



INSTINCT[®]

HEAT





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**INSTINCT
HEAT**
40 - 150kW

INSTINCT HEAT 40-150kW.

CONDENSING

Available in outputs of 40, 60, 80, 100, 120 and 150kW, the Instinct Heat is designed to ensure all installation requirements can be achieved. There is also an LPG Instinct Heat range from 40 - 80 kW for off mains installations.

FEATURES AND BENEFITS

- Largest range of outputs in market (40 - 150 kW)
- Robust & light aluminium silicon alloy heat exchanger
- Up to 110% part load efficiency
- High 5:1 turndown
- Compact – one width & height for easy siting
- Simple controls interface with large backlit display
- Comprehensive range of flue, fixing and control options
- Designed for easy installation, commissioning and servicing
- Proven reliability through design, component selection and proving
- NOx <40mg/kWh (Class 5) for all natural gas models for maximum BREEAM points
- 2 year parts and labour warranty

DIMENSIONS AND CLEARANCES

BOILER	DIM A	DIM B	DIM C
40, 60, 80	360	130	118
100, 120	520	226	118
150	610	233	120

The following minimum clearances must be maintained for operation and servicing:

TOP
DEPENDENT ON FLUE SIZE

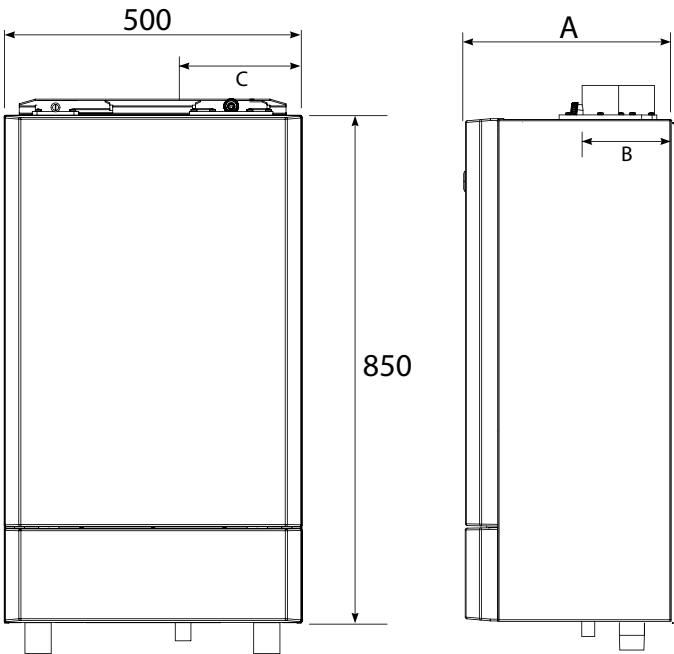
SIDES: 25mm

FRONT: 450mm

BOTTOM: 300mm

CLEARANCE BETWEEN MULTIPLE BOILER INSTALLATIONS
25mm

2
YEAR WARRANTY

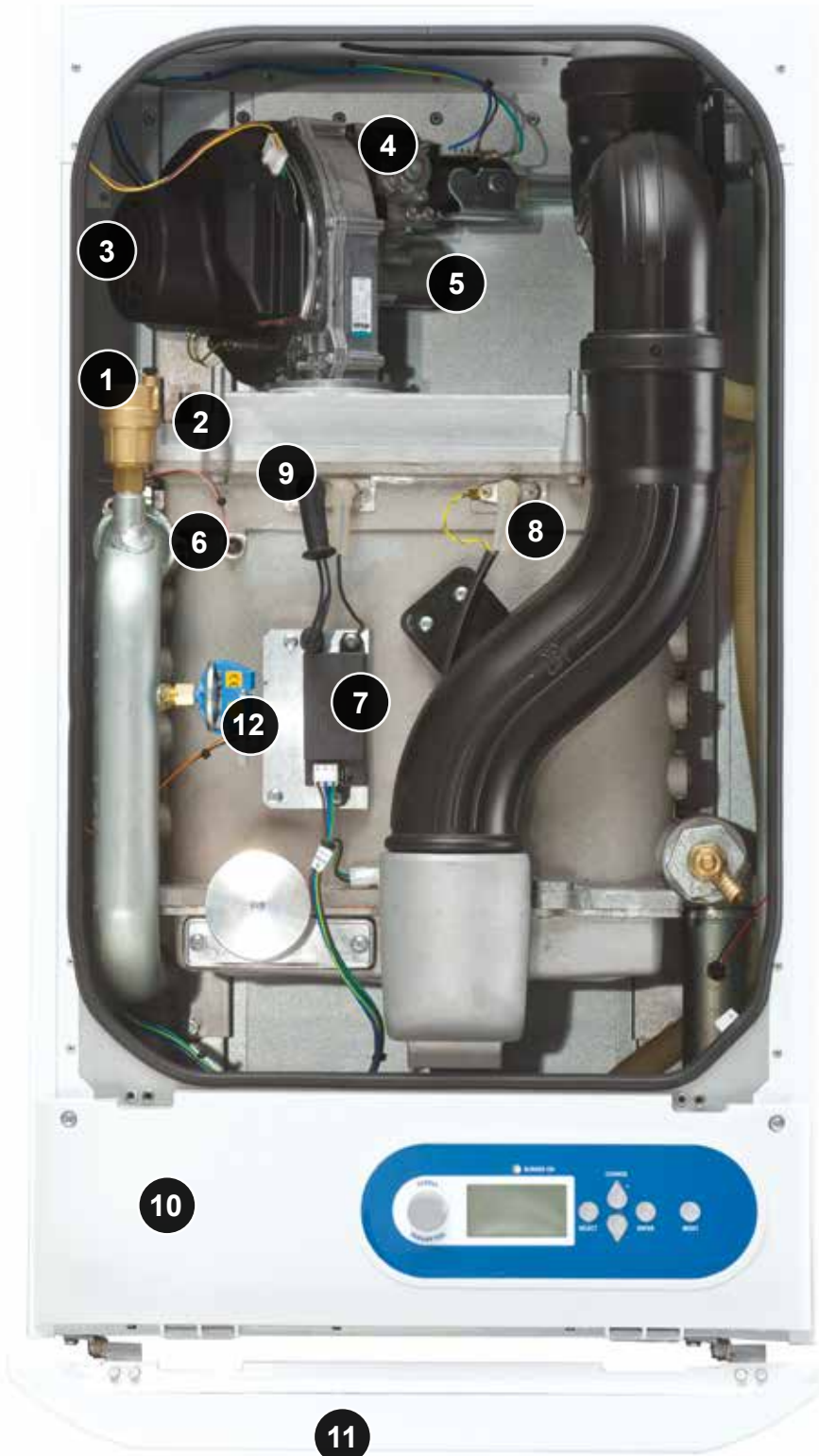


All dimensions in mm

BOILER ASSEMBLY

INTERNAL VIEW

(INSTINCT HEAT 80 SHOWN)



KEY

- 1. Auto Air Vent
- 2. Burner Fixings
- 3. Fan
- 4. Gas Valve
- 5. Venturi
- 6. Flow Thermistor
- 7. Ignitor Unit
- 8. Electrode Detection
- 9. Ignition Electrode
- 10. Fascia and Controls
- 11. Door Assembly
- 12. Water pressure sensor

PERFORMANCE DATA.

INSTINCT HEAT 40 - 150 KW

MODEL			40	40P	60	60P	80	80P	100	120	150
Boiler Output (non-condensing) Mean 70°C	Max	kW	40	40	60	60	80	80	100	120	150
	Min	kW	8	8	12	15	16	20	20	24	30
Boiler Output (condensing) Mean 40°C	Max	kW	42.0	41.2	63.5	62.1	84.4	82.6	103.9	124.7	158.0
	Min	kW	8.5	8.3	12.7	15.5	17.2	21.2	21.6	26.0	32.5
Boiler Input Max Rate	Net	kW	40.5	40.5	60.8	60.7	82.0	81.9	102.4	122.9	153.7
	Gross	kW	44.9	44	67.4	66	90.9	88.9	113.6	136.4	170.5
Boiler Input Min Rate	Net	kW	8.1	8.1	12.2	15.2	16.4	20.5	20.5	24.6	30.7
	Gross	kW	9.0	8.8	13.5	16.5	18.2	22.2	22.7	27.3	34.1
Gas Rate	Max rate	m³/hr	4.3	1.69	6.4	2.53	8.7	3.41	10.8	13.0	16.2
Flue Gas Flow Rate	Max Rate	m³/hr	63.4	62.1	95.1	93.1	128.3	125.4	160.3	192.5	240.7
CO₂ (±0.5%)	Max Rate	%	9.7	11.4	9.7	11.4	9.7	11.4	9.7	9.7	9.7
	Min Rate	%	8.7	10.2	8.7	10.5	8.7	10.5	8.7	8.7	8.7
NOx	Weighted	mg/kWh	39.1	80	32.3	83.8	39.8	68	39.6	38.8	38.1
		ppm	22.2	45	18.3	47.5	22.9	38.5	22.5	22.0	21.6
Efficiency	Seasonal	%	96.2	96.7	96.4	96.9	97.2	97.7	96.7	96.6	96.7
	*SEDBUK 2009	%	89.3	90.3	89.4	90.5	n/a	n/a	n/a	n/a	n/a

* The value is used in the UK Government’s Standard Assessment Procedure (SAP) for energy ratings of dwellings. The test data from which it has been calculated have been certified by a notified body.

