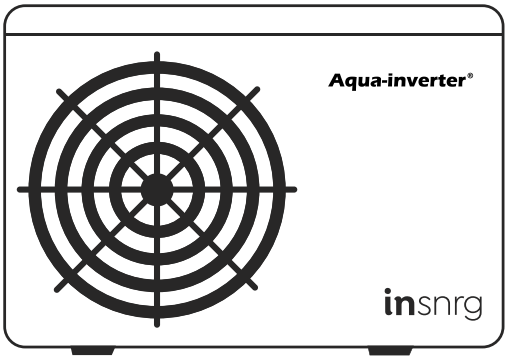
INSTALLATION & OPERATING MANUAL

Insnrg Hi Heat Pump

A COMPLETE GUIDE TO YOUR HEAT PUMP



insnrg

CONGRATULATIONS ON PURCHASE YOUR INSNRG Hi HEAT PUMP.

THIS MANUAL HAS BEEN CAREFULLY DEVELOPED TO GIVE YOU ALL THE INFORMATION YOU NEED TO GET THE BEST VALUE FROM YOUR PURCHASE.

It is important that you read through the manual to identify the key areas you need to understand, particularly the following:

- Health and Safety Concerns
- Installation requirements
- How to operate the major features of the unit
- The importance of maintenance
- If you have a problem, what to trouble shoot before you contact your professional
- Finally, your entitlements under your product warranty.

Insnrg have developed their product to provide you with the ultimate experience and are sure you will be delighted with your purchase.

Please note: This manual has been designed to cater for installation rules and codes in the USA, Canada and Australia. Specific rules and regulations for each country has been highlighted by the National flag of each country. Please ensure you follow the installation rules specific to your country.

THE IMPORTANT BITS

SECTION 1

WE CARE ABOUT YOUR SAFETY

IMPORTANT WARNINGS

Please read this manual carefully BEFORE installing, operating or servicing the Heat Pump.

Insnrg highly recommend the installation of all their equipment by a suitably qualified pool professional who will ensure your high performance Insnrg products are installed to your local standards and codes to ensure optimum safety and performance.

CAUTION

All components of the filtration system including Pumps, Filters, Heaters must be positioned so to prevent being used as means of access to the pool by young children. To reduce risk of injury, do not permit children to use or climb on this product. Closely supervise children at all times.

WARNING – HAZARDOUS PRESSURE

Pool and Spa water circulation systems operate under hazardous pressure during start up, normal operation, and after pump shut off. Stand clear of circulation system equipment during pump start-up. Failure to follow safety and operation instructions could result in violent separation of the pump housing and cover, and/or filter housing and clamp due to pressure in the system, which could cause property damage, severe personal injury, or death. Before servicing pool and spa water circulation systems, all system and pump controls must be in the off position and filter manual relief valve must be in open position. Before starting system pump, all system valves must be set in a position that allows system water to return back to the pool. Do not change filter control valve position whilst system pump is operating. Before starting system pump, fully open filter manual air relief valve. Do not close filter manual air relief valve until a steady stream of water (not air) is discharged.

WARNING – RISK OF ELECTRICAL SHOCK OR ELECTROCUTION.

Ensure that you position the filter to allow for the air/water bleed valve located in the lid to safely direct water drainage and purged air or water. Water discharged from an improperly position filter can create an electrical hazard that can cause severe personal injury as well as damage property.

THIS HEAT PUMP HAS POWER-OFF MEMORY FUNCTION. WHEN THE POWER IS RECOVERED, THE HEAT PUMP WILL RESTART

SECTION 2

WE WANT YOU TO BE DELIGHTED WITH YOUR PURCHASE, CORRECT INSTALLATION WILL PROLONG LIFE AND MAXIMISE THE PERFORMANCE OF THIS UNIT.

The following section will outline how to install your Heat Pump to get the best results. To operate correctly, your Heat Pump needs a reliable supply of Water, Air and Electricity.

By adhering to the following instructions, you will ensure the best combination.

Insnrg highly recommend the use of qualified service technicians to ensure the best performance as well as the health and safety of your family.

HOW IT WORKS

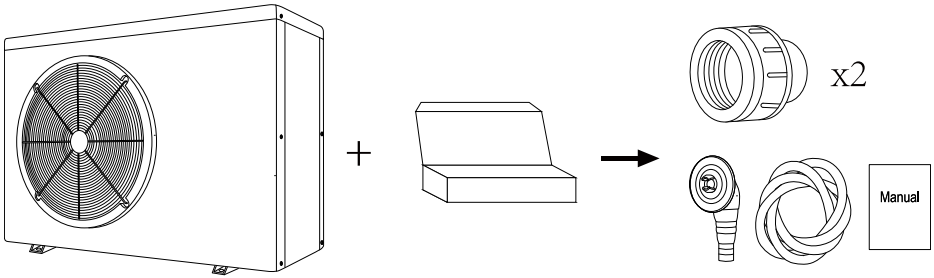
Your Insnrg Hi Heat Pump is a perfect investment to get the most value and enjoymeny out of your backyard swimming oasis. You can control the Heat Pump to give you perfect swimming water all year round. Heat Pumps are the most efficient way to heat your pool water as they utilise existing power source and combine with outside air conditions to heat your water at minimal energy costs.

The inverter technology built-in to your Insnrg Hi Heat Pump takes this saving to the next level by reducing the speed of your motor once the set temperature has been reached. This maintains your pool water at your desired temperature using up to 80% less power. This technology has been used in the Air Conditioning market for many years with great results.

Follow these instructions to get the most benefit out of your Insnrg Hi Heat Pump and ensure your family and friends enjoy your pool all year round.

GENERAL INFORMATION

CONTENTS



OPERATING TEMPRATURES

CONDITIONS		RANGE	
		Celcius	Fahrenheit
Temperature Operating Range	Air Temperature	-7 to 43	19.4 to 109.4
Temperature Setting	Heating	18 to 35	64.4 to 95.0
	Cooling	12 to 30	53.6 to 86.0

The heat pump will have ideal performance in the operation range of 15 to 25 Celcius / 59.0 to 77.0 Fahrenheit

SET-UP MODES

Your Insnrg Hi Heat Pump has two set-up modes - Smart and Silence. The chart below outlines the difference in each mode and under what conditions they should be used.

Mode	Recommendation	Advantages
	Smart Mode Use as standard	Heating capacity - 20% to 100% Intelligent optimization using Inverter Technology Fast Heating
	Silence Mode Use at night	Heating capacity - 20% to 80% Noise level - 3dB lower than Smart Mode

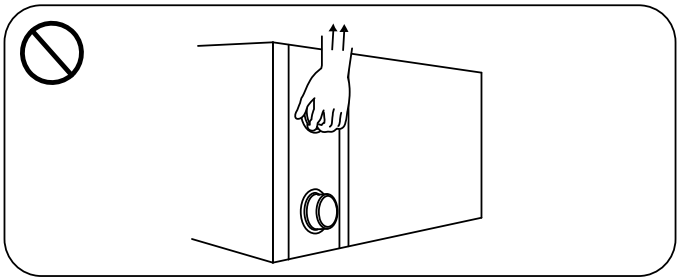
INSTALLATION GUIDELINES

Insnrg highly recommend installation is completed by a suitably qualified professional to ensure your safety and the best performance from your Heat Pump.

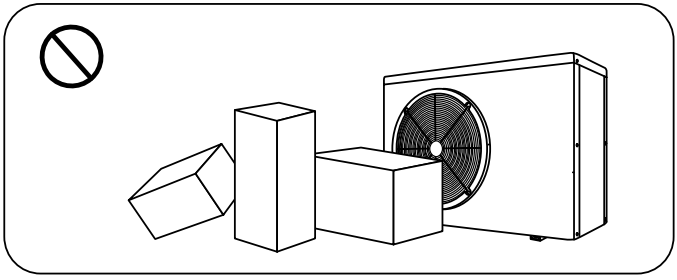
THE FOLLOWING GUIDELINES SHOULD BE FOLLOWED.

