ideal HEATING
COMMERCIAL

EQMAX stainless steel condensing water heater

Direct gas-fired hot water from the UK's commercial heating market leaders.

Outputs: 20kW to 120kW

Storage: 210L, 356L & 538L

SCAN ME

Visit our website for more details
idealcommercialheating.com/hot-water

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STAINLESS STEEL CONDENSING

EQMAX

COMMERCIAL WATER HEATER

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To view our full range of products visit:

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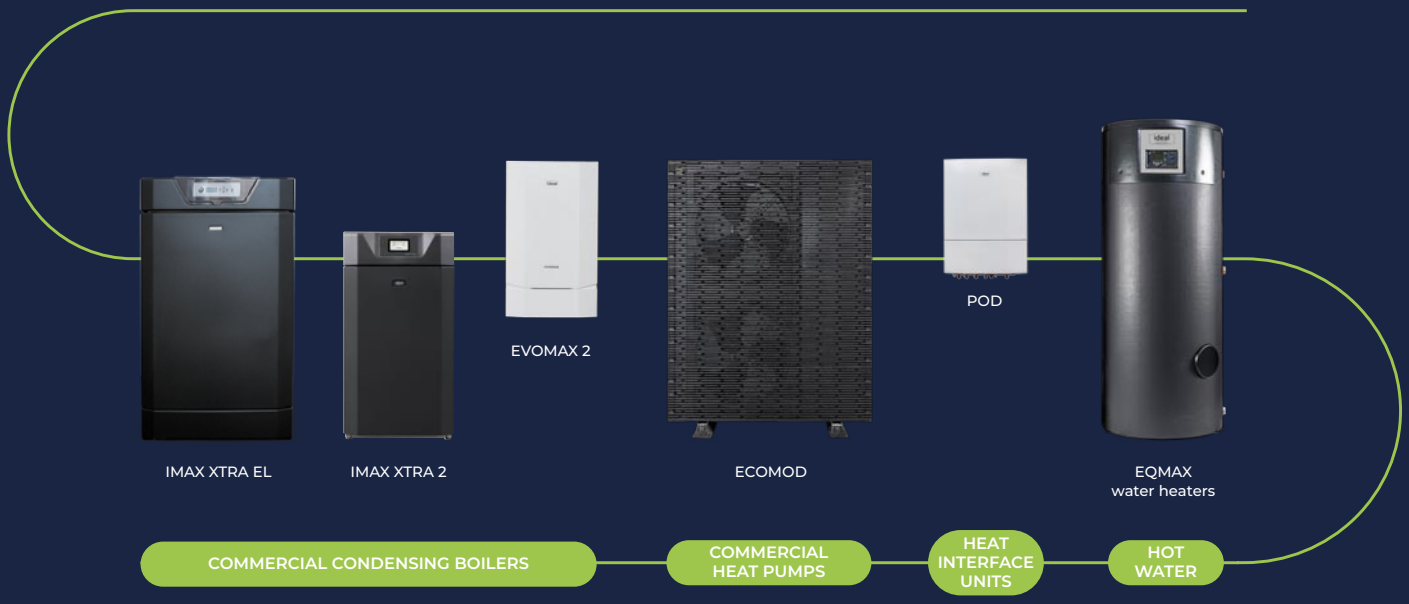
Market-leading heating and hot water products.



Ideal Heating, the UK's leading manufacturer of commercial heating products, is now expanding into the commercial hot water market with an exciting product launch: the **EQMAX range of direct gas-fired condensing water heaters**.

The brand of choice for thousands of contractors across the UK and ROI, Ideal Commercial Heating is the trusted partner for heating products. That trust has led us to extend our product and technology offering – bringing contractors hot water solutions that reflect the same high performance, quality and market accessibility that define our heating product portfolio.

Introducing the new **EQMAX** direct gas-fired condensing water heater

The EQMAX stainless steel condensing water heater is lightweight and compact, making it ideal for replacement and refurbishment projects.

The combination of combustion power, with integrated storage gives system confidence that all hot water demands will consistently be met.

- Available in 10 power outputs over 3 storage capacities with outputs from 20kW to 120kW
- Full stainless steel build for maximised resistance to corrosion – suitable for all water types
- Can deliver flow rates to satisfy high peak demand environments
- Reduced system heat loss and increased efficiency with integrated storage compared to indirect water heating systems.

5 YEAR WARRANTY*

FREE COMMISSIONING

STAINLESS STEEL

DHW

A ErP

Designed for replacement & refurbishment projects.