For Btu’s, multiply gross heat input (kW) by 3412 (Btu)
For ft³/h, divide the gross heat input (Btu/h) by the gross C.V. of the gas (Btu/ft³)

INCLUDED AS STANDARD.

BOILER	INSTINCT HEAT
Hours run	✓
Pump overrun	✓
Large backlit LCD controls,including 5 line plain text display	✓

GENERAL DATA.

INSTINCT HEAT 40 - 150 KW

MODEL		40/40P	60/60P	80/80P	100	120	150
Gas Supply		2H - G20 - 20mbar / 3P - G31 - 37mbar					
Gas Supply Connection		G ¾					
Flow Connection		G1 ¼					
Return Connection		G1 ¼					
Max Pressure (sealed system)	Bar (psi)	4.0 (58)					
Maximum Static Head	m	40.7					
Electricity Supply		230V - 50Hz					
Fuse Rating	A	4.0					
Power Consumption	W	207	131	265	370	403	400
IP Rating		IP20					
Nominal Flue Size (concentric)	mm	80/125			100/150		
Condensate Drain	mm	25					
Water Content	l	3.0	5.0		7.0		9.2
Dry Weight	Kg	49	60.30		75.70		89.75

Optional kit available on 60/80 models for 100/150mm flue.

OPTIONAL KITS.

UIN	BOILER	INSTINCT HEAT
158493	Modulating Sequencer kit	✓
206796	Programmable Room Thermostat kit	✓
206797	Outside sensor kit	✓
206798	Tank Sensor kit	✓
158877	Room sensor kit	✓
206799	Safety Interlock kit	✓
158476	Connection kit (includes isolation valve 1¼”, non return valve, safety valve and drain cock) - see page 8 of the installation manual	✓

COMMISSIONING SERVICE AVAILABLE ON REQUEST

SYSTEM TEMPERATURE.

DIFFERENTIALS

Flow rates for common systems using either 11°C, 15°C or 20°C temperature differentials are given in the table below.

BOILER	FLOW RATE (L/MIN)			HYDRAULIC RESISTANCE (MBAR)		
	11°C	15°C	20°C	11°C	15°C	20°C
Instinct Heat 40 / 40P	52.1	38.2	28.7	875	405	225
Instinct Heat 60 / 60P	78.2	57.3	43	435	180	83
Instinct Heat 80 / 80P	104.2	76.4	57.3	750	420	180
Instinct Heat 100	N/A*	95.6	71.7	N/A*	315	134
Instinct Heat 120	N/A*	N/A*	86	N/A*	N/A*	218
Instinct Heat 150	N/A*	N/A*	107.5	N/A*	N/A*	230

* Models with N/A are due to excessive flow rates which will cause erosion of the casting

- 40-80 kW boilers must operate with temperature differentials from 11 to 20°C.
- 100 kW boilers must operate with temperature differentials not less than 15 to 20°C.
- 120-150 kW boilers must operate with temperature differentials not less than 20°C.

CONTROLS KITS.

PROGRAMMABLE ROOM THERMOSTAT KIT.
Timed control of central heating. Includes a built in electronic room sensor, optimised start and on/off controlled DHW.

MODULATING SEQUENCER KIT.
Controls up to 5 boilers for cascade operation.
Air and Flow Header sensors are included.

OUTSIDE SENSOR KIT.
Provides weather compensation directly or with Programmable Room Thermostat kit.

TANK SENSOR KIT.
Provides DHW temperature control. Also for use with Sequencer kit.

ROOM SENSOR KIT.
Used with Modulating Sequencer kit for CH control.

SAFETY INTERLOCK KIT.
Provides boiler shut down via an external signal.

FLUE SYSTEMS.

A comprehensive range of flue kits are available from Ideal Commercial Boilers including horizontal and vertical concentric and open flue options.

For horizontal flues: this is the distance from the flue outlet centre line on the boiler to the outside wall. Horizontal flue termination is not available for Instinct Heat 150.

For vertical flue: this is the distance from the top of the boiler case to the aperture in the weather collar. If elbows are to be used, then the equivalent length of that fitting must be subtracted from the maximum flue extensions allowed for that flue option.

Note: Horizontal terminal resistance includes 1 x 90° elbow.

When installing Instinct Heat boilers with concentric flue (horizontally or vertically) the Ideal Commercial flue system must be used.

The resistance of flue components, together with the maximum flue resistance each boiler can work against, may be used to calculate the total flue resistance of the system, and to determine if they are acceptable to run on the boiler. Multiple boilers may be installed with a common flue header.

The flue system should be designed and supplied by a specialist flue company. BS 6644 and IGEM UP/10 provide guidance on design and the drainage of condensate from flue stack and headers. Condensate from a flue stack and header must be collected and drained before entering the boiler.

For Ventilation requirements please refer to the installation manual.

For more information on the flue systems refer to the Ideal Commercial condensing boiler range flue guide.



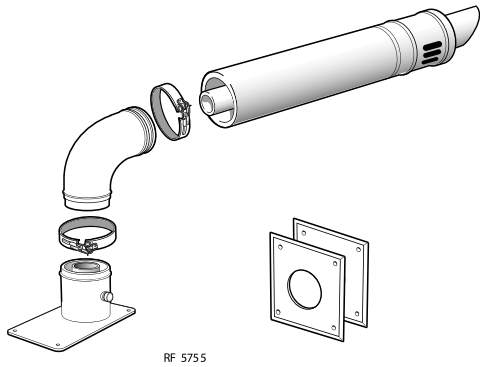
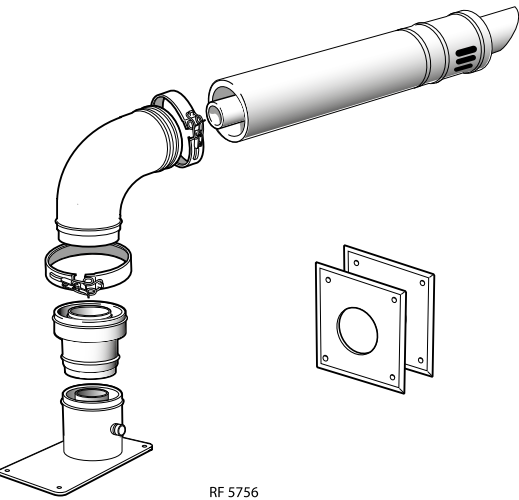
INSTINCT
HEAT
FLUE OPTIONS

CONCENTRIC FLUE OPTIONS (C TYPE)

HORIZONTAL WALL FLUE KIT.

INSTINCT HEAT HORIZONTAL CONCENTRIC FLUE APPLICATION ~ MAXIMUM LENGTHS AND PRESSURE DIFFERENTIALS					
Model	40/40P	60/60P	80/80P	100	120
Max flue length (m)	42	7.5	12	20	17.6
Max flue press diff (Pa)	200	117	260	220	288
Flue Size	80/125			100/150	
Wall flue kit No	158659			158661	

- CONTENTS
- Boiler adapter + screws (x6)
 - 90° elbow
 - Terminal
 - Locking collars (x2)
 - Wall plates (x2)



RF 5755

INSTINCT HEAT 60 & 80 HORIZONTAL CONCENTRIC FLUES OF LONGER LENGTHS (LARGER FLUE DIAMETER)		
Model	60/60P	80/80P
Max flue length (m)	30	35
Max flue press diff (Pa)	133	250
Flue Size	100/150	
Wall flue kit No	158660	

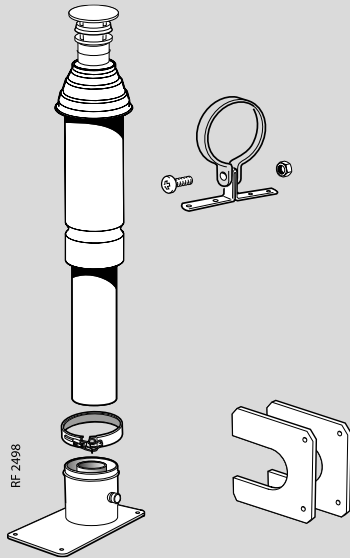
- CONTENTS
- Boiler adapter + screws (x6)
 - Increaser
 - 90° elbow
 - Terminal
 - Locking collars (x2)
 - Wall plates (x2)

To comply with CE certification, Instinct Heat boilers must be fitted with Ideal concentric flues (when using concentric flue type).

VERTICAL ROOF FLUE KIT.

INSTINCT HEAT VERTICAL CONCENTRIC FLUE APPLICATION ~ MAXIMUM LENGTHS AND PRESSURE DIFFERENTIALS						
Model	40/40P	60/60P	80/80P	100	120	150
Max flue length (m)	42	7.5	12	20	17.6	7.5
Max flue press diff (Pa)	200	117	260	220	288	290
Flue Size	80/125			100/150		
Wall flue kit No	158654			158656		

- CONTENTS
- Boiler adapter + screws (x6)
 - Terminal
 - Locking Collar
 - Finishing plates (x2)
 - Bracket

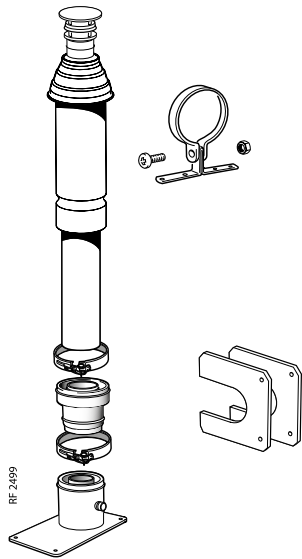


RF 2498

VERTICAL ROOF FLUE KIT.

