



## Production experience since 2002.

FLIXX heat pumps are manufactured in one of the world's most famous factories PHNIX, located in Guangdong, the largest technology region of China. Founded in April 2002, the national high-tech enterprise specializes in heat pump R&D, production and provision of comprehensive energy-saving solutions.

## Efficiency above all

The factory has a complete heat pump production chain, covering:

- residential heat pumps,
- home heating and cooling systems,
- swimming pool heat pumps,
- heat pump dehumidifiers,
- commercial and industrial high-temperature water heating solutions,
- industrial and agricultural heat supply equipment.

High-temperature heat pumps with enhanced vapor injection (EVI) technology are effectively used in northern regions for heating residential buildings.

With advantages such as safety, high efficiency, eco-friendliness and low energy consumption, heat pumps have become one of the most recommended solutions to replace traditional boilers in various countries.

## Looking to the Future

As an international company focused on the global market, PHNIX pays special attention to cooperation with key foreign partners. Today, 50% of the plant's products are exported to Europe, North America, the Middle East, Australia and other developed regions of the world.





## Air to air heat pumnps



### **FREYA**

Heating power 3,3 to 7,4 kW Heating up to -25°C outside Cooling up to +48°C outside **Refrigerant R32** Wi-Fi Self-diagnosis Comfortable sleep Anti-ice system Fan speed control Turbo mode Warm start **Display** off Blind adjustment Hidden digital Display Auto restart Timer Silent operation Economic mode Ventilation mode Golden fin protective coating Service valve protection Drying mode





FLDX



### SKADI

Heating power 2,6 to 7,1 kW Heating up to -15°C outside Cooling up to +48°C outside **Refrigerant R32** Wi-Fi Self-diagnosis Anti-ice system Warm start Hidden digital Display Silent operation Anti-corrosion Coating Comfortable sleep Turbo mode Vertical adjustment of the blind Timer Ventilation mode Drying mode Fan speed adjustment Display off Auto restart Economic mode Washable filter

### EIRA

Heating power 2,2 to 10,5 kW Heating up to -7°C outside Cooling up to +48°C outside Refrigerant R410A Wi-Fi readiness 100% Copper Condenser Anti-Dust Air Filtration Auto Smart Check ECO-friendly Refrigerant Turbo Mode Wireless LED Remote Control





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**FLIX** 

Model				FR09MD33M+	FR12MD42M+	FR18MD58M+	FR24MD74M+
	Rated Capacity	Cooling	W	2750 (600~4000)	3650 (700~4100)	5400 (1300~5900)	7300 (1800~7400)
		Heating	W	3300 (800~4200)	4200 (900~4200)	5800 (1300~6100)	7420 (1800~8000)
Outdoor unit Indoor unit Nameplate Nameplate Parameter Parameter	Rated Input Power	Cooling	W	720 (100-1200)	870 (130-1550)	1430 (290-1950)	1700 (230-2300)
		Heating	W	800 (200-1200)	1060 (230-1300)	1330 (250-1800)	2300 (230-2530)
	Rated Input Current	Cooling	А	3.3 (0.5-5.32)	4.2 (0.6-5.8)	6.4 (2.2-6.8)	7.9 (1.0-10.0)
		Heating	А	3.9 (1.0-5.30)	4.8 (1.0-6.3)	6.1 (2.0-8.0)	10.5 (1.0-11.0)
	Max. Input Power		W	1410	1778	2650	3200
	Max. Input Current		А	6,4	8,1	12,0	14,6
	SEER		/	A+++ 8.5	A+++ 8.5	A+++ 8.8	A+++ 8.7
er	SCOP cold zone		/	A++ 4.6	A++ 4.6	A++ 4.6	A++ 4.6
nepla ameti	SCOP average zone		/	A+++ 5.9	A+++ 5.5	A+++ 5.8	A+++ 5.4
Nar Par	Power supply source		V/Ph/Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz
	Refrigerant			R32	R32	R32	R32
	Refrigerant Charged		kg	0,39	0,57	0,77	1
	Air Flow Volume		m³/h	350/400/480/550/700	430/520/580/650/800	700/780/870/900/1000	820/990/1100/1200/140
	IDU-Noise level		dB(A)	20/24/27/31/35	20/24/27/31/35	24/28/33/37/42	26/32/35/39/43
	ODU-Noise level		dB(A)	48	49	50	53
	Indoor unit weight (Net )		kg	8	9	10	14
	Outdoor unit weight (Net )		kg	22	24	33	44
	Indoor unit weight (Gross)		kg	11	12	13	17
	Outdoor unit weight (Gross)		kg	24	27	36	48
r unit ıration	Net Dimension (WidthxHightxDepth)		mm	726*250*200	825*290*210	940*320*240	1120*320*240
Indoo configu	Packing Dimension (WidthxHeightxDepth)		mm	770*335*280	880*350*270	985*375*315	1168*405*330
	Connection	Liquid Valve	inch	1/4'	1/4'	1/4'	1/4'
		Gas Valve	inch	3/8'	3/8'	1/2'	5/8'
ion	Compressor	Туре		ROTARY	ROTARY	ROTARY	ROTARY
loor u gurat		Brand		GMCC	GMCC	GMCC	GMCC
Outd confi		Throttling gear		capillary	capillary	capillary	capillary
	Net Dimension (WidthxDepthxHeight)		mm	738*246*462	788*300*540	888*295*600	903*322*655
	Packing Dimension (WidthxDepthxHeight)		mm	775*315*495	825*380*570	915*390*640	933*422*700
	Ambient temperature (cooling)		°C	+16 ~ +48	+16 ~ +48	+16 ~ +48	+16 ~ +48
	Ambient temperature (heating)		°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24

