

Gas 220 Ace.

Specification guide



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Remeha, the expert choice.

Complete commercial solutions from the experts in sustainable heating and hot water.

Choose Remeha's advanced commercial boilers for your next commercial project. We invest heavily in research and development which enables our specialist teams to design high performance products at every level.

From using the latest materials and manufacturing techniques to meticulously designing and engineering each boiler, we ensure they're efficient to specify, install, run and maintain. All our boilers share the same simple design – so they're expandable, adaptable and future-proofed.

We're the experts in heating and hot water solutions, built with sustainable technology. Our teams will guide you through the right choices for your commercial heating and hot water project. So from specification to design, through to supply and installation, our customer service and product support is second to none.

Introducing the Remeha Gas 220 Ace range.

The Gas 220 Ace range is based upon proven technology. It is a new generation floor-standing boiler, with a new aluminium monobloc platform and an even higher output to physical size ratio.

Available in 160, 200, 250 and 300kW models – designed for central heating and indirect hot water production at

working pressures up to five bar on the 160 and six bar on the other models. The Gas 220 Ace is perfect for both new and retrofit applications and can be installed in most situations thanks to its conventional and room-sealed flue capability. Its even smaller footprint and ability to be installed in-line and back-to-back make it suited for modular configurations.

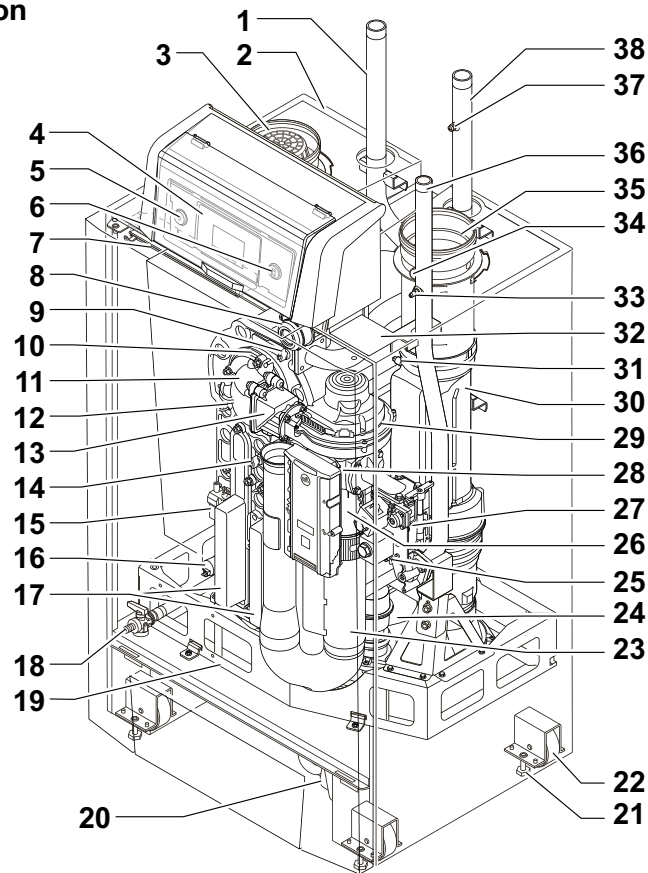
Features and benefits

| | |
|---|--|
| High output to physical size ratio | Can be used in modular configuration enabling large outputs to be installed in difficult to reach areas |
| All connections and pipework enter the top of the boiler – Gas 220 Ace models can be positioned in-line or back-to-back | Can be delivered through a standard door and is easy to manoeuvre in the plant room |
| Compact, lightweight and supplied with integral wheels | For ease of cleaning and hassle-free servicing |
| Flushing points and removable front section as standard | Ease of installation and servicing – no boiler disassembly required |
| 'Click and Go' condensate drain underneath the boiler – not inside | Ease of installation – multiple Gas 220 Ace models can be flued together in a common flue header without the risk of flue gases entering the other boilers |
| Inbuilt flue non-return valve | Flexible installation in new and existing buildings |
| Multiple flueing capabilities | Aids servicing in plant rooms |
| LED illuminated casing air box | Single piece stress-free casting for efficiency and durability |
| Built on the new aluminium monobloc platform | Energy savings – reducing gas consumption |
| High efficiency boiler up to 95.9% GCV | Low pollutant emissions that meet ErP regulations and London Plan targets (SPG 2014) |
| Ultra-low, Class 6 NO ₂ emission levels from 22 mg/kWh 0% O ₂ dry – EN15502 | Optimised operation with variable temperature systems and low carbon technologies |
| Optional high temperature secondary return kit | Ease of use – time and temperatures can be set and controlled by the end user |
| Time and temperature controls supplied as standard | Can connect to any Building Management System (BMS) without additional parts needed |
| Inbuilt 0-10v and volt free contacts | Lower noise and resonance |
| Tuned noise dampers as standard | |



boiler construction.

Typical boiler construction



Key

| | | | | | |
|----|------------------------------------|----|---------------------------------------|----|------------------------------|
| 1 | LTHW return pipe | 14 | Temperature sensor for heat exchanger | 27 | Gas valve unit |
| 2 | Casing/air box | 15 | Ignition transformer | 28 | Control unit (CU – GH) |
| 3 | Air supply | 16 | Hydraulic pressure sensor | 29 | Fan |
| 4 | Control panel | 17 | Heat exchanger inspection hatch | 30 | Flue gas connection pipe |
| 5 | On/off switch | 18 | Filling/drain valve | 31 | Flue gas sensor |
| 6 | Service connector (PC connector) | 19 | Frame | 32 | Support |
| 7 | LED interior light | 20 | Siphon | 33 | Gas pressure measuring point |
| 8 | Air pressure differential switch | 21 | Adjustable leg | 34 | Flue gas measuring point |
| 9 | Flow sensor | 22 | Transport wheel | 35 | Flue gas outlet |
| 10 | Burner | 23 | Air intake silencer | 36 | Gas connection |
| 11 | Combustion connection | 24 | Condensate collector | 37 | Manual air vent |
| 12 | Heat exchanger | 25 | Gas pressure measuring point | 38 | LTHW flow pipe |
| 13 | Burner fan (flue) non-return valve | 26 | Venturi | | |

Gas 220 Ace

operating principle.

Combustion air is drawn into the closed air box through the air inlet by a variable speed fan. The inlet side of the fan is fitted with a Venturi, where air and gas are mixed according to a fixed ratio. This ensures precise combustion.

The mixture is initially ignited by the combined ignition/ionisation probe which monitors the state of the flame. If the flame is unstable or doesn't ignite within the pre-set safety time cycle, the controls will shut the boiler down (after five attempts) and the boiler will need to be manually reset. The digital display will indicate a flashing fault code confirming the reason for failure

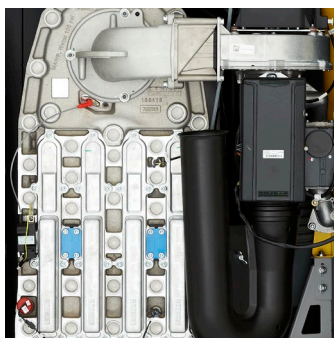
The products of combustion, in the form of hot flue gases, are forced through the heat exchanger transferring the heat to the system water (the flue gas temperature is reduced to approximately 5°C above the temperature of the system return water), then discharged vertically via the condensate collector, through the 150mm or 200mm connection to the atmosphere.

Because of the low flue gas exit temperature, a vapour cloud will form at the flue gas terminal – this is water vapour formed during the combustion process.

If the controls allow the flow and therefore the return temperature to fall below dew point (55°C), this water vapour will begin to condense in the boiler, transferring its latent heat into the system water, increasing the output of the boiler without increasing gas consumption.

Condensation formed within the boiler and flue system is discharged from the boiler to an external drain, via the drain pan and siphon supplied.

As an option, the boiler can be supplied with a second (fixed temperature) return connection. This additional connection enables the boiler to make full use of its condensing ability whilst accepting both fixed and variable temperature returns from the same system.