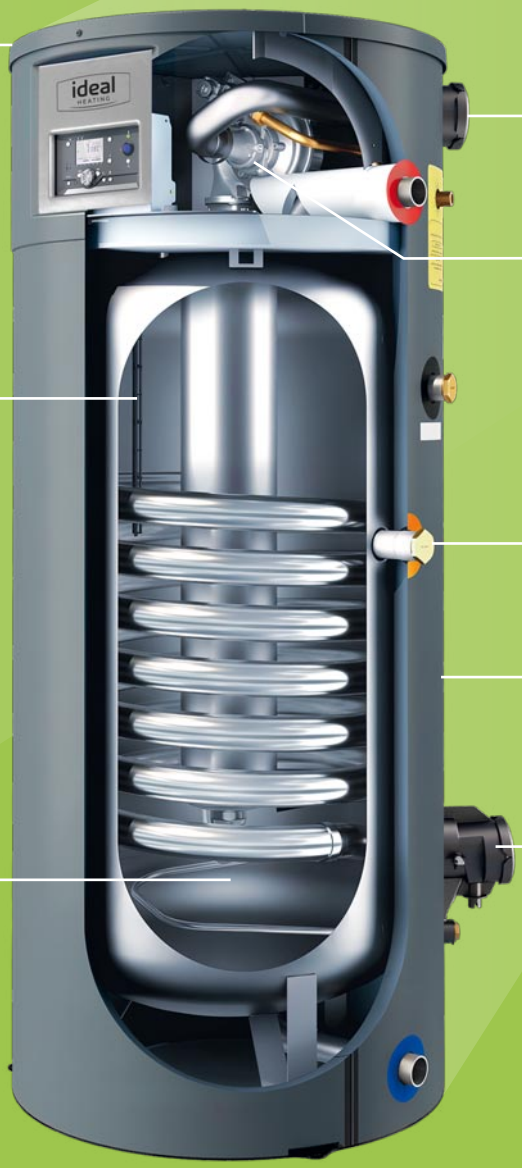
*Terms & conditions apply

EQMAX
Features and benefits

Compact and slimline designed to go through standard doorways

Powered anode(s) for enhanced corrosion resistance

Inspection and cleaning access to facilitate maintenance and satisfy requirements of healthcare specifications



Electromagnetic air flap for optimum combustion management

Modulating pre-mix burner providing high efficiency and precise temperature control resulting in better fuel management and lower emissions

Dedicated secondary return connection

Removable insulation jacket

Flue outlet with integrated non-return valve to improve system reliability and safety and retain heat within the appliance to benefit efficiency

- Storage tank, heat exchanger and coil all manufactured from stainless steel
- Enhanced durability under challenging water conditions
- Light weight and compact, making it ideal for replacement and refurbishment projects
- Free commissioning and 5-year warranty*
- Exceeds all Part L minimum efficiency requirements
- NOx under 40 mg/kWh across the range (Class 6)
- Suitable for natural gas and LPG systems