## SKADI





Model				SK09AG27AIR	SK12AG35AIR	SK18AG53AIR	SK24AG71AIR
	Rated Capacity	Cooling	W	2650 (700~3100)	3540 (1000~4200)	5280 (1500~6000)	7100 (2400~8000)
		Heating	W	2750 (700~3200)	3680 (1000~4500)	5400 (1600~6100)	7420 (2400~8300)
	Rated Input Power	Cooling	W	752	1020	1510	2150
		Heating	W	736	992,0	1450	1998
	Rated Input Current	Cooling	A	3,6	4,9	7,2	10,3
		Heating	A	3,5	4,7	6,9	9,6
	Max. Input Power		W	1200	1600	2400	3400
	Max. Input Current		A	8,3	9,1	11,1	15,8
	SEER		CLASS	A++	А++	A++	A++
			W/W	6,83	7,01	6,81	6,82
Nameplate Parameter	SCOP		CLASS	А+/А+++	A+/A+++	A+/A+++	А+/А+++
ame aran			W/W	4,21	4,22	4,20	4,13
Zd	Power supply source		V/Ph/Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz
	Refrigerant			R32	R32	R32	R32
	Refrigerant Charged			0.31 kg	0.450 kg	0.72 kg	0.9 kg
	Air Flow Volume		m³/h	320/350/400/480/550	610/540/480/420	610/700/780/870/900	630/820/990/1100/120
	IDU-Noise level		dB(A)	20/24/27/31/35	20/24/27/31/35	24/28/33/37/42	26/32/35/39/45
	ODU-Noise level		dB(A)	50	50	52	54
	Indoor unit weight (Net )		kg	8	8,5	10	14
	Outdoor unit weight (Net)		kg	25	25	30	34
	Indoor unit weight (Gross)		kg	10	11	13	17
	Outdoor unit weight (Gross)		kg	27	27	33	37
Indoor unit configuration	Net Dimension (WidthxDepthxHeight)		mm	700*250*190	810*290*190	910*320*230	1100*320*230
Indo c configi	Packing Dimension (WidthxDepthxHeight)		mm	775*320*285	875*375*285	985*375*315	1165*395*315
	Connection	Liquid Valve	inch	1/4"	1/4"	1/4"	1/4"O
		Gas Valve	inch	3/8"	3/8"	3/8"	1/2"
on it	Compressor Parameter	type		ROTARY	ROTARY	ROTARY	ROTARY
Outdoor unit configuration		Brand		HIGHLY	GMCC	GREE	GREE
utdo		Throttling gear		capillary	capillary	capillary	capillary
0 8	Net Dimension (WidthxDepthxHeight)		mm	738*246*462	738*246*462	800*285*520	860*290*530
	Packing Dimension (WidthxDepthxHeight)		mm	775*315*495	775*315*495	825*380*570	915*390*640
	Max pipe length		m	25	25	30	35
on	Max height difference		m	10	10	15	20
Common parameters	Standard pipe length (no addi- tional refrigerant required)		m	3.5	3.5	3.5	3.5
C Da	Ambient temperature (cooling)		°C	+16 ~ +48	+16 ~ +48	+16 ~ +48	+16 ~ +48
	Ambient temperature (heating)		°C	-15 ~ +24	-15 ~ +24	-15 ~ +24	-15 ~ +24