Gas 220 Ace

technical information.

| | 160 | 200 | 250 | 300 |
|--|----------------|-------------------|-------------------|-------------------|
| Performance | | | | |
| Nominal output (kW) central heating operation (80/60°C) min-max | 31.5-152.1 | 39.4-194.4 | 49.2-243.3 | 59.0-290.9 |
| Nominal output (kW) central heating operation (50/30°C) min-max | 34.7-161.1 | 43.2-209.8 | 54.1-261.0 | 65.0-310.7 |
| Nominal input (kW) central heating operation (Hi) min-max kW | 32-156 | 40-200 | 50-250 | 60-299 |
| Efficiency | | | | |
| Part L 2 seasonal efficiency GCV (%) | 95.9 | 95.5 | 95.6 | 95.8 |
| Full load central heating efficiency (Hi) (80/60°C) (92/42/EEC) (%) | 97.5 | 97.2 | 97.3 | 97.3 |
| Part load central heating efficiency (92/42/EEC) (return temperature 30°C) (%) | 108.5 | 108 | 108.2 | 108.4 |
| Useful efficiency at rated heat output and high temperature regime (ErP) η_4 (%) | 87.8 | 87.6 | 87.7 | 87.7 |
| Useful heat output at 30% of rated heat output and low temperature regime (ErP) η_1 (%) | 97.8 | 97.3 | 97.5 | 97.7 |
| Gas | | | | |
| Standard fuel | Natural gas | Natural gas | Natural gas | Natural gas |
| Optional fuel adjustment –see installation manual | LPG (propane) | LPG (propane) | LPG (propane) | LPG (propane) |
| Gas consumption G20 (H gas) min-max (m³/h) | 3.4-16.5 | 4.2-21.2 | 5.3-26.5 | 6.4-31.6 |
| Gas consumption G31 (propane) min-max (m³/h) | 1.4-6.3 | 1.6-8.2 | 2.1-10.2 | 6.3-31.6 |
| Gas inlet pressure G20 (H gas) min-max (mbar) | 17-25 | 17-25 | 17-25 | 17-25 |
| Gas inlet pressure G31 (propane) min-max (mbar) | 37-50 | 37-50 | 37-50 | 37-50 |
| Gas connection size BSP (inches) | 1" Male thread | 1½" Male threaded | 1½" Male threaded | 1½" Male threaded |
| Flame protection | Ionisation | Ionisation | Ionisation | Ionisation |
| Ignition | Electronic | Electronic | Electronic | Electronic |
| Flue (supplied as standard for conventional flue, option for room sealed available) | | | | |
| Flue diameter I/D (mm) | 150 | 200 | 200 | 200 |
| Air inlet diameter mm I/D (mm) | 150 | 200 | 200 | 200 |
| Flue gas quantity (1) min-max (kg/h) | 57-277 | 71-355 | 89-444 | 107-531 |
| Maximum counter pressure (Pa) | 200 | 150 | 150 | 150 |

Gas 220 Ace

technical information.

| | 160 | 200 | 250 | 300 |
|--|------------------|------------------|------------------|------------------|
| Performance | | | | |
| Water content (litres) | 17 | 33 | 33 | 33 |
| Hydraulic resistance ($\Delta T=20k$) (mbar) | 190 | 100 | 150 | 200 |
| Nominal flow rate ($\Delta T=20k$) (l/s) | 1.82 | 2.33 | 2.91 | 3.48 |
| Condensate connection (OD mm) | 40 | 40 | 40 | 40 |
| Connection size BSP inches flow/return (inch/mm) | 1¼" (40mm) | 2" (50mm) | 2" (50mm) | 2" (50mm) |
| Standard operating temperature (°C) | 20-90 | 20-90 | 20-90 | 20-90 |
| Maximum operating temperature (°C) | 90 | 90 | 90 | 90 |
| Maximum water temperature (°C) | 110 | 110 | 110 | 110 |
| Maximum water operating pressure (bar) | 5 | 6 | 6 | 6 |
| Minimum water operating pressure (bar) | 0.8 | 0.8 | 0.8 | 0.8 |
| General | | | | |
| Boiler weight (kg) | 205 | 245 | 245 | 245 |
| Dimensions (WxHxD) | 800 x 1662 x 657 | 800 x 1662 x 657 | 800 x 1662 x 657 | 800 x 1662 x 657 |
| BREEAM NO ₂ (mg/kWh) | 22 | 40 | 38 | 35 |
| Electrical | | | | |
| Nominal power (VAC/Hz) | 230/50 | 230/50 | 230/50 | 230/50 |
| Power consumption min-max (W) | 47-275 | 57-204 | 57-323 | 48-343 |
| Modulating input (V dc) | 0-10 | 0-10 | 0-10 | 0-10 |
| Fuse rating (amps) – CB-01 | 6.3 | 6.3 | 6.3 | 6.3 |
| Electrical protection index (IP) | IPX1B | IPX1B | IPX1B | IPX1B |

Suggested engineering specification

Gas 220 Ace.

Construction

The boiler shall be a pre-assembled, free-standing, gas-fired, high efficiency condensing boiler. The monobloc single piece cast aluminium heat exchanger and other major components shall be contained within a sealed air box. This shall form the main boiler casing with a removable front panel section for maintenance and cleaning purposes. All electrical and electronic controls shall be contained within the instrument panel mounted on top of the boiler. The boiler shall be shipped fully assembled with heavy duty castors fixed from factory to the boiler to enable ease of installation.

The boiler shall be tested before leaving the factory for the following:

- › Electrical safety
- › Water tightness
- › Gas tightness
- › Function testing

Hydraulic, Gas and Flue Connections

The flue gas outlet, combustion air inlet, flow, return and gas connections shall be located on top of the boiler with a condensate connection at low level behind a magnetic locked door. The boiler shall be suitable for room-sealed or open-flue applications. The boiler shall be able to operate up to working pressures not exceeding 5.0 bar (for the 160 and 6.0 bar for the 200, 250 and 300 models) with a minimum 0.8 bar required for the range.

Operation Principle

The boiler shall be complete with a modulating control system that limits the maximum difference in temperature between the heating flow and return and the maximum speed at which the flow temperature increases. The boiler shall be complete with a pre-mix burner (NG or LPG) with the gas/air ratio control system controlled internally. The combustion air shall be checked once every 24hrs or during each burner start automatically by the boiler controls. Flue gas temperature and hydraulic pressure shall be monitored automatically to ensure safe operation. An intelligent, advanced boiler control system shall continuously monitor the boiler conditions, varying the heat to suit the system load. The control shall be able to react to external/negative influences in the rest of the system (flow rates and air/gas supply problems) maintaining boiler output for as long as possible without resorting to a lock out condition. Should a negative effect happen in the system the boiler reduces its output and/or shuts down (shut-off mode), awaiting the negative conditions to return to normal before restarting.

Heat output shall be maintained as long as the negative condition is not dangerous. Standard frost protection shall operate as follows:

- › At a water temperature lower than 7°C, shunt pump starts (if controlled by the boiler)
- › If the water temperature is lower than 4°C, the boiler switches on
- › If the water temperature is higher than 10°C the boiler switches off and the circulation pump continues to run for a short time

Controls

The boiler shall include a controls package that allows the actual and set values to be read and adjusted on the built-in digital display which also provides normal operating and fault code indication. The controls as standard shall be the following inputs/outputs:

- › 0-10V input (flow or load control)
- › Outside temperature input
- › Shunt pump modulation control
- › High limit lock out
- › Low water protection
- › Safety/shutdown/release input
- › Calorifier pump control primary (optional)
- › Three way valve control (optional)
- › VT pump control (optional)
- › System status output (optional)
- › Boiler, VT and optional outside temperature sensors
- › Room thermostat control (optional)

Features

- › Ultra-low NO_x from 22mg/kWh
- › Modulating 18-100%
- › Data file for storing fault/run info
- › ErP compliant
- › PC connection for servicing
- › Premix burner

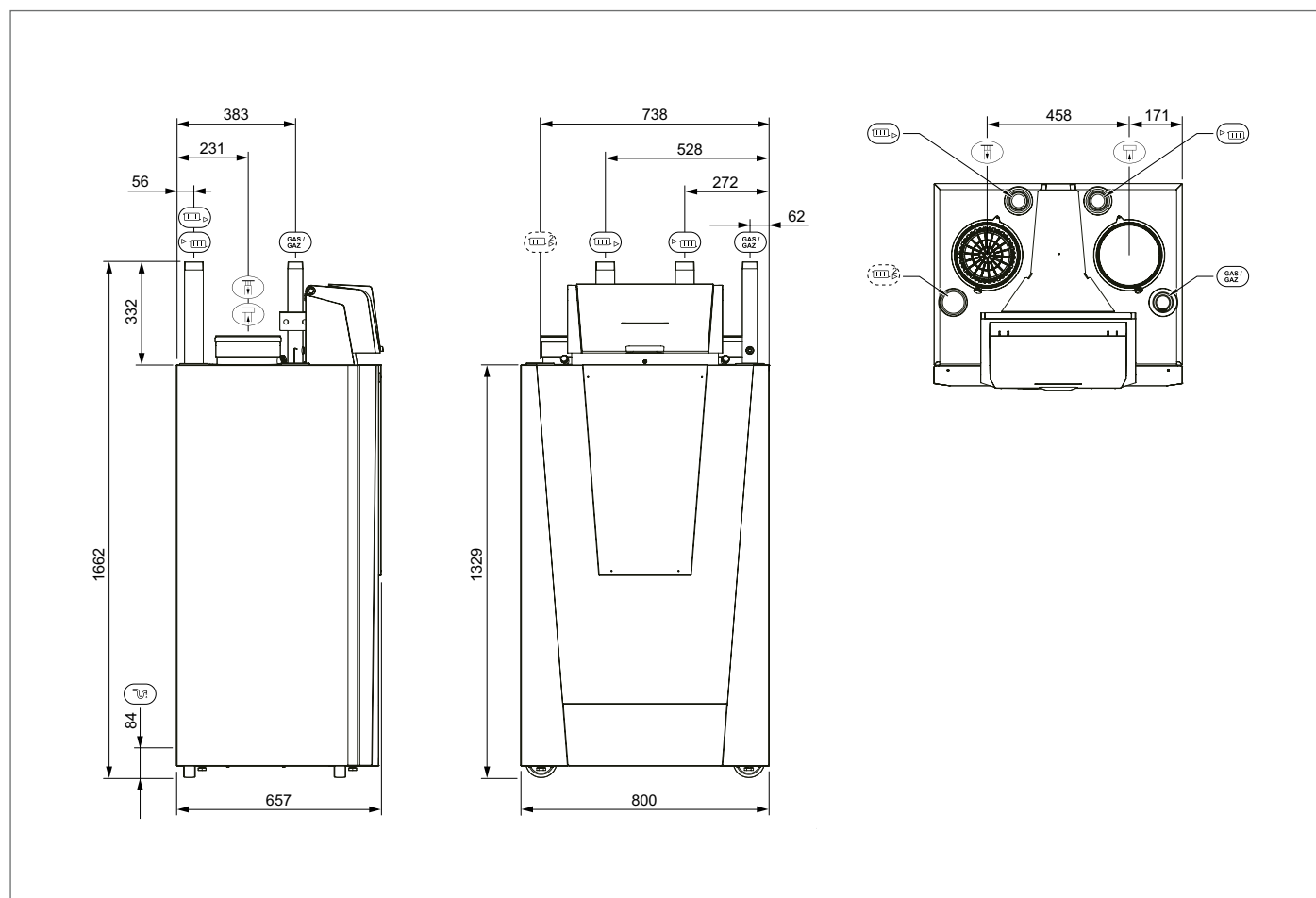
The Gas 220 Ace range of boilers conform with the following EC directives:

