

# **SWIMMING POOL HEAT PUMP UNIT**

# **Installation & Instruction Manual**



OASIS C38, C47, C58 HEAT PUMP Semi Commercial Heat Pump Range





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### 1. PREFACE

In order to provide our customers with quality, reliability and versatility, this product has been made to strict production standards. This manual includes all the necessary information about installation, debugging, discharging and maintenance. Please read this manual carefully before you open or maintain the unit. The manufacture of this product will not be held responsible if someone is injured or the unit is damaged, as a result of improper installation, debugging, or unnecessary maintenance. It is vital that the instructions within this manual are adhered to at all times. The unit must be installed by qualified personnel.

The unit can only be repaired by qualified installer centre, personnel or an authorised dealer.

Maintenance and operation must be carried out according to the recommended time and frequency, as stated in this manual.

The appliance shall be installed in accordance with national wiring regulations.

Use genuine standard spare parts only.

Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer

#### FAILURE TO COMPLY WITH THESE RECOMMENDATIONS WILL INVALIDATE THE WARRANTY.

Swimming Pool Heat Pump Unit heats the swimming pool water and keeps the temperature constant. For split type unit, the indoor unit can be Discretely hidden or semi-hidden to suit a luxury house.

Our heat pump has following characteristics:

#### 1 Durable

The heat exchanger is made of PVC & Copper Nickle tube which can withstand prolonged exposure to swimming pool water.

#### 2 Installation flexibility

The unit can be installed outdoors or indoors.

#### 3 Quiet operation

The unit comprises an efficient rotary/ scroll compressor and a low-noise fan motor, which guarantees its quiet operation.

#### 4 Advanced controlling

The unit includes micro-computer controlling, allowing all operation parameters to be set. Operation status can be displayed on the LCD wire controller. Remote controller can be chosen as future option.



# 2. SPECIFICATION

### 2.1 Performance data of Swimming Pool Heat Pump Unit

### \*\*\* REFRIGERANT: R410A

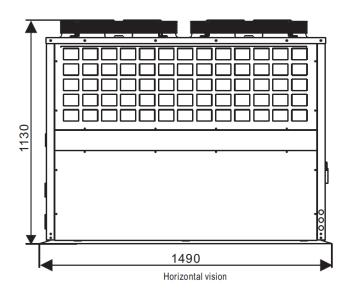
		Oasis C38	Oasis C47	Oasis C58
	Performance C	ondition: Air 27°C / W	ater 26°C	
Heating Capacity	kW	49	60	76
Running Current	A	11.5	16.6	23
	Performance C	ondition: Air 19°C / W	ater 26°C	
Heating Capacity	kW	38	47.0	58
Running Current	Α	11.5	16.6	23
Heating Power Input	kW	7	8.7	12.8
Cooling Capacity	kW	24	33.5	45
Cooling Power Input	kW	7.8	10.5	12.7
Running Current	Α	11.5	16.6	23
Power Supply	V/Ph/Hz	400V/3/50	400V/3/50	400V/3/50
Compressor Quantity	1	2	2	2
Compressor		Scroll	Scroll	Scroll
Fan Quantity		2	2	2
Fan Power Input	W	120x2	120x2	120x2
Fan Rotate Speed	RPM	830	830	830
Fan Direction		Horizontal	Horizontal	Horizontal
Noise	dB(A)	61	61	61
Water Connection	Mm	50	50	50
Water Flow Volume	I/m	200	250	333
Water Pressure Drop (max)	kPa	25	25	25
Unit Shipping Dimensions	Mm (L/W/H)	1520 x 790 x 1340	1520 x 790 x 1340	1520 x 790 x 1340
Net Weight / Shipping Weight	kg	252 / 286	254 / 295	257 / 297

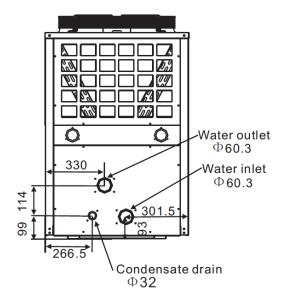
Cooling capacity is based on 19 °C ambient air temperature and 26°C water temperature

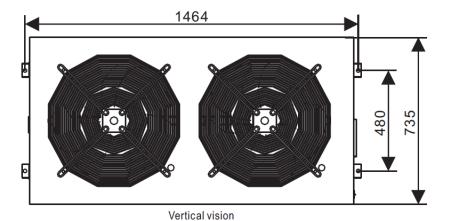


# 2. SPECIFICATION

### 2.2 The dimensions for Swimming Pool Heat Pump Unit



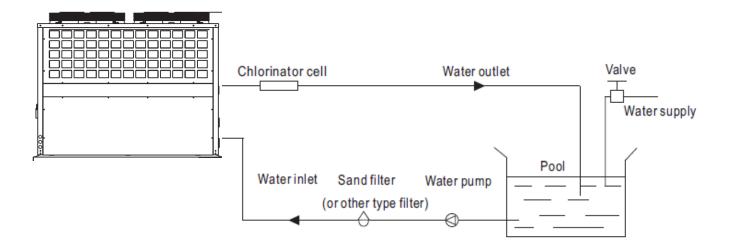




sales@sunloverheating.com.au sunloverheating.com.au



### 3.1 Installation illustration



#### Installation items:

The factory only provides the main unit and the water unit; the other items in the illustration are necessary spare parts for the water system, that provided by users or the installer.

#### Attention:

Please follow these steps when using for the first time

- 1. Open valve and charge water.
- 2. Make sure that the pump and the water-in pipe have been filled with water.
- 3. Close the valve and start the unit.

ATTN: It is necessary that the water-in pipe is higher than the pool surface.



