

TechBook

in.temp mini

The most affordable heat pump fully integrated with your hot tub system

Not for North American Market



Unleash energy savings with a budget-friendly investment

Seamless integration for effortless control

Whisper-quiet comfort for unforgettable relaxation





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Safety instructions







CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT DISMANTLE THE UNIT THERE ARE NO USER SERVICEABLE PART INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



FLAMMABLE MATERIALS



CAUTION: The refrigerant used in this appliance is flammable. Do not disassemble the unit, there are no user serviceable internal parts. Refer servicing to qualified personnel.



The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the service literature accompanying this appliance



The flame symbol within an equilateral triangle is intended to alert the user to the presence of a flammable product in the appliance. The latter can catch fire in the event of a leak and cause a fire.



IMPORTANT SAFETY INSTRUCTION:

For your own safety please read the following important safety instruction carefully before attempting to connect this unit to the main power supply. This will also allow you to get the best performance and prolong the life of the unit.

- * READ THESE INSTRUCTIONS.
- * KEEP THESE INSTRUCTIONS.
- * HEED ALL WARNINGS.
- * FOLLOW ALL INSTRUCTIONS.
- *WARNING! BEWARE OF THE APPLICATION OF SOME PRODUCTS COMMONLY USED AGAINST CORROSION (SUCH AS THE WD-40 FAMILY OF PRODUCTS) AS THEY COULD DAMAGE THE HEAT PUMP, DUE TO A NEGATIVE CHEMICAL REACTION BETWEEN SOME INDUSTRIAL OILS AND ITS PLASTIC ENCLOSURE. ANY OTHER MATERIALS THAT MAY COME INTO CONTACT WITH THE ENCLOSURE MUST BE CAREFULLY EVALUATED UNDER END-USE CONDITIONS FOR COMPATIBILITY.
- * DO NOT INSTALL NEAR ANY HEAT SOURCES.
- *ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.
- * REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL. SERVICING IS REQUIRED WHEN THE APPARATUS HAS BEEN DAMAGED IN ANY WAY, SUCH AS WHEN THE POWER-SUPPLY CORD OR PLUG IS DAMAGED, LIQUID HAS BEEN SPILLED OR OBJECTS HAVE FALLEN INTO THE APPARATUS, OR IF THE APPARATUS DOES NOT OPERATE NORMALLY OR HAS BEEN DROPPED.

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Warnings





WARNINGS:

Before installing or connecting the unit, please read the following:

- * DO NOT DISASSEMBLE OR ALTER THE APPARATUS.
- * DO NOT USE FOAM TO ISOLATE THE UNIT.
- * TURN POWER OFF BEFORE MODIFYING ANY CABLE CONNECTION IN THIS UNIT.
- * TURN POWER OFF BEFORE CLEANING OR SERVICING THIS UNIT.
- * PRODUCT MUST BE DISPOSED OF SEPARATELY FROM NORMAL HOUSEHOLD WASTE IN ACCORDANCE WITH LOCAL WASTE DISPOSAL LEGISLATION



