

the **HAMWORTHY**

TYNEHAM AIR SOURCE HEAT PUMP

RANGE GUIDE



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 **Hamworthy**

Introduction and background



Hamworthy

Whilst we may be best known for our range of modular commercial gas boilers in the UK, Hamworthy Heating is a leading authority in the commercial heating and hot water markets. Behind the scenes, we possess a wealth of expertise supporting the low carbon transformation of the UK heating industry.

Our parent company, Groupe Atlantic, has a long history in heat pumps and currently holds the market leading position in France. By combining Groupe Atlantic's technical and manufacturing heat

pump expertise, with our knowledge of UK heating systems and market, we have created a successful formula for our innovative range of Tyneham commercial air source heat pumps.

Our broad product range, whether it be modular floor standing boilers or durable stainless steel water heaters, ensures our customers have the best and most advanced solutions for heating and hot water, whilst supporting their journey towards decarbonisation. Each model in our range of commercial heat pumps can be integrated with other products in our portfolio allowing for commercial hybrid

heating, and hot water systems.

Collaborating through knowledge and skills in Groupe Atlantic, we have developed a range of low-carbon products, designed to simplify our customers' lives. More than just a manufacturer, Hamworthy Heating is a company that is dedicated to providing high levels of service and aftercare to its customers. From heating design support to technical assistance, whether the product is a commercial air source heat pump, floor standing boiler, or water heater, we will deliver the same outstanding customer service and support.



Trusted expertise since 1914



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 **Hamworthy**

 **atlantic**

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 **Triangle Tube**

**EXPERTS IN
HEATING**

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The journey to net zero

The desire to achieve net zero targets are based around the UK's environmental commitments, consumer awareness and public opinion.

Building regulations, increasing consumer awareness and future energy policy are key drivers in the uptake of renewable technologies such as heat pumps. UK home owners, social housing associations and local authorities are collectively seeking robust solutions to minimise their carbon emissions and reduce the environmental impact of residential energy use.

We have the knowledge, experience and skills to play our part in ensuring the nation achieves its net zero targets and so our customers have the best and most advanced solutions for heating and hot water, whatever their needs and requirements..

Why are heat pumps a good low carbon solution?

Heat pumps reduce the reliance on fossil fuels	<ul style="list-style-type: none">• Heat pumps produce zero local carbon emissions.• Heat pump technology can be up to 400% more efficient than traditional boilers.• Fossil fuel combustion contributes towards carbon emissions and global warming which is not environmentally friendly.
Heat pumps produce renewable heat	<ul style="list-style-type: none">• A heat pump utilises the free energy in the air to heat water.• When heat pumps are partnered with a renewable electricity supplier, heat generation is 100% carbon neutral.
Refrigerant vs. Natural Gas	<ul style="list-style-type: none">• The refrigerant in the heat pump is maintained within the unit and constantly recycled for the lifetime of the appliance.

The Tyneham range of air source heat pumps

With over 100 years of experience and knowledge, we have a track record of developing market leading solutions for commercial properties.

We have led the way in commercial heating by ensuring our heating products are at the forefront of technology, quality and design by delivering both high efficiency and low running costs.

Now, we have taken the next step forward by introducing our new Tyneham natural refrigerant commercial heat pumps.

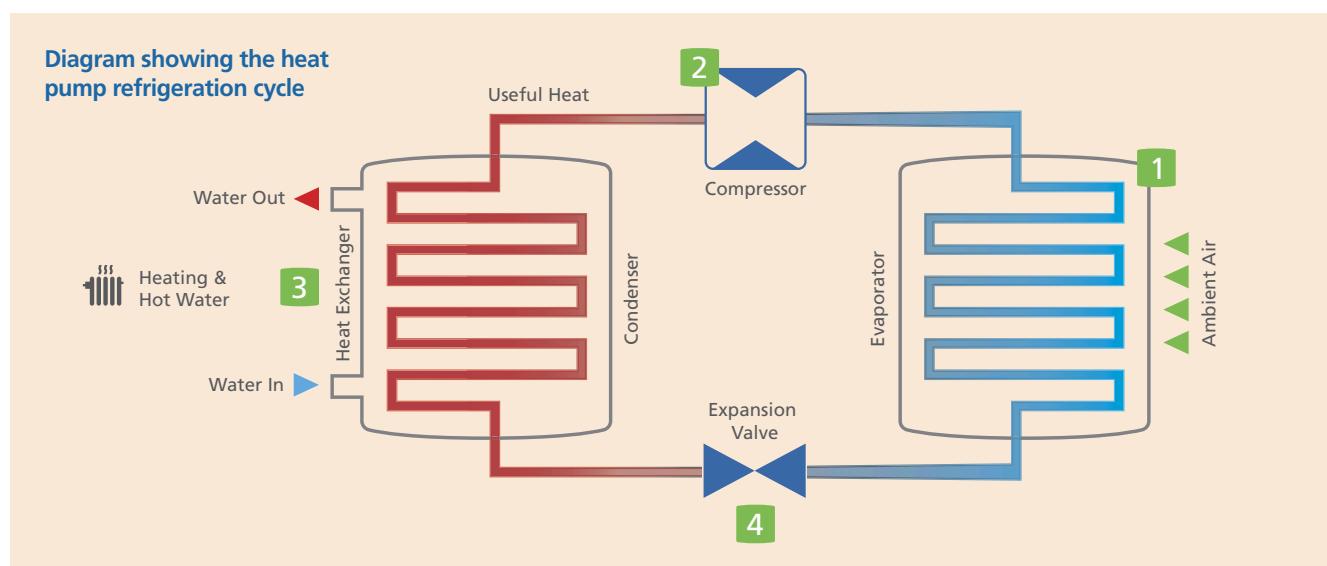
Featuring R290 and CO2 refrigerant for ultra-low GWP they are able to achieve high temperatures up to 75°C. These innovative heat pumps will ensure our customers have the best and most advanced solutions for heating and hot water, while helping businesses in the UK on their journey to Net Zero.



How a heat pump works

The technology: heat pump cycle

Heat pumps are a highly efficient, eco-friendly way of producing heat for commercial buildings. By taking 'free energy' from the air via a refrigerant cycle they generate heat without releasing any carbon emissions.



01

CAPTURE

The fan passes ambient air over extremely cold liquid refrigerant. The refrigerant captures the heat from the ambient air and becomes a warm vapour.

02

COMPRESS

The warm refrigerant vapour passes through a compressor which produces hot refrigerant and usable heat.

03

EXCHANGE

The heat in the hot refrigerant is then transferred to the heating and hot water cylinder through a heat exchanger.

04

EXPAND

Once the heat has been transferred to the building, the refrigerant passes through an expansion valve which reduces its temperature, making it really cold again and enabling it to capture heat from the ambient air, continuing the cycle.

The role of the refrigerant in heat pump technology

Air source heat pumps gather heat energy from the surrounding air, which, via a heat exchanger, is transferred into the heat pump refrigerant and turned into vapour. This vapour is then passed through

a compressor and turned into a high-pressure, high-temperature refrigerant, raising the temperature to a point that can deliver heat throughout a building's heating system. The refrigerant is the working

liquid used within the heat pump and refrigerant types are now broadly split into two categories: HFCs (Hydrofluorocarbon) such as R32 and natural refrigerants, which include R290 and CO₂.

Understanding refrigerants

Heat pumps are based on tried and tested technology, but the refrigerant used in many older models – and even some still being marketed today – have a high Global Warming Potential (GWP). Refrigerants with a

high GWP contain extremely potent greenhouse gases, that warm the planet.

The new Tyneham heat pumps use natural refrigerant with an ultra-low GWP:

Moving to natural refrigerants which have a low GWP is not only good for the planet, but also makes commercial sense as high GWP refrigerants become increasingly scarce and therefore more expensive. Use of natural refrigerant helps future proof your investment.

Models	Refrigerant	GWP	Outputs
Tyneham 290HT	R290 (propane)	3	15 – 65kW
Tyneham CO2 and CO2Q	R744 (CO2)	1	65 – 130kW

How does the refrigerant affect the heat pump system performance?

When designing a heat pump system you need to balance the performance of the heating system with the performance of the refrigerant.

There are key areas to consider when choosing the right heat pump for the system:

Max flow temperature

Not all refrigerants can generate sufficient domestic hot water temperatures or heating outputs.

Global Warming Potential

Different refrigerants have a different Global Warming Potential (GWP). The lower the GWP, the more eco-friendly it is and therefore better for the environment.

Coefficient of Performance

The heat output affects the coefficient of performance (COP) of the heat pump

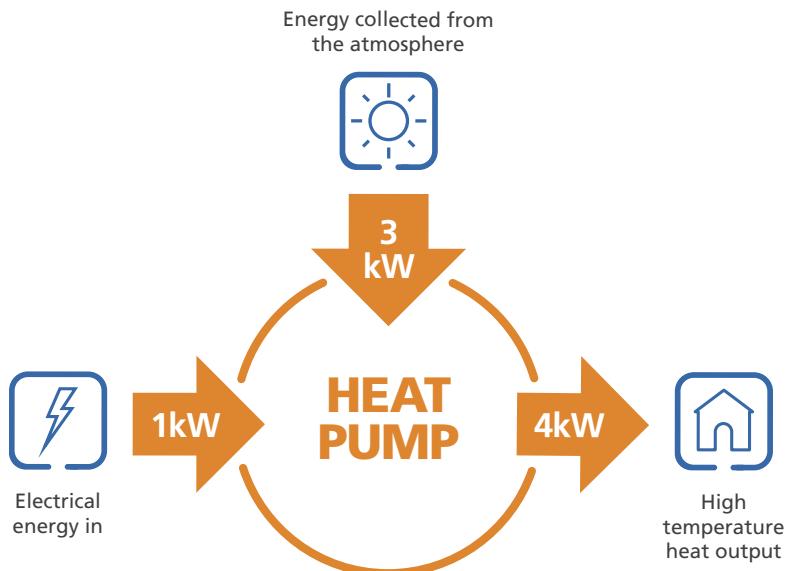
Ambient Air Temperature

The heat pump performance will be affected also by the ambient air temperature. The air has heat (energy) in it which is extracted by the heat pump and raised with the help of the refrigerant within. The warmer the air at the start of the cycle, the more energy that can be extracted. If the air temperature drops, then the heat pump has to work harder to extract more energy using more electricity.

The lower the Global Warming Potential (GWP), the more eco-friendly it is and therefore better for the environment

Refrigerant Name	Trade Name	Chemical Name	Ozone Depletion Potential	GWP-Global Warming Potential	Differences	Normal Flow Temp °C
R744	Carbon Dioxide	CO2	0	1	Natural refrigerant with ultra-low GWP, very eco-friendly and non-flammable.	70-90
R290	Propane	Propane	0	3	Natural refrigerant with ultra-low GWP, very eco-friendly and highly flammable.	75
R454c	HFO	Opteon XL20	0	148	Deposits of TFA do not degrade in water.	65
R454b	HFC	Difluoromethane	0	466	R410a replacement but unlike R410a is a synthetic refrigerant and not a single component refrigerant.	55
R32	HFC-32	Difluoromethane	0	675	Lower GWP, eco-friendly, mildly flammable, lower cost, currently most popular refrigerant choice.	55
R134a	HFC134a	1,1,1,2-Tetrafluoroethane	0	1430	Being phased out as of January 2022.	45
R407c	Kleaa66	R32/R125/R134a	0	1774	Still used but will be phased out in 2025 in systems with less than 3kg charge.	65
R410a	Puron, AZ-20	R-32/R-125 (50/50)	0	2088	Slowly being phased out, higher GWP, worse for environment, non flammable, higher costs.	60

Coefficient of performance (COP)



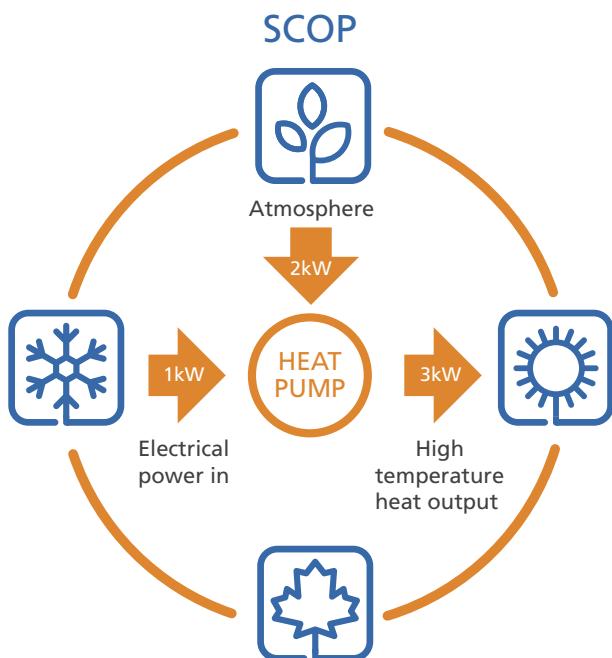
COP – Coefficient of performance

The Coefficient of Performance (COP) refers to the efficiency of a heat pump and directly relates to the energy the output from a heat pump. It is the ratio of heat produced, relative to each unit of electricity consumed in the heat pump.

$$COP = \frac{\text{Heat output}}{\text{Electrical input}}$$

See product range sections for COP graphs

Seasonal Coefficient of performance (SCOP)



SCOP – Seasonal coefficient of performance

The seasonal coefficient of performance (SCOP) is the average COP carried over the annual heating season (the full year).

Sound power and sound pressure

The levels of noise that a heat pump emits is represented as a sound power and sound pressure level.

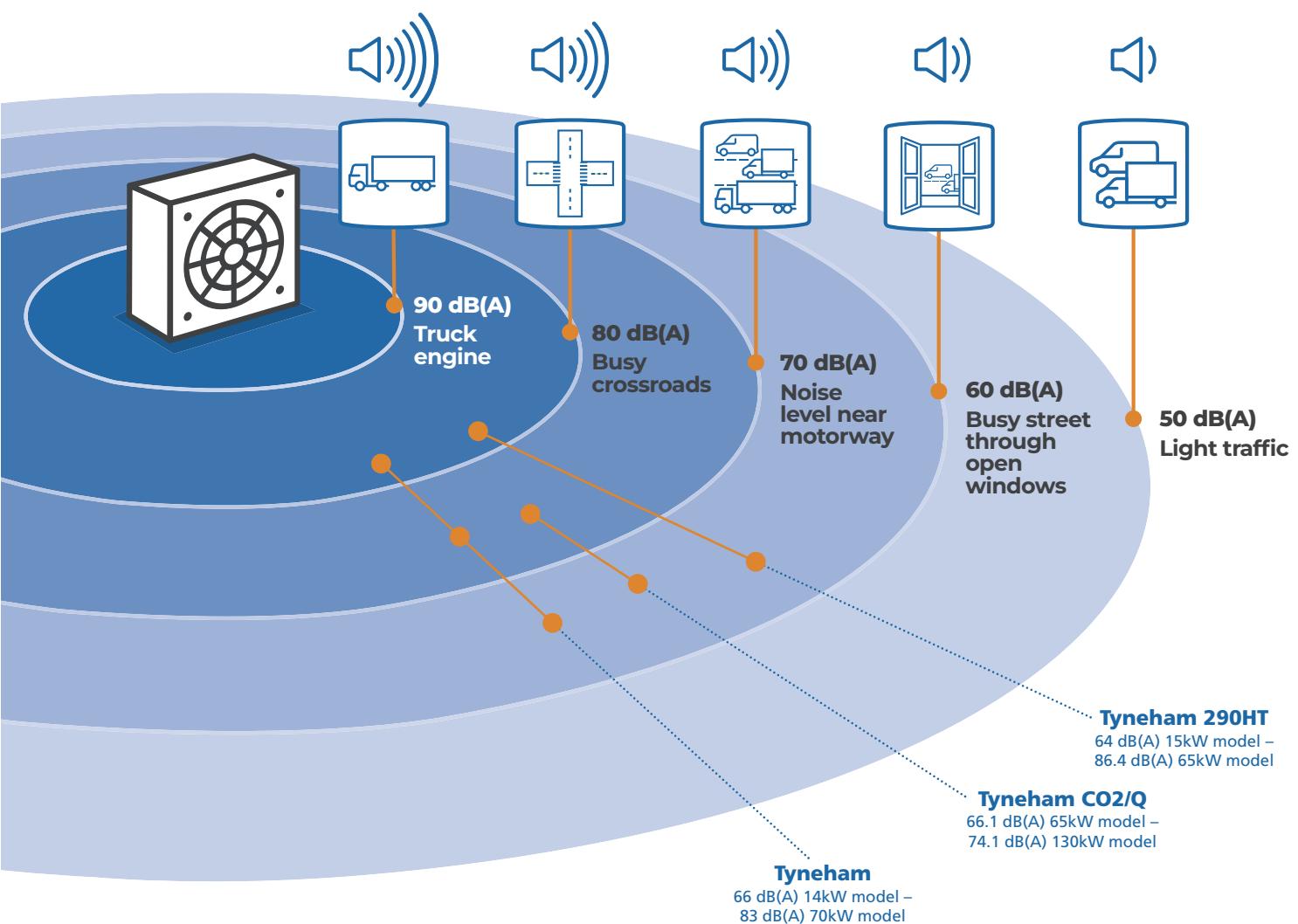
Sound power

Sound power is a property of the product components under laboratory testing.

