

# Thermia Atria Atria Duo



Atria



## The air heat pump that retrieves energy at temperatures down to $-20^{\circ}\text{C}$ .

The **Thermia Atria** is an efficient and reliable air heat pump. The high annual efficiency, which is a measurement of the heat pump's efficiency over the whole year, means that you can reduce your heating costs by as much as 75 percent.

Energy can be retrieved from outdoor air at temperatures down to  $-20^{\circ}\text{C}$ . Electric heating elements provide additional heat at temperatures lower than this. This extra heat is provided in five steps (3, 6, 9, 12 and 15 kW) to give economically sound heating.

The heat pump consists of two units. All essential components are indoors. Demand-controlled defrosting for the outdoor components minimises energy consumption.

The hot water tank is fitted with our TWS\* technique, which means that the hot water is produced faster and at higher temperatures than with traditional technique.

Using the Thermia Online optional feature, you can control your heat pump via the Internet. In the unlikely event that something needs rectifying, you will be alerted automatically via SMS text message or e-mail.

The **Thermia Atria Duo** is a variant of Thermia Atria. What separates them is that the Thermia Atria Duo has a separate hot water tank which makes it a good choice if you have a low ceiling height.

Atria Duo



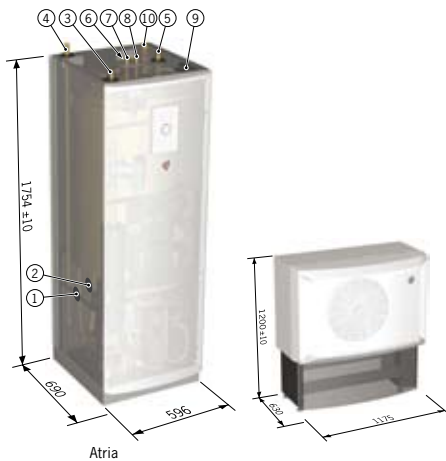
\* TWS = Patented heating technique for water heaters, developed by Thermia.

# Technical data Atria Atria Duo

## Connection Atria

The brine lines can be connected on either the left or right-hand sides of the heat pump.

- 1 Brine return line (Brine in), 28 Cu
- 2 Brine supply line (Brine out), 28 Cu
- 3 Heating system supply line, 22 Cu: 6-10 kW, 28 Cu: 12 kW
- 4 Heating system return line, 22 Cu: 6-10 kW, 28 Cu: 12 kW
- 5 Expansion pipe, 22 Cu
- 6 Lifting point
- 7 Hot water pipe, 22 Cu or stainless steel
- 8 Cold water pipe, 22 Cu or stainless steel
- 9 Lead-in for incoming power supply, sensors and communication cable
- 10 Expansion outlet brine circuit, DN25 int.



## Connection Atria Duo

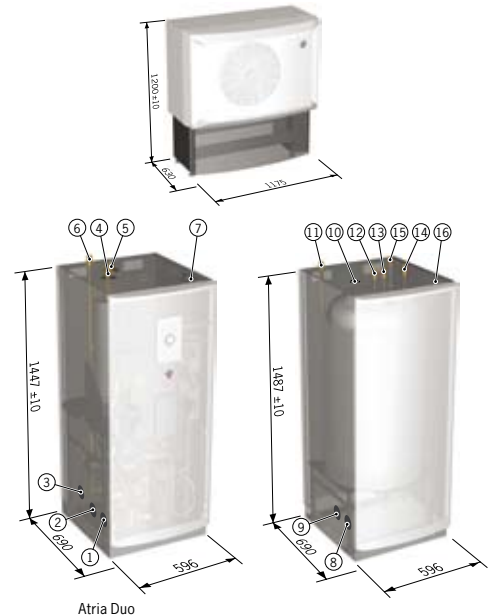
The brine lines can be connected on either the left or right-hand sides of the heat pump.

### Heat pump:

- 1 Brine out, during defrosting, 28 Cu
- 2 Return pipe water heater, 28 Cu
- 3 Brine in
- 4 Heating system supply pipe, 22 Cu: 6-10 kW, 28 Cu: 12 kW
- 5 Heating system return pipe, 22 Cu: 6-10 kW, 28 Cu: 12 kW
- 6 Brine out, normal operation
- 7 Lead-in power and sensor lead

### Water heater:

- 8 Brine in, during defrosting
- 9 Water heater, return pipe
- 10 Bleed valve, at stainless steel water heater
- 11 Brine out, during defrosting
- 12 Hot water pipe, 22 Cu or stainless steel
- 13 Cold water pipe, 22 Cu or stainless steel
- 14 Water heater supply pipe to TWS coil
- 15 Brine, expansion line when outdoor unit is positioned at high level
- 16 Lead-in sensor lead