- * DO NOT SERVICE THIS PRODUCT YOURSELF.
- * DO NOT PIERCE OR BURN.
- * BE AWARE THAT REFRIGERANT MAY NOT CONTAIN AN ODOUR.
- * SPACES WHERE REFRIGERANT IS STORED SHALL BE IN COMPLIANCE WITH LOCAL GAS REGULATIONS.
- * ALL WORKING PROCEDURE THAT AFFECTS SAFETY SHALL ONLY BE CARRIED BY COMPETENT PERSONS.
- * TRANSPORT OF EQUIPMENT CONTAINING FLAMMABLE REFRIGERANTS MUST BE DONE IN COMPLIANCE WITH THE LOCAL TRANSPORT REGULATIONS.
- * THE SIGNS USED FOR MARKING OF EQUIPMENT MUST BE IN COMPLIANCE WITH YOUR LOCAL REGULATIONS.
- * ALL OPERATING PROCEDURES THAT AFFECT SAFETY SHALL BE CARRIED OUT BY COMPETENT PERSONS.
- * STORAGE OF EQUIPMENT/APPLIANCES:
 - THE STORAGE OF EQUIPMENT SHOULD BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - THE APPLIANCE SHALL BE STORED IN A ROOM WITHOUT CONTINUOUSLY OPERATING IGNITION SOURCES; FOR EXAMPLE: OPEN FLAMES, AN OPERATING GAS APPLIANCE OR AN OPERATING ELECTRIC HEATER.
 - THE APPLIANCE SHALL BE STORED IN A ROOM WITH A FLOOR AREA LARGER THAN 30 SQUARE METRES.
- * STORAGE OF PACKED (UNSOLD) EQUIPMENT
 - STORAGE PACKAGE PROTECTION SHOULD BE CONSTRUCTED SUCH THAT MECHANICAL DAMAGE TO THE EQUIPMENT INSIDE THE PACKAGE WILL NOT CAUSE A LEAK OF THE REFRIGERANT CHARGE.
 - THE MAXIMUM NUMBER OF PIECES OF EQUIPMENT PERMITTED TO BE STORED TOGETHER WILL BE DETERMINED BY LOCAL REGULATIONS.
- * AN ALL-POLE DISCONNECT DEVICE HAVING A CLEARANCE OF AT LEAST 3 MM IN ALL POLES AND HAVING A LEAKAGE CURRENT CAPABLE OF EXCEEDING 10 MA; AS WELL AS A RESIDUAL CURRENT DEVICE (RCD) HAVING A RATED RESIDUAL OPERATING CURRENT NOT EXCEEDING 30 MA, MUST BE INCORPORATED INTO THE FIXED WIRING IN ACCORDANCE WITH THE LOCAL ELECTRICAL CODE.
- * PLEASE MAKE SURE THAT THE UNIT AND POWER CONNECTION ARE WELL GROUNDED TO PREVENT ELECTRICAL SHOCK.
- *THIS APPLIANCE IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY.

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Introduction



in.temp mini

The most affordable heat pump fully integrated with your hot tub system

Unleash energy savings with a budget-friendly investment

The Gecko in.temp mini offers an unbeatable price point for a fully integrated heat pump, making energy savings simple and accessible to all hot tub owners.

Seamless integration for effortless control

No confusing setups! Just like our other in.temp heat pumps, our new mini is thoughtfully designed to seamlessly integrate with the Gecko mobile application and compatible keypads. All this with a hassle-free installation that does not require any additional power connection. It's plug-and-play from the Gecko control system!

Whisper-quiet comfort for unforgettable relaxation

So small and quiet, it's been designed to be forgotten! With convenience in mind, the Gecko in.temp mini boasts a sleek, simple and remarkably compact design that fits easily into any decor style. Out of sight, out of mind! With a remarkably low 51dBA in operation mode, you won't even know it's there!



Introduction

This document

This document includes the necessary information to safely install and maintain your in.temp mini. Please read this manual carefully before you operate the unit.

The in.temp mini

The in.temp mini is one of the most economical ways of heating your hot tub efficiently. Using the free renewable energy from the air, it is at least 4 to 5 times more efficient than traditional heating. The in.temp mini gives you high-level comfort so you can enjoy your hot tub not only in summer, but also in spring and fall.

ECO Friendly

The in.temp mini uses an ozone-friendly refrigerant that dramatically reduces carbon emissions.

Titanium heat exchanger

The advanced titanium heat exchanger guarantees a longer life span, free of corrosion. It can be used with all types of water treatment, including chlorine, iodine, bromine and salt water.

Multiple functions

- Heating function available
- Automatic operation, restart and defrost
- No human attendance required
- Wide ambient working range: 0°C to 43°C

Reliable operation

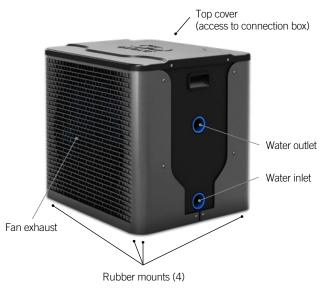
The in.temp mini has several built-in safety features, which include insufficient water flow protection, high/low pressure protection, overload protection, compressor protection and water temperature thermal cut-off.