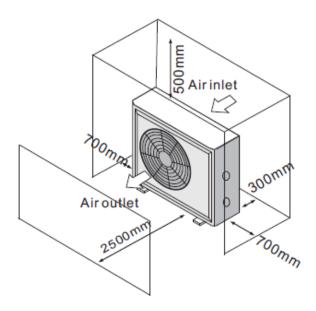
### 3.2 Swimming Pool Heat Pumps Location

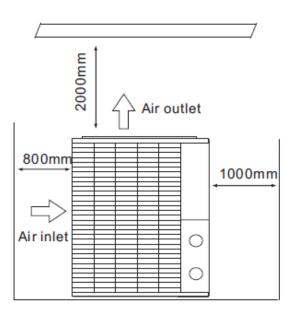
The unit will perform well in any outdoor location provided that the following three factors are presented:

#### 1. Fresh Air - 2. Electricity - 3. Pool filter piping

The unit may be installed virtually anywhere outdoors. For indoor pools please consult the supplier. Unlike a gas heater, it has no draft or pilot light problem in a windy area. DO NOT place the unit in an enclosed area with a limited air volume, where the units discharge air will be re-circulated.

DO NOT place the unit to shrubs which can block air inlet. These locations deny the unit of a continuous source of fresh air which reduces it efficiency and may prevent adequate heat delivery.





### 3.3 How Close to Your Pool?

Normally, the pool heat pump is installed within 7.5 metres of the pool. The longer the distance from the pool, the greater the heat loss from the piping. For the most part, the piping is buried. Therefore, the heat loss is minimal for runs of up to 15 meters (15 meters to and from the pump = 30 meters total), unless the ground is wet, or the water table is high. A very rough estimate of heat loss per 30 meters is 0.6 kW-hour, (2000BTU) for every 5  $^{\circ}$ C difference in temperature between the pool water and the ground surrounding the pipe, which translates to about 3% to 5% increase in run time.



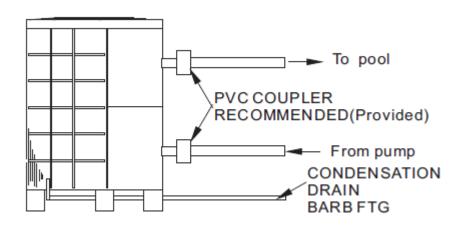
### 3.4 Swimming Pool Heat Pumps Plumbing

The Swimming Pool Heat Pumps exclusive rated flow titanium heat exchanger requires no special plumbing arrangements except bypass (please set the flow rate according to the nameplate). The water pressure drop is less than 10kPa at max. Flow rate. Since there is no residual heat or flame Temperatures, the unit does not need copper heat sink piping. PVC pipe can be run straight into the unit.

Location: Connect the unit in the pool pump discharge (return) line downstream of all filter and pool pumps, and upstream of any chlorinators, ozonators or chemical pumps.

Standard model have slip glue fittings which accept 32mm or 50 mm PVC pipe for connection to the pool or spa filtration piping. By using a 50 NB to 40NB you can plumb 40NB.

Give serious consideration to adding a quick coupler fitting at the unit inlet and outlet to allow easy draining of unit for winterizing and to provide easier access should servicing be required.



Condensation: Since the Heat pump cools down the air about 4 -5°C, water may condense on the fins of the horseshoe shaped evaporator. If the relative humidity is very high, this could be as much as several litres an hour. The water will run down the fins into the basepan and drain out through the barbed plastic condensation drain fitting on the side of the basepan.

This fitting is designed to accept 20mm clear vinyl tubing which can be pushed on by hand and run to a suitable drain. It is easy to mistake the condensation for a water leak inside the unit.

NB: A quick way to verify that the water is condensation is to shut off the unit and keep the pool pump running. If the water stops running out of the basepan, it is condensation. AN EVEN QUICKER WAY IS to TEST THE DRAIN WATER FOR CHLORINE - if the is no chlorine present, then it's condensation



### 3.5 Swimming Pool Heat Pumps Electrical Wiring

NOTE: Although the unit heat exchanger is electrically isolated from the rest of the unit, it simply prevents the flow of electricity to or from the pool water. Grounding the unit is still required to protect you against short circuits inside the unit. Bonding is also required.

The unit has a separate moulded-in junction box with a standard electrical conduit nipple already in place. Just remove the screws and the front panel, feed your supply lines in through the conduit nipple and wire-nut the electric supply wires to the three connections already in the junction box (four connections if three phase). To complete electrical hook up, connect Heat Pump by electrical conduit, UF cable or other suitable means as specified (as permitted by local electrical authorities) to a dedicated AC power supply branch circuit equipped with the proper circuit breaker, disconnect or time delay fuse protection.

Disconnect - A disconnect means (circuit breaker, fused or un-fused switch) should be located within sight of and readily accessible from the unit, this is common practice on commercial and residential air conditioners and heat pumps. It prevents remotely-energizing unattended equipment and permits turning off power at the unit while the unit is being serviced.

### 3.6 Initial startup of the Unit

NOTE- In order for the unit to heat the pool or spa, the filter pump must be running to circulate water through the heat exchanger.

Start-up Procedure - After installation is completed, you should follow these steps:

- 1. Turn on your filter pump. Check for water leaks and verify flow to and from the pool.
- 2. Turn on the electrical power supply to the unit, then press the key ON/OFF of wire controller, it should start in several seconds.
- 3. After running a few minutes make sure the air leaving the top(side) of the unit is cooler (Between 5-10 °C)
- 4. With the unit operating turn the filter pump off. The unit should also turn off automatically,
- 5. Allow the unit and pool pump to run 24 hours per day until desired pool water temperature is reached. When the water-in temperature reach setting, the unit just shuts off. The unit will now automatically restart (as long as your pool pump is running) when the pool temperature drops more than 2°Cbelow set temperature.

