

GREENFRIDGE Installation Guide



IMPORTANT:

Please note that the must be installed by a qualified refrigeration engineer, as with all testing and commissioning on refrigeration systems. A GREENFRIDGE is required for each “Air Sensor” controlling the refrigeration uses monitoring systems consideration should be given and monitoring system may require an additional GREENFRIDGE should read the same temperatures.

1. The GREENFRIDGE should be installed in the “Air Return”, or in the same position as the existing sensor.

Fitting Instructions:

1. Thread sensor and cable through locking ring nut 1.2. Thread Sensor and cable through bayonet fixing plate 2 as point 1 (Hollow side of plate to left hand side).3. Place two part cable termination 3 on both sides of cable approx 1cm from probe.4. Slide forward bayonet fixing plate 2 over two part cable termination 3 and lock with sliding ring 1.5. Push sensor probe into recess inside GREENFRIDGE.6. Lock the assembly onto the GREENFRIDGE bayonet fixing 4.7. Replace the sensor encased in the GREENFRIDGE where the thermostat was originally positioned.8. The refrigeration engineer should decide whether the GREENFRIDGE should be secured with a screw.

After 20-30 minutes check the refrigerator temperature has pulled down and adjust set point up by 1-2 degrees C if running colder than previously, you are now reading “GREENFRIDGE Temperature” and the “Air Temperature” is not relevant.

GREENFRIDGE – General:

Following the GREENFRIDGE installation, longer duration “on cycles” will typically lead to colder product temperatures.

It is recommended that you adjust the “set point” upwards by at least 1 degree C in order to prevent the system from working harder than required. If you have a digital microprocessor, check the temperature of your fridge or freezer after several hours to see if any adjustments are required.

WE DO NOT RECOMMEND THE GREENFRIDGE IS FITTED TO ANY THERMOSTAT IN DIRECT CONTACT WITH AN EVAPORATOR. THE GREENFRIDGE SHOULD NOT BE FITTED TO BLAST CHILLER, ICE MAKERS OR DOMESTIC REFRIGERATORS.

- NSF Protocol P235 Temperature Mimicking Sensors are not intended monitor Air Temperature.
- The GREENFRIDGE technology is certified to follow product temperatures, at 10mm below the surface, at the same rate as produce. (NSF test conditions allows for the Temperature mimicking device to have a 2 degrees F below and a 5 degrees F above discrepancy-which is considered food safe).

Diagrams:



EC101

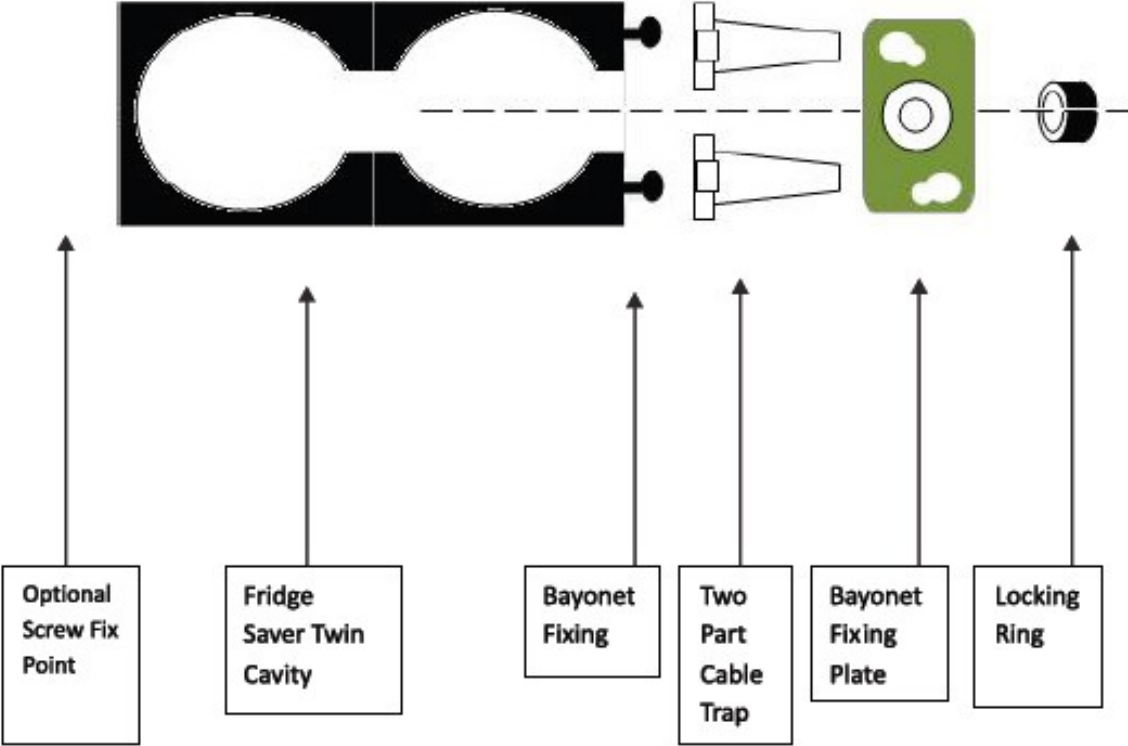


EC102

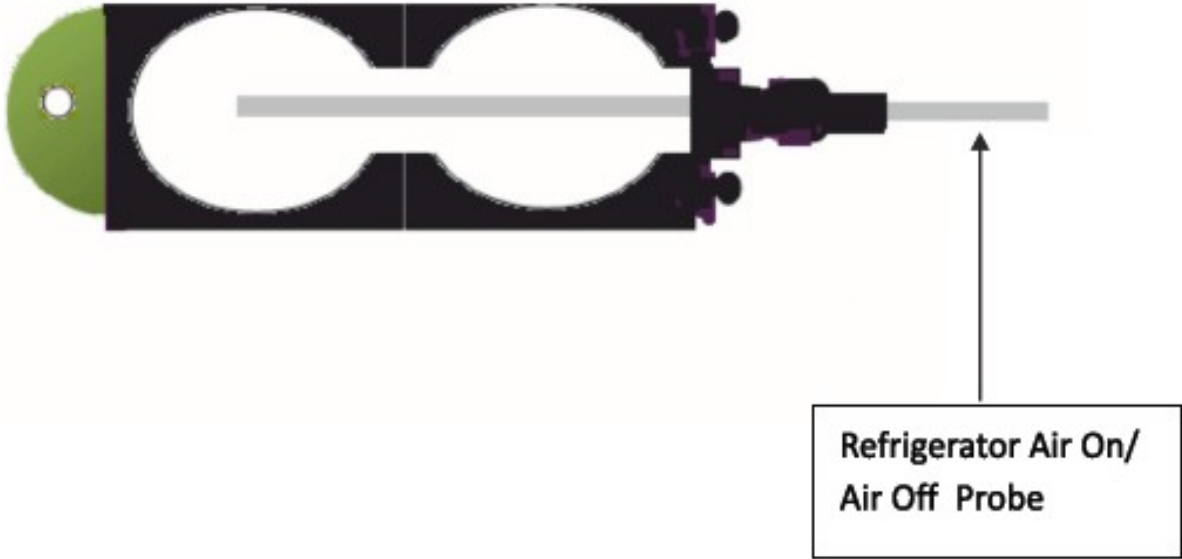


EC103

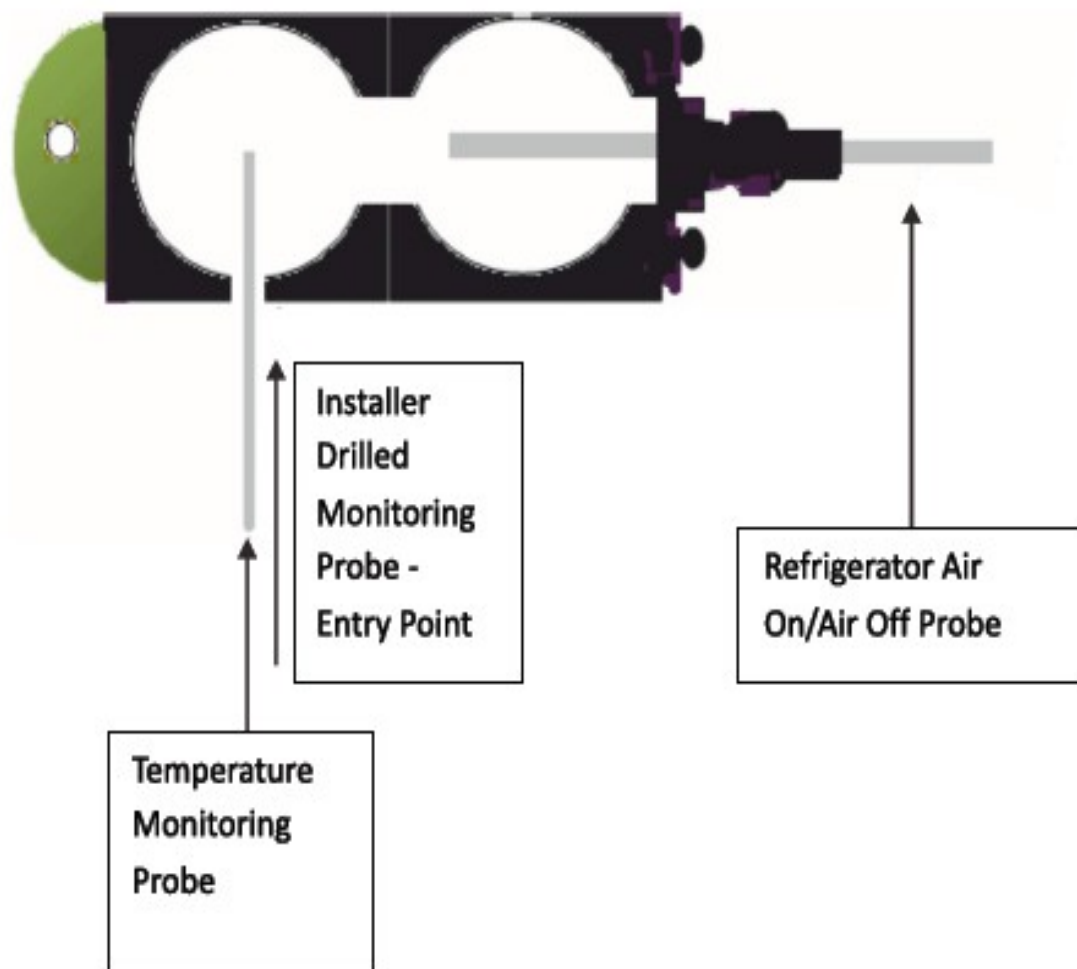
Installation of Fittings



Installation Examples with Thermostat Probe inserted:



Installation Examples with Thermostat Probe and Monitoring System Probe:



FOUR STEPS TO GET THE MOST FROM THE GREENFRIDGE:

Approximately, from 1 week to 10 days, following the GREENFRIDGE installation when taking HACCP measurements, you may notice the fridge/freezer unit is running cooler, this is due to longer duration compressor cycles achieved with GREENFRIDGE which means that you are in a position to optimize the “temperature setting” to get the best Energy Savings from the GREENFRIDGE System.

This involves simply adjusting the temperature setting up by one degree each day for a maximum of 3 days to bring the temperature of the product back up to previous levels while ensuring the HACCP routine limits are strictly adhered to.

Because the temperature set point is now higher than before the Energy Savings achieved with GREENFRIDGE will be at a maximum as there is less workload on the compressor.

Simply Follow These Basic Steps:

1. Establish temperature parameters for each refrigeration unit, i.e. your existing HACCP routine.
2. Measure and record temperature for each unit prior to GREENFRIDGE installation (**this can be completed when testing and commissioning**).
3. After 7 to days you may notice unit running colder, in this event, adjust temperature set point up by +10c (i.e make it 10c warmer) staying within the confines of your haccp routine for fridge/freezer.
4. After 24 hours measure and record temperature again. if still within your pre-defined temperature parameters for the product in question repeat process of increasing temperature set point by +10c per day to a maximum of +30c in total over three days.

NB. ALWAYS ENSURE THE MEASURED TEMPERATURE IS WITHIN THE PREDEFINED PARAMETERS FOR THE PRODUCT IN QUESTION. IT IS PARAMOUNT TO STAY WITHIN THE PARAMETERS AT ALL TIMES.