Self-diagnosis

In the event of a malfunction, the in.temp mini will perform a self-diagnosis and display an error code on the hot tub keypad. To identify the problem, please refer to the ERROR CODES pages in this manual.

Overview

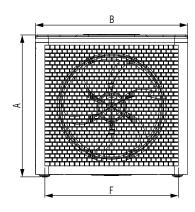
in.temp mini overview



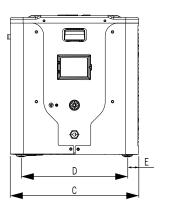


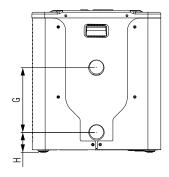
Model	Part #
IN.TEMP-H3.0-CE	0615-807006

in.temp mini dimensions



	Gecko-3.0kW
Α	385 mm (15.16 in)
В	412 mm (16.22 in)
С	350 mm (13.78 in)
D	290 mm (11.42 in)
Е	30 mm (1.18 in)
F	360 mm (14.17 in)
G	176 mm (6.93 in)
Н	55 mm (2.17 in)







Overview

Box content - CE Model

• in.temp mini

• Accessory kit Including rubber feet and fittings for 1.5-in piping

• 600AB0257 Heat pump communication cable 5 metres (16 feet) - pre-installed

• 600DA0305 Heat pump power cord euro 18/3 AWG 5 metres (16 feet) - pre-installed

Optional / sold separately

• 600AB0258 Heat pump communication cable 10 metres (33 feet)

• 600DA0306 Heat pump power cord euro 18/3 AWG 10 metres (33 feet)

• 9920-201308 Daughterboard option for in.ye-V3 control systems / ASSY PCB EXT-COM-RS485

Accessory kit (Included in the box)



Drain hose 9917-106901



Drain hose adaptor 9917-106901



1.5" piping adaptor 9917-106902

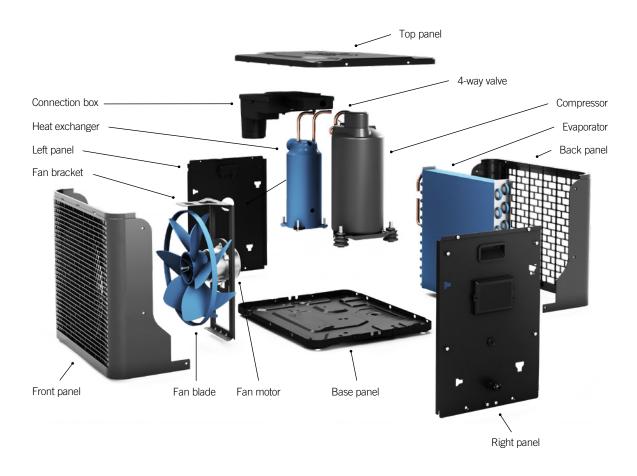


Rubber feet 250AC000



Overview

Exploded view





Connections



Turn off power before connecting the in.temp mini to the hot tub control system.

System connection

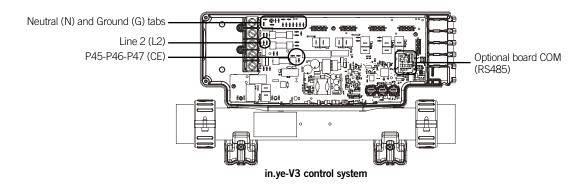
The communication cable provided with the heat pump must be connected to the RS485 communication port of the hot tub control.

The power cable connects to the hot tub control using 6.35mm (0.250") quick-connect female terminals. Ensure that all female terminals are correctly and completely seated on the printed circuit terminals for proper current ratings.