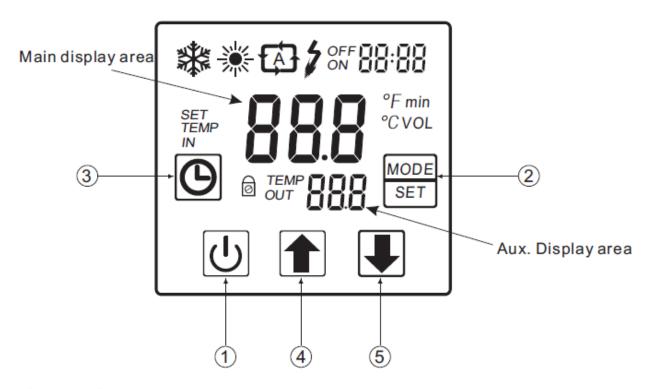
Time Delay- The unit is equipped with a 3-minute built-in solid state restart delay included to protect control circuit components and to eliminate restart cycling and contactor chatter.

This time delay will automatically restart the unit approximately 3 minutes after each control circuit interruption. Even a brief power interruption will activate the solid state 3-minute restart delay and prevent the unit from starting until the 5-minute countdown is completed.

Power interruptions during the delay period will have no effect on the 3-minute countdown.



### 4.1 Function of controller



### 1) Button function

NO	Symbol	Name	Function
1	ம	On/off	Press this button can start up or shut down the unit, cancel the current operation or back to the upper interface
2	MODE SET	Mode	Press this button can switch modes or save parameter setting.
3	<b>©</b>	Clock	Press this button can set the clock and timer
4		Up	Press this button can move up or increase parameter value.
(5)	1	Down	Press this button can move down or decrease the parameter value.



Symbol	Meaning	Function
**	Cooling	It is showed when the unit in cooling mode.
*	Heating	It is showed when the unit in heating mode and flashed in defrosting.
<b>(</b>	Automatic	It is showed when the unit in automatic mode.
4	Electric- heating	It is showed when the unit in electric-heating mode. (Swimming pool unit without this display)
ON	Timeron	It is showed when the unit sets the timer on
OFF	Timeroff	It is showed when the unit sets the timer off
IN	Inlet water	It is showed when the main display area gives the inlet water temperature.(measured value)
ОИТ	Outlet water	It is showed when the AUX display area gives the outlet water temperature.(measured value)
TEMP	Temperature	It is showed when the main/ AUX display area gives temperature
VOL	Flow	It is showed when the main display area gives the water flow value
min	Minute	It is showed when the main display area gives minute value
°F	Fahrenheit	It is showed when the main/AUX display area gives Fahrenheit value
°C	Centigrade	It is showed when the main/AUX display area gives centigrade value
SET	Parameter setting	It is showed when the parameter can be setted.
Ø	Lock	It is showed when the keyboard is locked.



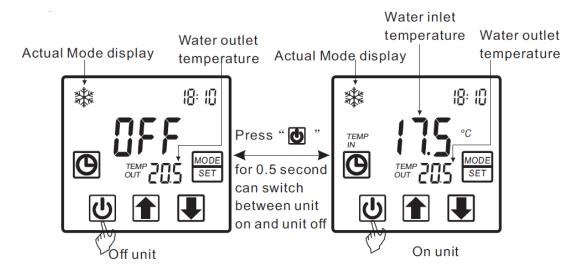
### 4.2 The controller usage

#### 4.2.A - Starting up and shutting down

In the off interface, press" for 0.5s can start up the unit, and aux. display-area shows water outlet temperature; In the running interface, press" for 0.5s can shut down the unit

water outlet temperature; In the running interface, press" " for 0.5s can shut down the unit and aux. display-area shows "OFF".

Attention: the operation of Starting up and shutting down can only be done in the main interface. For example:

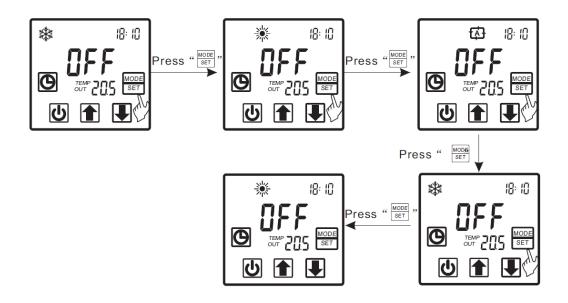


#### 4.2.B - Modes switching

If it is cold/ heat unit, in the main interface, you can switch different modes of cooling,

heating, auto mode by pressing " MODE SET "

Attention: The modes switching is useless if the unit you buy is single-cold/ single-heat unit. For example:

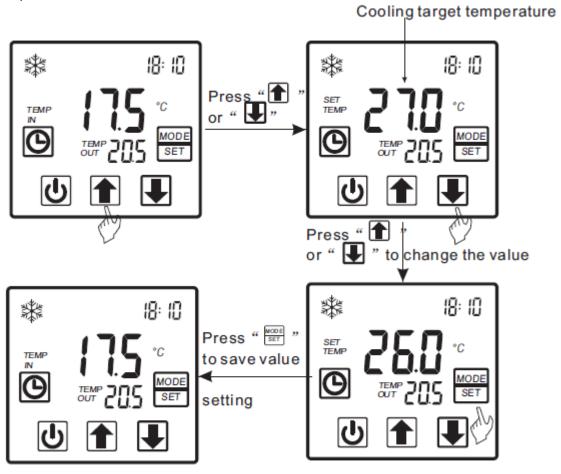




### 4.2.C - Temperature setting

In the main interface, press " or "