- › GAR (EU) 2016/426 to EN 15502-1: 2012 + A1: 2015
EN 15502-2-1: 2012
- › BED (92/42/EEC to EN 15502-1: 2012 + A1: 2015
EN 15502-2-1: 2012
- › EMC (2014/30/EU) to EN 55014-1 2007 + A1: 2009 + A2: 2011
EN 55014-2: 2015 EN 61000-3-2: 2014
EN 61000-3-3: 2013
- › LVD (2014/35/EU) EN 60335-2-102: 2016 CE16
- › ErP (2009/125/EC)
- › CE Certification Remeha Gas 220 ACE Range PIN: 0063CQ3781

Gas 220 Ace

dimensions.

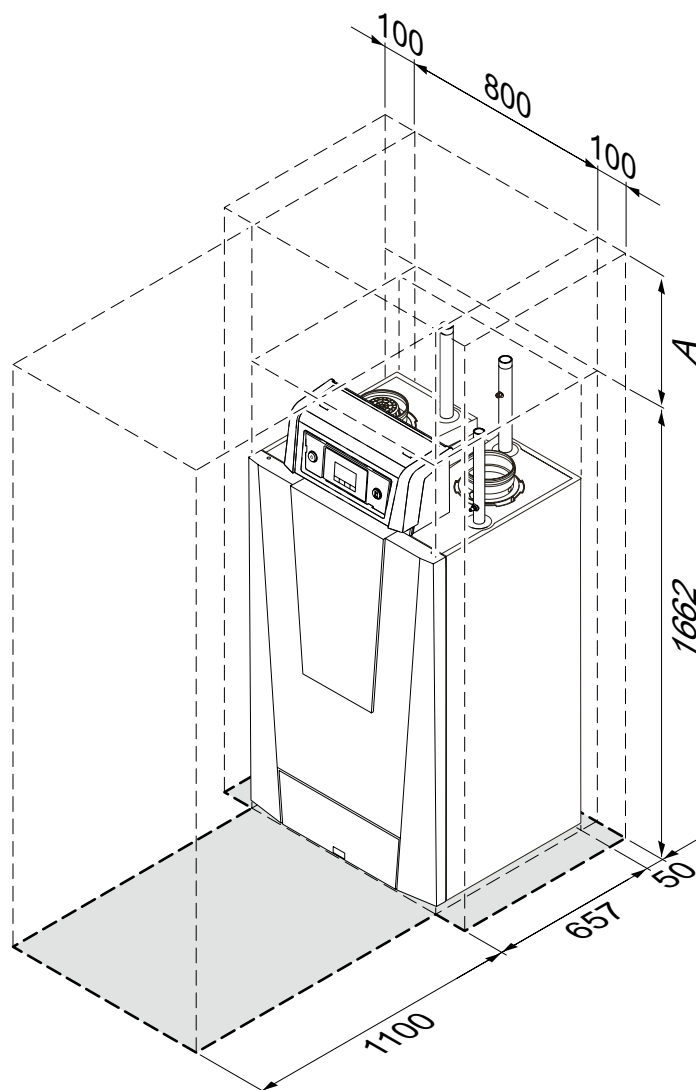
The small footprint of the Gas 220 Ace range and its space-saving configurations makes it particularly suitable for retrofit applications.



| Connection | Gas 220 Ace-160 | Gas 220 Ace-200 | Gas 220 Ace-250 | Gas 220 Ace-300 |
|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Flue gas outlet | Ø 150mm | Ø 200mm | Ø 200mm | Ø 200mm |
| Inlet air supply | Ø 150mm | Ø 200mm | Ø 200mm | Ø 200mm |
| Gas connection | 1" (25mm) Male threaded | 1½" (38mm) Male threaded | 1½" (38mm) Male threaded | 1½" (38mm) Male threaded |
| Flow connection | 1¼" (32mm) Male threaded | 2" (50mm) Male threaded | 2" (50mm) Male threaded | 2" (50mm) Male threaded |
| Return connection | 1¼" (32mm) Male threaded | 2" (50mm) Male threaded | 2" (50mm) Male threaded | 2" (50mm) Male threaded |
| Second return connection (optional) | 1¼" (32mm) Male threaded | 2" (50mm) Male threaded | 2" (50mm) Male threaded | 2" (50mm) Male threaded |

Layout and service clearances.

The boiler can be installed in-line or back-to-back depending on plant room access for maintenance.



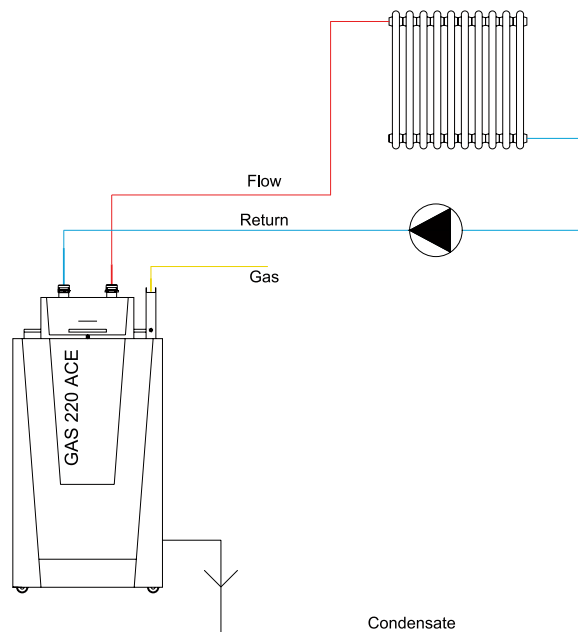
Dimension A:

500mm (If the air supply filter is used, there must be a clearance of at least 650mm.)

Recommended distances/clearances.

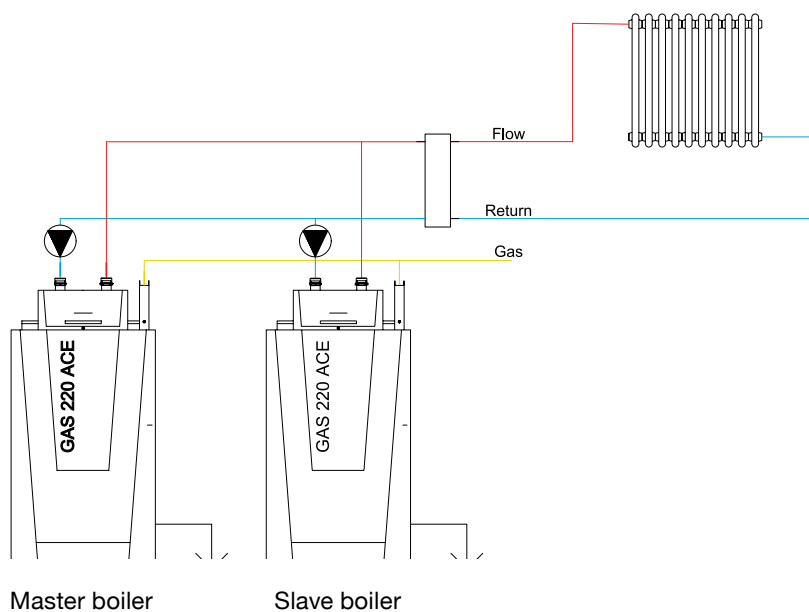
Typical installation.

Single boiler



Gas 220 Ace.
Floor-standing condensing boiler.

Multiple boilers



Gas 220 Ace.
2 Floor-standing condensing boilers.

For illustration purposes only.



Electrical connections.

General

The Gas 220 Ace is supplied as standard with electrical control and flame ionisation safety controls, with a specially designed microprocessor at the heart of the control system.

Specifications

Electrical supply

The Gas 220 Ace is suitable for a supply of 230V-1-50Hz 6.3 amp with phase/neutral/earth. Note: The sensor cables should be separate from the 230V cables.

