

GENERAL

This appliance shall be installed in accordance with:

- These installation instructions
- AS 5601 – Gas Installations Standard
- Local gas fitting regulations
- Municipal building codes
- AS/NZS 3500
- Any other relevant statutory regulations

This Merlin 600E has been adjusted in the factory to operate on natural gas.

This appliance shall be installed and adjusted only by a suitably qualified and authorised person.

The Merlin 600E is not suitable for use as a pool or spa heater.

SPECIAL NOTE !

CORRECT GAS PIPE SIZING IS VERY IMPORTANT.

IF GAS PIPE IS TOO SMALL, THE CUSTOMER WILL NOT RECEIVE THE FULL BENEFIT OF THIS HIGH PERFORMANCE PRODUCT.

TO ENSURE FULL PERFORMANCE, YOU WILL NEED TO SELECT A PIPE SIZE BASED ON A GAS CONSUMPTION RATE OF 152 MJ/h ON N.G. AND 160 MJ/h ON L.P.G.

USE A SUITABLE PIPE SIZING CHART (SUCH AS THE CHARTS IN AS 5601) TO CALCULATE PIPE SIZING.

Gas consumption and inlet pressure details are shown on the data plate, on the right hand side of the unit.

POSITIONING

The Merlin 600E is a fully condensing appliance with built-in flue terminal and is suitable for outdoor installation only.

We recommend that the water heater be positioned so that the bottom of the unit is at least 1500mm above ground level.

When determining a suitable position for the water heater, consider the length of hot water pipe runs. It is good practice to install the heater close to the most often used taps or in a central location to keep runs of hot water pipe as short as possible.

The location of the heater, or more specifically the flue terminal, must comply with the clearances specified in AS 5601 in Australia and NZ 5261 in New Zealand.

MOUNTING

The Merlin 600E weighs 28 kg. The wall on which it is to be mounted must be capable of supporting it and associated pipe work. Ensure that suitable fixing screws or bolts are used.

The top mounting bracket has a conveniently sized keyhole slot so that the heater can be positioned by hanging on one bolt initially. Once the unit has been checked for vertical with a spirit level, the other fixings are added.

If the water heater is to be mounted on a weatherboard or similar combustible surface, a 6mm thick, thermal and weather resistant material sheet (such as cement sheet) of approximately 800mm x 400mm should be affixed to the wall and the water heater mounted central to the sheet.

CONDENSATE

The Merlin 600E is a fully condensing appliance producing a large quantity of condensate which drains into the flue and then safely away via the condensate drain. To ensure proper drainage it is important to mount the heater vertical.

Condensate should be drained away to garden beds or storm water drains to prevent staining of walls or paving.

REMOTE CONTROLS

Remote control units communicate with the heater via UHF radio link which requires that the antenna is correctly installed at the base of the heater chassis. Check that the antenna is properly fitted and is not damaged, even in cases where the customer chooses not to use remote controls initially. When remote controls are introduced to the system either at the time of initial installation or at some later time, or when additional remote controls are being introduced, they must be programmed to communicate with the heater. Detailed instructions for this procedure are supplied with each remote control unit.

PRESSURE RELIEF VALVE

The Merlin 600E is factory fitted with a pressure relief valve set at 1200 kPa, which is equal to the maximum safe working pressure of the heater. If the water pressure exceeds or is likely to exceed 1200 kPa, then a pressure reduction device must be fitted.

COMMISSIONING

With installation complete and connected services "on", check for gas and water leaks.

This appliance has been factory set and should require no adjustment.

Open the nearest hot water tap to achieve a flow of approximately 10 litres per minute. The heater should light within 5 seconds and deliver water at the default temperature of 50 deg C.

The water temperature measured at the open tap should be between 47 deg C and 50 deg C. If the measured temperature is outside this range, refer to the "Servicing Instructions" before making any adjustments.

