The Optimus skid mounted Gas Absorption Heat Pump assembly captures low-grade energy from surrounding air and in combination with a gas-fired condensing burner provides LTHW at exceptional efficiencies. Up to 150% can be achieved with a flow rate at 50°C and an ambient temperature of 7°C. The unit is factory assembled, complete with interconnecting flow/return and gas pipework, internal wiring, Shunt pumps and Cascade control and is suitable for external installation only, it will operate continuously, even in defrost mode. It has low electrical input and uses a water/ammonia solution, which has a GWP and ODP of zero – making the product particularly environmentally friendly.

LTHW can be supplied at up to 65°C for heating applications and up to 70°C for domestic hot water.

For an Optimus Low Noise Gas Absorption Heat Pump “5-Unit” Skid Mounted Package, specifications shall be as follows:

- Gross nominal input of 126kW (113.5kW net)
- Gross nominal output of 191.9kW at 50°C flow and 7°C ambient air temperature
- CE Certified with a Gas Usage Efficiency of 152% at 50°C flow and 7°C ambient air temperature
- NOx emissions of no more than 44mg/kWh at 0% O₂
- Sound pressure at 5mtr <54db
- Global warming potential (GWP) <1
- Ozone depletion potential (ODP) <1

Ancillaries (delete as appropriate)

- Primary Buffer Vessel
- HSV Thermal store
- External Temperature sensor
- LCGHP DHW control
- Lochinvar Boiler Interface