### For example:





### 4.2.D - Clock setting

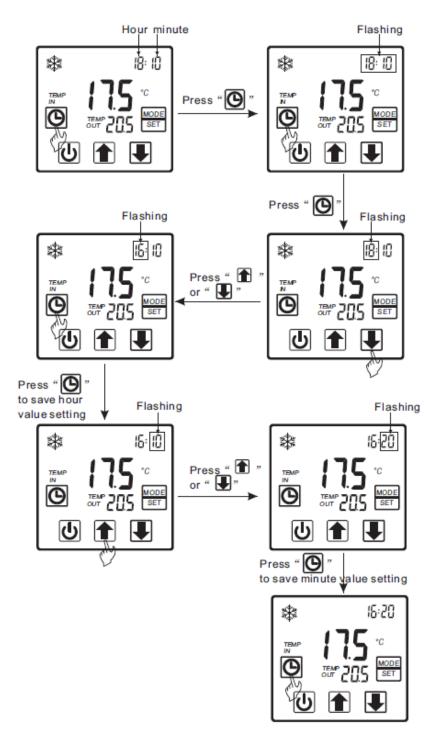
In the main interface, press " twice, Hours start to flashing, and press " to increase value or press " to decrease value, and press "" to save setting;

At the same time, minute start to flashing, press " to increase value or press " to decrease value, and press " to save setting.

Press " cannot save setting parameter and back to main interface.

Attention: If there is no operation for 5s system will remember parameter setting and back to the main interface.

For example:



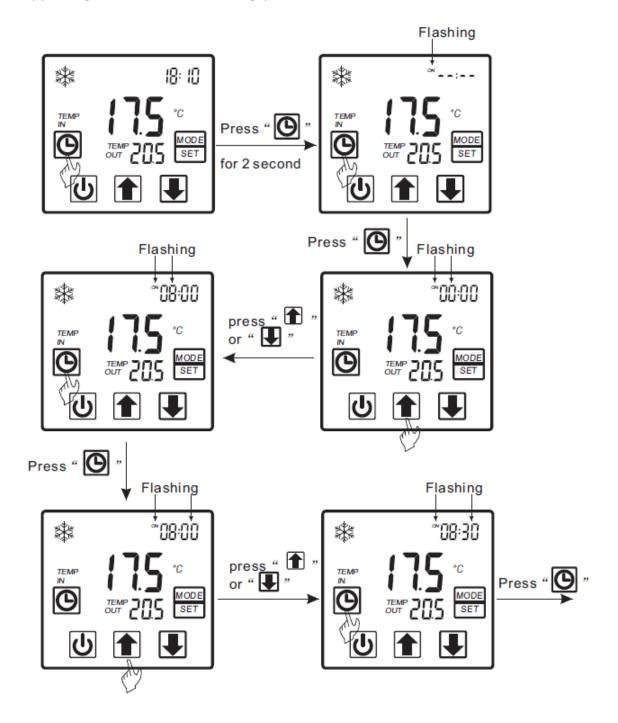


### 4.2.E - Timer setting

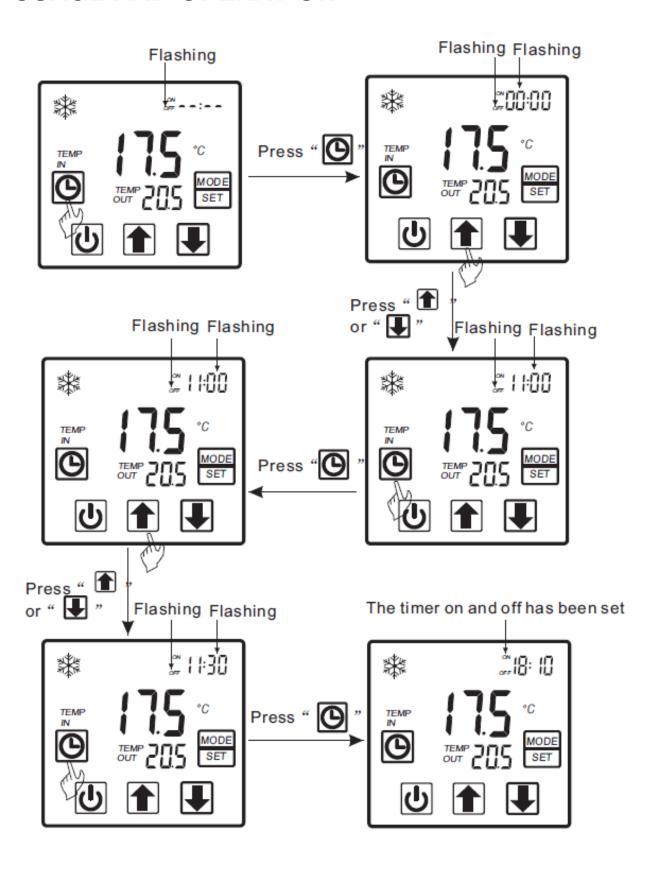
In the main interface, press " hold on 2 seconds and "on" is flashing, at this time, you can set the timer on (means the unit timer is on), then press " again and hold on 2 seconds and "off" is flashes you can set the timer off (means the unit timer is off).

If you want to cancel the timer off, In the "off" flashing interface, press " to cancel Attention: 1) If there is no operation for 5s, system will remember clock setting and back to the main interface.

2) By pressing " Util the "off" flashing, you can set the timer off without timer on.