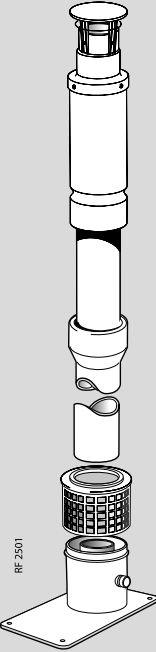
INSTINCT HEAT 60 & 80 VERTICAL CONCENTRIC FLUES OF LONGER LENGTH		
Model	60/60P	80/80P
Max flue length (m)	30	35
Max flue press diff (Pa)	133	250
Flue Size	100/150	
Wall flue kit No	158655	

- CONTENTS
- Boiler adapter + screws (x6)
 - Increaser
 - Terminal
 - Locking Collars (x2)
 - Finishing plates (x2)
 - Bracket



RF 2499

OPEN FLUE OPTIONS (B TYPE)



RF 2501

INSTINCT HEAT VERTICAL CONCENTRIC FLUE APPLICATION ~ MAXIMUM LENGTHS AND PRESSURE DIFFERENTIALS						
Model	40/40P	60/60P	80/80P	100	120	150
Max flue length (m)	70	25	22	20	49	32
Max flue press diff (Pa)	225	150	312	220	365	430
Flue Size	80/125			100/150		
Wall flue kit No	158662 + 158771 + 158769			158663 + 158772 + 158770		

- CONTENTS
- 158662 / 158663

158769 / 158770

158771 / 158772

 - Boiler adapter + screws (x6)
 - Air inlet grille*
 - Terminal
 - Extension tube (x2)**

* The boiler / adapter & air inlet grille must be fitted to all installations.

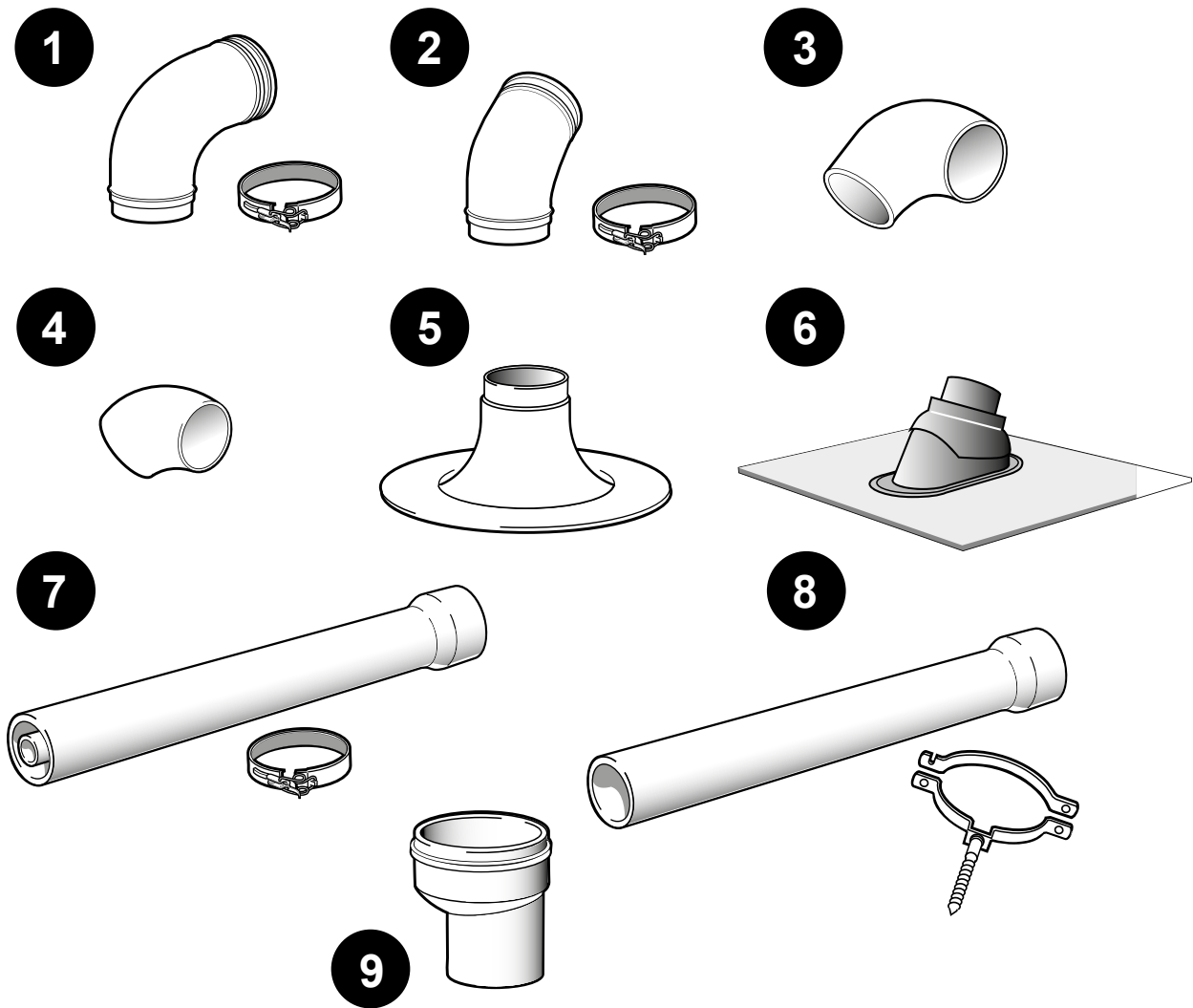
** At least 1 off extension tube MUST be used in the installation. This may be suitably cut to length if required

To comply with CE certification, Instinct Heat boilers must be fitted with Ideal boiler adapter.

- B type flues must use the inlet grille.
- C type flues must use a complete Instinct Heat flue.

FLUE KIT ACCESSORIES.

ACCESSORY		PART NO.			
		80/125	100/150	80	100
1	90° elbow (concentric)	152616	152617	N/A	N/A
2	45° elbow (concentric)	152618	152619	N/A	N/A
3	90° elbow	N/A	N/A	158773	158774
4	45° elbow (pair)	N/A	N/A	158775	158776
5	Flat Weather Collar	152611	152612	158780	158780
6	Pitched Weather Collar	152609	152610	158779	158779
7	1m Extension (concentric)	152400	152401	N/A	N/A
8	1m Extension (pair)	N/A	N/A	158771	158772
9	Increaser 80-100	N/A	N/A	152404	N/A
Wall bracket		202242	202243	N/A	N/A



FLUE RESISTANCES.
CONCENTRIC FLUE SYSTEMS

For concentric flue systems with elbows fitted, use the table to correct the maximum flue extension capability. Alternatively use the table to design the flue system, deducting the individual resistance of components from the maximum pressure drop allowed in the flue for that boiler. The maximum pressure drop allowed in the flue is given below.

MAXIMUM ALLOWABLE PRESSURE DIFF & FLUE LENGTH CONCENTRIC FLUES INCLUDING TERMINAL			
MODEL	FLUE SIZE	PRESSURE DIFF (Pa)	LENGTH (M)
40/40P	80/125	200	42
60/60P	80/125	117	7.5
	100/150	133	30
80/80P	80/125	260	12
	100/150	250	35
100	100/150	220	14.3
120	100/150	288	17.6
150	100/150	291	7.5

CALCULATING FLUE LENGTHS.

The maximum flue lengths for each model is shown in Table 1 below, these lengths are inclusive of the terminal resistance. The value shown is the maximum available length for extension. The equivalent length of elbows is shown in Table 2.

TABLE 1.

MAX EQUIVALENT FLUE LENGTH (INC TERMINAL RESISTANCE) METRES				
	CONCENTRIC		OPEN FLUE	
Flue Size	80/125	100/150	80	100
Model				
40/40P	52	-	70	-
60/60P	7.5	30	25	-
80/80P	12	35	22	-
100	-	14.3	-	20
120	-	17.6	-	49
150	-	7.5	-	32

TABLE 2.

EQUIVALENT LENGTH OF ELBOWS (METRES)				
	CONCENTRIC		OPEN FLUE	
Size	80/125	100/150	80	100
45°	0.85	1.25	0.45	0.60
90°	1.6	1.9	1.0	1.0

EXAMPLES OF FLUE LENGTH CALCULATION							
MODEL	FLUE TYPE	MAX EQUIVALENT LENGTH (TABLE 1)	ELBOWS				MAX STRAIGHT LENGTH
			TYPE	EQUIVALENT LENGTH (TABLE 2)	NO	TOTAL EQUIVALENT LENGTH	
60	80/125	7.5	90	1.6	2	3.2	4.3
60	100/150	30	90	1.9	2	3.8	26.2
80	80/125	12	90	1.6	3	4.8	7.2
120	100/150	17.6	90	1.9	4	7.6	10.0

FLUE RESISTANCES.

OPEN FLUE SYSTEMS

For open flue systems with elbows fitted, use this table to correct the maximum extension capability. The table shows the equivalent length of flue tube for the elbow required.

