



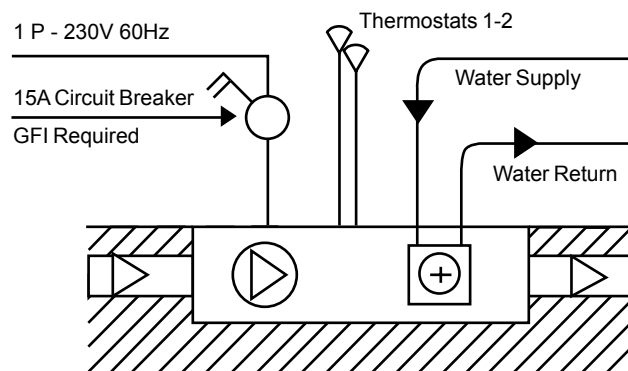
The 5200W heating unit is installed in the foundation slab or suspended floor, and contains a fan and four air/water-exchangers, with a nominal output of 5 kW, and is controlled by 1 or 2 external 24V electric room thermostats.

FUNCTION

The 5200W is controlled by one (single zone) or two (dual zone) external 24V electric room thermostats. These external thermostats open one of two water valves when a zone needs heat. An internal temperature sensor starts the fan motor when the inlet water temperature reaches approximately 40°C (105°F).

When both water valves close and the inlet water piping temperature decreases to approximately 37°C (100°F), the fan motor stops. The fan operation responds only to water temperature.

The 5200W can benefit from two-tiered energy rates for night storage of less expensive energy in the LEGALET heated floor with appropriate thermostat programming.



COVER INSTALLATION AND FINISHING

1. Connect ground wire to inner cover and install.
2. Install the 2 sound insulating foam-rubber mats (from insert packaging) between the heating unit inner cover and the floor hatch.
3. Install the floor hatch. If the floor hatch will be subject to damage, replace with a floor hatch made of 1/4" steel fastened to 1/2" plywood that is the same overall size as the standard floor hatch.
4. (Optional) Extend flooring over floor hatch, leaving a seam/gap at the floor hatch edges. If desired, use standard transition trim between the hatch and the floor to cover the seam/gap.

TECHNICAL DATA

Output, heating coil.....nominal 5 kW @ 60°C (140°F)
 Flow400 l/h (1.75 USGPM)
 Pressure drop (insert only) 20 kPa/7' (3 PSI)
 Maximum zero flow pressure drop (i.e. maximum pump pressure, valve limited)..... 100 kPa/35' (15 PSI)

This data is generic. Each Legalett installation is unique. Refer to customized specifications on your installation design drawing for actual design parameters.

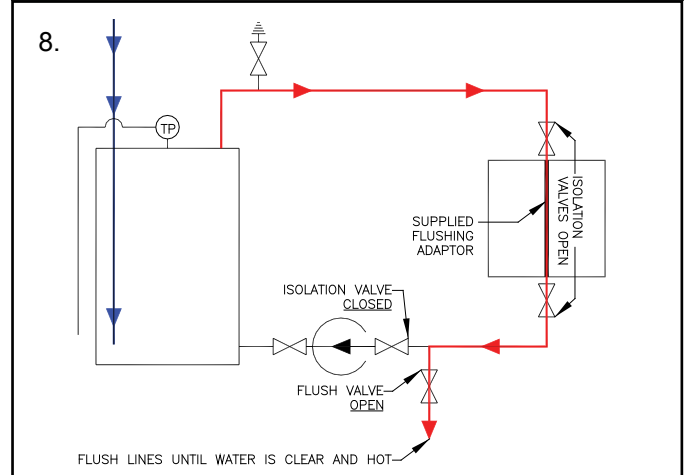
PLUMBING CONNECTIONS - TO BE PERFORMED BY A QUALIFIED PERSON

Steps 1-8 are the responsibility of the Installer

1. Ensure the concrete has dried sufficiently with the construction heater prior to insert installation - **refer to the Construction Heater Product Data Sheet - strict adherence to construction heater use requirements is required for warranty validation.**
2. Clean the furnace box thoroughly.
3. Prior to performing plumbing connections, **verify that the insert is not installed in the box and has not been connected electrically.** If the unit is already connected, contact Legalett for assistance.
4. Install local external ball valves for inlet and outlet.
5. Cut inlet and outlet pipe so that the fitting sweat adaptor ends (not supplied) are 75 mm (3") from the box surface. Ensure that the measuring tape contacts the box and is not held out by the grommet. Do NOT crimp fitting sweat adaptors onto pipe yet.
6. Sweat supplied riser assemblies for insert inlet and outlet onto fitting sweat adaptors and install on piping. Note that inlet and outlet risers are not interchangeable.
7. Connect the hot water feed line to the return line with the supplied flushing adaptor.
8. **Flush out plumbing system:** Close the isolation valve at the pump. Then open the flush valve next to pump, and run water through the piping until all debris and air have been flushed out of the lines. Close flush valve, open isolation valve at pump, bleed and energize pump until pump outlet piping is hot.

Steps 9-12 are the responsibility of the Heater Technician

9. Close external ball valves, remove flushing adaptor, and clean out any water that may have spilled into the box.
10. Place the insert in the box and tighten union connections.
11. Open external ball valves and check for leaks.
12. **Bleed plumbing system to ensure no entrained air:** Bleed any air from the heating insert using the 8 mm (5/16") bleed screws on the exchangers.