The connection must be done according to the following tables:

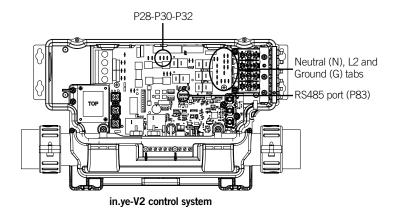
in.ye-V3 control system

CE Model	
Brown	Main line P45, P46, P47 tab (F2)
Blue	Any Neutral (N) tab
Green /Yellow	Any Ground (G) tab



in.ye-V2 control system

CE Model	
Brown	Main line P28, P30 or P32 tab (F2)
Blue	Any Neutral (N) tab
Green /Yellow	Any Ground (G) tab

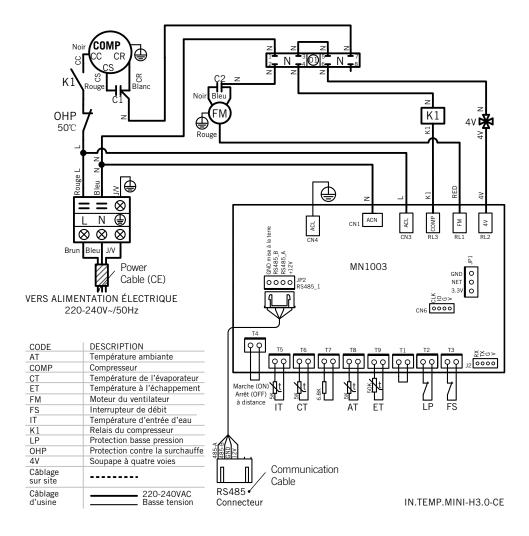




Connections

Terminal box

The terminal box is located underneath the top cover and allows access to the communication and power connections.



External breaker

The in.temp mini is intended to be powered by the hot tub control using the included power cable but it can also be powered by an external circuit breaker.

If an external circuit breaker is used to power the in.temp mini, make sure the cord complies with all local regulations.

To avoid unnecessary shedding of accessories when the in.temp mini or a different heat pump is not powered by the hot tub control, set the heat pump current to zero (0) through your hot tub user interface.



Installation



CAUTION

Do not install the unit in a place where flammable gas leaks can occur.

All plumbing connections should be carried out as per the instructions in this manual. Failure to do so could result in water damage to property.

Avoid contact with the fan when the unit is operating as this will cause serious injury.

Ensure the in.temp mini is correctly grounded with the power cable. The in.temp mini has an equipotential bonding point. It must be connected to the hot tub controller bonding terminal on the water heater.

Locating the in.temp mini



The in.temp mini should NOT be installed in an airtight location or confined space, such as a basement or garage. The in.temp mini requires good air ventilation. It will discharge cold air when it is heating and hot air when it is defrosting, and its efficiency depends on its ability to draw normal ambient temperature air and to discharge the cold or hot air well away from the unit. It is recommended to install the in.temp mini away from any other home appliances, to avoid the risk of electromagnetic interference. Please refer to the "Air space requirements" section of this manual.

The unit should be located on the ground, on a solid flat surface with a slight rearward slope. For optimal performance, ensure 0.7 metres (28") of free airflow to the discharge panel and 0.7 metres (28") to the inlet panel as well as free airflow to all sides of the unit. Ensure adequate access for maintenance purposes.

In cold climates, the in.temp mini should be installed higher than the highest level of snowfall and at least 46 cm (18") above the ground level on an open metal frame in order to prevent the accumulation of ice at the base of the unit caused by condensation. Your in.temp mini specialist may recommend a dedicated rustproof frame. Also see recommendations in the Condensation section.

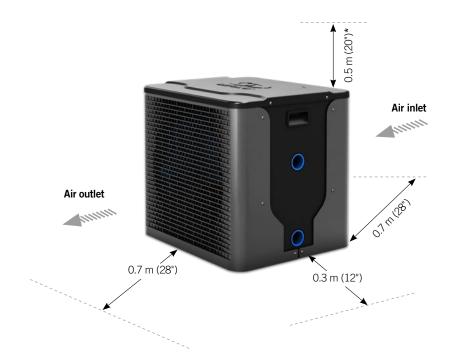
Additional instructions

- Grounded appliances must be permanently connected to fixed wiring.
- Parts incorporating electrical components, except remote control devices, must be located or fixed so that they
 cannot fall into the hot tub.
- The appliances should be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.

