



# ***ENERGYLINE PRO***

**SWIMMING POOL HEAT PUMP UNIT**



**Installation & Instruction Manual  
Australia & New Zealand**

**Hayward Pool Products (Australia) Pty Ltd.**

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Sales Ph 1300POOLS1 Fx 1300POOLS2



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Please read attentively and save for future consultation.  
This document must be given to the pool owner and should be kept in a safe place.

# 1. PREFACE

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We thank you for purchasing this Hayward swimming pool heat pump unit. This product was designed according to strict manufacturing standards to satisfy the required quality levels. This manual includes all of the necessary information concerning installation, debugging and maintenance. Please attentively read this manual before opening the unit or before carrying out any maintenance operations on it. The manufacturer of this product will not, under any circumstances, be held responsible in the case of injury to the user or damage to the unit resulting from improper installation, debugging or unnecessary maintenance. It is essential to follow all of the instructions specified in the manual at all times. The unit must be installed by a qualified professional and in accordance with AS/NZS 3000 Wiring Rules.

- Repairs must be made by a qualified professional.
- All electrical connections must be made by a qualified electrician according to AS/NZS 3000 Wiring Rules.
- Maintenance and the different operations must be carried out at the recommended times and frequencies as specified in this manual.
- Only use genuine spare parts.
- Failure to comply with these recommendations will invalidate the warranty.
- This swimming pool heat pump unit heats swimming pool water and maintains a constant temperature; it should not be used for any other purpose.

After having read this manual, keep it for future usage.

Warnings concerning children/people with reduced physical capacity:

This appliance is not intended to be used by persons (especially children) with reduced physical, sensory or mental capabilities or by persons who lack experience or knowledge, unless they are under supervision or have received instructions concerning the use of the appliance by a person responsible for their safety.

This product contains greenhouse effect fluorinated gases covered by the Kyoto protocol.

Type of refrigerant: R410A

GAP Value<sup>(1)</sup>: 1975

Periodic inspections for refrigerant leakage can be required as a function of European or local legislation. Please contact your local distributor for additional information.

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(1) Potential for global warming

# 2. SPECIFICATIONS

## 2.1 Technical data for the swimming pool heat pump unit

|                                     |                   |                     |                     |                     |
|-------------------------------------|-------------------|---------------------|---------------------|---------------------|
| Models                              | ENERGYLINE<br>PRO | ENP2M-9A            | ENP3M-13A           | ENP6M-21A           |
| Heating capacity*                   | kW<br>BTU/h       | 9,0<br>30735        | 13<br>44395         | 21,0<br>71715       |
| Absorbed electrical power           | kW                | 2,0                 | 2,36                | 3,82                |
| Running current*                    | A                 | 8,4                 | 11,6                | 17,5                |
| Power Supply                        | V<br>Ph/Hz        | 230 V ~<br>1 / 50Hz | 230 V ~<br>1 / 50Hz | 230 V ~<br>1 / 50Hz |
| aM type fuse calibre                | A                 | 12 aM               | 16 aM               | 30 aM               |
| Curve D circuit breaker             | A                 | 12 D                | 16 D                | 30 D                |
| Compressor quantity                 |                   | 1                   | 1                   | 1                   |
| Type of compressor                  |                   | Rotary              | Rotary              | Scroll              |
| Fan quantity                        |                   | 1                   | 1                   | 1                   |
| Fan power                           | W                 | 120                 | 150                 | 150                 |
| Fan rotation speed                  | RPM               | 850                 | 850                 | 850                 |
| Ventilation                         |                   | Horizontal          | Horizontal          | Horizontal          |
| Sound pressure level<br>(@ 1 metre) | dB(A)             | 54                  | 56                  | 56                  |
| Hydraulic connection O.D            | mm                | 48,3                | 48,3                | 48,3                |
| Nominal water flow*                 | m³/h              | 3,4                 | 5                   | 7                   |
| Water pressure drop<br>(max)        | kPa               | 10                  | 12                  | 17                  |
| Unit net dimensions<br>(L/W/H)      | mm                | 1025/455/<br>660    | 1140/470/<br>875    | 1140/470/<br>875    |
| Unit shipping dimensions<br>(L/W/H) | mm                | 1130/470/<br>760    | 1240/500/<br>980    | 1240/500/<br>980    |
| Net weight / shipping<br>weight     | kg                | 61/75               | 80/98               | 110/125             |



\* Value at +/- 5% under the following conditions: Exterior temperature = 24°C (75°F) / HR = 71% / Water inflow temperature = 26°C (78.8°F) / ΔT water 2°C (3.6°F).  
According to the NF 414 standard.

## 2. SPECIFICATIONS (continued)

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### 2.2 Operating range

Use the swimming pool heat pump unit within the following ranges of temperature and humidity to ensure safe and efficient operation.

|                                  | Heating mode  | Cooling mode  |
|----------------------------------|--|--|
| Outside temperature              | +2°C ~ +35°C   | +7°C ~ +43°C   |
| Water temperature                | +12°C ~ +40°C  | +8°C ~ +40°C   |
| Relative humidity                | < 80%  | < 80%  |
| Setting range from the set point | +15°C ~ +35°C  | +8°C ~ +35°C   |



If the temperature or humidity are outside of the ranges specified above, the built in protection features could activate and shutdown the swimming pool heat pump.

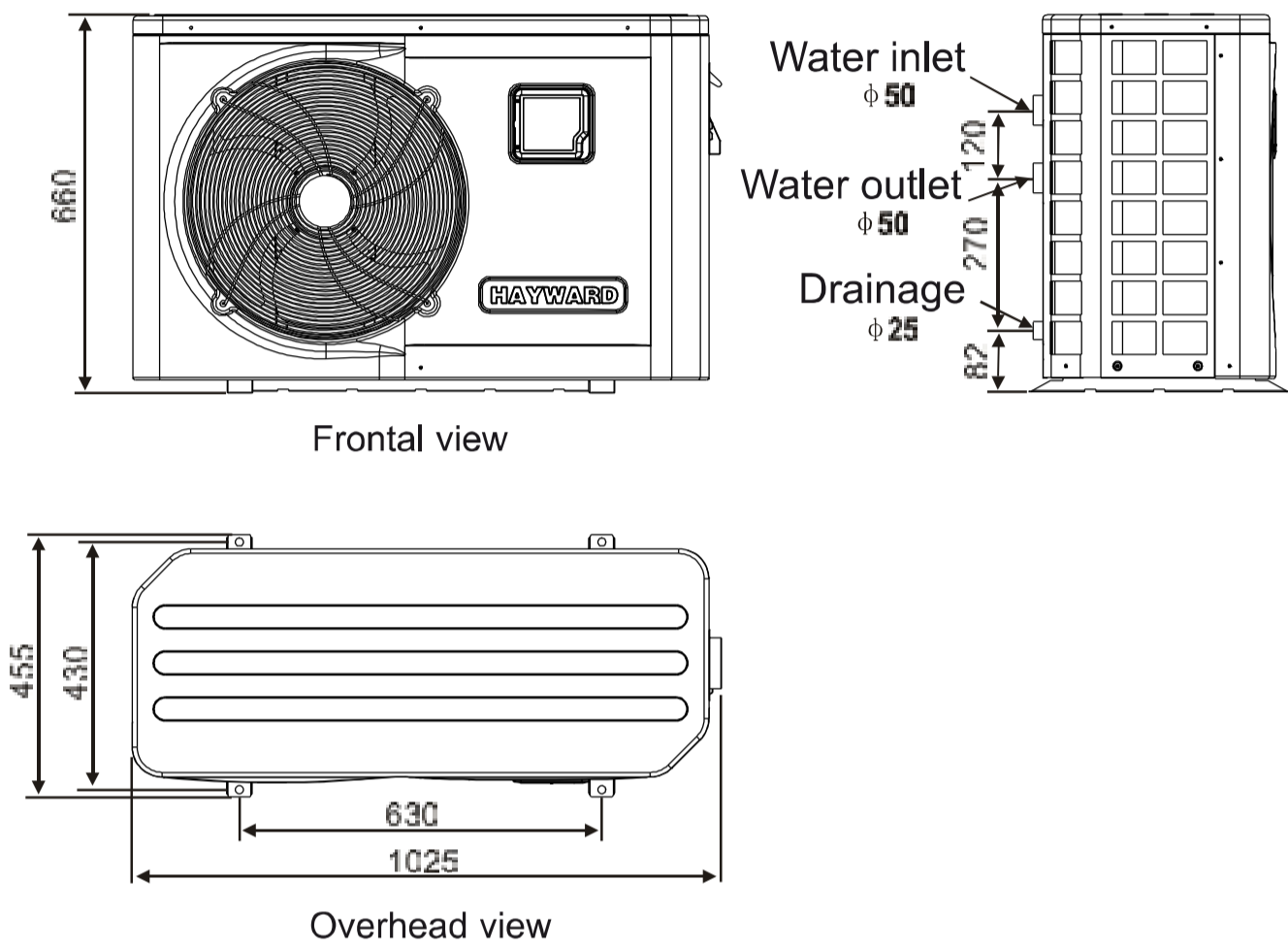
## 2. SPECIFICATIONS (continued)