Model				EI07AA-AIRPRO	EI09AA-AIRPRO	EI12AA-AIRPRO	EI18AA-AIRPRO	EI24AA-AIRPRO	EI36AA-AIRPRO
	Rated Capacity	Cooling	W	2200	2750	3600	5305	7100	10500
		Heating	W	2250	2800	3650	5530	7380	10200
	Rated Power Consumption	Cooling	W	685	856	1121	1655	2210	3488
		Heating	W	623	776	1011	1530	2044	3177
	Rated Running Current	Cooling	А	3,20	3,90	5,00	7,50	10,10	12,70
		Heating	А	3,00	3,70	4,80	7,20	9,70	13,50
	Max. Input Power		W	925	1156	1513	2234	2984	4200
	Max. Input Current		А	4,20	5,25	6,88	10,16	13,56	19,09
	EER Cooling Btu/h.W or W/W		W/W	3,21	3,21	3,21	3,21	3,21	3,01
ate ter	COP Heating		W/W	3,61	3,61	3,61	3,61	3,61	3,21
Nameplate Parameter	Power supply source		V/Ph/Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz	220-240V-1-50Hz
Pari	Refrigerant			R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant Charged		g	480	500	570	700	830	1600
	Air Flow Volume		m³/h	300/330/380/ 450/500	300/330/380/ 450/500	350/410/500/ 560/580	400/430/520/ 600/850	600/730/850/ 950/990	800/920/1100/ 1200/1250
	IDU-Noise level		dB(A)	20/24/27/31/33	20/24/27/31/33	22/26/31/33/36	24/28/33/37/39	26/32/35/39/41	28/32/38/42/50
	ODU-Noise level		dB(A)	50	50	51	53	54	60
	Indoor unit weight (Net)		Kg	7	7	9	11	12	14
	Outdoor unit weight (Net )		Kg	21	22	25	32	42	58
	Indoor unit weight (Gross)		Kg	9	9	11	13	14	17
	Outdoor unit weight (Gross)		Kg	23	24	27	35	45	61
	Indoor Net Dimension		mm	700×250×190	700×250×190	810×290×190	910×320×230	910×320×230	1100×320×230
on it	IndoorPacking Dimension		mm	775×320×285	775×320×285	875×375×285	985×375×315	985×375×315	1165×395×315
or un urati	Power Supply cable lenght		m	1.5	1.5	1.5	1.5	1.5	1.5
Indoor unit configuration	Condensate Drainage Pipe (O.D)			Ф16	Ф16	Ф16	Ф16	Ф16	Φ16
	Condensate Drainage Pipe ( L)		mm	2000	2000	2000	2000	2000	2000
	Liquid Valve		inch	1/4	1/4	1/4	1/4	1/4	1/4
	Gas Valve		inch	3/8	3/8	3/8	1/2	1/2	5/8
tt C	Compressor Type			ROTARY	ROTARY	ROTARY	ROTARY	ROTARY	ROTARY
Outdoor unit configuration	Compressor Brand			GREE	GREE	GREE	GMCC	GREE	GREE
tdoo figu	Throttling gear			Capillary	Capillary	Capillary	Capillary	Capillary	Capillary
Ou	Outdoor Net Dimension (WidthxDepthxHeight		mm	700×266×422	700×266×422	700×266×422	838×295×600	853×322×655	920x337x700
	Outdoor Packing Dimension (WidthxDepthxHeight)		mm	775x315x495	775x315x495	775x315x495	915x390x640	933x422x700	1020x430x755
	Max pipe length		m	20	20	20	25	25	25
L SI	Max height difference		m	8	8	9	12	12	15
Common parameters	Standard pipe length (no addi- tional refrigerant required)		m	3,5	3,5	3,5	3,5	3,5	3,5
) bē	Ambient temperature (cooling)		°C	+16 ~ +48	+16 ~ +48	+16 ~ +48	+16 ~ +48	+16 ~ +48	+16 ~ +48
	Ambient temperature (heating)		°C	-7 ~ +24	-7 ~ +24	-7 ~ +24	-7 ~ +24	-7 ~ +24	-7 ~ +24

## Air to water

#### **FLURRY**

The most innovative heat pump in the Flixx 2025 range, FLURRY uses environmentally friendly R290 refrigerant and is equipped with a compressor with EVI technology, providing an outstanding SCOP of 5.16. It is one of the quietest air-to-water heat pumps on the market, with a noise level of only 40 dB(A) at a distance of 1 metre.

#### BLIZZARD

FLIX

The air-to-water heat pump R290 Inverter is a combination of all modern achievements, created specifics for northern markets.

#### **HYDROBOX**

The hydronic module is specially designed to increase installation flexibility and reduce installation costs when connected to a monoblock heat pump.

#### **MULTIFUNC** (All In One)

Hydromodule with a built-in 180-litre hot water tank and a 60-litre storage tank, which can be easily combined with various heat pumps.

#### **ICEBERG**

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Commercial inverter type heat pump with high temperature EVI compressors of high power.

**GROUNDY** Innovative geothermal heat pump.



## FLURRY



- Functions - heating, cooling, DHW.

SCOP above 5.1 - high energy efficiency.
R290 EVI technology - guarantees reliable operation at temperatures down to -30°C.
Excellent performance at low temperatures - complies with ErP class 35/55°C A+++.

- High output temperature - up to +80°C.

- Remote monitoring and control - via 4G DTU or Wi-Fi.

- Minimum noise level.
- Exquisite appearance.

## **FLURRY**

The most innovative heat pump from the Flixx 2025 line, FLURRY, uses environmentally friendly R290 refrigerant and is equipped with a compressor with EVI (Enhanced Vapor Injection) technology, providing efficient heating, cooling and hot water supply even at extremely low temperatures.

This is one of the quietest air-to-water heat pumps on the world market. The noise level at a distance of 1 meter is only 40 dB, which makes it almost inaudible even in the yard of the house.





## ADVANTAGES

#### A+++ High Energy Efficiency

To optimally adapt to various climate conditions, the FLURRY series heat pump compressor has been improved. Combined with high-efficiency fans, specially designed finned heat exchangers and ducts designed using fluid dynamic modeling, the FLURRY series achieves the advanced A+++ energy efficiency level under the ErP standard. Moreover, the SCOP value exceeds 5.1, proving the stable and highly efficient operation of the unit all year round.

#### 40 dB- Ultra Silent Mode

The FLURRY series maintains an extremely low noise level, providing users with a comfortable and quiet environment. With a sound pressure level of only 40 dB(A) at a distance of 1 meter, it sets a new standard for quiet operation. This is made possible by optimizing the fan motor, improving its design and materials. In addition, the casing and compressor are equipped with sound-absorbing materials to achieve an ultra-quiet effect.