Power consumption at standby/part load/full load

| Gas 220 Ace | | | 160 | 200 | 250 | 300 |
|------------------------------|----------|--------|------------|------------|------------|------------|
| Supply voltage | | VAC/Hz | 230/50 | 230/50 | 230/50 | 230/50 |
| Power consumption | Max | W | 275.0 | 204.0 | 323.0 | 343.0 |
| Power consumption – low load | Min | W | 47.0 | 57.0 | 57.0 | 48.0 |
| Power consumption – standby | Min | W | 5.3 | 11.0 | 11.0 | 9.0 |
| Electrical protection index | | IP | IPX1B | IPX1B | IPX1B | IPX1B |
| Fuses | Main PCU | A | 6.3 1.6 | 6.3 1.6 | 6.3 1.6 | 6.3 1.6 |

Automatic controls (PCBs)

- > SIT
- > Type: CU-GH06 and SCB01

Fuse specification

The boiler is protected by fuses:

- > Supply voltage – 230 VAC/50 Hz
- > Main fuse value F1 (230 VAC) – 6.3 amps (CB-01)
- > Fuse value F2 (230 VAC) – 1.6 amps (CU-GH08)
Integral / Non-Replaceable
- > Fan – 230 VAC

Boiler temperature control

The Gas 220 Ace has electronic temperature control with flow, return and heat exchanger temperature sensors.

Regulating the water temperature

The flow temperature can be adjusted between 20°C and 90°C.

The boiler modulates back when the set flow temperature is reached. The switch-off temperature is the set flow temperature +5°C.

Shortage of water (low water) protection

The boiler is fitted with low water level protection based on temperature measurements. By modulating back when the water flow threatens to become insufficient, the boiler remains operational as long as possible. The boiler issues a warning in the event of no or too little water.

Water flow

The modulating control limits the maximum difference between the flow and return temperatures. Additionally a temperature sensor in the heat exchanger limits the maximum increase in the heat exchanger temperature.

Hydraulic pressure sensor

The hydraulic pressure sensor records the water pressure in the boiler.

Flue gas sensor

The boiler is fitted as standard with a flue gas sensor. When the exhaust gas temperature is too high, the boiler will lock out (fault). Once the fault has been remedied, the boiler can be unlocked.

Air pressure differential switch – the air pressure differential switch is a protection against a blocked trap or blocked air supply/flue gas outlet.

External connections

The connection box with the terminals of the connector for external connections is located behind the control panel. The wiring for external connections is fed through a cable duct to the back of the boiler. The connection box contains the standard PCB CB-01 and positions for the optional PCB(s) for the external connections. The connection box is included with the delivery of the boiler as standard. Use the connection cables supplied as standard to connect the connection box to the control panel.

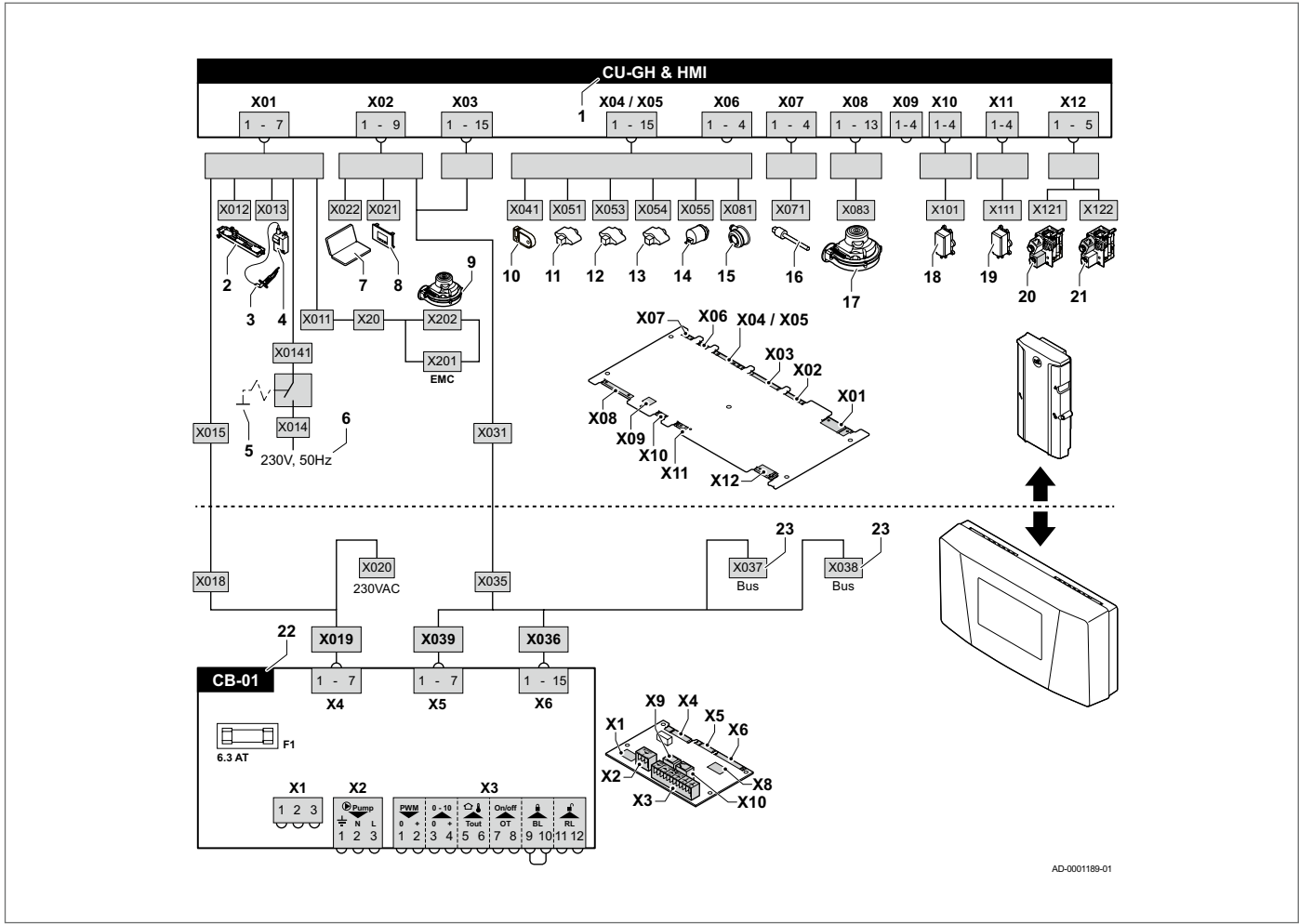
Controls

The boiler is supplied with the following standard control:

- > On/off control
- > Modulation regulation
- > Open therm (OT)
- > Blocking input (BL)
- > Input release (RL)
- > Pump (output) – modulation signal

Electrical connections.

Standard control PCB (CU-GH) with standard PCB (CB-01)



| Key | | | |
|-----|---|----|---------------------------------------|
| 1 | Boiler control unit | 13 | Return temperature sensors (RTs) |
| 2 | Lighting | 14 | Hydraulic pressure sensor (WPs) |
| 3 | Ionisation/ignition electrode (E) | 15 | Air pressure differential switch (PS) |
| 4 | Ignition transformer (IT) | 16 | Flue gas sensor (FGs) |
| 5 | On/off switch (AU) | 17 | Pump control (PWM) |
| 6 | Power supply (P) | 18 | Gas leakage control (VPS) |
| 7 | Service connector/computer connection | 19 | Gas pressure switch (GPS) |
| 8 | Control panel (HMI) | 20 | Gas valve 1 |
| 9 | Fan supply (P) | 21 | Gas valve 2 |
| 10 | Storage parameter (PSU) | 22 | Standard PCB |
| 11 | Flow sensor (FTs) | 23 | L-Bus connections for extra PCBs |
| 12 | Heat exchanger temperature sensor (HEs) | | |

Boiler control.

The heat output of the Gas 220 Ace can be controlled as follows:

- On/off control – the heat input varies between the minimum and maximum values on the basis of the flow temperature set on the boiler
- Modulating – the heat input varies between the minimum and maximum values on the basis of the flow temperature determined by the modulating controller. The boiler output can be modulated with an appropriate modulating controller
- Analogue control (0-10V) – the heat output % or the temperature output of the boiler is controlled via 0-10V values

Modulating controls general

The modulating nature of the boiler is used to maximum effect with a modulating controller based on room and/or outside temperatures. If the controller demands heat, the boiler supplies the heat output (providing the flow conditions have been met). If the controller supplies a calculated set point flow temperature, the boiler modulates to this calculated value (providing the flow conditions have been met). This increases the number of operating hours and drastically reduces the number of starts. Combined with the fixed gas/air mixture, this results in greater efficiency.

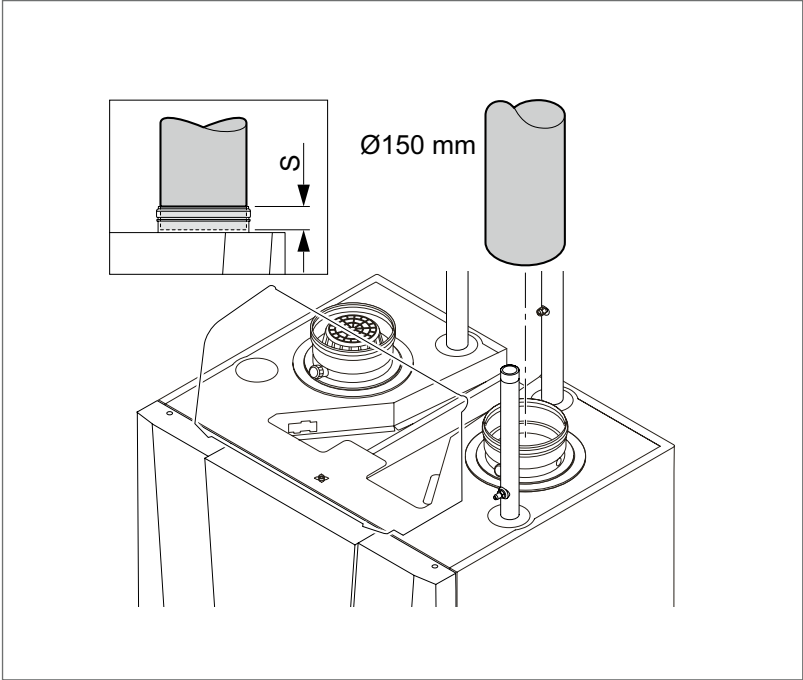
Boiler or system pump

A system pump can be connected to the boiler (230-1-50 supply max current rating of one amp). If the system pump requires more than one amp the terminals can only be used to provide a switch signal to a pump relay.

