

# **hurlcon heating**

## **HM Series Hydronic Boilers**

### **INSTALLATION AND OPERATING INSTRUCTIONS**



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## 1.0 INTRODUCTION

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Congratulations on your purchase of a Hurlcon Hydronic Boiler. Correct installation and service of your new heating system and correct chemical maintenance of the water will ensure years of service. The HM Series Boiler is a compact lightweight and efficient gas fired hydronic boiler. It is equipped with features that take advantage of new technology developed exclusively by Hurlcon.

The Hurlcon is a floor mounted atmospheric boiler with a built in balanced flue for outdoor installation. The power output is controlled by an integrated electronic controller to maintain the set point water temperature over a wide load range. In addition, the Hurlcon Hydronic Boiler is equipped with electronic ignition. The electronic display tells at a glance the operational status of the boiler.

**Note:**

The appliance is not intended for use by young children or infirm person without supervision. Please ensure that young children are supervised to ensure that they do not play with the appliance.

## 1.1 NOTICE TO INSTALLERS

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This is a Floor Mounted - External - Hydronic Central Heating Boiler  
For use with Natural Gas or LP Gas as per the attached data label.  
Australian Gas Association Tested AGA Approval No. 6423

*The information below is given to assist the installer with the installation of this range of HYDRONIC HM 200 - 500 Boilers. Please read it carefully in order to make the installation as easy as possible and to ensure the system works well and conforms to the necessary government regulations.*

**PLEASE READ THESE INSTRUCTIONS BEFORE STARTING THE INSTALLATION.**

**It is important that this boiler is installed and serviced as detailed in these instructions by an AUTHORISED person.**

**This boiler is to be installed and serviced to the requirements of the Local Building, Gas, Water and Electricity Authorities.**

**These instructions are to be held by the owner / user after installation.**

**This boiler must not be used for a SPA or POOL Boiler**

This appliance must be installed in accordance with the installation instructions, local gas fitting regulations, the AGA Installation Code AG 601 and any other relevant statutory authorities.

Refer to data plate for details of gas type, gas consumption and burner pressure.

## 2.0 HM MODELS AVAILABLE

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Model	250	300	400
Input MJ (NG)	240	288	350
Output kW	55	66	80

## 2.1 STANDARD EQUIPMENT – HM MODELS

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### Electronic control including.

- PID control with auto tune.
- Set point shift via building automation system
- Displays set and flow temperature.
- Electronic ignition

### Safety devices

- Built in flow switch
- Built in run on timer for pump
- Manual reset high limit
- Reliable in high wind areas

### Built to last

- All copper double row heat exchanger
- Bronze headers with brass sensor pockets
- Fully powder coated steel cabinet
- Powder coated flue terminal

### Efficiency

- Hot surface intermittent pilot
- Highly efficient stainless steel burners
- Double row - counter flow heat exchanger
- Out door compensation ready, just add outdoor sensor
- Electronic gas modulation turn down 3 : 1

### Ease of installation

- Fully plumbed ready to go
- All electrical pre wired including three pin power supply.
- Flow switch, run-on timer installed and wired
- Weather proof balanced flue external installation
- Terminal box for pump, outdoor compensation and room thermostat.

## 3.0 INSTALLATION

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### **THIS APPLIANCE MUST BE INSTALLED BY AN AUTHORISED PERSON.**

Refer to boiler data plate for specifications of gas type, gas consumption, burner pressure and water pressure.

This appliance must be installed in accordance with local regulations and A.G.A. Installation Code AG 601.

The boiler should always be installed downstream of the pump. The water connections are located on the left hand side of the boiler. Right hand connection models are available by special order. The inlet and outlet are clearly marked. Water connections are 1 ½" BSP FI.

The Hurlcon Boiler is fitted with a built in flow switch and will not start unless full of water and the pump is operating.

The Hurlcon Boiler incorporates a balanced flue terminal and is suitable for outdoor installation. An internal model is available on request.

**WARNING: An approved pressure relief valve must be fitted to this boiler before operation.**

## 3.1 SAFETY RULES

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For your safety – read before lighting

This appliance is equipped with an ignition device, which automatically lights the pilot. Do not try to light the pilot by hand.

BEFORE OPERATING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

### **Safety**

#### **What to do if you smell gas**

- Do not try to light any gas appliance.
- Do not touch any electrical switch.
- Turn off the gas supply at the gas meter.
- Immediately call your gas supplier or licensed gas fitter.

