

evotherm®

HIGH PERFORMANCE HEAT PUMPS

EVOTHERM

HEAT PUMP CONTROLLERS



Installation and Operation Manual for **EVOTHERM HEAT PUMP CONTROLLERS**

H5RO-S

1.0 FOREWORD

- 1.1 The H5RO-S controller is suitable for separate/independent circulation pump systems in combination with 'Heat Demand' style of heater.
- 1.2 The H5RO-S Controller is designed to switch on a 240V AC circulation pump, controlled from the 'Heat Demand' output of the heater.
- 1.3 **⚠CAUTION:** This appliance is not intended for use by young children or infirm persons without supervision.
- 1.4 Note: Ideally, as with all pool equipment, the controller should be installed out of direct weather.

2.0 INSTALLATION & OPERATION

2.1 CONTROLLER MOUNTING

- 2.1.1 Find a suitable location to mount the control box.
- 2.1.2 The controller should be no closer than 3m from the pool edge and a minimum 600mm above ground. The power cable is 1.8m long and should be plugged directly into a general power outlet. Do not use an extension lead.
- 2.1.3 Fix the mounting bracket to a solid structure with the screw and wall plug kit provided. Slide the controller on, locking it into place. Adjust the screws on the back of the unit to ensure a snug fit.

2.2 PUMP CONNECTION

- 2.2.1 The circulation pump plugs into the 240V socket (labelled PUMP).
- 2.2.2 The maximum load is 9.98 AMPS at 2395W.

2.3 HEATER CONNECTION

- 2.3.1 Connect the Heater Output cable from the H5RO-S controller output (labelled HEATER) to the Heat Demand Contact located on the heater unit.
- 2.3.2 Check with the heater manufacturer for correct interlocking procedure.
- 2.3.3 The Heater Output is for low-voltage (MAX 24V at 1 AMPS) switching only.
- 2.3.4 Note: If the heater's external switching circuit is greater than 24V AC, an external relay kit (can be purchased separately) is to be installed by a licensed electrician.
- 2.3.5 Note: Damage caused by incorrect connections will void warranties.

2.4 HEAT DEMAND

- 2.4.1 As most pools are filtered for 8 hours a day, extra run times are often required to maintain the water at the desired temperature.
- 2.4.2 The heater is equipped with a Heat Demand function that will assist in maintaining the temperature of the pool by communicating to the H5RO-S.
- 2.4.3 The controller will power the circulation pump when heat is called for by the heater. The heater monitors the system temperature within its defined run times. By this means, the desired water temperature is maintained.