Boiler control and typical flue installations.

We're unable to offer a flue system and recommend the installer contacts a flue specialist to design and manufacture the system in accordance with the requirements of the British Standards.

Conventional – room ventilated version (B_{23p})

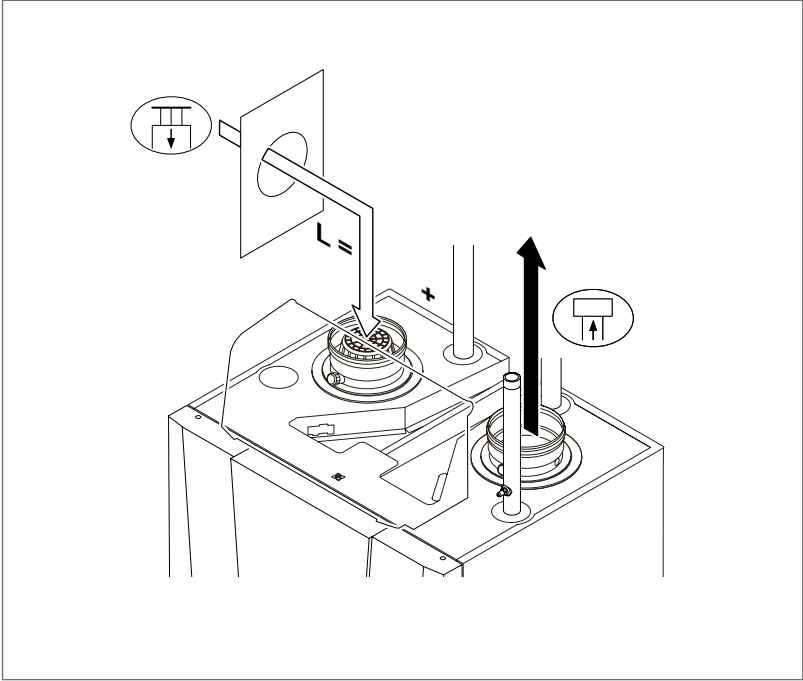


| Maximum chimney length (L) | | | |
|----------------------------|--------------------|--------------------|--------------------|
| Boiler type | Diameter | | |
| | 150mm | 200mm | 250mm |
| Gas 220 Ace 160 | 50m ⁽¹⁾ | 50m ⁽¹⁾ | 50m ⁽¹⁾ |
| Gas 220 Ace 200 | 35m | 50m ⁽¹⁾ | 50m ⁽¹⁾ |
| Gas 220 Ace 250 | 21m | 50m ⁽¹⁾ | 50m ⁽¹⁾ |
| Gas 220 Ace 300 | 15m | 50m ⁽¹⁾ | 50m ⁽¹⁾ |

(1) For longer flue lengths please contact Remeha technical department.

Note: Refer to the reduction table within the Installation Manual regarding reduction for 45 and 90 degree bends.

CLV (C53) system (two zone) – room-sealed version (c₅₃)



| Maximum chimney length (L) | | | |
|----------------------------|----------|---------------------|---------------------|
| Boiler type | Diameter | | |
| | 150mm | 200mm | 250mm |
| Gas 220 Ace 160 | 64m | 100m ⁽¹⁾ | 100m ⁽¹⁾ |
| Gas 220 Ace 200 | 21m | 100m ⁽¹⁾ | 100m ⁽¹⁾ |
| Gas 220 Ace 250 | 11m | 74m | 100m ⁽¹⁾ |
| Gas 220 Ace 300 | 5m | 48m | 100m ⁽¹⁾ |

(1) For longer flue lengths please contact Remeha technical department.

Note: Refer to the reduction table within the Installation Manual regarding reduction for 45 and 90 degree bends.

Cascade options

Spreading the total required heat output over several boilers in cascade configuration offers several advantages:

- > Standby capability
- > Better turndown ratio
- > Improved design flexibility
- > Quick and easy installation

The compact design of the boilers, combined with the smart gas and water connection technology of the cascade system, makes it possible to install a high heat output in a small area.

When installing two to eight boilers, our product range includes systems that are very comprehensive and easy to install. The hydraulic and gas system can be put together entirely without welding, using screw connections, compression connections and flanges. The individual components of the cascade system are available for independent cascade installation.

Please contact our sales or technical departments for different configurations. We also provide in-depth advice on the choice of flue gas discharge material and control engineering.

Gas 220 Ace cascade table dimensions DN 100

| Boiler models | Cascade Layout | Boiler Modules | System Connections EN1092 – 1 | Gas Connections EN1092 – 1 | Dimensions WxDxH (mm) |
|---------------|----------------|----------------|-------------------------------|----------------------------|-----------------------|
| All models | In-line | 1 | DN125 PN16 DIN 2633 | DN65 PN16 | 2245 x 874 x 2282 |
| All models | In-line | 2 | DN125 PN16 DIN 2633 | DN65 PN16 | 3145 x 874 x 2282 |
| All models | In-line | 3 | DN125 PN16 DIN 2633 | DN65 PN16 | 4045 x 874 x 2282 |
| All models | In-line | 4 | DN125 PN16 DIN 2633 | DN65 PN16 | 4945 x 874 x 2282 |
| All models | Back-to-back | 2 | DN125 PN16 DIN 2633 | DN65 PN16 | 2245 x 1483 x 2282 |
| All models | Back-to-back | 3 | DN125 PN16 DIN 2633 | DN65 PN16 | 3145 x 1483 x 2282 |
| All models | Back-to-back | 4 | DN125 PN16 DIN 2633 | DN65 PN16 | 3145 x 1483 x 2282 |
| 160, 200, 250 | Back-to-back | 5 | DN125 PN16 DIN 2633 | DN65 PN16 | 4045 x 1483 x 2282 |
| 160, 200 | Back-to-back | 6 | DN125 PN16 DIN 2633 | DN65 PN16 | 4045 x 1483 x 2282 |
| 160 | Back-to-back | 7 | DN125 PN16 DIN 2633 | DN65 PN16 | 4945 x 1483 x 2282 |

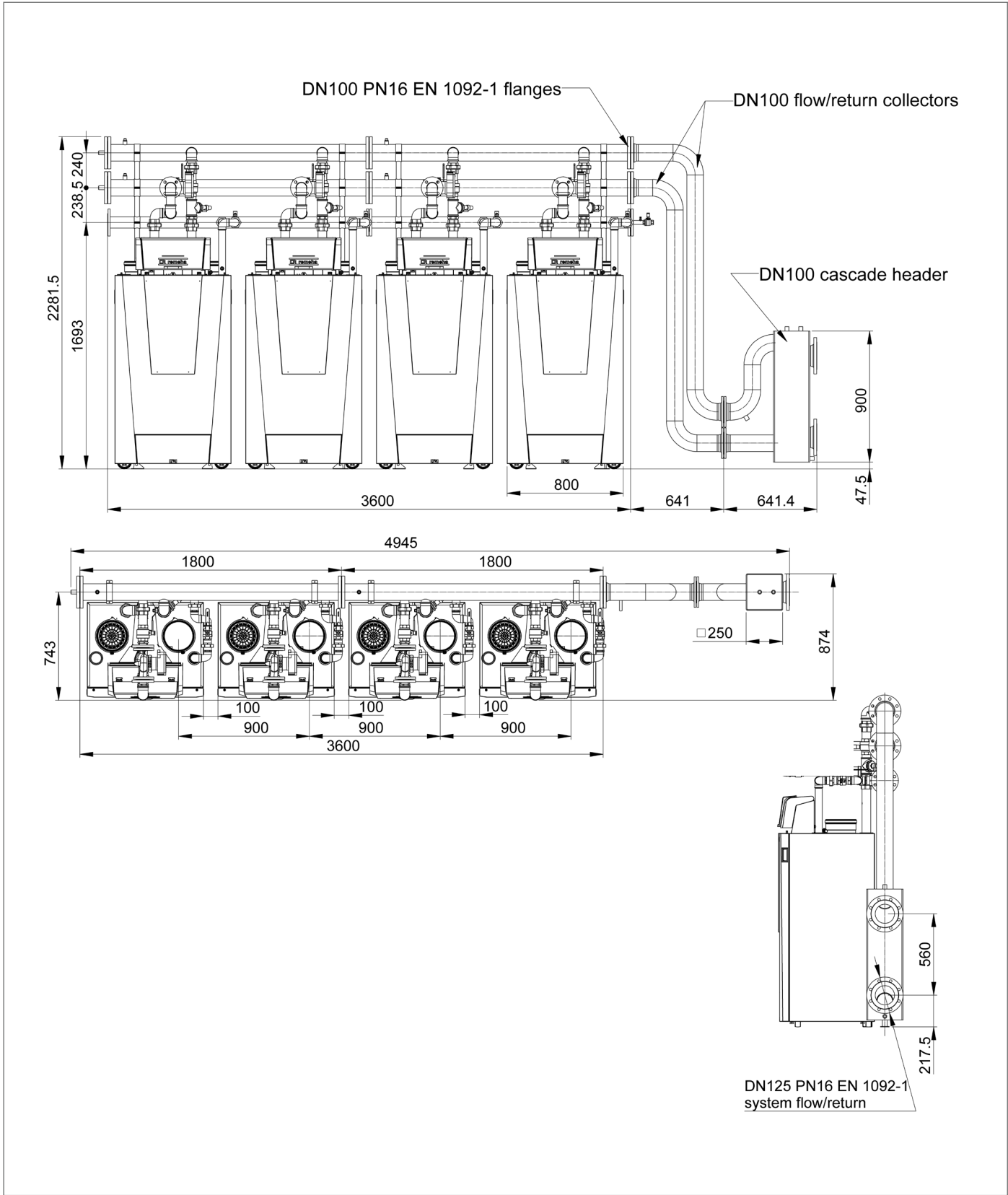
Gas 220 Ace cascade table dimensions DN 150