Installation

Space requirements

The terminal box is located underneath the top panel and allows access to the communication and power connections.



^{*} Top clearance is only a recommendation to ease service.



Installation

Precautions

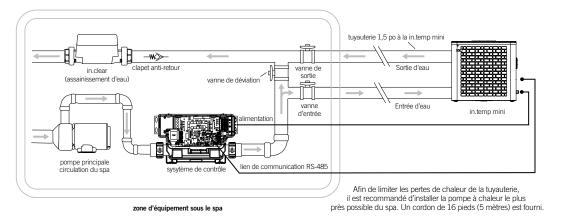
- Avoid locating the unit close to bedrooms or other noise-sensitive areas.
- Avoid a location which could create vibration (e.g. secured to a solid wall).
- The fan should not blow towards windows, walls or spaces likely to be inhabited by people or animals.
- Do not install where the in temp mini is likely to be subjected to polluted air, dust or debris, etc.
- Avoid directing fan output against the dominant wind directions.
- Protect the heat pump from possible snowfall.
- Minimize exposure to environmental conditions as much as possible and never block the airflow.
- Insulate the external water pipe between the hot tub and the in.temp mini with insulation foam.
- Install the valves inside the hot tub skirt to enable winterization.

Securing the in.temp mini

The in.temp mini should be securely fixed. The four included rubber mounts should be installed to absorb high-frequency vibrations.

Piping

A bypass, consisting of three valves, must be installed to adjust water flow to the in.temp mini and to isolate the apparatus for maintenance purposes. For a more stable flow in the heat exchanger, it is recommended to install the in.temp mini on the pressure side of the main pump.



If your installation is equipped with a water treatment system (chlorine, bromine, salt, etc.) the bypass must be installed before the water treatment, with a check valve between the bypass and water treatment system, in order to protect the heat exchanger.

Valve location

If you are in a cold climate and plan to shut down the in.temp mini, alone on the winter season, keeping your hot tub working, you should install all of the valves inside the hot tub skirt. If the valves are outside and no circulation of water occurs, the water in the pipes may freeze and break them.

Condensation

The air drawn into the in.temp mini is strongly cooled by the operation of the in.temp mini to heat the hot tub water, which may cause condensation on the fins of the evaporator. The amount of water may be as much as several litres per hour at high relative humidity. This is sometimes mistakenly regarded as a water leak. Since water generated by condensation will be evacuated at the bottom of the in.temp mini, it is better to provide a slight rearward slope when installing the in.temp mini to allow this water to flow freely on the ground. It also must be ensured that this evacuation of water will not affect any components around the in.temp mini, such as the electrical circuit and material such as wood or metal that can be weakened by water. That said, be aware that water will flow under the in.temp mini in normal operation.



Operating modes

The operating mode can be changed through the hot tub user interface.

Three different operating modes are available:

- 1) Eco Heat (EcoH)
- 2) Smart Heat (HEAT)
- 3) Electric (ELEC)

Eco Heat (EcoH)

In this mode, the in.temp mini is used as the unique source of heating. The heating element is kept off and the in.temp mini is not used to cool the water should its temperature rise above the current set point.

Smart Heat (HEAT)

This mode uses the in.temp mini as the main heating source. The heating element is turned on only if there is a large temperature difference between the water and the set point. The in.temp mini is not used to cool the water in this mode.

Electric (ELEC)

This mode keeps the heat pump off and uses only the heating element to regulate water temperature.

in.temp mini efficiency

The system is constantly monitoring outside temperature and as soon as this temperature impacts the efficiency of the in.temp mini, the system will bypass the selected mode and use the electric heater to get better energy efficiency.

Freeze protection

In cold weather, if it becomes impossible for the in.temp mini to keep the water temperature above the freezing point, the help of the heating element will be required even if its use should be prohibited by the operating mode or conditions. At any time, if the water temperature drops too close to the freezing point, the operating mode will be switched temporarily to "Smart Heat" and the system will heat until the minimum allowed set point has been reached before reverting to its previous operating mode and resume normal operation.

