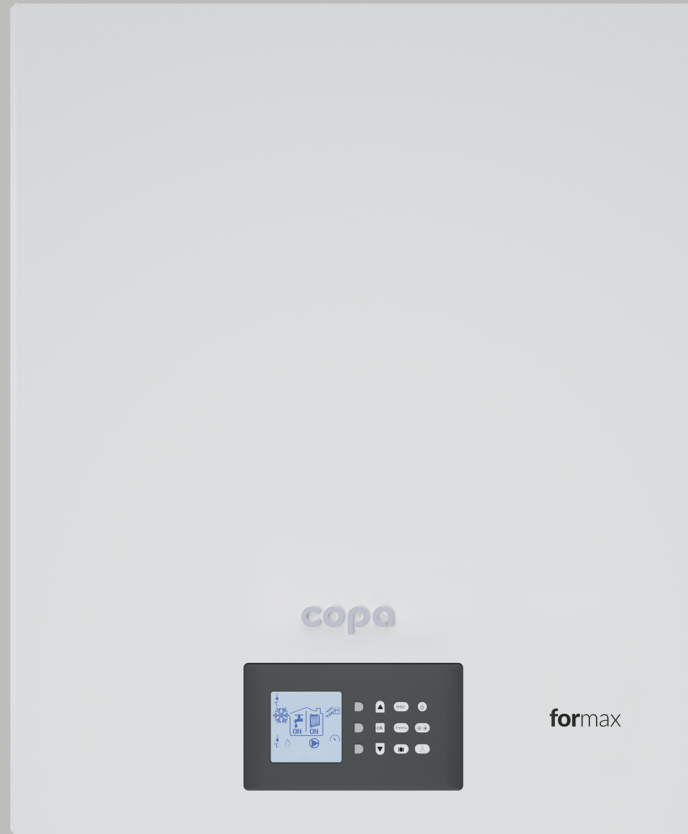


**copa**

**formax**

wall hung  
condensing  
boiler

**Powerful,  
Efficient and  
High Capacity**



## Technical and Design Features

- ① **Class A**, high seasonal efficiency
- ② Complies with **ERP** directive
- ③ Stainless steel main heat exchanger
- ④ **Internal Flue Flap**
- ⑤ Capacities up to **65/90/100/125/150 kW**
- ⑥ **Up to %108 energy efficiency**
- ⑦ Capacitive modulation rate up to **1:6**
- ⑧ Low noise level (**54dB**)
- ⑨ Blue jet burner technology
- ⑩ **6 bar** maximum CH working pressure
- ⑪ **NOx: Class 6**
- ⑫ Fully hermetic cabin
- ⑬ Cascade up to 15 devices
- ⑭ Ability to control with the smart room thermostat
- ⑮ Possibility to control 7 different heating zones through a single master boiler with additional zone control cards
- ⑯ Ergonomic, aesthetic and user friendly control panel with soft touch knobs
- ⑰ Long-lasting use with co-ageing technology.
- ⑱ Ability to connect to building automation systems (0-10V, OpenTherm, ModBus) without the need for any \_intermediate elements via the master control card
- ⑲ It enables communication with the internal card without the need for an interim converter card.



