

A-Class



Dimplex

A-Rated Homes with Dimplex heat pumps

Building Regulations and Part L Compliance made easy with Dimplex.

Dimplex The name you can trust.

dimplex.ie

A-Class Heat Pumps

Dimplex Heat Pump Manufacturing

Dimplex has been producing heat pumps for 30 years in manufacturing plants throughout Ireland, France and Germany. The A-Class heat pump from Dimplex is designed and developed in Dunleer, Co. Louth and manufactured in Newry, Co. Down. It is specifically designed for the Irish climate and to help meet our building regulations which are some of the most challenging in Europe.

Why choose a Dimplex A-Class heat pump?

- ✓ Helps meet building regulations
- ✓ Saves the builder and the homeowner money
- ✓ High energy ratings
- ✓ Hot water production without the need for an immersion
- ✓ Works with radiators, underfloor heating and Dimplex SmartRad
- ✓ Easy to use controls
- ✓ Easy to install
- ✓ Life expectancy is twice that of a regular boiler



A-Class Heat Pumps

Dimplex A-Class is our innovative range of class-leading air source heat pumps. Designed specifically for the Irish market, Dimplex A-Class is not just any new heat pump. Offering market leading efficiency with seasonal performance figures comparable with ground source units, even in the midst of Irish winter temperatures, A-Class sets a whole new benchmark for air source technology.

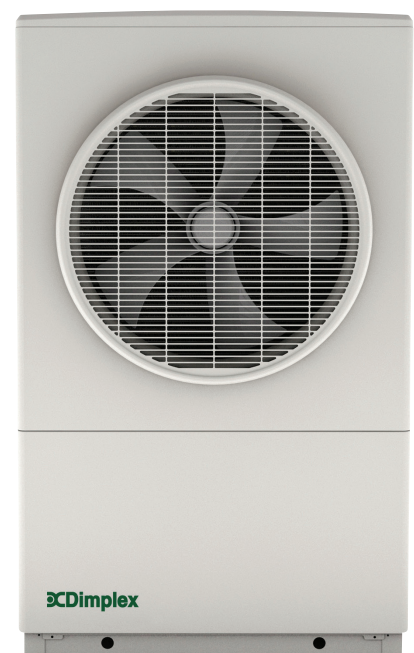
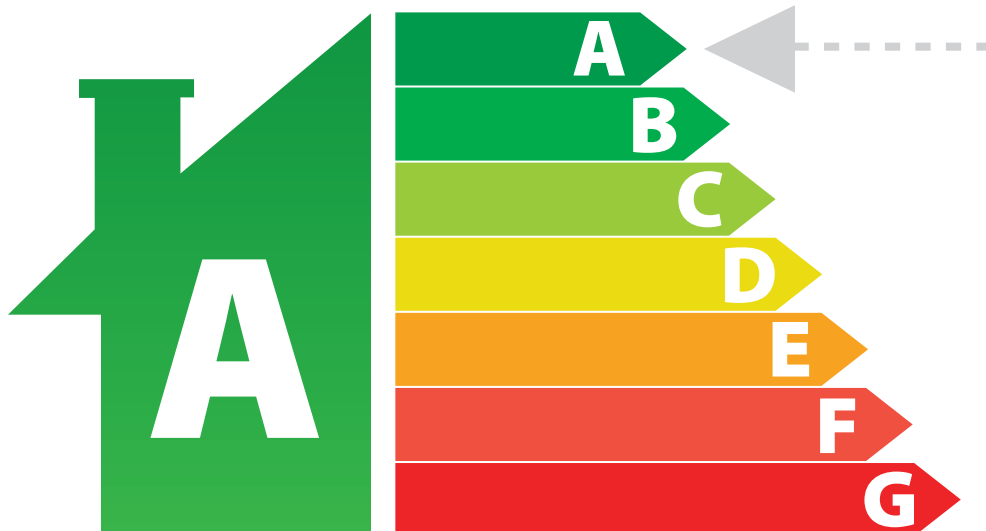
Building regulations- Part L compliance is easy with Dimplex

With the new Part L Regulations (2011) now requiring energy performance standards to be approximately 60% better than those of 2005, the Dimplex A-Class heat pump offers a one stop solution to meet Part L of the building regulations. The Dimplex A-Class heat pump can be applied to all house types and provides domestic hot water and space heating at the lowest possible cost, helping you to save on annual heating bills.