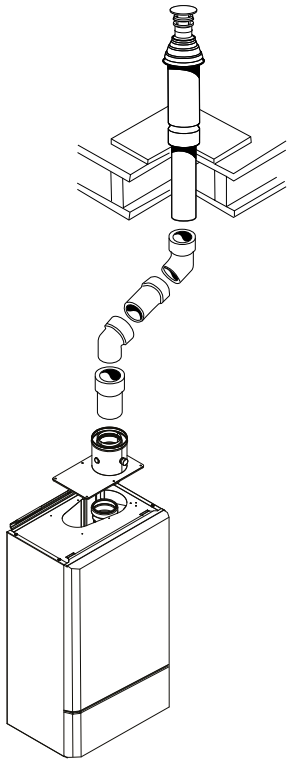
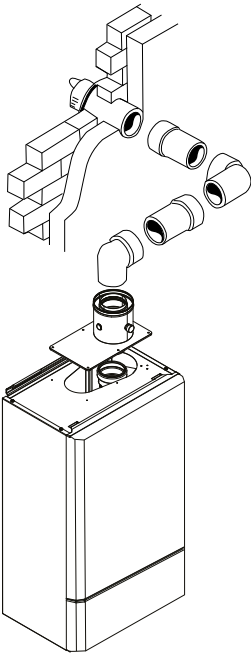
OPEN FLUE SYSTEMS ~ EQUIVALENT FLUE RESISTANCES IN METRES		
	Models 40, 40P, 60, 60P, 80, 80P	Models 100 / 120 / 150
90° Elbow	2.1	2.7
45° Elbow	0.6	1.8

EXAMPLES OF CALCULATING FLUE RESISTANCES/LENGTHS.

EXAMPLE 1 (CONCENTRIC)

HORIZONTAL FLUE FOR INSTINCT HEAT 40	
	Resistance (m)
Flue size	80/125
Max flue run	42
2 x 90° elbow	3.2
Total flue length available	38.8

Therefore this installation is acceptable as only a 2m run.



EXAMPLE 2 (CONCENTRIC)

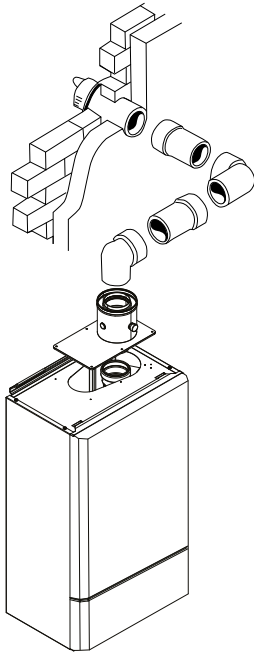
HORIZONTAL FLUE FOR INSTINCT HEAT 80	
	Resistance (m)
Flue Size	80/125
Max flue run	12
1 x 90° elbow	1.7
Total Flue Resistance	10.3

Therefore this installation is acceptable as only a 3m run.

EXAMPLE 3 (OPEN FLUE)

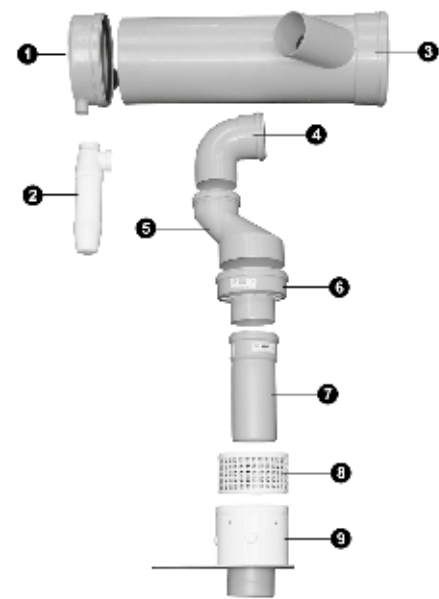
HORIZONTAL FLUE FOR INSTINCT HEAT 120	
	Resistance (m)
Flue Size	100/150
Max flue run	17.6
2 x 90° elbow	3.8
Total Flue Resistance	13.8

Therefore this installation is acceptable as only a 2m run.



MULTILINE CASCADE.

The Multiline Flue Cascade is one of the latest additions to the flue accessory range from Ideal, designed specifically for the Instinct Heat range. Available for installations up to 600kW as both a starter kit and extension pack the Multiline system enables Instinct Heat boilers installed as open flue to be connected via a common flue header. This creates a single flue connection point for a flue specialist to design to knowing that the boiler installation is efficient and safe.



- Simple system ordering with a starter kit and extension kits
- Starter kit includes, appliance connection, non-return flue damper, condensate tee and trap and all clips to secure the flue
- Extension pack includes appliance connection, non-return flue damper, and all clips to secure the flue
- Available for both 80/125 & 100/150 flue adaptor applications
- For installations up to 600kW
- Type B23 flue
- Designed specifically to work efficiently with Instinct Heat appliances with commissioning simply completed by selecting Multiline flue from the installer set up menu
- The perfect addition for Instinct Heat installations using either the standard height or low frame and header kits

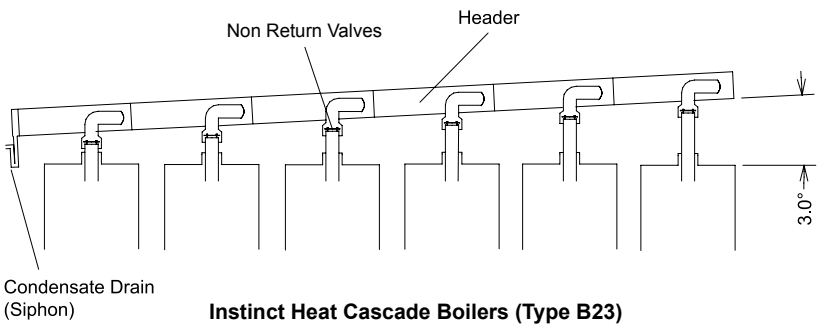
	PRODUCTS	STARTER KIT	EXTENSION KIT
1	End Cap	✓	
2	Siphon / Condensate trap	✓	
3	Collector Pipe (200 dia)	✓	✓
4	Elbow (90 x 100)	✓	✓
5	Non-Return Valve Connector (100 x 150)	✓	✓
6	Non-Return Valve Body (150 x 100 or 80)	✓	✓
7	Flue Extension Tube (100 or 80)	✓	✓
8	Air Intake Grill	✓	✓
9	Flue Connector (100/150 or 80/125)	✓	✓

The Cascade flue system is supplied in two kits. A Starter Kit & an Extension Kit.
Wire retaining clips are also provided to prevent movement of the tube connections due to expansion and contraction. These must be fitted to the ductwork to ensure safe operation of the system.

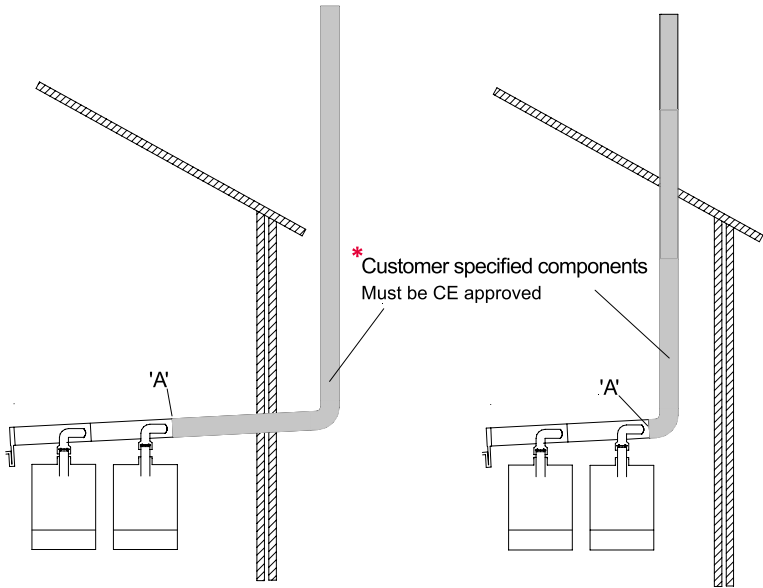
OPERATION.

SYSTEM CONFIGURATIONS.

OPTION	GAS TYPE	INSTINCT HEAT MODELS	MAX NUMBER OF BOILERS	MAX SYSTEM CAPACITY
1	Natural gas	Combinations of 100, 120, 150	6	600kW
2		Combinations that include a 40, 60 or 80	6	400kW
3	Propane	Combinations of 40P, 60P, 80P	6	400kW



Instinct Heat Cascade Boilers (Type B23)



***Multiline flue supplied to point A. Customers are to fabricate / supply B type flue system to termination point within flue resistance parameters.**

At the maximum system capacity the static pressure generated against the flue resistance at position [A] must not exceed the value Pmax quoted in table below.