## **SPECIFICATIONS:**





NEW

	FLURRY 4-16	FLURRY 5-23
Power Supply	380~415V/3N~/50Hz	380~415V/3N~/50Hz
Heating Condition – Ambient Temp. (DB/WB): 7/ 6°	C, Water Temp. (In/ Out): 30/	35°C
Nominal Capacity (kW)	12	17
Heating Capacity Range (kW)	4,3-18,7	4,5-22,7
Heating Power Input Range (kW)	0,67-4,33	0,9-5,0
ERP Level at outlet water temperature 35°C	A+++	A+++
ERP Level at outlet water temperature 55°C	A+++	A+++
Refrigerant Type	R290	R290
Refrigerant Volume (kg)	R290/1,3	R290/1,7
Sound Pressure (im) (dB(A))	41	42
Sound Power Level (EN12102) (dB)	49	50
Net Weight (kg)	214	263
Unit Dimension (L/W/H) mm	1438x543x1106	1438x543x1522
Shipping Dimension (L/W/H) mm	1588x623x1206	1588x623x1622
Compressor	Panasonic	Panasonic
Circulation Pump	Grundfos	Grundfos
Operating Ambient Temperature	-3043	-3043
Fan Quantity	1	2
Fan Motor Type	DC	DC
Water Connection (inch)	1	1
Rated Water Flow (m³/h)	2.06/1.3	2.92/1.83
Water Pressure Drop @Rated Water Flow (kPa)	20	25
Circulation Pump Head $\ensuremath{\mathbb C}$ Rated Water Flow (m)	8.5	12.5
Cabinet Type	Galvanized sheet metal+ASA+EPP	Galvanized sheet metal+ASA+EPP



## BLIZZARD



- SCOP up to 5.1
- High-performance R290 EVI technology down to -28°C
- Excellent cold weather performance A+++
- High output temperature up to+80C
- Remote monitoring and control
   4G DTU or WiFi
- Ultra-silent

## BLIZZARD

EVI additional vapor injection technology The BLIZZARD air-to-water heat pump combines advanced technologies and is designed specifically for use in northern regions.

The environmentally friendly R290 refrigerant in combination with inverter technology and EVI (Enhanced Vapor Injection) additional vapor injection technology provides efficient heating, cooling and hot water supply even at extremely low temperatures..





### **ADVANTAGES**

The BLIZZARD air-to-water heat pump with high energy efficiency A+++ is developed using the latest technology and modern design to meet strict requirements for efficiency, stability and noise level. With an energy efficiency class of A+++, the device is highly efficient and can significantly reduce users' electricity bills.





	BLIZZARD 4-16	BLIZZARD 5-22
Power Supply	380~415V/3N~/50Hz	380~415V/3N~/50Hz
Heating Condition – Ambient Temp. (DB/WB): 7/6°C, Water	Temp. (In/Out): 30/35°C	•
Nominal Capacity (kW)	10.0	17.0
Heating Capacity Range (kW)	4,3-15,5	4,5-22,0
Heating Power Input Range (kW)	0,95-4,2	1,0-5,6
Heating Condition – Ambient Temp. (DB/WB): 7/6°C, Water	Temp. (In/Out): 47/55°C	•
Nominal Capacity (kW)	10.0	17.0
Heating Capacity Range (kW)	5,8-16,0	6,9-22,0
Heating Power Input Range (kW)	1,82-6,08	1,9-7,1
Heating Capacity (A2W45 EN 14511) (kW)	10.0	17.0
Heating Power Input (A2W45 EN 14511) (kW)	3.08	5.20
COP (A2W45 EN 14511) (kW/kW)	3.25	3.27
Heating Capacity (A-7W35 EN 14511) (kW)	13.1	16.5
Heating Power Input (A-7W35 EN 14511) (kW)	4.52	5.50
COP (A-7W35 EN 14511) (kW/kW)	2.90	3.00
Heating Capacity (A-7W55 EN 14511) (kW)	13.0	16.5
Heating Power Input (A-7W55 EN 14511) (kW)	6.18	7.20
COP (A-7W55 EN 14511) (kW/kW)	2.11	2.29
Cooling Condition – Ambient Temp. (DB/WB): 35/24°C, Wat	er Temp. (In/Out): 23/18°C	
Cooling Capacity Range (kW)	4,0-14,5	8,0-23,0
Cooling Power Input Range (kW)	0,88-4,5	1,75-6,9
Cooling Condition – Ambient Temp. (DB/WB): 35/24°C, Wat	er Temp. (In/Out): 12/7°C	
Cooling Capacity Range (kW)	3,0 ~ 11,2	6,2~17,7
Cooling Power Input Range (kW)	0,85-4,3	1,7-6,5
Max. Power Input (kW)	9.35	10.8
Max. Current Input (A)	19.0	16.5
ERP Level at outlet water temperature 35°C	A+++	A+++
ERP Level at outlet water temperature 55°C	A+++	A+++
Refrigerant Type	R290	R290
Refrigerant Volume (kg)	1.1	1.7
Sound Pressure (1m) (dB(A))	46	48
Sound Power Level (EN12102) (dB)	60	64
Net Weight (kg )	170	186
Unit Dimension(L/W/H) (mm)	1287 × 458 × 928	1250 × 540 × 1330
Shipping Dimension(L/W/H) (mm)	1420 × 540 × 1080	1380 × 570 × 1480
Compressor Brand	Panasonic	Panasonic
Circulation Pump Brand	SHIMGE/GRUNDFOS	SHIMGE/GRUNDFOS
Operating Ambient Temperature	-28+43	-28+43
Fan Motor Type	DC	DC
Water Connection (inch)	1	1
Rated Water Flow (m <sup>3</sup> /h)	1.72	2.92
Water Pressure Drop @Rated Water Flo (kPa)	20	32
Circulation Pump Head @Rated Water F (m)	8	10.4
Cabinet Type	Galvanized sheet+ABS	Galvanized sheet+ABS

## HYDROBOX





## HYDROBOX FLIXX-10

#### EasyHydro (hydraulic module)

Offers optimized and elegant solutions for heating, cooling and hot water in one compact unit. Hydrobox has been specially designed to increase flexibility and reduce installation costs. Hydrobox can be combined with any model of domestic heat pumps, such as Flurry, Blizzard, Aurora. When installing the unit, the installer must connect the heat pump directly to the hydrobox, taking into account the need to add a buffer tank (for space heating/cooling) and, if necessary, a tank for domestic hot water.