1. The Heat Pump can only be used to heat swimming pool water. It can NEVER be used to heat other flammable or turbid liquid.

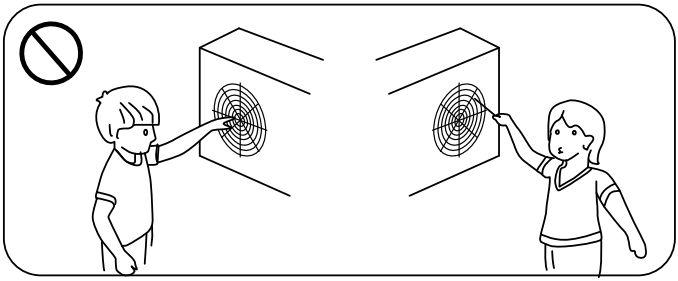
2. When moving the Heat Pump, don't lift using the water unions. This connects directly to the Titanium Heat Exchanger inside the heat pump and could lead to potential damage.



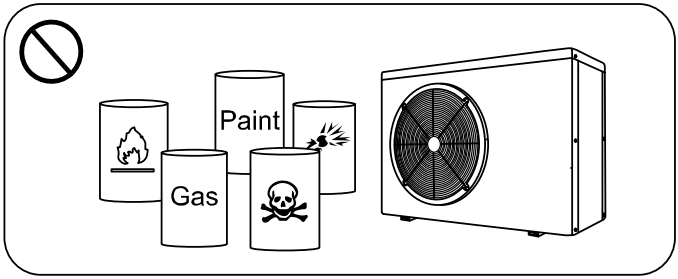
3. Air ventilation is vital for the performance of your Heat Pump. Don't put obstacles before the air inlet and outlet of the Heat Pump.



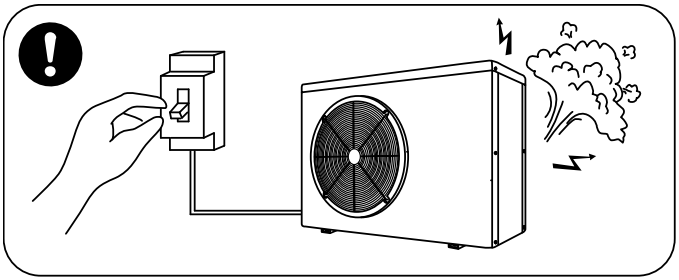
4. Don't put anything into the Air inlet or outlet, or the efficiency of the heat pump will be reduced or even stopped and could cause serious injury.



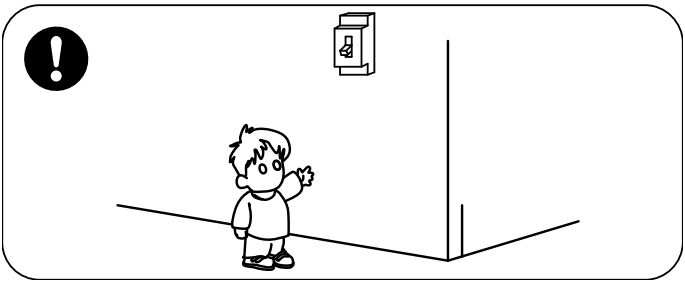
5. Fumes from combustible gas or liquids could be distributed by the Air inlets and outlets on your Heat Pump. Therefore, don't use or store any of these items in the same location.



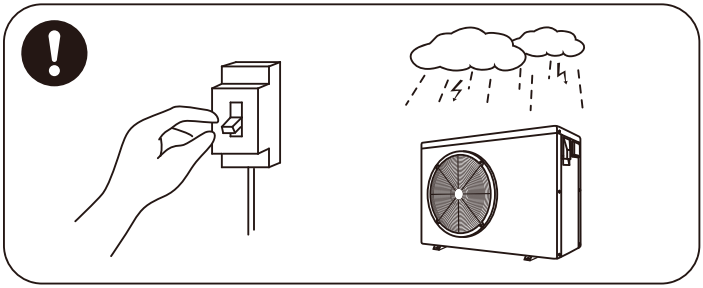
6. If any abnormal circumstances occurred, e.g noise, smell, smoke or leakage of electricity, switch off the main power immediately and contact your local dealer. Don't try to repair the heat pump by yourself.



7. The main power switch should be out of the reach of Children.



8. Please cut off the power in the lightning storm weather.



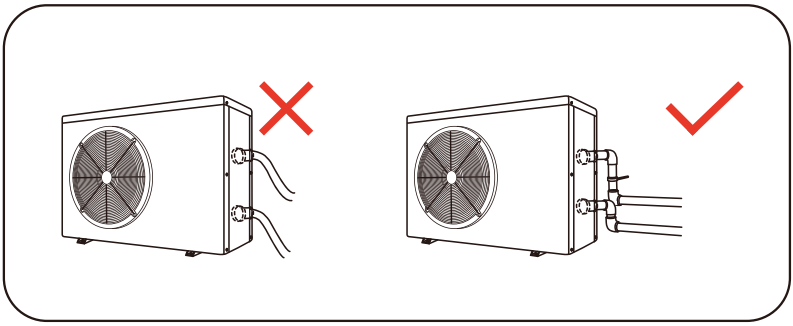
9. To secure the Heat Pump it is recommended that the unit frame be fixed by bolts (M10) to concrete foundation or brackets. The concrete foundation must be solid, the bracket must be strong enough and anti-rust treated.

10. The heat pump needs a circulation water pump to circulate the water. This can be the existing filtration pump, or a separate pump specifically for the Heat Pump. Discuss with your local pool professional for your best options. Insnrg manufacture a range of Single and Variable Speed pumps that are ideal for this application.

11. When the heat pump is operating efficiently, there will be condensation water discharged from the bottom of the unit, please pay attention to it. Insert the drainage tube (accessory) into the hole and clip it well, then connect a pipe to drain off the condensation water to your required location. Condensation will vary according to outside conditions such as heat and humidity.

WATER INSTALLATION

Your Insnrg Hi Heat Pump has the Inlet and Outlets clearly labelled on the outside of the unit. Use PVC Pipe to connect to the Filtration System. The use of soft flexible pipe is not recommended as the weight of these pipes will damage the internals of the unit and not be covered by warranty.