**NOTE. Some gases are heavier than air and it may be necessary to smell for leaks at floor level.**

#### **House keeping**

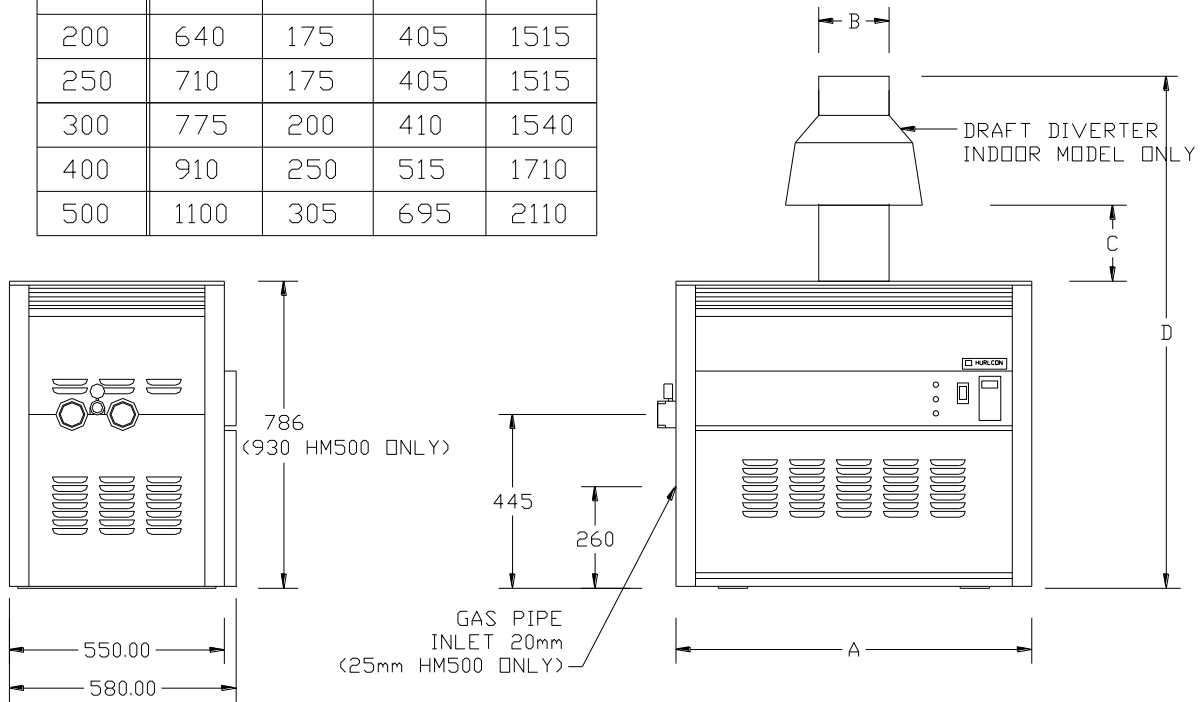
- Do not store or use flammable liquid or chemicals near this appliance.
- Do not use aerosols in the vicinity of this gas appliance.
- Keep this appliance free of debris.

**WARNING:** Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the appliance.

**Do not use this boiler if any part has been under water.**

### 3.2 BOILER DIMENSIONS

MODEL	DIM "A"	DIM "B"	DIM "C"	DIM "D"
200	640	175	405	1515
250	710	175	405	1515
300	775	200	410	1540
400	910	250	515	1710
500	1100	305	695	2110



### 3.3 INDOOR INSTALLATION

If the HM Boiler is to be installed indoors, an indoor draught hood kit must be purchased from Hurlcon and installed on the HM Boiler to convert it to an indoor model.

Product code numbers for draught hoods are:

Boiler model	Indoor top model	Flue size	Part number
HM 200	DH 20	175 mm	10966
HM 250	DH 25	175 mm	10964
HM 300	DH 30	200 mm	10967
HM 400	DH 40	250 mm	10965
HM 500	DH 50	300 mm	10968

A flue no smaller than the draught diverter diameter must be installed and terminated with an approved gas flue cowl (not a Chinaman's hat) 600mm above any roofline that is within 1.5 metres horizontally from the flue.

### 3.4 VENTILATION – AIR SUPPLY TO THE BOILER

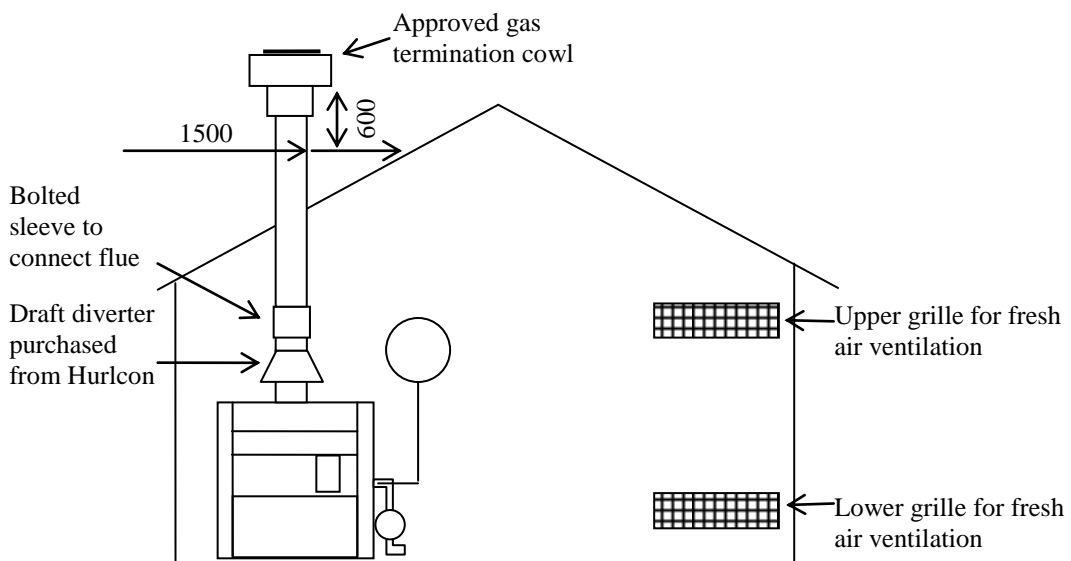
When installing the boiler indoors, it is imperative that an adequate supply of fresh air is provided for combustion. Failure to provide adequate ventilation voids all warranties and may be a danger to persons or property. Please refer to AGA 601 for full details.