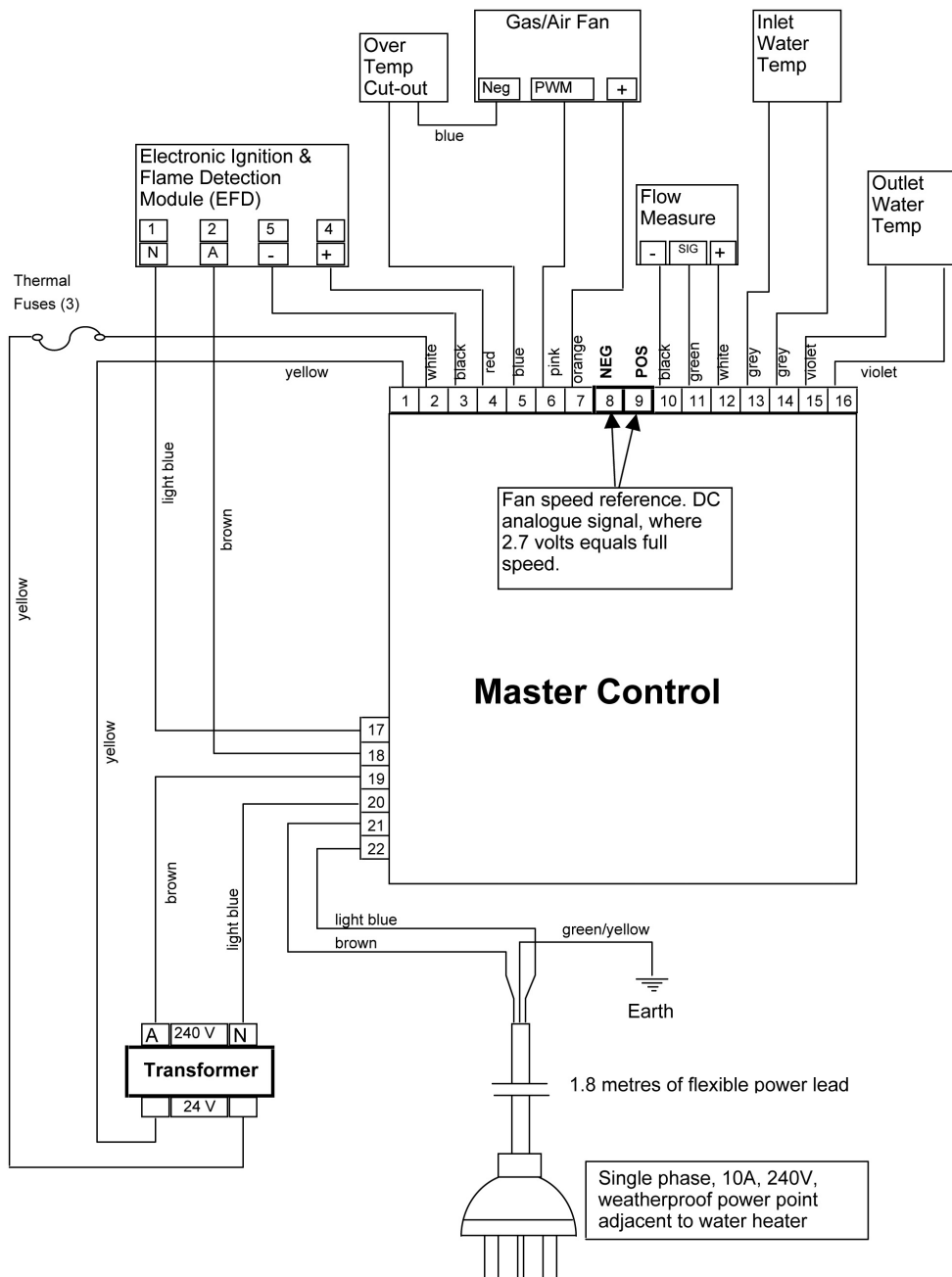
If problems are encountered, please refer to the "Operating Instructions" and check all of the external factors, before considering disassembly or seeking advice.

BEFORE YOU LEAVE

Before you leave the installation, ensure that the end user has a copy of the "Operating Instructions" and that they understand the basic operation of the unit.

