



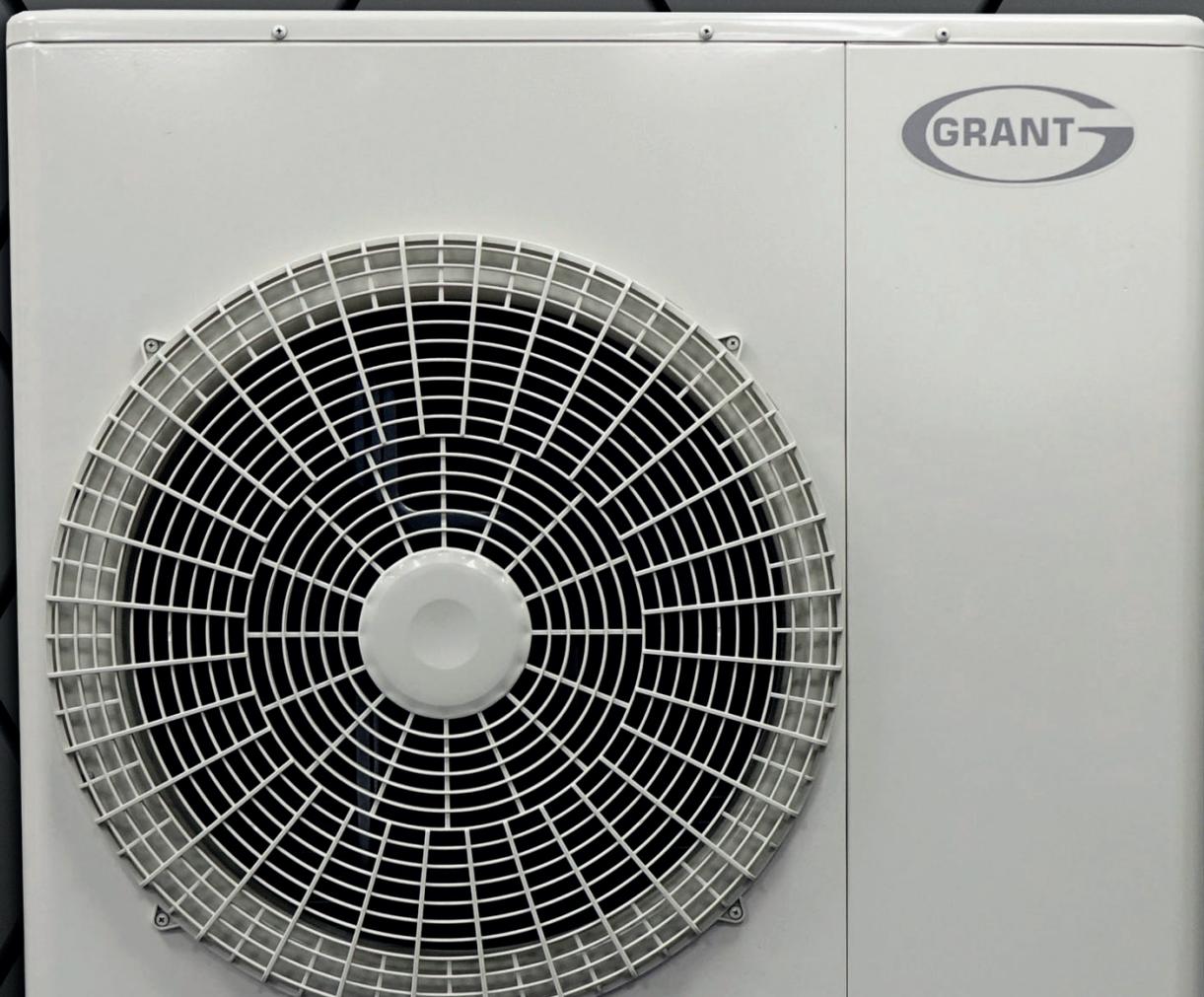
Aerona³

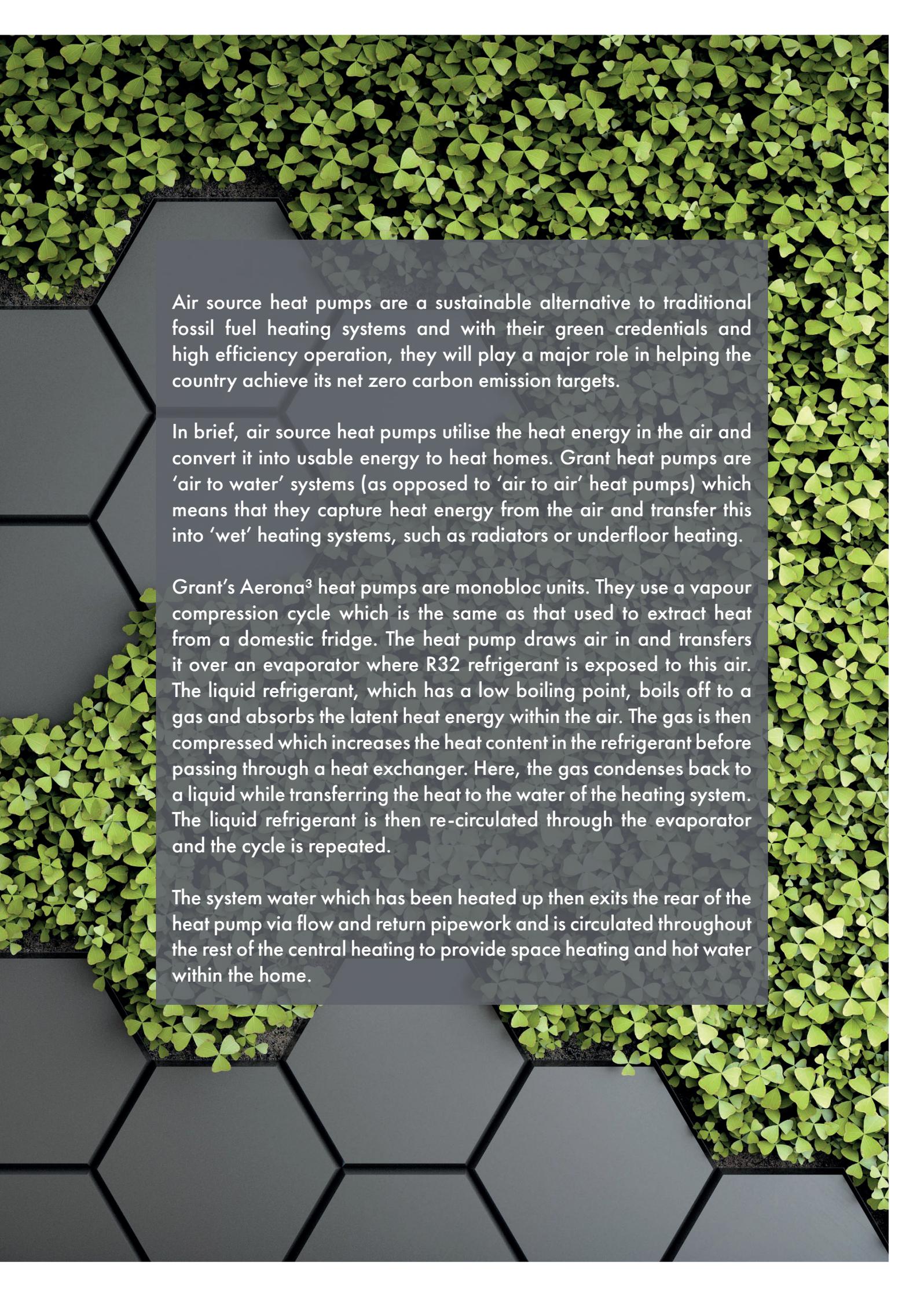
AIR SOURCE
HEAT PUMP RANGE

Inverter Driven Technology



What are air source heat pumps?





Air source heat pumps are a sustainable alternative to traditional fossil fuel heating systems and with their green credentials and high efficiency operation, they will play a major role in helping the country achieve its net zero carbon emission targets.

In brief, air source heat pumps utilise the heat energy in the air and convert it into usable energy to heat homes. Grant heat pumps are 'air to water' systems (as opposed to 'air to air' heat pumps) which means that they capture heat energy from the air and transfer this into 'wet' heating systems, such as radiators or underfloor heating.

Grant's Aerona³ heat pumps are monobloc units. They use a vapour compression cycle which is the same as that used to extract heat from a domestic fridge. The heat pump draws air in and transfers it over an evaporator where R32 refrigerant is exposed to this air. The liquid refrigerant, which has a low boiling point, boils off to a gas and absorbs the latent heat energy within the air. The gas is then compressed which increases the heat content in the refrigerant before passing through a heat exchanger. Here, the gas condenses back to a liquid while transferring the heat to the water of the heating system. The liquid refrigerant is then re-circulated through the evaporator and the cycle is repeated.

The system water which has been heated up then exits the rear of the heat pump via flow and return pipework and is circulated throughout the rest of the central heating to provide space heating and hot water within the home.

Introducing the Grant Aerona³ R32 Range

Consisting of four single phase models – 6kW, 10kW, 13kW and 17kW – the Grant Aerona³ R32 heat pumps provide heating and hot water for properties. Each unit operates at high efficiencies even when the external temperatures are low, making for a cost-effective renewable alternative to traditional off-gas heating methods. Furthermore, the Aerona³ heat pumps have minimal impact on their surroundings being compact in size and quiet in operation with both the 13kW and 17kW models being awarded the *Quiet Mark.