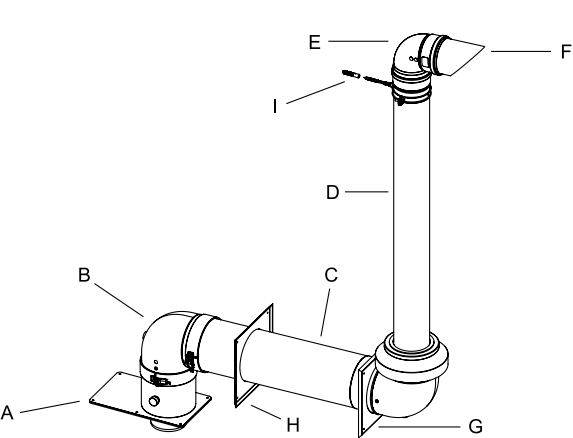
UIN	DESCRIPTION	EAN
210264	Instinct Heat Multiline Starter Kit 80/125	5022142102645
210265	Instinct Heat Multiline Extension Kit 80/125	5022142102652
210268	Instinct Heat Multiline Starter Kit 100/150	5022142102683
210269	Instinct Heat Multiline Extension 100/150	5022142102690

INSTINCT HEAT MODEL OUTPUT		CASCADE SYSTEM LIMITS		COMBUSTION PRODUCTS DATA		
Model		Maximum System Capacity	Maximum Header Pressure 'A' (Static)	Max rate CO ₂	Min rate CO ₂	Temperature Max
Max	Min	Hmax	Pmax	±0.5	±0.5	
kW	kW	kW	Pa	%	%	C
40	10	400	40	9.7	9.0	72
60	15					
80	20					
100	25	600	80			
120	30					
150	37.5					
40P	10	400	40	11.4	10.6	
60P	15					
80P	20					

INSTINCT HEAT PLUME KIT.

The Instinct Heat Plume Kit is one of the latest additions to the flue accessory range from Ideal, designed specifically for the Instinct Heat range. Available for Instinct Heat boilers up to 120kW the Plume Kit can be used to relocate the flue terminal up to 10m.

- Suitable for all Instinct Heat up to 120kW
 - Available for both 80/125 & 100/150 flue applications
 - Plume kit offers terminal relocation up to 10m
- Includes standard appliance connector, horizontal flue kit, special rain collar, external plume kit 1m and terminal
 - Offers neat solutions for awkward flue installations where the terminal requires relocation

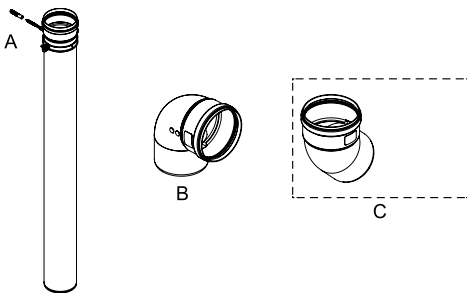


PRODUCTS	
A	Boiler Adaptor
B	Turret elbow
C	Flue terminal with rain cowl & air terminal assembly
D	1 Meter extension tube
E	90 degree elbow
F	Flue terminal end
G	External wall plate
H	Internal wall plate
I	Wall bracket

OPERATION.

INSTINCT HEAT PLUME KIT - PACKAGED OPTIONS

UIN	DESCRIPTION	DRAWING IDENTIFIER	COMPATIBLE WITH INSTINCT HEAT 40, 40P, 60, 60P, 80, 80P	COMPATIBLE WITH INSTINCT HEAT 100, 120
210685	Plume kit 1m extension 80/125	A	<input checked="" type="checkbox"/>	
210686	Plume kit 90 deg elbow 80/125	B	<input checked="" type="checkbox"/>	
210687	Plume kit 45 deg elbows (pair) 80/125	C	<input checked="" type="checkbox"/>	
210689	Plume kit 1m extension 100/150	A	*	<input checked="" type="checkbox"/>
210690	Plume kit 90 deg elbow 100/150	B	*	<input checked="" type="checkbox"/>
210691	Plume kit 45 deg elbows (pair) 100/150	C	*	<input checked="" type="checkbox"/>



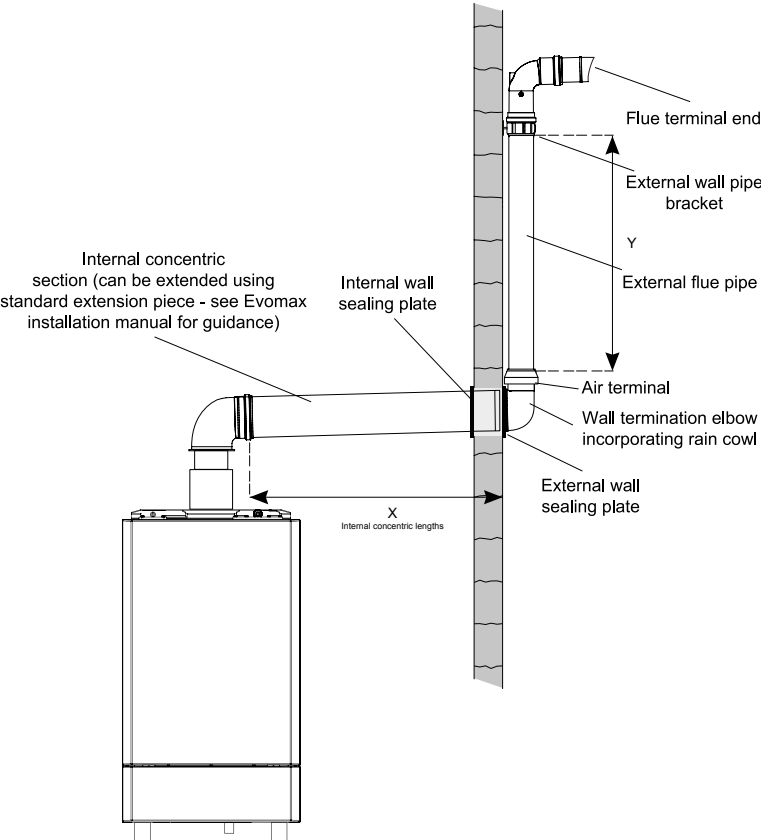
* Note: The 100/150mm Plume Kit system can also be used on Instinct Heat 80, 80P, 60 & 60P model variants if internal concentric wall horizontal flue adaptor is used (Part No. 158660). See main Instinct Heat Installation Literature for details.

INSTINCT HEAT PLUME KIT - 80/125

UIN	DESCRIPTION	EAN
210684	Plume kit 80/125	5022142106841
210685	Plume kit 1m extension 80/125	5022142106858
210686	Plume kit 90 deg elbow 80/125	5022142106865
210687	Plume Kit 45 deg elbow 80/125 (Pair)	5022142106872

INSTINCT HEAT PLUME KIT - 100/150

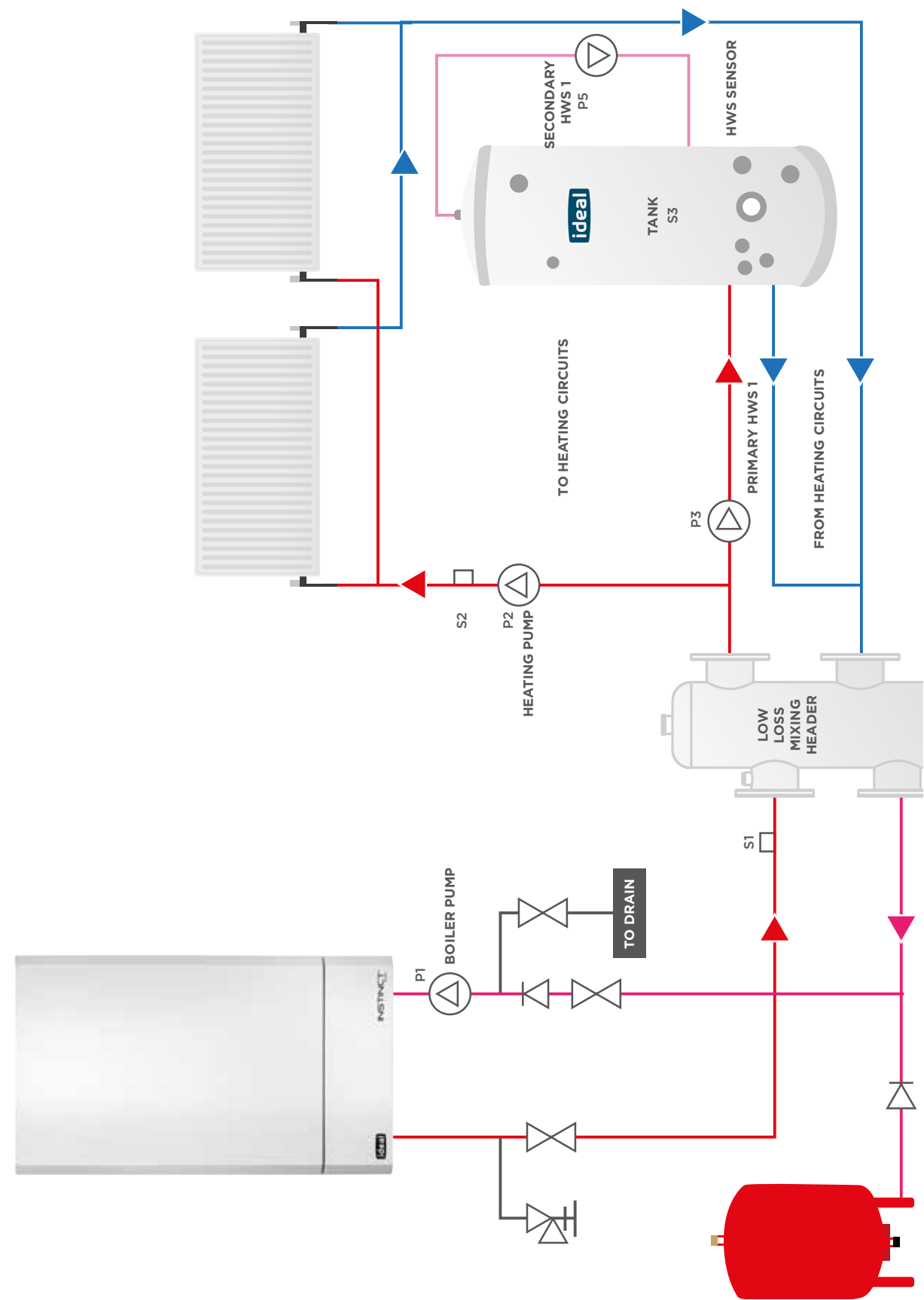
UIN	DESCRIPTION	EAN
210688	Plume kit 100/150	5022142106889
210689	Plume kit 1m extension 100/150	5022142106896
210690	Plume kit 90 deg elbow 100/150	5022142106902
210691	Plume kit 45 deg elbow 100/150 (Pair)	5022142106919



