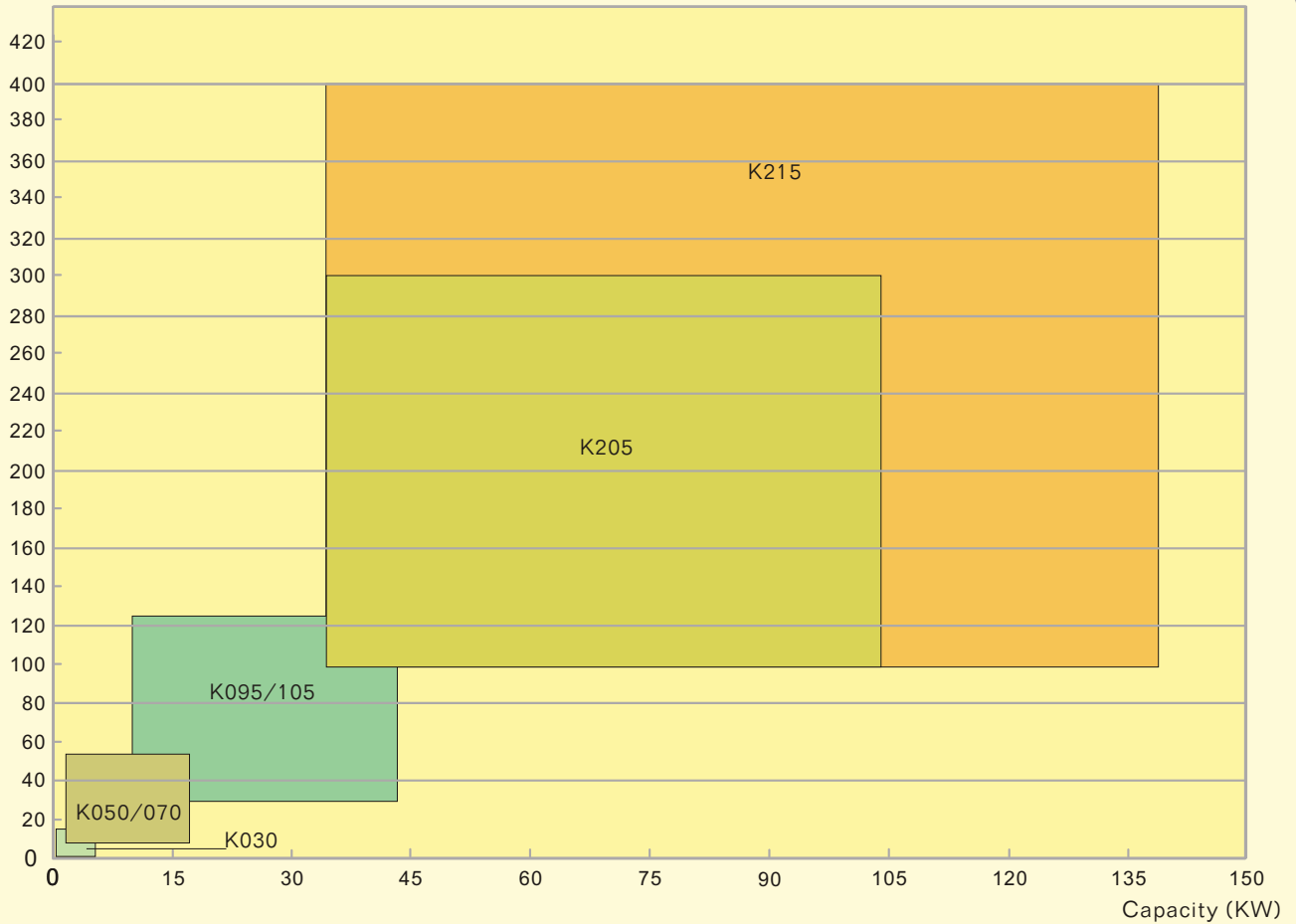
Connection Type Notation:

- B or C : Kaori standard refrigeration type connection.
- W : Kaori standard four soldering type connection.
- M : Kaori standard four PT male threaded connection type.
- F : Kaori standard four PT female threaded connection type.
- X : Kaori standard opposite-side connection model.

K095	K105	K205	K210	K215
				
○	○	○	○	○
○	○	○	NA	NA
0.0475m ²	0.0533m ²	0.1099m ²	0.1036m ²	0.1103m ²
AISI316	AISI316	AISI316	AISI316	AISI316

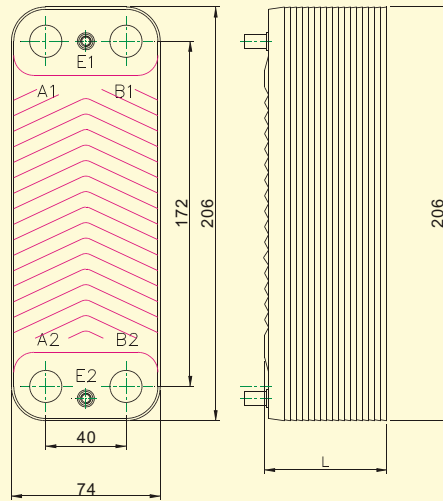
Kaori Model Performance Range Diagram

Flow Rate(LPM)