*HPID13R2 & HPID17R32



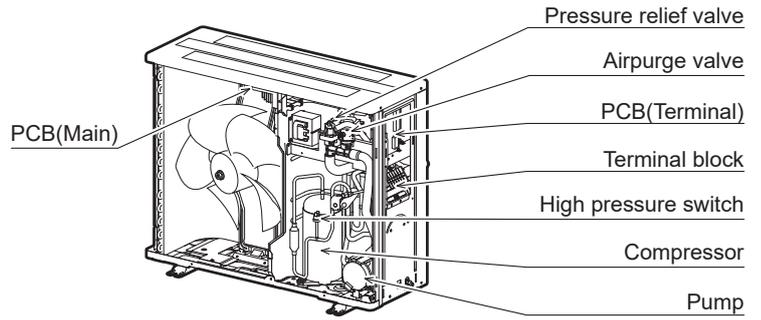
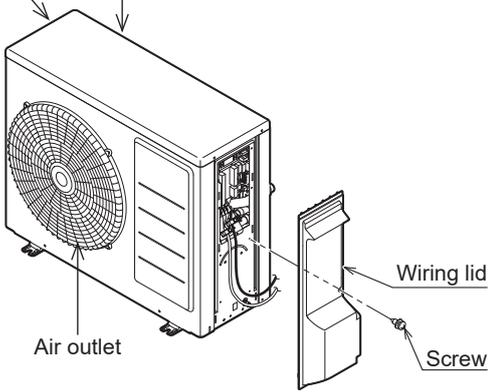
	HPID6R32	HPID10R32	HPID13R32	HPID17R32
ErP Rating* (Heating)	A+++	A+++	A+++	A+++
Height (mm)	675	882	1418	1418
Width (mm)	898	874	1024	1024
Depth (mm)	379.4	405	403	403
Weight (Full) (kg)	52.8	71.8	101	120
SCOP average climate conditions*	4.61	5.20	5.40	4.54
Sound pressure level at 1m (dBA)	54.2	53	49.8	50.6

*(BS EN 14825 average climate conditions @ 35° flow)

Heat Pump Components

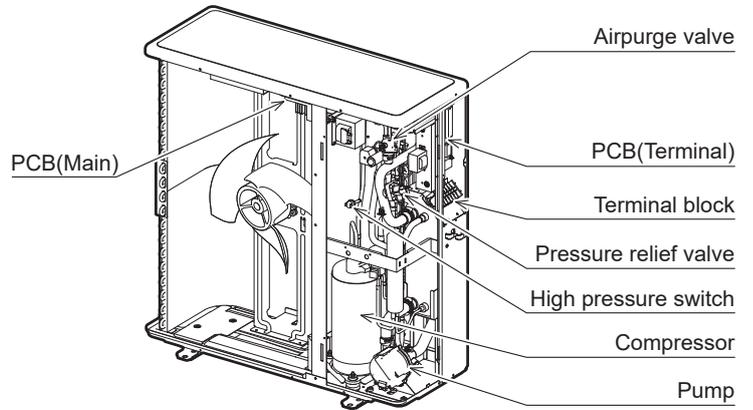
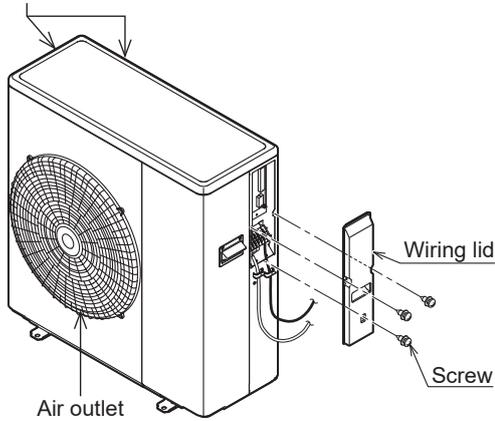
HPID6R32