*Terms & conditions apply

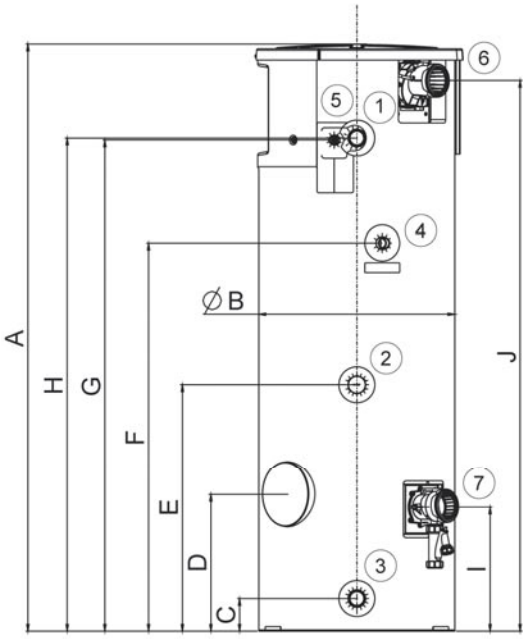
EQMAX
Technical information

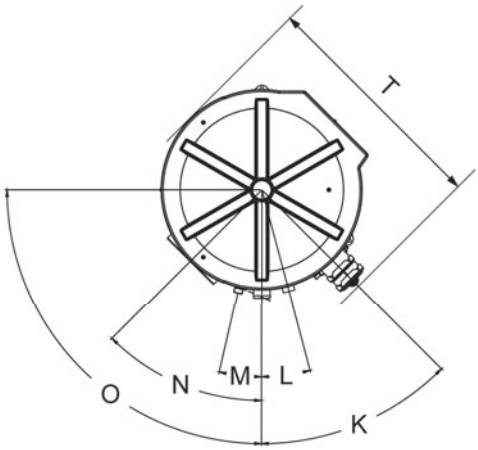
	Model:		EQMAX S20	EQMAX S25	EQMAX S30	EQMAX M35	EQMAX M50	EQMAX M60	EQMAX L70	EQMAX L80	EQMAX L100	EQMAX L120
Energy	Max Heat Input (Gross)	kW	20	25	30	35	50	56.6	69.9	80	100	120
	Max Power Output (Net)	kW	21	26.3	31.5	37	53	60	73.4	84	105	126
	Building regulations Part L, EN89 100% efficiency (NCV)	%	105	105	105	106	106	106	106	106	106	106
	Building regulations Part L, EN89 100% efficiency (GCV)	%	94.6	94.6	94.6	95.5	95.5	95.5	95.5	95.5	95.5	95.5
	Standby Loss	kWh/day	1.6	1.6	1.6	1.9	1.9	1.9	3.2	3.2	3.2	3.2
	Building regulations Part L, Maintenance Consumption (EN89)	kWh/day	2.7	2.7	2.7	3.4	3.4	3.4	5.6	5.6	5.6	5.6
	ErP efficiency rating		A	A	A	A	A	A	A	n/a	n/a	n/a
	Water Heater Efficiency (ErP)	%	95.9	91.7	93.5	90.3	92.5	91.4	92.7	91.3	90.8	90
	ErP Load Profile		XXL	XXL	XXL	XXL	XXL	XXL	3XL	3XL	3XL	3XL
Water	Storage Capacity	L	210	210	210	356	356	356	538	538	538	538
	1st 10 mins at ΔT 50°C	l/10'	175	205	220	330	400	435	475	500	550	600
	1st hour at ΔT 50°C	l/60'	450	570	580	630	1100	1210	1500	1700	2000	2300
	Continuous Flow at ΔT 50°C	l/hr	360	450	540	640	910	1090	1280	1460	1820	2190
	Max DHW temperature setpoint	°C	80	80	80	80	80	80	80	80	80	80
	Max operating pressure (open vented)	bar	7	7	7	7	7	7	7	7	7	7
	Max operating pressure (unvented)	bar	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	Heat-up time 50°C rise	mins	36	29	24	35	24	20	26	23	18	15
	Heat-up time 55°C rise	mins	40	32	26	39	27	22	29	25	20	17
Gas	Gas Inlet Pressure (Nominal nat gas)	mbar	20	20	20	20	20	20	20	20	20	20
	Gas flow rate (Nominal nat gas)	m^3/hr	2.1	2.6	3.2	3.7	5.3	6	7.4	8.5	11	12.7
	Gas Inlet Pressure (Nominal, LPG)	mbar	37	37	37	37	37	37	37	37	37	37
	Gas flow rate (LPG)	m^3/hr	0.8	1	1.2	1.4	2	2.4	2.7	3.1	4	4.7
	Gas connection		R ¾"	R ¾"	R ¾"	R ¾"	R ¾"	R ¾"	R 1"	R 1"	R 1"	R 1"
Flues	Max flue gas temperature	°C	100	100	100	100	100	100	100	100	100	100
	Nominal flue gas operating temp	°C	39	55	60	40.3	50.9	51.6	56.8	58.8	59.8	59.3
	Flue Gas Volume @15°C	kg/h	33.1	41.4	49.7	53.3	79.9	95	104.4	118.8	158.4	187.2
	NOx emissions	mg/kWh	29	29	29	32	32	32	39.5	39.5	39.5	39.5
	Pressure at flue outlet	Pa	110	170	200	130	200	200	65	95	155	200
	Air inlet/Flue outlet diameter	mm	80	80	80	100	100	100	130	130	130	130
	Max system length – C type flues	m	20	20	20	20	20	20	20	20	20	20
Electrical	Electrical Supply		230 V AC (+10%, -15%) 50Hz									
	Fuse rating	amp	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	Power consumption (maximum)	W	34	50	68	79	197	266	69	90	160	270
	Power consumption (standby)	W	3.6	3.6	3.6	3.7	3.7	3.7	4.5	4.5	4.5	4.5
	Sounds Power Level (Noise emissions)	dBA	64	64	64	75	75	75	67	69	74	78
Misc	Number of Anodes		1	1	1	2	2	2	3	3	3	3
	Dry weight	kg	96	96	96	142	142	142	240	240	240	240
	Filled Weight	kg	306	306	306	498	498	498	778	778	778	778
	Height	mm	1802	1802	1802	1874	1874	1874	2028	2028	2028	2028
	Diameter (inc insulation)	mm	600	600	600	750	750	750	890	890	890	890

EQMAX-S Dimensions

EQMAX S20 / S25 / S30

210L HOT WATER STORAGE 20kW/25kW/30kW POWER INPUTS





CONNECTIONS

EQMAX MODELS – S20 / S25 / S30	
1 Hot water outlet	Rp 1½"
2 Secondary return	Rp 1½"
3 Cold water inlet	Rp 1½"
4 T&P valve	Rp 1"
5 Gas inlet	R ¾"
6 Air inlet	Ø 80
7 Flue outlet	Ø 80

CLEARANCES

EQMAX MODELS – S20 / S25 / S30		
Clearance – front (service)	mm	Min 500
Clearance – sides	mm	500
Clearance – rear	mm	500
Clearance – top	mm	175