Attention! For the preparation of domestic hot water, a separate tank with a spiral heat exchanger is required, in which a temperature sensor must be installed.



### **ADVANTAGES**

HydroBox Flixx-10 contains integrated main components including water pump, valves, filters, constant pressure water filling device, electric control unit, etc.

Color controller
 Expansion tank 101
 Circulation pump (Optional)
 3-way valve for DHW
 Electric heater 3+6 kW

This unit has one of the thinnest housings on the market - its depth is 295 mm.



## **SPECIFICATIONS:**

	HydroBox Flixx-10 white/black
Power Supply	380-415V/3N/50Hz
Water Temp. Range (C)	5-75
Filling Water Connection (inch)	3/4
Drain Connection (inch)	3/4
Heat Pump Side Water Connection (inch)	1
Heating Side Water Connection (inch)	1
Hot Water Side Water Connection (inch)	1
Max. Water Pressure (bar)	3
Water Head (m), flow rate is 1.7m <sup>3</sup> /h	9.8
Water Pressure Drop (kPa), flow rate is 1.7m <sup>3</sup> /h	22
Expansion Tank (L)	10
Electrical Heater (kW)	3+6
Sound Pressure at 1 Meter (dB(A)), flow rate is 1.7m <sup>3</sup> /h	35
Dual Zone Control	Yes
Net Weight (kg)	53
Unit Dimensions (L x W x H) mm	665x485x295



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# MULTIFUNC

	FLIX		
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## **SPECIFICATIONS:**

	MULTIFUNCTION (ALL IN ONE)
Power Supply	380-415V/50Hz
Max. Power input (kW)	13.2
Max. Current input (A)	20
Net Weight (kg)	137
Electrical Heater (kW)	3+6
Electrical Heater DHW (kW)	2
DHW tank volume (L)	180
Buffer tank volume (L)	60
Expansion tank volume (L)	12
Water connection on the heat pump side supply/return (inches)	1
Cabinet type	Galvanizes sheet metal
Unit Dimensions (L x W x H) mm	665x595x1800
Shipping Dimensions (L x W x H) mm	780x685x1950

## **MULTIFUNC (ALL IN ONE)**

### Multifunctional hydromodule with integrated 180 I DHW

tank and 60 I accumulator tank.

The MULTIFUNCTION model offers optimized and elegant solutions for heating, cooling and hot water supply in one device. MULTIFUNCTION has been specially designed to increase flexibility and reduce installation costs.

It can be combined with any model of domestic heat pumps, such as Flurry, Blizzard, Aurora.





1) Color controller

- 2) Expansion tank 121
- 3) Circulation pump (Optional)
- 4) 3-way valve for DHW
- 5) Electric heater for heating 3+6 kW
- 6) Accumulator tank 601
- 7) Hot water tank 1801
- 8) Electric heater for DHW 2 kW



## **Options for connecting modules**



#### Traditional installation.

3-way valve, DHW tank, storage tank and protection group are mounted in the boiler room, if necessary, additional electric heaters are integrated into the tanks.



#### Installation with a multifunctional tank (ALL IN ONE)

Connect the heat pump directly to the multifunctional tank - this is the most convenient installation method. The multifunctional tank includes a hot water supply (DHW) tank, a buffer tank, an expansion tank, an electric heater for DHW and heating and a protection group.



#### **Installation with the multifunctional HYDROBOX module** The heat pump is connected directly to the Hydrobox module. It is also recommended to install a buffer tank and a separate tank for hot water supply, depending on the needs for hot water supply.



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Power range: from 14 to 100 kW.

Cascade control: support for connecting up to 16 units into a single system.

Smart defrosting system: increased efficiency at low temperatures.

Remote monitoring and control: via 4G DTU or WiFi, which provides convenient control and adjustment. Energy management: optimizes operation depending on current needs.

Leak monitoring: built-in freon leak detection system for increased safety.

Full inverter technology: ensures energy efficiency, stable operation and low noise.

Operation at extremely low temperatures: Down to -25°C for models with R290 refrigerant. Down to -36°C for models with R410A refrigerant.

### **ICEBERG**

Inverter commercial heat pump.

ICEBERG commercial inverter heat pumps are a versatile solution for providing comfortable climate and hot water supply in various facilities:

Hotels: to provide 24-hour heat and hot water.

Hospitals: to maintain a stable microclimate and hygienic conditions.

Corporate events: for temporary or permanent cooling or heating needs.

**Restaurants:** to create comfortable conditions for visitors and employees.

Shopping centers: for efficient climate control over large areas.

Industrial enterprises: for heating, cooling and process needs.

These systems combine reliability, high energy efficiency and adaptability, making them an excellent choice for commercial applications.