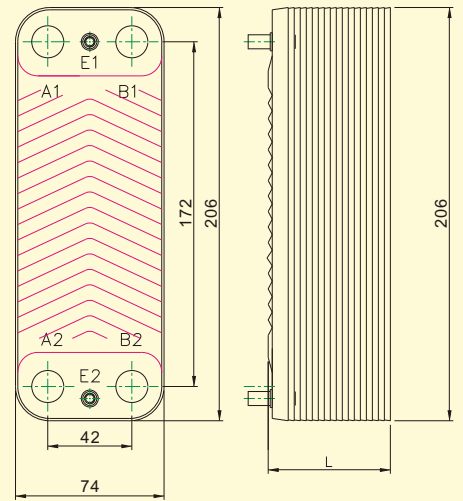




K025FA



K025FB

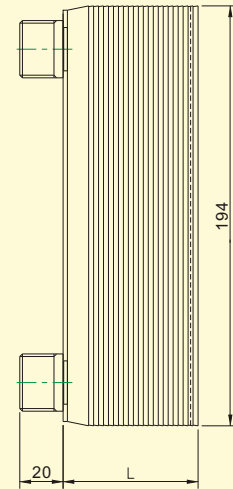
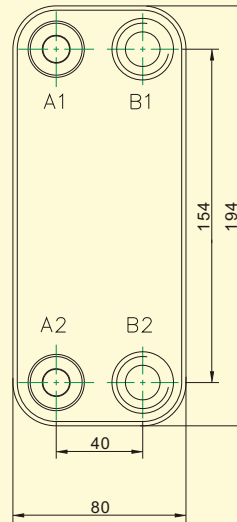


Unit(mm)

Kaori K025 BPHE

Model	Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
K025*10	10 bar / 10 bar	-160°C ~ 200°C	0.096m ²	29mm	0.65kg	0.216L
K025*12			0.120m ²	34mm	0.74kg	0.264L
K025*14			0.144m ²	38mm	0.82kg	0.312L
K025*16			0.168m ²	43mm	0.91kg	0.360L
K025*18			0.192m ²	47mm	1.00kg	0.408L
K025*20			0.216m ²	52mm	1.09kg	0.456L
K025*22			0.240m ²	56mm	1.18kg	0.504L
K025*24			0.264m ²	61mm	1.26kg	0.552L
K025*26			0.288m ²	65mm	1.35kg	0.600L
K025*28			0.312m ²	70mm	1.44kg	0.648L
K025*30			0.336m ²	74mm	1.53kg	0.696L
K025*32			0.360m ²	79mm	1.62kg	0.744L
K025*34			0.384m ²	83mm	1.70kg	0.792L
K025*36			0.408m ²	88mm	1.79kg	0.840L
K025*38			0.432m ²	92mm	1.88kg	0.888L

Copper / Nickel Brazing



Unit(mm)

Kaori K030 BPHE

Model	Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
K030*10	Cu Brazing -30 bar / 43 bar Ni Brazing -10 bar / 15 bar	-160°C ~ 200°C	0.094m ²	33mm	1.3kg	0.221L
K030*12			0.117m ²	37mm	1.4kg	0.270L
K030*14			0.140m ²	42mm	1.5kg	0.319L
K030*16			0.164m ²	46mm	1.6kg	0.368L
K030*18			0.187m ²	51mm	1.7kg	0.417L
K030*20			0.211m ²	55mm	1.8kg	0.466L
K030*22			0.234m ²	60mm	1.9kg	0.515L
K030*24			0.257m ²	64mm	2.0kg	0.564L
K030*26			0.281m ²	69mm	2.1kg	0.613L
K030*28			0.304m ²	73mm	2.2kg	0.662L
K030*30			0.328m ²	78mm	2.3kg	0.711L
K030*32			0.351m ²	82mm	2.4kg	0.760L
K030*34			0.374m ²	87mm	2.5kg	0.809L
K030*36			0.398m ²	91mm	2.6kg	0.858L
K030*38			0.421m ²	96mm	2.7kg	0.907L

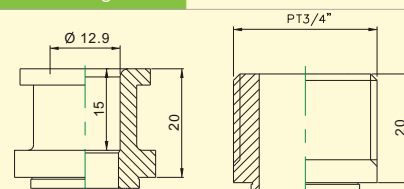
Threaded Connector

PT/NPT/GB Male							PT/NPT/GB Female							
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
※	※							※						

Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
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Connector Drawing



FEATURE

H

※ Please Refer to the Legends in the Folded Panel on Page 7.(All pages)

LEGENDS

V

Distributor

Kaori "V" type BPHE implements an unique distributor design which ensures even allocation of refrigerant within flow channels.

H

Hydraulic

Kaori "H" type BPHE is designed to withstand repetitive high stress when working in hydraulic related environment. Its muscular body structure shows off its strength.

AD

Air Dyer

A compact solution for air dryer application - Kaori offers air dryer unit in the form of BPHE; the easiest way to miniaturize your air dryer package.

T

Temperature Monitoring

Kaori "T" type BPHE is designed with two temperature sensor ports. These ports enable easy installation of temperature sensor and achieve accurate system control.

S

Extra Strength

When high working pressure is required (ex: R410 refrigeration system), Kaori offers "S" type BPHE. Kaori "S" type BPHE is designed to withstand up to 653 psi (45bar) of working pressure and is tested with 943 psi (65bar) of pressure.

