



Inverter-driven air source heat pump systems



Dimplex renewables®



Dimplex Air-Eau™ is an exciting new range of inverter-driven air source heat pumps designed to match output to varying heating demand. With achievable CoPs of up to 4.7, Air-Eau provides one of the most advanced, efficient and high-performance air source heat pump ranges on the market.

Air-Eau uses an inverter-driven compressor. This effectively modulates the heat pump output to match heating demand, enabling the heat pump output to stay constant – even at very cold outdoor temperatures. When air temperatures are warmer and heating demand falls, the heat pump output is reduced, helping to maximise Air-Eau's efficiency (CoP).

Air-Eau at a glance

- Available in four model options – 6, 9, 12 and 16kW outputs – to suit your individual requirements
- Superior efficiency performance, with CoPs of up to 4.7
- Inverter-driven compressor able to maintain heating output levels – even at low air temperatures – and modulate output to maximise efficiency
- 'Monobloc' heat pump unit, with integrated heating system components built in for ease of installation:
 - Circulation pump
 - Expansion vessel
 - Safety group
 - Backup immersion
- Supplied complete with heat pump programmer
- Variable water flow temperatures between 35 and 55°C to optimise space heating comfort, with weather-compensated flow temperature control to improve efficiency
- Designed to work efficiently with underfloor heating, Dimplex SmartRad or conventional radiators
- Ideal for use in conjunction with a Dimplex EC-Eau heat pump-ready cylinder to produce domestic hot water
- Low noise levels and 'Quiet Mode' for night-time operation
- Easy access to electrical and plumbing connections for ease of installation



Specifications

| MODEL | LA 6 MI | LA 9 MI | LA 12 MI | LA 16 MI |
|--|-----------------------|--------------------|--------------------|--------------------|
| OPERATING LIMITS | | | | |
| Heating water flow (°C) | 25 to 55 | | | |
| Air temperature (°C) | -20 to 35 | | | |
| PERFORMANCE | | | | |
| Heat output (kW)/CoP at A-15/W35 | 5.9/2.2 | 7.6/2.0 | 8.9/2.43 | 10.3/2.33 |
| Heat output (kW)/CoP at A-7/W55 | 5.8/1.8 | 5.0/1.5 | 8.2/1.9 | 9.0/1.8 |
| Heat output (kW)/CoP at A-7/W35 | 5.9/2.8 | 9.0/2.4 | 10.0/2.7 | 11.4/2.55 |
| Heat output (kW)/CoP at A2/W35 | 6.0/3.7 | 9.0/3.4 | 11.4/3.4 | 13.0/3.25 |
| Heat output (kW)/CoP at A7/W35 | 6.0/4.4 | 9.0/4.1 | 12.0/4.67 | 16.0/4.23 |
| Recommended heating water flow with internal pressure differential | 1m³/hr @ 23500Pa | 1.6m³/hr @ 49000Pa | 2.1m³/hr @ 27000Pa | 2.8m³/hr @ 47000Pa |
| Sound pressure level at 1m [dB(A)] | 47 | 49 | 50 | 53 |
| Air flow (m³/min) | 47 | 52 | 80 | 90 |
| MECHANICAL/ELECTRICAL | | | | |
| Dimensions HxWxD (mm) | 865 x 1283 x 320 | 865 x 1283 x 320 | 1410 x 1284 x 400 | 1410 x 1284 x 400 |
| Weight (kg) | 122 | 122 | 165 | 165 |
| Refrigerant: type/total charge weight (kg) | R410A/1.45 | R410A/1.45 | R410A/2.3 | R410A/2.95 |
| Expansion vessel size (l) | 10 | | | |
| Defrosting | Reverse cycle defrost | | | |
| Enclosure protection | IP24 | | | |

Dimplex Air-Eau:

The packages



Air-Eau packages

To optimise the benefits of Dimplex Air-Eau heat pumps, we offer complete system packages designed to suit a wide range of domestic heating and hot water applications. All our packages are ideal for both new and existing homes, and each combines the benefits of high-efficiency Dimplex Air-Eau heat pumps with purpose-designed Dimplex EC-Eau 'heat pump-ready' hot water cylinders (with integrated buffer tanks for space saving and efficiency) plus all the necessary controls and ancillaries. The packages may also be combined with your choice of SmartRad radiator for a wholly integrated, high-efficiency and low-carbon heating solution.

EC-Eau cylinders

Dimplex EC-Eau stainless steel cylinders are designed specifically to deliver mains pressure hot water from heat pump systems. They are supplied with carefully sized, high surface area heat exchangers. This ensures maximum heat transfer between the heat pump and the stored water for optimal efficiency and running costs. Packages are available with 125, 150 or 210 litre capacity options and all cylinders include an integrated 75 litre buffer tank as standard. A mandatory requirement for all Dimplex heat pumps, this ensures efficient defrosting and compressor optimisation. To minimise internal space requirements, the buffer is cleverly incorporated – and thermally separated – on top of the cylinder.