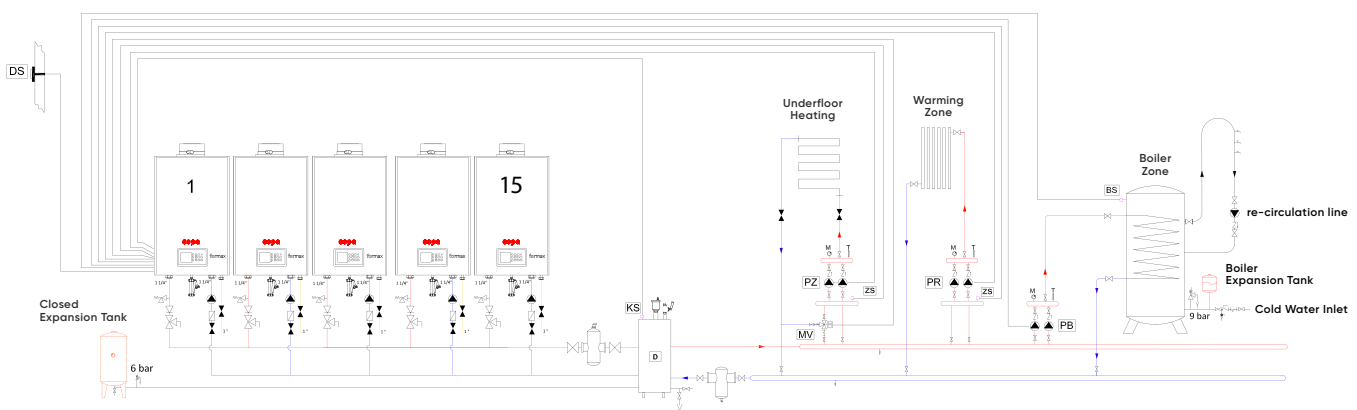
## Cascade Use and Wide Zone Control

With the premix condensing technology used in **FORMAX** wall type condensing boilers, the highest efficiency values are obtained and energy savings are achieved both in single and cascade use. With the standard control panel on **FORMAX** boilers, it provides cascade installation up to 15 boilers without the need for an extra external control panel, while at the same time it can control 3 zones (1 pcs 3-way mixture circuit, 1 pcs direct heating circuit and 1 pcs DHW hot water usage circuit).

It eliminates the need for intermediate converter and communication card during cascade and zone control system provides cost advantage.

The devices do not include circulation pump, expansion tank and safety valve. They must be supplied and used externally.

## Sample Installation Diagram (With Standard Control Panel)



• For more installation diagrams please visit our website.

Digital  
LCD Screen

1

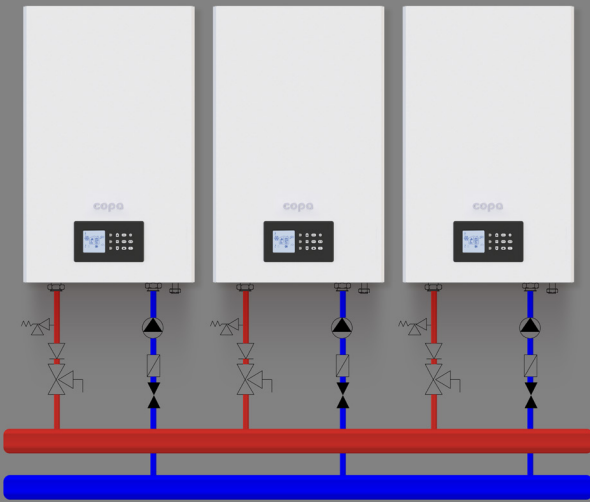
Control  
Keypad

2



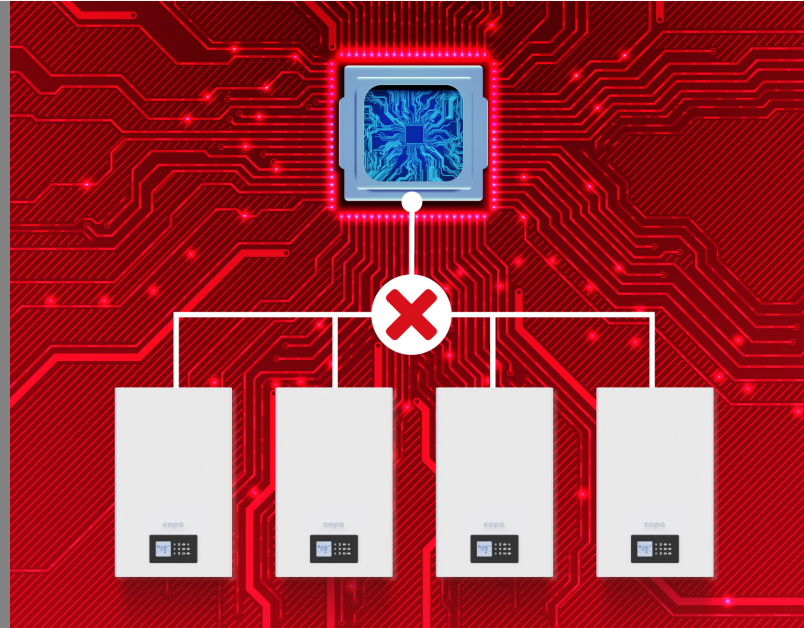
## Ergonomic, Aesthetic and Service Friendly Control Panel

The control panel of Formax boilers has an improved digital display and software. It is both aesthetic and ergonomic thanks to its digital LCD led display and soft touch buttons that provide ease of use. Control panel Temperature settings and service parameters are easily adjusted with the multifunctional soft touch buttons on it.