Atria	6	8	10	12	6ES	8ES	10ES	12ES
Refrigerant, R404A	0.95 kg	1.45 kg	1.5 kg	1.6 kg	0.95 kg	1.45 kg	1.5 kg	1.6 kg
Mains supply	400V 3-N	400V 3-N	400V 3-N	400V 3-N	230V 1-N	230V 1-N	230V 1-N	230V 1-N
Auxiliary heater	3/6/9/12/15 kW	3/6/9/12/15 kW	3/6/9/12/15 kW	3/6/9/12/15 kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW
Output capacity <sup>1)</sup>	5.7 kW	7.7 kW	10.6 kW	10.8 kW	5.7 kW	7.7 kW	10.6 kW	10.8 kW
Heat factor (COP) <sup>1)</sup>	2.7	2.9	2.9	2.7	2.7	2.9	2.9	2.7
Circuit breaker	10 <sup>2</sup> /16 <sup>3</sup> /20 <sup>4</sup> /20 <sup>3</sup> /25 <sup>6</sup> A	16 <sup>2</sup> /16 <sup>3</sup> /20 <sup>4</sup> /20 <sup>3</sup> /25 <sup>6</sup> A	16 <sup>2</sup> /16 <sup>3</sup> /20 <sup>4</sup> /20 <sup>3</sup> /25 <sup>6</sup> A	16 <sup>2</sup> /20 <sup>3</sup> /25 <sup>4</sup> /25 <sup>3</sup> /25 <sup>6</sup> A	25 <sup>2</sup> /32 <sup>3</sup> /40 <sup>4</sup> A	25 <sup>2</sup> /32 <sup>3</sup> /40 <sup>4</sup> A	32 <sup>2</sup> /40 <sup>3</sup> /50 <sup>4</sup> A	32 <sup>2</sup> /40 <sup>3</sup> /50 <sup>4</sup> A
Volume, hot water heater	180 liter	180 liter	180 liter	180 liter	180 liter	180 liter	180 liter	180 liter
Weight	260 kg	260 kg	260 kg	268 kg	260 kg	260 kg	260 kg	268 kg
Atria Duo	6	8	10	12	6ES	8ES	10ES	12ES
Refrigerant, R404A	0.95 kg	1.45 kg	1.5 kg	1.6 kg	0.95 kg	1.45 kg	1.5 kg	1.6 kg
Mains supply	400V 3-N	400V 3-N	400V 3-N	400V 3-N	230V 1-N	230V 1-N	230V 1-N	230V 1-N
Auxiliary heater	3/6/9/12/15 kW	3/6/9/12/15 kW	3/6/9/12/15 kW	3/6/9/12/15 kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW	1.5 <sup>2</sup> /3 <sup>3</sup> /4.5 <sup>4</sup> kW
Output capacity <sup>1)</sup>	5.7 kW	7.7 kW	10.6 kW	10.8 kW	5.7 kW	7.7 kW	10.6 kW	10.8 kW
Heat factor (COP) <sup>1)</sup>	2.7	2.9	2.9	2.7	2.7	2.9	2.9	2.7
Circuit breaker	10 <sup>2</sup> /16 <sup>3</sup> /20 <sup>4</sup> /20 <sup>3</sup> /25 <sup>6</sup> A	16 <sup>2</sup> /16 <sup>3</sup> /20 <sup>4</sup> /20 <sup>3</sup> /25 <sup>6</sup> A	16 <sup>2</sup> /16 <sup>3</sup> /20 <sup>4</sup> /20 <sup>3</sup> /25 <sup>6</sup> A	16 <sup>2</sup> /20 <sup>3</sup> /25 <sup>4</sup> /25 <sup>3</sup> /25 <sup>6</sup> A	25 <sup>2</sup> /32 <sup>3</sup> /40 <sup>4</sup> A	25 <sup>2</sup> /32 <sup>3</sup> /40 <sup>4</sup> A	32 <sup>2</sup> /40 <sup>3</sup> /50 <sup>4</sup> A	32 <sup>2</sup> /40 <sup>3</sup> /50 <sup>4</sup> A
Weight	154 kg	154 kg	154 kg	162 kg	154 kg	154 kg	154 kg	162 kg

- 1) Tested according to EN14511 at A+7W45 (including fan and circulation pumps) 2) Heat pump with 3 kW auxiliary heater (1-N 1.5 kW)  
 3) Heat pump with 6 kW auxiliary heater (1-N 3 kW) 4) Heat pump with 9 kW auxiliary heater (1-N 4.5 kW) 5) 12 kW auxiliary heater (compressor off)  
 6) 15 kW auxiliary heater (compressor off)