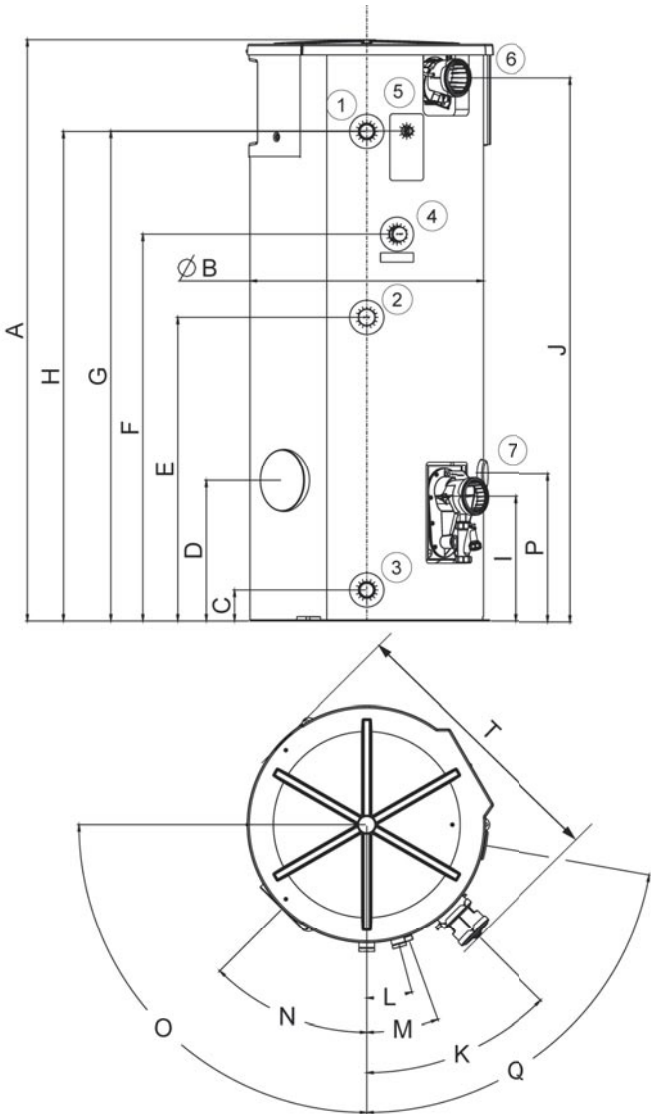
DIMENSIONS

EQMAX MODELS – S20 / S25 / S30	
A Overall height	1802
B Diameter	Ø 600
C Height to cold water inlet	100
D Height to inspection hatch	419
E Height to secondary return	759
F Height to T&P valve connection	1193
G Height to gas connection	1508
H Height to hot water outlet	1514
I Height to flue outlet	380
J Height to air inlet	1691
K Angle position of flue outlet	45°
L Angle position of T&P valve fitting	13°
M Angle position of gas connection	12.9°
N Angle position of inspection hatch	45°
O Angle position of HMI	90°
T Full width	699

EQMAX-M Dimensions

EQMAX M35 / M50 / M60

356L HOT WATER STORAGE 35kW/50kW/60kW POWER INPUTS



CONNECTIONS

EQMAX MODELS – M35 / M50 / M60	
1 Hot water outlet	Rp 1½"
2 Secondary return	Rp 1½"
3 Cold water inlet	Rp 1½"
4 T&P valve	Rp 1¼"
5 Gas inlet	R ¾"
6 Air inlet	Ø 100
7 Flue outlet	Ø 100

CLEARANCES

EQMAX MODELS – M35 / M50 / M60		
Clearance – front (service)	mm	Min 500
Clearance – sides	mm	500
Clearance – rear	mm	500
Clearance – top	mm	175

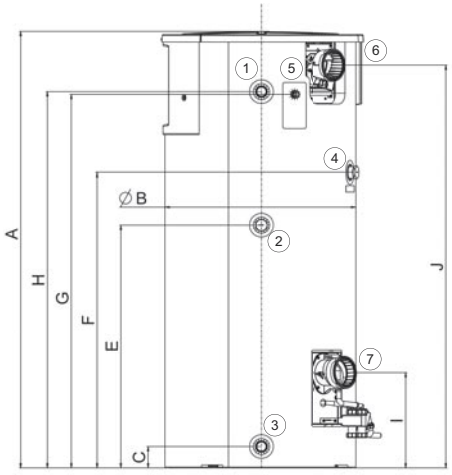
DIMENSIONS

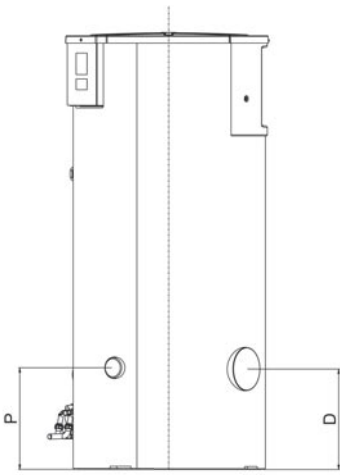
EQMAX MODELS – M35 / M50 / M60	
A Overall height	1874
B Diameter	Ø 750
C Height to cold water inlet	100
D Height to inspection hatch	454
E Height to secondary return	980
F Height to T&P valve connection	1248
G Height to gas connection	1580
H Height to hot water outlet	1579
I Height to flue outlet	402
J Height to air inlet	1752
K Angle position of flue outlet	45°
L Angle position of T&P valve fitting	15°
M Angle position of gas connection	20°
N Angle position of inspection hatch	45°
O Angle position of HMI	90°
P Height of lower anode fitting	478
Q Angle position of lower anode fitting	80°
T Full width	884

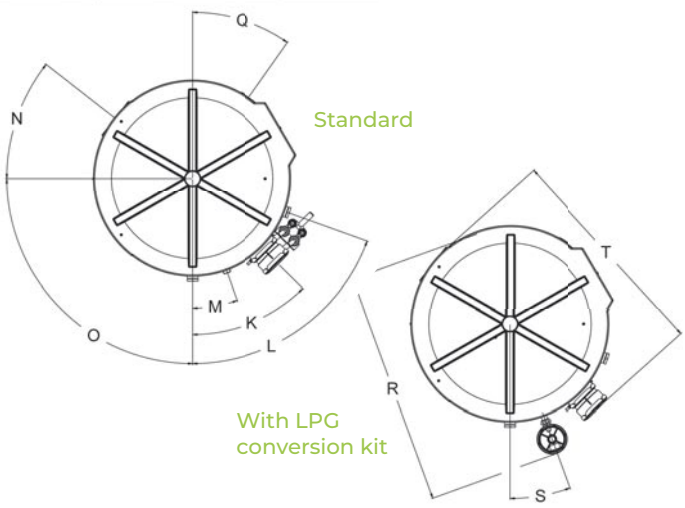
EQMAX-L Dimensions

EQMAX L70 / L80 / L100 / L120

538L HOT WATER STORAGE 70kW/80kW/100kW/120kW POWER INPUTS







CONNECTIONS

EQMAX MODELS – L70 / L80 / L100 / L120	
1 Hot water outlet	Rp 1½"
2 Secondary return	Rp 1½"
3 Cold water inlet	Rp 1½"
4 T&P valve	Rp 1½"
5 Gas inlet	R 1"
6 Air inlet	Ø 130
7 Flue outlet	Ø 130