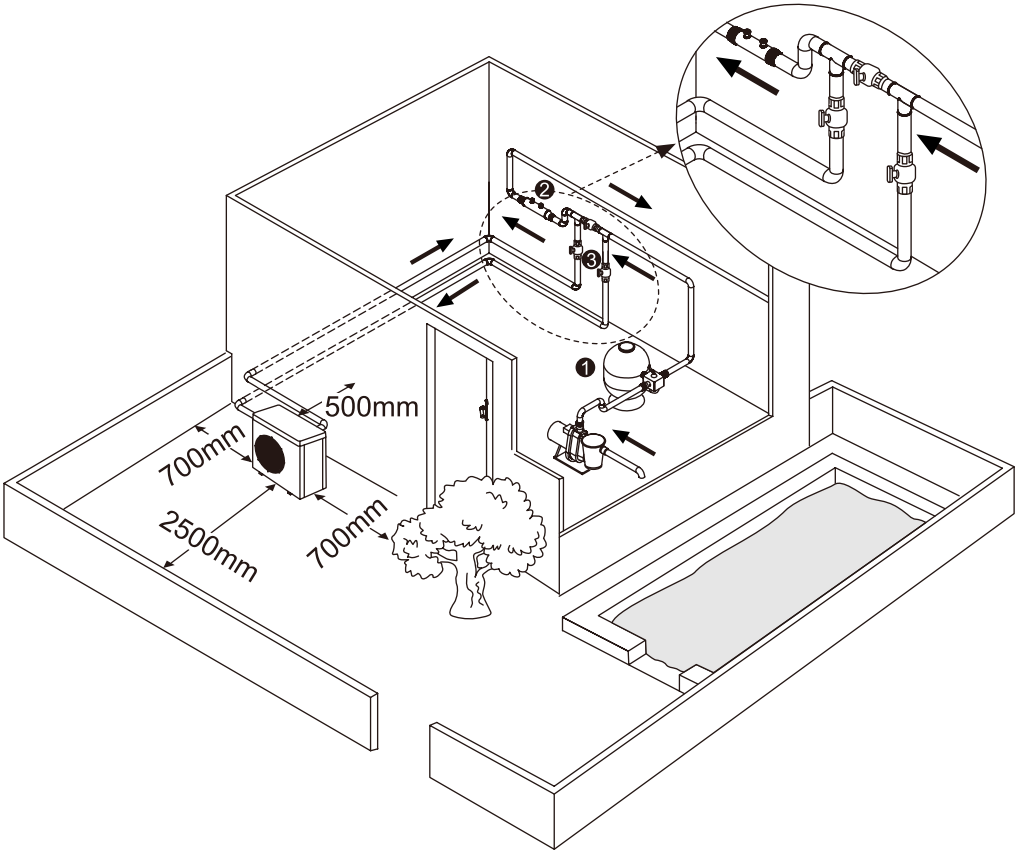


To get the best performance from your Heat Pump it is recommended that the PVC Pipe length should be less than 10 metres / 33 feet between the pool and the heat pump. If greater than this distance, the heat gained can be lost to outside conditions prior to reaching the pool water resulting in poor performance.

AIR INSTALLATION

Good Air circulation is a requirement for the best performance of your Insnrg Hi Heat Pump.

THE FOLLOWING CHART GIVES GUIDELINES TO THE BEST LOCATION FOR YOUR HEAT PUMP.

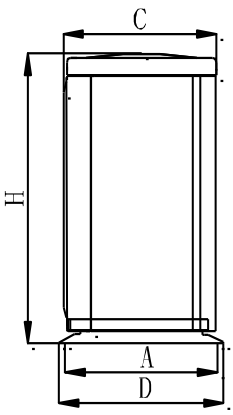


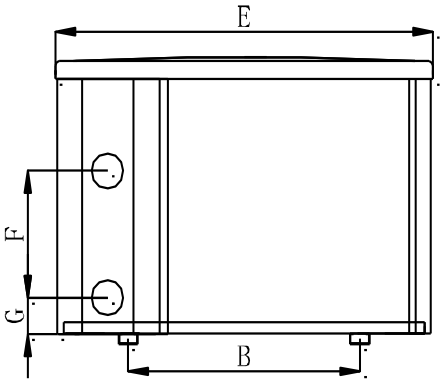
**** HEAT PUMPS SHOULD NEVER BE INSTALLED INDOORS AS THIS WILL SIGNIFICANTLY AFFECT PERFORMANCE**

CLEARANCES

Minimum Distance	Metres	Feet
Front	2.5	8.2
Back	0.5	1.7
Sides	0.7	2.3

DIMENSIONS





	A	B	C	D	E	F	G	H
Model	**Size (mm)**							
HI 27	315	590	312	340	961	250	74	658
HI 40	315	590	312	340	961	340	74	658
HI 72	395	590	392	420	961	460	74	758
HI 120T	505	790	496	530	1161	650	74	958

** Above data is subject to modification without notice.*

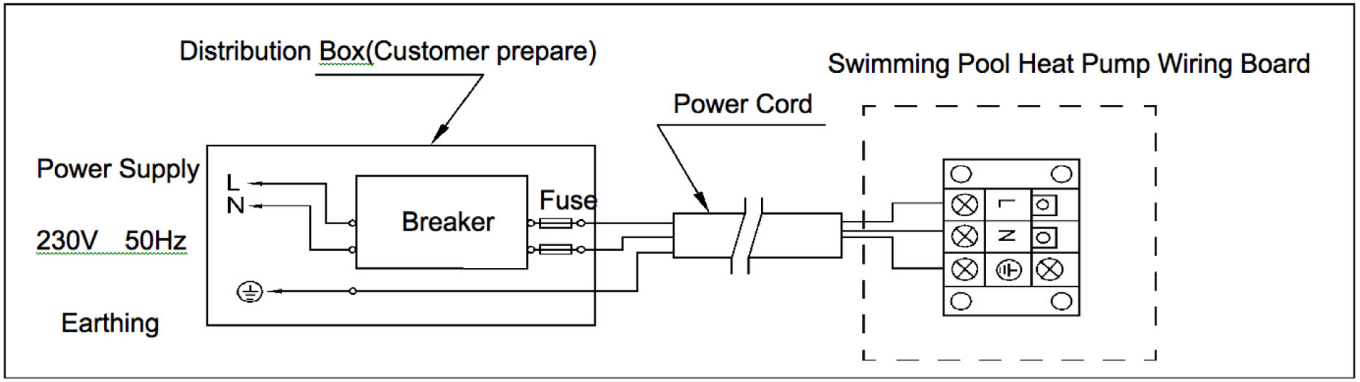
ELECTRICAL INSTALLATION

Depending on the model purchased from the Insnrg HI range of Heat Pumps, will depend on the electrical work required. The HI 27 model comes complete with a 10amp 3 Pin Plug which can be easily plugged into existing power points. The HI 40 model comes complete with a 15amp 3 Pin Plug which can be plugged into any 15amp power points. The HI 72 model requires a qualified electrician to connect to single phase power. The HI 120T model requires a qualified electrician to connect to three phase power.

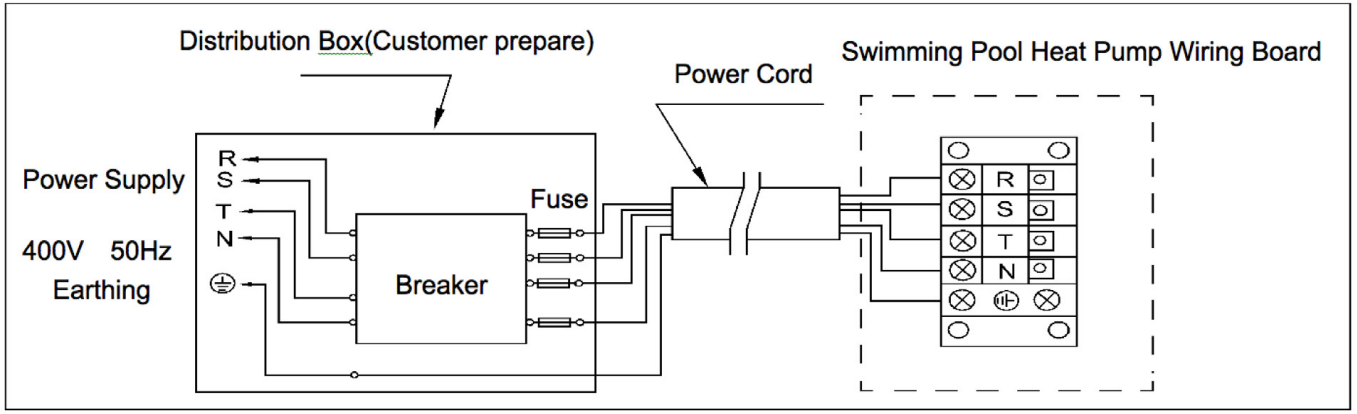
SOME OTHER GUIDELINES FOR ELECTRICAL INSTALLATION INCLUDE:

- Connect to appropriate power supply, the voltage should comply with the rated voltage of the products
- Well earth the heat pump
- Wiring must be connected by a professional technician according to the circuit diagram
- Set breaker or fuse according to the local code (leakage operating current ≤ 30mA)
- The layout of power cable and signal cable should be orderly and not affecting each other.