The sound power is the sound waves emitted from a source (heat pump is the source in this case), it is measured in decibels (dB). The sound power is the total sound emitted from the source.

Sound pressure

The sound pressure is sometimes referred to as the 'noise level'. This describes the disturbance of sound and what we realistically hear.



Tyneham 290HT Commercial heat pumps

Using R290 natural refrigerant, these monobloc air source heat pumps have been designed for use in commercial buildings. The Tyneham 290HT can achieve high flow temperatures with high efficiencies and low carbon heating.

Key features

- Monobloc air source heat pumps
- Single unit with the refrigeration cycle contained within the outdoor unit
- Inverter controlled compressor to accurately match the heat demand[†]
- Ultra-low global warming potential due to the use of R290 natural refrigerant
- High flow temperature, perfect for DHW production
- Highly efficient coefficient of performance (COP)*
- Quiet noise level as low as 64 dB(A)**
- Suited to larger installations – cascade systems to achieve higher output
- Combine with Hamworthy's boilers for a hybrid heating system
- 2 year warranty (extended to 5 years if commissioned by Hamworthy Heating)
- Back up and long-term support from our team of experienced UK based engineers

A green arrow pointing to the right with the text 'A++' inside it, indicating the energy efficiency rating of the heat pump.A black rectangular image of a heat pump unit, with the text '65kW' in the bottom right corner, indicating the model's capacity.

[†] Tyneham 290HT 65kW model incorporates a fixed speed compressor.

R290
Refrigerant



6 models available 15kW – 65 kW

Tyneham 290HT technical specification

Tyneham model		Units	15kW	18kW	27kW	40kW	50kW	65kW
ENERGY	Heat Pump Space Heating [35°C]	ErP rating	A+++	A+++	A++	A++	A++	A++
	Heat Pump Space Heating [35°C]	SCOP	5.02	4.99	4.46	4.09	4.2	4.08
	Heat Pump Space Heating [55°C]	ErP rating	A++	A++	A++	A++	A++	A++
	Heat Pump Space Heating [55°C]	SCOP	4.85	4.76	4	3.83	3.91	3.32
	Refrigerant		R290	R290	R290	R290	R290	R290
	Refrigerant Charge	(kg)	1.27	1.27	2.1	3.15	3.5	4.35
	Global Warming Potential	GWP	3	3	3	3	3	3
	Heating (A7/W35)	Capacity (kW)	15.84	18.77	28.6	40.1	50	63.9
HEATING	Heating (A7/W35)	Power Input (kW)	3.36	4.03	7.6	13.1	16.5	42.7
	Heating (A7/W35)	COP*	4.94	4.62	4.54	4.1	4.2	4.6
	Max Flow Temperature	Max [°C]	75	75	75	75	75	70
	Air Temperature Range	Min/Max [°C]	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)
SOUND	Sound Data Outdoor unit	Power Level dB(A)**	64	64	65	82	83	86.4
	Sound Data Outdoor unit	Pressure Level at 1m dB (A)***	47	47	45	64	65	78.4
CONNECTIONS & WATER	Pipework Connection Sizes	Heating Flow (inch)	1	1	1 1/4	1 1/2	1 1/2	2
	Pipework Connection Sizes	Heating Return (inch)	1	1	1 1/4	1 1/2	1 1/2	2
ELECTRICS	Minimum Water Volume	Litres (l)	230	230	225	365	415	
	Electrical Supply	(v)	400	400	400	400	400	400
	Phase		Three	Three	Three	Three	Three	Three
	Max Running Current	(amp)	15.8	16.5	21	38	45	70
DIMENSIONS	Fuse Rating	(amp)	25	25	25	50	63	75
	Width	(mm)	1100	1100	1610	1895	1895	2300
	Depth	(mm)	510	510	710	1110	1110	1200
	Height	(mm)	1447	1447	1270	1980	1980	1500
	Weight	(kg)	174	174	285	535	550	770

Minimum installation clearances:

15, 18 & 27kW models

Front: 1500mm
Rear: 400mm
Left: 400mm
Right: 500mm
Top: 1500mm
Bottom: 50mm
Side clearance of 1000mm when used in cascade.
The outdoor unit must be raised by at least 50mm from the ground

40 & 50kW models

Front: 1500mm
Rear: 1500mm
Left: 1200mm
Right: 1000mm
Top: 1500mm
Bottom: 50mm
Side clearance of 1500mm when used in cascade.
The outdoor unit must be raised by at least 50mm from the ground.

65kW model

Front: 1000mm
Rear: 800mm
Left: 800mm
Right: 1000mm
Bottom: 50mm
Side clearance of 1500mm when used in cascade.
The outdoor unit must be raised by at least 50mm from the ground.

Accessories and options:

	Included	Optional
External control unit – 15kW to 27kW	•	
Integral controller – 40kW to 65kW	•	
Flexible hose		•
Anti-vibration rubber feet		•
Exogel antifreeze kit		•

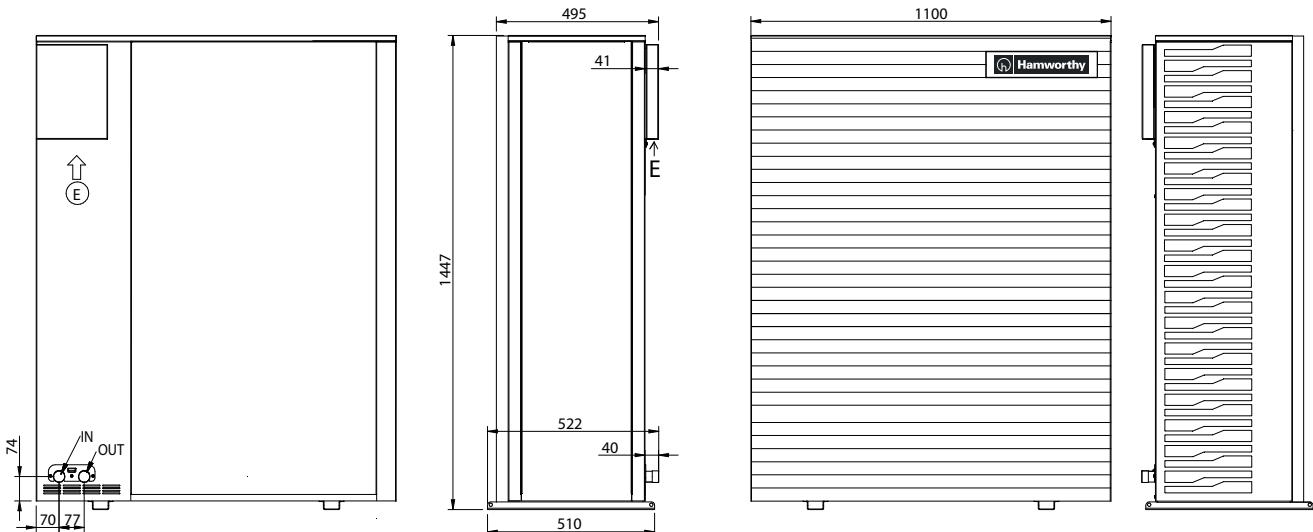
Terms and conditions apply:

Tyneham 290HT models all represent the output at Air 7°C & Water 35°C.
* Coefficient of Performance (COP) rated at EN14825 test conditions Water 35°C / Air 7°C.
** The sound levels refer to a fully loaded unit at standard nominal conditions according to EN12102:2022.
*** Sound pressure value calculated from the sound power level in condition (9) using the standard UNI EN ISO 3744:2010.

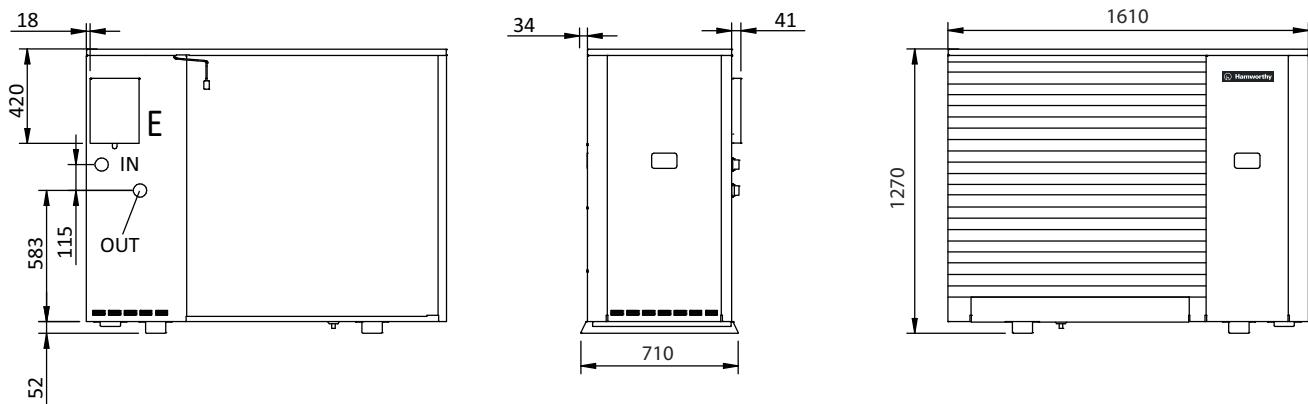
Tynemouth 290HT dimensions

R290
Refrigerant

15 & 18kW models



27kW model

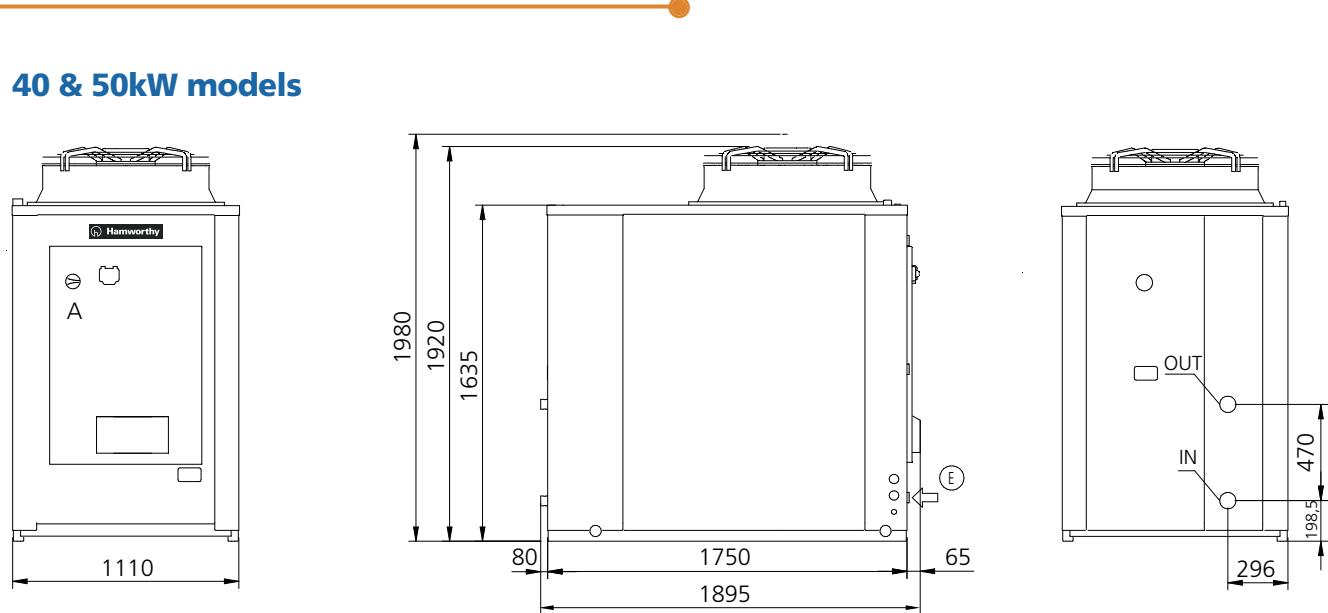


E = electrical

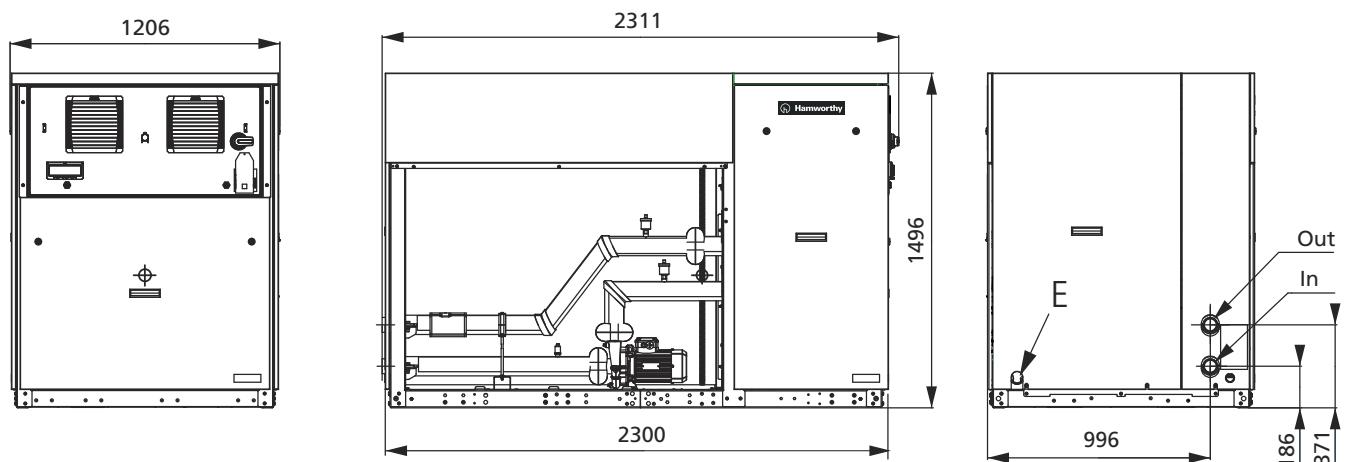
Note: All dimensions in mm unless otherwise stated.

Tynemouth 290HT dimensions

40 & 50kW models



65kW model



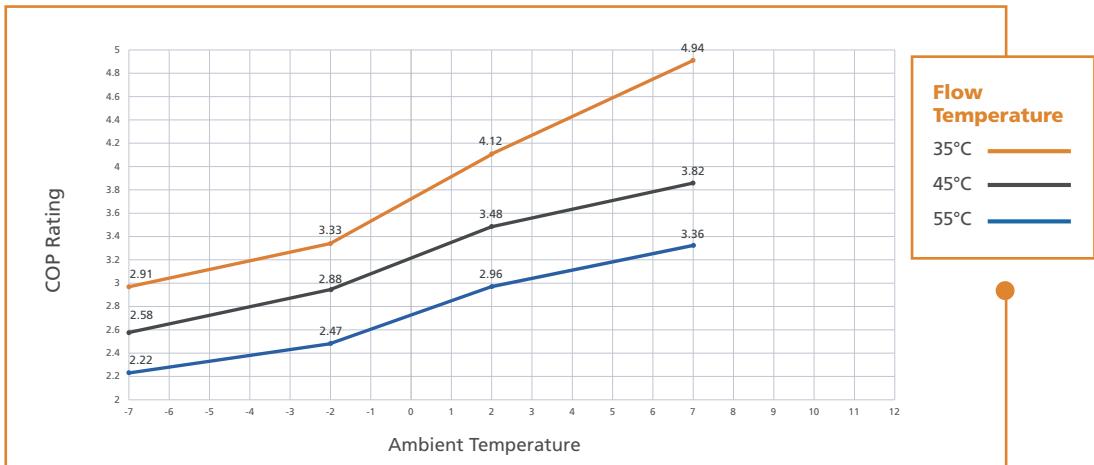
E = electrical

Note: All dimensions in mm unless otherwise stated.