### 15 Cascade Installations And Wide Zone Control With Standard Control Panel

With the standard control panel on the boiler, it provides cascade installation up to 15 boilers and + 3 zones (1 3-way mixing circuit, 1 direct heating circuit and 1 DHW hot water usage circuit) connection and control without the need for an extra external control panel. Formax Boilers, which are an effective solution for large spaces in cascade connections, can reach 2400 kW system heating power with up to 15 cascade connections.



### It Enables Communication With The Internal Card Without The Need For An Interim Converter Card.

Formax boilers can be used without the need for any interim converter or communication card during cascade connection thanks to the advanced microprocessor controlled control card with digital LCD Turkish display. In this way, the microprocessor-controlled card completely eliminates the need for an interim converter and communication card, providing easy installation and a great system cost advantage.

# Power of Central Heating Formax



## FORMAX Condensing Boiler Technological Advantages



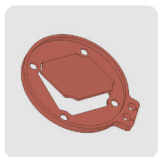
### Stainless Steel Condensation Heat Exchanger

Stainless steel condensate heat exchanger, high performance, long use. It has been designed and manufactured taking into account the life and high safety criteria. It reaches high efficiency values of 108% with premix condensation technology.



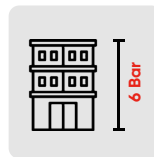
### Premix Stainless Steel Burner and Bluejet Technology

It is a special burner that produces emission below European norms (class 5), automatic adjustment of air flow rate with frequency controlled fan, stainless steel surface, micro flame, electronic ignition, ionisation electrode. With Bluejet technology, the burner has class 5 emission values according to EN 297 / A5 directive, and the NOx and CO emission rates it emits to the environment are at the lowest level determined by the standards.



### Integrated Chimney Flap

Thanks to the internal integrated chimney flap within the device, the system provides a cost advantage compared to the externally installed chimney flap.



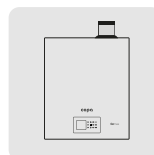
### 6 Bar

With 6 bar operating pressure, it provides usage advantage and system cost advantage by eliminating the use of extra plate heat exchangers in high buildings.



### Wide Range Of Capacities

Formax boilers offer a wide range of capacity options suitable for every need with five different capacity options of 65 - 90 - 100 - 125 - 150 kW.



### Suitable for Hermetic Use

It can be used hermetically or semi-hermetically with coaxial chimney sets.



### High Security Advanced Safety Systems

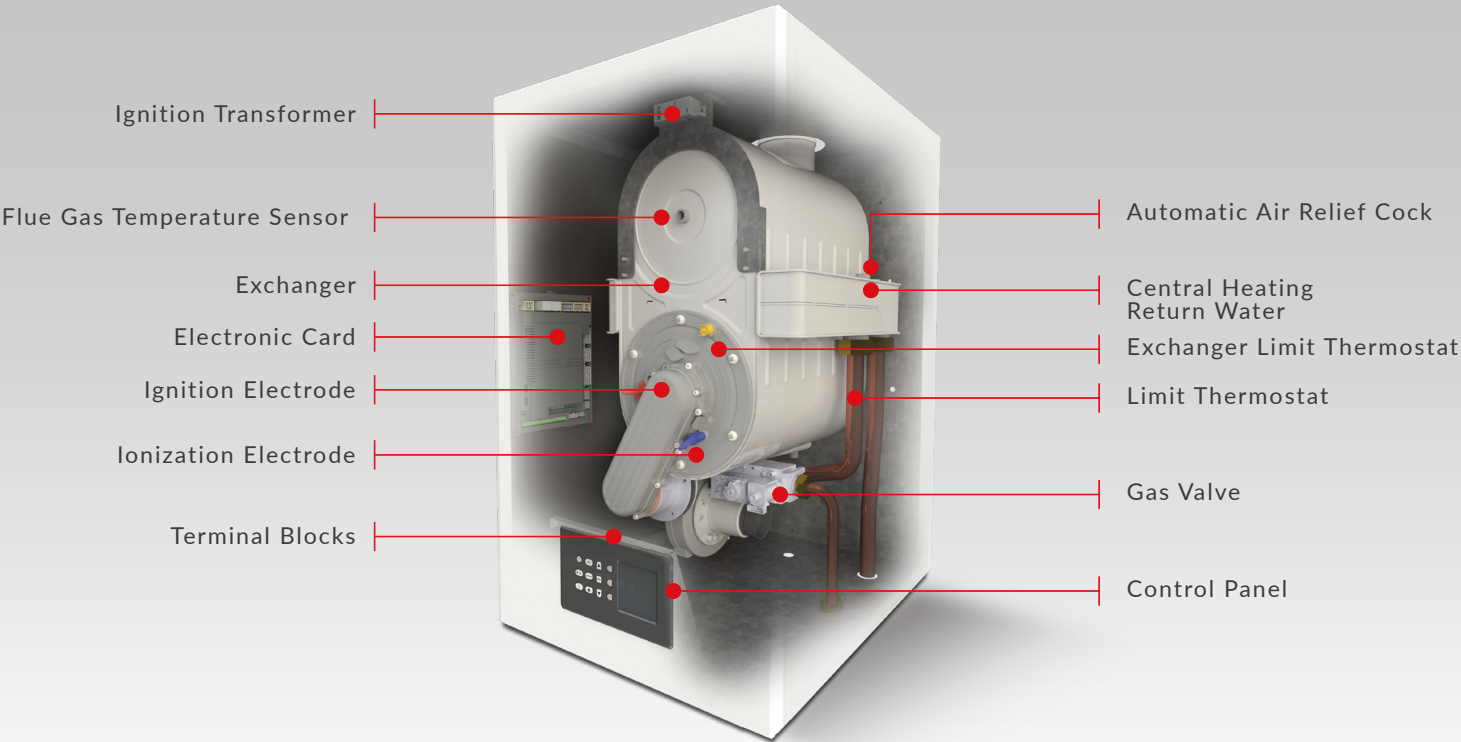
Formax boilers: Equipped with high and advanced safety systems such as pump anti-blocking protection, post-circulation protection, boiler freeze protection, boiler freeze protection, overheating protection.