Ni+

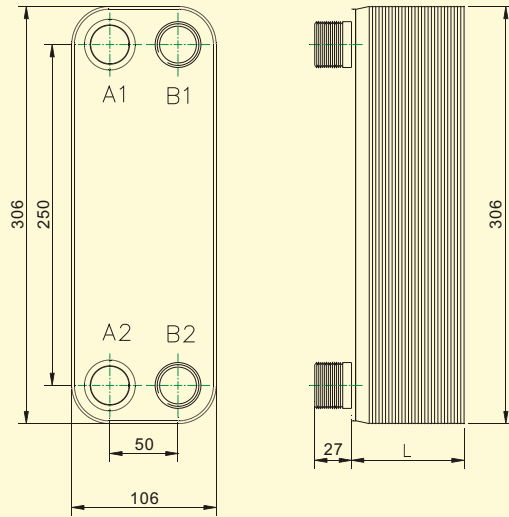
Super Nickel

Kaori offers "Ni+" type BPHE for extreme Nickel BPHE applications. "Ni+" BPHE finds itself working comfortably at maximum 435psi (30bar) pressure and is tested with 624psi (43bar) pressure.

D

Dual Circuit

Kaori "D" type BPHE is designed to handle two compressors at the same time. This model further simplifies your already delicate design.



Unit(mm)

Kaori K050 BPHE

	Model	Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
Copper Brazing	K050*10 C/B	30 bar / 43 bar	-160°C ~ 200°C	0.204m ²	34mm	2.8kg	0.486L
	K050*14 C/B			0.306m ²	44mm	3.3kg	0.702L
	K050*20 C/B			0.459m ²	58mm	4.2kg	1.026L
	K050*24 C/B			0.561m ²	68mm	4.7kg	1.242L
	K050*34 C/B			0.816m ²	92mm	6.0kg	1.782L
	K050*50 C/B			1.224m ²	130mm	8.2kg	2.646L
	K050*70 C/B			1.734m ²	178mm	10.9kg	3.726L
Nickel Brazing	K050*10	10 bar / 15 bar	-160°C ~ 200°C	0.204m ²	34mm	2.8kg	0.486L
	K050*20			0.459m ²	58mm	4.2kg	1.026L
	K050*30			0.714m ²	82mm	5.5kg	1.566L
	K050*40	30 bar / 43 bar		0.969m ²	106mm	6.9kg	2.106L
	K050*50	1.224m ²		130mm	8.2kg	2.646L	
	K050*60	1.479m ²		154mm	9.6kg	3.186L	
	K050*70	1.734m ²		178mm	10.9kg	3.726L	

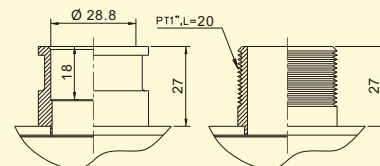
Threaded Connector

PT/NPT/GB Male							PT/NPT/GB Female							
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
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Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
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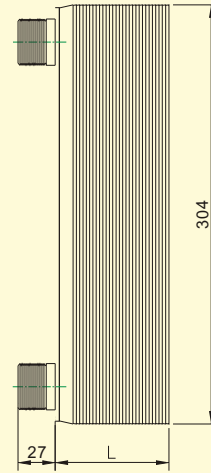
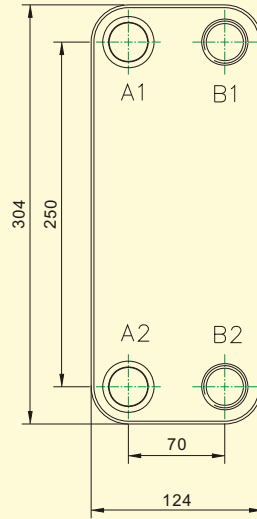
Connector Drawing



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Unit(mm)

Kaori K070 BPHE

	Model	Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
Copper Brazing	K070*10 C/B	30 bar / 43 bar	-160°C ~ 200°C	0.240m ²	34mm	3.1kg	0.576L
	K070*14 C/B			0.360m ²	44mm	3.7kg	0.832L
	K070*20 C/B			0.540m ²	58mm	4.6kg	1.216L
	K070*24 C/B			0.660m ²	68mm	5.2kg	1.472L
	K070*34 C/B			0.960m ²	92mm	6.7kg	2.112L
	K070*50 C/B			1.440m ²	130mm	9.1kg	3.136L
	K070*70 C/B			2.040m ²	178mm	12.1kg	4.416L
Nickel Brazing	K070*10	10 bar / 15 bar	-160°C ~ 200°C	0.240m ²	34mm	3.1kg	0.576L
	K070*20			0.540m ²	58mm	4.6kg	1.216L
	K070*30			0.840m ²	82mm	6.1kg	1.856L
	K070*40			1.140m ²	106mm	7.6kg	2.496L
	K070*50			1.440m ²	130mm	9.1kg	3.136L
	K070*60			1.740m ²	154mm	10.6kg	3.776L
	K070*70			2.040m ²	178mm	12.1kg	4.416L

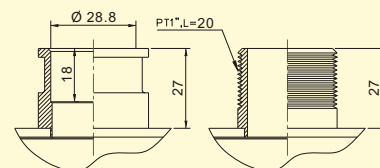
Threaded Connector

PT/NPT/GB Male							PT/NPT/GB Female							
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
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Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
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Connector Drawing