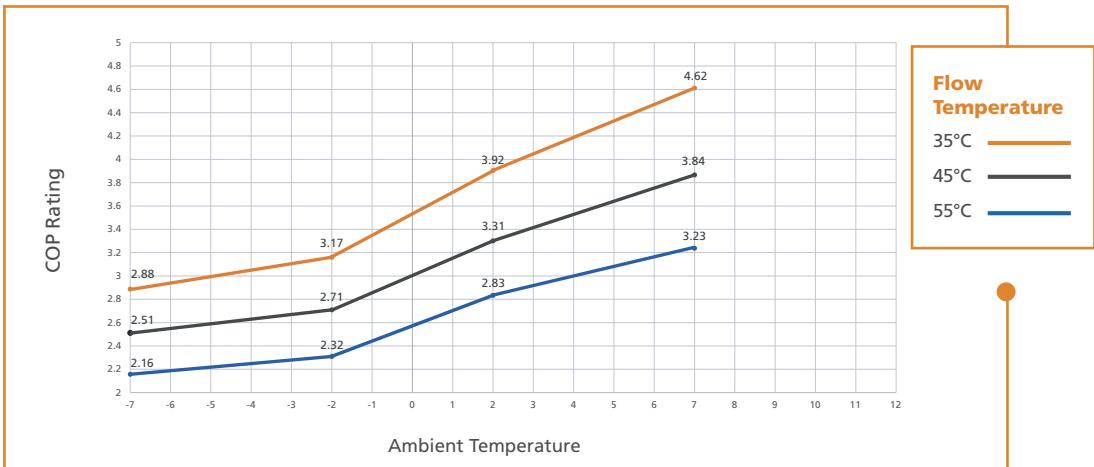
Tynemouth 290HT coefficient of performance (COP) graphs

R290
Refrigerant

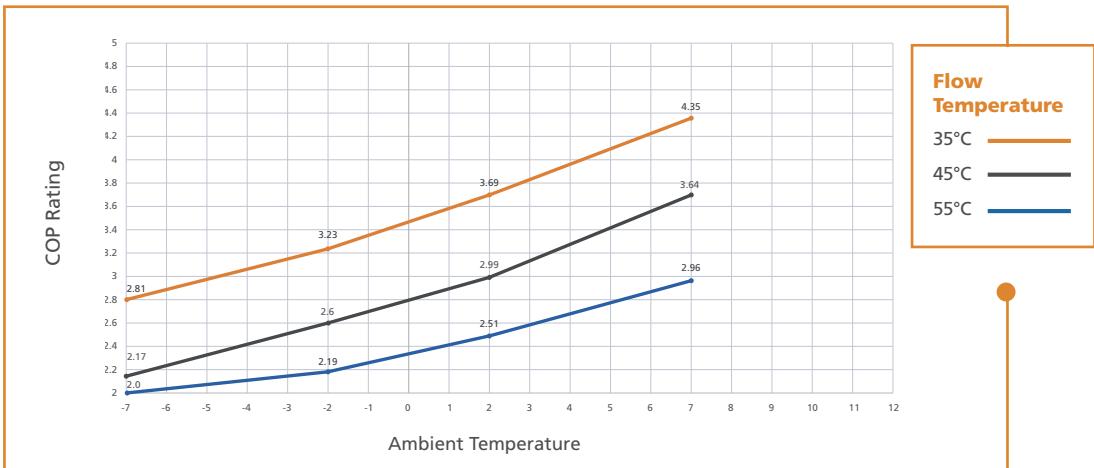
**290HT
15kW**



**290HT
18kW**



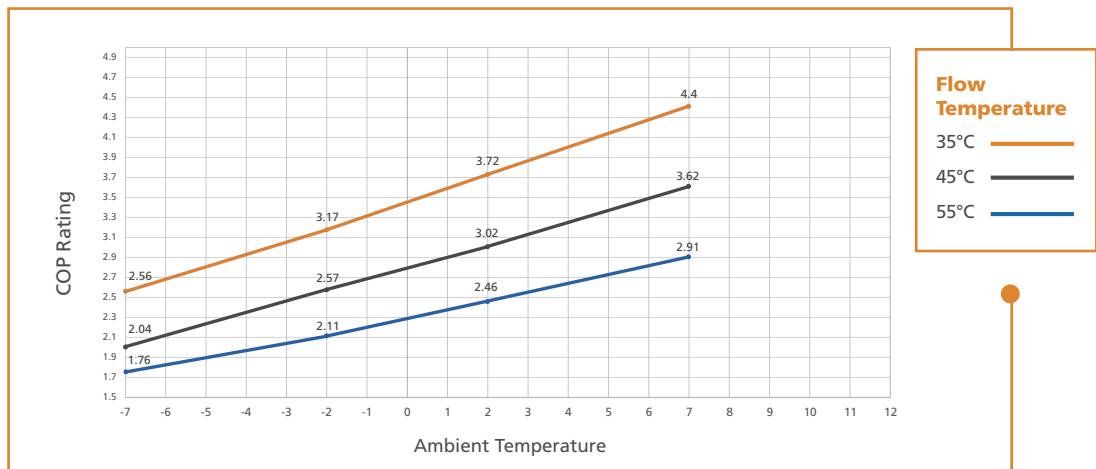
**290HT
27kW**



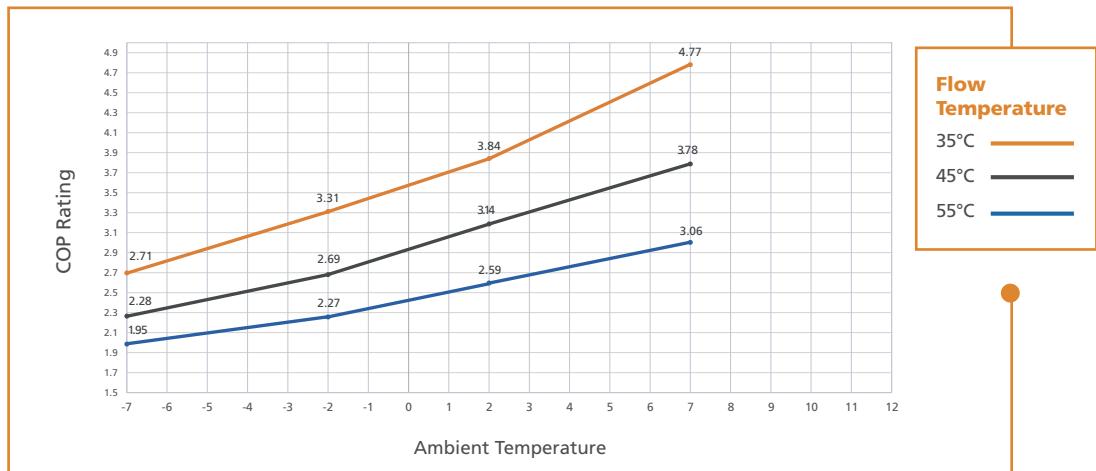
Tynemouth 290HT coefficient of performance (COP) graphs

R290
Refrigerant

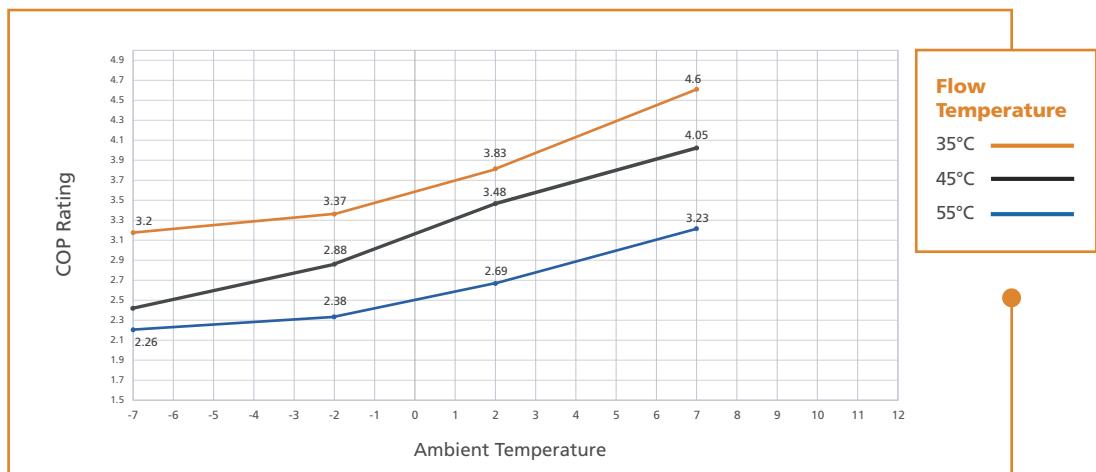
**290HT
40kW**



**290HT
50kW**



**290HT
65kW**



Tyneham 290HT specification

The Tyneham 290HT heat pump has a fully automatic, integrated controller, utilising a highly efficient inverter controlled compressor, integral circulating pump and is suitable for connection to a correctly sized buffer cylinder.

Controls

The Tyneham 290HT heat pump has connectivity for all common types of BMS integration including 0-10v, volt free and BACnet. Where no BMS is present a controller must be integral to the heat pump, which can adjust and monitor both DHW and heating temperatures, with the ability to control back up or emergency heaters.

The Tyneham 290HT heat pump is of inverter type with an inverter controlled circulating pump built in.

The controls must have safety lock out parameters including fault diagnosis for the heat pump.

The Tyneham 290HT heat pump can be used with external components such as frost protection and weather compensation.

Hydraulics

Hydraulic connections are common to each chassis type to ensure ease of installation and maintenance in mixed output cascades. The Tyneham 290HT heat pump has a maximum operating pressure of 6 bar and is suitable for heating and indirect hot water systems. Pressure relief valves are integral.

Dimensions

The Tyneham 290HT heat pump range has common chassis sizes within the range to help enable uniform cascade specification.

Efficiency

COP of the heat pump must be inline with site application.

The Tyneham 290HT heat pump utilises refrigerant R290 with a GWP of 3.

The Tyneham 290HT features an inverter controlled compressor, integral modulating pump and DC fan motor (15-50kW only).

Approvals

The Tyneham 290HT heat pump holds the following approvals EN 14276-1:2020, EN 14276-2:2020, EN 12735-1:2020, EN 12735-2:2016, EN378:2017, EN 13134:2002

Components directive 2014/68/UE conformity evaluation modules:

Compressors A2
Heat exchangers H +H1
Receivers D1
Valves A
Safety valve

Specification

The Tyneham 290HT heat pump is capable of flow temperatures of up to 75°C with a 5°C Delta T.

To ensure the most efficient operation and conform to minimum water quantities for defrost cycles, the Tyneham 290HT heat pump will be connected directly to a correctly sized buffer.

Sourcing

The Tyneham 290HT heat pump has been manufactured or finally assembled in Europe.

Cascade

The Tyneham 290HT heat pump can be configured in a cascade of up to 7 units (max 350kW) using one central controller.

The controller must be able to sequence the heat pumps to give equal running time per unit.

Warranty

The Tyneham 290HT heat pump is available with a 5 year parts and labour warranty (5 year warranty available if commissioned by Hamworthy Heating Engineer, 2 year warranty as standard).

Case study



New Tyneham 290HT cascade installation at Cambridge primary school

Two Tyneham 290HT 27kW air source heat pumps have been installed in cascade for underfloor heating in a new extension at Ermine Street Church Academy in Huntingdon, Cambridge. The system is connected to a Hamworthy Tyneham buffer that maintains a flow temperature of 50°C, providing the school with an efficient heating solution.

Sector: Education
Building: School
Products: Tyneham 290HT heat pump & 500L buffer cylinder
Application: Underfloor heating

Ermine Street Academy, part of the Diocese of Ely Multi-Academy Trust, is a primary school in Alconbury Weald for children aged 4 to 11. The school's main heating system is supported by a set of Hamworthy Heating boilers, which were installed by Sotham Engineering. Tasked with the second phase of the project, which involved efficiently powering an under-floor heating system in the school's new extension building, Sotham Engineering consulted with their local Hamworthy representative once again to specify a solution.

Issue

Considering the need to lower carbon emissions, improve heating for efficiency and the challenge of ensuring complete separation of the heat source for the new extension, while working with low gas pressures available in the building, the team at Sotham Engineering decided that a heat pump system would be the best solution.

Following consultation and a review of product performance and capabilities, the decision was made to incorporate two 290HT 27kW Tyneham heat pumps with a 500L Hamworthy buffer into the new design.

"Underfloor heating with a heat pump partner particularly well and are a great combination. We choose Tyneham Heat Pumps due to their overall performance and efficiency. Having collaborated with Hamworthy during the first stage of the project, we found them easy to work with and always available to provide support and assistance."

Comments Ricky Harris, Sotham Engineering Services Ltd.



For more information on the products used in this hybrid set up, visit our website or contact your Hamworthy Area Sales Manager



Solution

To accurately meet the heating requirements of the new school extension and ensure an even distribution of heat - eliminating cold spots - the new system from Hamworthy Heating includes two 290HT 27kW Tyneham heat pumps configured in a hydraulic cascade setup. These pumps are connected to a 500L buffer cylinder, which also features an electrical heating element, controlled by a BMS. The buffer connections were also supplied by Hamworthy Heating. This cascade arrangement allows for the heat capacity to be equally distributed according to specific heating demands, thereby enhancing the school's energy efficiency and minimising unnecessary energy consumption and cycling of the heat pumps.

Rather than relying on a larger single heat pump that may run inefficiently at partial load, the new cascade setup at Ermine Street Church Academy enables the units which have inverter controlled compressors to adjust their capacities as needed. This approach will help the school achieve a more

accurate match to its actual heating demand and optimise performance in the future.

Additionally, since the system can adjust to keep the heat pumps operating at their most efficient state, improving the coefficient of performance (COP), each heat pump can run within its optimal performance range more frequently. As a result, the overall heating system becomes more efficient, which means Ermine Street Church Academy benefit from reduced operating costs.

The new Tyneham heat pump installation at Ermine Street Church Academy also provides the school with increased protection against breakdowns. Unlike a single heat pump installation, which can result in complete downtime if it fails or needs to be serviced, the new cascade installation offers greater reliability. In this scenario, the remaining unit can continue to operate at increased capacity. This means the school building is supplied with uninterrupted heating. Furthermore, as the workload is shared across two Tyneham heat

pumps, stress, and wear on individual components is significantly reduced. This means, going forward, the school can also expect to benefit from improved reliability.

Quiet in operation, with noise levels as low as 64db(A), the new Tyneham 290HT heat pump system also means that noise disruption to pupils and teaching is kept to a minimum, as well as neighboring properties.

Sotham Engineering is a leading provider of integrated Mechanical and Electrical installation and maintenance services. Based in Cambridge and a division based in Norwich, Sotham Engineering has over 50 years of experience in maintenance repairs through large-scale specialist projects. The new heat pump installation began in late Spring and was completed in time for the start of the new school year in September. Ermine Church Academy now benefits from a reliable and efficient heat pump system that will help the school reduce its carbon footprint and lower operational costs.

Tyneham CO2 and CO2Q Commercial heat pumps

Future proof your investment with our range of CO2 natural refrigerant commercial heat pumps. Ideal for when space is limited, this range can be installed flush against a wall or back to back with another unit, and benefits from a low dB(A) rating for minimal background noise.

Key features

- Made in the UK
- Ultra-low GWP due to the use of R744 (CO2) natural refrigerant
- Highly efficient coefficient of performance (COP)*
- Quiet noise levels as standard with low noise models available (CO2Q)
- Can be installed against a wall or back to back with another unit with no installation clearances required at the rear of the unit
- Inverter controlled compressor to accurately match the heat demand
- Single unit with the refrigeration cycle contained within the outdoor unit
- Suited to larger installations – cascade systems to achieve higher output
- Combine with Hamworthy's boilers for a hybrid heating system
- 2 year warranty on parts only
- Back up and long-term support from our team of experienced UK based engineers



Ultra low GWP with the use of CO2 refrigerant





Tyneham CO2Q

65 – 130 kW

Tyneham CO2 65 – 130 kW

Available in 65kW, 95kW & 130kW

Tyneham CO2 technical specification

Tyneham model		Units	65kW	95kW	130kW
ENERGY	Heat Pump Space Heating [55°C]	ErP rating	A+++	-	-
	Heat Pump Space Heating [55°C]	COP	3	3	3
	Heat Pump Space Heating [65°C]	ErP rating	A+++	-	-
	Heat Pump Space Heating [65°C]	COP*	3.4	3.4	3.4
	Refrigerant		R744	R744	R744
	Refrigerant Charge	(kg)	4.8	6.5	10
	Global Warming Potential	GWP	1	1	1
	Heating (A7/W65)	Capacity (kW)	65	95	130
	Heating (A7/W65)	Power Input (kW)	17	25	34
	Heating (A7/W65)	SCOP	3.5	3.5	3.5
HEATING	Max Flow Temperature	Max [°C]	70	70	70
	Air Temperature Range	Min/Max [°C]	(-15 no max)	(-15 no max)	(-15 no max)
	Sound Data Outdoor unit	Power Level dB(A)**	74	75	75
	Sound Data Outdoor unit	Pressure Level at 10m dB (A)***	43	44	44
	Pipework Connection Sizes	Heating Flow (mm)	28	35	42
SOUND	Pipework Connection Sizes	Heating Return (mm)	28	35	42
	Electrical Supply	(v)	400	400	400
	Phase		Three	Three	Three
	Max Running Current	(amp)	45.07	67.55	82.19
	Fuse Rating	(amp)	63	80	100
DIMENSIONS	Width	(mm)	2190	3051	3101
	Depth	(mm)	1160	1160	1457
	Height	(mm)	1853	1853	1853
	Weight	(kg)	935	1260	1300

Accessories and options:

	Included	Optional
Master controller		•
DHW controller		•
Flexible hoses		•
Burst disc pressure relief kit		•
Exogel antifreeze kit		•
Anti-corrosion coating for installations close to the sea (special order)		•

Minimum installation clearances:

Front: 1000mm

Rear: 0mm (Designed to back up to a wall)

Left/Right: 1000mm

Terms and conditions apply:

Tyneham CO2 & CO2Q models all represent the output at Air 7°C & Water 65°C.