Two permanent openings shall be provided directly to outside. The openings shall be located to ensure the distance between the top of the upper opening and the ceiling of the room or enclosure, and the distance between the bottom of the lower opening and the floor of the room or enclosure does not exceed 5% of the height of the room or enclosure.

The minimum vertical dimension of any free ventilation opening shall be 6 mm.  
The minimum free ventilation area provided by each opening shall be:

MODELS HM	200	250	300	400	500
AREA mm <sup>2</sup>	65,000	80,000	100,000	130,000	160,000

The following diagram is provided as a guide only. All flueing and installation work must be carried out by an authorized person. Flueing must conform to local regulations and to A.G.A. installation code AG 601. Care must be taken to provide the correct ventilation and correct flueing materials in close proximity to combustible surfaces.



**A Hurlcon indoor draught diverter must be fitted to unit in accordance with Hurlcon’s Instructions and Installation Codes before the boiler can be enclosed.**

**Do not install spa blowers in the same room as a gas boiler. This is potentially dangerous to spa users.**

**Do not store chemicals or fuel in the same room as the gas boiler. This may cause fire or explosion. When installing in a garage the HM Boiler must be installed 450 mm above floor level.**

### 3.5 CLEARANCES

The boiler must be installed at least 500 mm from any combustible surface. Clearances must comply with AG 601.

Clearances from non combustible surfaces are:

Front	500mm
Both sides	500mm
Rear	500mm
Above	1500mm
Combustible Surfaces	500mm Minimum

Recommended service clearances 500mm on both sides and 1000 in front for component removal, connections and servicing.

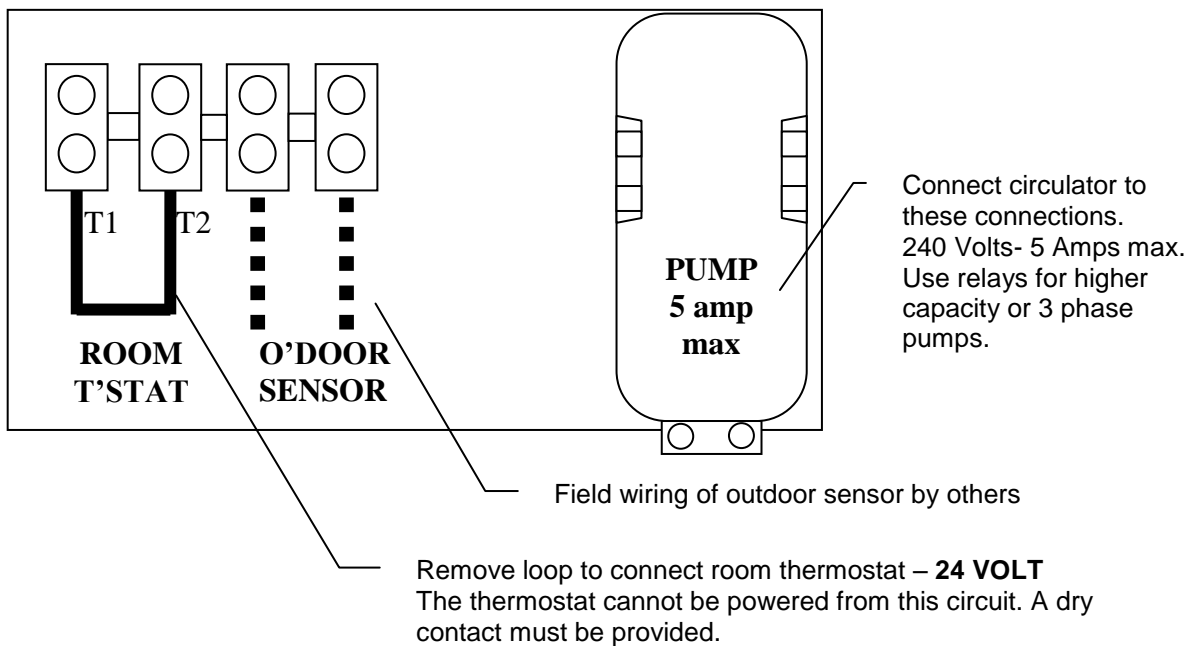
**Boiler must be installed on a fireproof base.**

### 3.6 ELECTRICAL CONNECTION

The boiler is supplied with a standard 10 amp 3 pin plug for connection to a 240V 10 amp GPO. The boiler incorporates a 240/24 VAC transformer which supplies power to the control circuit only and must not be used for any additional equipment. All equipment connected to mains power should be protected by an RCD circuit breaker. The boiler has a 240 volt power supply for the pump electrical connection which incorporates the pump run on timer. A terminal strip is provided for a 24 volt room thermostat and the addition of an outdoor compensation sensor.

If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

Electrical connections





### 3.7 GAS CONNECTION

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The gas connection is on the left side of the boiler. A 20 mm (25mm for HM 500) flare nipple is provided for gas line connection. An approved manual shut off valve must be installed in the gas fitting line before the boiler so that the gas can be turned off and the boiler removed for servicing if required. The gas valves should be sized the same as the gas fitting line to prevent excessive pressure drop in the gas pipe.