			ICEBERG 50 (R410)	ICEBERG 100 (R410)			
Rated Heating	Heating Capacity	kW	40,00	90,00			
A20/W55°C	Heating Power Input	kW	8,50	19,70			
	COP	/	4,70	4,57			
Rated Heating	Heating Capacity	kW	41.5(16.0~50.0)	95.0(16.0~100.2)			
One A7/W45°C	Heating Power Input	kW	12.2(4.5~17.5)	28.9(4.5~31.3)			
	COP	/	3.40(2.86~3.65)	3.29(3.20~3.56)			
Rated Heating Two	Heating Capacity	kW	30.0(11.3~33.2)	60.0(19.1~64.0)			
A-12/W41°C	Heating Power Input	kW	13.0(4.7~15.8)	24.7(6.9~26.7)			
	COP	/	2.31(2.10~2.75)	2.43(2.40~2.80)			
Rated Heating	Heating Capacity	kW	24.2(12.3 <sup>~</sup> 26.9)	50.9(16.2~54.5)			
Three A-20/W41°C	Heating Power Input	kW	12.5(6.6~14.6)	25.2(7.0~27.9)			
	COP	/	1.94(1.84~2.12)	2.02(1.95~2.35)			
Heating IPLV (H)		/	3,25	3,2			
Power Supply		/	/ 380-415V/3N^/50-60Hz				
Max. Power Input		kW	18,50	32,00			
Max. Running Curre	nt	А	29,50	51,00			
Operating Temperat	ure Range	°C	°C -38-55				
Refrigerant			R410 (R32 on request)				
Water Flow Vol-	hot water	m³/h	6,88	15,50			
ume	heating (-12/-14°C)	m³/h	5,70	10,32			
Water Pressure	hot water	kPa	75,00	90,00			
Drop	heating (-12/-14°C)	kPa	50,00	70,00			
Water Connection	1	/	DN40	DN65			
Sound Pressure(1m)		dB(A)	61(56~65)	66(56~69)			
Net Weight		kg	490	733			
Gross Weight		kg	560	833			
Net Dimension L/W/	Н	mm	1195/980/1900	2170/1150/2130			



## ICEBERG

		ICEBERG 50 (R290)	ICEBERG 75 (R290)
Heating Condition - Ambient Temp.(DB/V	VB):7°C/6°C,Water ir	nlet/outlet 30°C/35°C	2
Nominal Capacity	kW	35	50
Heating Capacity Range	kW	13.63-50.00	20.45-75.0
Heating Power Inout Range	kW	4.36-16.00	6.54-24.00
СОР	W/W	3.12-4.62	3.12-4.62
Current Input Range	А	6.97-25.6	10.45-38.4
Heating Condition - Ambient Temp.(DB/V	VB):2°C/1°C , Water i	nlet/outlet 30°C/35°	С
Heating Capacity Range	kW	11.07-40.60	16.16-59.27
Heating Power Inout Range	kW	3.77-13.83	5.50-20.19
СОР	W/W	2.94-3.51	2.94-3.51
Current Input Range	А	5.76-21.13	8.40-30.84
Heating Condition -Ambient Temp.(DB/V	VB):-7°C/-6°C , Wate	r inlet/outlet 50°C/5	5°C
Heating Capacity Range	kW	8.47-30.00	12.03-43.00
Heating Power Input Range	kW	5.34-16.29	7.63-22 .88
COP	W/W	1.83-2.79	1.83-2.79
Current Input Range	А	8.01-23.95	11.68-35.04
Cooling Condition - Ambient Temp.(DB/V	VB):35°C/24°C , Wat	er inlet/outlet 12°C/1	7°C
Cooling Capacity Range	kW	9.27-34.00	14.10-50.00
Cooling Power Inout Range	kW	3.91-14.35	5.95-21.82
СОР	W/W	1.95-3.45	1.95-3.45
Current Input Range	А	6.26-22.96	9.51-34.89
Heating Condition -Ambient Temp.(DB/V	VB):20°C/15°C, Wate	▪ er inlet/outlet 15°C/5	5°C
Hot Water Capacity Range	kW	16.36-70.00	23.22-100
Hot Water Power Inout	kW	5.29-19.40	7.51-27.54
СОР	W/W	3.21-4.65	3.21-4.65
Current Input Range	А	8.22-30.14	11.67-42.80
Max.Hot Water capacity	L/h	1505	2150
ERP Level (35-C)	/	A+++	A+++
ERP Level (55-C)	/	A++	A++
SCOP @65°C		2,75	2,71
Max.Power Input	kW	24	36
Max.Current Input	А	30	45
Power Supply	V/Ph/Hz	380-415V/3	N~/50-60Hz
Refrigerant	/	R290	R290
Sound Pressure(1m)	dB(A)	62	68
Sound Power Level (EN12102)	dB(A)	77	83
Operating Ambient	·c	-25-43	-25-43
Max.Outlet Water	·c	73	73
Fan Motor Quantity	/	1	2
Fan Motor Type	/	DC Fan Motor	DC Fan Motor
Warter Connection	inch	G1.5"	DN50
Refrigerant/Proper Input	g	1500*2	2400*2
Rated Water Flow	g m³/h	5,85	8,5
Rated Water Pressure Drop	kpa	20	25
Net Weight		363	733
Gross Weight	kg	456	833
-	kg	456 1198/980/1816	833 1965x1060x2070
Unit Dimension (L/W/H)	mm		
Ship Dimention (L/W/H)	mm	1320/1100/2060	2055x1060x2070









### **Environmentally friendly**

nvironmentally friendly R290 refrigerant is fully compatible with conventional lubricants and components. With zero ozone depletion potential (ODP=0) and low global warming potential (GWP=3), it does not require synthetic processing, has a minimal impact on the hydrocarbon balance and does not contribute to the greenhouse effect.