A-Class heat pump features:

- Four models with nominal heating capacities from 6-16kW, single phase
- Outstanding performance with COPs (Coefficient of Performance) of up to 4.7
- Provides 100% of hot water without an immersion
- Operational with external air temperatures from -20°C to +35°C
- Optimised inverter-driven compressor, providing variable output levels and low starting current
- Supplied complete with wall-mounted heating system controller
- Easy access to electrical and plumbing connections for ease of installation
- Designed to work efficiently with underfloor heating, Dimplex SmartRad or conventional radiators
- Available in system packages with A-Class cylinders/buffer tanks and controls, and ancillaries for ease of specification and installation

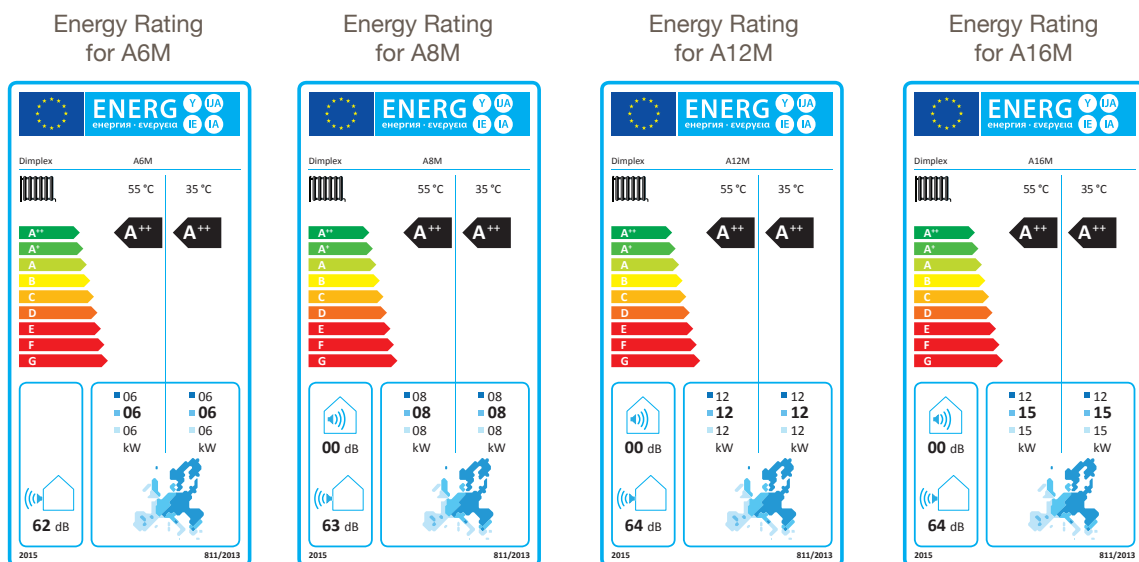
Higher Building Energy Rating (BER) with the Dimplex A-Class