The gas fitting line should be installed by an authorised person and comply with local regulations and A.G.A. code AG 601. The gas line from the meter will usually be of a larger size than the gas inlet connection. Therefore a reduction to the boiler connection fitting will be necessary. The reduction should be as close to the boiler as possible.

Before using the boiler, test all connections for gas leaks using soapy water.

The boiler gas valve has a built in pressure regulator. A 1/8" pressure test point is provided on the burner manifold. On starting the boiler, a manometer must be used and burner pressure checked against the boiler data plate. The gas valve regulator may need adjustment to correct manifold pressure. Incorrect burner pressure may void warranty.

### 3.8 PUMP SELECTION:

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If a pump has not been supplied by your Dealer as part of this Boiler package, it will be necessary to size the Pump in accordance with the following flow rate and pressure drop chart. System pressure drop will need to be added to the corresponding boiler pressure drop.

<b>FLOW RATES &amp; PRESSURE DROPS</b>				
<b>Boiler Model</b>		<b>250</b>	<b>300</b>	<b>400</b>
10 Deg C Rise	Flow l/s	1.33	1.59	2.13
	Boiler pressure drop kPa	1.90	2.50	5.10
15 Deg C Rise	Flow l/s	0.89	1.06	1.42
	Boiler pressure drop kPa	1.60	2.00	4.20
20 Deg C Rise	Flow l/s	0.66	0.80	1.06
	Boiler pressure drop kPa	0.44	0.69	1.47

## 4.0 COMMISSIONING

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### 4.1 STARTING THE BOILER

1. Purge gas line of any air and wait five minutes for gas to clear.
2. Plug three pin plug into a suitable power point and switch on. The READY indicator should light. Digital controller should now operate and indicate water temperature
3. Pump should start, the FLOW indicator should light.
4. Turn Burner Switch ON.
5. After a few seconds, the burner should ignite. Ignition will be confirmed by the BURNER indicator.
6. If the burner fails to light, check FLOW indicator is on. Turn burner switch off then on to reset ignition system.

### 4.2 TESTING BURNER PRESSURE

1. Set up manometer
2. Turn boiler "OFF".
3. Remove screw from 1/8" brass test point located on outlet side of gas valve/burner manifold
4. Connect manometer tube to test point
5. Turn boiler "ON" and wait for main burner to ignite and gas modulation to go to fully open.
6. Once main burner has ignited, the manometer must indicate the nominal burner pressure listed below.
7. To adjust gas valve regulator, remove regulator adjustment cap and, using a screwdriver, turn plastic bush clockwise to increase, anti-clockwise to decrease burner pressure.

#### Maximum inlet gas pressure is:

Natural Gas    3.5 kPa                  Propane Gas    3.5 kPa                  ULPG    3.5 kPa

#### Nominal burner pressure is:

		HM 250	HM 300	HM 400
Natural Gas kPa	High Flame	0.82	0.82	0.75
	Low Flame	0.10	0.10	0.10
Propane Gas kPa	High Flame	2.50	2.50	2.50
	Low Flame	0.80	0.80	0.80
ULPG kPa	High Flame	2.00	2.00	2.00
	Low Flame	0.80	0.80	0.80

## 4.3 CHECKING MINIMUM GAS PRESSURE

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1. Set up manometer
2. Turn boiler "OFF".
3. Remove screw from 1/8" brass test point located on outlet side of gas valve/burner manifold
4. Connect manometer tube to test point
5. Turn boiler "ON" and wait for main burner to ignite.
6. Press and hold EXIT button for 5 seconds. Hand indicator lights.
7. Press and hold Decrease button to move gas ball valve to lowest setting.
8. Read gas pressure.

## 4.4 ADJUSTING MINIMUM GAS PRESSURE

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### **Increasing minimum gas pressure**

1. Press Increase button until correct pressure is reached.
2. Release locking screw.
3. Move actuator to lowest setting.
4. Tighten locking screw.
5. Return to automatic operation by pressing EXIT for 5 seconds.

### **Decreasing minimum gas pressure**

1. Release locking screw.
2. Move actuator toward the maximum setting.
3. Tighten locking screw.
4. Press and hold Decrease button to move gas valve to lowest setting.
5. Repeat until correct minimum gas pressure is achieved.
6. Return to automatic operation by pressing EXIT for 5 seconds.

## 4.5 FLOW SWITCH

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The Hurlcon Boiler has an inbuilt flow switch which allows the burner to operate only when the system is full of water and the circulating pump is operating. NOTE: The installed flow switch has no user adjustments. Air in the system may stop the boiler from lighting

## 5.0 OPERATING INSTRUCTIONS

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- STOP! Read the safety rules above.
- Turn off electric power to appliance.
- This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- Wait five minutes to clear out any gas. If you then smell gas, STOP! Refer to instructions above.
- Turn on power to appliance.
- Turn Burner Switch ON. The boiler will ignite in around 10 seconds.
- If the appliance will not operate, turn burner switch OFF for 5 seconds, then ON again. If the appliance still does not ignite, call your service technician.