## **Optimum thermal performance**

R290 has outstanding thermodynamic efficiency, requiring less refrigerant for equipment with equivalent thermal capacity. This not only reduces costs, but also emphasizes its environmental friendliness.

## CO<sub>2</sub> emissions (or Global Warming Potential, GWP) for R290, R32 and R410A:

Gas Type	R290	R32	R410A
GWP	3	675	2088
Weight(kg)	0.8	1.7	2.4
Weight x GWP(kg x GWP)	0.8 x 3	1.7 x 675	2.4 x 2088
CO <sub>2</sub> Emission(kg)	2.4	1350	5011
Conversion of Different Means of Transportation	20-minute drive by car about 14.8km	4-hour flight from Hongkong to Singapore	17-hour flight from Hongkong to Chicago

As an example of a 12 kW R32 heat pump with the same performance, it can be noted that the R32 refrigerant charge is 1.7 kg, while R290 requires only 0.8 kg, which is 40% of the R32 refrigerant volume. Despite the significantly smaller amount of refrigerant, the R290 heat pump is able to provide the same or even higher performance.



## **Swimming pool heat pump Njord**



Not just an efficient swimming pool heat pump product as it is, FLIXX is aiming to build an awesome craft with all modern elements, such as double-side airflow outlet, matt-finished sheet metal cabinet, golden radiator etc.



#### Advanced Heat Pump Technology

Not only is the unit designed with superior appearance, but also powerful performance. With mature inverter technology combined with the adoption of Mitsubishi compressor, the unit can maintain high COP at 16 while running silently, which create wonderful swimming atmosphere for you!

#### Low Noise Running

A fully enclosed cabinet is specially designed for the compressor so that the running noise can be kept inside and the noise of the whole unit can maintain very low.

#### **Double-side Airflow Outlet**

The unit uses PHNIX own patent double-side airflow cabinet which through years of application in the market is proven to be highly efficient in heat exchange and outstandingly silent during operation.

#### **Matt-finished Sheet Metal Cabinet**

On the cabinet, the lively interplay of matt-finished surfaces combined with irregular shaped pattern is reminiscent of a high-performance swimming pool heat pump products.

#### Modern Controller

The unit utilizes a smart big button and touch combined display which is incomparably easy to use. Moreover, the display can be installed simply by plugging in the machine and removes easily when maintenance and replacement.



#### App control

Simplify your life with AQUA TEMP. Via connection by Bluetooth, Wi-Fi and 4G, your can take full control of your swimming pool heat pump from anywhere in your home or office with a single app on your smartphone.



FLIXX models	Njord SP 20-40	Njord SP D30-55	Njord SP 40-70	Njord SP 50-85	Njord SP 60-100	Njord SP3 70-115	Njord SP3 80-130
Advised pool volume (m <sup>3</sup> )	20-40	30-55	40-70	50-85	60-100	70-115	80-130
Operating air temperature (°C)		•	•	-10~43		•	
Rated power	1,6	2,13	2,36	3,22	3,17	4,91	5,28
Refrigerant		0	•	R32		0	
Certification				CE			
Air 27°C/Water 26°C / Humid. 80%							
Heating Capacity(kW)	1.4~7.1	1.9~9.5	2.4~13	2.5~17.8	3.5~20	7.7∾25	7.8~27.8
Consumed power (kW)	0.087-1.09	0.118-1.39	0.145-1.96	0.151-2.78	0.214-3.07	0.481~4.10	0.488~4.71
СОР	16~6.5	16.1~6.8	16.5~6.6	16.5~6.4	16.3~6.5	16.0~6.1	16.0~5.9
Air 15°C/Water 26°C/Humid. 70%	•	^				•	
Heating Capacity(kW)	1.1-5.5	1.4~7.0	1.6~9.1	2.3~12.8	2.5~14.7	4.9~18.9	5.0~21.2
Consumed power (kW)	0.157-1.22	0.205-1.48	0.238-1.89	0.353-2.66	0.357-3.19	0.754~4.11	0.769~4.81
СОР	7~4.5	6.8~4.7	6.7~4.8	6.5~4.8	7∾4.6	6.5~4.6	6.5~4.4
Air 10°C/Water 26°C/Humid. 64%	•				•		
Heating Capacity(kW)	0.9-4.0	1.2-5.5	1.6-7.2	2.0-9.8	2.6-11.3	3.6-14.2	3.7-15.9
Consumed power (kW)	0.20-1.25	0.27-1.72	0.33-2.18	0.40-2.80	0.58-3.32	0.80-4.06	0.82-4.68
СОР	4.5-3.2	4.5-3.2	4.8-3.3	4.9-3.5	4.5-3.4	4.5-3.5	4.5-3.4
Air 35 °C /Water 28 °C / Humid 80 %	•	•	•	•		•	
Cooling Capacity(kW)	1.92-3.5	1.92-3.5	2.06-3.65	2.50-4.54	4.64-8.96	6.56-11.40	6.56-11.40
Consumed power (kW)	0.48-1.14	0.48-1.14	0.50-1.29	0.85-2.01	1.21-2.64	1.61-3.17	1.61-3.17
EER	4.0-3.07	4.0-3.07	4.12-2.83	2.94-2.26	3.83-3.39	4.07-3.60	4.07-3.60
Power Supply		•	. 220	)-240V^/1Ph 380V^	//3N	•	
Fan Quantity	1	1	1	1	1	1	1
Fan Speed (RPM)	400-700	400-750	400-800	400-750	500-750	500-800	500-850
Sound Pressure 1m dB(A)	36-45	36-46	37-47	40-50	41-51	43-53	45-54
Sound Pressure of 50% capacity at 1m dB(A)	42	43	44	44	45	47	47
Sound Pressure 10m dB(A)	16-25	16.5-27	19-28.5	20-30	21-31	23-33	25-34
Water Connection (mm)				50			,
Water FlowVolume (m3/h)	2,4	3,2	4,1	5,2	5,6	10,3	12,5
Water Pressure Drop (max) kPa	2	3	4	5	6	7	8
Net Dimensions L/W/H (mm)	1030*455*635	1030*455*635	1030*455*635	1130*500*800	1210*530*900	1210*530*900	1210*530*900