CLEARANCES

EQMAX MODELS – L70 / L80 / L100 / L120		
Clearance – front (service)	mm	Min 500
Clearance – sides	mm	500
Clearance – rear	mm	500
Clearance – top	mm	175

DIMENSIONS

EQMAX MODELS – L70 / L80 / L100 / L120	
A Overall height	2028
B Diameter	Ø 890
C Height to cold water inlet	100
D Height to inspection hatch	467
E Height to secondary return	1129
F Height to T&P valve connection	1373
G Height to gas connection	1735
H Height to hot water outlet	1748
I Height to flue outlet	442
J Height to air inlet	1871
K Angle position of flue outlet	45°
L Angle position of T&P valve fitting	70°
M Angle position of gas connection	20°
N Angle position of inspection hatch	38°
O Angle position of HMI	90°
P Height of lower anode fitting	470
Q Angle position of lower anode fitting	35°
R Overall width with LPG conversion kit	1101
S Angle position of gas connection with LPG conversion kit	20°
T Max installed width	1020

EQMAX water heater
Suggested engineering specification

Construction

Our EQMAX direct fired water heater is built to last using high quality stainless steel tanks and heat exchangers, for the safe production of potable hot water and excellent protection against corrosion.

Particular attention is paid to the welding process with as much welding as possible being done on the inside 'water side' of the tank. Where 'water side' welding has not been possible, a full penetration welding process is used. During this process, the opposite sides of the weld are then filled using an inerting process to ensure a high quality complete weld is achieved.

The completed storage tank assembly is then 100% pickled in order to remove potential contaminants and provide additional protection for welded areas.

The storage tank comes with a removable foam insulation jacket and insulation upper disk to ensure that standing losses are minimised.

Burner

The modulating pre-mix burner is mounted on top of the heater in a downward-firing arrangement. The controlled supply of gas and air achieves the optimum gas/air mixture for efficient performance and clean combustion. The burner can modulate down to 5:1 on full power (model dependent).

Heat exchanger

The hot combustion gases are directed down through the combustion chamber which extends to near the base of the tank, then rise up the heat exchanger to a point where it forms a coiled spiral and descends again. The flue gas discharge outlet is towards the base of the water heater. This construction maximises heat transfer as gases cooled by the colder water towards the bottom of the tank are able to condense. Latent heat is recovered as a result of this process which increases the operating efficiency of the water heater.

This type of heat exchanger also reduces the problems traditionally associated with scale. Any build-up will fall to the base of the unit and avoid any issues with performance and hot spots.

Anode protection

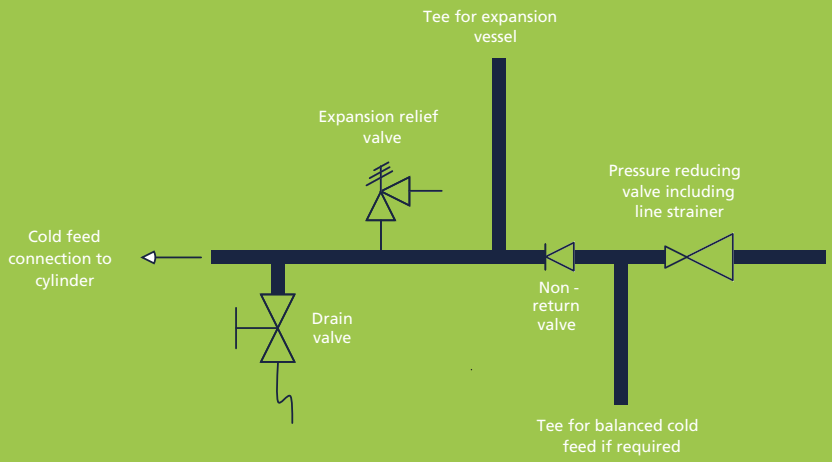
All EQMAX models are fitted with up to 3 bespoke titanium electrical anodes as standard to further enhance the tank's level of resistance to corrosion.

These anodes do not require any routine maintenance or replacement, and have an estimated service life of more than 10 years.

Anodes protect against corrosion which can develop on all types of metal, and corrosion can occur in both hard and soft water conditions.

It is essential for the electrical anode protection system that the power supply is uninterruptible to ensure proper protection of the unit is maintained. Any external time controls must use the remote enable connections and not interrupt the mains supply to the water heater.

Down firing burner



Unvented supply kit

LPG compatible

All EQMAX water heater models are suitable for LPG fuel. All models can be converted from natural gas to LPG by a qualified installer. It is strongly recommended that LPG installations have gas detection equipment fitted, and that this equipment is positioned near the heater and at low level. It is also imperative that the plant room is ventilated at high and low level.

Any EQMAX models operating on LPG must not be installed in basement plant rooms.

Flue connection

The air inlet connection is at the top of the water heater, and the flue gas outlet connection is sited at the bottom. The EQMAX water heaters are suitable to operate on traditional open flue systems (B23) and also room sealed flue configurations with horizontal and vertical terminations (C13, C33). All Ideal Commercial Heating flue components have been specified and tested specifically for use with the EQMAX to ensure safe and optimum performance from the installation.

It is possible to install multiple EQMAX water heaters onto a common flue header, this must be provided by a flue specialist / third party flue system provider. The flue outlet on an EQMAX incorporates a non-return valve so no additional back flow prevention devices for flue gases are required.

An EQMAX water heater is supplied with a universal flue starter kit as standard. The components within these starter kits have been designed to provide an easy, compact installation of the flue system closest to the water heater.