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### 2.3 Dimensions

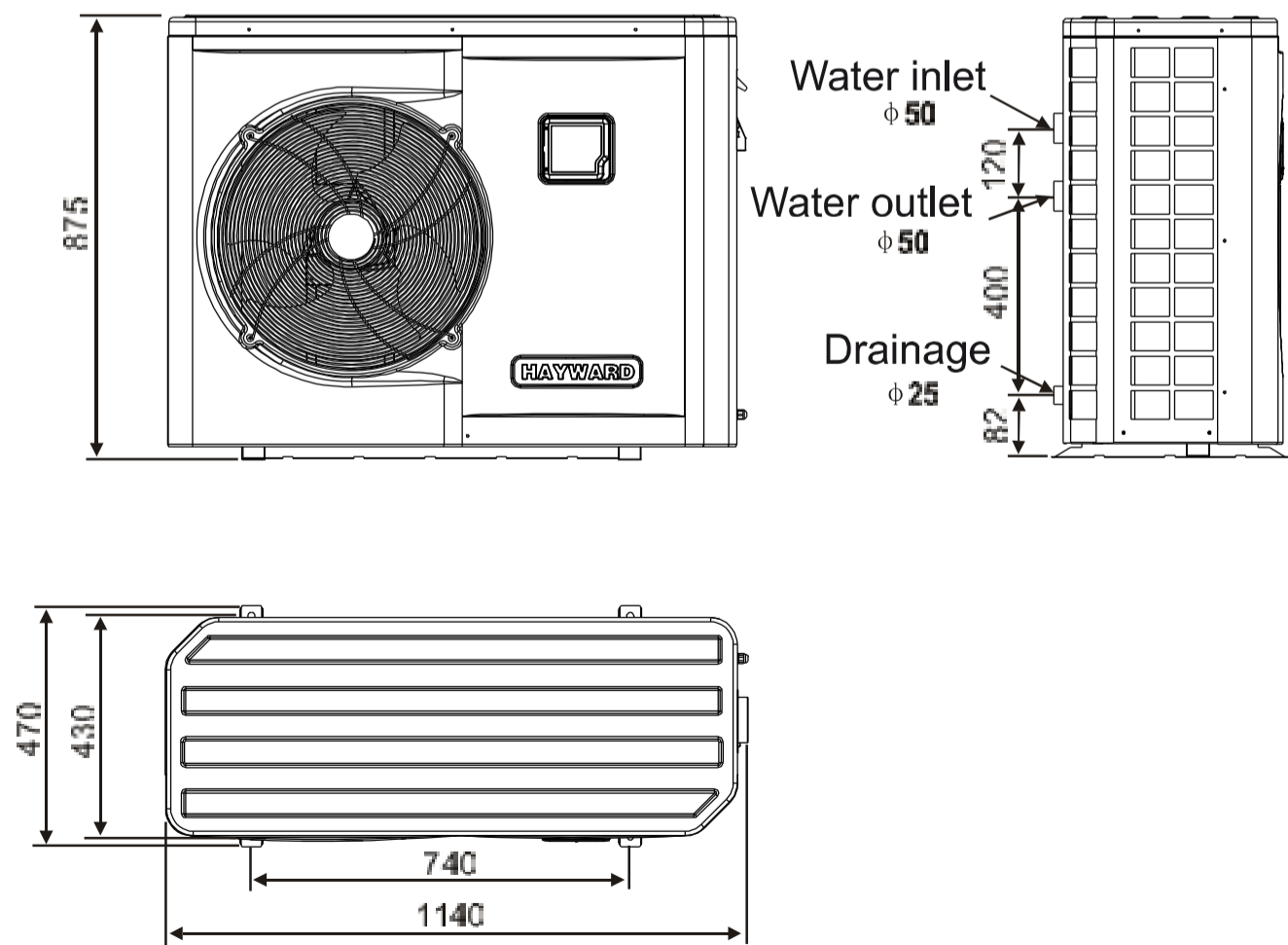
Models: ENP2M-9A

Unit: mm



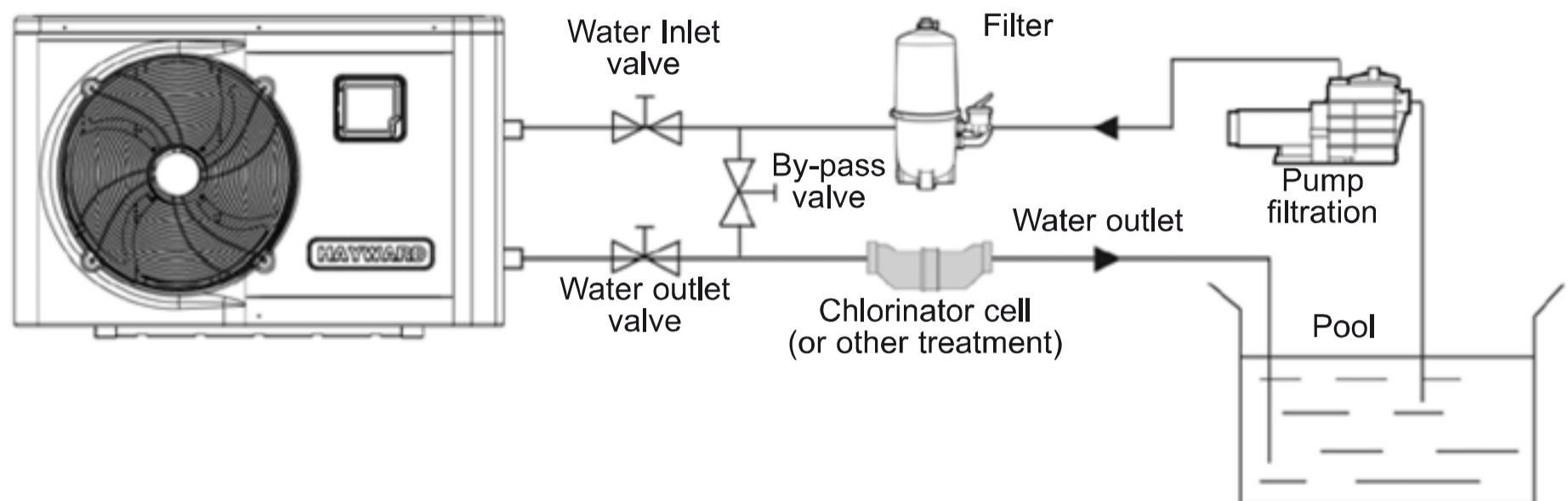
Models: ENP3M-13A / ENP6M-21A

Unit: mm



## 3. INSTALLATION AND CONNECTION

### 3.1 Functional Diagram



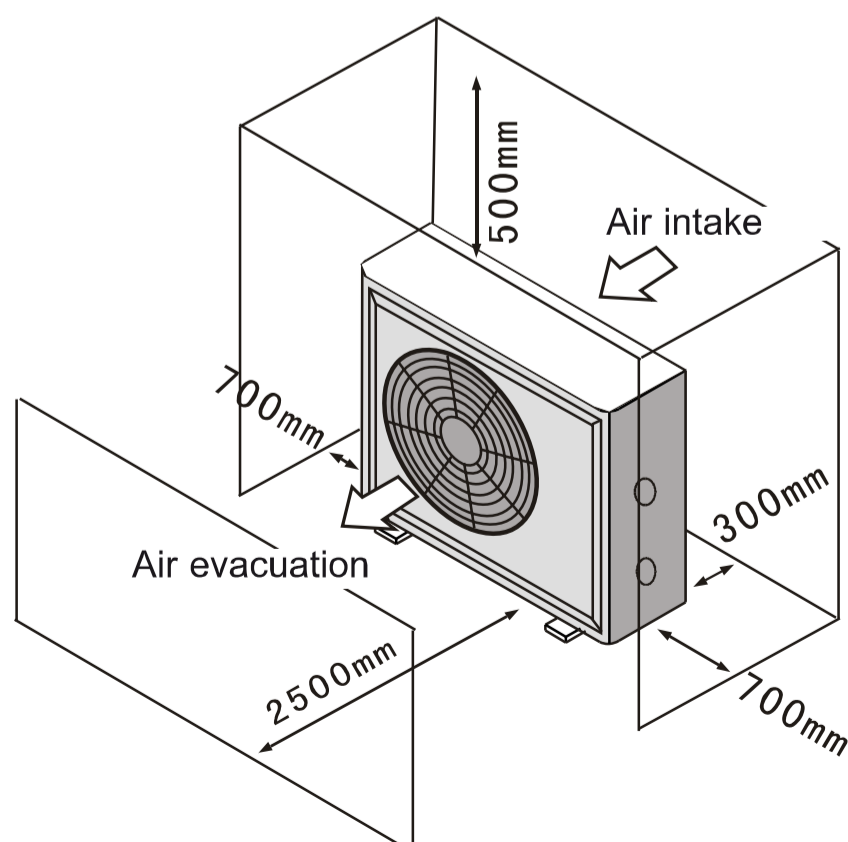
Note: The swimming pool heat pump unit is sold without any treatment or filtration equipment. The components presented in the diagram are spare parts to be supplied by the installer.

### 3.2 Heat pump



***Place the heat pump outdoors and away from any enclosed technical space.***

***Placed under a shelter, the minimum required distances mentioned below must be respected in order to avoid any risk of air recirculation and a deficiency in the unit's overall performance.***



### 3. INSTALLATION AND CONNECTION (continued)

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***It is advised to install the unit on a dissociated cement block or a mounting bracket designed for this use and to set up the unit on the supplied rubber bushing and fastening with appropriate fasteners (bolts, screws, ect). Fasteners and washers not supplied.***

***The unit shall not be located any closer to the swimming pool than inside zone 2 as explained in AS/NZS 3000 Wiring Rules.***

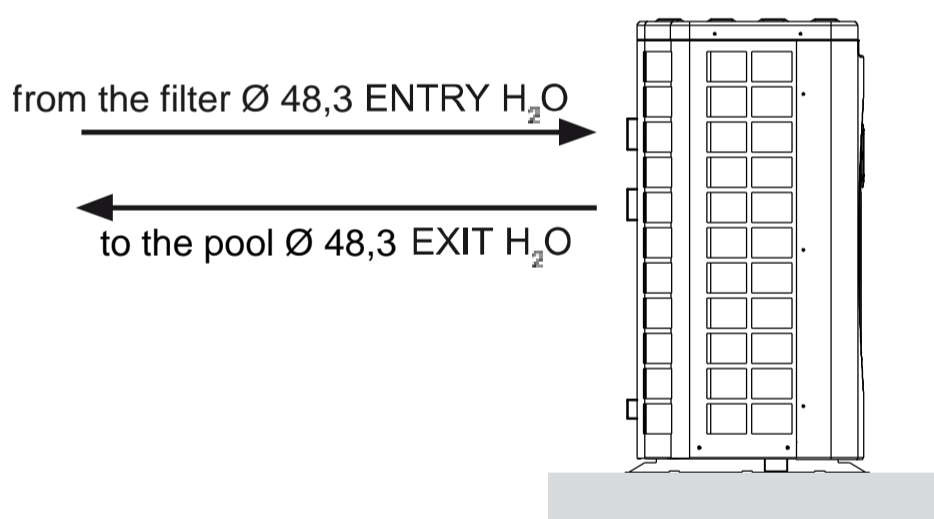
***The maximum installation distance between the unit and the swimming pool is 15 metres.***

***The total length of the piping to and from the unit is 30 metres.***

***Insulate both the above ground and buried hydraulic piping.***

#### 3.3 Hydraulic connection

The unit is supplied with two 48.3 mm Ø union connections to suit 40mm PVC pipe. Connect the water inlet to the heat pump coming from the filtration group, then connect the water outlet of the heat pump to the pipe going to the pool (see diagram below).



Install a by-pass valve between the heat pump entrance and exit.



***If an automatic chemical distributor or a salt chlorinator is used, it should be installed imperatively after the heat pump to ensure the protection of the titanium condenser against elevated concentrations of chemicals.***



***Be sure to install the by-pass valve and the supplied union connections at the water inlet and outlet level in order to simplify purging during the winter period and to facilitate access when disassembling for maintenance.***

### 3. INSTALLATION AND CONNECTION (continued)

#### 3.4 Electrical connection



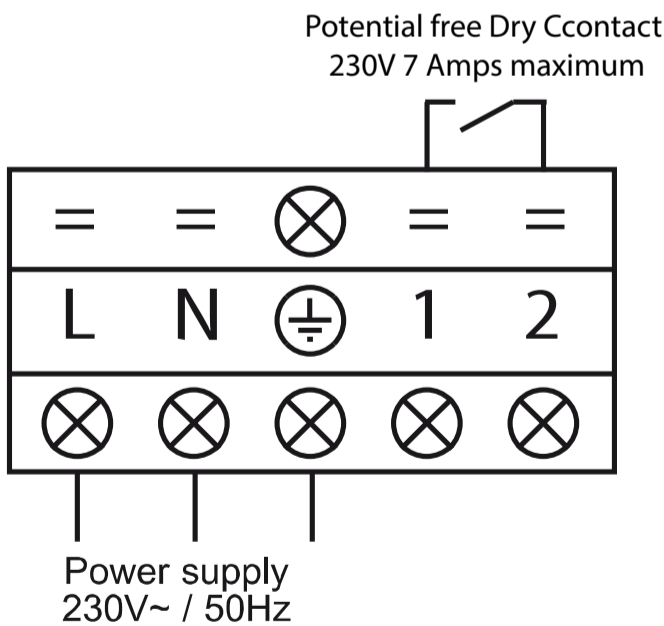
**Electrical installation and wiring for this equipment must be in conformity with AS/NZS 3000 Wiring Rules.**



**Verify that the available electrical power supply and the network frequency correspond to the required operating current taking into account the appliance's specific location, and the current required to supply any other appliance connected to the same circuit.**

