

Eco-X



The efficient, cost-effective and
safe community heating unit

Alpha – the heating innovators

Alpha has successfully been supplying the UK heating industry for 40 years.

During this time we've developed a reputation for manufacturing boilers using the very best components and to the highest possible build quality. As a result, Alpha boilers are widely regarded as amongst the most reliable and high performance heating products available today.

Our reputation follows through into the quality and level of service we provide. We're known for how closely we work with our customers and we're always willing to put the extra effort in to help them.

In an age when more and more manufacturers are cutting corners by compromising aspects of their business and products to stay competitive, traditional values such as these remain more important to us than ever before.

Introducing Eco-X the new standard in community heating

With Eco-X, Alpha gives building management authorities an innovative, high performance hot water and central heating supply unit that utilises heat generated by communal boilers.

Eco-X offers outstanding energy efficiency, individual control, flexible siting and high levels of safety – at a fraction of the cost of individual boilers. Moreover, it provides a limitless, instantaneous supply of hot water, all thanks to refined heat exchanger technology.

Eco-X offers dramatic energy savings over conventional copper cylinders whilst keeping scale and bacteria out. In addition, its life cycle compares with that of a storage cylinder, yet it's much easier and cheaper to replace.

How Alpha Eco-X works

In the UK, a community heating system typically comprises a large, centralised boiler with stored hot water in individual dwellings, and central heating either via radiators in individual dwellings (at 8 bar high pressure) or warm air systems.

Alpha has developed three Eco-X units in response to local authority demand for hot water and heating in individual

dwellings in conjunction with a community heating system.

Alpha Eco-X DHW provides instantaneous hot water indirectly from a community heating circuit via a plate heat exchanger. The main components are pre-assembled, mounted on a back panel and supplied with isolation valves, strainer, wall fixings and a thermostat sensor.

Alpha Eco-X LPCH is used in conjunction with the DHW unit and provides central heating to the dwelling indirectly from the community heating circuit via a plate heat exchanger. It incorporates all the necessary components such as a pump, expansion vessel, safety valve, pressure gauge and filling loop to provide a sealed central heating system with a maximum working pressure of 2.5 bar.

Alpha Eco-X HPCH is used in conjunction with the DHW unit and provides central heating to the dwelling directly from the community heating circuit.



Technical Information for Eco-X

Installation

Dimensions of each assembled Unit (including cover)	Height	500mm
	Width	300mm
	Depth	220mm
Min clearances required	Top	5mm
	Bottom	200mm
	Sides	5mm
	Front	450mm

District Heating Circuit

Max working pressure	8 bar
Min working pressure	1 bar
Max flow temperature	95°C
Max differential pressure	4 bar
Flow connection	22mm
Return connection	22mm

Secondary Circuit (Domestic Hot Water)

Max working pressure	8 bar
Min working pressure	0.2 bar
Heat output to water (approx.)	20 to 28kW
DH circuit flow rate reqd for max output	15 to 20 l/min
Max flow rate at 35°C rise (approx.)	12 l/min
Min required flow rate	2.5 l/min
Adjustable outlet temperature up to	60°C
Max outlet temperature (approx.)	62°C
Mains inlet connection	15mm
DHW outlet connection	15mm

Low Pressure Central Heating (Sealed Systems)

Max working system pressure	2.5 bar
Min system pressure	0.5 bar
Max system temperature	85°C
Safety valve setting	3 bar
Expansion vessel size (pre-charge press)	8L @ 0.8 bar
Flow connection	22mm
Return connection	22mm
Relief valve discharge connection	15mm
Recommended system pressure (cold)	1.0bar

Alpha Heating Innovation

Nepicar House, London Road, Wrotham Heath, Kent TN15 7RS

Enquiries: 01732 783000