| Boiler models | Cascade Layout | Boiler Modules | System Connections EN1092 – 1 | Gas Connections EN1092 – 1 | Dimensions WxDxH (mm) |
|---------------|----------------|----------------|-------------------------------|----------------------------|-----------------------|
| 300 | Back-to-back | 5 | DN125 PN16 DIN 2633 | DN100 PN16 | 4273 x 1594 x 2386 |
| 250, 300 | Back-to-back | 6 | DN125 PN16 DIN 2633 | DN100 PN16 | 4273 x 1594 x 2386 |
| 200, 250, 300 | Back-to-back | 7 | DN125 PN16 DIN 2633 | DN100 PN16 | 5173 x 1594 x 2386 |
| All Models | Back-to-back | 8 | DN125 PN16 DIN 2633 | DN100 PN16 | 5173 x 1594 x 2386 |

Notes: A technical clearance of at least 1100mm is required at the front (service side) of the boilers. Refer to our Building Information Model (BIM) files for dimensional clearances around the cascade system. A minimum clearance of 100mm is required for the last boiler opposite the low loss header. A minimum clearance of 50mm is required at the back of the cascade boilers (In-line boilers only).

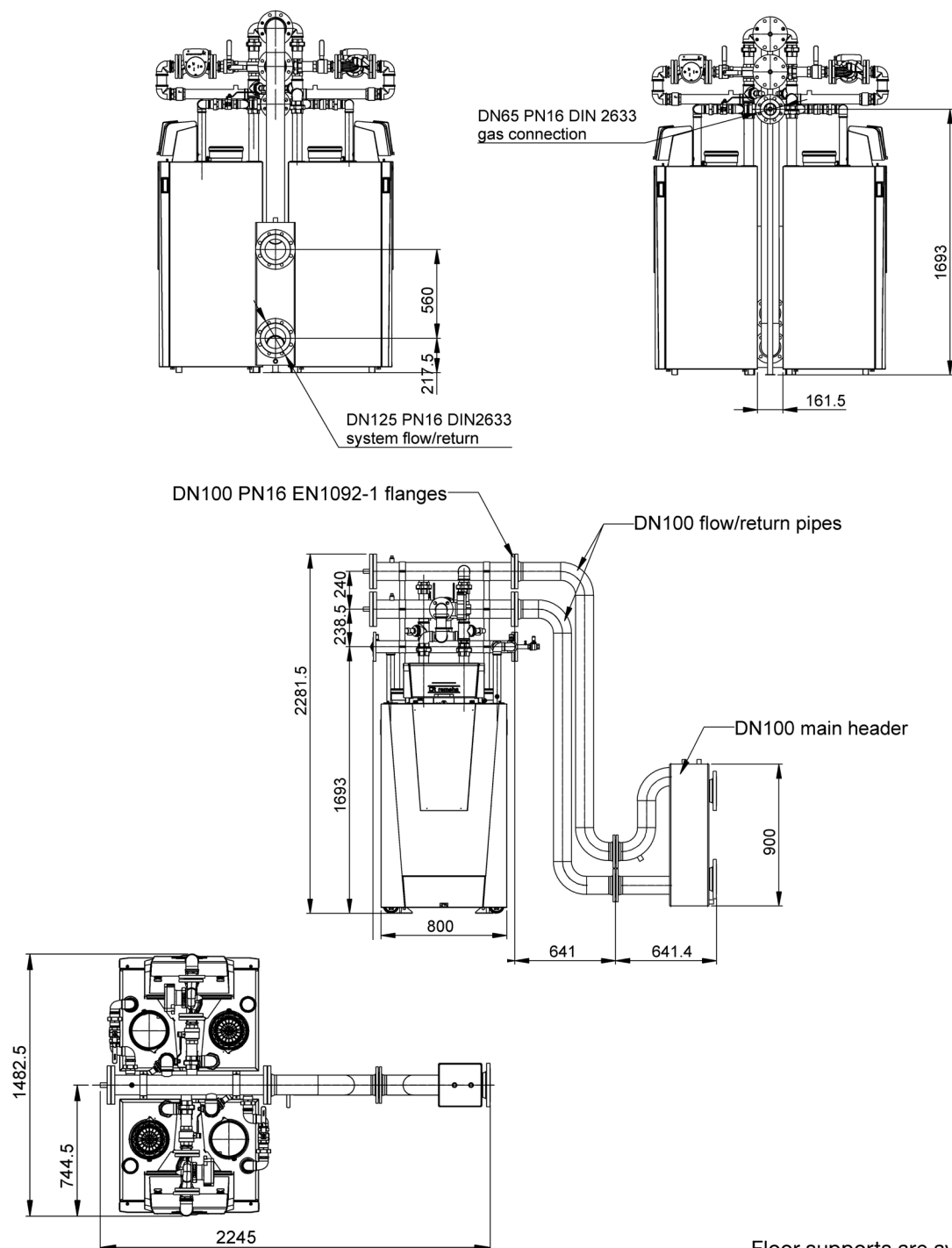
Cascade options in-line.

Four boilers in-line



Cascade options in-line.

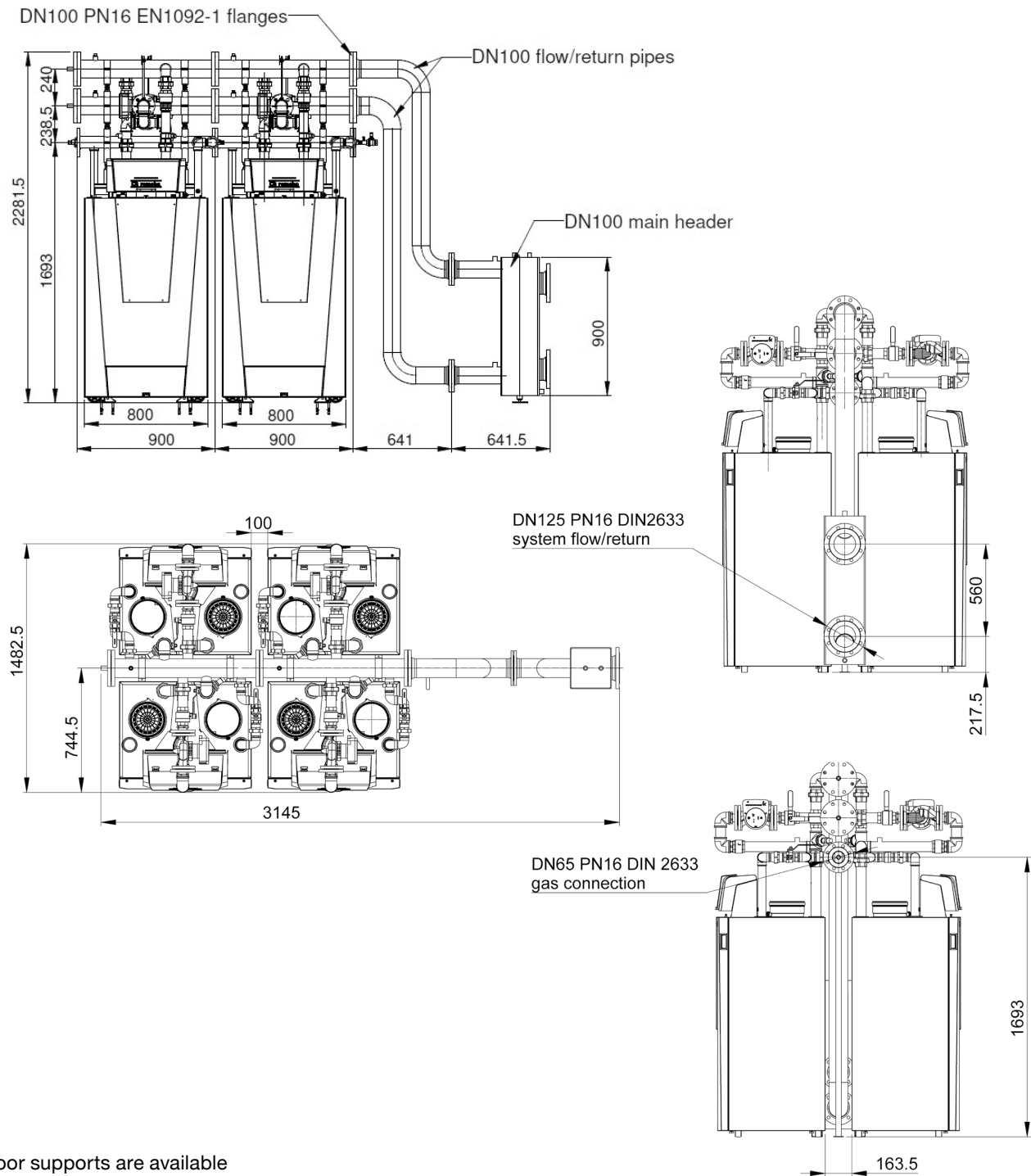
Two boilers back-to-back



Floor supports are available as an option. They are not included in the standard kit.