**ENP 2M-9A 230 V~ +/- 10% 50 HZ 1 Phase**  
**ENP 3M-13A 230 V~ +/- 10% 50 HZ 1 Phase**  
**ENP 6M-21A 230 V~ +/- 10 % 50 HZ 1 Phase**

**See the corresponding wiring diagram in the appendix.**  
**The connection box is located on the right side of the unit. Three connections are designed for the power supply and two are for controlling the circulation pump via the Heat Priority Wiring on on page 21.**



**Never connect a circulation pump directly to terminals 1 & 2.**

### 3. INSTALLATION AND CONNECTION (continued)



- The electrical power supply to the unit must have a fuse protection device like a feed motor (aM) or D curve circuit breaker.
- The electrical power supply must be supplied through a Residual Current Device (RCD), with a rated residual operating current not exceeding 30mA.
- Models with hard wired power input circuits must be supplied through an isolation switch in accordance with AS/NZS 3000 Wiring Rules.


| MODELS                     |         | ENP2M-9A          | ENP3M-13A         | ENP6M-21A         |
|----------------------------|---------|-------------------|-------------------|-------------------|
| Power supply               | V/Ph/Hz | 230 V~<br>1/50 Hz | 230 V~<br>1/50 Hz | 230 V~<br>1/50 Hz |
| aM type fuse<br>calibre    | A       | 12 aM             | 16 aM             | 30 aM             |
| Curve D circuit<br>breaker | A       | 12 D              | 16 D              | 30 D              |



**Always isolate the power supply to the unit before opening the electrical control box.**

#### 3.5 Initial start-up

Start-up procedure - After installation is complete, follow these steps:

- 1) Rotate the fan by hand to verify that it can turn freely, and that the turbine is correctly affixed to the motor shaft.
- 2) Ensure that the unit is connected correctly to the main power supply (see the wiring diagram in the appendix).
- 3) Activate the filtration pump.
- 4) Verify that all water valves are open and that the water flows toward the unit before switching on the heating or cooling mode.
- 5) Verify that the drainage hose is correctly affixed and that it causes no obstructions.
- 6) Activate the unit power supply, then press the On/Off button  on the control panel.
- 7) Ensure that no ALARM code is displayed when the unit is ON (see troubleshooting guide).

### **3. INSTALLATION AND CONNECTION (continued)**

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- 8) Set the water flow using the by-pass valve (see § 3.6 and 2.1), as provided for by each model, to obtain an Entry/Exit temperature of 2°C.
- 9) After running for several minutes, verify that the air exiting the unit is cool (between 5 and 10°).
- 10) With the unit operating, turn off the filter pump. The unit should automatically turn off and display error code E03.
- 11) Allow the unit and the pool pump to run 24 hours per day until the desired water temperature has been reached. When the set water inlet temperature is reached, the unit will turn off. It will automatically restart (as long as the pool pump is running) if the pool temperature is at least 0.5°C below the set temperature.

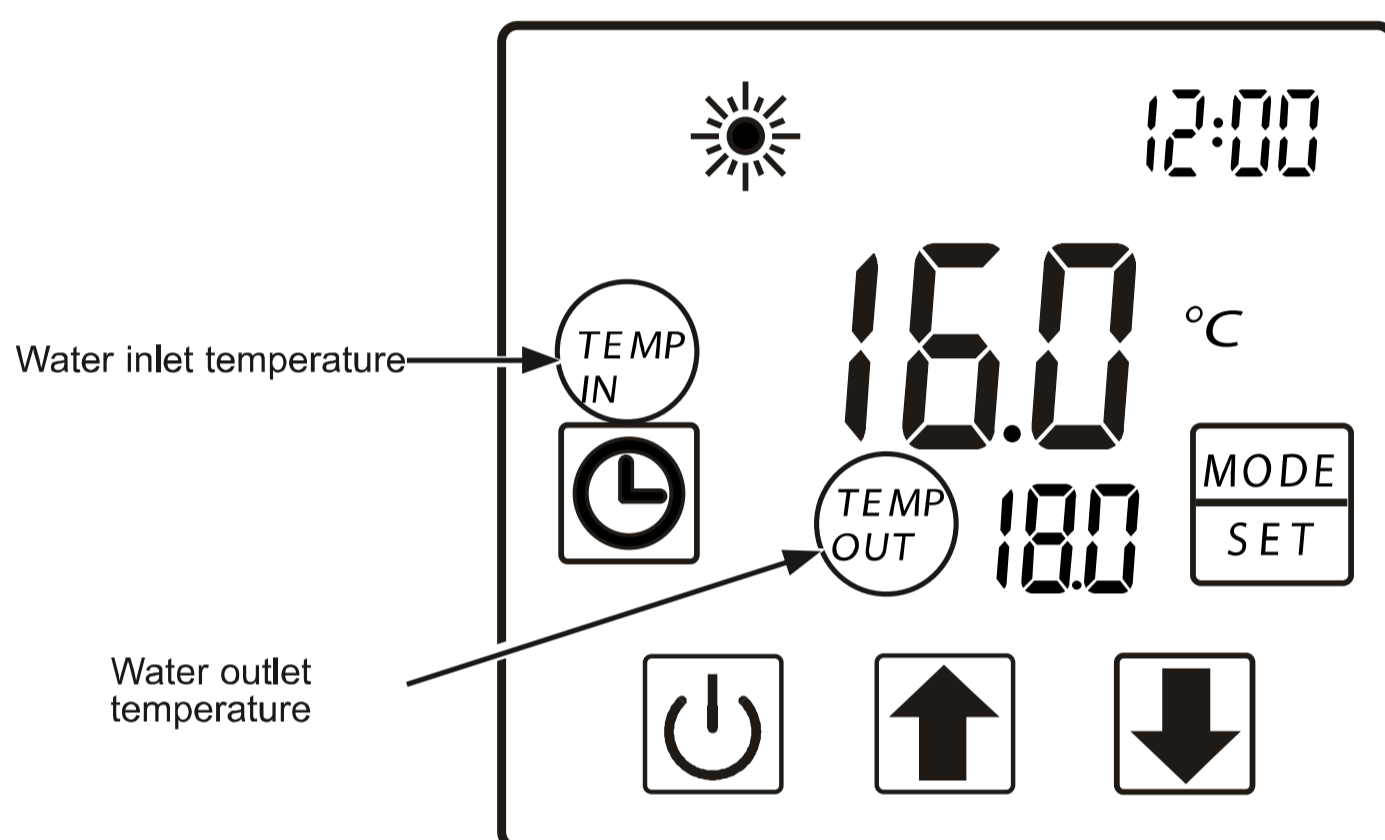
**Water flow switch** - The unit is equipped with a flow switch that turns on the heat pump when the pool filtration pump is running, and deactivates it when the filtration pump is out of order. If the water is low, the E03 alarm code will appear on the regulator (See § 6.4).

**Time delay** - The unit is equipped with a time delay of 3 minutes in order to protect the control circuit components, to eliminate restart cycling and contactor chatter. Thanks to this time delay, the unit automatically restarts approximately 3 minutes after each control circuit interruption. Even a brief power interruption will activate the restart time delay.

## 3. INSTALLATION AND CONNECTION (continued)

### 3.6 Water flow setting

With the water entry and exit valves being open, adjust the by-pass valve in order to obtain a difference of 2°C between the inflow and outflow temperature (see principle diagram § 3.1). You can verify the switch by seeing the entry/exit temperatures directly on the control panel.



Note: Opening the by-pass valve creates a weaker flow, which leads to an increase in temperature change.

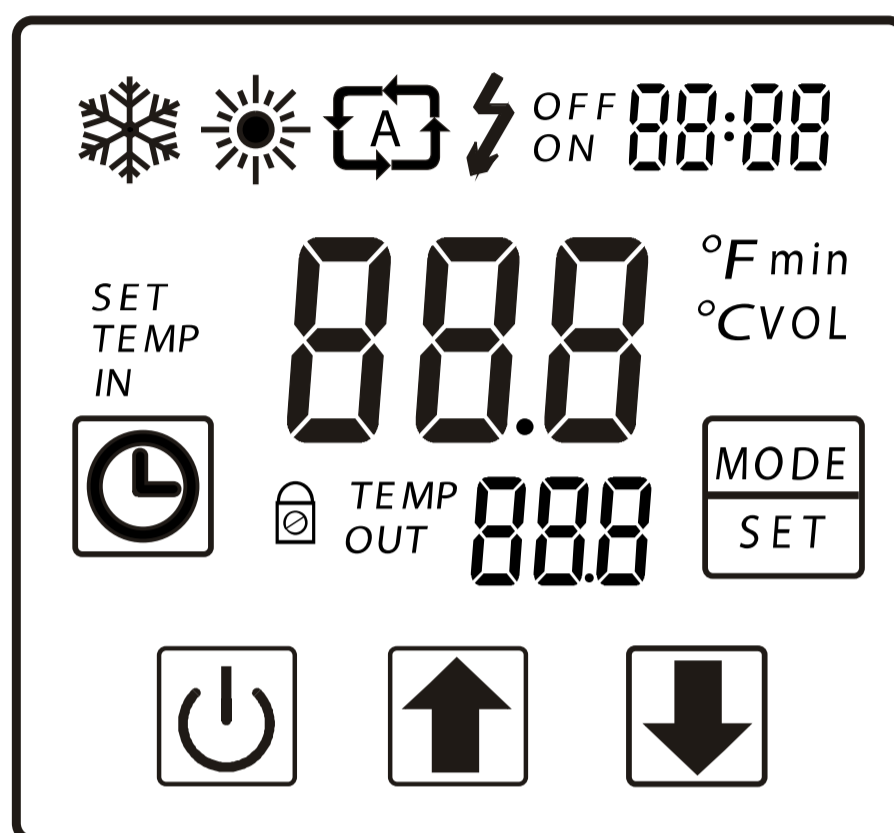
Closing the by-pass valve creates a stronger flow, which leads to a decrease in temperature change.

## 4. USER INTERFACE

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### 4.1 General presentation

The heat pump is equipped with a digital control panel with a touch screen, electronically connected and pre-set at the factory in heating mode.