## Features and benefits of FLIXX heat pumps



#### **Integrated Design**

The integrated design integrates the heat pump system into a single unit, saving installation space and simplifying maintenance. In addition, placing the heat pump outdoors not only frees up indoor space, but also eliminates the risk of refrigerant leakage in the room, creating a more comfortable and safe environment for the user.

#### **Smart Touch Display**

- Easy touch control for convenient operation.
- Elegant and aesthetic design for ease of use.
- Versatile Installation
- Wall-mountable
- Adaptable to various installation conditions.

Multi-language support

With support for up to 13 languages, the device interface is clear and easy to use

Advanced Monitoring and Recording

• Access to temperature curves for water, environment and conditions for the past 45 days.

• Extraction of operating data for various elements of the heat pump, simplifying installation, configuration and after-sales service.

#### Patented Defrost Technology

Equipped with PHNIX's exclusive defrost technology, our motherboard has outstanding defrost control capabilities.

This advanced technology not only improves the heat pump's efficiency, but also extends its overall lifespan, ensuring stable and reliable operation even in the harshest conditions.

#### Fully upgraded motherboard

New motherboard with more features

#### Plug and play design

SG-Ready compatibility Dual-zone control (different outlet temperatures) Temperature compensation







#### Remote control, monitoring and debugging system Warmlink and IOT Cloud

All FLIXX heat pumps are equipped with a wireless module for connection to the remote monitoring and control system.

Connection is via Wi-Fi or 4G communication module, which is integrated into the heat pump body. Warmlink application for smartphone:

- Temperature control.
- Setting up operating timers.
- Switching operating modes.
- Notifications about malfunctions.
- Monitoring energy consumption.

#### Cloud service IOT Cloud for installation and maintenance companies:

- Full access to all installed units.
- Operation statistics, graphs, changing any
- settings and remote diagnostics of equipment.
- Software update.

• Monitoring and notifications about malfunctions via email or web interface 24/7.

• Remote support and maintenance work from the equipment manufacturer.







#### WarmLink APP

Timer setting

Mode switching Fault alarm and record

Monitor power-consumption statistics



#### **Cascade Controller**

• Connection of up to 16 heat pumps into a single system

- Weather-dependent regulation.
- Rotation of units based on compressor operating time.

• Proportional activation of units depending on the building's needs for heat or cold.

- Automatic addressing of units.
- Smart control of the defrosting process.



# GROUNDY



## GROUNDY

#### Geothermal heat pump

- Use of R290 refrigerant.
- Fully inverter technology.
- Possibility of operation at high temperatures up to 75°C.
- Built-in brine and circulation pumps.
- Integrated passive cooling function.
- Provision of heating and hot water supply.
- Compatible with photovoltaic system.
- Internet control.
- Support for cascade connection.





### **ADVANTAGES**

#### 1. Energy Efficient and Green

A geothermal heat pump uses the stable temperature of the earth to heat and cool your home. In winter: Takes heat from the earth and transfers it inside. In summer: Removes heat from the house and returns it to the earth. This reduces energy costs and minimizes the carbon footprint.

#### 2. Full DC Inverter Technology

With full DC inverter technology: Smoothly controls the speed of the compressor, fan and pumps. Ensures high energy efficiency. Maintains a stable indoor temperature. The system operates quietly, which increases comfort. Extends the life of the equipment and reduces the impact on the environment.

#### 3. Compatible with Photovoltaic (PV) Systems

Using a heat pump in conjunction with a photovoltaic system: Increases overall efficiency and sustainability. Produces electricity from sunlight to power the heat pump. Reduces dependence on the power grid and reduces heating and cooling costs.

#### 4. Intelligent remote control

Control your heat pump easily and conveniently via the app: Access to system settings from anywhere in the world.

Possibility of optimizing operation and monitoring the system in real time.

Power Supply (V)	380-415V/3N~/50-60Hz
Height (mm)	985
Width (mm)	604
Depth (mm)	665
Model Test conditions water to water (B10/7°C W30/35°C)	
GS100-12	12 kW
GS100-20	20 kW
GS100-30	30 kW
Product efficiency class, space heating, 35 °C	A+++
Product efficiency class, space heating, 55 °C	A+++





FLIX

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