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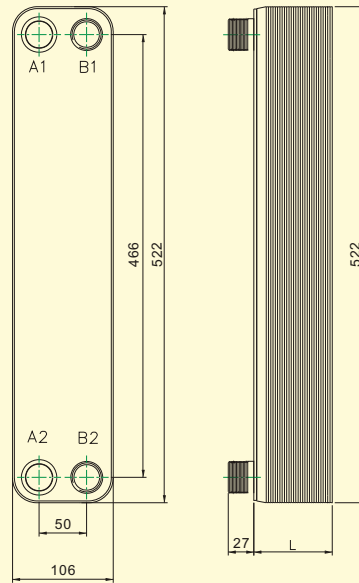
H

AD

T

D

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Unit(mm)

Kaori K095 BPHE

	Model	Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
Copper Brazing	K095*18 B/BV	30 bar / 43 bar	-160°C ~ 200°C	0.760m ²	53mm	7.0kg	1.496L
	K095*26 B/BV			1.140m ²	72mm	8.8kg	2.200L
	K095*30 B/BV			1.331m ²	82mm	9.7kg	2.552L
	K095*34 B/BV			1.520m ²	92mm	10.5kg	2.904L
	K095*40 B/BV			1.805m ²	106mm	11.9kg	3.432L
	K095*48 B/BV			2.185m ²	125mm	13.6kg	4.136L
	K095*60 B/BV			2.755m ²	154mm	16.3kg	5.192L
	K095*80 B/BV			3.705m ²	202mm	20.7kg	6.952L
Nickel Brazing	K095*18	10 bar / 15 bar	-160°C ~ 200°C	0.760m ²	53mm	7.0kg	1.496L
	K095*26			1.140m ²	72mm	8.8kg	2.200L
	K095*30			1.331m ²	82mm	9.7kg	2.552L
	K095*34			1.520m ²	92mm	10.5kg	2.904L
	K095*40			1.805m ²	106mm	11.9kg	3.432L
	K095*48			2.185m ²	125mm	13.6kg	4.136L
	K095*60			2.755m ²	154mm	16.3kg	5.192L
	K095*80			3.705m ²	202mm	20.7kg	6.952L

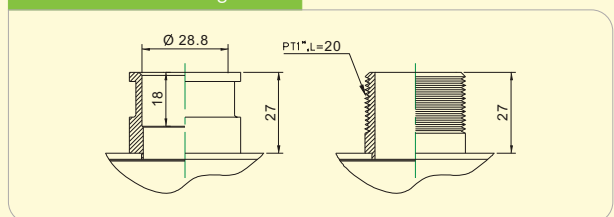
Threaded Connector

PT/NPT/GB Male							PT/NPT/GB Female							
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
		※						※						

Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
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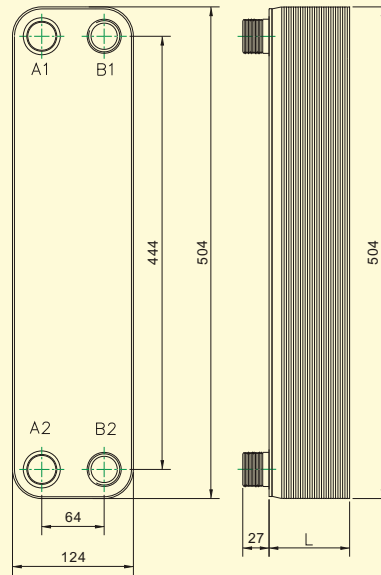
Connector Drawing



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Unit(mm)

Kaori K105 BPHE

	Model	Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
Copper Brazing	K105*18 C/B/BV/CV	30 bar / 43 bar	-160°C ~ 200°C	0.853m ²	53mm	7.8kg	1.904L
	K105*26 C/B/BV/CV			1.279m ²	72mm	9.7kg	2.800L
	K105*30 C/B/BV/CV			1.492m ²	82mm	10.7kg	3.248L
	K105*34 C/B/BV/CV			1.706m ²	92mm	11.6kg	3.696L
	K105*40 C/B/BV/CV			2.025m ²	106mm	13.1kg	4.368L
	K105*48 C/B/BV/CV			2.452m ²	125mm	15.0kg	5.264L
	K105*60 C/B/BV/CV			3.091m ²	154mm	17.9kg	6.608L
	K105*80 C/B/BV/CV			4.157m ²	202mm	22.7kg	8.848L
Nickel Brazing	K105*18	10 bar / 15 bar	-160°C ~ 200°C	0.853m ²	53mm	7.8kg	1.904L
	K105*26			1.279m ²	72mm	9.7kg	2.800L
	K105*30			1.492m ²	82mm	10.7kg	3.248L
	K105*34			1.706m ²	92mm	11.6kg	3.696L
	K105*40			2.025m ²	106mm	13.1kg	4.368L
	K105*48			2.452m ²	125mm	15.0kg	5.264L
	K105*60			3.091m ²	154mm	17.9kg	6.608L
	K105*80			4.157m ²	202mm	22.7kg	8.848L