Cascade options in-line.

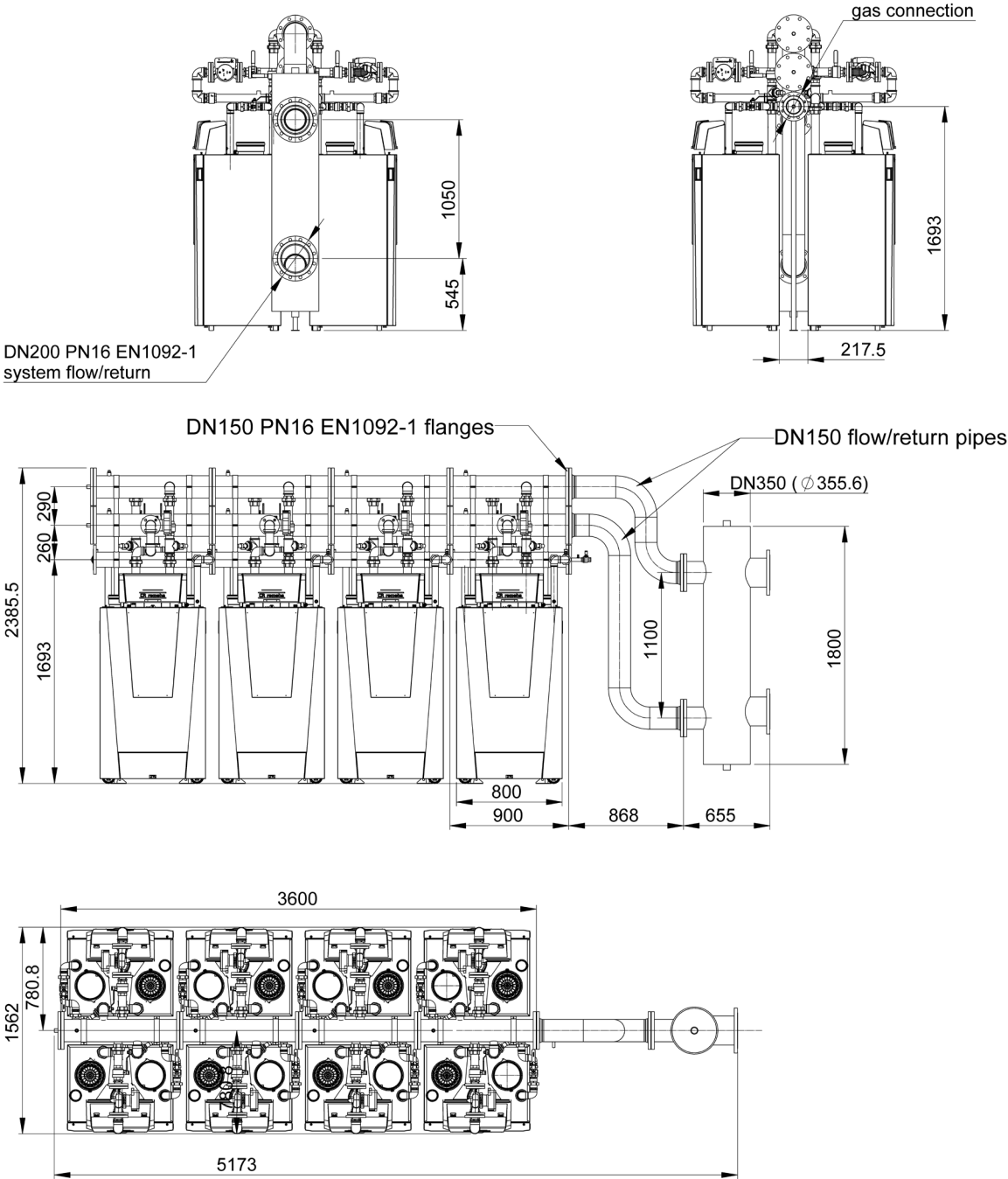
Two boilers back-to-back



Floor supports are available as an option. They are not included in the standard kit.

Cascade options in-line.

Eight boilers back-to-back



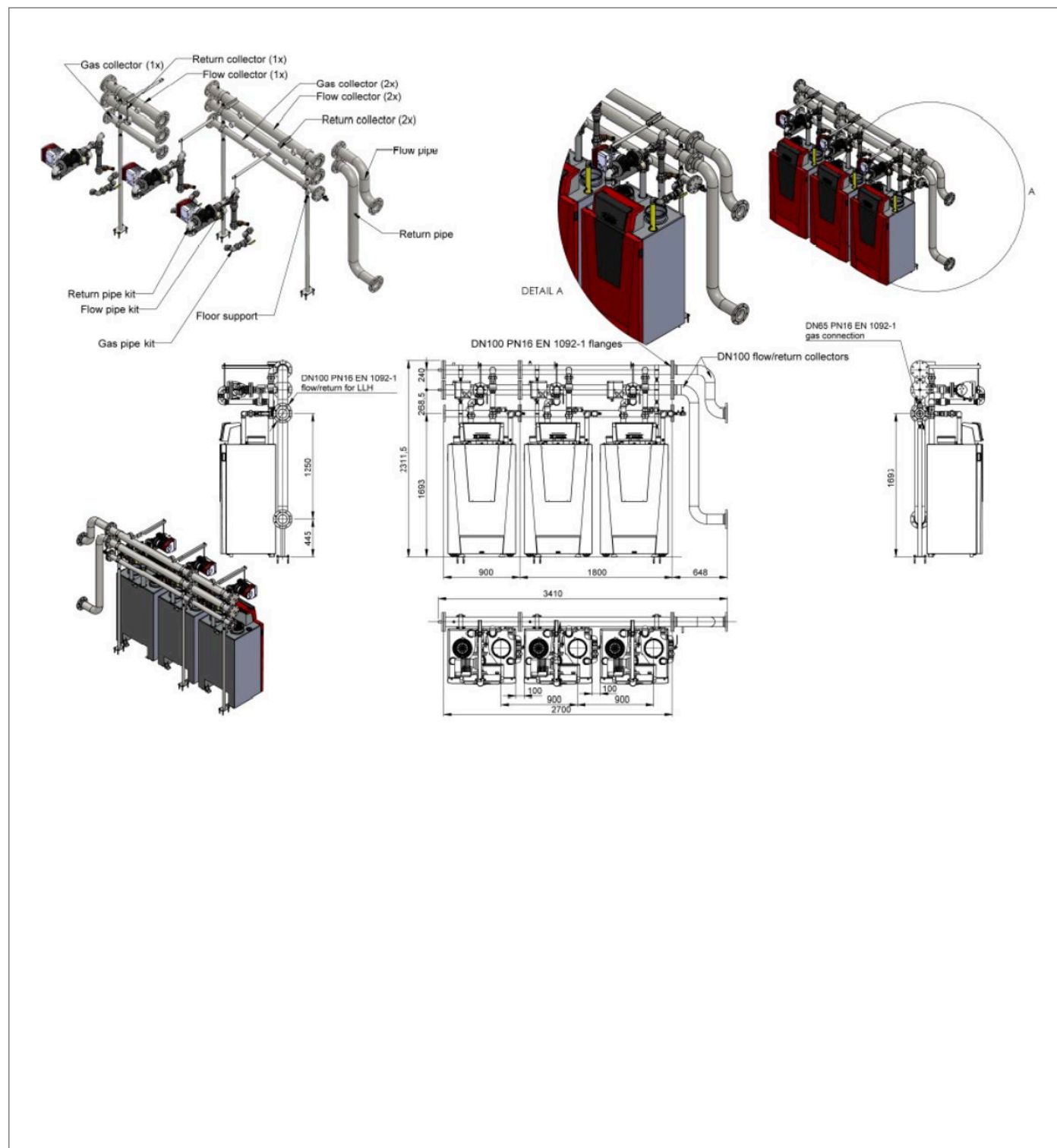
Floor supports are available as an option. They are not included in the standard kit.

Bespoke rig systems.

We provide bespoke rig system service to support consultants in overcoming plant room limitations and tight deadlines. These rigs are designed and manufactured to meet the exact requirements of each individual project so that they can be installed in a fraction of the time. This solution is particularly beneficial for organisations restricted to a small window of time in which to carry out installation.