Restart delay

At all times, when the in.temp mini is shut down, be aware that there is forced a waiting time of three minutes before the in.temp mini can operate again. This is to prevent damage to the equipment. For example, if the operating mode has been changed from Cold to Hot after an increase of the setpoint, the in.temp mini will be allowed to start only after a delay of three minutes.



Maintenance

To protect the paintwork, avoid leaning or putting objects on the shell. The cover and the panels can be wiped with a damp cloth and domestic cleaner. (Warning: Never use cleaning agents containing sand, soda, acid or chloride as these can damage the surfaces.)

To prevent clogging in the titanium heat exchanger, ensure that the system incorporates water filtration treatment equipment. In the event of a problem occurring due to contamination, the system should be cleaned as described below. (Warning: the fins on the finned tube heat exchanger are sharp!).

Cleaning the heat exchanger and pipework

Contamination in the pipes and heat exchanger can reduce the performance of the in.temp mini. If this is the case, the pipe system and heat exchanger must be cleaned by a technician. Use only pressurized drinking water for cleaning.

Ventilation system cleaning

The finned heat exchanger, fan and condenser outflow should be clear of all obstructions (leaves, twigs, etc.) before each new heating season. These can be manually removed using compressed air or by flushing with clean water. It may be necessary to remove the unit cover and air inlet grid first.

Warning: Before opening the unit, ensure that all electrical supplies are protected from human access.

To prevent the evaporator and the condenser tray from being damaged, do not use hard or sharp objects for cleaning. Under extreme weather conditions (e.g. snow drifts), ice may form on the air intake and exhaust air outlet grids. If this happens, the ice must be removed in the vicinity of the air intake and exhaust air outlet grids to ensure that the minimum airflow rate is maintained.

Winter shutdown

To prevent frost damage to the unit when not in use the in.temp mini should be drained of all water. If the in.temp mini cannot be winterized, another form of frost protection should be considered.

Warning: The warranty does not cover damage caused by inadequate frost protection measures during the winter.



Steps to winterize your in.temp mini

in.temp mini and freezing weather

The in.temp mini is equipped with a security algorithm to prevent freezing in the pipes and in the worst case, this could make the pump run more often. The in.temp mini should be energy efficient even when it comes to the first freezing weather but you should decide in advance when to winterize for the winter season.

Be aware that if there is an outage during cold weather, the pump will no longer be able to run to prevent freezing in the pipes. Outside pipes are directly exposed to very cold temperature.



IMPORTANT SAFETY INSTRUCTION:

WINTERIZATION MAY REQUIRE THE DISCONNECTION OF CABLES TO THE HOT TUB CONTROL. THESE OPERATIONS MUST BE ACOMPLISHED BY QUALIFIED SERVICE PERSONNEL.

- Turn off the main power breaker of the hot tub.
- Open the hot tub control door and disconnect the main power cable coming from the in.temp mini (see page 10).
 You can leave the communication cable connected to connector P83.
- Locate the input and output valves, according to the figure on page 14, and mark the position of the valves to make sure they will be set back in the same position when restarting the in.temp mini.
- Now, completely close the input and output valves.
- Disconnect the water piping inlet and outlet from the in.temp mini.
- Remove the drain plug and make sure the heat exchanger drains out.
- The in.temp mini should be blown out with air to ensure no water is left inside. A compressed airline should be placed into the water outlet line to blow air through the unit.
- Loosely reconnect the plumbing connection and drain plug to allow any remaining water to drain. Take care to block any insects or debris.
- · Cover the in.temp mini with a protective tarp to prevent snow and other debris from infiltrating in the fan grill.
- Ensure that all plumbing going from the in.temp mini to the hot tub has been emptied of all water.
- Finally, turn on the main power breaker of the hot tub. The in.temp mini should no longer be detected by the hot tub control.

Opening



IMPORTANT SAFETY INSTRUCTIONS:

RESTARTING THE UNIT AFTER WINTERIZATION MAY REQUIRE THE CONNECTIONS OF CABLES TO THE HOT TUB CONTROL. THESE OPERATIONS MUST BE ACOMPLISHED BY QUALIFIED SERVICE PERSONNEL.