* Coefficient of Performance (COP) rated at EN14825 test conditions Water 65°C / Air 7°C.

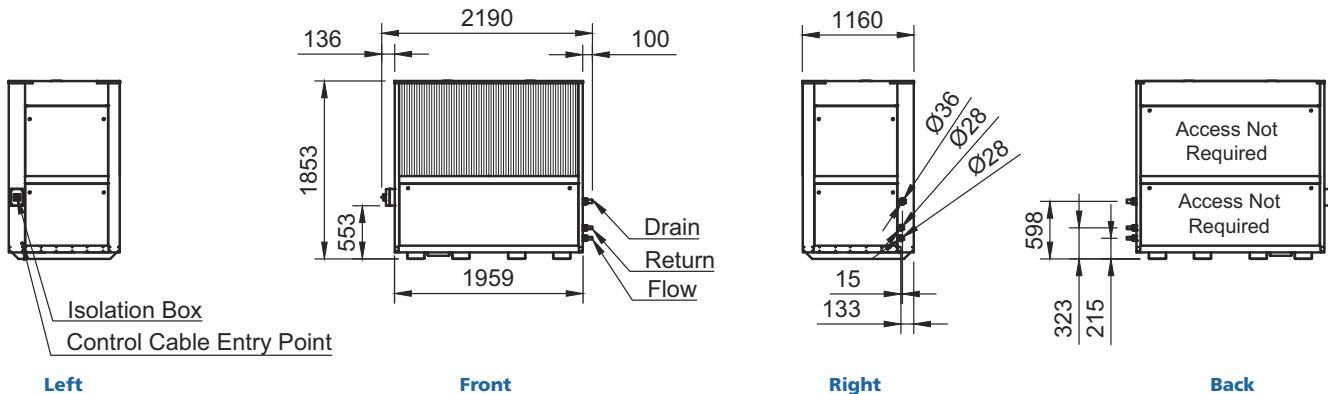
** The sound power has been established in general accordance with BS EN ISO 3740: 2019 with a survey grade accuracy (sR0) = 4 dB.

*** Sound pressure level at 10m determined in accordance with Annex D of BS EN ISO 13487(TC): 2019.

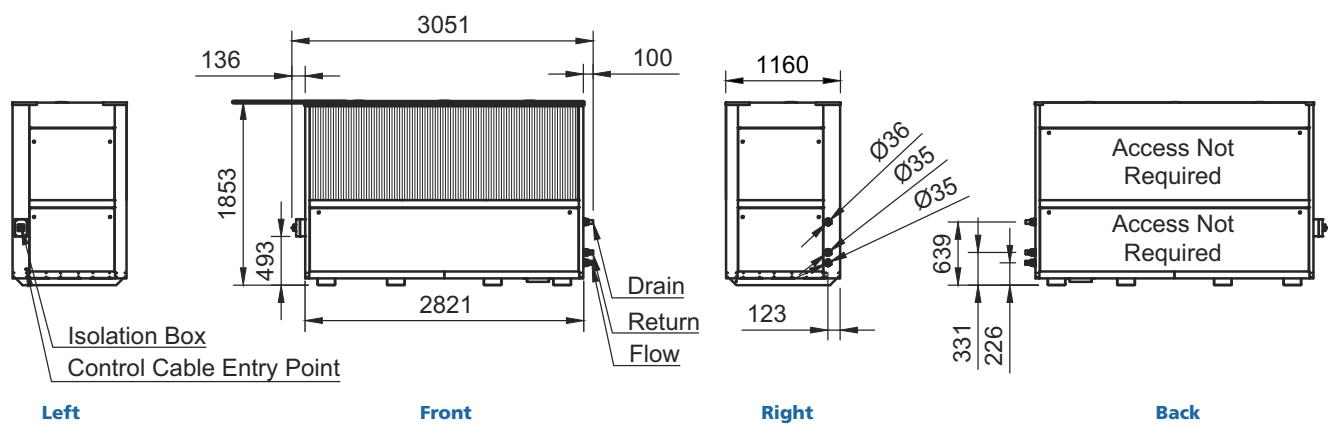
Tynemouth CO₂ dimensional drawings



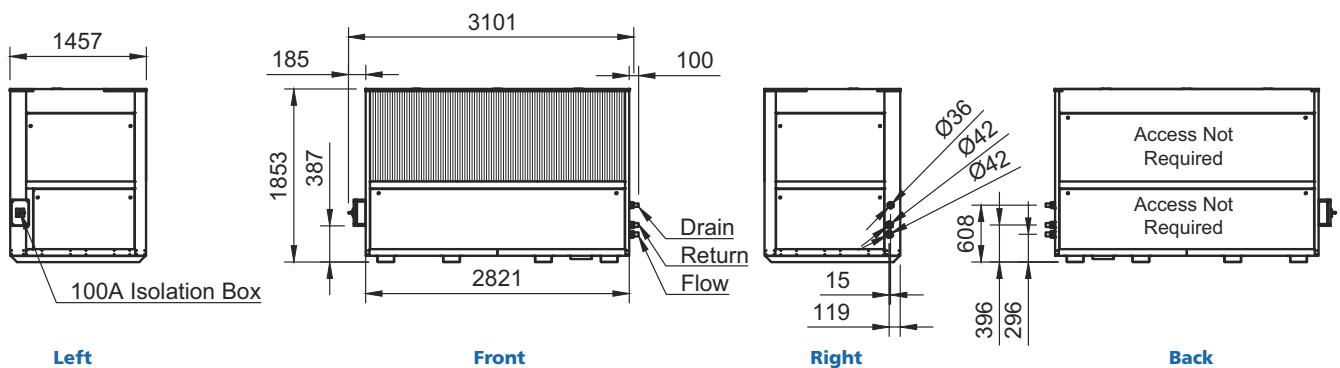
65kW



95kW

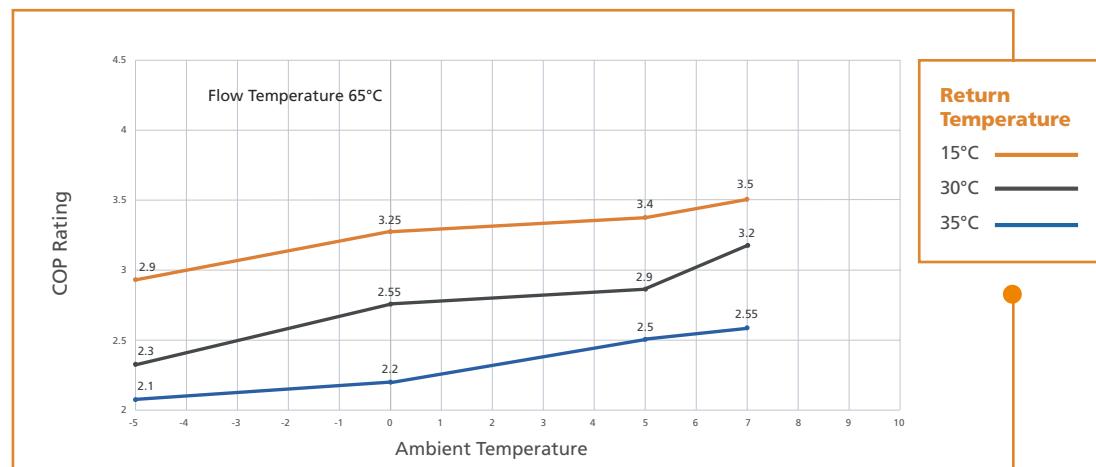


130kW

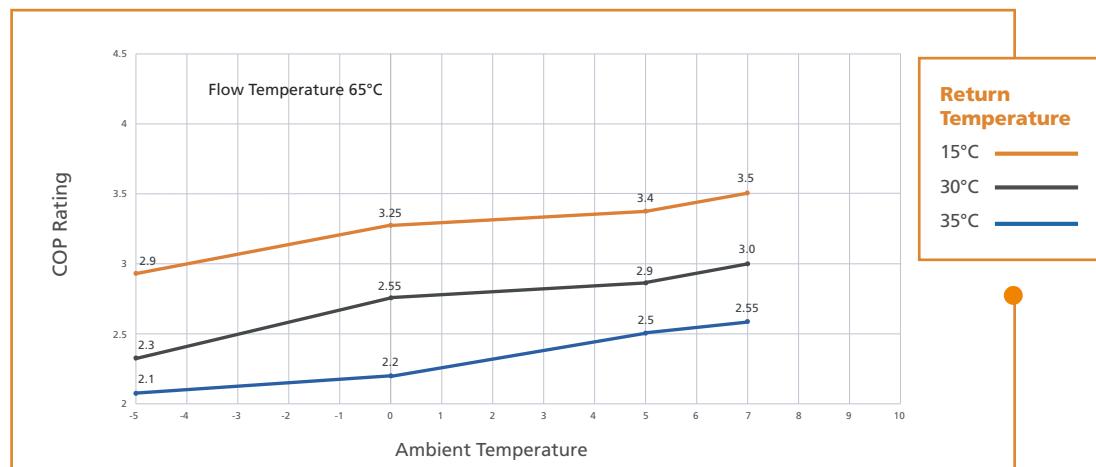


Tynemouth CO2 coefficient of performance (COP) graphs

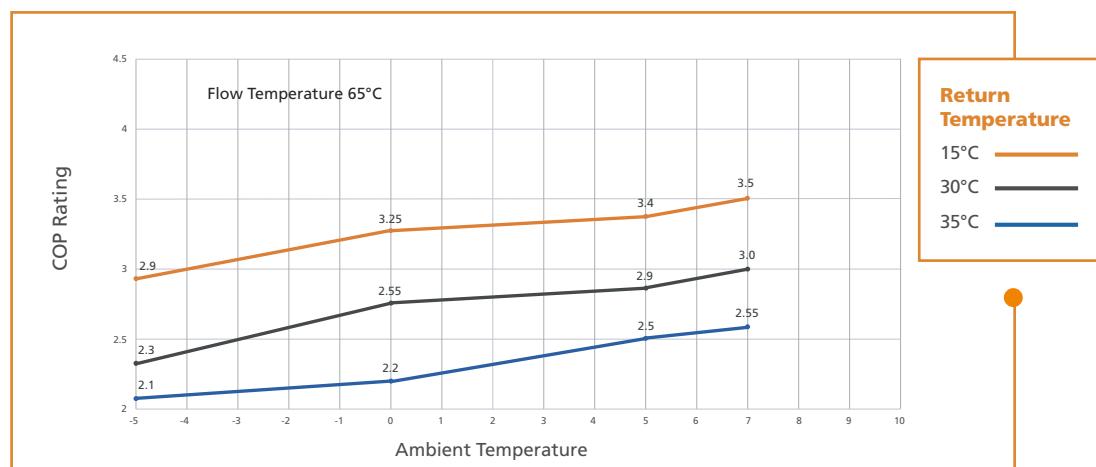
CO2
65kW



CO2
95kW



CO2
130kW



Tynemouth CO2Q technical specification



	Tynemouth model	Units	65kW	95kW	130kW
ENERGY	Heat Pump Space Heating [55°C]	ErP rating	A+++	-	-
	Heat Pump Space Heating [55°C]	COP	3	3	3
	Heat Pump Space Heating [65°C]	ErP rating	A+++	-	-
	Heat Pump Space Heating [65°C]	COP*	3.4	3.4	3.4
	Refrigerant		R744	R744	R744
	Refrigerant Charge	(kg)	4.8	6.5	10
	Global Warming Potential	GWP	1	1	1
	Heating (A7/W65)	Capacity (kW)	65	95	130
	Heating (A7/W65)	Power Input (kW)	17	25	34
	Heating (A7/W65)	SCOP	3.5	3.5	3.5
HEATING	Max Flow Temperature	Max [°C]	70	70	70
	Air Temperature Range	Min/Max [°C]	(-15 no max)	(-15 no max)	(-15 no max)
	Sound Data Outdoor unit	Power Level dB(A)**	71	72	72
	Sound Data Outdoor unit	Pressure Level at 10m dB (A)***	40	40	40
	Pipework Connection Sizes	Heating Flow (mm)	28	35	42
SOUND	Pipework Connection Sizes	Heating Return (mm)	28	35	42
	Electrical Supply	(v)	400	400	400
	Phase		Three	Three	Three
	Max Running Current	(amp)	45.07	67.55	82.19
	Fuse Rating	(amp)	63	80	100
DIMENSIONS	Width	(mm)	2190	3051	3101
	Depth	(mm)	1160	1160	1457
	Height	(mm)	2401	2401	2401
	Weight	(kg)	1000	1365	1590

Accessories and options:

	Included	Optional
Master controller		•
DHW controller		•
Flexible hoses		•
Burst disc pressure relief kit		•
Exogel antifreeze kit		•
Anti-corrosion coating for installations close to the sea (special order)		•

Minimum installation clearances:

Front: 1000mm

Rear: 0mm (Designed to back up to a wall)

Left/Right: 1000mm

Terms and conditions apply:

Tynemouth CO2 & CO2Q models all represent the output at Air 7°C & Water 65°C.

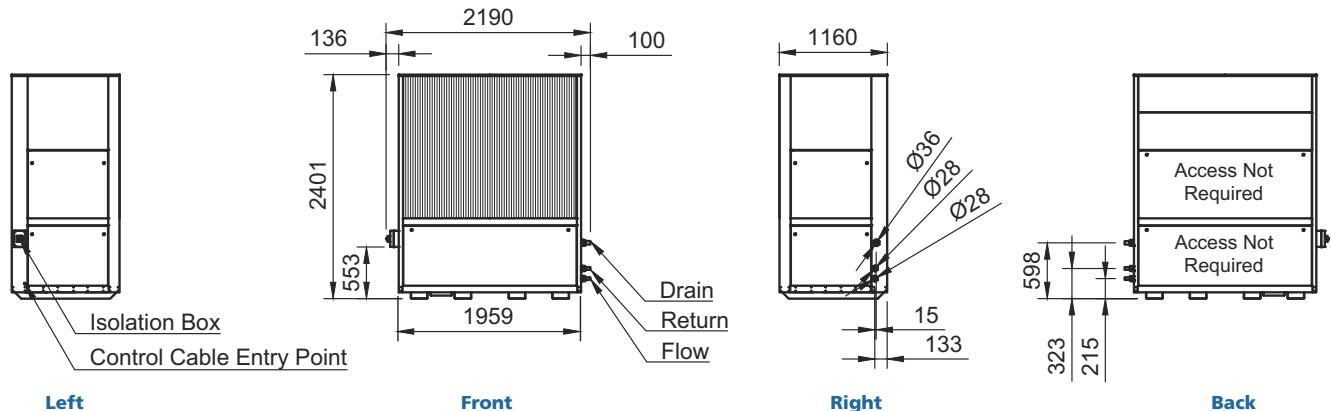
* Coefficient of Performance (COP) rated at EN14825 test conditions Water 65°C / Air 7°C.

** The sound power has been established in general accordance with BS EN ISO 3740: 2019 with a survey grade accuracy (sR0) = 4 dB.

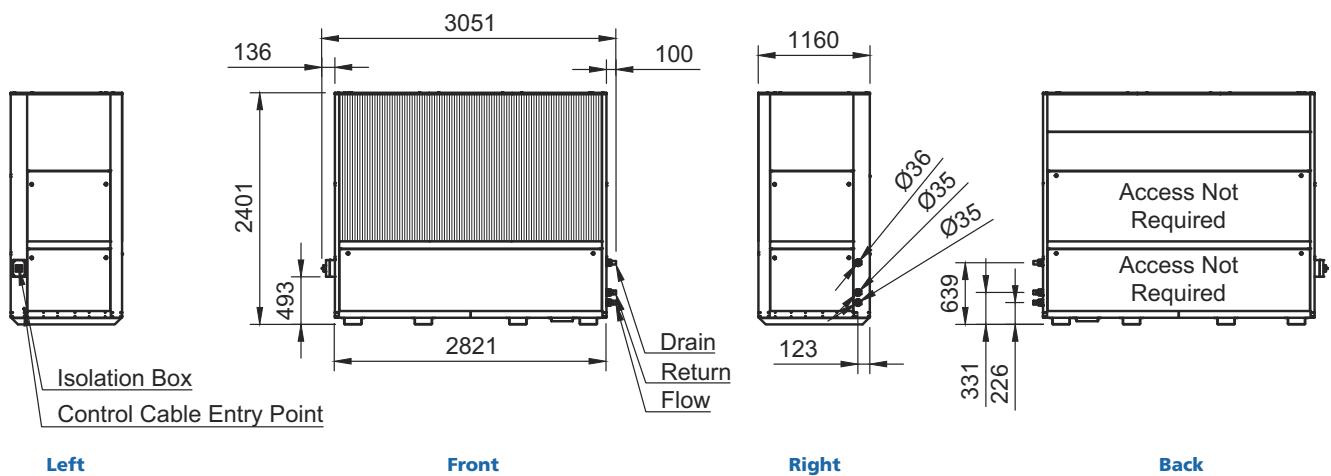
*** Sound pressure level at 10m determined in accordance with Annex D of BS EN ISO 13487(TC): 2019.