For power supply: 230V 50HZ



For power supply: 400V 50HZ



ELECTRICAL PARAMETERS

MODEL		HI 27	HI 40	HI 72	HI 120T
Breaker	Rated Current A	10.5	12.0	21.0	12.0
	Rated Residual Action Current mA	30	30	30	30
Fuse A		10.5	12.0	21.0	12.0
Power Cord mm2		3×1.5	3×2.5	3×4	5×2.5
Signal cable mm2		3×0.5	3×0.5	3×0.5	3×0.5

NOTE: The above data is adapted to power cord ≤ 10m / 33ft .
If power cord is > 10m / 33ft, wire diameter must be increased. The signal cable can be extended to 50m / 164ft at most.

INITIAL START-UP PROCEDURE

Check all the wirings carefully before turning on the heat pump.

Check installation of the whole heat pump and the pipe connections according to the pipe connecting drawing

Check the electric wiring according to the electrical wiring diagram and earthing connection

Make sure that the main power is well connected

Check if there is any obstacle in front of the air inlet and outlet of the heat pump

ONCE ABOVE IS OK, PROCEED AS FOLLOWS:

1. Start the circulation pump, and check for any leakage of water
2. Turn Heat Pump Power on and press the ON/OFF button of the heat pump
3. Set desired temperature in the thermostat.

In order to protect the heat pump, the heat pump is equipped with start delay function. When starting the heat pump, the fan will start to run in 3 minutes, in another 30 seconds, the compressor will start to run.

4. After pool heat pump starts up, check for any abnormal noise from the heat pump
5. Check the temperature setting

SECTION 3

HAVE FUN AND GET THE MOST OUT OF YOUR PURCHASE

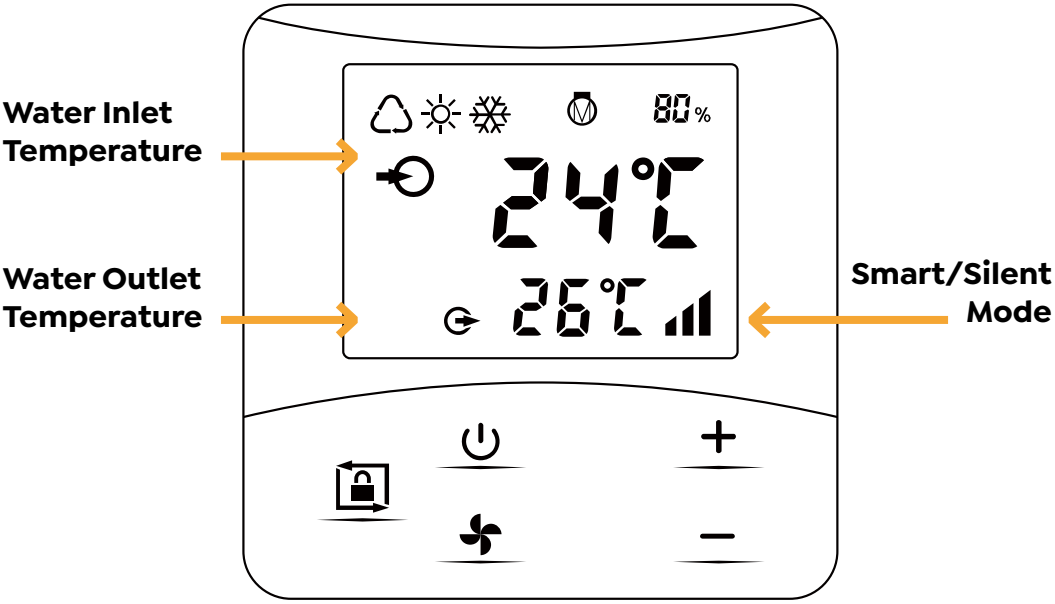
Now that your Insnrg Hi Heat Pump is installed and operating, it is important to understand how to keep it in the best condition and give you the best results for many years to come.

OPERATIONAL INSTRUCTIONS

Symbol	Designation	Function
	ON/OFF	Power On/Off
	Unlock / Mode	**1.** Press and hold for 3 seconds to unlock/lock screen **2.** After screen is unlocked, press it to select mode: *Auto (12~35°C)* *Heating (18~35°C)* *Cooling (12~30°C)*
	Speed	Select Smart/Silence mode
	Up / Down	Adjust set temperature

Important points to note:

- If no operation for 30 seconds, screen will be locked
- When Heat Pump is off, screen will be dark and “0%” will be displayed



	Auto
	Heating
	Cooling
	Compressor
80%	Heating capacity percentage

FUNCTIONS

1. POWER ON

Press  for 3 seconds to light up screen, then press  to power on heat pump

2. ADJUST SET TEMPERATURE

Unlock screen, press + or − to display or adjust the set temperature to your desired level

3. MODE SELECTION

Press  to select mode and choose from the following:

a. Auto  : adjustable temperature range 12~35℃

b. Heating  : adjustable temperature range 18~35℃

c. Cooling  : adjustable temperature range 12~30℃

4. SMART/SILENCE MODE SELECTION:

1. Smart mode as default will be activated when heat pump is on, and screen shows .

2. Press to enter Silence Mode, and screen shows .
(Suggestion: select Smart mode for initial heating)

5. DEFROSTING

a. Auto Defrosting: When heat pump is defrosting, will be flashing. After defrosting, will stop flashing.

b. Compulsory Defrosting: When heat pump is heating, press and together for 5 seconds to start compulsory defrosting, and will be flashing.
After defrosting, will stop flashing.

(Note: Compulsory defrosting intervals should be more than 30 minutes and the compressor should run for more than 10 minutes.)

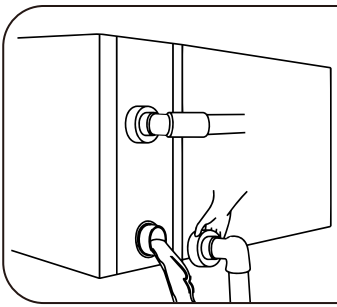
WINTERISING

If you live in a climate where your temperature is low enough to freeze your pool water, it is vitally important that you follow the below steps to protect your Heat Pump investment. If you live in a climate where there is a small chance of freezing, you could leave the circulation pump operating to eliminate the chance of the water freezing. Should water freeze inside the Heat Pump it will expand and it's highly likely that the internals will be damaged which are costly to repair and not covered by warranty.

TO PREPARE YOUR HEAT PUMP FOR FREEZING CONDITIONS:

1. Turn off power supply to the Heat Pump
2. If Heat Pump is below the pool water level, ensure that your inlet and outlet valves are turned to off to ensure that the pool water doesn't drain out
3. Drain water out of the heat pump by removing the inlet unions
4. Once water is completely drained, replace inlet union fitting

Once the freezing conditions have subsided and you are ready to restart your Heat Pump, turn the valves back to ON, turn power ON to the Heat Pump and restart.



⚠ Important:
Unscrew the water union of inlet pipe to let the water flow out. When the water in machine freezes in winter season, the titanium heat exchanger may be damaged.

SECTION 4

OOPS, SOMETHING'S NOT RIGHT?