3.0 INSTALLATION DIAGRAM

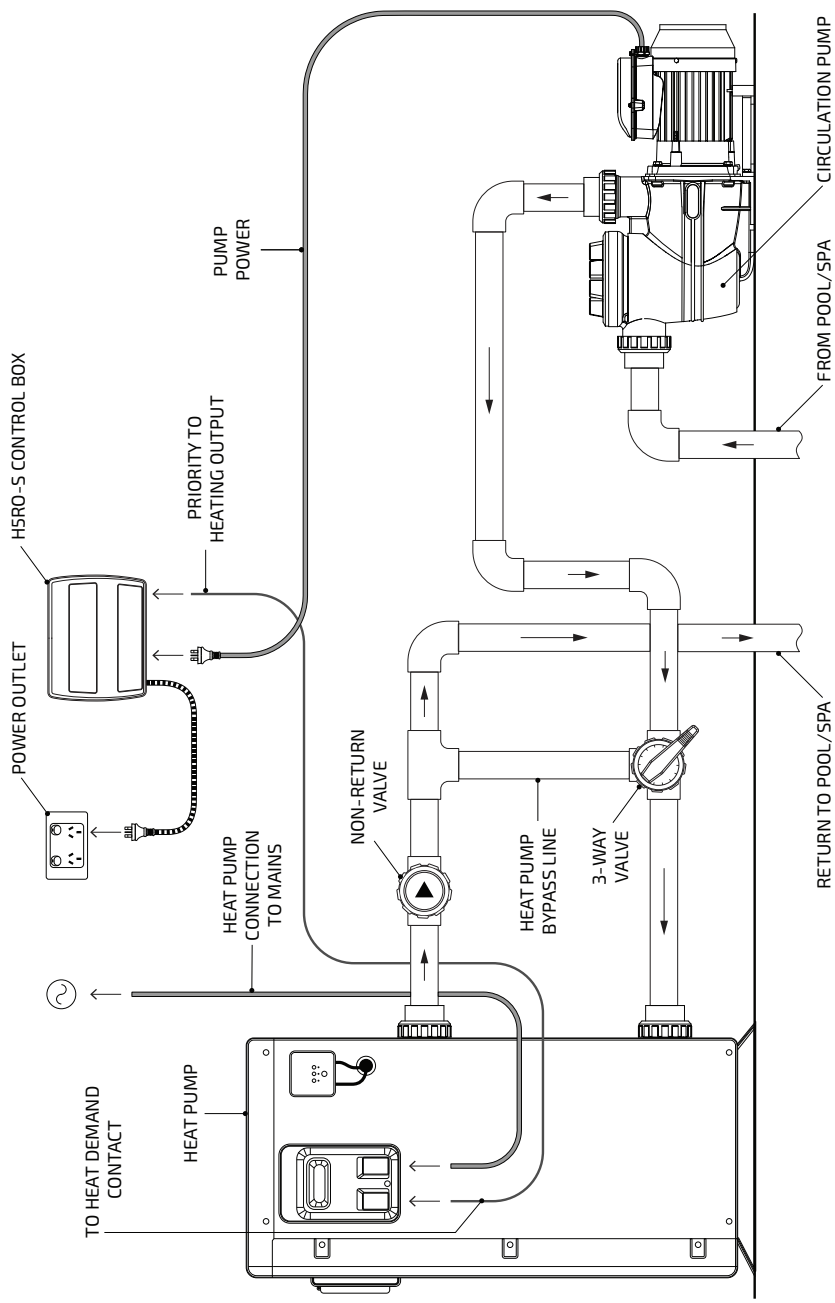


Fig. 1

4.0 BASE DIAGRAM

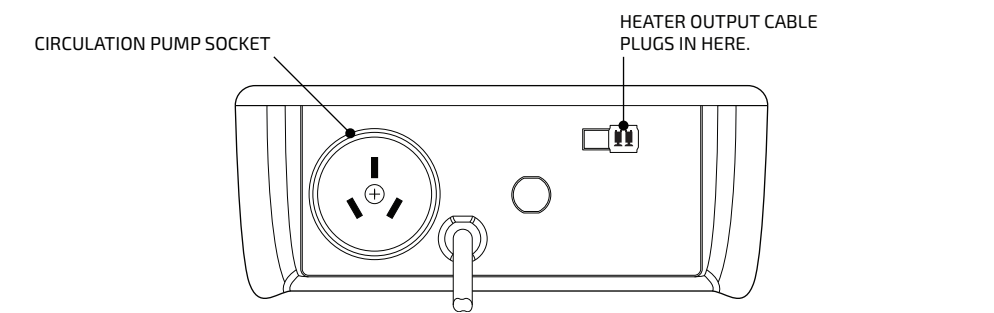


Fig. 2

5.0 TROUBLESHOOTING

Fault/Problem	Possible Causes and Remedies
Pump will not start	The pump will only ever run for the purpose of automatic heating if the pool is below the temperature limit set in the heater. If the pump does not operate, then plug the pump into a power point and test. If the pump is OK then the controller requires repair.
Pump will not stop	Turn off power to the controller, ensure the pump stops. If the pump continues to operate then unplug it from the power point and connect it to the 240V AC socket marked PUMP at the bottom of the controller.
Pool not heating	Ensure that the Heater Output cable is connected to the plug properly and that the plug is pushed in.
	Check that the heater has power connected.
	Check that the Heater Output cable is connected to the appropriate position inside the heater, according to the heater manufacturer's instructions.

6.0 WARRANTY

- 6.1 This range of product is covered by a 2 year limited warranty against component failure or faulty workmanship from the date of installation.
- 6.2 Faulty units should be returned in the first instance to the dealer from which the unit was purchased.
- 6.3 Damage to the unit due to misuse, power surges, corrosion from pool chemical fumes, lightning strikes and or installation that is not in accordance with the manufacturer's instruction may void the warranty.
- 6.4 Warranty does not include on-site labour or travel costs to or from installation site.