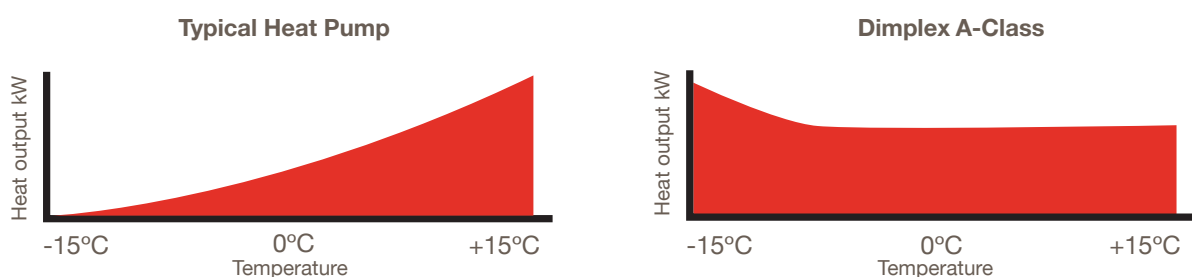
Energy labels

EU Energy Labels

You no doubt already know the colourful labels from refrigerators, washing machines and vacuum cleaners. Now heat pumps are also required to carry the EU energy label. There's a clever touch: the labels can also be given to heat pumps combined with domestic hot water preparation – in fact, for the whole integrated system, including solar thermal power, domestic hot water preparation, temperature controls, etc. This proves once again that it's worth investing in a complete system. Energy efficiency ratings for individual appliances range from very good (A++) to unsatisfactory (G), with a total of nine different levels. It's now possible to compare different heat generators such as boilers and heat pumps directly with each other. No problem for Dimplex A Class, though: it easily achieves top ratings of up to A++. By contrast, heating boilers (oil, gas, biomass) are rated A at best, and as low as C or D in some cases. So no need to worry about the new labels, Dimplex has you covered with all the information you need for input into DEAP and Part L of the Building Regulations.



Instant Output-When you need it



Heating made simple

Heating made simple with intuitive set-up and controls

The A-Class Controller runs the complete home heating system: the A-Class heat pump, room and water temperatures, as well as timings in up to four heating zones.

There's no need for a separate heating thermostat which reduces system costs – this intelligent controller automatically uses the lowest possible amount of energy to deliver target temperatures. And lower energy consumption means lower running costs.

The large user interface with clear menu icons, and an intuitive rotate and push control button, make the system simple to use for the installer and homeowner alike. Plus, it comes preconfigured with all default settings, so minimal system set-up is required, helping to make installation fast and efficient.

For installers there is a dedicated password protected installer area which is used to commission the heat pump and to make refinements after installation. For the homeowner, the user interface is laid out to enable temperature and timing adjustments to be made with ease.



App available in
May 2017



Hot water

- 1 Shows the current hot water temperature
- 2 Controls your water heating



Modes

- 1 Home
- 2 Out
- 3 Holiday
- 4 Home early



Heating

- 1 Control temperature
- 2 Turns heating on/off
- 3 Displays indoor/outdoor temperature



Information

- Lets you know your current operation status



A-Class heat pump cylinders

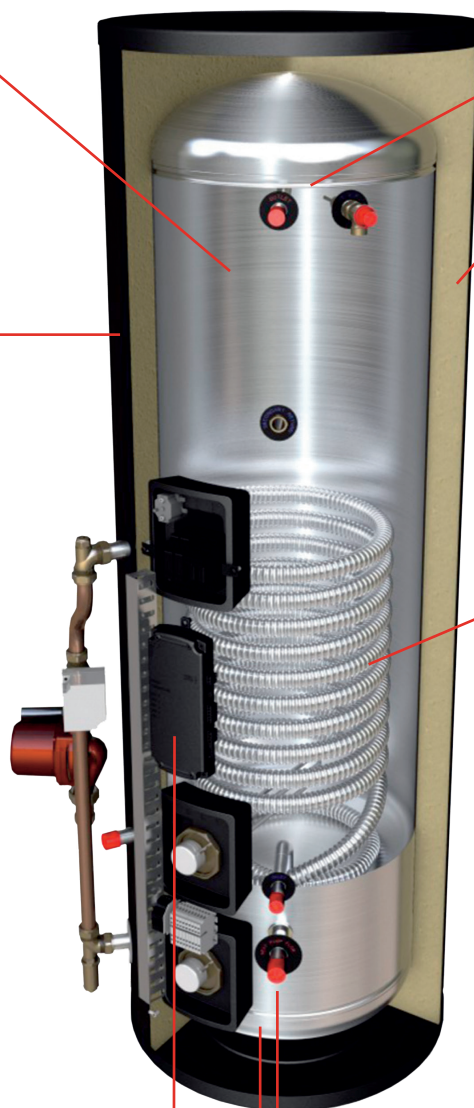
Unvented stainless steel cylinders for heat pumps