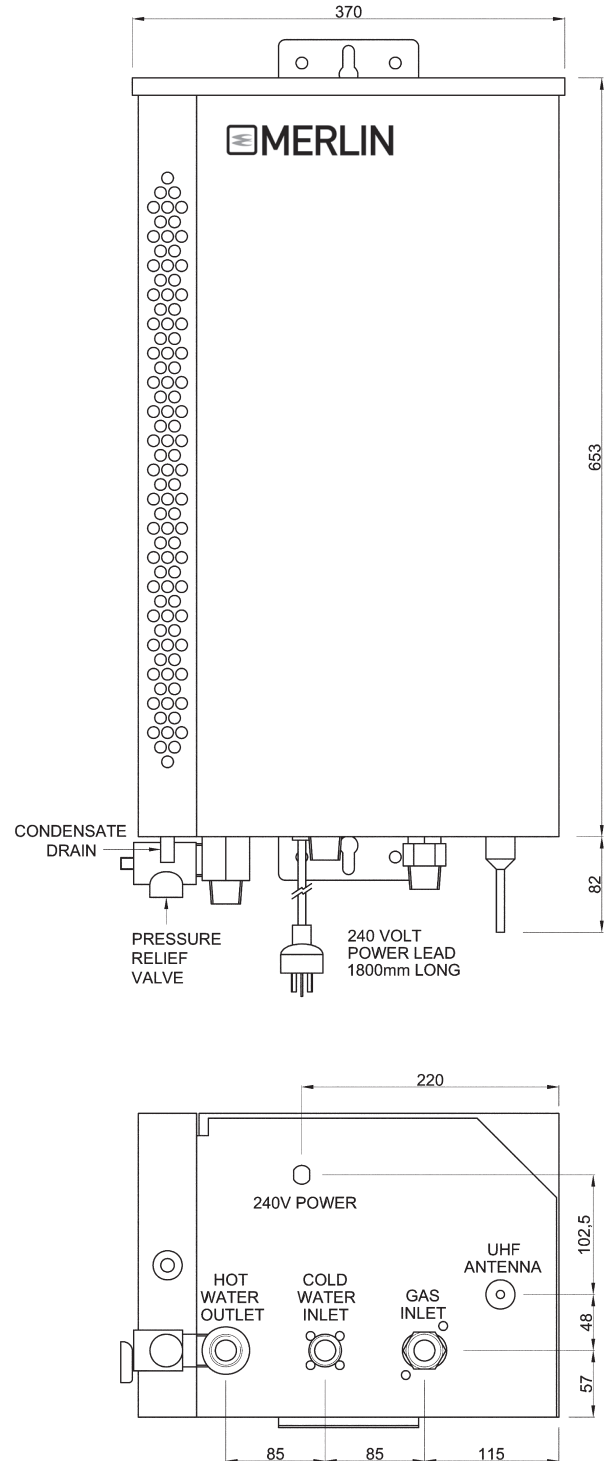
If the system includes remote controls, program them to communicate with the heater (in accordance with the instructions supplied with the remotes), ensure that they operate correctly over the required distance and demonstrate their correct use to the end user.

WIRING DIAGRAM



SPECIFICATIONS

Performance	Hot Water Capacity: (Raised 25 deg C above inlet temp)	24 litres per minute	
	Nominal Gas Input: (At full power)	152 MJ/h on N.G 160/MJ/h on L.P.G.	
	Thermal Efficiency:	95 %	
Features	Ignition:	Automatic (Electronic)	
	Set Temperature:	50 deg C	
	Temperature Range: (With remote control)	36 – 48 deg C (1 deg increments) and 50 deg C	
	Anti Frost Protection:	Optional	
Physical	Height:	653 mm	
	Width:	370 mm	
	Depth:	270 mm	
	Weight:	28 kg	
	Gas Inlet Connection:	3/4" BSP Male	(RH side)
	Cold Water Connection:	3/4" BSP Male	(Centre)
	Hot Water Connection:	3/4" BSP Male	(LH side)
Requirements	Installation Location:	Outdoor Only	
	Gas Type:	Natural Gas	L.P.G.
	Gas Inlet Pressure:	1.13 – 3.0 kPa	2.75kpa
	Inlet Water Pressure (Max.):	1200 kPa	
	Electrical Supply:	240 volt, 50Hz (Requires a single phase, Weatherproof power point adjacent to heater)	
Warranty	Parts and Labour:	5 Years	



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