### TO TURN GAS OFF TO APPLIANCE

- Turn off all electrical power to the appliance.
- Turn off gas tap in gas line prior to boiler.

## 5.1 FROST PROTECTION

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If there is any possibility of the boiler being left cold during frost conditions, an approved anti-freeze should be added.

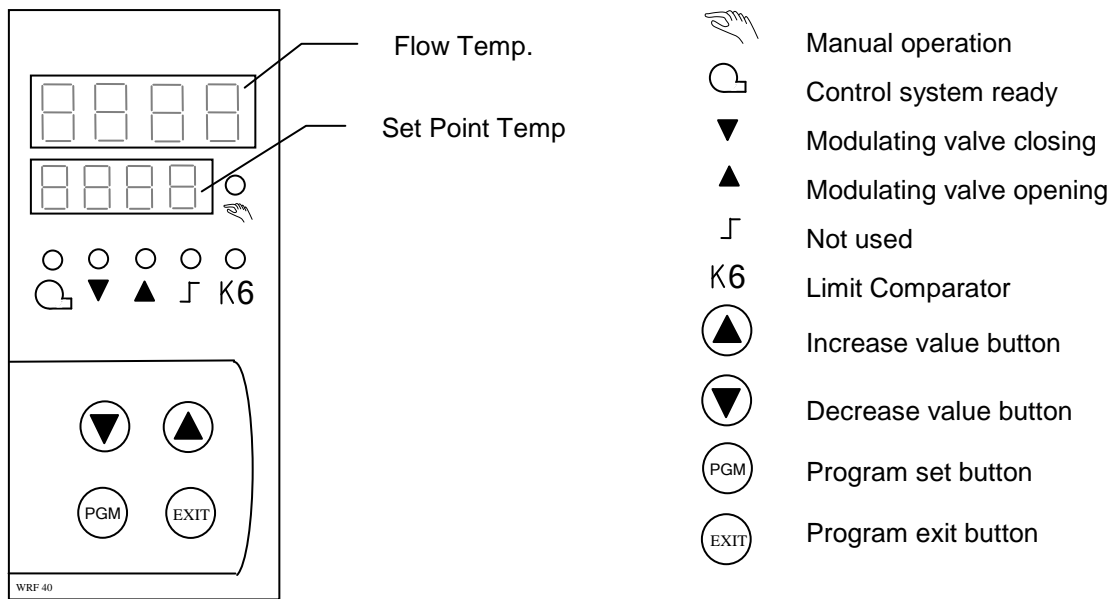
## 5.2 ENERGY SAVING TIPS

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- Make sure the ingress of cold air under doors and through gaps around windows is kept to a minimum.
- All open fire chimneys evaporative air-conditioning ducts etc should be closed to stop the loss of warm air.
- During the summer or while on vacation, turn the boiler off.
- Set up a regular program of preventative maintenance for the boiler each new heating season. Check heat exchanger, controls, burner operation etc.
- If the heating system will not be used for a prolonged period, turn the boiler off at the main gas valve and electrical power supply.

## 5.3 CONTROL SYSTEMS

### DIGITAL CONTROLLER OPERATION



### DESCRIPTION

The sophisticated digital thermostat controller provides display of water flow temperature, set point temperature and operating status of the boiler.

### TEMPERATURE DISPLAY

The **RED** display indicates the flow water temperature from the boiler. The **GREEN** display indicates the boiler water flow set temperature.

The controller is set to Hurlcon factory default settings at the time of manufacture. These settings are suitable for a wide range of applications but may require fine tuning depending on individual project specifications and characteristics. A detailed Siemens RWF 40 product manual is available on request which details how all settings are made and the auto tune function is activated.

Standard settings are as follows

Radiator & Fan Coil System -

Set temp	Dead zone	High limit Automatic reset	High Limit Manual Reset
80 °C	± 5 °C	85 °C	90 °C

## OPERATION

Sequence of events once the boiler has been correctly installed with the room thermostat and burner turned off.

Event	Result
Turn on electrical power to the boiler	Controller powers up and completes test procedure. Pump starts up. Flow indicator on.
Turn on burner switch. Turn on room thermostat	Ignition sequence begins; checks water flow, high limit and flow temperature against set temperature. Modulation valve adjusts gas rate. Ready indicator on Burner lights. Burner indicator on.
Water flow reaches set temperature.	Modulation valve has reduced gas flow to hold set temperature. All indicators on
Water flow temperature reaches set temperature plus 5 °C	Burner turns off. Burner indicator off
Water flow temperature falls to set temperature.	Modulating gas valves starts to open. Burner relights. Burner indicator on
Water flow temperature reaches 90 °C	High limit switch opens, burner shuts down. Pump continues to run for preset time.
Burner switch turned off	Burner shuts down, pump continues to run. Ready indicator off.
Room thermostat switches off	Burner shuts down; pump continues to run for preset time. Ready indicator off.
Room thermostat switches on	Pump restarts, burner ignites.
Water flow stopped by external control	Flow switch de-activates, burner turns off and pump continues to run for preset time. Flow indicator off.
Water flow is reinstated	Flow switch reactivates, burner re ignites. Flow indicator on.

## 5.4 MAINTENANCE

It is recommended that the following items are professionally checked at least every six months and at the beginning of every heating season.