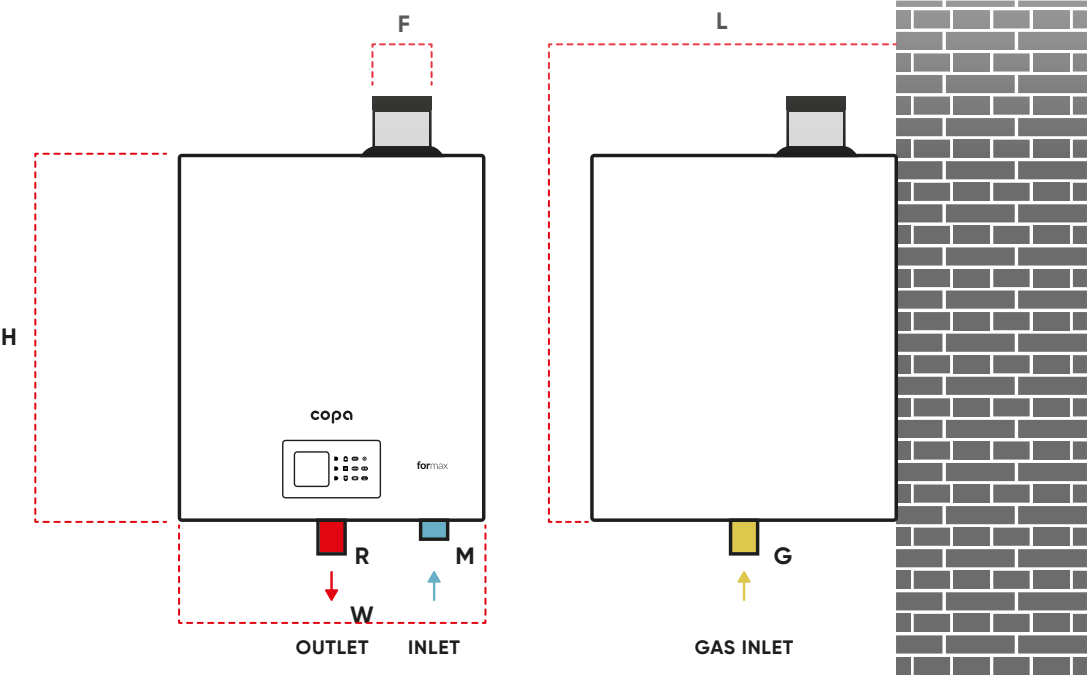
### High Saving with Wide Modulation Range

Formax boilers adjust the capacity according to the need with the 1:6 modulation range it provides, saving both gas and electrical energy while at the same time increasing the service life of the devices.