Air inlet is located in the left or in the back



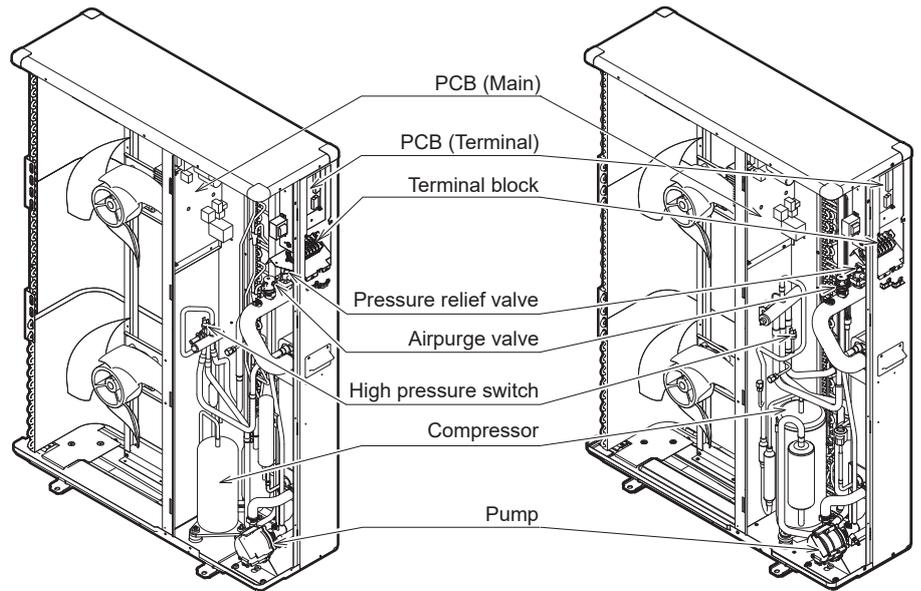
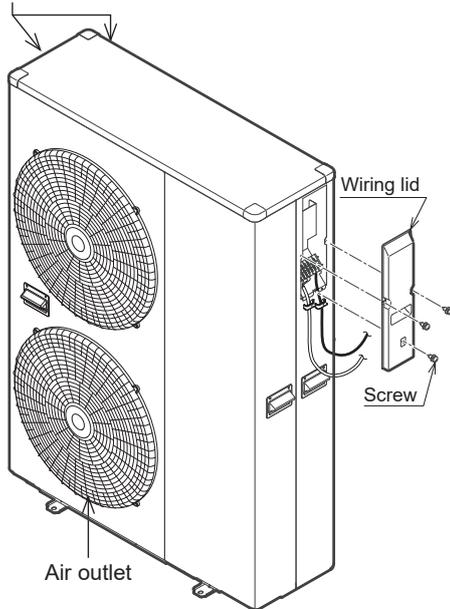
HPID10R32

Air inlet is located in the left or in the back



HPID13R32 & HPID17R32

Air inlet is located in the left or in the back



Technical Specifications

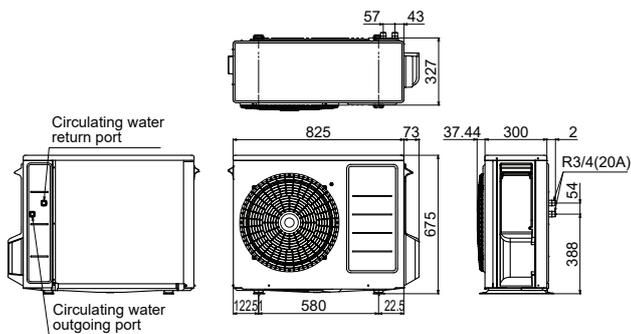
		HPID6R32	HPID10R32	HPID13R32	HPID17R32
ErP Rating*	Heating	A+++	A+++	A+++	A+++
Height (mm)		675	882	1418	1418
Width (mm)		898	874	1024	1024
Depth (mm)		379.4	405	403	403
Weight (kg)	Empty	51	70	99	118
	Full	52.8	71.8	101	120
Heating Capacity (kW) (BS EN 14511 - air 7°C/ Water 35°C)		6.92	11.1	13.6	18.0
Power input (kW) (BS EN 14511 - air 7°C/ Water 35°C)		1.41	2.10	2.59	3.76
COP (BS EN 14511 - air 7°C/ Water 35°C)		4.91	5.28	5.25	4.79
SCOP average climate conditions (BS EN 14511 - air 7°C/ Water 35°)		4.62	5.22	5.41	4.54
Refrigerant (R32) (kg)		0.80	1.55	2.20	2.80
Power supply		~230V 1ph 50Hz			
Water connections (BSPF)		3/4"	1"	1 1/4"	1 1/4"
Min/ Max operating temperatures Air (°C)		-20/43	-20/43	-20/43	-20/43
Sound power level dB(A) (BS EN ISO 3743-1:2010)		65.2	64	60.8	61.6
Sound pressure level at 1 m - external (dB(A)) (Q=1)		54.2	53	49.8	50.6