1. Examine the balanced flue or indoor draught diverter. Make sure there are no obstructions to the flow of air to, or flue products from, the appliance.
2. Visually check the main burner and pilot flames. If the flame appears yellow, the burner should be cleaned by a qualified service technician.
3. Keep the boiler area clear and free of combustibles and flammable liquids. Chlorine should not be stored in the vicinity of the boiler. Chlorine vapours, when drawn through a boiler, can rapidly cause corrosion of the heat exchanger.
4. Keep the boiler area free from garden refuse and debris. This will help prevent insects nesting in the unit and ensure extended life and reliability of your boiler.

## 6.0 GAS CONVERSION

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### 6.1 BURNER CONVERSION

1. Turn off gas supply to unit.
2. Turn off power supply to pump and boiler.
3. Remove front access door
4. Disconnect gas supply from gas valve.
5. Remove the two Phillips head screws from the angle brackets at the end of the manifold tube securing burner assembly to combustion chamber.
6. Disconnect wiring from gas valve
7. Remove drive motor form gas valve.
8. Slide complete burner tray out through the access opening.
9. Remove the four s/s bolts securing the injector manifold to the burner tray.
10. Remove burner injectors and replace with desired gas type injectors.
11. Remove pilot burner and change pilot injector to desired gas type.
12. Remove regulator screw cap from top of gas valve
13. Turn plastic plug anti-clockwise until fully removed and withdraw spring.
14. Insert spring for desired gas type and re-install plastic plug.
15. Re-install burner assembly and reconnect gas supply.
16. Check gas system for leaks.
17. Commence lighting procedure as described above.
18. Adjust burner pressure as described above.

Model	Natural Gas			Propane Gas			ULPG Gas		
	Injector size	Pilot Size	Burner pressure	Injector size	Pilot size	Burner pressure	Injector size	Pilot size	Burner pressure
200	3.30 mm	N18 silver	0.82 kPa	1.9 mm	N10 black	2.50 kPa	1.9 mm	N10 black	2.00 kPa
250	3.30 mm	N18 silver	0.82 kPa	1.9 mm	N10 black	2.50 kPa	1.9 mm	N10 black	2.00 kPa
300	3.30 mm	N18 silver	0.82 kPa	1.9 mm	N10 black	2.50 kPa	1.9 mm	N10 black	2.00 kPa
400	3.30 mm	N18 silver	0.75 kPa	1.9 mm	N10 black	2.50 kPa	1.9 mm	N10 black	2.00 kPa
500	3.30 mm	N18 silver	0.78 kPa	1.9 mm	N10 black	2.50 kPa	1.9 mm	N10 black	2.00 kPa

## 6.2 GAS PIPE SIZING TABLES

Natural gas at 1.13 kPa gas meter pressure					
VICTORIA					
Maximum run of copper pipe with average number of fittings					
Model	20 mm	25 mm	32 mm	40 mm	50 mm
HM 200	2 m	8 m	30 m	75 m	320 m
HM 250	-	6 m	18 m	45 m	220 m
HM 300	-	4 m	14 m	35 m	140 m
HM 400	-	3 m	8 m	20 m	90 m
HM 500	-	1	6 m	14 m	60 m

1.25 kPa gas meter pressure					
S.A., W.A., some areas N.S.W.					
Maximum run of copper pipe with average number of fittings					
Model	20 mm	25 mm	32 mm	40 mm	50 mm
HM 200	6 m	25 m	90 m	240 m	320 m
HM 250	4 m	18 m	60 m	160 m	320 m
HM 300	3 m	14 m	45 m	110 m	320 m
HM 400	2 m	8 m	25 m	70 m	300 m
HM 500	-	6 m	18 m	45 m	200 m

2.75 kPa gas meter pressure				
N.S.W. some areas, some new areas of Victoria.				
Maximum run of copper pipe with average number of fittings				
Model	15 mm	20 mm	25 mm	32 mm
HM 200	4 m	40 m	160 m	320+ m
HM 250	3 m	25 m	100 m	320+ m
HM 300	2 m	20 m	85 m	280 m
HM 400		12 m	50 m	160 m
HM 500		8 m	35 m	100 m

## 7.0 TROUBLESHOOTING

BOILER WILL NOT LIGHT	
Possible cause	Remedy
Automatic ignition system fails	Check water flow light indicator.
Pump not running	Check pump and flow switch
Pump air locked	Air bleed system & pump bearing
Flow switch open	By pass to test -
Defective gas control	Shut off gas supply and call for service
Thermostat turned off	Turn on
Set temperature lower than water temperature	Increase set temperature
Water too hot-fault condition displayed	Refer to fault indication table
High Limit Thermostat open	Reset
Insufficient water flow	Check for too many valves turned off
BOILER MAKING KNOCKING NOISES	
Possible cause	Remedy
Boiler operating after pump has shut off	Shut off gas supply and call for service
Heat exchanger scaled	Shut off gas supply and call for service



If the boiler cannot be made to perform correctly, please contact the Hurlcon Service Office closest to you.

For	VICTORIA:	Phone (03) 9765 9765
	NEW SOUTH WALES:	Phone (02) 9674 8544
	QUEENSLAND:	Phone (07) 3393 3233
	SOUTH AUSTRALIA	Phone (08) 8345 5755
	WEST AUSTRALIA	Phone (08) 9258 9322

For all other areas, please contact our Victorian office.