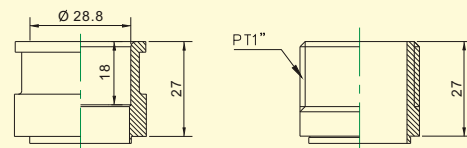
Threaded Connector

PT/NPT/GB Male							PT/NPT/GB Female							
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
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Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
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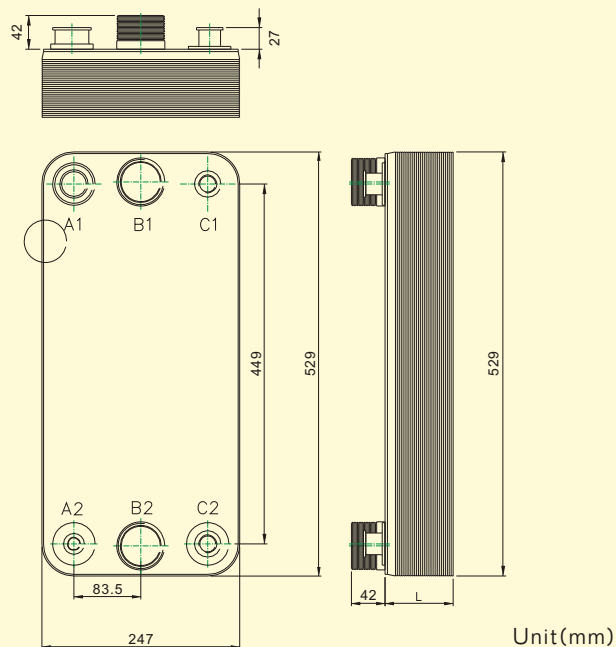
Connector Drawing



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Kaori K215 BPHE

Model		Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
Copper Brazing	K215*18 D/DV	30 bar / 43 bar	-160°C~ 200°C	1.765m ²	56mm	16.5kg	3.74L
	K215*30 D/DV			3.088m ²	84mm	22.8kg	6.38L
	K215*38 D/DV			3.971m ²	103mm	26.9kg	8.14L
	K215*58 D/DV			6.177m ²	150mm	37.3kg	12.54L
	K215*66 D/DV			7.059m ²	169mm	41.5kg	14.30L
	K215*78 D/DV			8.383m ²	197mm	47.7kg	16.94L
	K215*118 D/DV			12.795m ²	291mm	68.5kg	25.74L

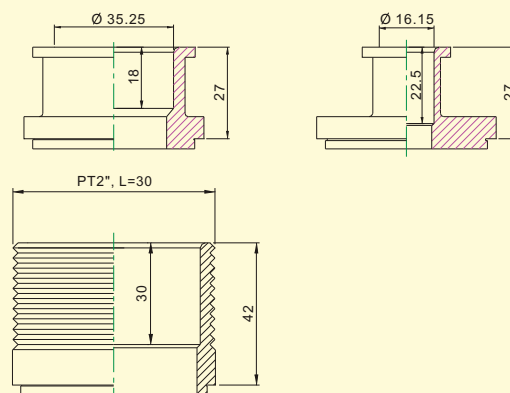
Threaded Connector

PT/NPT/GB Male								PT/NPT/GB Female						
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
				※	※			※						

Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
	※				※	

Connector Drawing



FEATURE



※ Please Refer to the Legends in the Folded Panel on Page 7. (All pages)

HVAC (Evaporators/Condensers)

RT	Kcal/hr	KW	BTU/H	K050/070	K095/105	Eva.Only	K205	Eva.Only
0.5	1,512	1.76	6,000	K050/070*10C				
1	3,024	3.52	12,000	K050/070*14C				
1.5	4,536	5.27	18,000	K050/070*20C				
2	6,048	7.03	24,000	K050/070*24C				
3	9,072	10.55	36,000	K050/070*34C	K095/105*18B			
4	12,096	14.07	48,000	K050/070*50C	K095/105*26B			
5	15,120	17.58	60,000	K050/070*70C	K095/105*30B			
6	18,144	21.10	72,000		K095/105*34B			
7.5	22,680	26.37	90,000		K095/105*40B			
8	24,192	28.13	96,000		K095/105*48B			
10	30,240	35.16	120,000		K095/105*60B	*60BV	K205*30C	*30V
12.5	37,800	43.95	150,000		K095/105*80C	*80CV	K205*34C	*34V
15	45,360	52.74	180,000				K205*40C	*40V
20	60,480	70.33	240,000				K205*60C	*60V
25	75,600	87.91	300,000				K205*80C	*80V
30	90,720	105.49	360,000				K205*100C	*100V

Dual Circuit

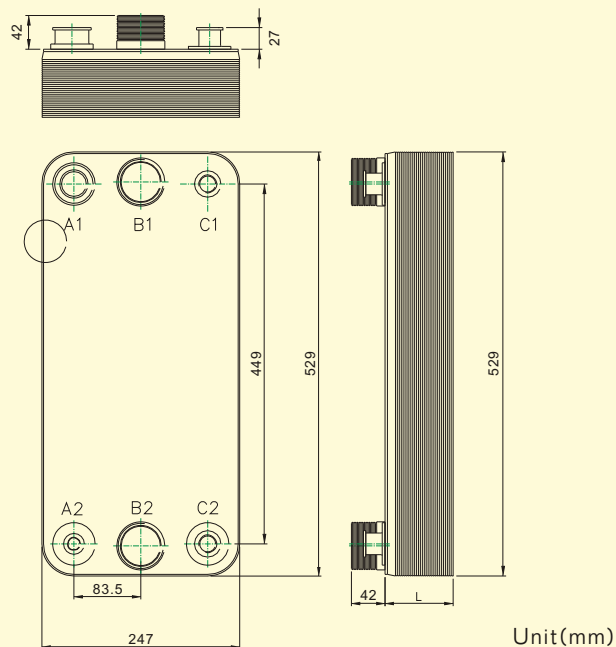
RT	Kcal/hr	kW	BTU/H	K215
3+3	18,144	21.10	72,000	K215*18D
5+5	30,240	35.16	120,000	K215*30D
7.5+7.5	45,360	52.74	180,000	K215*38D
10+10	60,480	70.33	240,000	K215*58D
12.5+12.5	75,600	87.91	300,000	K215*66D(V)
15+15	90,720	105.49	360,000	K215*78D(V)
20+20	120,960	140.65	480,000	K215*118D(V)