#### Key



Symbol Cooling Mode



Symbol Heating Mode



Automatic mode



Clock and timer settings



Selection and settings button



On/Off button and return



Scroll down



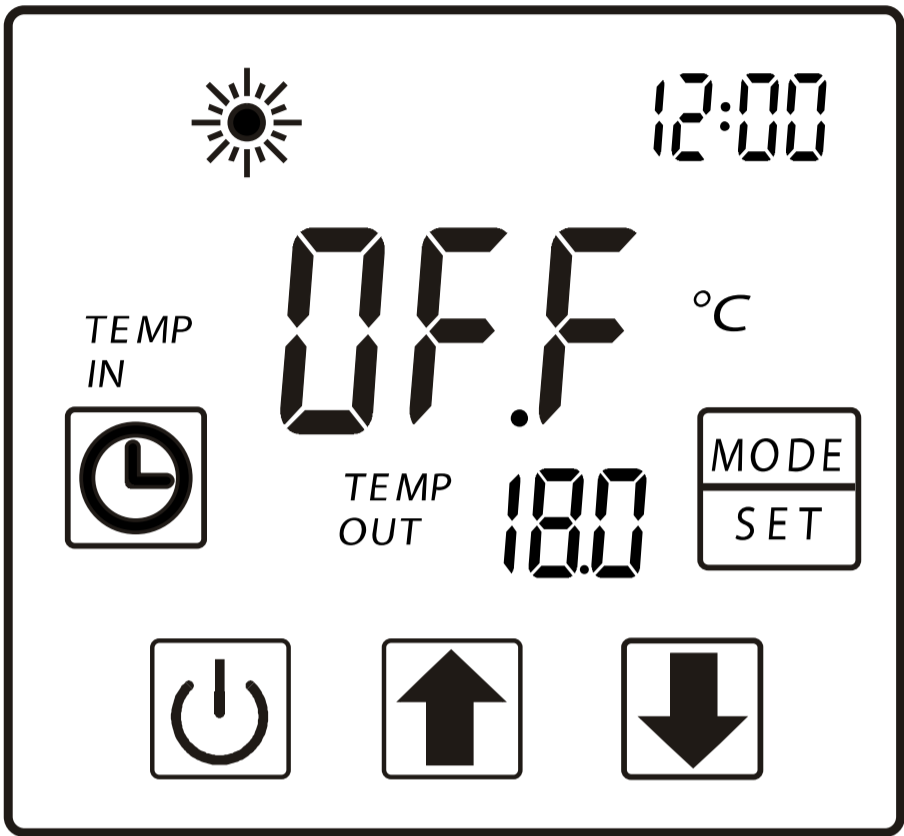
Scroll up

## 4. USER INTERFACE (continued)

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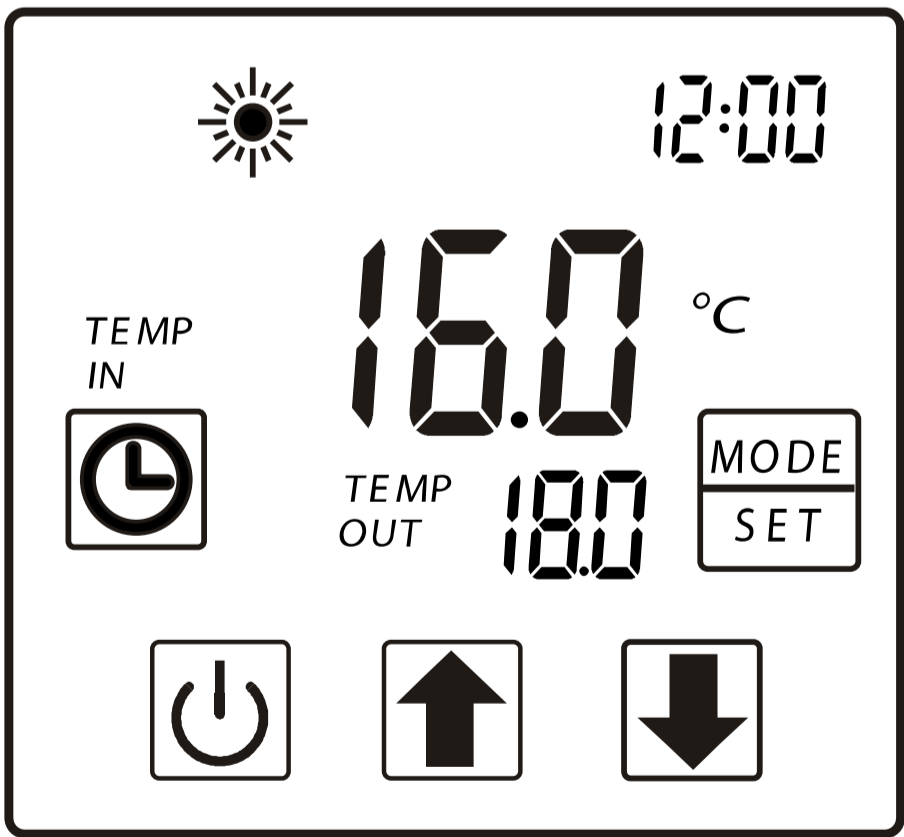
### OFF Mode

When the heating pump is in sleep mode (OFF Mode) “OFF” is displayed on the command screen.



### ON Mode








When the heating pump is running or regulating (ON Mode), the inlet and outlet water temperatures are displayed on the command screen.




## 4. USER INTERFACE (continued)

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### 4.2 Clock settings








Press 2 times on , the blinking time display then set the time with the arrows  or  then press one more time  to set the minutes with the arrows  or . Press  to validate.

Note: The settings will be automatically saved if no button is pressed after 5 seconds, if not press  to validate.

### 4.3 Timer function settings









Setting this function is necessary if you would like to run the heat pump for a shorter period than what is defined by the filtration clock. Therefore, you can program a deferred start and an anticipated stop or simply stop a certain timeframe from running (at night, for example).

#### Start Program (Timer ON) / Start

- 1) Press  2 seconds, Timer "ON" blinks.
- 2) Press  to set the hour using the buttons  .
- 3) Press  to set the minutes using the buttons  .

It is automatically saved after 5 seconds of no action.






#### Stop Program (Timer OFF) / Stop

- 1) Press  2 seconds, Timer "ON" blinks then press  3 times in a row until timer "OFF" blinks.
- 2) Press  to set the hour using the buttons  .
- 3) Press  to set the minutes using the buttons  .

## 4. USER INTERFACE (continued)


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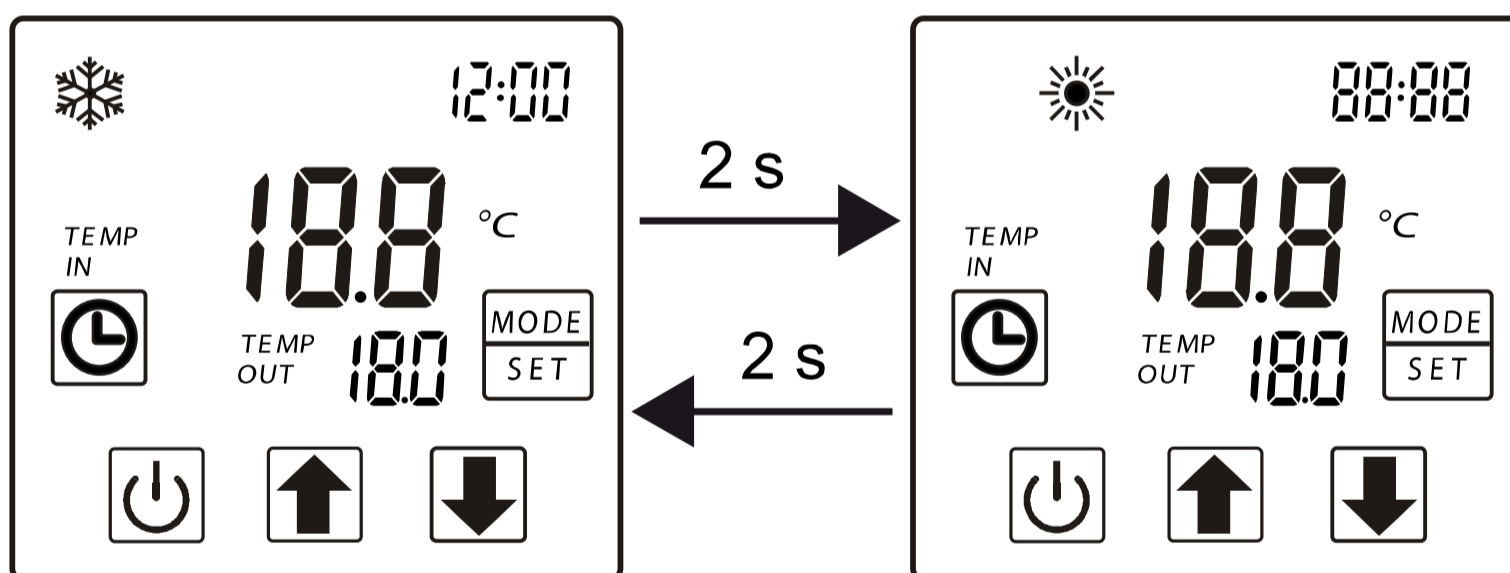
### Turn off the Timer (Timer ON and OFF) / Off and On

- 1) Press  2 seconds, Timer “ON”.
- 2) Press  to delete the programme.
- 3) Press  2 seconds timer “ON” blinks then press  2 seconds, Timer “OFF” blinks.
- 4) Press  to delete the programme.

### 4.4 Operating mode choice: heating or cooling

#### In Mode “OFF” or “ON”

Press the button  2 seconds to go from heating mode to cooling mode, and vice-versa.





## 4. USER INTERFACE (continued)

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### 4.5 Settings and visualisation from the set point (desired water temperature)

#### In Mode “OFF” and Mode “ON”



Press the buttons  or  to define the desired set point. The settings are made with a precision of 0.5 °C.



***It is recommended to never surpass a water temperature of 30°C in vinyl lined pools to avoid warpage of the liner.***

Note: When on or off, it is suffice to press the button  or  to see or modify the set point.

### 4.6 Locking and unlocking the touch screen

Press the On/Off button  5 seconds until it beeps and this symbol appears .

To unlock, press  5 seconds until it beeps and this symbol disappears .

## 5. MAINTENANCE AND WINTERISING

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### 5.1 Maintenance

These maintenance operations must be carried out once per year in order to guarantee the longevity and the good working condition of the heat pump.

- Clean the coil with the help of a soft brush or jet of air or water (**Warning, never use a high pressure cleaner**).
- Verify that the drains flow well.
- Verify the tightening of the hydraulic and electrical connections
- Verify the hydraulic sealing of the condenser.



***Before any maintenance operation, the heat pump must be isolated from any electrical supply(s). The maintenance operations must only be carried out by personnel that are qualified and authorised to handle liquid refrigerants.***

### 5.2 Winterising

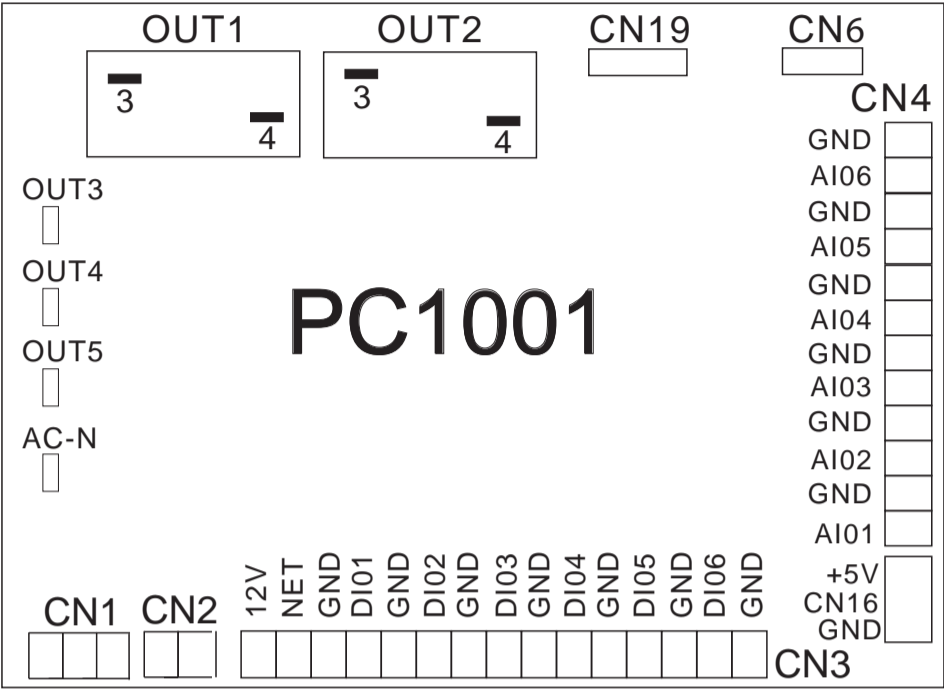
- Put the heat pump in “OFF” mode.
- Isolate the power supply to the heat pump.
- Empty the condenser with the help of the drain to avoid any risk of deterioration. (high risk of freezing).
- Close the by-pass valve and unscrew the entry/exit connection unions.
- Eliminate the maximum amount of residual stagnant water from the condenser with the help of an air gun.
- Close the water entry and exit areas of the heating pump to avoid introducing foreign bodies.
- Cover the heating pump with a dedicated winterising case.