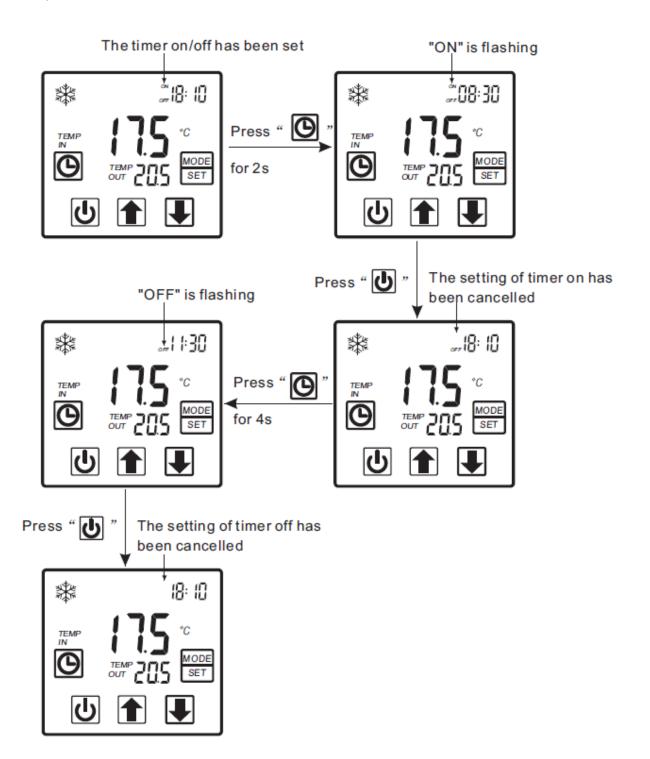




### 4.2.F - Cancel the timer setting

Press " for 2s and "ON" is flashing, at this time, press " to cancel the setting of timer on; It is the same way to cancel the setting of timer off.

For example:





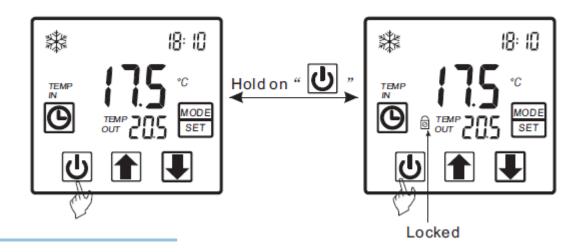
### 4.2.G - Keyboard lock

To avoid mis-operation, please lock the controller after parameter setting.

At the main interface, press " for 5 seconds, the keyboard will be locked.

When the keyboard is locked, press " **b**" for 5 seconds, the keyboard will be unlocked.

NOTES: When the unit is in alarming state, the key lock can be removed automatically.

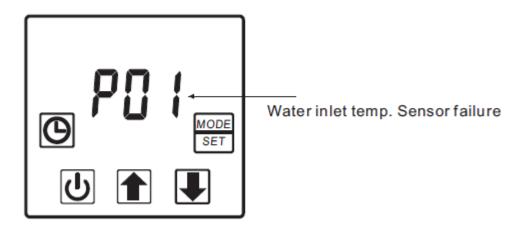


### 4.2.H - Malfunction display

There will be malfunction code showing on the controller screen when relative malfunction occurs.

You can refer to the malfunction table to find out the failure cause and solution.

For example:





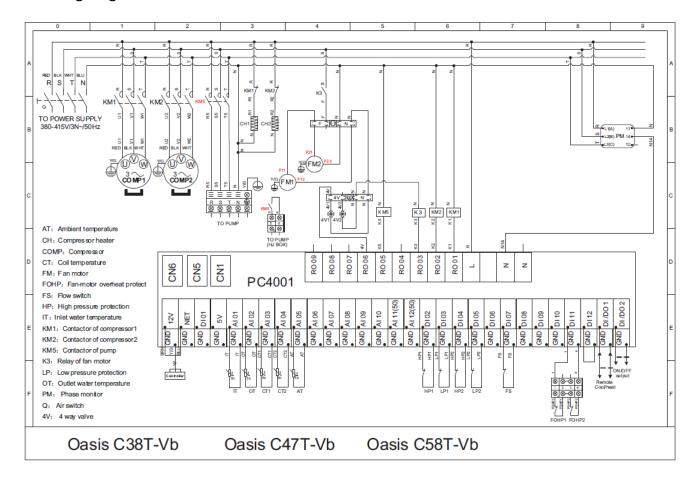
### 4.3 Parameter table

Meaning	Default	Remark
Heating inlet target temp.	28℃	Adjustable
Cooling inlet target temp.	28℃	Adjustable
Auto inlet target temp.	<b>27</b> ℃	Adjustable

#### Remark:

The wire controller can display the temperature unit as "oF" or "oC" according to the unit Model you bought.

### 4.4 Wiring diagram





### 5. MAINTENANCE AND INSPECTION

#### 5.1 Maintenance

Check the water supply device and the release often. You should avoid the condition of no water or air entering into system, as this will influence unit's performance and reliability.

You should clear the pool/spa filter regularly to avoid damage to the unit as a result of the dirty of clogged filter.

The area around the unit should be dry, clean and well ventilated. Clean the side heating exchanger regularly to maintain good heat exchange as conserve energy.

The operation pressure of the refrigerant system should only be serviced by a certified Technician

Check the power supply and cable connection often. Should the unit begin to operate abnormally, switch it off and contact the qualified technician.

Discharge all water in the water pump and water system, so that freezing of the water in the pump or water system does not occur. You should discharge the water at the bottom of water pump if the unit will not be used for an extended period. You should check the unit thoroughly and fill the system with water fully before using it for the first time.