## Siemens RWF40 controller program standard settings

To access press and hold PRG for 10 seconds

Parameter	<i>Process data.</i>	
	Display	Actual Settings
Setpoint 1 *	SP1	80
Setpoint 2 (optional) *	SP2	0
Digital Setpoint Shift (optional) *	Dsp	0
Outside Temperature (optional)	tA	
Predefinition of external setpoint *	SPE	
Parameter	<i>Parameter Level.</i>	Factory Setting
Limit value of limit comparator *	AL	0
Switching differential for limit comparator *	HySt	0
Proportional band *	Pb.1	20
Derivative time	dt	30
Integral action time	rt	120
Contact spacing *	db	2
Actuator running time	tt	60
Switch-on threshold burner / stage II *	H y S 1	-2
Switch-off threshold stage II *	H y S 2	0
Upper switch-off threshold *	H y S 3	4
Response threshold	q	0
Heating curve slope	H	4
Parallel displacement *	P	0
To access press and hold PRG for 10 seconds for second time		
Parameter	<i>Configuration Level.</i>	Factory Setting
Analog input 1, 2 & 3 setpoint changeover / shift	C111	9030
Limit comparator: controller type: setpoint 1 locking	C112	0010
Unit address decimal place / unit, signal for out-of-range	C113	0100
Measurement range start analog input 1 *	SCL	0
Measurement range end analog input 1 *	SCH	100
Measurement range start analog input 2 *	SCL2	0
Measurement range end analog input 2 *	SCH2	0
Lower setpoint limit *	SPL	50
Upper setpoint limit *	SPH	85
Actual value correction, analog input 1 *	OFF1	0
Actual value correction, analog input 2 *	OFF2	0
Actual value correction, analog input 3 *	OFF3	0
Filter time constant for digital filter, analog input 1	DF1	1

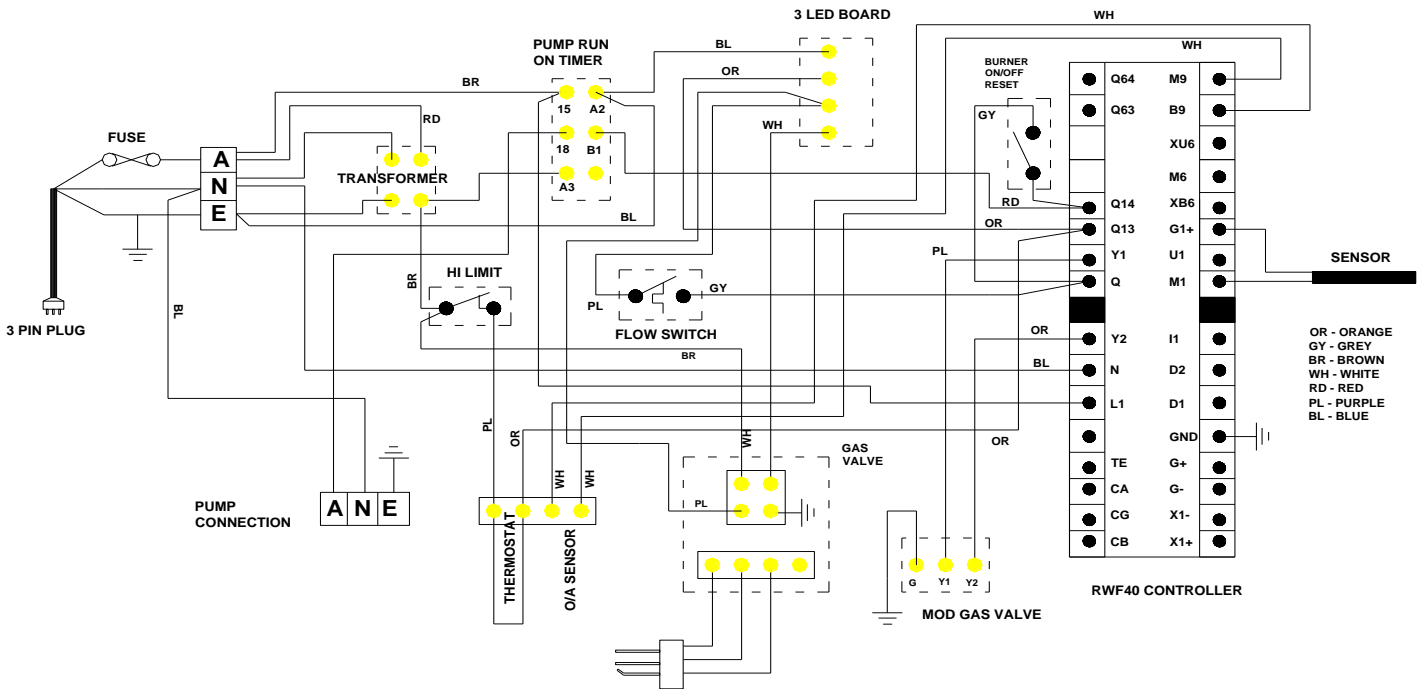
For **OUTDOOR TEMP** control refer to wiring diagram.

