

Commercial systems

Electrical requirements



Rinnai INFINITY water heaters, each;

- One standard 10 A outdoor power point
- Standby current typically 0.01 A
- Operating current typically 0.4 A
- Maximum current draw is 1 A, this includes frost protection (which will rarely operate)

Primary pumps



Two pumps in each set, but only one will run at a time.

A single standard 10 A power point is required for pump set controller—two pumps powered from a single [controller](#).

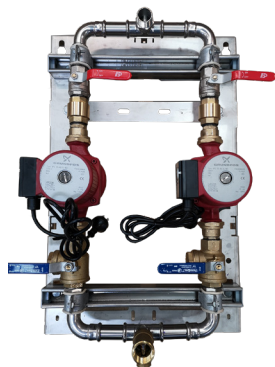
Systems up to five water heaters

- Grundfos CM5-2, full spec [here](#)
- Rated current is 3 A
- Starting current listed as 530% (it must be of a very short duration because we haven't measured that in our testing)

Systems six water heaters or larger

- Grundfos CM10-1, full spec [here](#)
- Rated current is 4.2 A
- Starting current is listed as 390%

Building return pumps



Rinnai supply assemblies with a wide range of pumps according to customer requirements.

- Two pumps in set which will run simultaneously at times
- A single standard 10 A power point required for pump set controller—two pumps powered from a single [controller](#).

The most common pump supplied is a Grundfos UPS25-80. If this is not what you have been supplied, please check the specifications for the selected pump.

Grundfos UPS 25-80 N spec [here](#). Generally will operate at speed 3: 0.7 A each pump, 1.4 A total.

UV steriliser

Refer to selected manufacturer. Even for very large systems this would be expected to be single phase and less than 2 A.

Commercial systems

Electrical requirements



Earthquake or fire gas shut-off solenoids

If gas is cut while primary pumps are operating, the water heaters will lock-out.

To avoid the water heaters locking out the following logic should be applied when an alarm is triggered:

1. Electrical circuit to the primary pump(s) is cut.
2. Gas is cut.
3. Electrical circuit to the INFINITY units is ideally not cut.

This will ensure when gas and pump electricity is restored the water heater will happily carry on.

If the water heaters are operating when the gas is cut, they will lock-out and not heat until the pump stops and re-starts. (The Rinnai pump controllers stop the pumps automatically for a few seconds every 30 minutes, just in case of random gas failure.)