* "V" type comes with built-in refrigerant distributor

Test Condition: Water vs. R22

Condenser Test : ARI Standard-450 No4	The Inlet Saturated Temperature of Refrigerant Vapor : 100°F (37.8°C)	The Inlet Temperature of Refrigerant Vapor: 200°F (93.3°C)	The Inlet Temperature of Cooling Water: 84.9°F (29.4°C)	The Outlet Temperature of Cooling Water: 92.8°F (33.8°C)
Evaporator Test : ARI Standard-480 No1	The Inlet Temperature of Chiller Water: 53.9°F (12.2°C)	The Outlet Temperature of Chiller Water: 44°F (6.7°C)	The Outlet Saturated Temperature of Refrigerant : 35°F (1.7°C)	The Temperature of Refrigerant Before Expansion Valve: 100°F (37.7°C)

* The above model selection is based on the above test conditions.



Kaori K215 BPHE

Model		Design / Test Pressure	Working Temp.	Total Heat Transfer Area	L	Weight	Total Volume
Copper Brazing	K215*18 D/DV	30 bar / 43 bar	-160°C~ 200°C	1.765m ²	56mm	16.5kg	3.74L
	K215*30 D/DV			3.088m ²	84mm	22.8kg	6.38L
	K215*38 D/DV			3.971m ²	103mm	26.9kg	8.14L
	K215*58 D/DV			6.177m ²	150mm	37.3kg	12.54L
	K215*66 D/DV			7.059m ²	169mm	41.5kg	14.30L
	K215*78 D/DV			8.383m ²	197mm	47.7kg	16.94L
	K215*118 D/DV			12.795m ²	291mm	68.5kg	25.74L

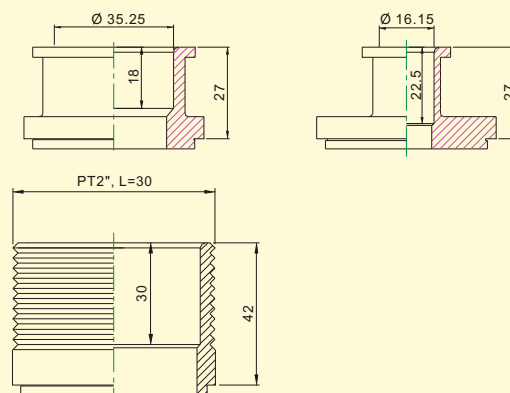
Threaded Connector

PT/NPT/GB Male								PT/NPT/GB Female						
1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"
				※	※			※						

Solder Connector

12.9mm	16.15mm	19.25mm	22.36mm	28.8mm	35.25mm	41.5mm
1/2"	5/8"	6/8"	7/8"	1-1/8"	1-3/8"	1-5/8"
	※				※	

Connector Drawing



FEATURE



※ Please Refer to the Legends in the Folded Panel on Page 7. (All pages)

HVAC (Evaporators/Condensers)

RT	Kcal/hr	KW	BTU/H	K050/070	K095/105	Eva.Only	K205	Eva.Only
0.5	1,512	1.76	6,000	K050/070*10C				
1	3,024	3.52	12,000	K050/070*14C				
1.5	4,536	5.27	18,000	K050/070*20C				
2	6,048	7.03	24,000	K050/070*24C				
3	9,072	10.55	36,000	K050/070*34C	K095/105*18B			
4	12,096	14.07	48,000	K050/070*50C	K095/105*26B			
5	15,120	17.58	60,000	K050/070*70C	K095/105*30B			
6	18,144	21.10	72,000		K095/105*34B			
7.5	22,680	26.37	90,000		K095/105*40B			
8	24,192	28.13	96,000		K095/105*48B			
10	30,240	35.16	120,000		K095/105*60B	*60BV	K205*30C	*30V
12.5	37,800	43.95	150,000		K095/105*80C	*80CV	K205*34C	*34V
15	45,360	52.74	180,000				K205*40C	*40V
20	60,480	70.33	240,000				K205*60C	*60V
25	75,600	87.91	300,000				K205*80C	*80V
30	90,720	105.49	360,000				K205*100C	*100V

Dual Circuit

RT	Kcal/hr	kW	BTU/H	K215
3+3	18,144	21.10	72,000	K215*18D
5+5	30,240	35.16	120,000	K215*30D
7.5+7.5	45,360	52.74	180,000	K215*38D
10+10	60,480	70.33	240,000	K215*58D
12.5+12.5	75,600	87.91	300,000	K215*66D(V)
15+15	90,720	105.49	360,000	K215*78D(V)
20+20	120,960	140.65	480,000	K215*118D(V)

* "V" type comes with built-in refrigerant distributor

Test Condition: Water vs. R22

Condenser Test : ARI Standard-450 No4	The Inlet Saturated Temperature of Refrigerant Vapor : 100°F (37.8°C)	The Inlet Temperature of Refrigerant Vapor: 200°F (93.3°C)	The Inlet Temperature of Cooling Water: 84.9°F (29.4°C)	The Outlet Temperature of Cooling Water: 92.8°F (33.8°C)
Evaporator Test : ARI Standard-480 No1	The Inlet Temperature of Chiller Water: 53.9°F (12.2°C)	The Outlet Temperature of Chiller Water: 44°F (6.7°C)	The Outlet Saturated Temperature of Refrigerant : 35°F (1.7°C)	The Temperature of Refrigerant Before Expansion Valve: 100°F (37.7°C)

* The above model selection is based on the above test conditions.