Maintenance, Trouble Shooting, Replacement Parts, Warranty & Contact Section

MAINTENANCE

Your new Insnrg Hi Heat Pump has been designed to withstand harsh outdoor conditions and withstand high velocity water with chemicals. Some of these parts will wear in the normal course of use and require regular checks and maintenance. A well thought out pro-active maintenance schedule will identify faults early and extend the lifespan of your Heat Pump.

A good tip for all outdoor Filtration Equipment including your Heat Pump is to ensure that the equipment area is protected from any insects and vermin with a regular treatment of Surface Spray or suitable Insecticide. Most of the electronics in Pumps, Chlorinators or Heaters are well vented to protect against extremes of temperature, however this creates a popular environment for ants and other insects who are attracted to the warmer, dry environments inside the enclosures. We recommend that, with power turned off to all equipment, you spray a surface insecticide on the surfaces surrounding the equipment to prevent ant and insect ingress. Repeat every three months or as necessary to ensure no nasty surprises.

PRO-ACTIVE MAINTENANCE PROGRAM

WHEN?	WHAT ARE YOU LOOKING FOR?	HOW CAN YOU FIX?
Weekly	Check around the unit for leaves/debris or signs of flooding.	Remove any debris that is restricting air circulation around the Heat Pump. If in a flood prone location, rectify.
Quarterly	Check all Gaskets	Isolate and turn off the Heat Pump. Remove all Gaskets and turn over. You can also apply a silicon based grease to extend the life. If dry, then contact your local pool professional to replace.
	Check for any Insects / Ants etc	It is a good practice to use a good quality surface spray around your equipment. Make sure all units are turned off and then spray around all units to eliminate any insect/ants etc
	Check for any leaks	If you notice any water leaking from the Heat Pump. Check gaskets first and reseal. If continues, contact your local pool professional to assess and rectify.
Annually	Clean the Evaporative Coil and Fan	Use a soft cloth with water containing a small amount of household detergent to carefully clean the entire outside of the unit, especially the evaporative coils and fan.

TROUBLE SHOOTING

FAILURE	REASON	SOLUTION
Heat pump doesn't run	No power	Wait until the power recovers
	Power switch is off	Switch on the power
	Fuse burned	Check and change the fuse
	The breaker is off	Check and turn on the breaker
Fan running but with insufficient heating	evaporator blocked	Remove the obstacles
	Air outlet blocked	Remove the obstacles
	3 minutes start delay	Wait patiently
Display normal, but no heating	Set temp. too low	Set proper heating temp.
If above solutions don't work, please contact your installer with detailed information and your model number. Don't try to repair it yourself.		

ATTENTION

Please don't try to repair the heat pump by yourself to avoid any risk.

DISPLAY CODES

NO.	DISPLAY	FAILURE DESCRIPTION
1	E3	No water protection
2	E5	Power supply excesses operation range
3	E6	Excessive temp difference between inlet and outlet water(Insufficient water flow protection)
4	Eb	Ambient temperature too high or too low protection
5	Ed	Anti-freezing reminder
NO.	**Display**	**Failure description**
1	E1	High pressure protection
2	E2	Low pressure protection
3	E4	3 phase sequence protection (three phase only)
4	E7	Water outlet temp too high or too low protection
5	E8	High exhaust temp protection
6	EA	Evaporator overheat protection (only at cooling mode)
7	P0	Controller communication failure
8	P1	Water inlet temp sensor failure
9	P2	Water outlet temp sensor failure
10	P3	Gas exhaust temp sensor failure
11	P4	Evaporator coil pipe temp sensor failure
12	P5	Gas return temp sensor failure
13	P6	Cooling coil pipe temp sensor failure
14	P7	Ambient temp sensor failure
15	P8	Cooling plate sensor failure
16	P9	Current sensor failure
17	PA	Restart memory failure
18	F1	Compressor drive module failure
19	F2	PFC module failure
20	F3	Compressor start failure
21	F4	Compressor running failure
22	F5	Inverter board over current protection
23	F6	Inverter board overheat protection
24	F7	Current protection
25	F8	Cooling plate overheat protection
26	F9	Fan motor failure
27	Fb	Power filter plate No-power protection
28	FA	PFC module over current protection

DISPLAY CODES

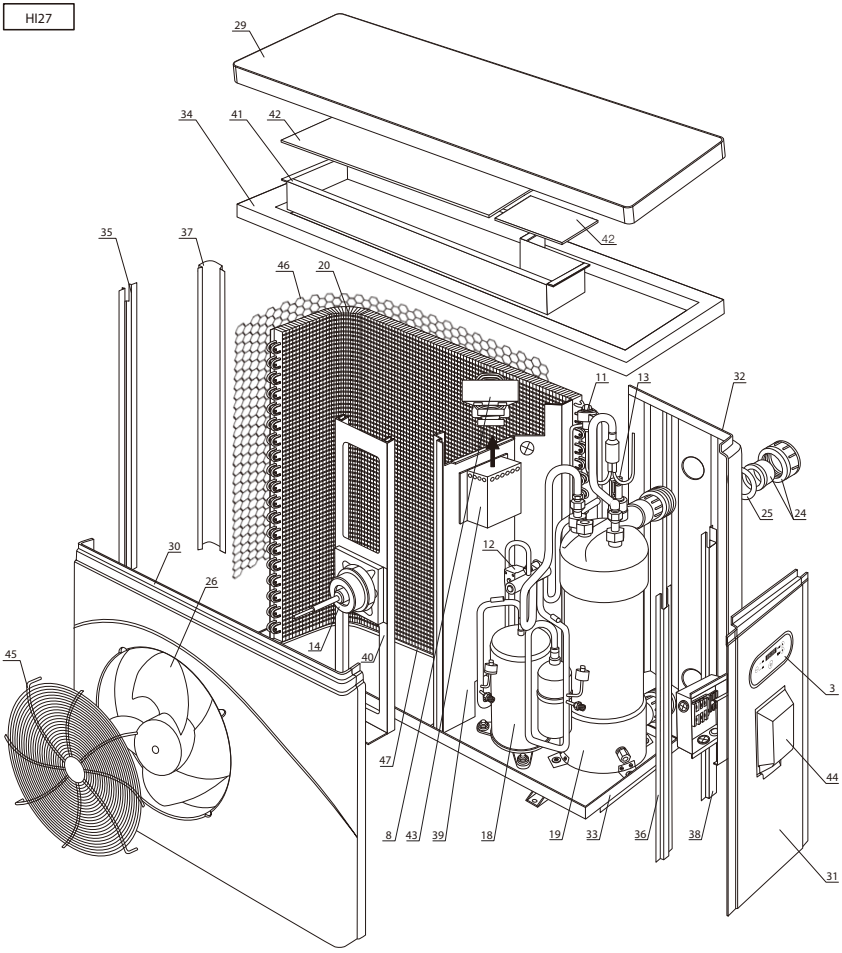
MODEL	HI 27	HI 40	HI 72	HI 120T
Advised pool volume (m3)	20~40	30~55	50~95	90~169
Working Air Temp (C/F)	-7 to 43 Celcius / 19.4 to 109.4 Fahrenheit			
Performance Condition: Air 26°C, Water 26°C, Humidity 80%				
Heating capacity (kW)	8.0	12.0	21.0	35.2
COP	14.7~7.0	14.8~5.7	15.2~5.7	15.5~5.5
COP at 50% speed	10.6	10.3	10.5	10.6
Performance Condition: Air 15°C, Water 26°C, Humidity 70%				
Heating capacity (kW)	5.8	8.0	14.3	24.0
COP	7.3~4.8	7.4~4.3	7.7~4.2	8.0~4.5
COP at 50% speed	6.5	6.2	6.2	7.0
Performance Condition: Air 35°C, Water 28°C, Humidity 80%				
Cooling capacity (kW)	4.0	5.5	10.0	16.4
Rated input power(kW) at air 15	0.16~1.2	0.24~1.8	0.36~3.3	0.63~5.15
Rated input current (A) at air 15	0.7~5.2	1.04~7.8	1.57~14.3	0.91~7.4
Max input current(A)	8.0	10.0	17.5	9.5
Power supply	230V/1 Ph/50Hz		400V/3 Ph/50Hz	
Advised water flux (m /h)	2~4	4~6	8~10	12~18
Sound pressure 1m dB(A)	38.8~48.2	42.1~50.7	40.9~54.2	42.6~54.7
Sound pressure 10m dB(A)	18.8~28.2	22.1~30.7	20.9~34.2	22.6~34.7
Water pipe in-out Spec (mm)	50			
Net Dimension LxWxH (mm)	961×340×658	961×340×658	961×420×758	1161×530×958
Net Weight (kg)	45	50	68	117