Electrical Installation Requirements

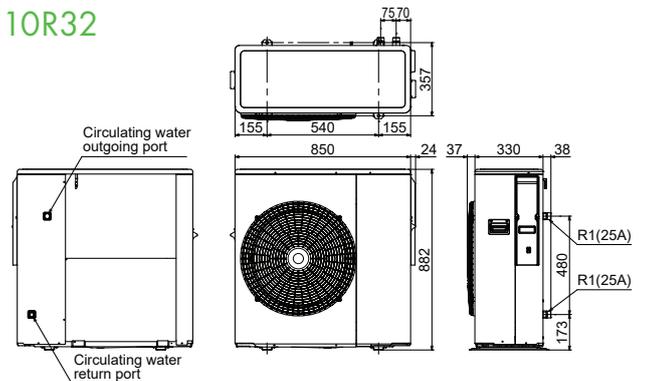
Max running current (A)		11.2	17.5	23.0	25.3
MCB	Rating (A)	16	20	32	32
	Type	C	C	C	C

* Low temperature: 35°C flow (heating). From September 2019

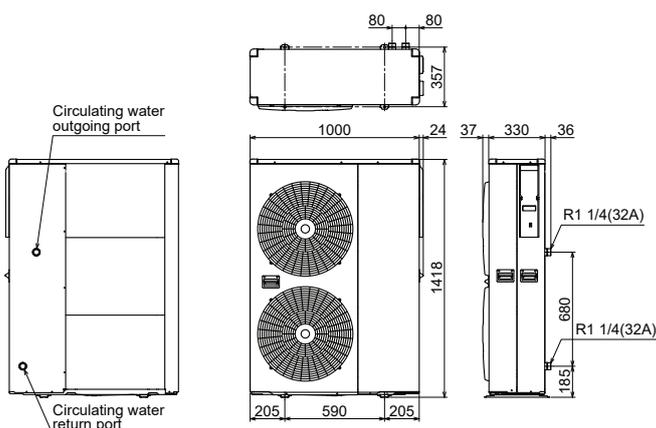
HPID6R32



HPID10R32



HPID13R32 & HPID17R32

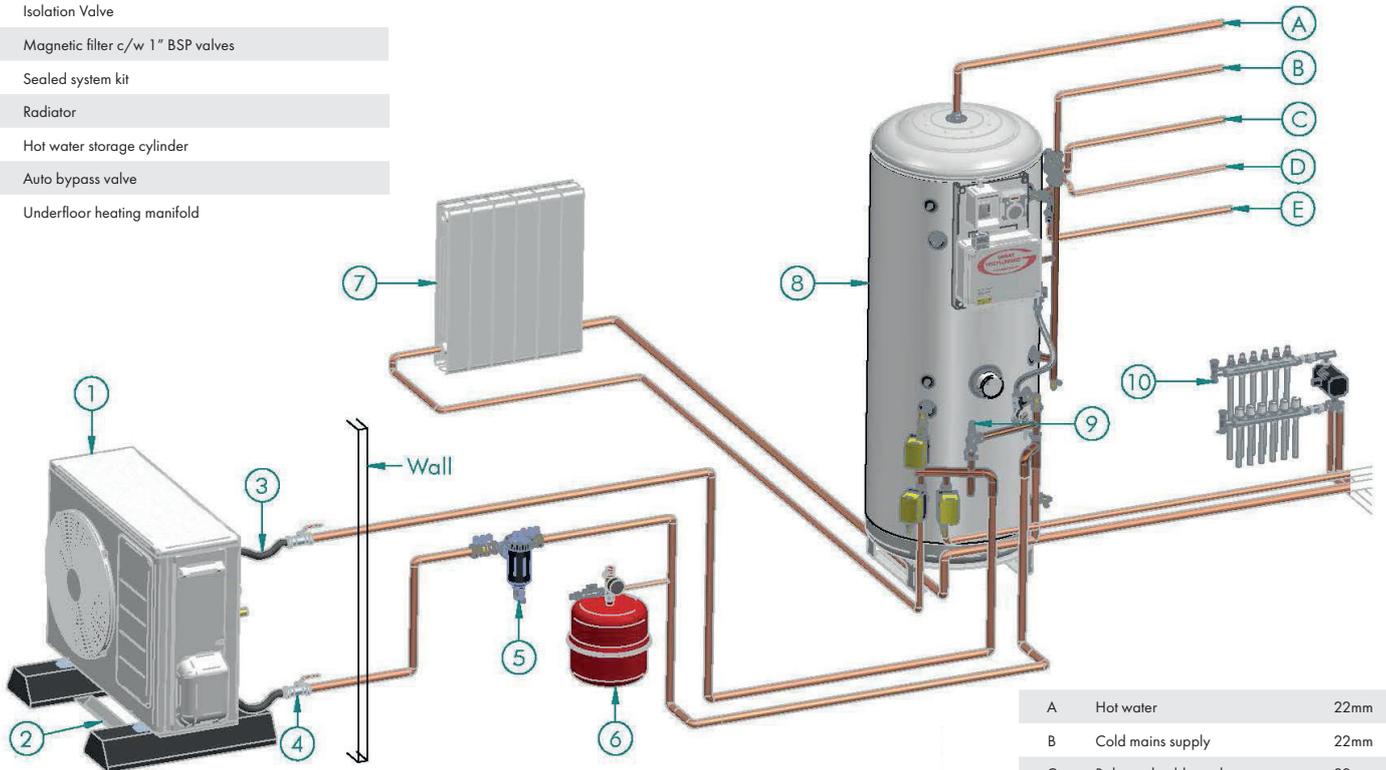


To view our **Product fiche** concerning the commission delegated regulations use the QR code below:



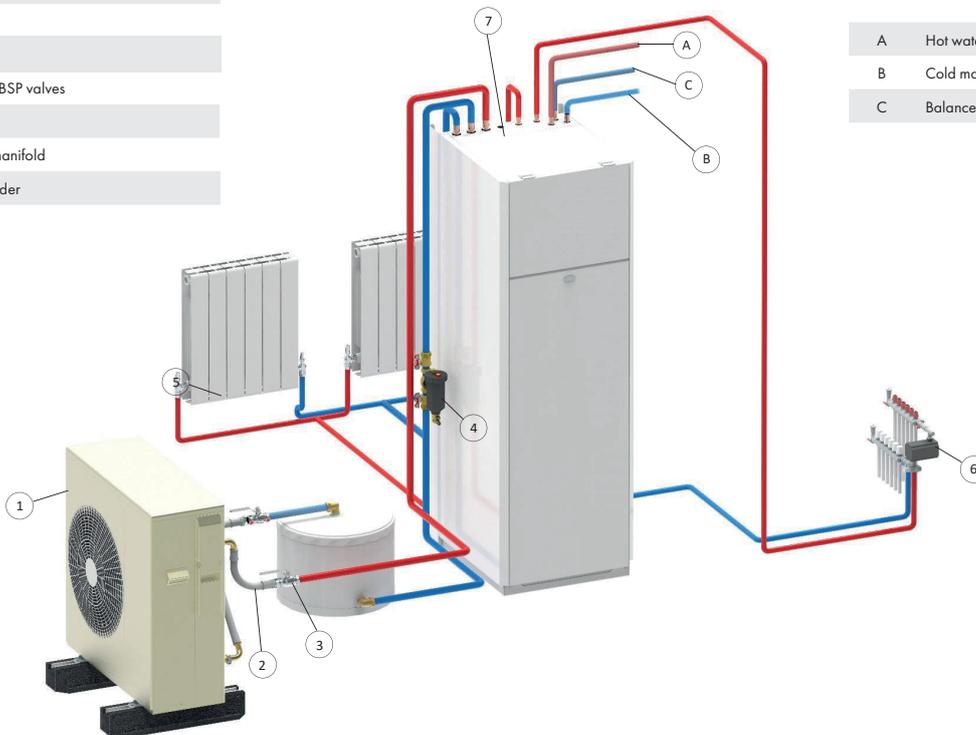
Heat Pump Systems

- 1 Heat Pump
- 2 Drain for condensation
- 3 Flexible Hose
- 4 Isolation Valve
- 5 Magnetic filter c/w 1" BSP valves
- 6 Sealed system kit
- 7 Radiator
- 8 Hot water storage cylinder
- 9 Auto bypass valve
- 10 Underfloor heating manifold



A	Hot water	22mm
B	Cold mains supply	22mm
C	Balanced cold supply	22mm
D	DHW cylinder expansion vessel	22mm
E	Cylinder safety discharge pipe	15mm

- 1 Heat Pump
- 2 Flexible Hose
- 3 Isolation valve
- 4 Magnetic filter c/w 1" BSP valves
- 5 Radiators
- 6 Underground heating manifold
- 7 AWave integrated cylinder



A	Hot water	22mm
B	Cold mains supply	22mm
C	Balanced cold supply	22mm

Note: This system diagram is only a concept drawing, not a detailed engineering drawing, and is not intended to describe complete systems, nor any particular system. It is the responsibility of the system designer, not Grant IRL, to determine the necessary components for and configuration of the particular system being designed including any additional equipment and safety devices to ensure compliance with building and safety code requirements.

Heat pump operation modes

The operation of the heat pump is indicated in the top right hand corner of the controller screen. Here is a quick guide to the mode symbols and their meaning.



This indicates the frost protection is active.



This indicates the heat pump defrost cycle is active.



This symbol indicates a heating demand. If this is steady it means the programmer and room thermostat are calling for heating. If the symbol is flashing it indicates that the heat pump is in heating mode but the heating has stopped due to a hot water demand that has priority.



This indicates a hot water demand.



This indicates the heat pump fan is running.



This indicates the circulating pump (in the heat pump) is running.