The open flue kits contain an air inlet basket with air filter to prevent dust and debris from entering the air inlet, and the concentric kits contain an adaptor to combine the air inlet pipework with the flue outlet pipework into a concentric flue system.

The flue starter kit must be installed in full for all concentric flue system installations, and the air inlet basket provided is mandatory for all open flue system installations.

Condensate management

The EQMAX is a condensing water heater, where the cooler flue gases condense as they pass through the coil within the water heater. Latent heat is recovered as a result of this process which increases the operating efficiency of the water heater.

The condensate of the flue gases is discharged through the flue outlet into an external trap on the EQMAX S & M models (210L and 356L capacity), while EQMAX L models (538L capacity) feature an additional dedicated condensate evacuation tube which feeds into a double external trap.

Open vented or unvented systems

The EQMAX range is suitable for both open vented and unvented hot water systems. An unvented accessory kit is available from Ideal Commercial Heating to enable the EQMAX to be installed on an unvented hot water system, in line with the requirements of Building Regulations Part G3. A temperature and pressure relief valve is included with the water heater as standard and must be fitted.

Legionella control

The EQMAX water heaters conform to the recommendations offered within industry best practices such as HSG 274 Part 2 and ACOP L8 as follows:

- Dedicated access for routine inspection and cleaning
- Dedicated pasteurisation cycle within the control software
- Unique Triplex sensor for accurate temperature control

Water quality statement

Due to the variable composition of distributed water supplies it is necessary to identify the properties of the cold water feed to the water heater. As is commonly seen within water heating devices, scale formation will develop during normal operation, and it is therefore an essential requirement that appropriate action is undertaken to ensure reliable and continuous operation. For regions with very calcareous water (over 350 ppm CaCO3), it is best to use a softener to prevent scaling problems in the heating element. Excessive scaling reduces device performance and can lead to corrosion of the heating element. Routine monitoring, inspection and cleaning is therefore important. As hardness and conductivity are related, any water softening that is applied must be subsequently checked to ensure that the water maintains a conductivity level above 100 µS/cm. This is necessary to ensure effective operation of the electrical anodic protection system.

Unvented systems and accessories

The EQMAX range is supported by unvented and hydraulic accessories as well as components for a range of flue system types.

Unvented kit

Each unvented supply kit is sized 1½" and comprises the following items:

- 3.5 bar pressure reducing valve
- Non return valve
- 6 bar expansion relief valve
- Tundish
- Drain valve (including tee and reducing fitting)

The unvented supply kit is a mandatory install for any unvented application.

Expansion factor for different water temperatures						
Temperature	°C	50	55	60	65	70
Expansion Factor	∑	0.0118	0.0142	0.0168	0.0196	0.0225

A Temperature and Pressure relief valve is supplied with the water heater and must be fitted onto all unvented installations.

Multiple water heater installations should order one unvented kit per water heater.

The expansion vessel is not supplied as part of the unvented kit and must be ordered separately in accordance with system volume expansion requirements.

Both standard type and flowthrough type expansion vessels are available to purchase.

EQMAX expansion vessel

- All models are WRAS approved
- Maximum working pressure 10 bar
- Available in 3 sizes – 25L, 33L and 60L
- Factory pre-charged with nitrogen to 3.5 bar for DHW system use

25L and 33L expansion vessels come with wall mounting brackets, 60L must be mounted onto a flat surface and be floor standing.

Flow-through type expansion vessels are also available and can provide increased protection against the formation of bacterial growth.

25L and 33L vessels require a flow jet valve to be purchased alongside the vessel. This valve is included with the 60L.

LPG conversion kit

An LPG conversion kit is supplied as standard for 20-60kW models (EQMAX S and M).

For 70-120kW models (EQMAX L), the LPG conversion kit must be ordered separately and is not included as standard with the water heater.

Top-to-bottom recirculation pump

This gives enhanced temperature control and can be used in the control of legionellosis – for compliance with the Heath and Safety Commission (HSC) requirements for safe production of hot water.

Controls

The EQMAX uses a Siemens controls platform which has been specially adapted for use on DHW systems.

Easy to use digital control panel with backlit LCD display and utilising a scroll wheel to navigate between the different settings screens. LEDs are also incorporated into the user interface to enable quick and easy identification of faults, should they occur.

Primary operating features include:

- DHW production in comfort (primary temperature setpoint) and reduced (secondary temperature setpoint) modes
- Full 7 day / 24 hour time and date settings to control comfort/ reduced mode activation
- Standby mode which will operate a frost protection programme if required
- Anti-legionella programme which is fully customisable to system requirements
- Holiday mode programming for periods of shutdown
- Programmable pump control function

Setpoints:

- The DHW setpoints can be adjusted between 45°C and 80°C
- 3 'ON/OFF' cycles can be programmed to run within a single 24 hour period
- The anti-legionella programme can have its cycle temperature, cycle duration and cycle frequency adjusted
- Adjustable frost protection setpoint between -20°C and 20°C

In addition to the standard controls built into the water heater, optional controls and accessories will also be available. These include:

- Cable (sensor QAZ36 for thermowell) water temperature sensor to monitor stored water temps of additional cylinders connected to the EQMAX.