Environmental sensitivity and efficient performance are key attributes of EC-Eau. The range boasts 60mm of low Global Warming Potential (GWP) insulation foam and innovative features throughout to reduce heat loss. All inner components are made using 100% recyclable stainless steel inner components, while the sleek black, hardwearing outer shell is manufactured from recycled materials. EC-Eau cylinders are supplied with expansion vessel, all necessary safety devices and built-in 3kW immersion heaters. Plus, being stainless steel, the cylinders come with a full 25-year warranty.

SmartRad radiators

Dimplex SmartRad wall-mounted fan convector radiators provide a controllable, responsive and energy-efficient alternative to underfloor heating, and are the perfect complement to Dimplex air source heat pump packages. SmartRad radiators contain only 5% of the water volume of a conventional steel radiator. This low thermal mass means they can heat up five times faster and react more responsively to changes in room temperature. The result: improved control, comfort and energy saving. This makes SmartRad ideal for retrofit installations in place of conventional radiators or in new buildings either instead of, or in conjunction with, underfloor heating.

Package options

Package 1 – 1 heating zone and DHW with combined buffer and DHW cylinder

A choice of Air-Eau heat pump combined with an EC-Eau cylinder offers installers a flexible heating and hot water solution for properties with limited space. EC-Eau cylinders are available in a choice of 125, 150 or 210 litre capacities with an integrated 75 litre buffer tank to minimise space requirements. Incorporating a simple to operate programmable heating system thermostat, this package provides the ideal heating and hot water solution for both new build and retro fit installations.

| Air source heat pump | LA 6 MI | LA 9 MI | LA 12 MI | LA 16 MI |
|----------------------|--|---------|-----------------|----------|
| 15m control cable | CL15 | | | |
| Accessories kit | Containing: PRT1 wall mounted thermostat 3 port valve NTC2 Hot water sensor SMF32 Filter strainer | | | |
| Choose one of: | 125L heat pump cylinder | | ECS125HP/75-580 | |
| | 150L heat pump cylinder | | ECS150HP/75-580 | |
| | 210L heat pump cylinder | | ECS210HP/75-580 | |

Package 2 – 1 heating zone and DHW with separate buffer and DHW cylinder

A choice of 12 or 16kW Air-Eau heat pump and heat pump cylinder capacities provides installers with a flexible heating and hot water system for properties with varying hot water requirements. With cylinder options from 125 to 300 litre capacities and heat pump output from 8 to 16kW, a range of domestic heating and hot water demands can be fulfilled. Incorporating a separate buffer tank and a simple to operate programmable heating system thermostat, this package provides the ideal heating and hot water solution for both new build and retro fit installations.

| Air source heat pump | LA 12 MI | LA 16 MI |
|----------------------|--|--------------|
| 15m control cable | CL15 | |
| Accessories kit | Containing: PRT1 wall mounted thermostat 3 port valve NTC2 Hot water sensor SMF32 Filter strainer | |
| Buffer cylinder | PSW 100 | |
| Choose one of: | 125L heat pump cylinder | ECS125HP-580 |
| | 150L heat pump cylinder | ECS150HP-580 |
| | 210L heat pump cylinder | ECS210HP-580 |
| | 250L heat pump cylinder | ECS250HP-580 |
| | 300L heat pump cylinder | ECS300HP-580 |

Package 3 – 1 heating zone with buffer tank

For situations where only heating is required, this package, with a choice of heat pump outputs from 6 to 16kW, this package offers installers a flexible solution to the heating demands of a wide range of domestic properties and is ideal for retro fit installations.

| Air source heat pump | LA 6 MI | LA 9 MI | LA 12 MI | LA 16 MI |
|----------------------|---------|---------|----------|----------|
| 15m control cable | CL15 | | | |
| Room thermostat | PRT1 | | | |
| Filter strainer | SMF 32 | | | |
| Buffer cylinder | PSW 100 | | | |

Specifications

Dimplex policy is one of continuous improvement; the Company therefore reserves the right to alter specifications without notice. The information contained in this brochure is correct at the time of printing. You are advised to consult your Dealer before purchasing.

Installation Guidance

This brochure is designed to assist you with your choice of Dimplex products and it is not intended as an installation guide. For safety, products should only be installed by a competent person, in accordance with current regulations and the manufacturer's instructions.

The Dimplex Range

Dimplex offers the widest range of electric space and water heating products in the world – over 400 – to meet almost any heating need. In addition to this publication, we have a wide range of brochures for both domestic and commercial applications. Please visit our website www.dimplex.co.uk for more information.

For more information on our
wide range of renewables technologies,
please visit www.dimplexrenewables.com
email: sales@dimplexrenewables.com

Republic of Ireland: **+353 (0) 1 842 4833**
Northern Ireland: **+44 (0) 28 3833 7317**

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With thanks to the following customer: Randwick Village Hall and Playing Fields Committee

 **Dimplex**renewables®
A world of expertise

Republic of Ireland: Dimpco, Airport Road, Cloghran, Co. Dublin

Northern Ireland: Glen Dimplex N.I. Limited, 5 Charlestown Avenue, Charlestown Industrial Estate, Craigavon, Co. Armagh, BT63 5ZF