***Any damage caused by poor winterising maintenance will lead to cancellation of the warranty.***

# 6. APPENDIX

## 1.Connection of PCB illustration

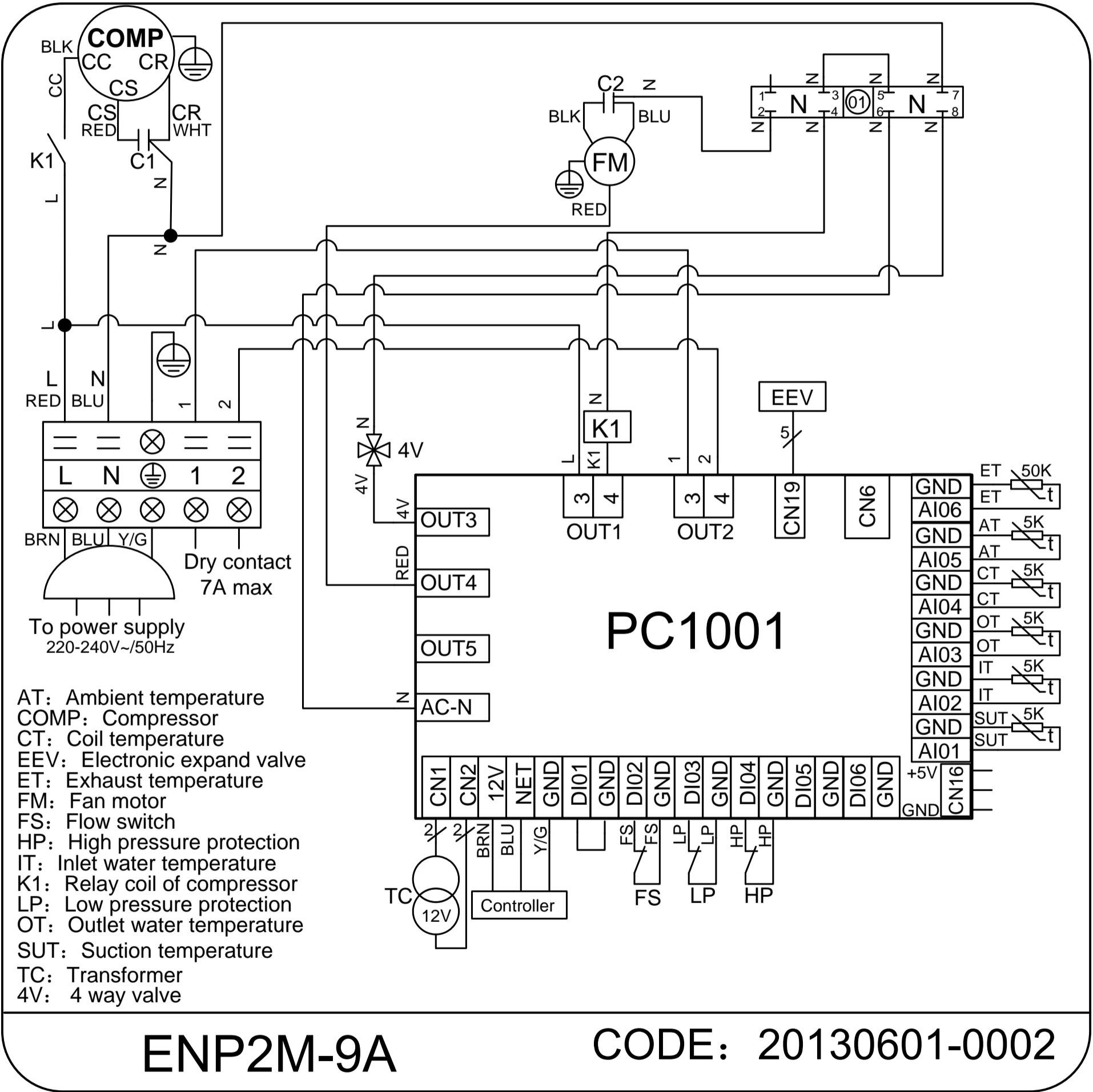


Connections explanation:

| No. | Symbol      | Meaning                                      |
|-----|-------------|--|
| 1   | OUT1        | Compressor of system1（220-230VAC）            |
| 2   | OUT2        | Water pump control - Dry contact 230V 7A max |
| 3   | OUT3        | 4way valve（220-230VAC）                       |
| 4   | OUT4        | High speed of fan motor（220-230VAC）          |
| 5   | OUT5        | Low speed of fan motor（220-230VAC）           |
| 6   | AC-N        | Neutral wire                                 |
| 7   | NET GND 12V | Wire controller                              |
| 8   | DI01 GND    | On/Off Switch(input)(no use)                 |
| 9   | DI02 GND    | Flow switch (input)( normal close)           |
| 10  | DI03 GND    | Low pressure protect                         |
| 11  | DI04 GND    | High pressure protect                        |
| 12  | DI05 GND    | No use                                       |
| 13  | DI06 GND    | No use                                       |
| 14  | AI01 GND    | Suction temperature (input)                  |
| 15  | AI02 GND    | Water in temperature (input)                 |
| 16  | AI03 GND    | Water out temperature (input)                |
| 17  | AI04 GND    | Temperature of coil (input)                  |
| 18  | AI05 GND    | Ambient temp                                 |
| 19  | AI06 GND    | Exhaust temperature (input)                  |
| 20  | CN1         | Primary transformer                          |
| 21  | CN2         | Secondary transformer                        |
| 22  | CN6         | Without use                                  |
| 23  | CN19        | Electronic expansion valve                   |
| 24  | 5V CN16 GND | Flow meter                                   |

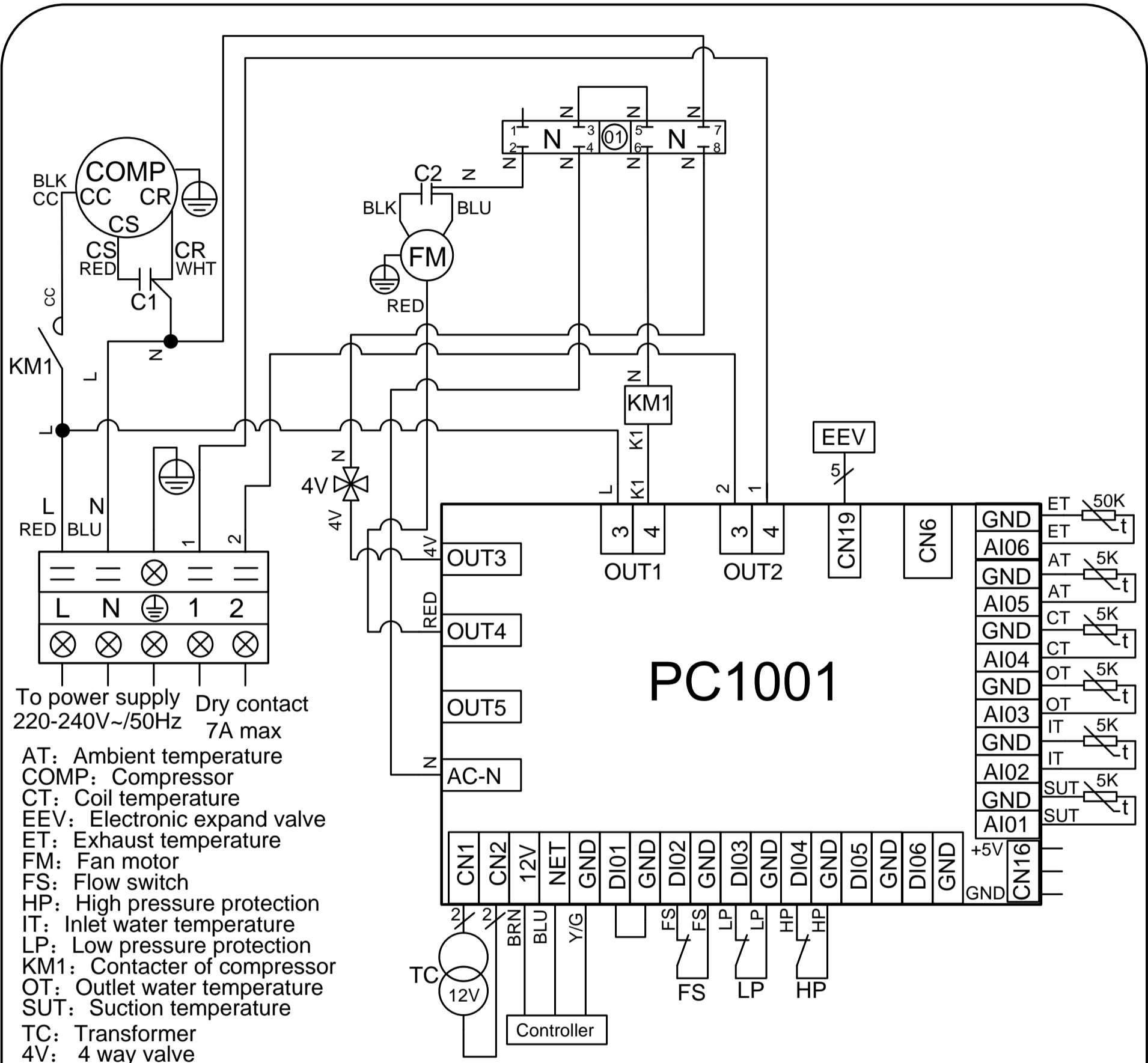
# 6. APPENDIX (continued)