Sustainable material

- Inner vessel manufactured from premium grade Duplex stainless steel
- Lightweight yet ultra-high strength and stress/corrosion resistant, ensuring long cylinder life
- 25-year warranty
- Outer cladding produced from 100% recycled material
- Hard wearing, flexible and damage resistant
- High proportion of materials (excluding insulation) by volume recycled

Environmentally sound performance

- Side hot water draw off connection, minimises heat losses through the top of the cylinder
- 60mm of injected polyurethane foam insulation, CFC/HCFC free
- Best practice standards for low heat loss and heat recovery
- Completely void free, including insulation around immersions and thermostats
- Recessed immersion heater and thermostat housings reduce heat loss
- Large surface area coil for use with A-Class heat pumps



* Ts and Cs apply. Please consult our website for more details.

Superior operational performance

- A-Class controller mounted on cylinder
- 210 or 250 litre of continuous hot water
- 40 litre buffer built in
- High flow rates for efficient hot water delivery
- Powerful showers and fast filling baths
- Corrugated coil construction maximises surface area while maintaining high usable volume
- Light and easy to handle for easy installation
- Surface-mounted thermostats and sensors all pre-wired with no pockets
- Supplied complete with inlet safety group and external expansion vessel
- All connections accessible from the front

A-Class heat pump cylinders

Innovative A-Class heat pump cylinders are a key feature of the A-Class range of air source heat pumps. Utilising all of the benefits of the A-Class heat pump cylinder and incorporating an onboard pre-wired 'water module' controller and integrated heating system hydraulics, A-Class cylinders make the entire system as fast and cost effective to install as possible.

Range features:

- 2 model options 210 and 250 litre with integrated 40 litre buffer
- Optimised for inverter heat pumps
- Onboard water module – pre-wired thermostats, immersions, sensors, pumps and valves
- Low heat loss (1.53kWh/24h)
- Easy to install



A-Class heat pump model range



* Ts and Cs apply. Please consult our website for more details.

Specifications

Dimensions

Model	Height (mm)	Diameter (mm)	T&P Valve (mm)	HW outlet (mm)	CW Inlet (mm)	HP return (mm)	HP flow (mm)	HP flow to buffer (mm)	Buffer flow to HP (mm)	Weight empty (kg)	Weight full (kg)
ECS210HP40A-580	1763	580	1520	1520	440	440	960	180	312	50	295
ECS250HP40A-580	2023	580	1797	1797	440	440	960	180	312	62	344

Measurements in mm, made from the bottom of the cylinder to the centre of the component.

Performance

Model	Capacity (l)	Primary hot water capacity (l)	Buffer capacity (l)	Number of immersions	Expansion vessel (l)	Heat pump coil size (kW)	Heat pump coil surface area (m ²)	Reheat time (mins)	Heat loss (kWh/24h)	Energy Rating
ECS210HP40A-580	203	195	40	2	19	2.2	2.2	13(**)	1.53	B
ECS250HP40A-580	243	246	40	2	19	2.2	2.2	18(**)	1.79	B

**Determined in accordance with EN12897-2000.

SmartRad[®] Fan Convactor Radiators

The perfect heat pump partner

Dimplex SmartRad is an intelligent fan convactor radiator designed specifically to work with heat pumps.

Controllable, responsive and attractively designed SmartRad offers a practical, energy-efficient alternative to underfloor heating as a low temperature heating system.

Containing only 5% of the water volume of a conventional radiator, SmartRad's low thermal mass means heat-up time, responsiveness and ultimately comfort are significantly improved.