80 / 125 DIA FLUE ~ MAXIMUM FLUE LENGTHS (M)			
Instinct Heat Model	40/40P	60/60P	80/80P
Y	X		
0.5	39.2	4.7	9.2
2.0	38.5	4.0	8.5
4.0	37.6	3.1	7.6
6.0	36.7	2.2	6.7
8.0	35.8	1.3	5.8
10.0	34.9	0.4	4.9

100 / 150 DIA FLUE ~ MAXIMUM FLUE LENGTHS (M)				
Instinct Heat Model	60/60P	80/80P	100	120
Y	X			
0.5	27.0	32.0	8.0	14.6
2.0	26.6	31.6	7.6	14.2
4.0	26.0	31.0	7.0	13.6
6.0	25.5	30.5	6.5	13.1
8.0	24.9	29.9	5.9	12.5
10.0	24.4	29.4	5.4	12.0

SYSTEM LAYOUT.
TYPICAL SINGLE BOILER LAYOUT



* Low loss header may not be required depending on system design and pump sizing



INSTINCT
HEAT

MULTIPLE BOILER INSTALLATIONS

MULTIPLE BOILER INSTALLATIONS.

FRAME AND HEADER KITS

BOILER FRAME AND HEADER KITS

The Frame and Header Kits are suitable for modular (cascade) boiler installations, and are available up to a maximum output of 600 kW, in both in-line and back-to-back arrangements.

IN-LINE KITS

Kits include flow & return headers with mixing header and gas header, all with fixing brackets. For easy connection flexible stainless steel pipe and connections are supplied together with pressure relief valves, boiler shut off valves and drain cock.

Appropriately sized ErP modulating shunt pumps are also included. Flow, return and low loss headers together with the flexible boiler connections are all pre insulated. Separate single boiler frame kits are available for use with in-line kits if required.

BACK-TO-BACK KITS

Kits include all the in-line contents plus the required special frame kits for such compact installations. Both types of kit are available for the following number of boilers and sizes. Mixing header kits and modulating pump kits are also available separately.



AVAILABLE OPTIONS.

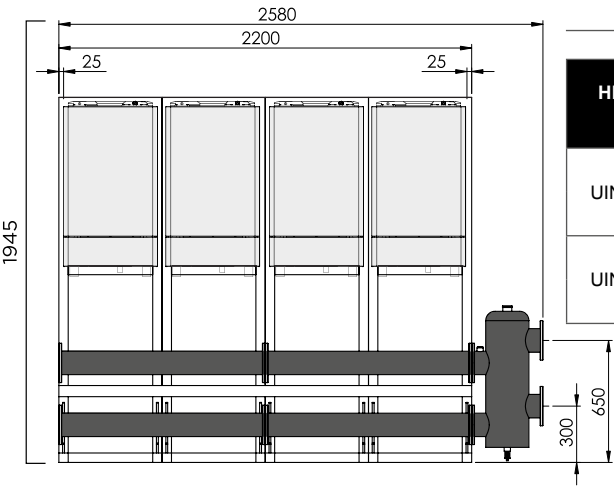
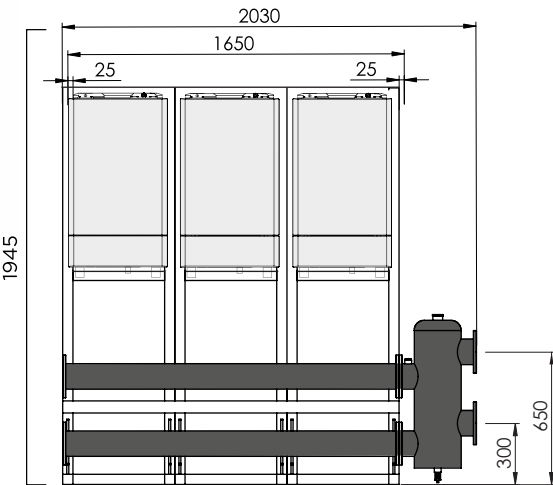
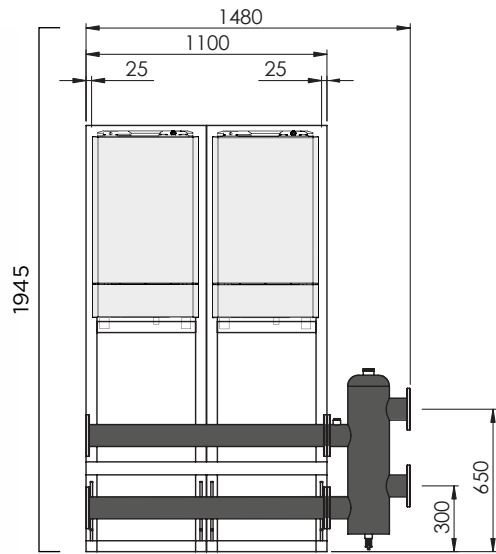
	MODELS	SIZE
2 boilers	40-100	DN80
2 boilers	120-150	DN80
3 boilers	40-100	DN80
3 boilers	120-150	DN100
4 boilers	40-100	DN100
4 boilers	120-150	DN100
5 boilers	40-100	DN100
5 boilers	120	DN100
6 boilers	40-100	DN100

In-line kits do not include the support frame as the boilers can be wall mounted, but a frame kit is available if the wall is unsuitable to facilitate boiler mounting.

Please note, models 120 kW and 150 kW currently do not incorporate the modulating pump. For full details of all configurations & specifications, please refer to the installation manual.

Please note, the Instinct Heat boilers are to be ordered separately.

FRAME & HEADER KITS.



2 X INSTINCT HEAT 40 - 150 KW

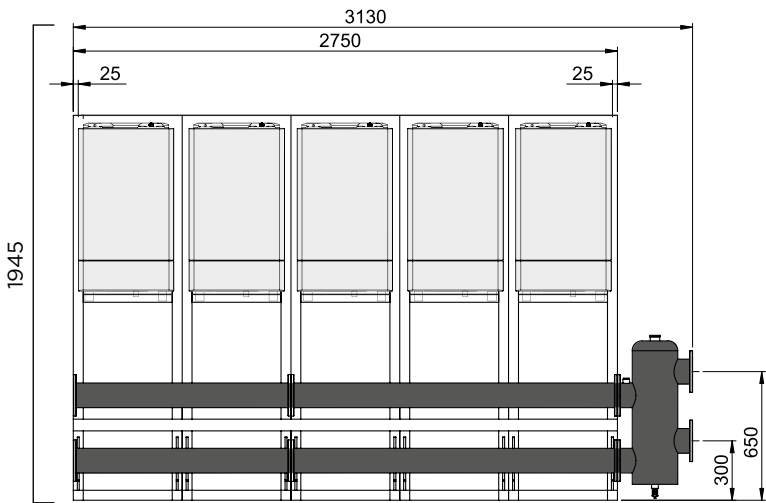
HEADER KITS	RATING	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
UIN209799	40-80kW	1945	1100	413	DN80	80/125
	100kW	1945	1100	573	DN80	100/150
UIN209798	120kW	1945	1100	573	DN80	100/150
	150kW	1945	1100	663	DN80	100/150

3 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	RATING	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
UIN209801	40-80kW	1945	1650	413	DN80	80/125
	100kW	1945	1650	573	DN80	100/150
UIN209800	120kW	1945	1650	573	DN80	100/150
	150kW	1945	1650	663	DN80	100/150

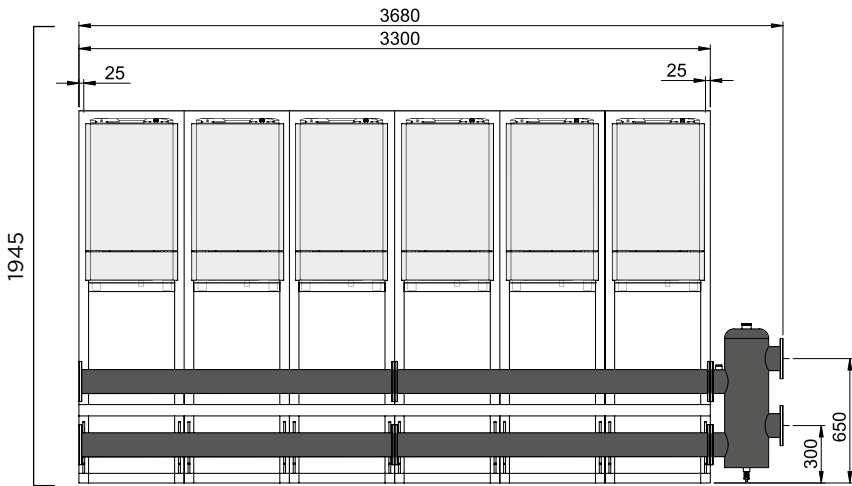
4 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	RATING	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
UIN209803	40-80kW	1945	2200	413	DN100	80/125
	100kW	1945	2200	573	DN100	100/150
UIN209802	120kW	1945	2200	573	DN100	100/150
	150kW	1945	2200	663	DN100	100/150