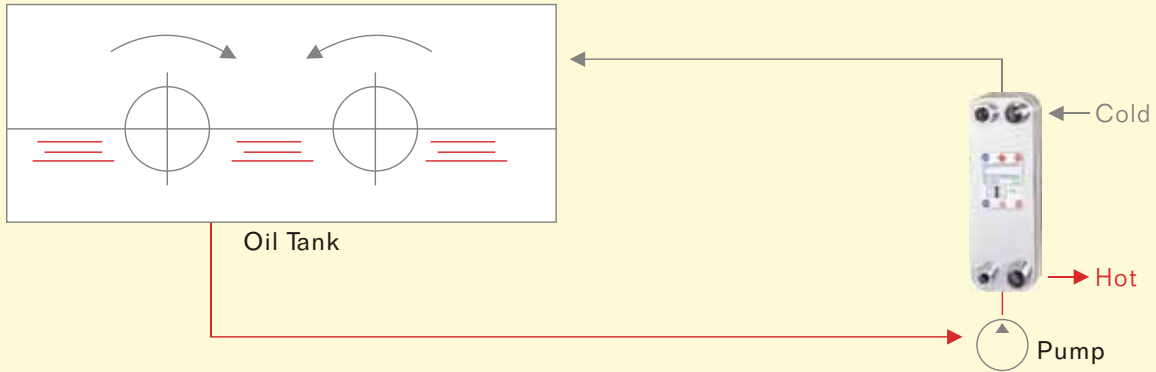
COMBI BOILER



Model	Capacity (kW)	Primary Side			Secondary Side		
		Water Flow Rate (lpm)	Water Inlet Temp	Water Outlet Temp	Water Flow Rate (lpm)	Water Inlet Temp	Water Outlet Temp
K030E/025F*10	18	6.0	10°C	60°C	20	74°C	59°C
K030E/025F*12	24	7.1	10°C	60°C	20	74°C	56°C
K030E/025F*14	25	7.2	10°C	60°C	20	74°C	56°C
K030E/025F*16	27	7.7	10°C	60°C	20	74°C	54°C
K030E/025F*18	29	8.2	10°C	60°C	20	74°C	53°C
K030E/025F*20	30	8.6	10°C	60°C	20	74°C	52°C
K030E/025F*22	32	9.0	10°C	60°C	20	74°C	51°C
K030E/025F*24	33	9.6	10°C	60°C	20	74°C	49°C
K030E/025F*26	35	10.0	10°C	60°C	20	74°C	48°C
K030E/025F*28	36	10.3	10°C	60°C	20	74°C	48°C
K030E/025F*30	37	10.7	10°C	60°C	20	74°C	47°C
K030E/025F*32	38	11.0	10°C	60°C	20	74°C	46°C
K030E/025F*34	39	11.4	10°C	60°C	20	74°C	45°C
K030E/025F*36	40	11.6	10°C	60°C	20	74°C	44°C
K030E/025F*38	41	11.9	10°C	60°C	20	74°C	44°C