Tyneham CO2Q dimensional drawings

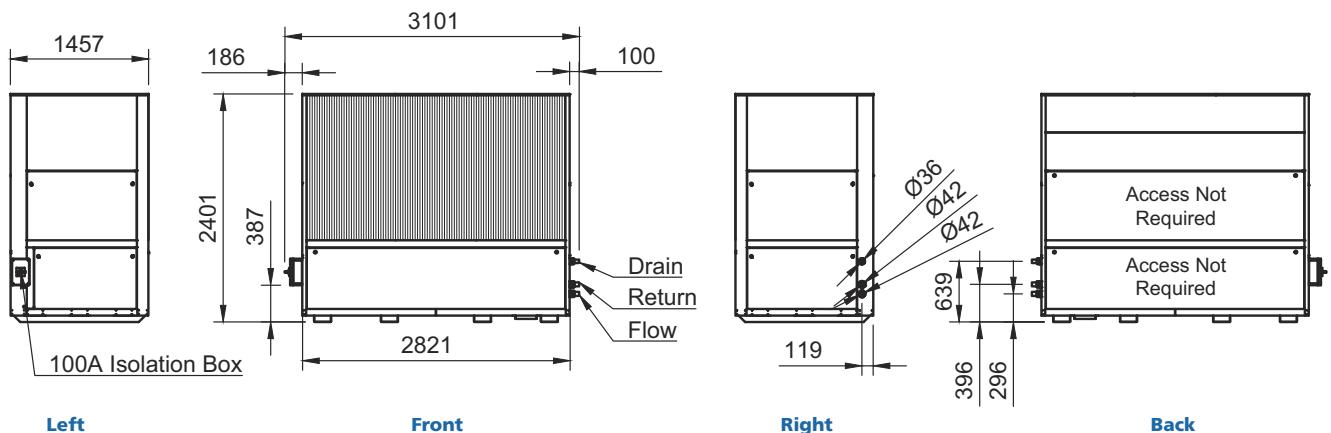
65kW



95kW



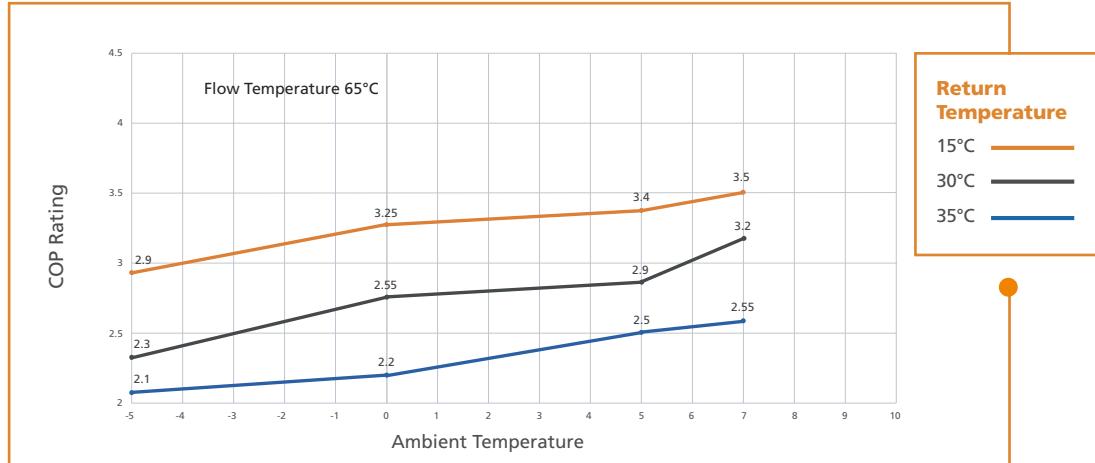
130kW



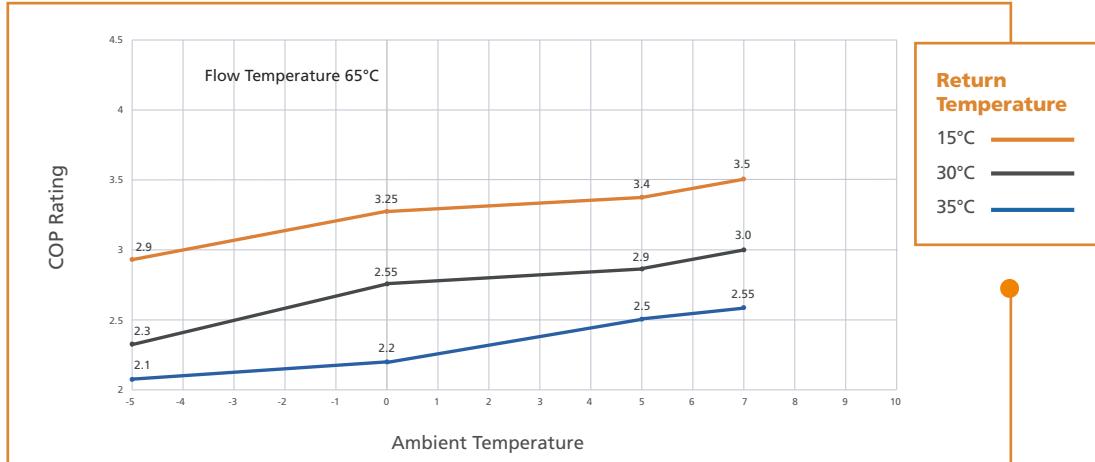
Tynemouth CO2Q coefficient of performance (COP) graphs



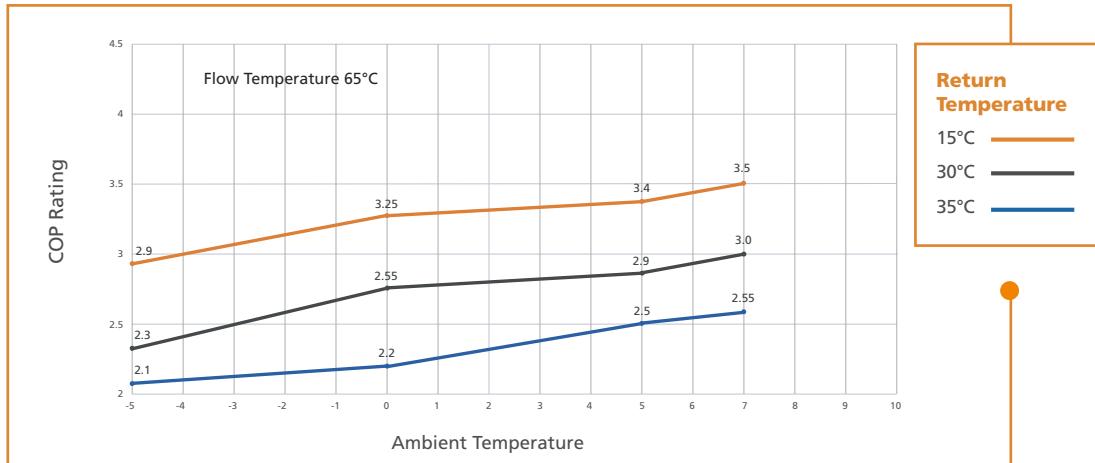
CO2Q
65kW



CO2Q
95kW



CO2Q
130kW



Tyneham CO2 & CO2Q specification

The Tyneham heat pump has a fully automatic integrated controller, using a highly efficient inverter controlled compressor, integral circulating pump and is suitable for connection to a correctly sized buffer cylinder.

Controls

The Tyneham heat pump has connectivity for all common types of BMS integration including 0-10v, volt free and Modbus. Where no BMS is present a controller must be integral to the heat pump, which can adjust and monitor both DHW and heating temperatures, with the ability to control back up or emergency heaters.

The Tyneham heat pump is of inverter type with an inverter controlled circulating pump built in.

The controls have safety lock out parameters including fault diagnosis for the heat pump.

The Tyneham heat pump can be paired with external components for front protection and weather compensation.

Hydraulics

Hydraulic connections are uniform across each chassis type to ensure ease of installation and maintenance in mixed output cascades. The Tyneham CO2 and CO2Q heat pump has a maximum operating pressure of 6 bar and is suitable for heating and indirect hot water systems. Pressure relief valves are integral.

Dimensions

The Tyneham CO2 and CO2Q has a universal height across their respective range to ensure mixed output cascades maintain the same universal configuration.

Efficiency

COP of the heat pump must be in line with site application.

The Tyneham CO2 and CO2Q heat pump uses refrigerant R744 (CO2) with a GWP of 1.

The Tyneham CO2 and CO2Q heat pump features an inverter controlled compressor, integral modulating pump and DC fan motor.

Specification

The Tyneham CO2 and CO2Q heat pump is capable of flow temperatures of up to 70°C with a return of 35°C.

To ensure the most efficient operation and conform to minimum water quantities for defrost cycles, the Tyneham CO2 and CO2Q heat pump can be connected directly to a correctly sized buffer.

Sourcing

The Tyneham CO2 and CO2Q heat pump is manufactured or finally assembled in the UK.

Cascade

Tyneham CO2 and CO2Q heat pump is configurable up to 6 units (max 780kW) in cascade using one central controller. The controller must be able to sequence the heat pumps to give equal running time per unit.

Warranty

The Tyneham CO2 and CO2Q heat pump is available with a 2 year parts only warranty.

Please note that the above information is correct at time of publication. Hamworthy Heating has a policy of continuous development and therefore reserves the right to alter product specifications or any other details without prior notification.

CHOOSE

Tyneham 290HT heat pump

Ideal for when space is limited - install flush against a wall or back to back with another unit in cascade. Low dB(A) rating for minimal background noise.



6 MODELS
15kW – 65kW OUTPUT

15 MODELS
97 - 762kW
OUTPUT



COMBINE

ModuMax mk3

Up to 15:1 turndown ratio, 40°C delta T and 90°C output for top up and back up heat demands.

CREATE

**your low carbon
hybrid heating system**

ASK
advice. specification. knowledge.

Tyneham Commercial heat pump

With a coefficient of performance (COP) rating up to 4.85 and a low global warming potential our Tyneham R32 range provides efficient low carbon heating.

Key features

- Monobloc air source heat pump single unit with the refrigeration cycle contained within the outdoor unit
- Inverter controlled compressor to accurately match the heat demand
- Low global warming potential due to the use of R32 refrigerant
- Highly efficient coefficient of performance (COP)*
- Light and compact unit for ease of installation and delivery
- Suited to larger installations – cascade systems to achieve higher output
- 2 year warranty (extended to 5 years if commissioned by Hamworthy)
- Gold Fin anti-corrosion coating as standard on the 14 & 18 kW models and Blue Fin anti-corrosion coating on the 26, 32, 50 & 70 kW models
- Back up and long-term support from our team of experienced UK based engineers
- Combine with Hamworthy modular boiler for a hybrid heating system

A++



R32
Refrigerant

50 & 70kW

14 & 18kW

A+++

A++

26 & 32kW



6 units available 14kW – 70kW

Tyneham

technical specification

Technical Specification	Unit	14kW 1PH	14kW 3PH	18kW	26kW	32kW	50kW	70kW
Heat Pump Space Heating [35°C]	ErP rating	A+++	A+++	A+++	A++	A++	A++	A++
	SCOP	4.48	4.48	4.46	4.55	4.81	4.16	3.94
Heat Pump Space Heating [55°C]	ErP rating	A++	A++	A++	A+	A+	A+	A+
	SCOP	3.31	3.31	3.36	3.14	3.14	3.08	3.04
Heating (A7/W35)	Capacity (kW)	14.1	14.1	17.9	26	32.1	50.2	66.8
	Power Input (kW)	2.91	2.91	4.07	6.44	7.84	12.2	16.3
	COP*	4.85	4.85	4.4	4.04	4.09	4.11	4.1
Air Temperature Range	Min/Max (°C)	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)	(-20 +40)
Sound Data Outdoor Unit	Power Level dB(A)**	68	68	68	74	76	82	83
	Pressure level at 1m dB(A)†	53	53	53	58	60	65	66
Pipework Connection Sizes	Heating Flow (")	1	1	1	1	1½	1½	1½
	Heating Return (")	1	1	1	1	1½	1½	1½
Dimensions Outdoor Unit	Width (mm)	1044	1044	1044	1600	1600	1920	1920
	Depth (mm)	455	455	455	680	680	1110	1110
	Height (mm)	1409	1409	1409	1315	1315	1920	1920
Weight	kg	121	136	141	240	255	535	595
Electrical Data	Electrical Supply (v)	240	415	415	415	415	415	415
	Phase	Single	Three	Three	Three	Three	Three	Three
	Max Running Current (Amp)	29.2	9.7	12.2	23.3	27.1	54	70
	Fuse Rating (Amp)	32	25	25	25	32	63	100
Refrigerant Charge	R32 (kg)	3.2	3.2	3.5	4.3	5.1	8.5	12

Accessories and options

	Required	Optional
Control unit (sold separately)*		•
Flexible hoses		•
Anti-vibration rubber feet		•
Anti-corrosion coating for installations close to the sea (special order)	•	

*Optional control units are available for cascade and where no BMS is present.

Minimum installation clearances:

	14 & 18kW	26 & 32kW	50 & 70kW
Front (mm)	1500	1500	1500
Rear(mm)	400	400	1500
Left (mm)	400	400	1200
Right (mm)	500	700	1000
Top (mm)	500	500	1500
Bottom (mm)	50	50	50
Side clearance when used in cascade	1000	700	2200

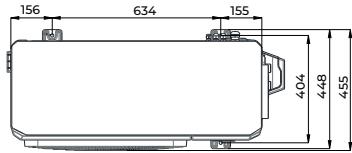
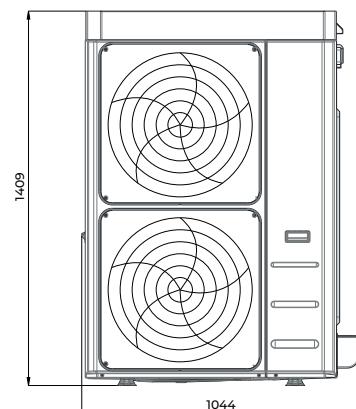
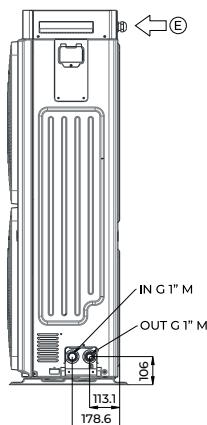
Terms and conditions apply:

- * Coefficient of performance (COP) rated at EN14825 test conditions Water 35°C/ Air 7°C.
- ** The sound levels refer to a fully loaded unit at standard nominal conditions according to EN 12102-1: 2013.
- # Sound pressure: value calculated from the sound power level using the standard UNI EN ISO 3744:2010.

