



Process Heating



## Aquanexa E Series

Compact • Reliable • Efficient • Smart

ELT: 09 / 19 / 35 / 50 / 85kW

EHT: 34 / 78 / 153kW

# Conserving resources, Preserving the future.

Thermax provides systems and solutions in the critical domains of energy and environment. The products and services developed by Thermax help industries achieve better resource productivity and improved bottom lines, while maintaining a cleaner environment. The company's vision for the future is firmly anchored in the belief that, to stay competitive, business houses need to adopt sustainable practices.

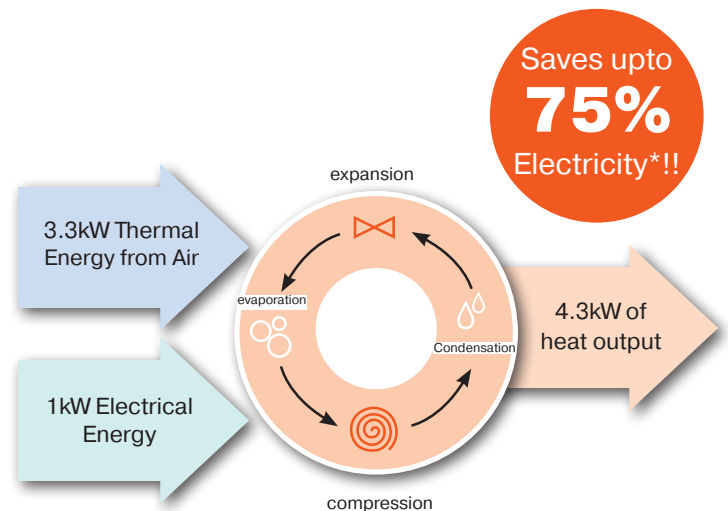
Thermax's product portfolio covers the heating, cooling, water and waste management, and specialty chemicals. The company also designs, builds and commissions large boilers for steam and power generation, turnkey power plants, waste-to-energy systems and air pollution control projects.

## Introduction to ANX E-series

Aquanexa – E Series is an Air to Water heat pump that works on the principle of reverse refrigeration to generate hot water which can be used in closed loop circuits for a number of applications.

It has reliable components like a scroll compressor and an expansion valve in circuit through which environment friendly refrigerants like R410a or R134a are circulated. The heat absorbed from ambient air by the refrigerant is further increased by pressurising the refrigerant. This heat is then transferred to incoming water, thus providing hot water at the outlet.

Aquanexa E series extracts up to 3.3kW heat from primary air and consumes 1kW of electrical input to give 4.3kW of heat output in the form of hot water.



\* Compared to conventional electrical heater

## Salient Features

### Shell and tube type heat exchanger:

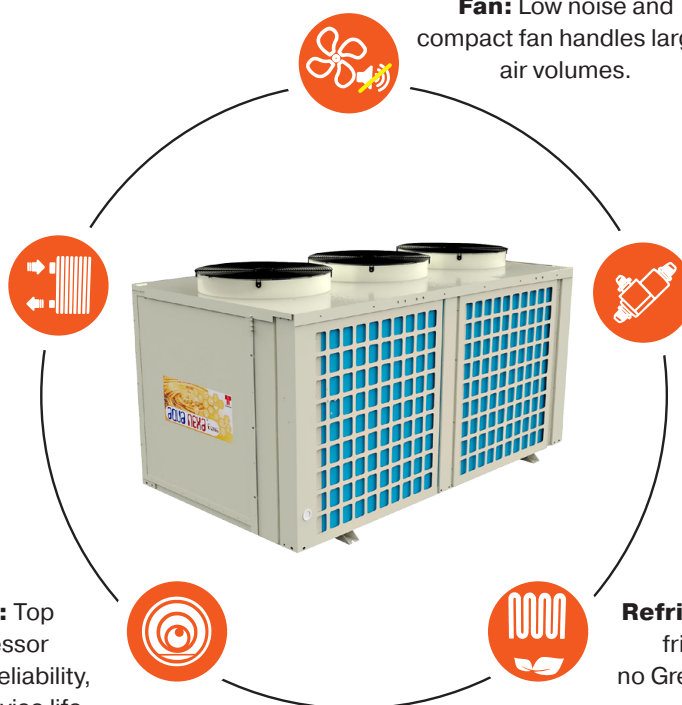
Highly efficient heat exchanger with fins on the copper coil offers heat transfer area that is 3.6 times that of an ordinary smooth coil. The larger diameter pipe ensures smooth water flows.

**Scroll compressor:** Top quality scroll compressor offering high efficiency, reliability, low noise and longer service life.

**Fan:** Low noise and compact fan handles larger air volumes.

**Electronic Expansion Valve (EEV):** High precision EEV regulates in minute steps to adjust superheat degrees accurately.