5 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	RATING	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
UIN209805	40-80kW	1945	2750	413	DN100	80/125
	100kW	1945	2750	573	DN100	100/150
UIN209804	120kW	1945	2750	573	DN100	100/150



6 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	RATING	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
UIN209806	40-80kW	1945	3300	413	DN100	80/125
	100kW	1945	3300	573	DN100	100/150

FRAME AND HEADER KIT

SYSTEM DESIGN OPTIONS

TOTAL OUTPUT REQUIRED KW	NO. OF BOILERS	SIDE BY SIDE OPTION – BOILER MODELS	SIDE BY SIDE FOOTPRINT SIZE W X D (MM)	HEADER KIT PRODUCT NO. SIDE BY SIDE	BOILER MODELS	BACK TO BACK FOOTPRINT SIZE W X D (MM)	FRAME/HEADER PRODUCT NO. BACK TO BACK
80	2	40	1480 x 573	209799	40	930x1096	209901
100	2	40 + 60	1480 x 573	209799	40 + 60	930x1096	209901
120	2	60	1480 x 573	209799	60	930x1096	209901
140	2	60 + 80	1480 x 573	209799	60 + 80	930x1096	209901
160	2	80	1480 x 573	209799	80	930x1096	209901
180	2	80 + 100	1480 x 573	209799	80 + 100	930x1096	209901
200	2	100	1480 x 573	209799	100	930x1096	209901
220	3	2 x 60 + 100	2030 x 573	209801	2 x 60 + 100	1480x1096	209903
240	2	120	1480 x 573	209798	120	930x1096	209900
260	3	60, 2 x 100	2030 x 573	209801	60, 2 x 100	1480x1096	209903
270	2	120 + 150	1480 x 663	209798	120 + 150	930x1276	209900
280	3	80, 2 x 100	2030 x 573	209801	80, 2 x 100	1480x1096	209903
300	2	150	1480 x 663	209798	150	930x1276	209900
320	4	40, 80, 2 x 100	2580 x 573	209803	40, 80, 2 x 100	1480x1096	209905
340	4	60, 80, 2 x 100	2580 x 573	209803	60, 80, 2 x 100	1480x1096	209905
360	3	120	2030x663	209800	120	1480x1276	209902
380	4	80, 3 x 100	2030x573	209801	80, 2 x 100	1480x1096	209903
390	3	2 x 120 + 150	2030x663	209800	2 x 120 + 150	1480x1276	209902
400	4	100	2580x573	209803	100	1480x1096	209905
420	3	120, 2 x 150	2030x663	209800	120, 2 x 150	1480x1276	209902
440	5	40, 4 x 100	2580x573	209803	40, 4 x 100	1480x1096	209905
450	3	150	2030x663	209800	150	1480x1276	209902
460	5	60, 4 x 100	3130x573	209805	60, 4 x 100	2030x1096	209907
480	4	120	2580x663	209802	120	480x1276	209904
500	5	100	3130x573	209805	100	2030x1096	209908
510	4	3 x 120 + 150	2580x663	209802	3 x 120 + 150	1480x1276	209904
520	6	40, 80, 4 x 100	3680x573	209806	40, 80, 4 x 100	2030x1096	209908
540	4	2 x 120, 2 x 150	2580x663	209802	2 x 120, 2 x 150	1480x1276	209904
550	N/A	N/A	N/A	N/A	N/A	N/A	N/A
560	6	60, 5 x 100	3680x573	209806	60, 5 x 100	2030x1096	209908
570	4	120, 3 x 150	2580x663	209802	120, 3 x 150	1480x1276	209904
580	6	80, 5 x 100	3680x573	209806	80, 5 x 100	2030x1096	209908
590	N/A	N/A	N/A	N/A	N/A	N/A	N/A
600	4	150	2580x663	209802	150	1480x1276	209904

MULTIPLE BOILER INSTALLATIONS.

LOW HEIGHT FRAME AND HEADER KITS

BOILER FRAME AND HEADER KITS

The Low Height Frame and Header Kits make installation much simpler in circumstances of reduced headroom, offering an option of replacing a floor standing atmospheric boiler with a high efficiency model.

Three options are available allowing for outputs from 40 kW to 450 kW.

FEATURES AND BENEFITS

- Frame and Header Kits fit easily through standard doorways
- Lift weights are as low as possible
- The Low Height Frame and Header Kit is supplied on one palette shrink wrapped together with all ancillary fittings needed for assembly
- All pipe work connections are supplied with either the boiler, header kit or are pre assembled to the header kit
- Pre assembled to header; the boiler the flow and return flexible connections, which reduce installation time
- Delivered with header kit; connection pipe assembly, non return valves & pipe work connector, all isolation valves, pressure relief valve, drain cock and associated fittings
- The Low Height Frame and Header Kit can be installed with either an Ideal Commercial Sequencer offering direct modulation of the system, reducing running costs, or a proprietary option
- The extremely compact dimensions allow for replacement of existing standard efficiency floor standing boilers, using a single wall mounted condensing boiler up to 150 kW allowing sufficient space to install flue system, pump and pipe headers
- High quality and well-finished components
- Supplied with frames and low energy modulating pumps (ErP approved)

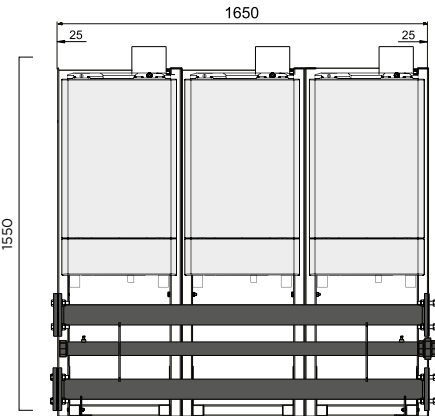
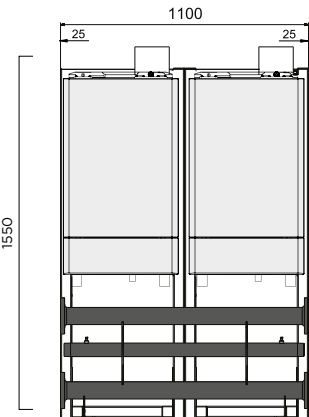
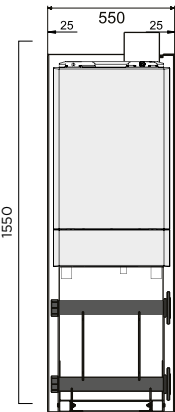


AVAILABLE OPTIONS

	MODELS	SIZE	LOW LOSS HEADER KIT
1 Boiler	40-150	DN50 (2" BSP)	✓
2 Boiler	60-300	DN65	✓
3 Boiler	90-450	DN80	✓

Please note, the Instinct Heat boilers are to be ordered separately.

LOW HEIGHT FRAME AND HEADER KITS



1 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
40-80kW	1550	550	410	DN50 (2" BSP)	80/125
100-120kW	1550	550	570	DN65	100/150
150kW	1550	550	666	DN80	100/150

2 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
40-80kW	1550	1100	410	DN50 (2" BSP)	80/125
100-120kW	1550	1100	570	DN65	100/150
150kW	1550	1100	660	DN80	100/150

3 X INSTINCT HEAT 40 - 150 KW

HEADER KITS	HEIGHT (mm)	LENGTH (mm)	DEPTH (mm)	DN FLANGE SIZE	CONCENTRIC FLUE
40-80kW	1550	1650	410	DN50 (2" BSP)	80/125
100-120kW	1550	1650	570	DN65	100/150
150kW	1550	1650	660	DN80	100/150