Key features:

- Ideal for use with heat pumps
- Cost effective, practical alternative to underfloor heating
- Designed for low water temperature operation:
 - Optimises heat pump COP
 - Reduces heat pump running costs
- More energy efficient than conventional radiators:
 - 40% less energy consumption to bring a room from 10°C to 21°C
- Fast response/room heat up due to very low water content:
 - 2x faster than conventional radiators
- Integral electronic thermostatic control
- Optional plug-in 24-hour or 7-day programmers
- Stylish compact design, with a choice of metal or glass fronts





Operating limits	SRX080	SRX120	SRX140	SRX180
Heating water system / return °C	Max. 85/Min. 15 at 150 L/h			
Performance	*at medium fan speed and air inlet temp of 20°C			
Heating capacity* mean water flow temp 40°C (kW)	0.6	0.9	1.1	1.5
Heating capacity* mean water flow temp 45°C (kW)	0.8	1.1	1.4	1.8
Heating capacity* mean water flow temp 50°C (kW)	1.0	1.4	1.7	2.2
Heating capacity* mean water flow temp 55°C (kW)	1.1	1.6	2.0	2.6
Heating capacity* mean water flow temp 60°C (kW)	1.3	1.8	2.3	2.9
Sound pressure level at 1m dB (A)				
Low	26			
Medium	29			
Boost	36			
Air flow rate				
Low (m²/h)	60	100	120	160
Medium (m²/h)	125	190	225	300
Boost (m²/h)	228	345	410	540
Dimensions (mm) HxWxD	530x503x145	530x670x145	530x740x145	530x911x145
Weight (kg)	13	16	18	23
Power input (W)				
Low	17	22	26	24
Medium	20	32	40	35
Boost	27	47	60	53
Standby power	1W			
Nominal voltage / fuse rating (V/A)	~230 / 3			
Hydraulic connections	15mm left and/or right hand connection or from rear			
Water content (l)	0.31	0.43	0.48	0.60
Cable supplied	1 metre			