**Refrigerant:** Environmentally friendly refrigerant with no Green House Gas Emissions



## Inbuilt Safety Features

- ◆ Anti-freeze protection
- ◆ Compressor overheat protection
- ◆ Lack of phase and reverse protection
- ◆ Refrigerant circuit high and low pressure protection
- ◆ Overload protection
- ◆ High temperature protection and more



## Benefits



Round the clock hot water



Compact and silent



No CO<sub>2</sub> emission



Can be installed in basements or rooftops



Works in all typical weather conditions



Plug and play unit



Automatic Operation



No fuel required and no fire hazard

## Building Management System Connectivity

Featuring BMS connectivity, Aquanexa E Series ensures visibility of significant hot water generator parameters in central server rooms. In addition to being able to control your HVAC, lighting, elevators, etc. BMS connectivity helps control the heat pump to optimally manage your overall energy needs.



### Comparative of all solutions

Parameter	Heat Pump	HWG - Oil fired	HWG - Gas fired	HWG - Solid fuel fired	Solar heater	Electric Geysers
Fuel	Electricity	HSD/LSD	LPG/NG/PNG	Wood/agrowaste	Sunlight	Electricity
Initial Cost	Medium	High	High	Low	High	Low
Running Cost	Low	High	High	Medium	Low	High
Maintenance Cost	Low	High	High	Medium	Low	Low
Cost of Fuel	Low	High	High	Medium	Low	High
Fuel Consumption	Low	High	High	High	Low	High
Weather Impact	Low	Low	Low	Low	High	Low
Space required	Low	High	High	Medium	High	Low
Efficiency	High	Medium	Medium	Low	Low	Medium
Accessories Required	Low	High	High	Medium	Low	Low

High Medium Low

# Aquanexa ELT

Aquanexa ELT provides rated water temperature of 55 °C for continuous operation and 60 °C for intermittent operation.

Thus making it Ideal for



Hotels & Restaurants



Salons & Spas



Hospitals & Clinics



Laundries



Religious places



School, Colleges and Hostels



Marriage Halls



Commercial complexes and convention centres

## Technical Specifications - Aquanexa ELT

Type	Air Source Circulation Type				
	ANX ELT-09	ANX ELT-19	ANX ELT-35	ANX ELT-50	ANX ELT-85
Unit					
Heating Capacity (kW)	09*	19	35	50	85
Rated Hot water output temperature	55°C				
Maximum Hot water outlet temperature	60°C				
Rated Hot water outlet (Ltr/hr)	193	410	750	1075	1815
Power Supply	415V, 50 Hz, 3 Phase				
Rated Input Power (kW)	2.26	4.45	8.1	11.95	20
COP**	4	4.35	4.33	4.32	4.36
Refrigerant	R410a				
Pipe Size	DN 20	DN 25	DN 32	DN 32	DN 50
<b>Dimension</b>					
Length (mm)	1000	820	1502	1502	1995
Width (mm)	360	695	750	750	1165
Height (mm)	630	1060	1060	1060	1105
Net Wt (Kg)	64	160	255	400	725

\*Without BMS connectivity

\*\*COP stands for Coefficient of Performance

### Important Notes:

- Application side initial water temperature: 15°C, final temperature 55°C, max temp 60°C.
- Ambient temperature: dry bulb 20°C, wet bulb 15°C
- Ambient Temperature Range: -7°C to 43°C
- Mentioned parameters are for refrigerant R410a.
- Specifications are subject to change because of continuous product development.



## Aquanexa EHT

Aquanexa EHT provides rated hot water temperature of 75 °C for continuous operation and 80 °C for intermittent operation. Thus making it Ideal for



Automobile



Dairy



Food processing



Beverages



Tea garden

### Industrial Applications of Aquanexa EHT



Acid-alkali baths



Vegetable drying



Packaging



Auto component washing



Bottle washing  
And more

## Technical Specifications - Aquanexa EHT

Type	Air Source Circulation Type		
	ANX EHT-34	ANX EHT-78	ANX EHT-153
Unit			
Heating Capacity (kW)	34	78	153
Rated Hot water output (Ltr/hr)	750	1685	3440
Rated Hot water outlet temperature	75°C		
Maximum Hot water outlet temperature	80°C		
Power Supply	415V, 50 Hz, 3 Phase		
Rated Input Power (kW)	10.21	23.56	45.88
COP*	3.4	3.33	3.35
Refrigerant	R134a		
Pipe Size	DN 32	DN 50	DN 80
Dimension			
Length (mm)	1502	1995	2074
Width (mm)	750	1165	1920
Height (mm)	1360	1105	2085
Net Wt (Kg)	410	855	1620

\*COP stands for Coefficient of Performance

### Important Notes:

- Application side initial water temperature: 30°C, Final temperature 75°C, Max temperature 80°C
- Ambient temperature dry bulb 20°C, wet bulb 15°C.
- Ambient Temperature Range: -7 °C to 43°C
- Mentioned parameters are for refrigerant R134a
- Specifications are subject to change because of continuous product development.

Conserving Resources,  
Preserving the Future.



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