## ENP2M-9A



# 6. APPENDIX (continued)

## ENP3M-13A

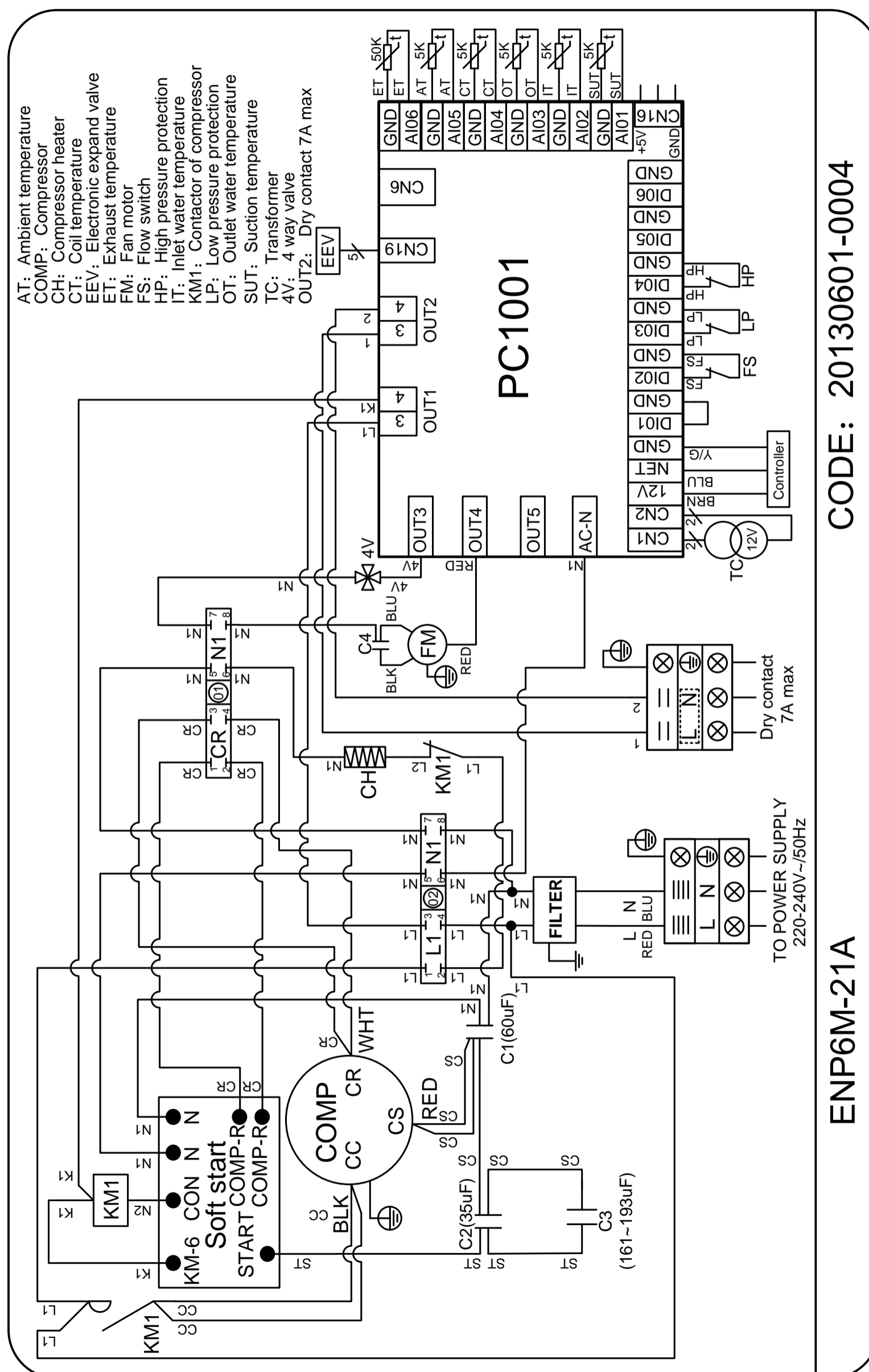


ENP3M-13A

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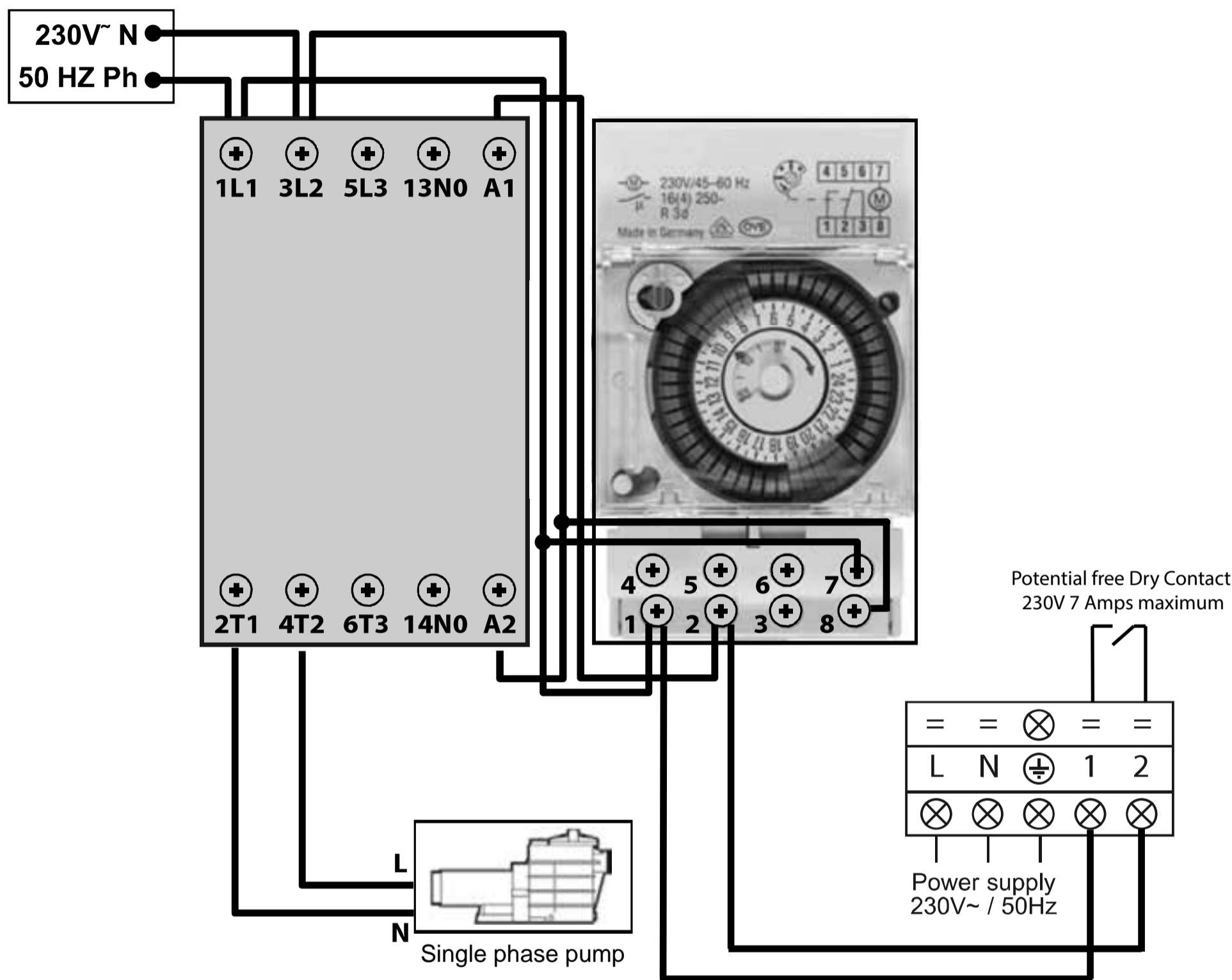
## 6. APPENDIX (continued)

# ENP6M-21A



# 6. APPENDIX (continued)

## 6.2 Heating priority wiring



The Heat Priority Control components are to be installed by a qualified electrical contractor in accordance with AS/NZS 3000 Wiring rules.

Wire terminals 1 & 2 to the timer as shown in the above diagram.

Set the circulation pump to run for 2 minutes every hour so that the heat pump can check the water temperature. If the temperature of the pool is lower than the set point of the heat pump, the circulation pump will continue to run until the set point temperature is reached.