Tynemouth dimensional drawings

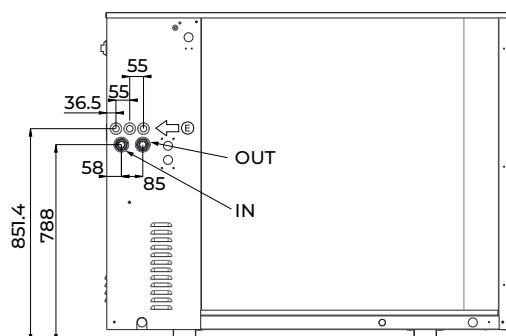
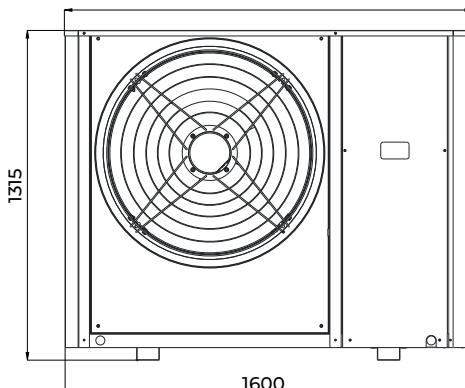
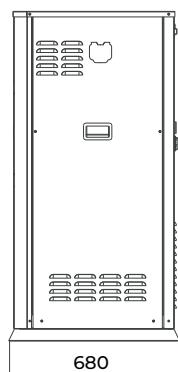


14 & 18kW



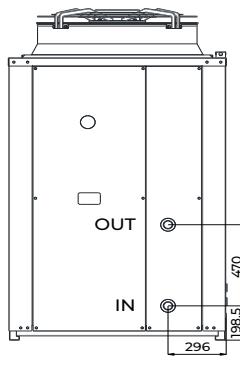
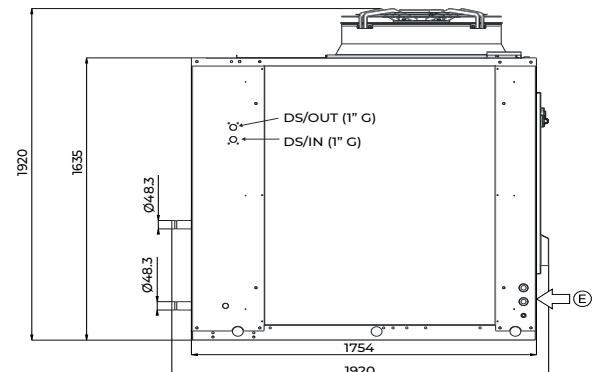
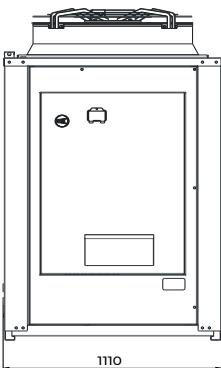
E: Electrical Connection

26 & 32kW



E: Electrical Connection

50 & 70kW

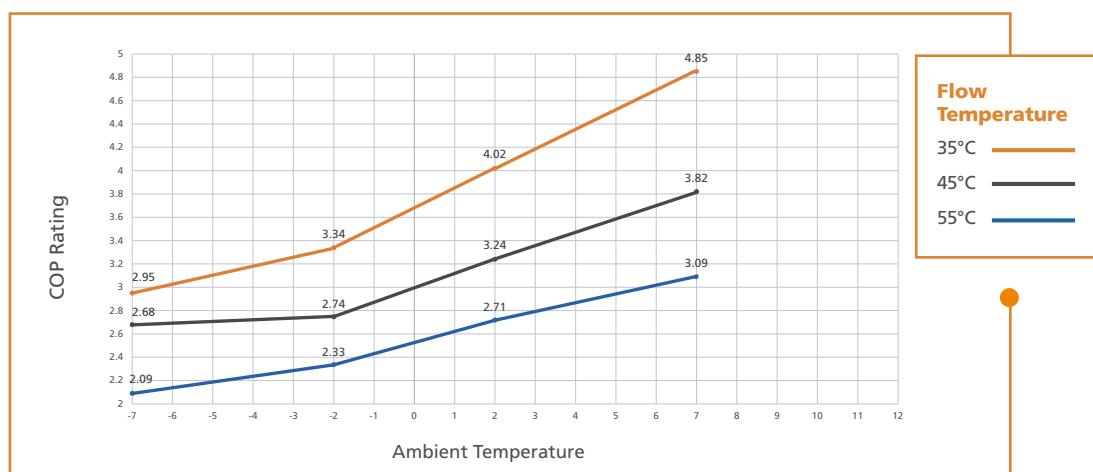


E: Electrical Connection

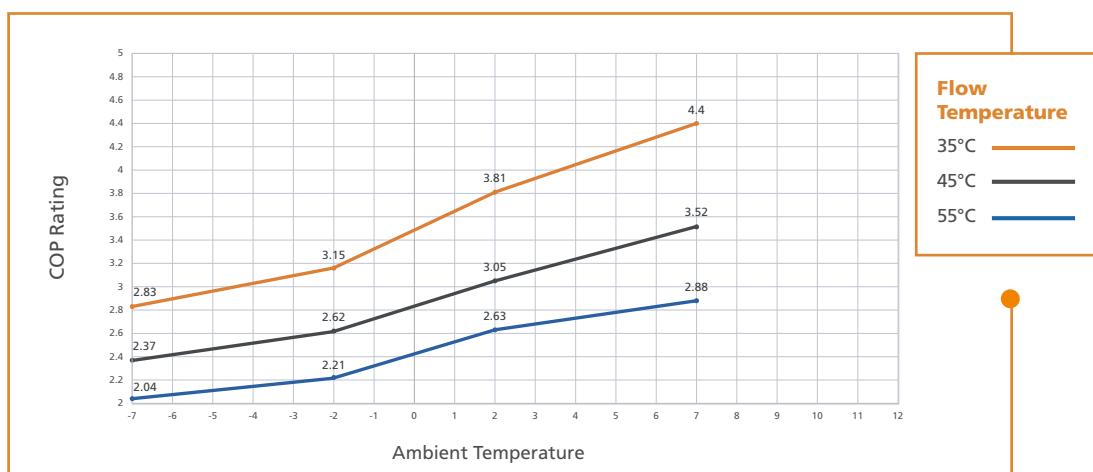
Note: All dimensions in mm unless otherwise stated.

Tyneham coefficient of performance (COP) graphs

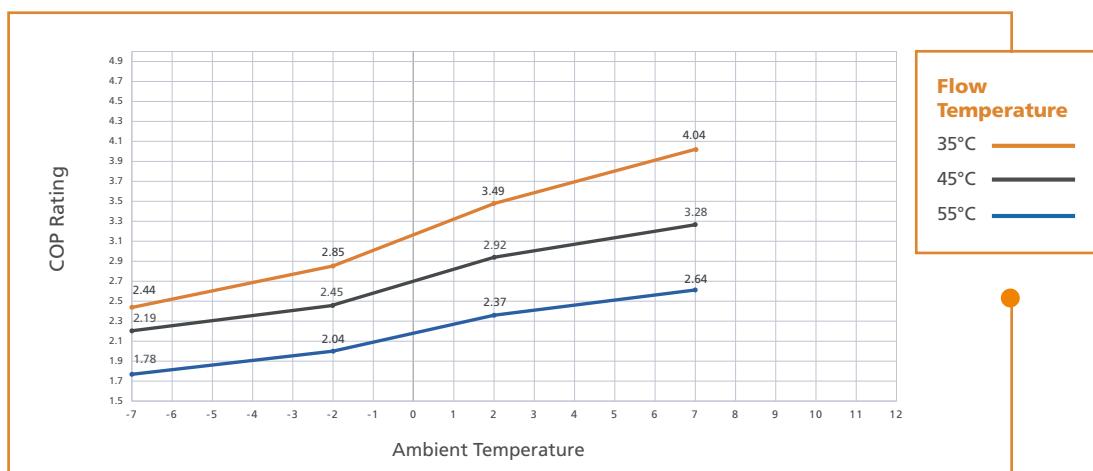
14kW



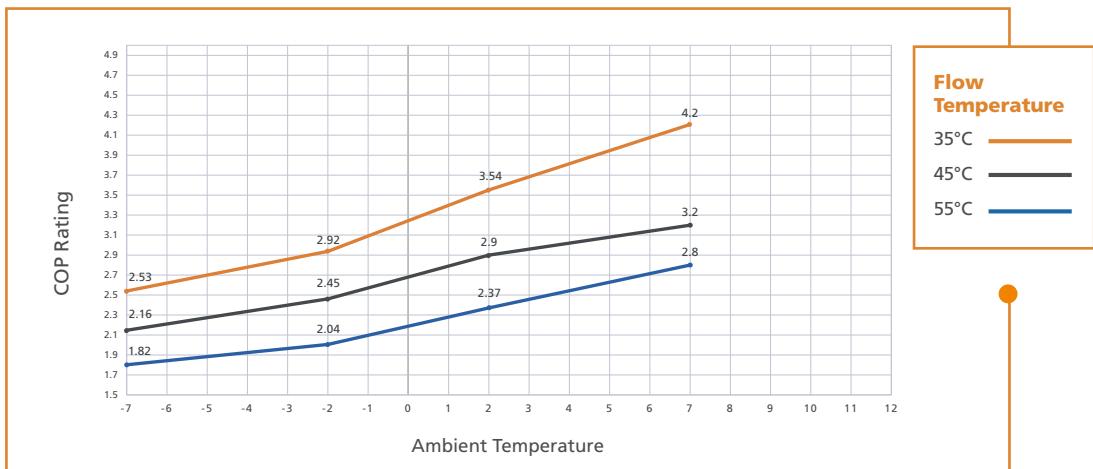
18kW



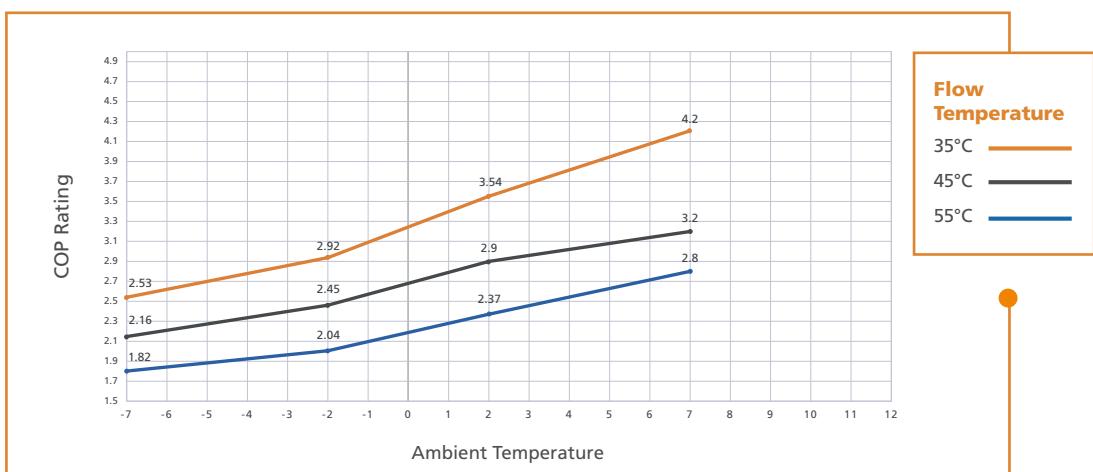
26kW



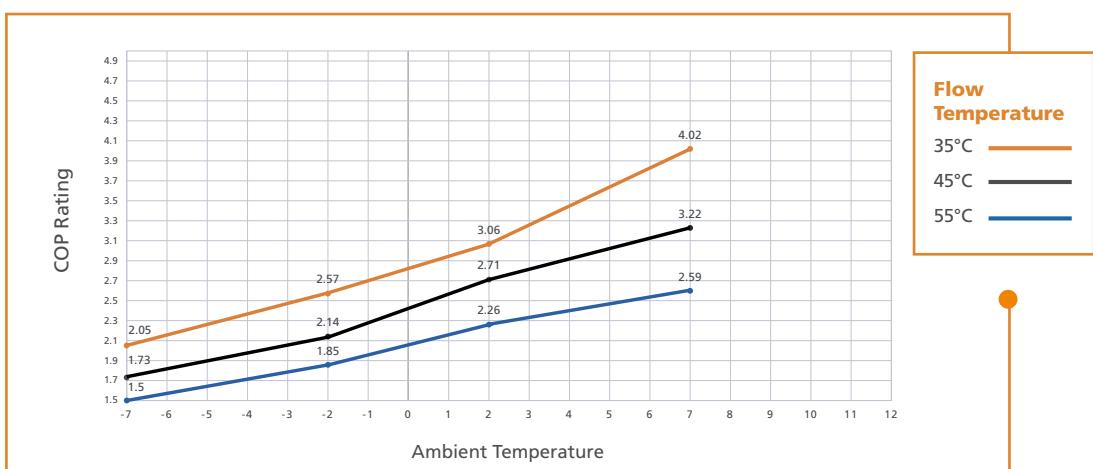
32kW



50kW



70kW



Tyneham specification



Overview

The Tyneham heat pump has an integrated controller, utilising an inverter controlled compressor, integral circulating pump and suitable for connection to a correctly sized buffer cylinder.

Controls

The Tyneham heat pump has connectivity for all common types of BMS integration including 0-10v, volt free and BACnet. Where no BMS is present a controller must be integral to the heat pump, which can adjust and monitor both DHW and heating temperatures, with the ability to control back-up or emergency heaters.

The Tyneham heat pump is an inverter type with an inverter controlled circulating pump built in. The controls have safety lock out parameters including fault diagnosis for the heat pump. With the use of external components the Tyneham heat pump is capable of frost protection, weather compensation.

Hydraulic

Hydraulic connections are uniform across the outputs available in the Tyneham range common to each chassis type to ensure ease of installation and maintenance in mixed output cascades. The Tyneham heat pump has a maximum operating pressure of 6 bar and is suitable for heating and indirect hot water systems. Pressure Relief valves are integral.

Dimensions

The Tyneham heat pump range has common chassis sizes within the range to enable uniform cascade specification..

Efficiency

COP (Coefficient of Performance) measurement of the Tyneham heat pump must be in line with the site application.

The Tyneham heat pump utilises refrigerant R32 with a GWP (Global Warming Potential) of 675. The Tyneham has an inverter controlled compressor, modulating integral pump and DC Fan Motor.

Approvals

The Tyneham heat pump has approvals EN 14276-1:2020, EN 14276-2:2020, EN 12735-1:2020, EN 12735-2:2016, EN 378:2017, EN 13134:2002

Components directive 2014/68/UE

conformity evaluation modules:

Compressors A2

Heat exchangers H +H1

Receivers D1

Valves A

Safety valve.

The manufacturer must be ISO 9001 accredited.

Specification

The Tyneham is capable of flow temperatures of up to 55°C with a 5°C Delta T and must be connected directly to a correctly sized buffer, to ensure most efficient operation and conform to minimum water quantities for defrost cycles.

Sourcing

The Tyneham heat pump is manufactured or finally assembled in Europe.

Cascade

The Tyneham heat pump is configurable up to 7 units (max 490kW) in cascade using one central controller. The controller must be able to sequence the heat pumps to give equal running time per unit.

Warranty

The Tyneham heat pump is available with a 5 year parts and labour warranty (5 year warranty available if commissioned by Hamworthy Heating Engineer, 2 year warranty as standard).

Building Information Modelling (BIM)

bimstore

Working in partnership with **bimstore**, we have produced data enriched 3D BIM objects available for our range of commercial heating and hot water products.

Our range of BIM objects offer a host of configurable options built in for you. They are loaded with extensive metadata including size, outputs, efficiencies, dimensions, clearance zones and pipe kit options.

The benefits of BIM are huge, including improved collaboration and design co-ordination. Wastage in materials and on-site production are reduced and BIM will also assist in asset and lifecycle management.

Visit our website to
download the latest BIM
drawings for your project.



SCAN
ME



Wireframe



Vertex Normals



Matcap





Joining forces for a quick and efficient solution



When Shastid Energy was faced with a faulty heat pump and up to five months without heating at its commercial premises in Cambridgeshire, Hamworthy Heating was on hand to arrange the swift delivery of a Tyneham heat pump – in three days!

Familiar with delivering quick solutions to its own customers daily, Shastid Energy was confronted with an unusual dilemma when it came to maintaining its own commercial heating system. Faced with a fault on the existing heat source pump and unable to source a company willing to provide a quote to repair it, Shastid Energy decided to replace its entire heat pump system. However, with only one local company on hand to deliver a reasonable quote, expected delivery times would leave the Shastid team without a working system for up to five months.

The solution

With the prospect of five long and cold winter months ahead, John Atkinson from Shastid Energy turned

Sector:	Offices
Building:	Commercial premises
Products:	Tyneham heat pump

to Hamworthy Heating for advice. Following a long and solid working relationship, John explained the logistical issues and the delivery problems Shastid Energy were experiencing over a weekly catch up with Hamworthy. Quick to resolve the issue, a new 14kW air source heat pump was delivered to the Shastid offices within three days, ready for installation straight out of the box. “After many futile attempts to both repair and replace our existing heat pump system, the solution Hamworthy provided us with was a true breath of fresh air,” comments John Atkinson from Shastid Energy.

“After many futile attempts to both repair and replace our existing heat pump system, the solution Hamworthy provided us with was a true breath of fresh air.”

John Atkinson,
Shastid Energy

Quickly and expertly installed by Shastid Energy’s very own Engineering Managers, Peter Millgate and Daniel Martin, the new system was successfully up and running within two short days, restoring the building with heat once more.

“We’ve been dealing with Hamworthy on a weekly basis for years on quotations for replacement boilers and spares and we’ve always received excellent service. Based on our personal experience of the Tyneham, we wouldn’t hesitate to use Hamworthy again for heat pumps,” concludes John.

Buffer tanks

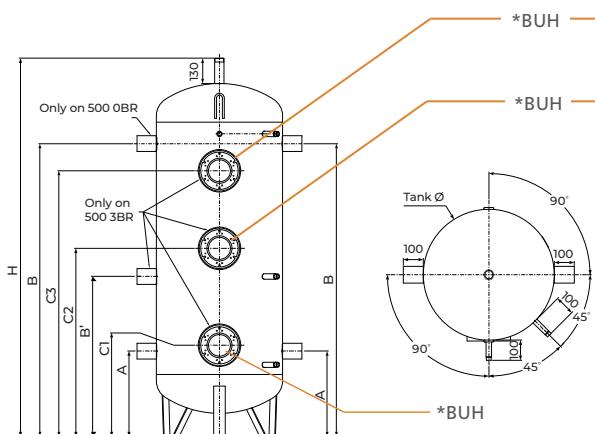
A buffer tank is typically just an insulated vessel of water; it doesn't usually contain any coils or heat exchangers; most will have top and bottom connections, and some will have a baffle plate internally. The primary role of a buffer tank is to keep a minimum volume of water 'in circuit' at times when the heating load is very low. This prevents the heat pump from short cycling and provides a bypass route to maintain the minimum flow rate through the heat

pump if most of the heating zones have shut down. Both the minimum flow rate and the minimum volume of water in circuit are necessary to keep the heat pump happy. Short cycling can cause several issues: loss of energy efficiency, reduced compressor life, power network disruption and, very rarely, sudden compressor failure due to lubrication starvation. Secondary to that, the ASHP needs to defrost. To do this it utilises for this function.