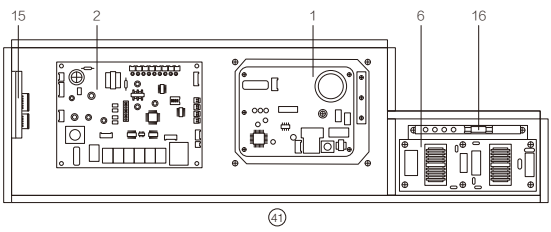
1. The values indicated are valid under ideal conditions: Pool covered with an isothermal cover, filtration system running at least 15 hours a day

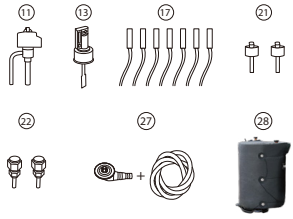
2. Related parameters are subject to adjustment periodically for technical improvement without further notice. For details please refer to nameplate.

REPLACEMENT PARTS

HI27



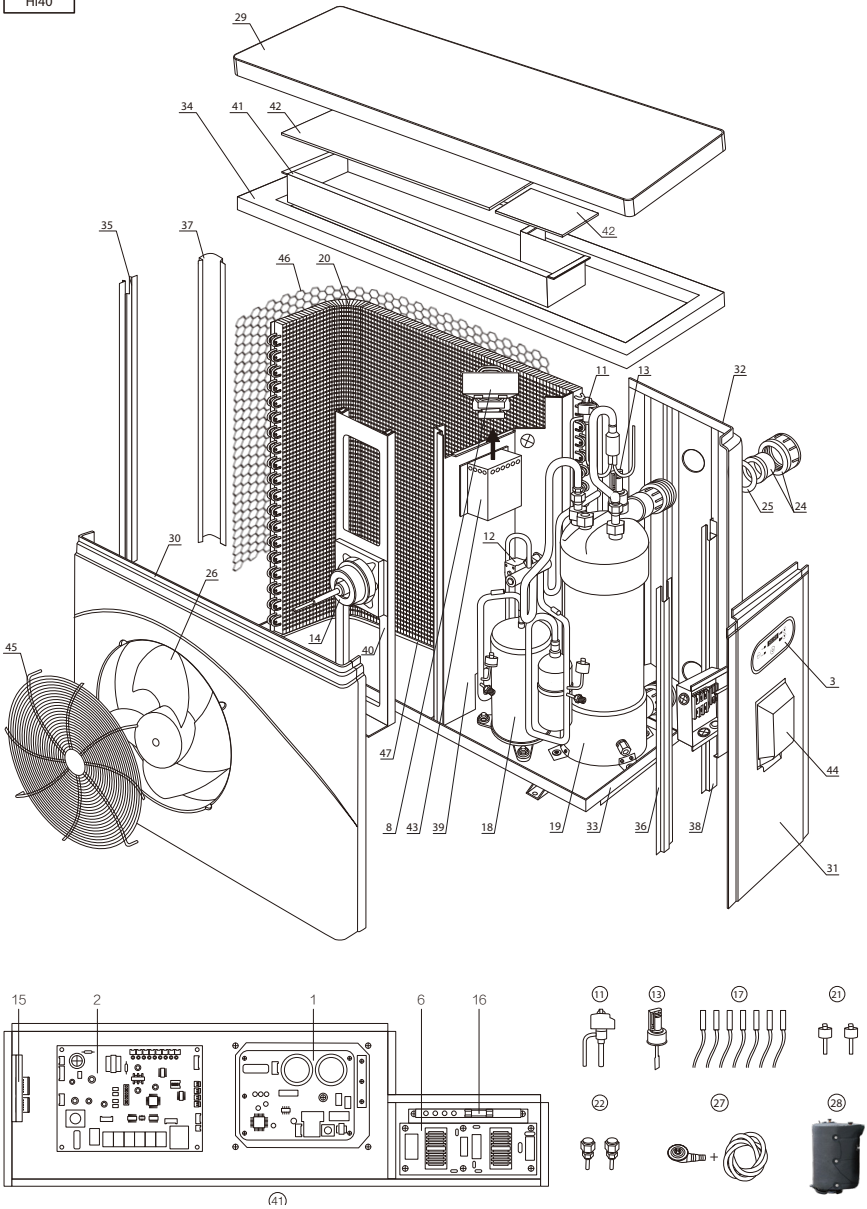




HI27

Position	Spare parts	Code
	A、Electrical Spare Parts	
1	Inverter board	033091290000
2	PC board (Heat)	033090240000H16
3	Oval LED (Heat)	034090200000
3	Squared LCD	/
3	Touch controller	/
4	Contactor	/
5	Capacitor	/
6	Power filter plate	033092300000
7	Capacitor plate	/
8	Reactor(big)	041301090000
9	Reactor(small)	/
10	Water pump contactor	/
11	Electronic expansion valve	006121000000
12	4-way valve	006110080000
13	Water flow switch	040060600000
14	Fan motor	032050510100
15	Fan motor driver module	032050500200
16	Fuse	040070010000
17	Full set of sensors	035043010000-R
	B、Refrigerating Spare Parts	
18	Compressor	031063080000
19	Titanium heat exchanger(Heat)	001031070002
20	Evaporator	001011220000
21	High &low pressure protection switch	040050600000-R
22	High&low Pressure valve	006080500000-R
23	Liquid reservoir	/
	C、Cabinet & Other Spare Parts	
24	Water union	003990020000
25	Water union gasket	004980050000-R
26	Fan	007010130000
27	Drainage kit	003991700000-R
28	Compressor insulation cap	004040270000
29	Top cover	003020220107
30	Front panel	003020450107
31	Right panel	003020220707
32	Back panel	003020221407
33	Bottom board	002021010100
34	Electrical compartment rack	002020100300
35	Front left pole	002020691300
36	Front right pole	002020101100
37	Back left pole	002020101200
38	Back right pole	002020101300
39	Separate board	002021000900
40	Motor bracket	002021001000
41	Electrical compartment 1	002021200300
42	Electrical compartment lid 1	002021200900
43	Reactor box	002021200700
44	Terminal board protection cover	003020230907
45	Fan mesh	002990140000
46	Black plastic mesh	003991100000
47	Evaporator heating belt	042040010000