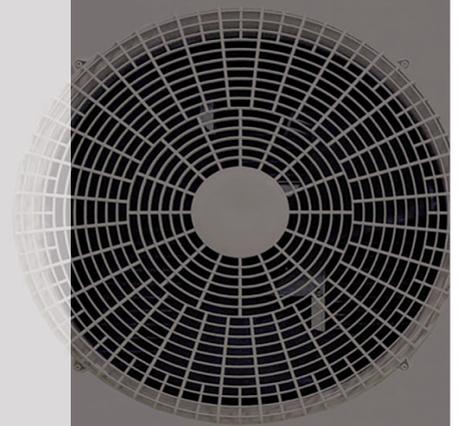


This indicates the heat pump compressor is running. If this symbol is flashing it indicates that the operation of the compressor is being delayed by the internal controls of the heat pump. This delay should normally stop after a short period and the compressor (and heat pump) will operate.

Please scan QR code for further information.



Grant Aeron3
Display Pad



Additional resources

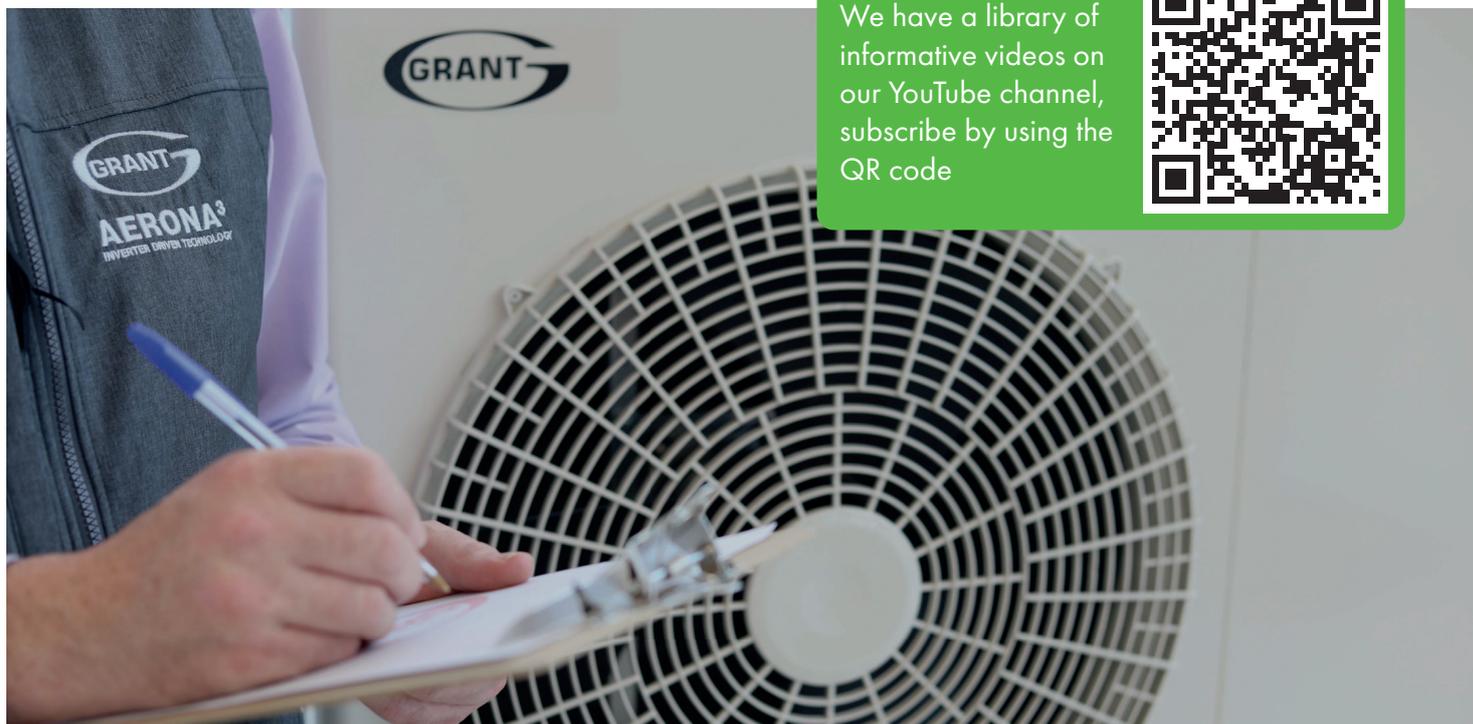
If you need to contact us, you can do so via the contact page on our website: www.grant.eu or by emailing our Technical & Customer Services Teams on customerservice@grantengineering.ie

Please ensure you have the following information available:

- Heat Pump model
- Heat Pump serial number - see data plate (on side panel)
- Date of purchase/installation
- The correct name and address for the installation
- The installer's name, address and telephone number



We have a library of informative videos on our YouTube channel, subscribe by using the QR code



CPD Training

Continuous Personal Development (CPD) is training we provide here and off site for architects, engineers, energy assessors and similar minded professionals. These certified courses are available in many technologies, give an insight and knowledge on current and new products and areas for which are relevant to attendees. We currently have three CPD courses available which are RIAI and Engineers Ireland approved.