# 5. MAINTENANCE AND INSPECTION

### 5.2 Trouble Shooting Guide

Malfunction	Display	Cause	Solution
Water inlet temp. Sensor failure	P01	The water inlet temp. Sensor	Check or change the
		is open or short circuit	water inlet temp. Sensor
Water outlet temp. Sensor failure	P02	The water outlet temp.	Check or change the
		sensor is open or short circuit	water outlet temp.
			Sensor
Ambient temp. Sensor failure	P04	The ambient temp. sensor is	Check or change the
		open or short circuit	ambient temp. Sensor
Pipe temp. Sensor failure	P05	The pipe temp. sensor is	Check or change the
		open or short circuit	pipe temp. Sensor
Evaporator temp. Sensor failure	P07	The evaporator temp. Sensor	Check or change the
		is open or short circuit	evaporator temp. Sensor
High pressure protect	E01	The exhaust pressure is high,	Check high pressure
		high pressure switch action	switch and cooling
			return circuit
Low pressure protect	E02	The suction pressure is low,	Check low pressure
		Low pressure switch action	switch and cooling
			return circuit
Flow switch failure	E03	No water or litter water	Check the flow volume,
		in water system	water pump is failure or
			not
Temp. is too much different	E06	Water flow volume not	Check the flow volume,
between water-inlet and outlet		enough, Water	water
		system pressure difference is	system is jammed or not
		small	
Ant freezing under cooling mode	E07	Water flow volume not	Check the flow volume,
		enough	water system is jammed
			or not
The primary anti-freezing protection	E19	Ambient temperature is too	
start.		low	
The second anti-freezing	E29	Ambient temperature is too	
protection start		low	
Communication failure	E08	Communication failure	Check the wire
		between	connection between
		remote wire controller and	remote wire controller
		main board	and main board



### 6.1 Connection of PCB illustration

										RO 09	RO 08	700		RO 06	RO 05	RO 04	RO 03		- 1	RO 01	_		Z	z :	z			
	PC4001																											
12V	NET	DI 01	5V	AI 01	AI 02	AI 03	AI 04	AI 05	AI 06	AI 07	AI 08	AI 09	AI 10	AI 11 (50K)	AI 12(50K)	DI 02	DI 03	DI 04	DI 05	DI 06	DI 07	DI 08	DI 09	DI 10	DI 11	DI 12	DI/DO 2	DI/DO1
GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND	GND

			ı	PC4	001			
CN1								CN6
	CN5	CN4						



### 6.2 Connections Explained

NO.	Symbol	Meaning	NO.	Symbol	Meaning
1	AC-L	Live line	21	DI 07	Water flow switch protection input
2	AC-N	Null line	22	DI 08	Electric heater overload protection input
3	RO 01	Compressor 1 output(220VAC)	23	DI 09	Compressor 1 overload protection input
4	RO 02	Compressor 2 output(220VAC)	24	DI 10	Compressor 2 overload protection input
5	RO 03	High speed of fan output(220VAC)	25	DI 11	System protection input
6	RO 04	Low speed of fan output(220VAC)	26	DI 12	Emergency switch input
7	RO 05	Water pump output(220VAC)	27	AI 01	Water input temperature input
8	RO 06	4-way valve output(220VAC)	28	AI 02	Water output temperature output
9	RO 07	Electric heater output (250VAC)	29	AI 03	System 1 fan coil temperature input
10	RO 08	Spray valve output(220VAC)	30	AI 04	System 2 fan coil temperature input
11	RO 09	Alarm system output(220VAC)	31	AI 05	Ambient temperature input
12	DI/DO 1	Mode indicator output	32	AI 06	System 1 antifreeze temperature input
13	DI/DO 2	Emergency switch output	33	AI 07	System 1 antifreeze temperature input
14	DI 01	Flow rate input	34	AI 08	System 1 suction temperature input
15	DI 02	System 1 high pressure protection input	35	AI 09	System 2 suction temperature input
16	DI 03	System 1 low pressure protection input	36	AI 10	No use
17	DI 04	System 2 high pressure protection input	37	AI 11(50K)	System 1 discharging temperature input
18	DI 05	System 2 low pressure protection input	38	AI 12(50K)	System 2 discharging temperature input
19	NET GND 12V	Connecting to the remote controller	39	CN1	System 2 electric expansion valve output
20	DI 06	Phase sequence protection	40	CN6	System 1 electric expansion valve output
			41	CN4	Burning program interface
			42	CN5	RS485 interface

# OCISIS heat pumps

### **6.APPENDIX**

### 6.3 Caution & Warning

- 1. The unit can only be repaired by qualified installer centre personnel or an authorised dealer. (for Europe market)
- 2. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- 3. Please make sure that the unit and power connection have good earthing, otherwise may cause electrical shock.
- 4. If the supply cord is damaged, it must be replaced by the manufacturer or our service agent or similarly qualified person to avoid a hazard.
- 5. Directive 2002/96/EC (WEEE):
  - The symbol depicting a crossed-out waste bin that is underneath the appliance indicates that this product, at the end of its useful life, must be handled separately from domestic waste, must be taken to a recycling centre for electric and electronic devices or handed back to the dealer when purchasing an equivalent appliance.
- 6. Directive 2002/95/EC (RoHs): This product is compliant with directive 2002/95/EC (RoHs) concerning restrictions for the use of harmful substances in electric and electronic devices.
- 7. The unit CANNOT be installed near flammable gas. Once there is any leakage of the gas, fire can occur
- 8. Make sure that there is circuit breaker for the unit, lack of circuit breaker can lead to electrical shock or fire.
- 9. The heat pump located inside the unit is equipped with an over-load protection system. It does not allow for the unit to start for at least 3 minutes from a previous stoppage.
- 10. The unit can only be repaired by the qualified personnel of an installer centre or an authorized dealer. (for North America market)
- 11. Installation must be performed in accordance with the NEC/CEC by authorized person only. (for North America market)
- 12. USE SUPPLY WIRES SUITABLE FOR 75°C.