HI40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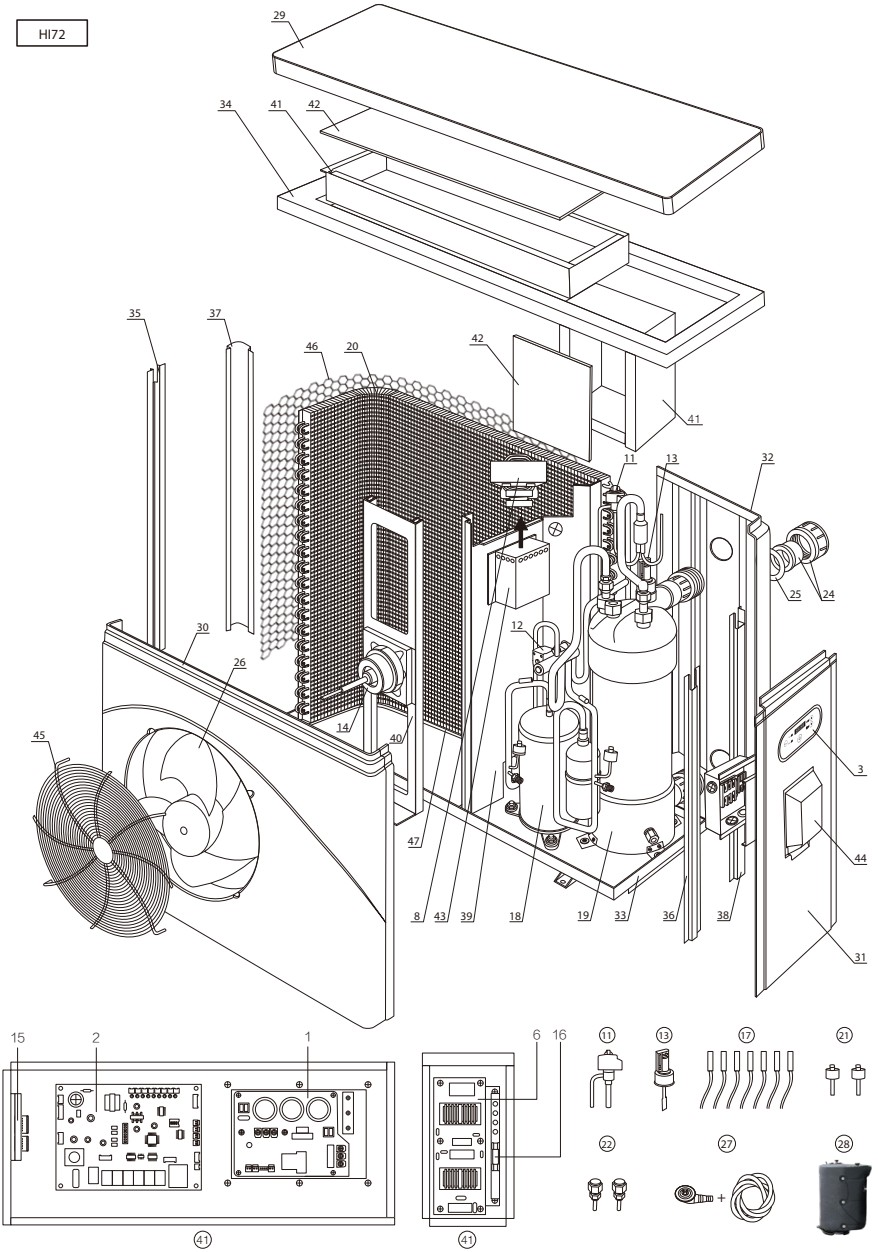
HI40

Position	Spare parts	Code
	A、Electrical Spare Parts	
1	Inverter board	033091320000
2	PC board (Heat)	033090240000H26
3	Oval LED (Heat)	034090200000
3	Squared LCD	/
3	Touch controller	/
4	Contactor	/
5	Capacitor	/
6	Power filter plate	033092300000
7	Capacitor plate	/
8	Reactor(big)	041301090000
9	Reactor(small)	/
10	Water pump contactor	/
11	Electronic expansion valve	006121000000
12	4-way valve	006110080000
13	Water flow switch	040060600000
14	Fan motor	032050500100
15	Fan motor driver module	032050500200
16	Fuse	040070020000
17	Full set of sensors	035043010000-R
	B、Refrigerating Spare Parts	
18	Compressor	031063020000
19	Titanium heat exchanger(Heat)	001030780002
20	Evaporator	001011110000
21	High &low pressure protection switch	040050600000-R
22	High&low Pressure valve	006080500000-R
23	Liquid reservoir	/
	C、Cabinet & Other Spare Parts	
24	Water union	003990020000
25	Water union gasket	004980050000-R
26	Fan	007010030000
27	Drainage kit	003991700000-R
28	Compressor insulation cap	004040270000
29	Top cover	003020220107
30	Front panel	003020450107
31	Right panel	003020220707
32	Back panel	003020220507
33	Bottom board	002020690100
34	Electrical compartment rack	002020100300
35	Front left pole	002020691300
36	Front right pole	002020101100
37	Back left pole	002020101200
38	Back right pole	002020101300
39	Separate board	002020692100
40	Motor bracket	002020692200
41	Electrical compartment 1	002021200300
42	Electrical compartment lid 1	002021200900
43	Reactor box	002021200700
44	Terminal board protection cover	003020230907
45	Fan mesh	002990140000
46	Black plastic mesh	003991100000
47	Evaporator heating belt	042040040000

HI72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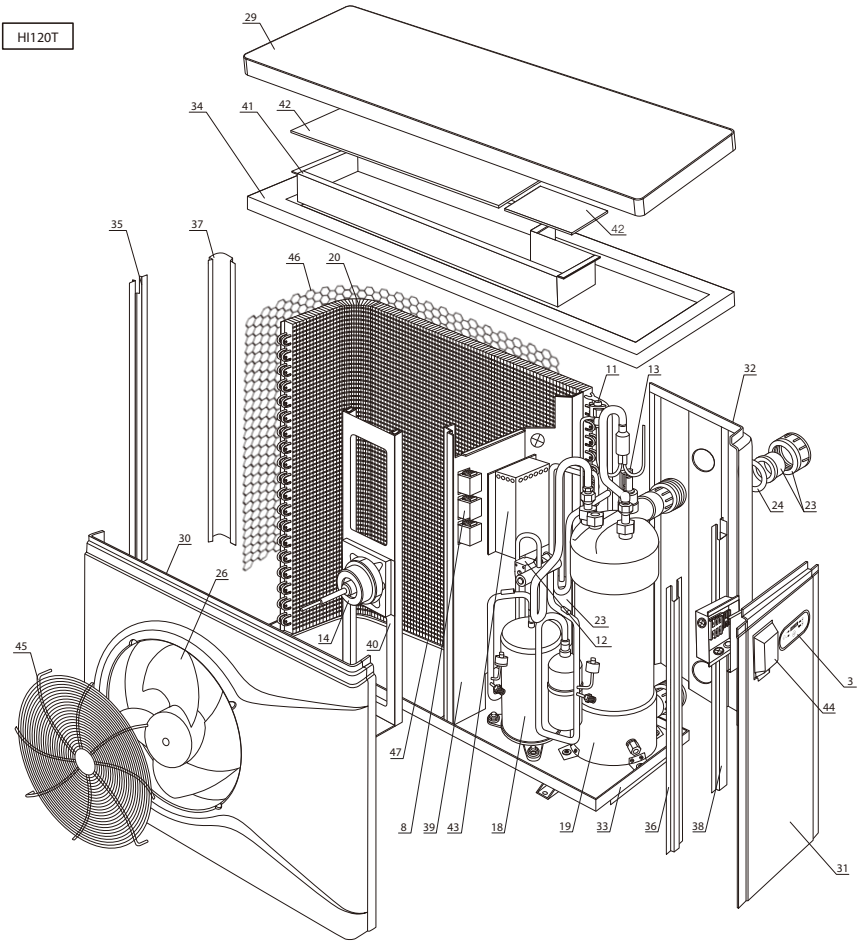
HI72