LOW HEIGHT FRAME AND HEADER KIT

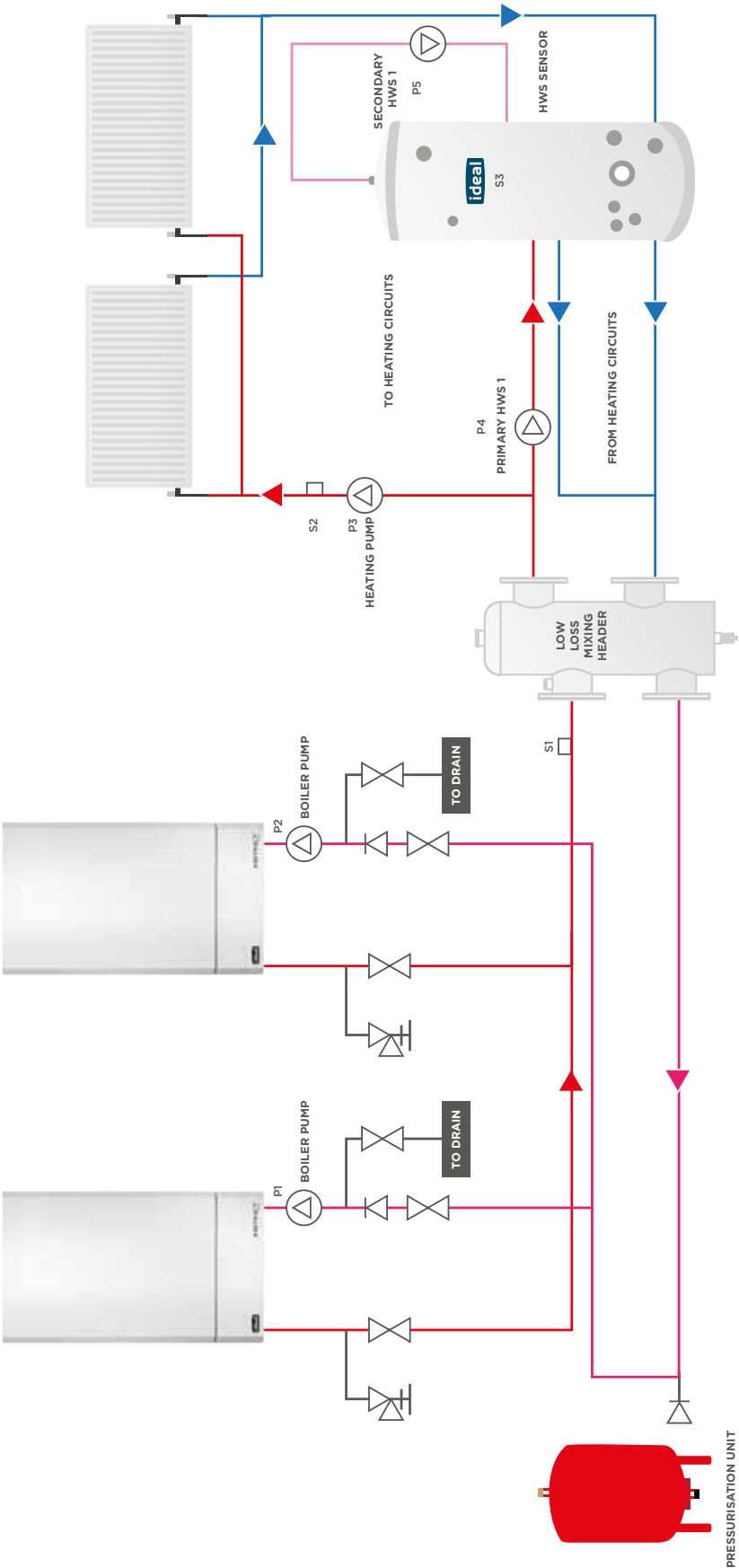
SYSTEM DESIGN OPTIONS

TOTAL OUTPUT REQUIRED KW	NO. OF BOILERS	HEADER	SIDE BY SIDE FOOTPRINT SIZE W X D (MM)	OPTIONAL LOW LOSS HEADER	BOILER MODELS	FRAME/HEADER PRODUCT NO.
40	1	DN50	550 x 642	209394	1	210012
60	1	DN50	550 x 642	209394	1	210012
80	1	DN50	550 x 642	209394	1	210012
100	1	DN50	550 x 642	209394	1	210012
120	1	DN50	550 x 642	209394	1	210012
150	1	DN50	550 x 642	209394	1	210012
80	2	DN65	1100 x 642	209395	2 x 40	210029

SYSTEM DESIGN OPTIONS (CONTINUED)

TOTAL OUTPUT REQUIRED KW	NO. OF BOILERS	HEADER	SIDE BY SIDE FOOTPRINT SIZE W X D (MM)	OPTIONAL LOW LOSS HEADER	BOILER MODELS	FRAME/HEADER PRODUCT NO.
100	2	DN65	1100 x 642	209395	1 x 60 + 1 x 40	210029
120	2	DN65	1100 x 642	209395	2 x 60	210029
140	2	DN65	1100 x 642	209395	1 x 80 + 1 x 60	210029
140	2	DN65	1100 x 642	209395	1 x 100 + 1 x 40	210029
160	2	DN65	1100 x 642	209395	2 x 80	210029
160	2	DN65	1100 x 642	209395	1 x 100 + 1 x 60	210029
180	2	DN65	1100 x 642	209395	1 x 100 + 1 x 80	210029
180	2	DN65	1100 x 642	209395	1 x 120 + 1 x 60	210029
190	2	DN65	1100 x 642	209395	1 x 150 + 1 x 40	210029
200	2	DN65	1100 x 642	209395	2 x 100	210029
200	2	DN65	1100 x 642	209395	1 x 120 + 1 x 80	210029
210	2	DN65	1100 x 642	209395	1 x 150 + 1 x 60	210029
220	2	DN65	1100 x 642	209395	1 x 120 + 1 x 100	210029
230	2	DN65	1100 x 642	209395	1 x 150 + 1 x 80	210029
240	2	DN65	1100 x 642	209395	2 x 120	210029
250	2	DN65	1100 x 642	209395	1 x 150 + 1 x 100	210029
270	2	DN65	1100 x 642	209395	1 x 150 + 1 x 120	210029
300	2	DN65	1100 x 642	209395	2 x 150	210029
90	3	DN80	1650 x 642	252437	3 x 30	210020
100	3	DN80	1650 x 642	252437	1 x 40 + 2 x 30	210020
110	3	DN80	1650 x 642	252437	2 x 40 + 1 x 30	210020
120	3	DN80	1650 x 642	252437	3 x 40	210020
140	3	DN80	1650 x 642	252437	1 x 60 + 2 x 40	210020
160	3	DN80	1650 x 642	252437	1 x 80 + 2 x 40	210020
180	3	DN80	1650 x 642	252437	3 x 60	210020
180	3	DN80	1650 x 642	252437	1 x 100 + 2 x 40	210020
200	3	DN80	1650 x 642	252437	2 x 80 + 1 x 40	210020
220	3	DN80	1650 x 642	252437	2 x 80 + 1 x 60	210020
240	3	DN80	1650 x 642	252437	3 x 80	210020
240	3	DN80	1650 x 642	252437	2 x 100 + 1 x 40	210020
260	3	DN80	1650 x 642	252437	1 x 120 + 1 x 100 + 1 x 40	210020
290	3	DN80	1650 x 642	252437	1 x 150 + 1 x 100 + 1 x 40	210020
300	3	DN80	1650 x 642	252437	3 x 100	210020
320	3	DN80	1650 x 642	252437	2 x 100 + 1 x 120	210020
320	3	DN80	1650 x 642	252437	2 x 120 + 1 x 80	210020
340	3	DN80	1650 x 642	252437	2 x 120 + 1 x 100	210020
350	3	DN80	1650 x 642	252437	1 x 150 + 2 x 100	210020
360	3	DN80	1650 x 642	252437	3 x 120	210020
370	3	DN80	1650 x 642	252437	1 x 150 + 1 x 120 + 1 x 100	210020
380	3	DN80	1650 x 642	252437	2 x 150 + 1 x 80	210020
390	3	DN80	1650 x 642	252437	1 x 150 + 2 x 120	210020
400	3	DN80	1650 x 642	252437	2 x 150 + 1 x 100	210020
420	3	DN80	1650 x 642	252437	2 x 150 + 1 x 120	210020
450	3	DN80	1650 x 642	252437	3 x 150	210020

SYSTEM LAYOUT.
TYPICAL BOILER LAYOUT



* Low loss header may not be required depending on system design and pump sizing



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COURSES COVER THE FOLLOWING.

- Product range overview
- Product specification
- Application and installation of products
- Electronic circuits and components
- Flue and accessory options
- Component overview, change and repair
- User controls
- Sequence of operation
- Fault finding
- Commissioning

The course involves discussion with tutors and demonstrations with practical advice.

Lunch and refreshments are provided and a certificate is awarded upon completion.

TRAINING.

These comprehensive one-day courses can be mixed and matched for individual installation and servicing companies. The course uses a simple step-by-step approach with hands on training to ensure all aspects of commissioning, servicing, and fault finding can be dealt with quickly and efficiently.

COURSES ARE AVAILABLE ON THE FOLLOWING PRODUCTS:

INSTINCT HEAT RANGE (1 DAY) FREE OF CHARGE

CONTACT TRAINING

Tel: 01482 498432
technical.training@idealboilers.com

BOOK ONLINE AT
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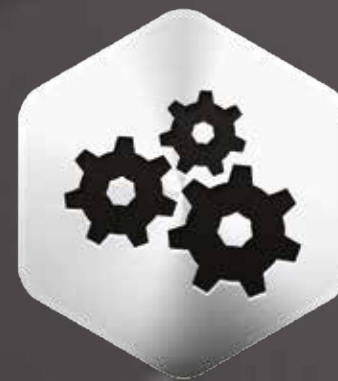
SERVICE & SUPPORT.

At Ideal, we are committed to delivering the highest levels of customer service. With over a century of experience in the heating industry, we know how important confidence and trust is to our customers.

You can be confident to know that you're partnering with a British manufacturer that's supported by a dedicated national service team, delivering help and advice to you and your customers throughout the year.

Our rigorous research and development procedures and manufacturing quality control checks, ensures that all of our products are produced to the highest standards; delivering total comfort and peace of mind.

The call centre team, based in Hull, East Yorkshire, is comprehensively trained to provide tailored advice. All calls will be answered by trained members of staff who will take ownership of the call. All of our trained staff are on-hand to assist with enquiries or help diagnose and resolve faults over the telephone. Should that not be possible, we will arrange an appointment for one of our engineers to visit. Our dedicated team of engineers are fully trained to exacting standards and are all Gas Safe registered.



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