For **NIGHT SETBACK** connect D2 and Ground on RWF40

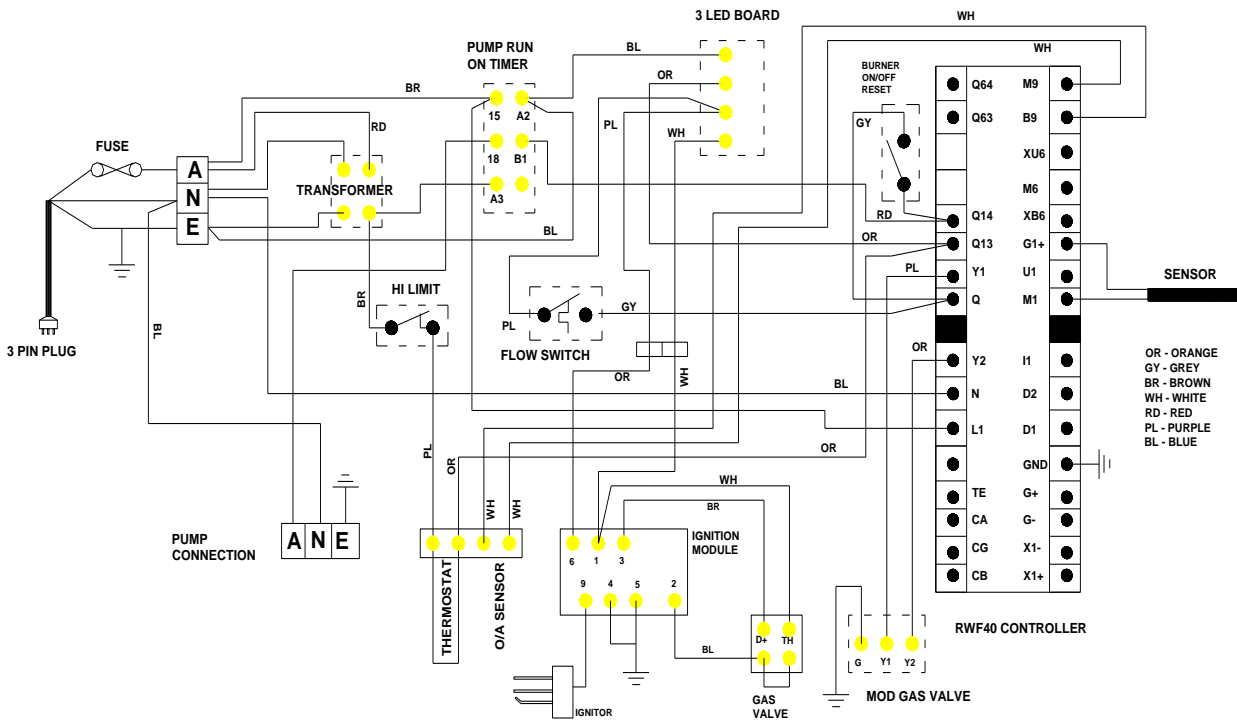
Inst195 HM Series Hydronic Boiler V10\_10

# 8.0 HM SERIES WIRING DIAGRAM

## 8.1 MODEL 200 – 400



## 8.2 MODEL 500



## 9.0 ONE YEAR LIMITED WARRANTY

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### **GENERAL CONDITIONS**

Hurlcon cover your boiler with a limited 1 year warranty against defective materials and workmanship from the date of purchase (plus 30 days to allow for installation). The heat exchanger, including headers are covered by a five year warranty (plus 30 days to allow for installation). Proof of purchase date must be provided in order to substantiate warranty claim.

The warranty includes in field labour costs where the boiler is installed in a capital city metropolitan area. Labour charges apply to boilers installed outside of these areas. Any costs for transport of faulty or replacement parts, removal or reinstallation are the owner's responsibility.

Hurlcon assumes no liability for consequential damages of any kind.

Like your motor vehicle, your new boiler requires periodic service and maintenance to keep it operating in top condition and at maximum efficiency. An annual service by one of our qualified service technicians is highly recommended.

### **LIMITATIONS**

All warranties only apply if the boiler is installed and operated in complete compliance with the installation and operating instructions. The warranty shall not apply to any boilers or parts that have been subject to accident, negligence, alteration, abuse or misuse.

### **ADDITIONAL WARRANTY EXCLUSIONS:**

This warranty does not cover failures or malfunctions resulting from:

- Failure to properly install, operate or maintain the boiler in accordance with our printed instructions provided.
- Abuse, alteration, accident, fire, flood and the like. Examples of misuse or neglect include, but are not limited to, physical damage from external force, not following installation instructions, leaving door off for extended periods of time, inappropriate application of the boiler, etc.
- Scaling, freezing, or other conditions causing an inadequate water circulation.
- Incorrect gas pressure or gas supply.
- Incorrect or excessive flow rate of water.
- Failing to correct bleed water system of air.
- Chemical contamination of combustion air or use of chemical additives to the water.

No person is authorised to make any warranties on Hurlcon's behalf. To place a service call, contact your nearest Hurlcon office.

HURLCON HEATING Pty. Limited. A.B.N. 97 007 284 504  
www.hurlconheating.com.au email: service@hurlconheating.com.au  
Information and specifications subject to change without notice.

<b>Victoria:</b>	<b>New South Wales:</b>	<b>Queensland:</b>	<b>South Australia:</b>	<b>Western Australia:</b>	<b>Gold Coast:</b>	<b>Townsville:</b>
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