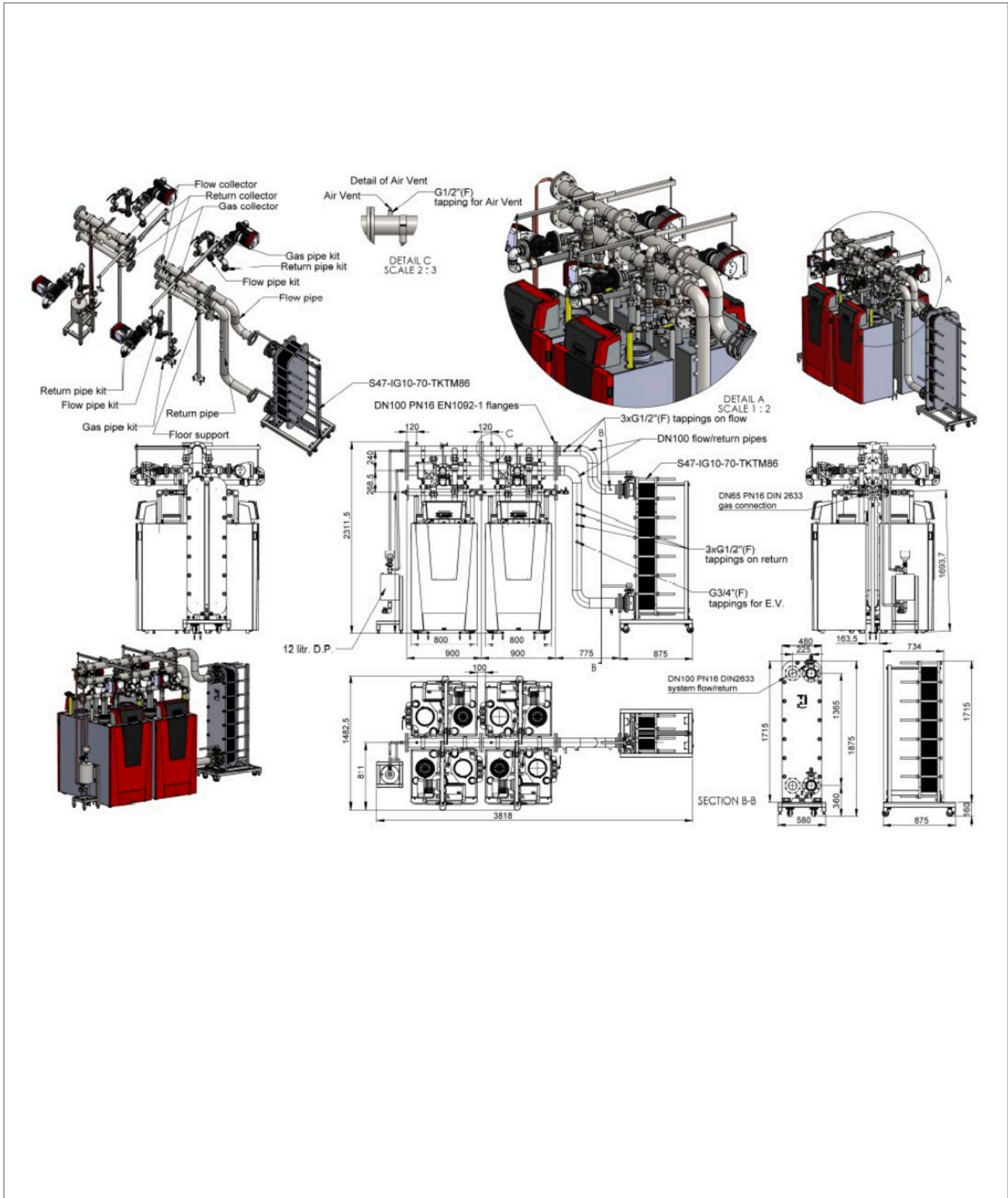
For more information, please contact our Sales Team. You can find your local dedicated Remeha expert on our website: remeha.co.uk

Three boiler rig system



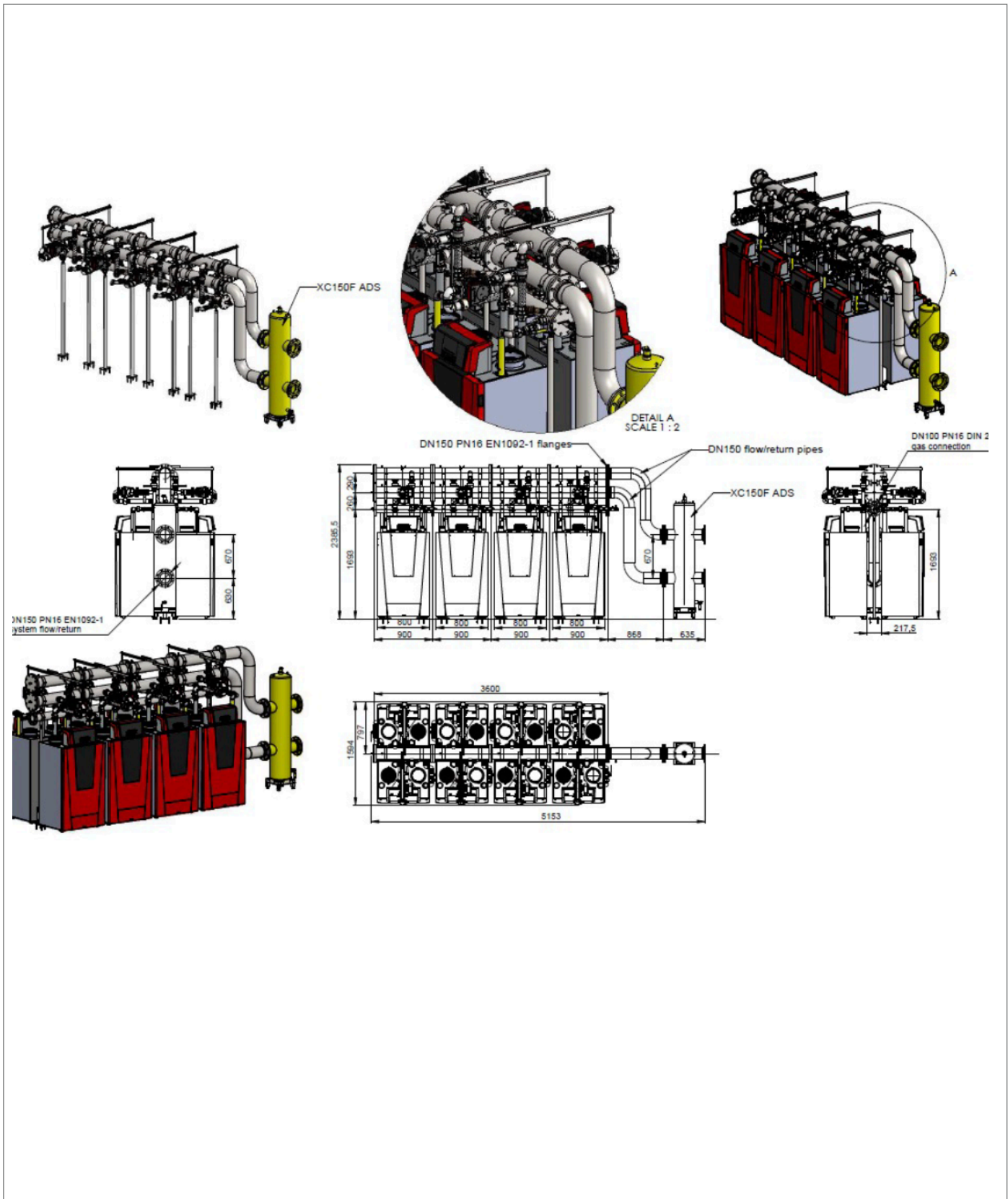
Bespoke rig systems.

Four boiler rig system with PHE



Bespoke rig systems.

Eight boiler rig system



Technical support and declaration of compliance.

Technical support

From brochures to CAD drawings and BIM files, you can access all the information you need at remeha.co.uk

Or call our sales or technical departments on **0345 070 1055**.

We're always happy to help.

We can provide you with:

- › Brochures
- › Technical specification sheets
- › Case studies
- › Installation manuals
- › BIM files
- › CAD files
- › Energy-related products directive data
- › Commissioning
- › Technical information
- › Spare parts (part of our aftersales service)

Declaration of compliance

We hereby certify that the series of appliances specified herein is in compliance with the standard model described in the EC declaration of compliance, and that it is manufactured and marketed in compliance with the requirements and standards of the following European Directives:

- › GAR (EU) 2016/426 to EN 15502-1: 2012 + A1: 2015
EN 15502-2-1: 2012
- › BED (92/42/EEC to EN 15502-1: 2012 + A1: 2015
EN 15502-2-1: 2012
- › EMC (2014/30/EU) to EN 55014-1 2007 + A1: 2009
+ A2: 2011
EN 55014-2: 2015
EN 61000-3-2: 2014
EN 61000-3-3: 2013
- › LVD (2014/35/EU) EN 60335-2-102: 2016 CE16
- › ErP (2009/125/EC)
- › CE Certification Remeha Gas 220 Ace
Range PIN: 0063CQ3781



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Gas 220 Ace Specification Guide January 2024

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Residential and commercial heating and hot water solutions