- An introduction to condensing oil boilers, woodpellet boilers and air to water heatpumps
- Condensing oil, woodpellet and heatpump product training
- Heatpump technology & appropriate heat emitter sizing

BIMSTORE collaborates the design, construction, and operating process to create a unique 3D model of Grant products. BIM is the latest modernized development in the construction industry and Grant has worked closely with the BIMSTORE to create Revit models of our Heat Pump and Cylinders range. The Grant products are free to download and give Engineers, Architects etc the ability to see how the Grant products will fit into their projects.



BIMSTORE

Features & Benefits

Grants range of Wave cylinders are manufactured from duplex stainless steel and are indirect, mains water cylinders with single, double and triple coil options available. The single and double coil cylinders are high gain, which leads to a much faster heating time and quicker recovery. The range of cylinders have been specifically designed to operate in conjunction with the Grant Aerona³ heat pump range.

- 10 year guarantee (subject to T&C's)
- Available from 180ltr - 300ltr
- Immersion heater & fast recovery stainless steel solid coils
- Suitable for use with heat pumps, biomass, gas, oil boilers and solar
- Suitable for both domestic and light commercial use
- T&P valve factory fitted
- Manufactured from 'Duplex' stainless steel for superior corrosion resistance
- 28mm and 22mm compression fittings
- 50mm CFC and HCFC-free foam lagging for low heat loss
- Additional sizes may be available upon request
- Cylinder kits available
- Good flow rate ideal for homes with multiple bathrooms and fast filling of baths
- Economical to run with minimal maintenance
- Fast reheat times for quick availability of hot water
- Solid coil as standard to reduce noise

Technical Specifications

Wave Cylinder Code	Description	Height (mm)	Diameter (mm)
HPMONO210G	210L single coil stainless steel indirect	1496	550
HPMONO300G	300L single coil stainless steel indirect	2055	550
HPDUOIND210G	210L twin coil stainless steel indirect	1496	550
HPDUOIND300G	300L twin coil stainless steel indirect	2055	550
CYL300TRIPLE	300L triple coil stainless steel indirect unvented	2055	550
HPMONOSLIM/180G	180L slimline cylinder	1717	478

Pre-Plumbed Cylinder Code	Description	Height (mm)	Diameter (mm)
HPMONO210G	210L single coil stainless steel indirect	1496	550

AWave Integrated Cylinder code	Description	Height (mm)	Width (mm)	Depth (mm)
HPINT210G	210L stainless steel indirect pre-plumbed cylinder housed within a powder coated casing	1821	594	633



Grant Heating Design & Service package offer

- 
- Technical Design
 - Detailed heating specification for tenders
 - Estimation and quoting service
 - SR 50 calculations
 - Expert and experienced advice
 - 42 years of after sales advice
 - Service engineers network
 - Customer focus and satisfaction to a standard of ISO 9001
 - Commissioning of all installs
 - Designer signs offs
 - Professional Indemnity Insurance
 - Employers liability
 - Public and product liability
 - Ancillary certification
 - Installer training
 - CPD training
 - eLearning Academy
 - Commissioning and servicing training
 - Bespoke training
 - Full warranty of parts and labour
 - In house marketing team, design and printing facilities
 - Product videos for end user
 - On site R+D that are continuously developing and testing new products and standards

Features & Benefits

Whether you are a homeowner or work within the trade and are planning a new build project, there are number of important choices to make. Some of which include the size and scale of your design, construction materials required, types of finishes available and of course, selecting the best home heating system. Ensuring the correct heating system is in place not only delivers greater overall efficiencies and long-term savings but also helps you meet environmental standards outlined in building regulations.

Helping to ease the process Grant provide the full home heating solution by combining specialist knowledge with an extensive product portfolio. Following an easy process, you can save time and have the property's full heating requirements designed, quoted and supplied by Grant.

Availing of Grant's **free of charge design service**. You can learn more about how combining an AERONA³ heat pump with other products in our innovative product offering can help your heating system achieve optimum efficiencies. All it takes is three easy steps:

1. Send your planning drawings to **heatpump@grantengineering.ie** or call **057 912 0089**
2. A member of the Grant team will be in touch with you to discuss requirements
3. You will receive full property specifications with recommended products all available from Grant.

**On the journey to a
greener future, we
are with you every
step of the way.**



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