Flue system components

Flue data

	Open Flue		Concentric / Room Sealed Flue (C13/C33)			
EQMAX Model	Air Inlet/Flue Outlet Diameter	Pressure at Outlet (Pa)	Flue System Diameter	Max Flue System Length (m)	Equivalent Length 90° Elbow	Equivalent length 45° Elbow
S 20	80mm	110	80/125	20	1	0.5
S 25	80mm	170	80/125	20	1	0.5
S 30	80mm	200	80/125	20	1	0.5
M 35	100mm	130	100/150	20	1	0.5
M 50	100mm	200	100/150	20	1	0.5
M 60	100mm	200	100/150	20	1	0.5
L 70	130mm	65	130/200	20	1	0.5
L 80	130mm	95	130/200	20	1	0.5
L 100	130mm	155	130/200	20	1	0.5
L 120	130mm	200	130/200	20	1	0.5

S and M models share their wider system components with Evomax 2 (with the exception of plume kits and multiline cascade header kits).

The following components are available in 80/125 (S models), 100/150 (M models) and 130/200 (L models):

Flue kits – concentric
Vertical Roof Flue Kit
Horizontal Wall Flue Kit
Extension Kit 0.5 & 1m
Pitched Weather Collar
Flat Weather Collar
90° Elbow
45° Elbow
Wall Bracket

Flue kits – open flue
Vertical Flue Terminal
Extension Pipes 0.5 & 1m
90° Elbow
45° Elbow
Pitched Weather Collar
Flat Weather Collar
Wall Bracket

EQMAX
Universal flue kits

EQMAX is approved for open flue or room sealed flue systems.

The water heaters are offered with a range of components suitable for B23, C13 and C33 flue systems.

KIT COMPONENTS

The kits supplied contain components for both concentric and open flues. A universal flue kit is supplied as standard with each EQMAX water heater.

Typical flue installation

Note: Flue terminals are not included within flue starter kits and must be ordered separately.

B23 flue system

C13 flue system

C33 flue system

When installing EQMAX water heaters with concentric flue (horizontally or vertically) the Ideal commercial flue system must be used to comply with CE certification.

B type components for open flue systems (Air inlet basket mandatory installation)
B23 Air inlet basket
Flue outlet straight extension
Flue outlet support elbow
Adjustable support foot
Water heater bracket kit
1m straight extension
0.5m straight extension

C type components for room sealed flue systems (Mandatory installation)
Air inlet straight extension
Flue outlet straight extension
Flue outlet support elbow
Adjustable support foot
Water heater bracket kit
Concentric T-adaptor
1m straight extension
0.5m straight extension

With any alternative flue system used, the installer must ensure that the flue system is sufficiently supported, and the air inlet and flue outlet connections are not under any weight stress. The flue system should be designed and supplied by a specialist flue company.

Benefits of stainless steel

With stainless steel becoming a popular choice for hot water products, we take a look at some of the key factors driving this trend.

What is stainless steel?

Stainless steel is a generic name for more than 150 carbon alloys that have a minimum of 10.5% chromium. Chromium makes stainless steel corrosion-resistant by oxidizing quickly, forming a thin layer on the metal surface that protects the underlying metal from corrosion. With this thin passive film completely covering the metal surface, the metal is passivated, and the risk of corrosion is greatly reduced.

The most commonly used grades of stainless steel employed in hot water generators are 304, 316(L) and duplex which have a higher level of corrosion resistance and the ability to shape and form the metal into tanks and detailed heat exchangers.

The battle against corrosion

When it comes to dedicated water heaters and hot water stores for domestic hot water, corrosion is the enemy, particularly wet corrosion. Wet corrosion occurs through an electrochemical reaction that requires the presence of oxygen. For example, steel interacts with water and oxygen to form hydrated iron (III) oxide–rust, which will eventually cause structural damage, resulting in costly maintenance and repair, unless otherwise prevented. Here, the material composition of stainless steel provides high resistance to corrosion and provides consistent performance to stresses caused by harsh operating conditions, thus maximising the service life of the water heater or store. Stainless steel will react with oxygen to self-passivate, which means it naturally forms a protective layer that is key to its corrosion resistance by preventing further oxdiation.

Durability of the heat exchanger

As with boilers, when it comes to dedicated water heaters and DHW storage vessels, materials are also best selected for their thermal performance properties. As the heat exchanger plays a key role in maximizing effective and reliable heat transfer, stainless steel offers a robust long-lasting solution.

Frequently confronted with minerals, oxygen, chemicals and sediment, not to mention high temperatures, thermal stress and flue gas condensate, stainless steel is, without doubt, a strong, durable contender that can withstand water and fire side attacks. In comparison to heat exchangers made from steel or copper, which can struggle to withstand acidic flue condensate, stainless steel is a good material choice due to its high corrosion resistance and flexibility. Also, due to their composition of corrosion-resistant alloys, stainless steel products often have a longer warranty such as our market-leading five-year warranty for our EQMAX range of gas fired condensing water heaters.

Looking at the bigger picture

Often assumed to be more expensive than some of the other materials traditionally used, such as copper, aluminium and steel, when you look at the bigger picture and consider total life cycle costs, stainless steel is often a cost effective option.

Stainless steel water heaters and storage vessels also have the added advantage of being lightweight. Featuring a typically much thinner wall, this makes them much easier and safer to transport and install.

Lastly, compared with other commonly used materials, stainless steel has relatively low embodied carbon, which contributes to longevity and should be considered within the whole-life carbon impact assessment.

The solution

The new EQMAX stainless steel condensing water heater ticks all the boxes when it comes to achieving a durable solution that will stand the test of time. Available in ten power outputs over three storage capacities, the EQMAX features a durable full stainless-steel tank, heat exchanger and coil for increased performance, efficiency, and increased service life.