### 6.4 Cable specification

### 1. Single phase unit

Nameplate maximum current	Phase line	Phase line Earth line		Creepage protector	Signal line
No more than 10A	2×1.5mm <sup>2</sup>	1.5mm <sup>2</sup>	20A	30mA less than 0.1 sec	
10~16A	$2\times2.5$ mm <sup>2</sup>	2.5mm <sup>2</sup>	32A	30mA less than 0.1 sec	
16~25A	2×4mm <sup>2</sup>	4mm <sup>2</sup>	40A	30mA less than 0.1 sec	
25~32A	2×6mm <sup>2</sup>	6mm <sup>2</sup>	40A	30mA less than 0.1 sec	
32~40A	2×10mm <sup>2</sup>	10mm <sup>2</sup>	63A	30mA less than 0.1 sec	
40~63A	2×16mm <sup>2</sup>	16mm <sup>2</sup>	80A	30mA less than 0.1 sec	$n \times 0.5 mm^2$
63~75A	2×25mm <sup>2</sup>	25mm <sup>2</sup>	100A	30mA less than 0.1 sec	
75~101A	2×25mm <sup>2</sup>	25mm <sup>2</sup>	125A	30mA less than 0.1 sec	
101~123A	$2\times35$ mm <sup>2</sup>	35mm <sup>2</sup>	160A	30mA less than 0.1 sec	
123~148A	2×50mm <sup>2</sup>	50mm <sup>2</sup>	225A	30mA less than 0.1 sec	
148~186A	$2\times70$ mm <sup>2</sup>	70mm <sup>2</sup>	250A	30mA less than 0.1 sec	
186~224A	2×95mm <sup>2</sup>	95mm <sup>2</sup>	280A	30mA less than 0.1 sec	

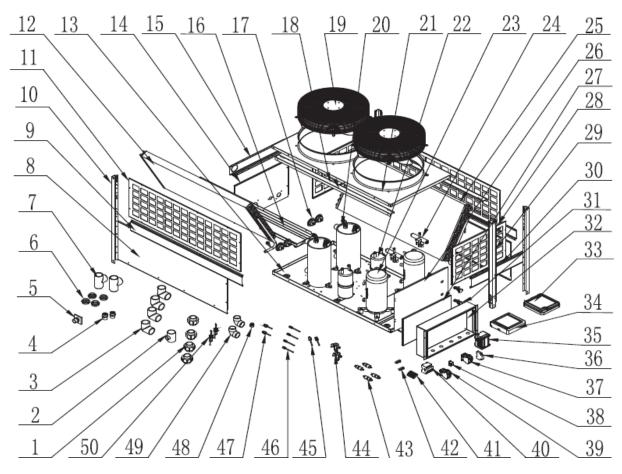
### 2. Three phase unit

Nameplate maximum current	Phase line	Earth line	МСВ	Creepage protector	Signal line
No more					
than 10A	3×1.5mm <sup>2</sup>	1.5mm <sup>2</sup>	20A	30mA less than 0.1 sec	
10~16A	3×2.5mm <sup>2</sup>	2.5mm <sup>2</sup>	32A	30mA less than 0.1 sec	
16~25A	$3\times4$ m m <sup>2</sup>	4mm <sup>2</sup>	40A	30mA less than 0.1 sec	
25~32A	$3\times6$ mm <sup>2</sup>	6mm <sup>2</sup>	40A	30mA less than 0.1 sec	
32~40A	$3\times10$ mm <sup>2</sup>	10mm <sup>2</sup>	63A	30mA less than 0.1 sec	
40~63A	$3\times16$ mm <sup>2</sup>	16mm <sup>2</sup>	80A	30mA less than 0.1 sec	$n \times 0.5 mm^2$
63~75A	$3\times25$ mm <sup>2</sup>	25mm <sup>2</sup>	100A	30mA less than 0.1 sec	
75~101A	$3\times25$ mm <sup>2</sup>	25mm <sup>2</sup>	125A	30mA less than 0.1 sec	
101~123A	$3 \times 35 \text{mm}^2$	35mm <sup>2</sup>	160A	30mA less than 0.1 sec	
123~148A	$3\times50$ mm <sup>2</sup>	50mm <sup>2</sup>	225A	30mA less than 0.1 sec	
148~186A	$3 \times 70 \text{mm}^2$	70mm <sup>2</sup>	250A	30mA less than 0.1 sec	
186~224A	$3 \times 95 \text{mm}^2$	95mm <sup>2</sup>	280A	30mA less than 0.1 sec	

When the unit will be installed at outdoor, please use the cable which can against UV.