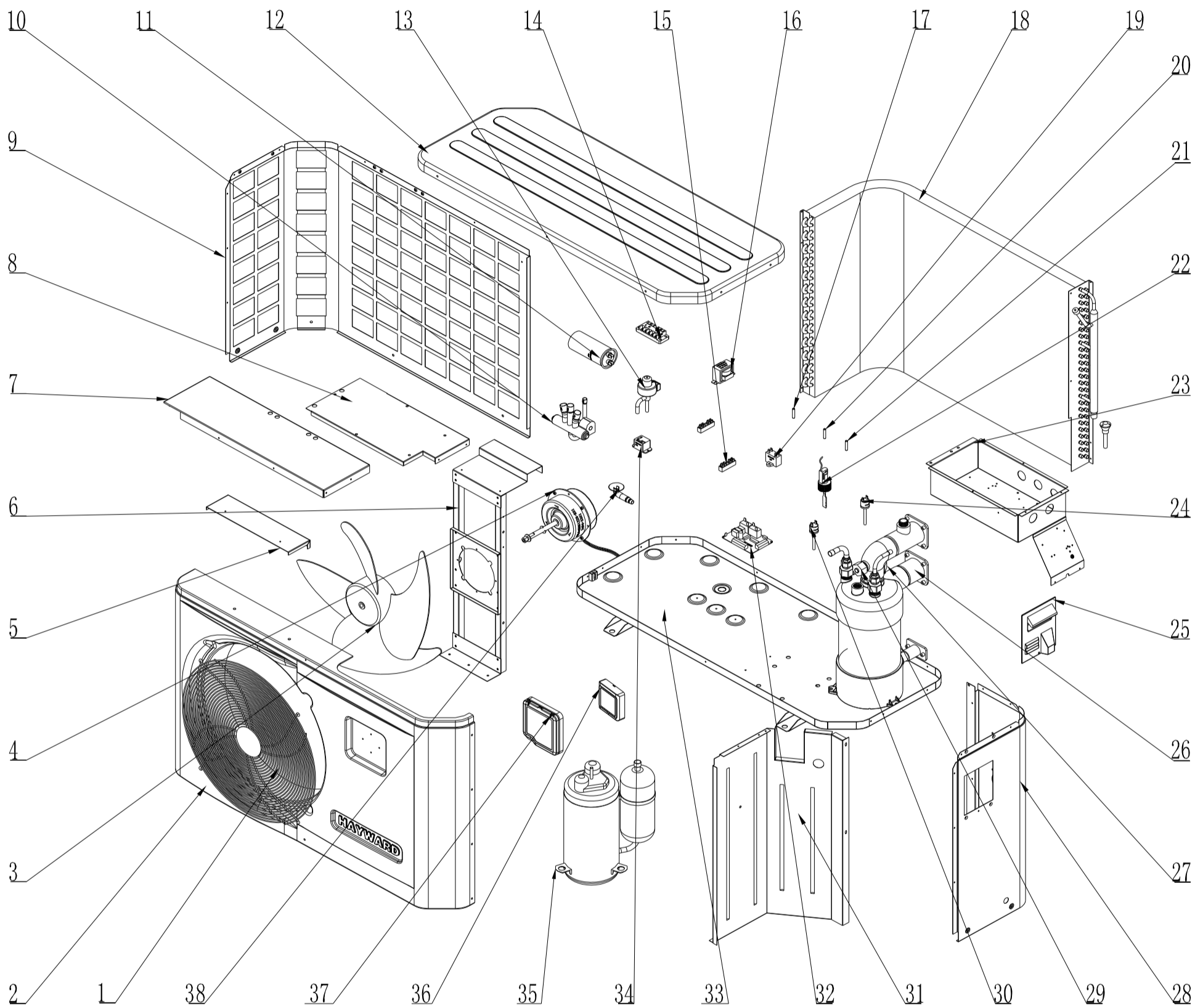


**Never connect a circulation pump directly to terminals 1 & 2.**



# 6. APPENDIX (continued)

## ENP2M-9A



# 6. APPENDIX (continued)

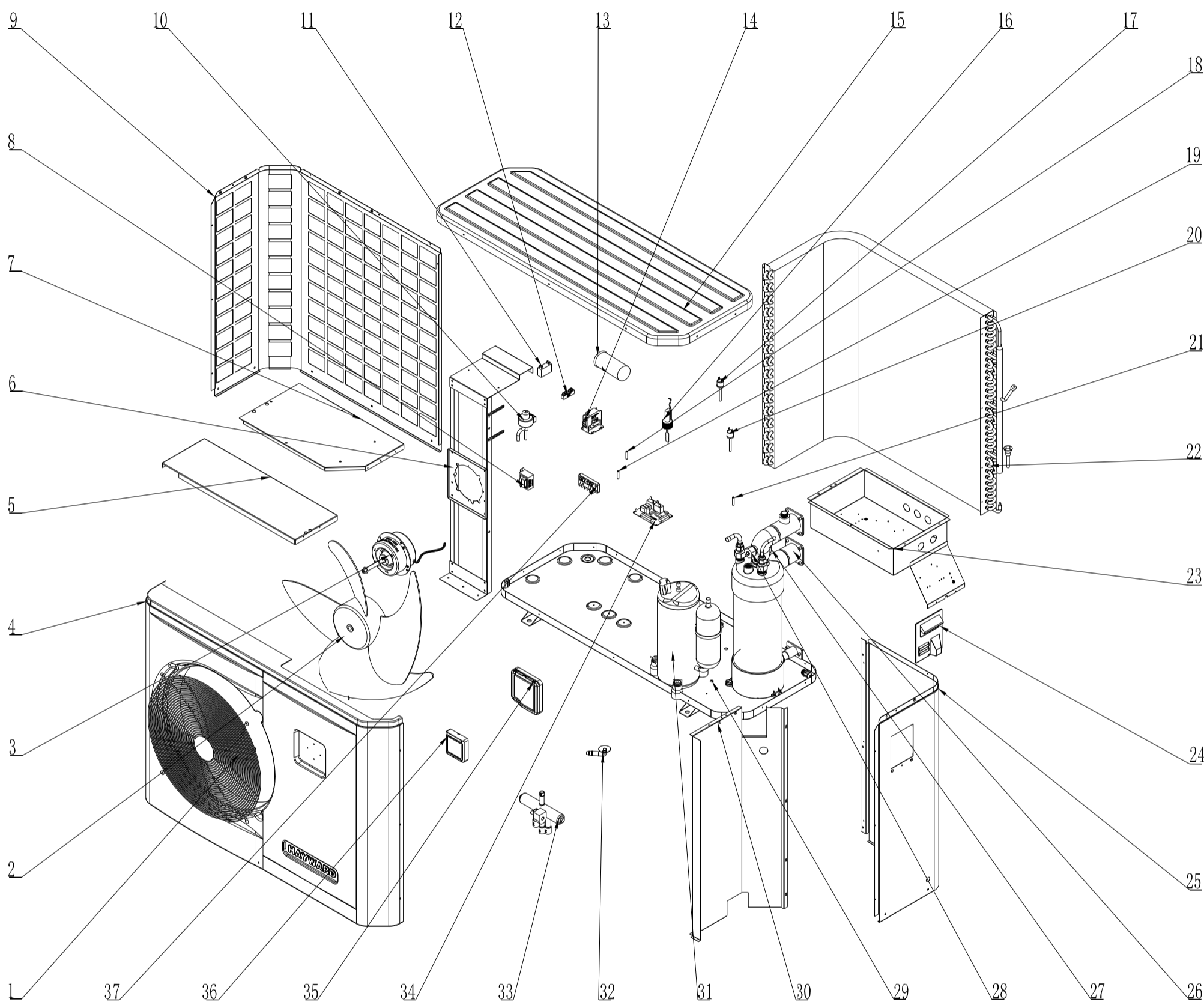
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## ENP2M-9A

| Item # | Part Number   | Description                     |
|--------|---------------|---------------------------------|
| 1      | HWX200022188  | Protection cover                |
| 2      | HWX320822002  | Front panel                     |
| 3      | HWX35002701   | Fan blade assy                  |
| 4      | HWX34043301   | Fan motor                       |
| 5      | HWX320821069  | Protection panel                |
| 6      | HWX321221108  | Fan motor bracket               |
| 7      | HWX321221077  | Support panel                   |
| 8      | HWX321221079  | Electrical box cover            |
| 9      | HWX320821072  | Left panel                      |
| 10     | HWX20041437   | 4 way valve                     |
| 11     | HWX20003510   | Compressor capacitor 60 $\mu$ F |
| 12     | HWX320822021  | Top cover                       |
| 13     | HWX2000140346 | Electrical expansion valve      |
| 14     | HWX40003901   | Terminal block (5 connections)  |
| 15     | HWX20003909   | Terminal block (2 connections)  |
| 16     | HWX200037003  | Transformer 230V~ 12V           |
| 17     | HWX20003242   | Air temperature sensor          |
| 18     | HWX320812009  | Fin coil                        |
| 19     | HWX20003501   | Fan motor capacitor 3 $\mu$ F   |
| 20     | HWX20003223   | Exhaust temperature sensor      |
| 21     | HWX20003242   | Coil temperature sensor         |
| 22     | HWX200036005  | Flow switch                     |
| 23     | HWX321221078  | Electrical box                  |
| 24     | HWX20003603   | Low pressure switch             |
| 25     | HWX320822042  | Protection cover                |
| 26     | HWX320812008  | PVC-Titanium condenser          |
| 27     | HWX20003242   | Water inlet sensor              |
| 28     | HWX320821071  | High pressure switch            |
| 29     | HWX20003242   | Water outlet sensor             |
| 30     | HWX20013605   | High pressure switch            |
| 31     | HWX321221076  | Centre wall                     |
| 32     | HWX9505311452 | Main PCB                        |
| 33     | HWX320821007  | Chassis                         |
| 34     | HWX20003619   | Relay                           |
| 35     | HWX20011163   | Compressor                      |
| 36     | HWX950531247  | LCD control PCB                 |
| 37     | HWX200022068  | Waterproof cover                |
| 38     | HWX34002203   | Drain connector                 |

# 6. APPENDIX (continued)

## ENP3M-13A



## 6. APPENDIX (continued)

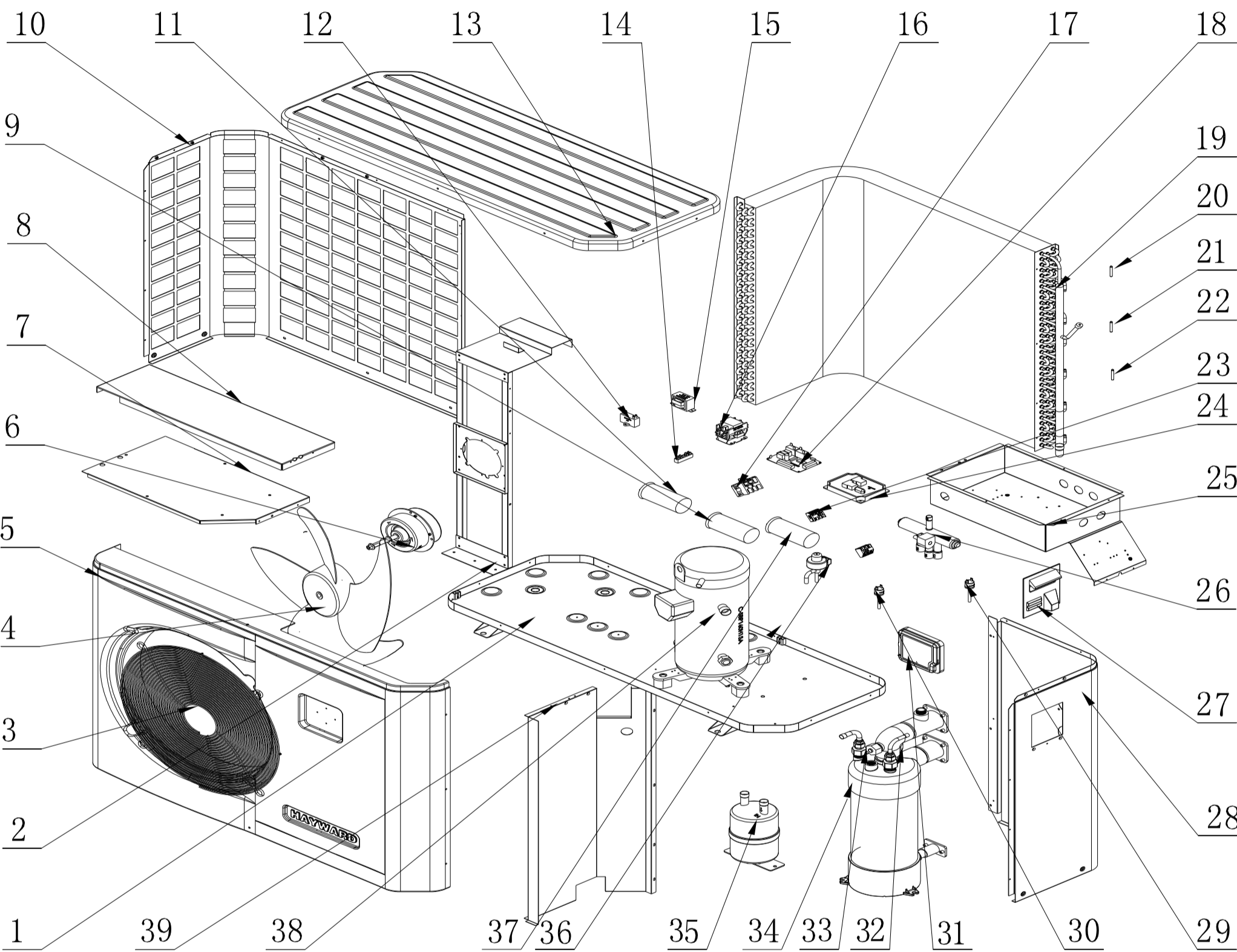
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### ENP3M-13A

| Item # | Part Number   | Description                     |
|--------|---------------|---------------------------------|
| 1      | HWX200022169  | Protection cover                |
| 2      | HWX35002701   | Fan blade assy                  |
| 3      | HWX340433134  | Fan motor                       |
| 4      | HWX320822015  | Front panel                     |
| 5      | HWX320921025  | Support panel                   |
| 6      | HWX320921236  | Fan motor bracket               |
| 7      | HWX320921024  | Electrical box cover            |
| 8      | HWX200037003  | Transformer 230V~ 12V           |
| 9      | HWX320921090  | Back panel                      |
| 10     | HWX2000140346 | Electrical expansion valve      |
| 11     | HWX20003509   | Fan motor capacitor 5 $\mu$ F   |
| 12     | HWX20003909   | Terminal block (2 connections)  |
| 13     | HWX20003510   | Compressor capacitor 60 $\mu$ F |
| 14     | HWX200036006  | Relay (compressor)              |
| 15     | HWX320922016  | Top cover                       |
| 16     | HWX200036005  | Flow switch                     |
| 17     | HWX20003603   | Low pressure switch             |
| 18     | HWX20003223   | Exhaust temperature sensor      |
| 19     | HWX20003242   | Coil temperature sensor         |
| 20     | HWX20013605   | High pressure switch            |
| 21     | HWX20003242   | Air temperature sensor          |
| 22     | HWX351212001  | Fin coil                        |
| 23     | HWX320921021  | Electrical box                  |
| 24     | HWX320822008  | Protection cover                |
| 25     | HWX320921089  | Right panel                     |
| 26     | HWX320912013  | PVC-Titanium condenser          |
| 27     | HWX20003242   | Water inlet sensor              |
| 28     | HWX20003242   | Water outlet sensor             |
| 29     | HWX320921235  | Chassis                         |
| 30     | HWX320921023  | Centre wall                     |
| 31     | HWX200011027  | Compressor                      |
| 32     | HWX34002203   | Drain connector                 |
| 33     | HWX20041437   | 4 way valve                     |
| 34     | HWX9505311453 | Main PCB                        |
| 35     | HWX200022068  | Waterproof cover                |
| 36     | HWX950531247  | LCD control PCB                 |
| 37     | HWX40003901   | Terminal block (5 connections)  |