Offering enhanced durability with electrical anode protection, the EQMAX offers excellent performance, even under the most challenging water conditions. Acting as a ‘fit and forget’ part of the water heater while providing corrosion protection benefits in hard water areas, the anodes do not require any routine maintenance or replacement and have an estimated service life of more than 10 years.

Suitable for both renovation and new build projects, including locations with substantial and continuous hot water demands such as hotels and sports facilities, the EQMAX meets all of the latest Building Regulations and offers significantly improved efficiency and performance when replacing a non-condensing water heater.

What to consider when upgrading to a condensing water heater system

In line with updates to Approved Document L of Building Regulations and the uplift that ends the option to carry out like-for-like non-condensing water heater replacements in most commercial buildings, we assess the key practical factors to consider when upgrading to a new energy efficient hot water system.

Sizing up for the job

To be forewarned is to be forearmed, so the best starting point is to gather as much information as possible about the building and its current usage.

This is particularly important for refurb projects in buildings such as hotels, sports facilities, or care homes, which may have experienced an extension, sanitary fittings upgrade or increase in occupancy since the previous installation. Oversize and you could be faced with a reduction in system efficiency and increased energy wastage. Undersize and you could end up with very frustrated building occupants and the risk of a bad reputation.

Consider existing flue requirements

Once hot water demand is established, it's important to recognise the type and condition of the existing flue system and its route. When changing commercial non-condensing water heaters to condensing systems, existing flues often need to be replaced or lined to cope with condensate, which is acidic. As part of the upgrade, new flue systems need to be watertight and pressure-tight and designed to drain the condensate back into the water heater to then be drained out fully.

Coping with condensate drainage

As part of the upgrade, a provision must also be put in place to remove condensate. Without this, condensate can leak, corrode and ultimately cause damage to other equipment on the plant room floor. To avoid this, a suitable drainage system must be installed next to the water heater. For plant rooms where this is not an option, a trap using corrosion-resistant material can be connected to the drainage system. For basement plant room installations, installing a condensate removal pump is also another consideration.

Further thoughts

Things can and do change over time, so it's also worthwhile to take a look at the whole hot water system as part of your final assessment. This can highlight any other potential updates that might be required, such as the specification of a flow-through expansion vessel. This will also provide the opportunity to ensure unvented accessories are in full working order.

In addition to improving overall efficiency, these additional checks can also help to enhance service life and guard against the breeding of harmful bacteria, most notably Legionella.

Ideal has the solution. The EQMAX range of stainless steel condensing water heaters delivers exceptional peak and continuous volumes of hot water with long-term cost savings. Available in ten power outputs over three storage capacities, it features a durable stainless-steel tank, heat exchanger and coil for enhanced performance, efficiency, and increased service life.

A fully condensing unit which meets all the requirements for Part G and Part L for a fully compliant installation.

Aftersales support

We are committed to delivering the highest level of customer service. With more than 120 years' of experience in the heating industry we are trusted by customers across the UK.

Your new Ideal Commercial Heating hot water products are available with the same support and aftersales commitment you expect from the UK's leading commercial heating manufacturer.

Our new Commercial Service Division brings together our expertise and resources for an even better way of delivering service and support, so you always have direct access - exactly when you need it.

What this means for you:

- One dedicated point of contact – faster more responsive support
- Easier to work with – single service team for commissioning, warranty, servicing and breakdowns on all commercial products
- Dedicated nationwide team of highly skilled engineers
- Expert knowledge on all group commercial products
- Nationwide coverage with next-day breakdown cover for critical sites*

We're here to keep your heating and hot water systems performing at their best. To discuss how we can support your next project or site, contact your local Business Development Manager.

SCAN ME

To view our full range of products visit:

idealcommercialheating.com/hot-water

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

Service and warranty

EQMAX Commissioning

We strongly recommend that all water heaters are commissioned by our Commercial Service Division. As well as ensuring your product is set up correctly for maximum efficiencies you will receive extra benefits on warranty. On completion, you will get a report with details of the initial operating settings.

Service

Installed water heaters will experience a wide variation in operating conditions that can occur due to differing patterns of usage and the variable chemical nature of distributed water supplies. It is therefore strongly recommended that water heaters be drained and inspected within 3 months of the initial commissioning. Once the levels of calcium deposition are established a suitable maintenance schedule can be implemented, however as a minimum all water heaters should be serviced annually.

For more information on commissioning please contact our Commercial Service Division.

Warranty

EQMAX comes with a 2 year parts & labour warranty extended to 5 years if commissioned by Ideal Commercial Heating.*

Full details of warranty terms and conditions are available on request.

Spares

Essential to any maintenance and service regime is the availability of quality spare parts.

By coming to us you can be assured of genuine spare parts and may also benefit from technological improvements. We have a long-term commitment to spare parts for our products.

Speak to our service team today to find out more about commissioning and service offering or ask us to add it to your project quote.

Tel:
03330 040 395

Email:
group.commercial@groupe-atlantic.co.uk

Website:
idealcommercialboilers.com/contact-us

Calls cost no more than calls to geographic numbers (01 or 02) and will be included in any inclusive minutes you have with your telephone service provider.

*Terms & conditions apply.

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03330 040 393

E: commercial@idealheating.com

Calls cost no more than calls to geographic numbers (01 or 02) and will be included in any inclusive minutes you have with your telephone service provider.

Technical Help:

01482 498376

PO Box 103, National Avenue
Kingston upon Hull, East Yorkshire
HU5 4JN, United Kingdom

E: group.commercial@groupe-atlantic.co.uk

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idealcommercialheating.com

EQMAX_water_heater_brochure_RevB