- Turn off the main power breaker of the hot tub.
- Inspect every pipe connected between the in.temp mini and the hot tub for any damage. If everything is fine, proceed to the next step.
- Tighten every plumbing connection that was previously loosened for the winterization and be sure that the drain plug is correctly installed.
- Locate the input and output valves and bring them back to the opening mark already set from the winterization
 procedure.
- Open the hot tub control door and connect the main power cable, coming from the in.temp mini, to the right tabs (see page 10).
- The communication cable RS485 should already be connected to the hot tub control. If not, please refer to page 10.
- Finally, turn on the main power breaker of the hot tub. The in.temp mini should be found by the hot tub control instantly.



Compatible keypads

List of compatible keypads with in.temp mini

For more information on the compatible keypads for your in.temp mini, refer to the corresponding Techbook.



in.k330 main keypad Color LCD display, 5 keys



in.k500 main keypad Color LCD display, 7 keys



in.k800 main keypad Color LCD display, 10 keys



in.k1001+ main keypad Color LCD capacitive touchscreen display



in.k1000+ main keypad Color LCD capacitive touchscreen display



integration kit Unlock seamless compatibility with legacy Gecko hot tub systems



The in.temp mini is also supported by the in.touch 2 mobile app. So even if your hot tub is not equipped with any of the keypads above, you can still control your in.temp mini via the in.touch 2 device.



Troubleshooting

This heat pump is equipped with a thermal cutoff to prevent abnormal failures. The thermal cutoff will deactivate the power to the heat pump compressor. In the event of such a failure, the heat pump fan will continue to operate, but the compressor will remain off. No error message will be displayed.

The most common reasons for this failure are insufficient water flow or a defective water flow switch.

To reset the system, allow the heat pump to cool down and then reset the hot tub main breaker.

If the condition persists, discontinue use of the unit and contact a certified technician.

Errors codes

If a protection kicks in or if an error is detected in the heat pump, an error code will be reported on the hot tub keypad. If more than one error is detected, only the error with the highest priority will be displayed.

All error codes are listed below in priority order.

Error code	Error description
HP99	Communication error
HP05	Coil temperature sensor failure
HP46	Compressor low-pressure protection
HP41	Water flow protection
HP01	Compressor exhaust temperature sensor failure
HP22	Ambient temperature sensor failure
HP65	Ambient temperature too low protection
HP63	Water outlet temperature too low protection when defrosting



Troubleshooting

Stand-alone mode with in.grid

Troubleshooting guide

00			
Malfunction	Error code	Cause	Solution
Water inlet temp. sensor failure	P01	The water inlet temp. sensor is open or short circuit	Check or change the water inlet temp. sensor
Ambient temp. sensor	P04	The ambient temp.	Check or change the ambient temp.
failure	failure F04		sensor
Exhaust temp. sensor	P81	The exhaust pipe temp.	Check or change the exhaust temp.
failure	101	sensor is open or short circuit	sensor
		High compressor exhaust	Check high-pressure switch and
High-pressure protection	E01	pressure. Pressure switch	cooling return circuit
		activated	cooming return eneant
Low-pressure protection	E02	The suction pressure is low. Low	Check low-pressure switch and
Low-pressure protection		pressure switch activated	cooling return circuit
	E02	The suction pressure is low.	Check low-pressure switch and
Low-pressure protection for 3 times		Low-pressure switch activated	cooling return circuit
		3 times	cooming return circuit
Flow switch failure	E03	No water or little water in water	Check the flow volume. Circulation
1 IOW SWILCIT Idliule	L03	system	pump is at fault
		Communication failure between	Check the wire connection between
Communication failure	E08	remote controller and main	remote controller and main board
		board	Terriote controller and main board
Low ambient-temperature	TP	Ambient temperature is too low	Check the ambient temperature
protection	11	Ambient temperature is too low	value
Defrost	DF	Time to defrost	Wait until the end of defrost cycle
	Di	Time to delitost	Trait and the end of demost cycle