# 6. APPENDIX (continued)

## ENP6M-21A



# 6. APPENDIX (continued)

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## ENP6M-21A

| Item # | Part Number   | Description                          |
|--------|---------------|--------------------------------------|
| 1      | HWX320921235  | Chassis                              |
| 2      | HWX320921236  | Fan motor bracket                    |
| 3      | HWX200021089  | Protection cover                     |
| 4      | HWX35002704   | Fan blade assy                       |
| 5      | HWX320922015  | Front panel                          |
| 6      | HWX200033134  | Fan motor                            |
| 7      | HWX320921024  | Electrical box cover                 |
| 8      | HWX320921025  | Support panel                        |
| 9      | HWX20003504   | Compressor capacitor 35 $\mu$ F      |
| 10     | HWX320921090  | Back panel                           |
| 11     | HWX20003511   | Compressor capacitor 161-193 $\mu$ F |
| 12     | HWX20003509   | Fan motor capacitor 5 $\mu$ F        |
| 13     | HWX320922016  | Top cover                            |
| 14     | HWX20003909   | Terminal block (2 connections)       |
| 15     | HWX200037003  | Transformer 230V~ 12V                |
| 16     | HWX200036007  | Relay (compressor)                   |
| 17     | HWX20003920   | Terminal block (3 connections)       |
| 18     | HWX9505311456 | Main PCB                             |
| 19     | HWX320112002  | Fin coil                             |
| 20     | HWX20003242   | Coil temperature sensor              |
| 21     | HWX20003242   | Air temperature sensor               |
| 22     | HWX20003223   | Exhaust temperature sensor           |
| 23     | HWX20003933   | Terminal block (3 connections)       |
| 24     | HWX20003151   | Smart starter                        |
| 25     | HWX320921021  | Electrical box                       |
| 26     | HWX20011491   | 4 way valve                          |
| 27     | HWX320822008  | Protection cover                     |
| 28     | HWX320921089  | Right panel                          |
| 29     | HWX20003603   | Low pressure switch                  |
| 30     | HWX20013605   | High pressure switch                 |
| 31     | HWX200022068  | Waterproof cover                     |
| 32     | HWX20003242   | Water inlet sensor                   |
| 33     | HWX20003242   | Water outlet sensor                  |
| 34     | HWX320112003  | PVC-Titanium condenser               |
| 35     | HWX35001401   | Liquid tank                          |
| 36     | HWX2000140237 | Electrical expansion valve           |
| 37     | HWX20003510   | Compressor capacitor 60 $\mu$ F      |
| 38     | HWX2000111112 | Compressor                           |
| 39     | HWX320921023  | Centre wall                          |
| 40     | HWX200036005  | Flow switch (not shown)              |
| 41     | HWX34002203   | Drain connector (not shown)          |
| 42     | HWX950531247  | LCD control PCB (not shown)          |

## 6. APPENDIX (continued)

### 6.4 Troubleshooting guide



***Certain operations must be carried out by an authorized technician.***

| Problem   | Error codes | Description   | Solution  |
|---|-------------|---|---|
| Water inlet sensor defect.  | P01         | The sensor is open or presents a short-circuit.   | Verify or replace the sensor.   |
| Water outlet sensor defect.                                       | P02         | The sensor is open or presents a short-circuit.   | Verify or replace the sensor.   |
| De-icing sensor defect.   | P05         | The sensor is open or presents a short-circuit.   | Verify or replace the sensor.   |
| Exterior temperature sensor defect.                               | P04         | The sensor is open or presents a short-circuit.   | Verify or replace the sensor.   |
| The inlet and outlet difference in water temperature is too high. | E06         | Water flow volume is insufficient, water pressure difference is too low/too high.   | Verify the water flow, or system obstruction.   |
| Antifreeze Protection Cold mode                                   | E07         | Water outlet quantity is too weak.  | Verify the water flow, or the outlet water temperature sensor.  |
| Level 1 antifreeze protection                                     | E19         | Air temperature or water inlet temperature is too weak.   |   |
| Level 2 antifreeze protection                                     | E29         | Air temperature or water inlet temperature is still too weak.   |   |
| High pressure protection  | E01         | Pressure of the refrigeration circuit is too high, or the water flow is too low, or the coil is obstructed or the air flow is too weak. | Verify the high pressure switch and the refrigeration circuit pressure.<br>Verify the water or air flow.<br>Verify that the flow switch is working correctly.<br>Verify the water inlet/outlet valve openings.<br>Verify the by-pass setting. |
| Low pressure protection   | E02         | Refrigeration circuit pressure is too weak, or air flow is too weak or the coil is obstructed.  | Verify the low pressure switch and the refrigeration circuit pressure to determine if there is a leak.<br>Clean the coil surface.<br>Verify the fan rotation speed.<br>Verify that there is free air flow to the coil.                        |
| Flow detector defect  | E03         | Water flow is insufficient or the detector is in short-circuit or defective.  | Verify the water flow, verify the filtration pump and the flow detector to see if they have any possible problems.  |
| Communication problem   | E08         | Problem with the LED controller or the PCB connection.  | Verify the cable connection.  |
| The compressor will not start                                     |             | Phase missing or phase order incorrect  | check that the 3 phases are present<br>modify the phase order at the heat pump's electrical connection terminal block   |

## 6. APPENDIX (continued)

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### 6.5 Warranty



#### Warranty – Standard Conditions

Hayward Pool Products (Australia) Pty Ltd (ACN 083 413 414) ("Hayward Pool Products (Australia)") distributes Hayward Pool Products in Australia and New Zealand and provides the following warranties:

##### STATUTORY RIGHTS

1. The benefits to the consumer under this warranty are in addition to other rights and remedies of the consumer under the laws in relation to the goods and services to which the warranty relates; and
2. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You may be entitled to a replacement or refund for a major failure and for compensation for any other loss or damage. You are also entitled to have the goods repaired if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

##### LIMITED WARRANTY

Hayward Pool Products (Australia) warrants that its products are free from defects in materials and manufacture for 12 months from date of supply by Hayward Pool Products (Australia) plus 90 days to allow for installation and supply (unless otherwise specified). Hayward Pool Products (Australia) will at its discretion, except in the circumstances described below, either replace or repair any product proven to be defective during the warranty period for either materials or manufacture or alternatively pay the cost of repair or replacement within 90 days of the receipt of the defective product, barring unforeseen delays. This warranty is personal to the original purchaser and does not pass to any subsequent purchaser(s).

To the extent permitted by law, Hayward Pool Products (Australia) will not be liable for products which fail or become defective during the warranty period as a result of freezing, accident, negligence, improper installation, water chemistry, misuse or lack of care.

To the extent permitted by law, except as set out in this Warranty, Hayward Pool Products (Australia) excludes all statutory or implied conditions and warranties and any other liability it may have to the Customer (including liability for indirect or consequential loss) that may arise under statute or at law including without limitation for breach of contract, in tort (including negligence) or under any other cause of action.

To the extent permitted by law, except as set out in this Warranty, Hayward Pool Products (Australia) limits its liability under any condition or warranty which cannot be legally excluded in relation to the supply of Goods and Services to:

1. Replacing the Goods or supplying equivalent Goods or Services again;
2. Repairing the Goods;
3. Paying the cost of replacing the Goods or of supplying equivalent Goods or Services again; or
4. Paying the costs of repairing the Goods.

##### PRODUCTS REQUIRING QUALIFIED INSTALLATION

Some products due to their technical nature are only intended for sale by retail shops where local sales and technical support can be provided or as a part of a new Pool Installation. Where installation has not been carried out in accordance with this requirement, warranty labour and support will be the sole responsibility of the reseller supplying the product. Warranty claims for such products will be limited to replacement of parts only, with faulty goods being returned to place of purchase for processing.

The following products as well as those that may be designated by Hayward Pool Products (Australia) from time to time, are not specifically intended for owner installation and are deemed to be technical products:-

- Heaters - All;
- Hayward Dosing and Chemistry Control;
- Hayward Pool and Spa Controls;
- Puresilk Dosing and Chemistry Control;

Claims made for warranty, labour or infield support will not be accepted by Hayward Pool Products unless evidence is provided that installation has been completed in accordance with standard warranty conditions. Please refer to specific program document for details.



## 6. APPENDIX (continued)

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### HEATING PRODUCTS

Please note that warranty claims for Heaters are handled directly by Hayward Pool Products (Australia) and are not authorised for over the counter exchanges. These items are site specific and involve local conditions such as placement, installation, water chemistry, fuel supply and electricity. Each unit needs to be evaluated on the site utilising Hayward Pool Products (Australia)'s authorised service network. Hayward Pool Products (Australia) will not be responsible for additional costs incurred where a heater has been installed at a location situated further than 25km from an authorised service outlet. Advice must be sought in writing from Hayward Pool Products (Australia) to determine appropriate service procedure on a case by case basis. Under no circumstances should a complete Heater or Heat Pump be returned without prior written approval from either Hayward Pool Products (Australia)'s warranty department or your local Branch Customer Service Centre.

### WHAT TO DO IF YOU HAVE A WARRANTY CLAIM

The faulty product is to be returned to the place of purchase, or where installed by an approved agent to an authorised warranty agent. No returns will be received directly from end consumers by Hayward Pool Products (Australia). You are responsible for arranging removal of the defective product and arranging installation of the repaired or replacement product, all transportation (and any applicable insurance costs) of transporting the product to the supplier and transporting the replaced or repaired product from the supplier.

All returns are subject to Hayward Pool Products (Australia)'s written approval and must be accompanied by either:-

1. A Field Inspection Report authorised by the Local Customer Service Manager or Authorised Agent; or
2. A "Return Goods Authorisation" form obtained from Hayward Pool Products (Australia) prior to shipment.

Unauthorised returns will not be accepted.

All Hayward Pool Products (Australia) warranty parts taken as an across the counter warranty exchange must be held for inspection until authorisation has been given by the Local Branch Customer Service Manager to dispose of them. Hayward Pool Products (Australia) reserves the right to provide replacement or credit for any items authorised under this warranty program.

All claims must be accompanied by a copy of original purchase receipt, clearly stating date of purchase. All serial numbers must place the product within the warranty period or a proof of purchase is required. No claims in respect of the product can be made after the expiration of the warranty period.

Warranty service requests can be faxed to:

**Hayward Pool Products (Australia) Pty Ltd.**

**Fax: 1300 POOLS2 (1300 766571)**

Or submitted to your local Hayward Pool Products (Australia) Branch Office.

A standard form is available to request warranty service. We will require:

- Installation contact information including address, daytime telephone numbers, home phone number, email etc.
- Complete model and serial number
- Proof of purchase (if the serial number was manufactured > 1 year ago).
- Evidence that purchase and Installation was completed in one transaction, by the one business or organisation.
- Nature of problem including specific faults and error codes

Hayward Pool Product (Australia) Pty Ltd

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**F (+61) 3 9794 9945 or 1300 POOLS2**

**email: [sales@hayward-pool.com.au](mailto:sales@hayward-pool.com.au) web: [www.hayward-pool.com.au](http://www.hayward-pool.com.au)**

**REGISTER YOUR HAYWARD POOL PRODUCTS WARRANTY  
ONLINE TODAY AT: [www.hayward-pool.com.au](http://www.hayward-pool.com.au)**