Dimplex A-Class

Technical Specifications

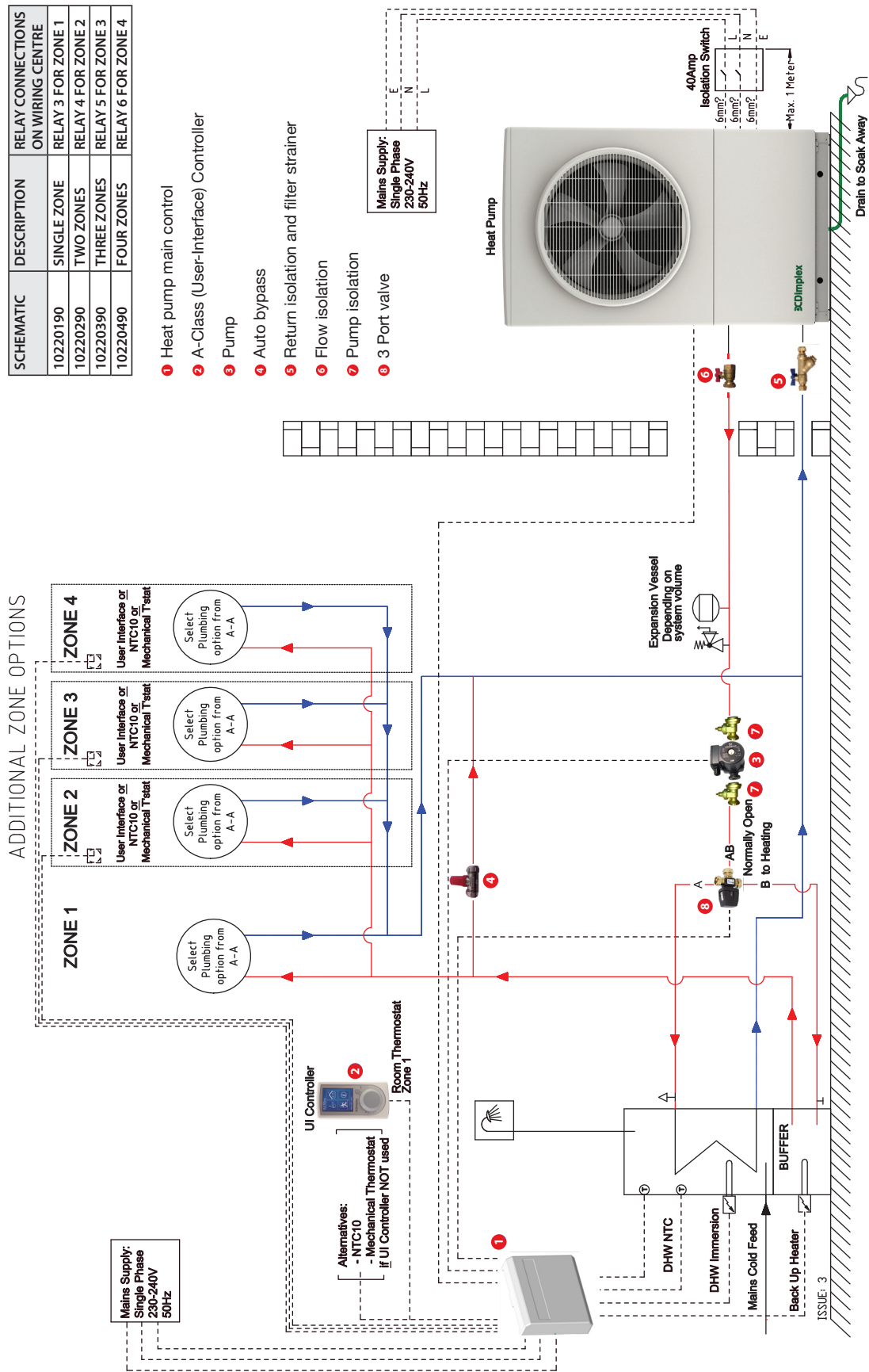


Model	A6M	A8M	A12M	A16M
Certification				
HARP Listed	√	√	√	√
ERP	A++	A++	A++	A++
Operating limits				
Max. flow temperature (°C)	58	65	65	65
Air (°C)	-20 to +30	-20 to +30	-20 to +35	-20 to +35
Performance				
Heat output / CoP A7W35* (kW) /	5.7/4.6	6.7 / 4.6**	12.0 / 4.7	12.0 / 4.7**
Nominal power consumption at A7/W35* (kW)	1.2	1.4	2.6	2.6
Sound power level (dB(A))	61.2	64	64	64
Sound pressure level at 1m (dB(A))	56	56	56	56
Sound pressure level at 10m (dB(A))	36.2	42	42	42
Heating water flow rate / at A7/W35 (m³/h)	1.0	1.15	2.1	2.1
Heat source flow (m³/h)	1700	2600	3700	3700
Mechanical/electrical				
Dimensions – WxHxD (mm)	930 x 770 x 490	932 x 1260 x 401	932 x 1571 x 401	932 x 1571 x 401
Weight (kg)	77	110	130	130
Rated voltage	1/N/PE ~230 V, 50 Hz			
Starting current (A)	Inverter start			
Fuse protection	C20	C20	C40	C40
Refrigerant: type/total charge weight (kg)	R410A / 1.0	R410A / 1.75	R410A / 2.0	R410A / 2.0
Defrost	Automatic			
Heating connections (inch)	1	1	1	1

*According to EN 14511.

**Performance optimised to match building heat load and to maximise the SPF (Seasonal Performance Factor).

Flexible Zone Control Set-up



The Glen Dimplex Promise



Tried and tested technology:

All Dimplex products are designed to help meet the latest building regulations in Ireland.



Installer training:

We operate an Accredited Installer Programme and only supply our systems through accredited installers.



Customer service:

When you choose Dimplex you will have the support of our Design, Production and Service teams locally here in Ireland.



Product warranty:

Dimplex heat pumps have the benefit of a 3 year Parts and Labour warranty. We inspect every installation to make sure your product has been correctly installed and to validate the warranty.



Full design service:

Our in-house team can provide detailed DEAP analysis. This includes full heat loss calculations and energy saving estimates.



HARP listed:

The Home-heating Appliance Register of Performance (HARP) database provides information on efficiency for heating appliances for your home.

Follow us on:



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