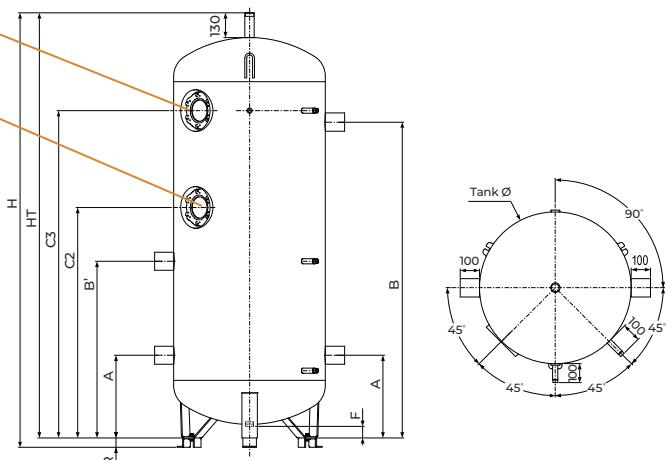
Dimensions

500 L



Front view

900 - 1500 L



Front view

Top view

For advice or more information on specifying buffer contact your Hamworthy Area Sales Manager.



Buffer tanks technical information

Technical features and performance capabilities

Features	Tank Models			
	500 0F*	500 3F*	900 2F*	1500 2F*
Useful capacity (L)	517	517	904	1425
Passage width (mm)	680	680	795	1015
Min. room height for installation (mm)		2100	2100	2415
Tilting dimension (mm)(1)	1980	1980	2240	2270
Empty tank weight (kg)	72	72	140	180
Thermal losses(2) Ua (W/K). Flexible M1	1.38	1.657	2.231	2.778

(1) Risers not mounted.

(2) Storage at 65°C – Ambient temperature at 20°C. Values supported per RT2012.

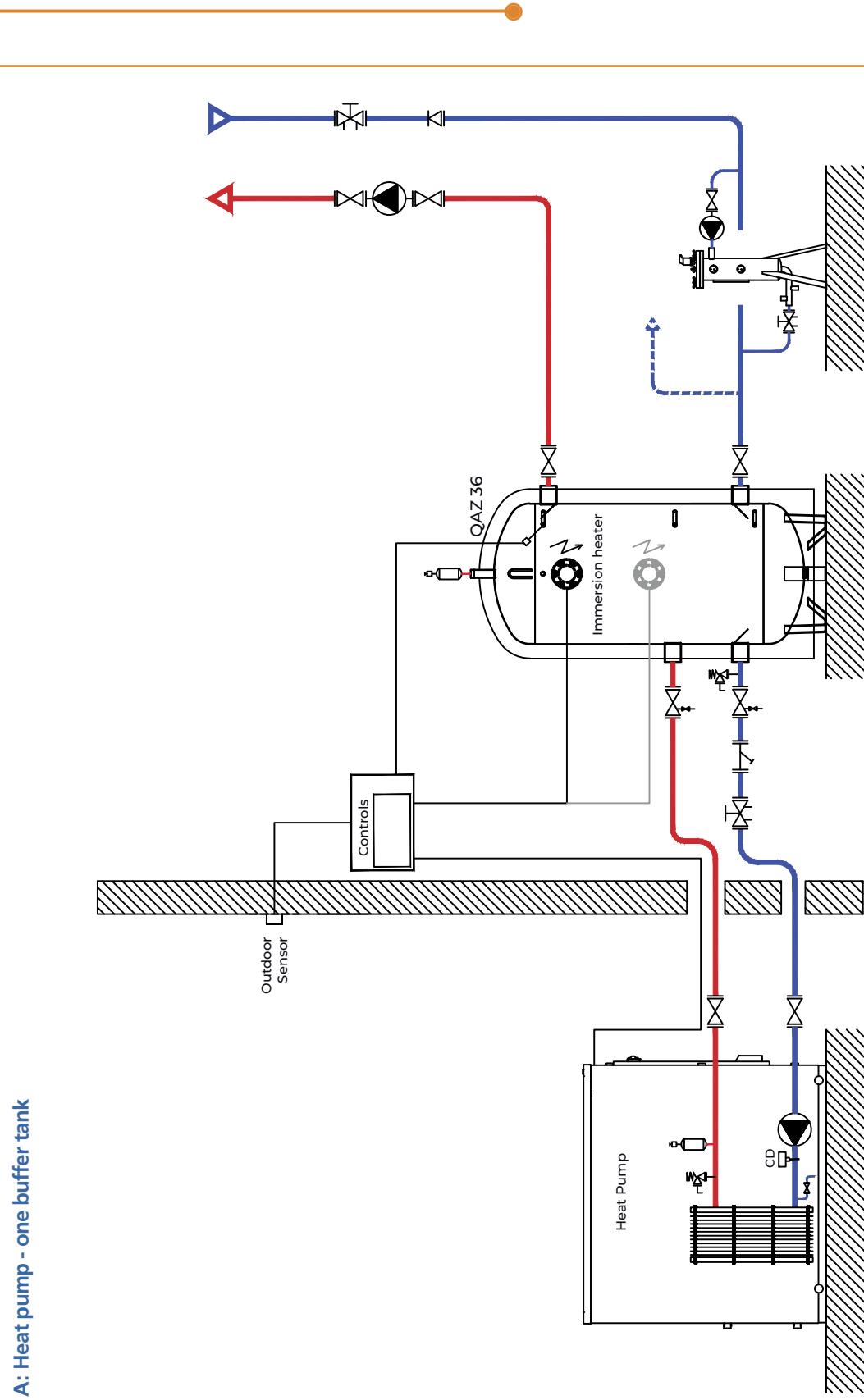
Dimensions

500 OF, 500 3F, 9002F, 1500 models

Refs	Designation	Units	Tank Models			
			500 0F*	500 3F*	900 2F*	1500 2F*
Tank Ø	Tank diameter without insulation	mm	650	650	790	1000
HT	Tank overall height (height without riser)	mm	1950	1950	2215	2215
H	Height with risers	mm	1950	1950	2265	2265
A	Lower connection	mm	440	440	430	500
B	Upper connection	mm	1510	1510	1645	1460
B'	Intermediate connection	mm	-	825	920	915
C1	Lower flange height	mm	-	470	-	-
C2	Intermediate flange height	mm	-	970	1200	1077
C3	Upper flange height	mm	-	1370	1705	1630
F	Drainage height	mm	110	110	60	60
R	Riser height	mm	-	-	50	50
1	Temperature probe branch pipe				1/2" F Through type	
2	Thermometer branch pipe				1/2" F Through type	
3	Branch pipe connection			2 1/2" F		3" F
4	Purge				1 1/2" M	2" M
5	Drain				1 1/4" F	
BUH	Back-up heater mounting				3-of	2-of
						2-of

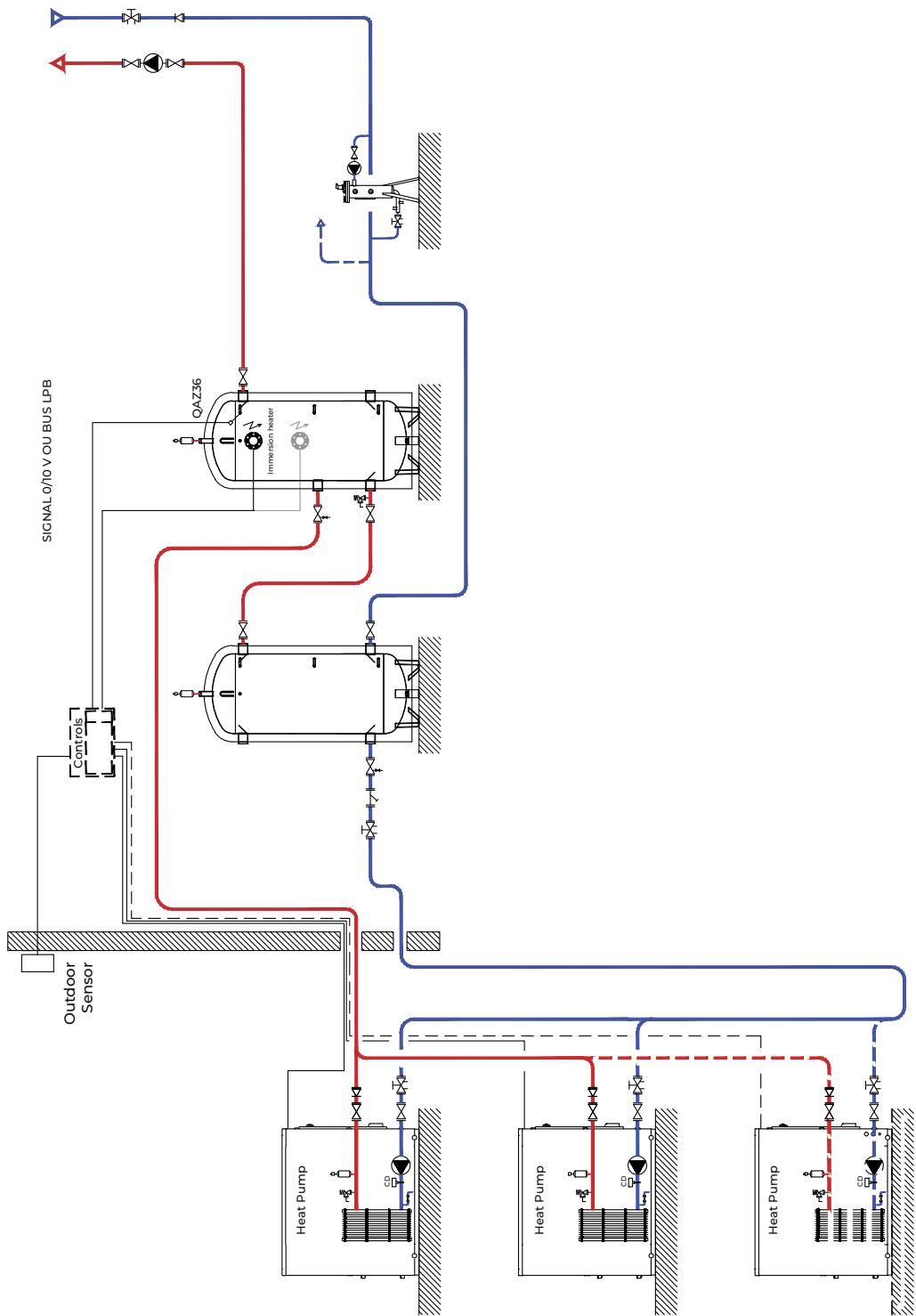
* OF = 0 Flanges
2F = 2 Flanges
3F = 3 Flanges

Example system schematics based on R32 and R290 refrigerant Tyneham air source heat pumps

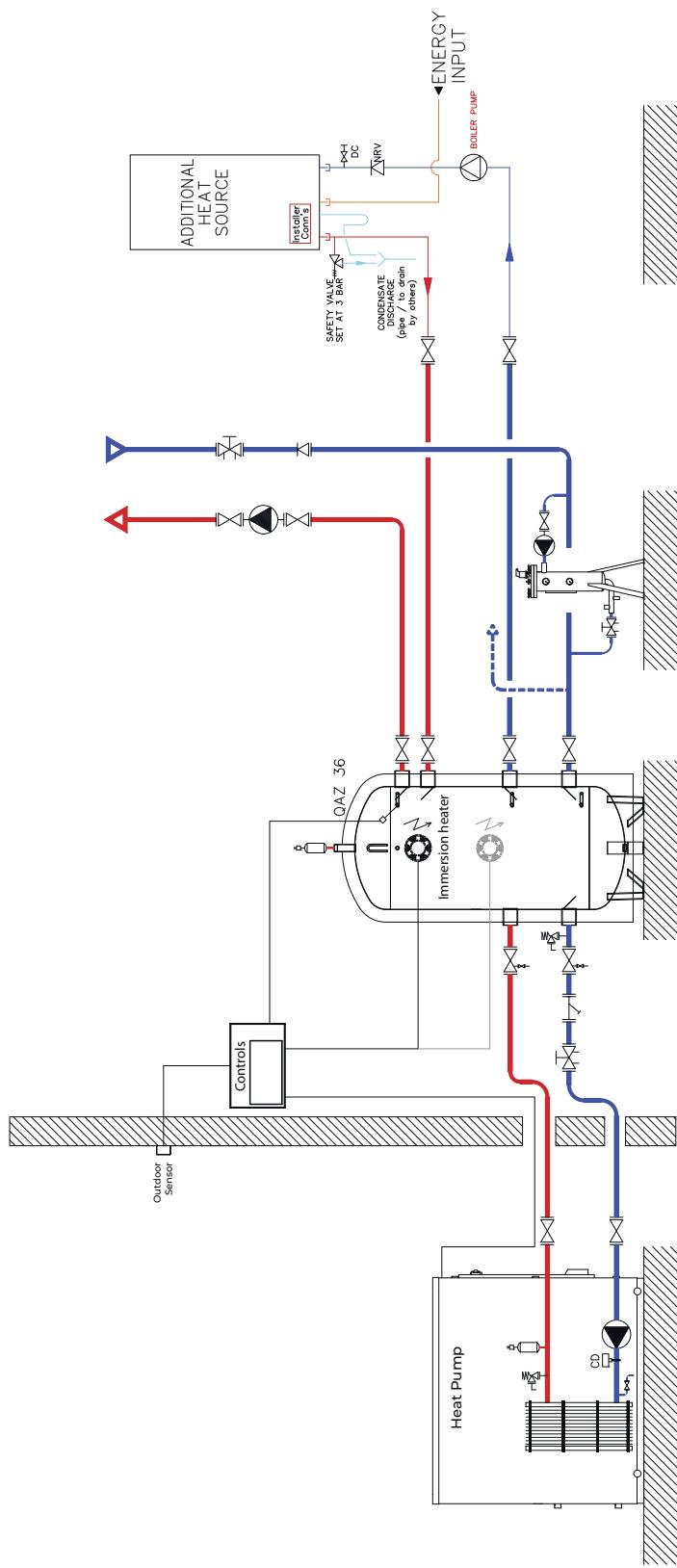


Example system schematics based on R32 and R290 refrigerant Tyneham air source heat pumps