OIL COOLER

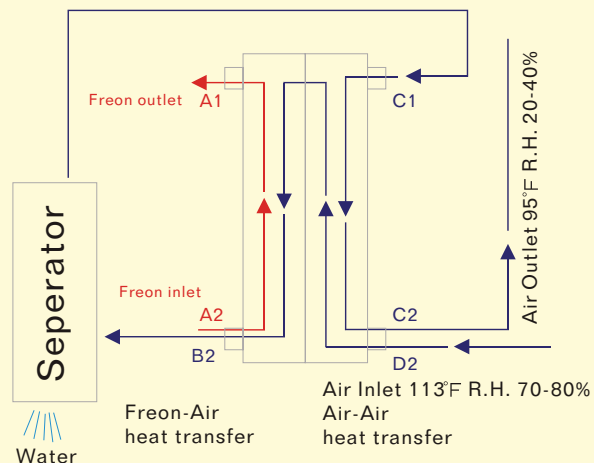


Oil Cooler, for ISO VG68

Model	Capacity (kW)	Oil Flow Rate (LPM)	Water Flow Rate (LPM)	Oil Inlet Temperature (°C)	Water Inlet Temperature (°C)	Oil Pressure Drop (kPa)	Water Pressure Drop (kPa)
K030*12MH	3	12	6	60	20	< 50	< 10
K030*22MH	6	24	12	60	20	< 50	< 10
K030*32MH	10	48	24	60	20	< 50	< 10
K030*42MH	13	55	27	60	20	< 50	< 10
K030*52MH	15	61	30	60	20	< 50	< 10
K070*23MH	14	40	20	60	20	< 50	< 10
K070*33MH	18	50	25	60	20	< 50	< 10
K070*43MH	24	68	34	60	20	< 50	< 10
K070*53MH	28	80	40	60	20	< 50	< 10
K070*63MH	35	100	50	60	20	< 50	< 10
K070*73MH	45	130	65	60	20	< 50	< 10
K065*23MH	20	90	45	60	20	< 50	< 10
K065*33MH	29	125	62	60	20	< 50	< 10
K065*43MH	35	145	72	60	20	< 50	< 10
K065*53MH	43	175	87	60	20	< 50	< 10
K065*63MH	50	200	100	60	20	< 50	< 10
K065*73MH	62	250	125	60	20	< 50	< 10
K105*23MH	14	30	15	60	20	< 50	< 10
K105*33MH	19	40	20	60	20	< 50	< 10
K105*43MH	23	48	24	60	20	< 50	< 10
K105*53MH	28	56	28	60	20	< 50	< 10
K105*63MH	34	66	33	60	20	< 50	< 10
K105*73MH	41	80	40	60	20	< 50	< 10
K205*23MH	27	60	30	60	20	< 50	< 10
K205*33MH	44	90	45	60	20	< 50	< 10
K205*43MH	56	100	50	60	20	< 50	< 10
K205*53MH	62	110	55	60	20	< 50	< 10
K205*63MH	78	140	70	60	20	< 50	< 10
K205*73MH	92	170	85	60	20	< 50	< 10
K205*83MH	132	250	125	60	20	< 50	< 10



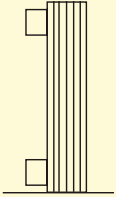
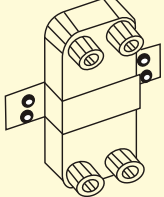
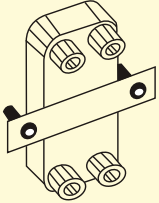
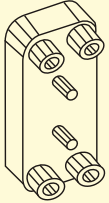
AIR DRYER



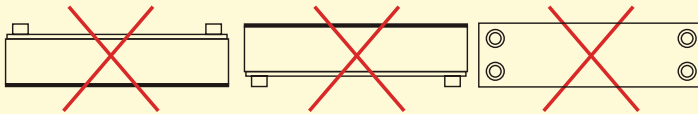
BPHE for Refrigerated Air Dryer

Model	Max. Air Flow Rate		Connections		
	Nm ³ /hr	scfm	Soldered		Air Inlet / Outlet Female
			Freon Inlet	Freon Outlet	
K030*10*6DC-K1	17	10	φ 1/2"	φ 1/2"	PT 1/2"
K030*12*8DC-K1	34	20	φ 1/2"	φ 1/2"	PT 1/2"
K030*16*12DC-K1	60	35	φ 1/2"	φ 1/2"	PT 1/2"
K030*20*16DC-K1	71	42	φ 1/2"	φ 1/2"	PT 1/2"
K070*16*12DC-K4	120	70	φ 1/2"	φ 5/8"	PT 1"
K070*20*16DC-K4	144	85	φ 1/2"	φ 5/8"	PT 1"
K070*24*20DC-K4	170	100	φ 1/2"	φ 5/8"	PT 1"
K070*32*28DC-K4	242	142	φ 1/2"	φ 5/8"	PT 1"
K070*34*30DC-K4	255	150	φ 1/2"	φ 5/8"	PT 1"
K070*38*34DC-K4	290	170	φ 1/2"	φ 5/8"	PT 1"
K070*44*40DC-K4	340	200	φ 1/2"	φ 5/8"	PT 1"
K210*16*12DC-K1	425	250	φ 1/2"	φ 1-3/8"	PT 2"
K210*18*14DC-K1	510	300	φ 1/2"	φ 1-3/8"	PT 2"
K210*22*18DC-K1	612	360	φ 1/2"	φ 1-3/8"	PT 2"
K210*26*22DC-K2	680	400	φ 1/2"	φ 1-3/8"	PT 2-1/2"
K210*28*24DC-K2	850	500	φ 1/2"	φ 1-3/8"	PT 2-1/2"
K210*38*34DC-K2	1,020	600	φ 1/2"	φ 1-3/8"	PT 2-1/2"
K210*44*40DC-K2	1,275	750	φ 1/2"	φ 1-3/8"	PT 2-1/2"
K210*54*50DC-K2	1,400	820	φ 1/2"	φ 1-3/8"	PT 2-1/2"

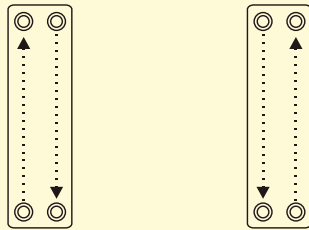
BPHE INSTALLATION GUIDE

<p>Mounting suggestions:</p> <p>Four different ways to mount the BPHE</p>	(1) Bottom support	(2) Sheet metal bracket
		
	(3) Crossbar & bolts	(4) Stud bolts
		

- Install the BPHE in counter flow direction:
To keep lower water volume below the connector.



- Install the BPHE in counter flow direction:
To achieve high thermal efficiency and high heat transfer rate.



Cleaning:

- The solution used should be weak acid with concentration less than 5%, for example citric acid.
- If the acid concentration is too high, the copper and stainless steel inside might be etched or corroded.
- Flush the BPHE with large amounts of fresh water to purge any remaining acid solution before restarting the system.



BPHE INSTALLATION GUIDE