REMORA

AES
Automated Environmental Systems

Quick guide to understanding how the anti-freeze system works for the fixed speed and Inverter heat pumps

The Remora F and I model heat pumps have two levels of anti-freeze protection.

The logic on each unit is slightly different, one being a fixed-speed unit and the other being an inverter.

The control logic for the fixed speed range is shown below: P17 Message on the controller

If the inlet water temperature is 4°C or below and the ambient temperature is 2°C or below, the unit will enter the 1st level of anti-freeze and start running the water pump to prevent water in the pipes from freezing. When the ambient temperature is above 4°C the heat pump will exit the anti-freeze mode.

If the inlet water temperature is 2°C or below and the ambient temperature is 2°C or below, the unit will enter the 2nd level of anti-freeze and start running the heat pump to heat the water. Once the inlet water temperature exceeds 3°C the heat pump will exit the anti-freeze mode.

However anti-freeze protections will still be triggered by water and ambient air temps.

The control logic for the Inverter range is shown below: EE04 Message on the controller

If the inlet water temperature is lower than 15°C and the ambient temperature is 0°C or below, the unit will enter the 1st level of anti-freeze, and start running the water pump. When the inlet water temperature exceeds 15°C or the ambient temperature is above 2°C, the heat pump will exit anti-freeze mode.

If the inlet water temperature is lower than 2°C and the ambient temperature is 0°C or below, the unit will enter the 2nd level of anti-freeze, and start running the heat pump to heat the water. Once the inlet water temperature exceeds 15°C or the ambient temperature is 2°C or above, the heat pump will exit anti-freeze mode.

However anti-freeze protections will still be triggered by water and ambient air temps.

01284 658770 | sales@automatedenvironmentalsystems.co.uk