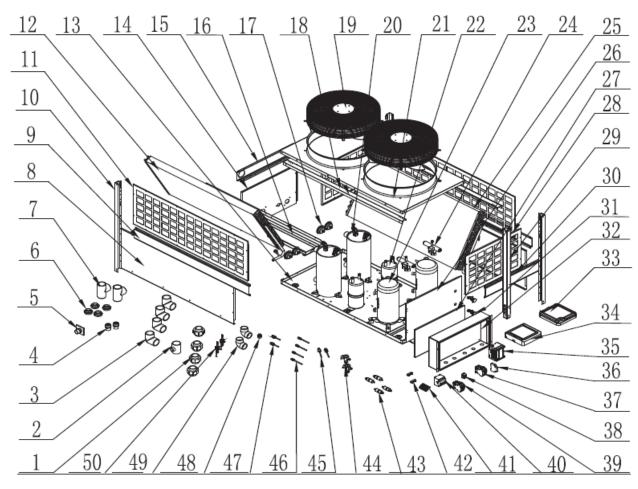
### 6.5 Explosive view of the C38 unit



NO.	Part Note	PartName	NO.	Part Code	Part Name	
1	2001-1355		26		electrical box cover	
		pipe connector		32006-210047		
2	2002-1342	PVC 3-way valve	27	35005-210012	scale board	
3	2002-1348	PVC elbow	28	35005-210017	left panel	
4	2002-1383	PVC pipe	29	35005-210002	left post	
5	2004-1303	PVC fixed plate	30	35005-210006	left beam	
6	2002-1337	PVC adapter bonnet	31	4000-7707	electrical box door	
7	2002-1339	PVC 3-way valve	32	35005-210010	electrical box	
8	32006-210044	front-down panel	33	20000-220068	water proof box	
9	32006-210010	front beam	34	95005-310156	LCD wire controller	
10	35005-210003	right post	35	95005-310114	Pc4001	
11	32006-210012	front-up panel	36	20000-360023	3-phase AC inspector	
12	32006-120006	right-condenser	37	20000-360208	AC contactor	
13	32006-210009	chassis	38	20000-360203	relay	
14	32006-210014	right panel	39	20000-360208	AC contactor	
15	35006-210026	right beam	40	2000-3680	circuit breaker	
16	35005-210013	water collector	41	2000-3902	5-points terminal	
17	2000-2802	pressure gage	42	2000-3909	2-points terminal	
18	35005-210016		43	2000-1406	filter	
19	20000-330160	fan motor	44	2002-1417	TX valve	
20	32004-120003	heat exchanger	45	20000-360060	pressure switch	
21	35005-210009	top cover	46	20000-140512	needle valve	
22	3505-1405	liquid-gas separator	47	2000-3602	pressure switch	
23	2000-1141	compressor	48	2005-1360	PVC adapter bonnet	
24	2001-1491	4-way valve	49	2001-1359	PVC elbow	
25	32006-120005	left condenser	50	20000-360005	water flow switch	



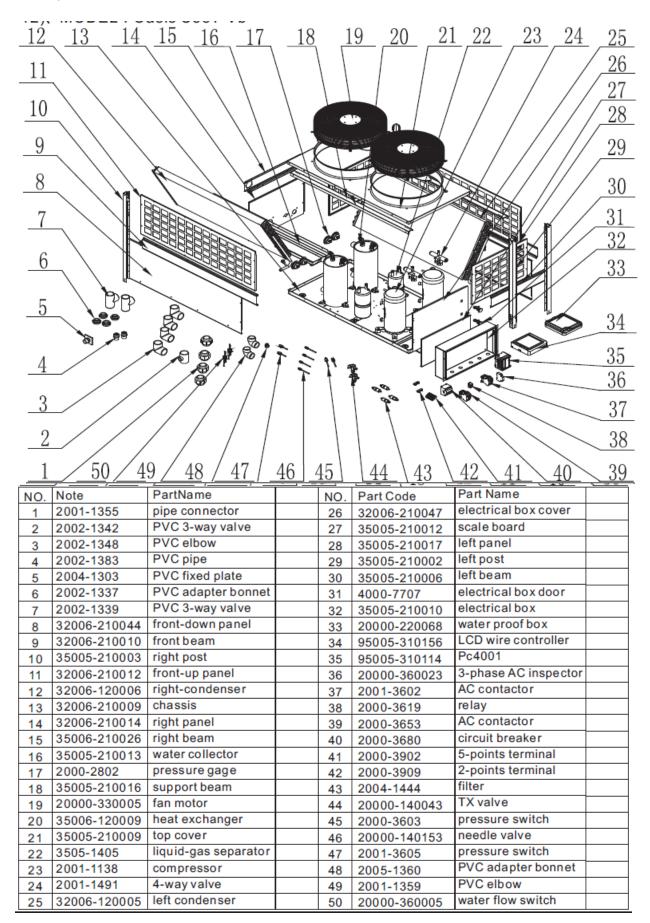
### 6.6 Explosive view of the C47 unit



	<i>,</i> ,		 	<u>,                                </u>	<del> </del>	
NO.	Note	PartName	NO.	Part Code	Part Name	
1	2005-1367	pipe connector	26	32006-210047	electrical box cover	
2	2002-1342	PVC 3-way valve	27	35005-210012	scale board	
3	2002-1348	PVC elbow	28	35005-210017	left panel	
4	2002-1383	PVC pipe	29	35005-210002	left post	
5	2004-1303	PVC fixed plate	30	35005-210006	left beam	
6	2002-1337	PVC adapter bonnet	31	4000-7707	electrical box door	
7	2002-1339	PVC 3-way valve	32	35005-210010	electrical box	
8	32006-210044	front-down panel	33	20000-220068	water proof box	
9	32006-210010	front beam	34	95005-310156	LCD wire controller	
10	35005-210003	right post	35	95005-310114	Pc4001	
11	32006-210012	front-up panel	36	20000-360023	3-phase AC inspector	
12	32006-120006	right-condenser	37	2001-3602	AC contactor	
13	32006-210009	chassis	38	2000-3619	relay	
14	32006-210014	right panel	39	2000-3653	AC contactor	
15	35006-210026	right beam	40	2000-3680	circuit breaker	
16	35005-210013	water collector	41	2000-3902	5-points terminal	
17	2000-2802	pressure gage	42	2000-3909	2-points terminal	
18	35005-210016	support beam	43	2004-1444	filter	
19	20000-330005	fan motor	44	20000-140043	TX valve	
20	32006-120015	heat exchanger	45	2000-3603	pressure switch	
21	35005-210009	top cover	46	20000-140153	needle valve	
22	3505-1405	liquid-gas separator	47	2001-3605	pressure switch	
23	2001-1161	compressor	48	2005-1360	PVC adapter bonnet	
24	2001-1491	4-way valve	49	2001-1359	PVC elbow	
25	32006-120005	left condenser	50	20000-360005	water flow switch	



### 6.7 Explosive view of the C58 unit





# **NOTES**







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