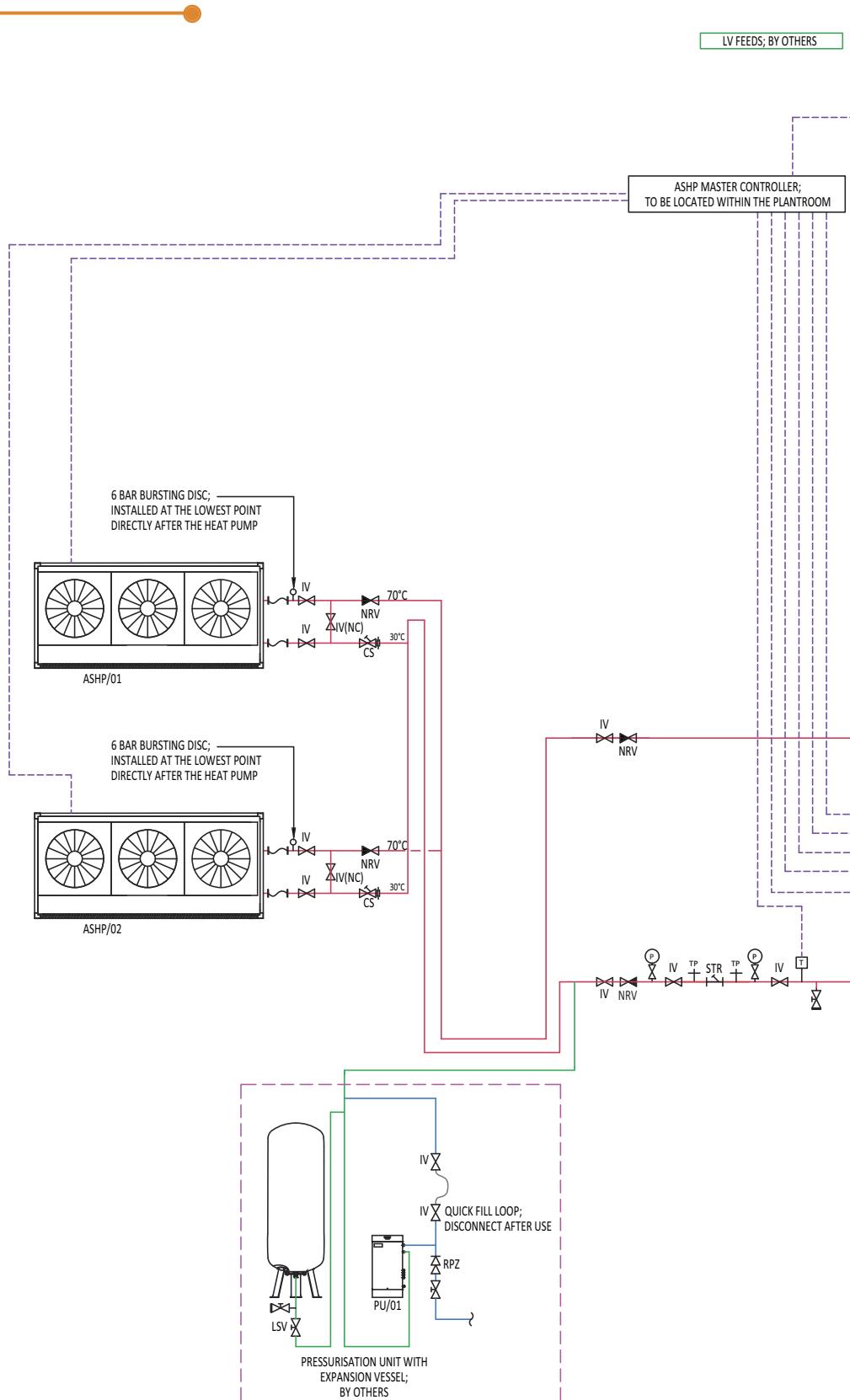
B: Heat pump - cascade one buffer tank

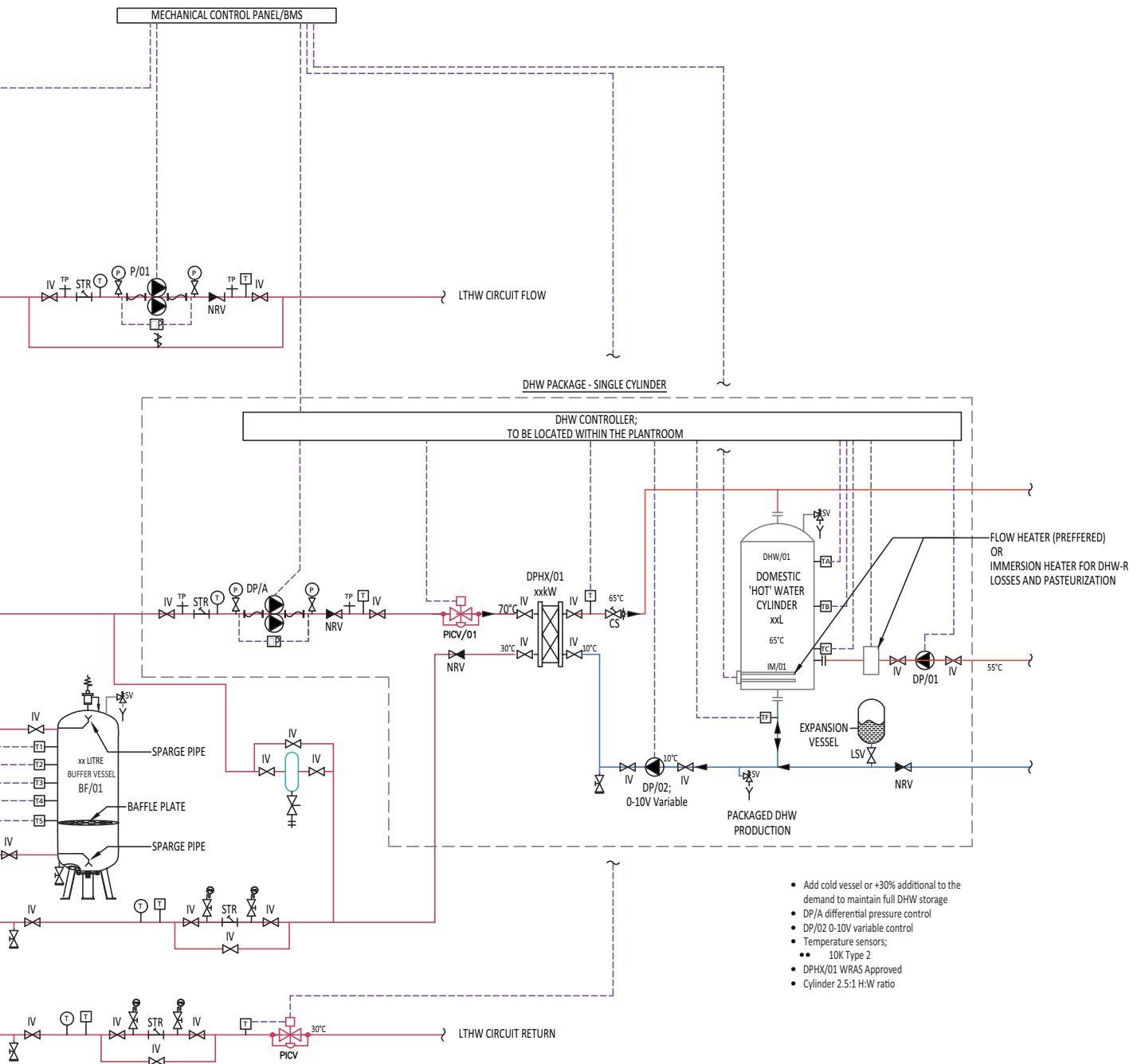


C. Heat Pump - one buffer tank with One boiler in Hybrid Set Up



Example schematic based on a Tyneham CO2 refrigerant air source heat pump for heating and DHW





Case study



Hybrid heating for a low carbon solution at council offices

Sunderland Council specify heat pump system for Stansfield Business Centre

Stansfield Business Centre is located to the south of the River Wear within the Hendon area of Sunderland in a predominantly industrial and commercial area. Built in 2002, the building was originally fitted with two gas-fired boilers and pressurisation units, and two circulating pumps which had reached the end of life and needed to be replaced.

"Sunderland City Council is committed to playing its part in tackling the global climate change emergency and has taken steps to reduce its carbon emissions from operational activities so as to be carbon neutral by 2030. As part of this commitment, when the existing LTHW heating system at Stansfield Business Centre, which was served by two wall-hung gas boilers, was due for replacement, Sunderland City Council saw this as an excellent opportunity to install a hybrid system that would help to both reduce carbon emissions and save on energy."

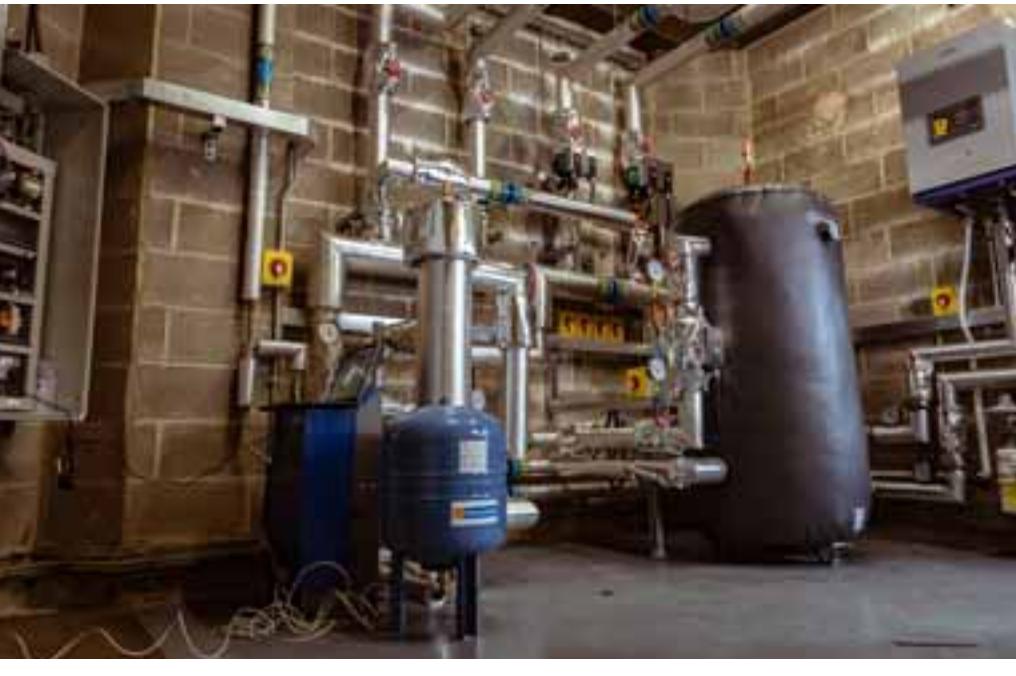
Sector:	Council offices
Building:	Stansfield Business Centre
Products:	32kW Tyneham air source heat pump, Stratton mk3 wall hung boiler
Application:	Space heating

Reducing carbon emissions

Alan Cowgill, Mechanical Building Services Engineer at Sunderland City Council, who is part of a team responsible for reducing energy use across council-run buildings in Sunderland was tasked with finding a system that would meet year-round heating demands whilst reducing operational environmental impact. He explained:

Following an evaluation of the building's heating requirements, Alan Cowgill from Sunderland City Council found:

"As the existing gas boilers were operating at elevated temperatures and the heating system was designed to operate with high-grade heat at peak loads at Stansfield Business Centre, air source heat pump (ASHP) low-grade heat was deemed unsuitable to replace the current



system alone. To meet the requirement, it was established that a hybrid system was therefore required with the ASHP being the lead source of heating, and a gas boiler providing a top-up when the temperatures were required.”

The solution

Combining traditional heating systems such as gas boilers with low and zero carbon technologies – such as heat pumps – is an alternative that helps reduce the carbon impact of the heat generators used in a building. To accurately meet the heating demands of the building, the new Hamworthy Heating system at Sunderland Business Centre consists of a 32kW Tyneham air source monobloc heat pump which is connected to a 500L buffer cylinder. Offering superb operational reliability, excellent quality, and outstanding performance, Tyneham heat pumps feature a coefficient of performance (COP) rating of up to 4.85, to provide efficient, low carbon heating.

Serving as the primary heat source within the new hybrid set up, the Tyneham heat pump efficiently increases the heat up to 55° to a buffer tank. As and when additional temperature is required, the system, which also includes a Stratton mk3 condensing wall-hung boiler as a secondary heat source, will switch over to the boiler to meet the required load. Not only does this ensure year-round reliability, as the boiler supports the heat pump, but it will also ensure that the building is supplied with the most energy-efficient system, at any given time. Offering outstanding efficiency, the Stratton mk3 features a 5:1 turndown ratio, excellent low-class 6 NOx emission across all models, and up to 97% gross seasonal efficiency.

Controlled by a BMS system, designed by WS Controls, which can be accessed on site or remotely, Sunderland Council is now able to conveniently and simply manage the system and monitor set points, as and when required.

Installed by one of Hamworthy's approved installers, John Paul Malpass of Compac Services N.E Ltd comments:

“We've worked with Hamworthy since we first started the company in 1988 and have always felt extremely well supported. The Hamworthy sales team is a pleasure to work with and the products are great, with an excellent aftercare service to match.”

Following the successful upgrade, Stansfield Business Centre now benefits from a reliable and energy-efficient hybrid heating system, which has enabled Sunderland Council to continue to further reduce its carbon impact. Alan Cowgill concludes: Thanks to the Hamworthy team and their technical staff for assisting with this project.

For more information on the products used in this hybrid set up, visit our website or contact your Hamworthy Area Sales Manager



Hands on product training with the Expert Academy

An informative day designed to provide a comprehensive understanding of how a heat pump can be successfully integrated into your plantroom and controls solutions.

The day primarily focusses on the wide range of flexible wiring and programming options available from our Tyneham R32 and or 290HT heat pumps. We also cover the alternative product positioning and safety considerations across the product range.

Concentrating on controls strategies such as enabling the heat pump from simple make and break contacts to utilising the latest technology to operate valves, control a hot water circuit and Hybrid setups.

We will explore differing solutions to offer as many opportunities as possible to integrate a heat pump into your existing portfolio of commercial heating spaces, looking at schematics to bring the scenarios to life.

This course is open to a range of attendees including specifiers, system designers, heating engineers and more with existing knowledge of heat pump technology.

What's included:

- Installation requirements
- Location/ noise considerations, structural strength, defrost & condensate disposal
- Wiring the unit, 3 Phase supplies and getting phases correct
- Configuration enabling, cascade, schematics, min volumes & buffers
- Commissioning and controllers
- Checking & adjusting flow rates, cleaning strainers & filters
- Outside sensor to set bivalent point – add gas boiler to cascade
- Bivalent and hybrid set up
- Maintenance checks and trouble shooting
- R290 considerations including Atex rated tools and safe working practices, commissioning and calibration of the R290 detectors

**EXPERT
ACADEMY**



Who can attend

This course is suitable for those with existing knowledge of heat pump technology.

Book now



Visit our website to see available course dates and locations.

What you need to bring

All tools and equipment are provided along with lunch and refreshments throughout the day.

How to book

Visit our website to see available course dates and locations. Please speak to your Area Sales Manager to discuss options.

Price: Free

Duration: 1-day typically 9.30am – 4pm with lunch included

Locations: Leeds or Luton

CIBSE approved CPD courses

Our CIBSE approved CPD courses are beneficial for anyone wishing to understand the latest industry developments and discover new ways to add value, performance and efficiency to your commercial heating and hot water projects.

We can offer seminars online, or in person, at our site, or yours.

Book now

Please speak to your Area Sales Manager to discuss and book one of our CIBSE approved CPD Courses





Courses

› Considerations for commercial ASHP selection, specification and system application

This CIBSE approved CPD seminar builds on our Introduction to commercial heat pumps – technology and principles course to guide you through selection and specification of the right heat pump and/or heating system for your customers requirements and expectations.

› Introduction to heat pumps – technology and principles

Heatpumps will play a major part in the future of commercial heating and hotwater in the UK. Learn about the technology and principles behind heat pumps to help you with your system design and specification.

› Boiler controls – unwiring the jargon

Get to know the terminology used in controls and how best to setup your boilers for highest efficiency and performance.

› New boilers on old heating systems – hydraulic design

Understand the hydraulic design options available when installing new boilers on old systems.

Learn the difference between open and closed heating systems and how to choose the best method of separating the primary and secondary circuits.

› Best practice in DHW

DHW in commercial applications is a big topic, so we've developed a series of 3 independent, 1 hr CPD seminars. Each seminar is CIBSE approved and topics include system design, safety and legislation, and sizing.

Service and support

Our Group Commercial Service Division is a dedicated commercial service team created to support all our commercial brands and customers.

A new dedicated Group Service team that unites our commercial product knowledge into a single source of expertise, making us the most responsive and easiest to work with in the industry.

What this means for Hamworthy customers:



New industry-leading dedicated commercial service team



Expert knowledge on all group commercial products



Faster, more responsive support when you need us most



A single service team for commissioning, warranty, servicing and breakdowns on all commercial product ranges



Easier to work with providing best-in-class service



UK nationwide coverage with next-day breakdown cover for critical sites*

* Terms and conditions apply. Speak to a member of the commercial service division team for more information.



Looking for trusted support on your next commercial installation?

Contact your area sales manager or visit our website to find out how the Commercial Service Division can help.

ASK

advice. specification. knowledge.



Technical advice

We know that one size doesn't fit all so we'll make sure that we understand your needs and requirements to fully support you at each stage of your commercial project.

Commercial specification

With an extensive range of the latest **heating, hot water** and **low carbon technology**, we can help you specify the right solution for your commercial needs.

Expert knowledge

It's not just our award-winning products that set us apart. It's our people. **Your technical experts** and their impressive industry knowledge makes a real difference to your projects.

From help with **sizing hot water** to **replacing commercial boilers**, and everything you need to know about heat pumps, legislation and technology – you'll find us friendly, knowledgeable and easy to deal with, every step of the way.

ASK Hamworthy for:

- **Technical advice**
- **Commercial specification**
- **Expert knowledge**

Don't just take our word for it:

"Hamworthy is a leading name in the industry and has a general reputation of being reliable and robust."

(Heating and Plumbing Contractor and Hamworthy customer for over 5 years)

"We are delighted with the service support and products Hamworthy give our company. We are made to feel part of the team."

(HVAC Contractor and Hamworthy customer for over 5 years)

"Excellent service and always understands our needs."

(Plumbing, heating & cooling specialist merchant and Hamworthy customer for over 5 years)

Contact your Hamworthy
Area Sales Manager for
more information, a site
survey or a quote.

SCAN
HERE



Notes

**British engineering excellence from Hamworthy Heating;
the commercial heating and hot water specialists.**



**SUPPORT BRITISH
MANUFACTURING**



Hamworthy Heating Accreditations

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ISO 14001 Environmental Management System
ISO 45001 Health & Safety Management System

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hamworthy-heating.com

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