Position	Spare parts	Code
	A、Electrical Spare Parts	
1	Inverter board	033091330000
2	PC board (Heat)	033090240000H51
3	Oval LED (Heat)	034090200000
3	Squared LCD	/
3	Touch controller	/
4	Contactor	/
5	Capacitor	/
6	Power filter plate	033092310000
7	Capacitor plate	/
8	Reactor(big)	041301100000
9	Reactor(small)	/
10	Water pump contactor	/
11	Electronic expansion valve	006121010000
12	4-way valve	006110210000
13	Water flow switch	040060600000
14	Fan motor	032050500100
15	Fan motor driver module	032050500200
16	Fuse	040070040000
17	Full set of sensors	035043010000-R
	B、Refrigerating Spare Parts	
18	Compressor	031063030000
19	Titanium heat exchanger(Heat)	001030690002
20	Evaporator	001010650000
21	High &low pressure protection switch	040050600000-R
22	High&low Pressure valve	006080500000-R
23	Liquid reservoir	/
	C、Cabinet & Other Spare Parts	
24	Water union	003990020000
25	Water union gasket	004980050000-R
26	Fan	007010070000
27	Drainage kit	003991700000-R
28	Compressor insulation cap	004040210000
29	Top cover	003020500107
30	Front panel	003020560107
31	Right panel	003020500707
32	Back panel	003020500907
33	Bottom board	002020570100
34	Electrical compartment rack	002020570200
35	Front left pole	002020570500
36	Front right pole	002020570600
37	Back left pole	002020411200
38	Back right pole	002020411100
39	Separate board	002020571900
40	Motor bracket	002020572000
41	Electrical compartment 1	002020572200
42	Electrical compartment lid 1	002020593400
43	Reactor box	002021330700
44	Terminal board protection cover	003020230907
45	Fan mesh	002990160000
46	Black plastic mesh	003991100000
47	Evaporator heating belt	042040080000

HI120T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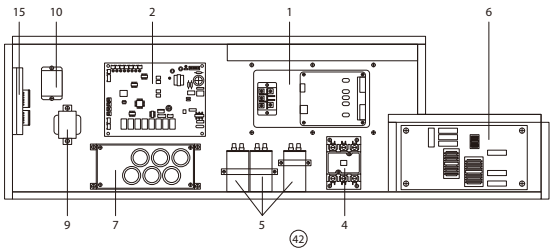
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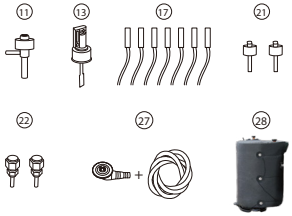
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HI120T

Position	Spare parts	Code
	A、Electrical Spare Parts	
1	Inverter board	033093010000
2	PC board (Heat)	033090060000H78S
3	Oval LED (Heat)	034090200000
3	Squared LCD	/
3	Touch controller	/
4	Contactor	040010030000
5	Capacitor	041020350000
6	Power filter plate	033090630000
7	Capacitor plate	033091500000
8	Reactor(big)	041301060000
9	Reactor(small)	041301070000
10	Water pump contactor	040020020000
11	Electronic expansion valve	006121100000
12	4-way valve	006110160000
13	Water flow switch	040060600000
14	Fan motor	032051000100
15	Fan motor driver module	032051000200
16	Fuse	/
17	Full set of sensors	035043010000-R
	B、Refrigerating Spare Parts	
18	Compressor	031063000000
19	Titanium heat exchanger(Heat)	001030680002
20	Evaporator	001011140000
21	High &low pressure protection switch	040050600000-R
22	High&low Pressure valve	006080500000-R
23	Liquid reservoir	006090040000
	C、Cabinet & Other Spare Parts	
24	Water union	003990020000
25	Water union gasket	004980050000-R
26	Fan	007010120000
27	Drainage kit	003991700000-R
28	Compressor insulation cap	004040220000
29	Top cover	003020240107
30	Front panel	003020710107
31	Right panel	003020240707
32	Back panel	003020240807
33	Bottom board	002020580100
34	Electrical compartment rack	002020580200
35	Front left pole	002020580700
36	Front right pole	002020580800
37	Back left pole	002020580900
38	Back right pole	002020131300
39	Separate board	002020580300
40	Motor bracket	002020582000
41	Electrical compartment 1	002020580500
42	Electrical compartment lid 1	002020580600
43	Reactor box	002020653600
44	Terminal board protection cover	003020230507
45	Fan mesh	002990150000
46	Black plastic mesh	003991100000
47	Evaporator heating belt	042040060000

WARRANTY

Insnrg products are designed and manufactured to the highest possible standards of performance.

Australian Consumer Law
Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Warranty Period and Conditions
Insnrg Techne Pty. Ltd. (hereinafter "the Company") is pleased to warrant to the original retail purchaser that this product shall be free of manufacturing and material defects for a period of five (5) years from the original invoice date subject to the following conditions:

1. The product is purchased new from an authorised Insnrg dealership in Australia, New Zealand or North America.

2. This warranty is not assignable and applies to the original retail purchaser only and the original receipt, invoice or any other proof of purchase must be retained and produced if requested by the Company.

3. Nothing in this warranty shall apply to any defects caused by misuse or abuse, neglect, accident, extremes of climate, dampness, humidity, reasonable fair wear and tear and/or any causes other than detects in manufacturing and materials. Proper care and maintenance information is detailed in the Owner's Manual for this product which you must follow.

4. Where a defect is physically visible or otherwise affects the exterior surfaces of the product, you must notify the Company of such defect within fourteen (14) days from the date of your purchase.

5. If the product is bought as a demonstration, refurbished, ex-rental, discontinued or otherwise previously unboxed unit, the warranty applicable shall be limited to twelve (12) months only.

Warranty Claim Procedure

To exercise your rights under this warranty, you must:

Within fourteen (14) days of you becoming aware of any defect, report the following details to the dealership from which the product was purchased:

- Your name, address and contact information;
- Model, and serial number of the product; and
- A detailed description of the defect.

On receipt of the above information, the Company will allocate to your dealership an Insnrg Authorisation Number (IAN).

Depending on the model type, how it is installed, and the defect reported, your nominated dealership will advise on how the warranty service will be performed. This could include, but not limited to, return of product to the dealership, return of product to the company, or a visit by qualified service technician to your poolside.

If advised to return the product, place the defective product in secure packaging, clearly label it with the IAN number allocated and send it to the address of the authorised service agent which will be advised by your dealership.

The Company will not be liable for any transportation costs, or in the event that a poolside call is arranged with an authorised service technician, costs of technician's travel time if the defect is found not to be covered by the consumer guarantees.

In the case of returned product, the authorised service technician or dealership will contact the purchaser when the product has been repaired and is ready for collection.

The Company will repair or replace at its absolute discretion your product at no cost for parts or labour in accordance with the terms stated in this warranty provided that the reported defect is able to be located by the technical staff assigned to the product. If the technical staff is unable to locate the defect, you may be liable to pay for the cost of the technician's travel time and labour.

insnrg

Thanks for purchasing our high performance Hi Heat Pump.

We know that you will get many years of enjoyment from this product.

Insnrg has been founded by persons with over 120 years experience in the Pool and Spa industry.

We pride ourselves on developing products that are specifically created for your backyard lifestyle. We are continuously developing new products and ideas to make pool ownership easier and fun.

Should you wish to keep updated with our progress and hear first hand our new products and developments, please feel free to stay in touch by using any or all of the below methods:

SNAIL MAIL

64 Duerdin Street,
Clayton, VIC, 3168

LANDLINE

(03) 8578 5633

WEBSITE

www.insnrg.com

PRODUCTS IN PERFECT SYNERGY