Specifications

Environmental ratings CE models 3.0kW

Operating temperature: 0°C (23°F) to 43°C (109°F)

Water resistance: IPX4

Mechanical CE models 3.0kW

Compressor: Rotary (GREE)

Pressure: Min: 2.1 MPa (304.58 psi)

Max: 4.4 MPa (638.17 psi)

Refrigerant: R32/180g (6.35oz)

Weight:

Net: 21.5 kg (47.4 lbs) Gross: 23 kg (50.71 lbs)

Carton box size: 458 x 450 x 410 mm

18.3 x 17.72 x 16.14 in

Rated flow: 1.2 M³/h (5.28 GPM) **Best efficiency flow rate:** 2.27 M³/h (10 GPM)

Flow detector: Flow switch Noise at 1 m: 51.2 dB(A)

Electrical CE models 3.0kW

Input Supply Voltage: $220 \text{ V} \sim 240 \text{ V}, 50 \text{ Hz}$ Power input (max): 0.93 kW

Power input (max): 0.93kW Rated Current¹: 4,21 A

Communication Supply: 10-12 Vdc, 80mA

Performance CE models 3.0kW

Heating capacity²:3.032kWPower input:0.687kWCOP:4.41Heating capacity³:1.945kWPower input:0.628kWCOP:3.10

Compatibility

Compatible with the in.k1000 keypad with software revision 36

¹ Wire gauge and breaker size should be dimensioned according to the maximum current rating.

² Based on the following operating conditions: 24°C (75°F) Ambient air, 26°C (79°F) Water inlet.

³ Based on the following operating conditions: 15°C (59°F) Ambient air, 26°C (79°F) Water inlet.



Compatibility

- in.temp mini is compatible with all in.ye and in.yt versions equipped with a RS-485 interface. If your hot tub is equipped with an in.ye-V3, there is a daughterboard that can be installed to add support to the in.temp mini. Refer to the in.ye-V3 techbook.
- To obtain information about compatibility with your hot tub system, please refer to the QR code provided here.

Features	YEv3.flx YTv2.flx	YEv3 ¹ YTv2 ¹	YEv3 ² YTv2 ² YTv2 ²	in.grid	classic connection*
Heating	X	X	X	x	Х
Heating only with heat pump	X	x	X	X	
Smart management of electrical heater	х	х	x	Х	
Cooling ³					
Regulation mode selection through the keypad ³	х	х	x		
Regulation mode selection through the mobile app	х	х	x	Х	
Heat pump status and errors displayed on keypad	Х	х	X		
Heat pump errors displayed on mobile app	х	x	X		
Energy savings graph	X	х			
Intelligent power management (load shedding when powered through the pack)	х	х	x		
Auto-detection of the heat pump	X	X	x		

¹ See Serial Number Compatibility List.

² See Serial Number Compatibility List. Pack older than identified in the list will support the in.temp mini. Cooling option will still appear on main keypad but will not be functional. Energy saving graph menu will also be deactivated. To avoid unnecessary shedding of accessories when the in.temp mini is opperating, heat pump current must be manually adjusted to to Five (5) through your hot tub user interface.

³ Regulation mode may be displaying cooling option with older pack/keypad combination. This feature is not supported by the in.temp mini.

^{*} Classic connection refers to a connection to the heat pump in parallel with the heater.



Replacement parts

Product	Part number
Main board	9920-201372
Relay	450AA0483
Rs 485 cable 5M	600AB0257
Rs 485 cable 10M	600AB0258
Rubber leg	250AC0001
Drain tube	9917-106901
Water fitting	9917-106902
Fan motor	35000001
Fan	260AA0001
Compressor capacitance	150AA0600
Fan capacitance	150AA0601
Flow switch	510AD0252
External temperature probe	550AA0043
Alim. Cable 5M	600DA0305
Alim. Cable 10 M	600DA0306
Bundle for in.temp mini + in.grid	0699-500024
in.temp mini Keypad	9920-100182
in.temp mini Keypad + T4 cable for in.grid kit	9920-102303