TECHNICAL DATA

Operating voltage 1 P - 230V 60Hz
 Power consumption (fan/actuators/transformer) .200W
 Breaker rating (GFI required) 15A
 Recommended supply wire capacity for temporary construction heater usage 30A
 Thermostat wire specification - minimum 3-conductor

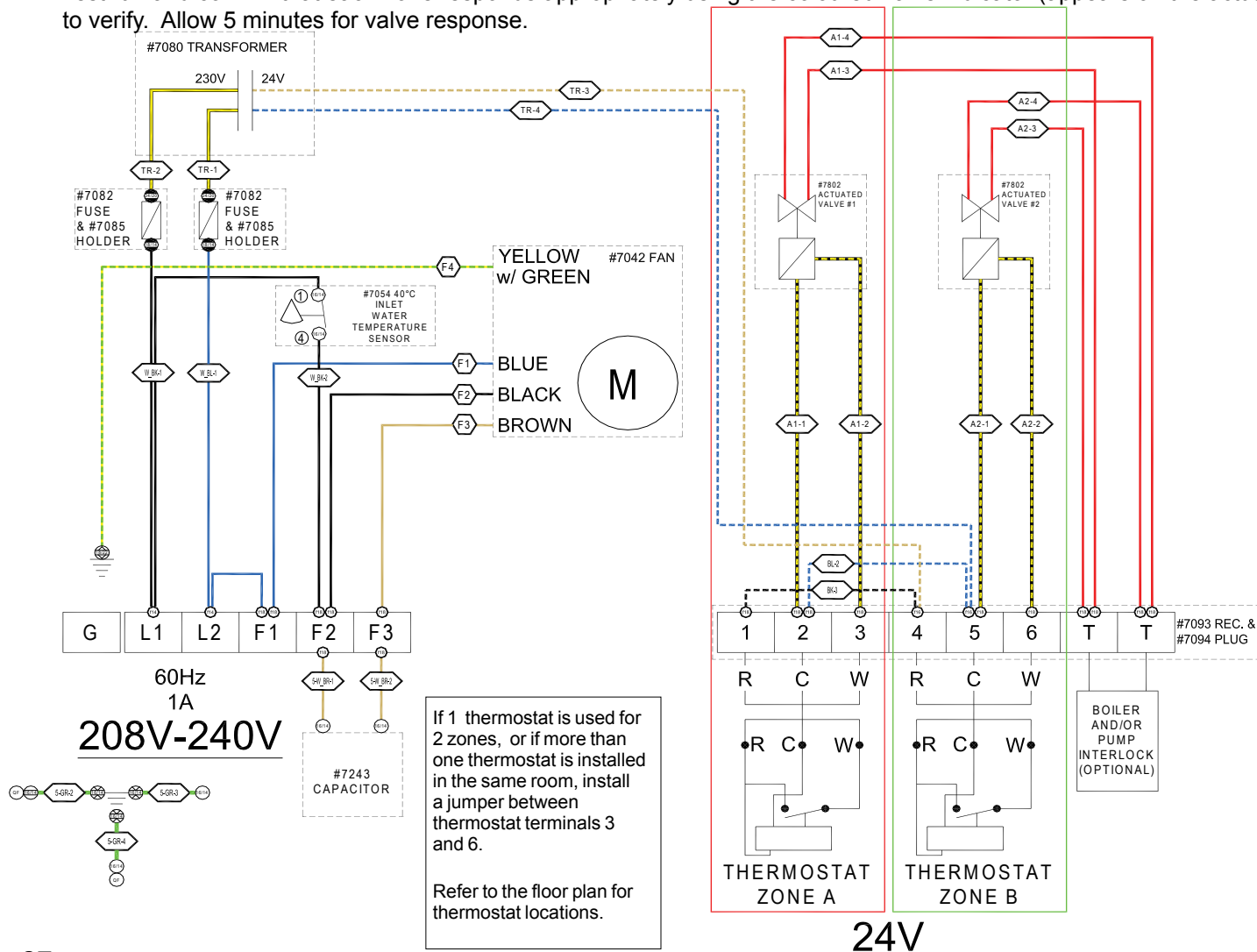
ELECTRICAL CONNECTIONS - TO BE PERFORMED BY A QUALIFIED PERSON

Steps 1-3 are the responsibility of the Installer

1. Do **NOT** connect unit electrically until plumbing is complete.
2. Install a properly sized two-pole local disconnect to enable total isolation for servicing. GFI protection is required. (Local Spa Panel accepted for both purposes)
3. **Replace temporary construction heater breaker with a 15A GFI breaker. (Local Spa Panel accepted instead). It is permissible to gang multiple heaters on a single GFI breaker in the panel. Refer to Power consumption above.**

Steps 4-7 are the responsibility of the Heater Technician

4. Terminate power wiring, including connecting ground jumpers to box male spade tab AND attach male spade tab to lid.
5. Terminate thermostats in the orange control wiring plug. Remove control plug from control receptacle when terminating control wiring.
6. **Seal the piping and wiring in all conduits using a duct sealing compound.**
7. Test run and confirm that each zone responds appropriately using the coloured valve indicator (appears on the actuator) to verify. Allow 5 minutes for valve response.



If 1 thermostat is used for 2 zones, or if more than one thermostat is installed in the same room, install a jumper between thermostat terminals 3 and 6.

Refer to the floor plan for thermostat locations.