Structure and Components of the Device



Technical Dimensions	W	H	L	ØF	ØM	ØR	ØG
Formax 65	490 mm	703 mm	515 mm	80/125	1 ¼"	1 ¼"	¾"
Formax 90	490 mm	783 mm	515 mm	100/150	1 ¼"	1 ¼"	1 "
Formax 100	490 mm	783 mm	515 mm	100/150	1 ¼"	1 ¼"	1 "
Formax 125	490 mm	783 mm	650 mm	100/150	1 ¼"	1 ¼"	1 "
Formax 150	490 mm	783 mm	650 mm	100/150	1 ¼"	1 ¼"	1 "





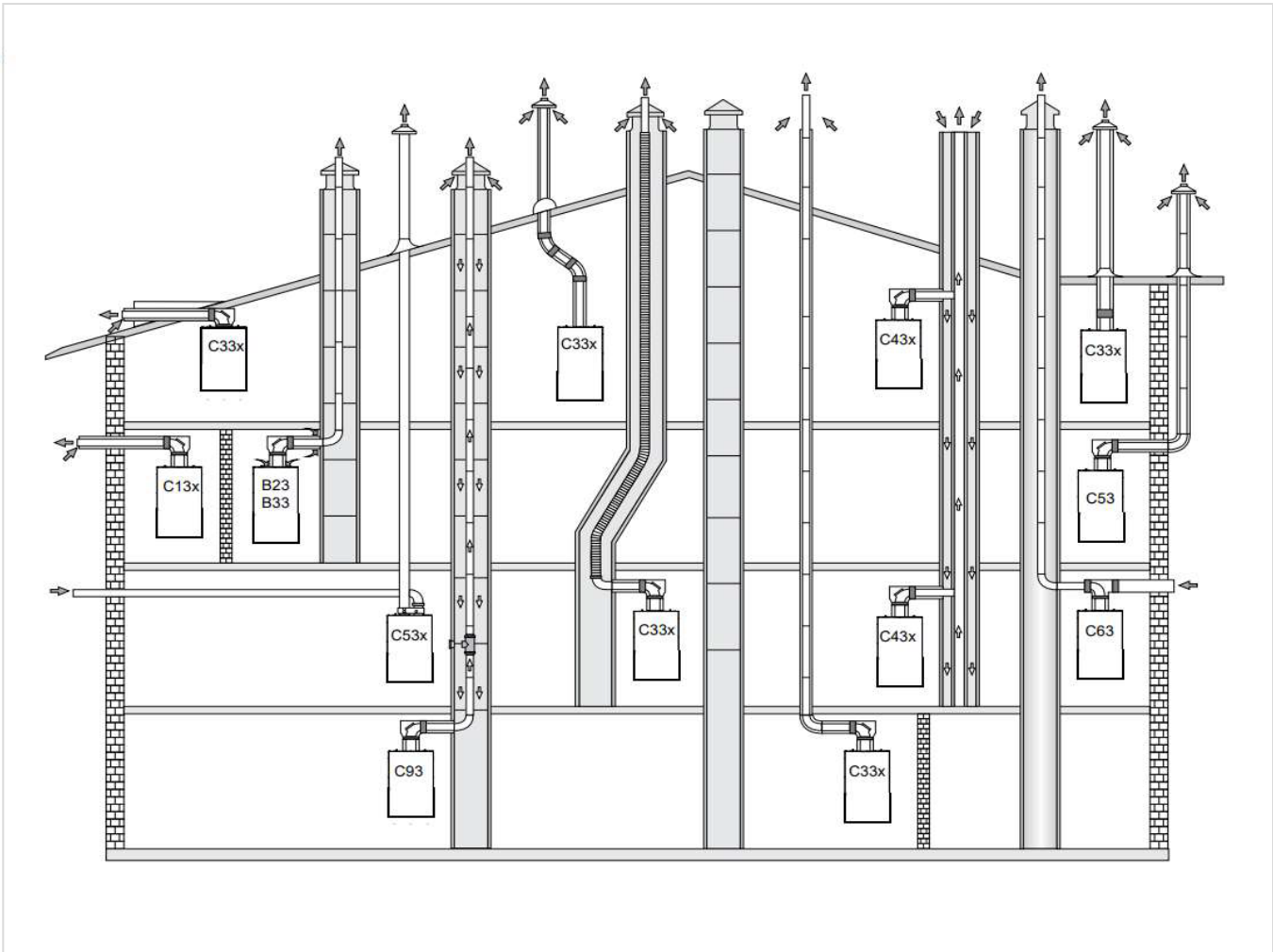
Technical Dimensions	W	H	L	ØF	ØM	ØR	ØG
Formax 65	490 mm	703 mm	515 mm	80/125	1 ¼"	1 ¼"	¾"
Formax 90	490 mm	783 mm	515 mm	100/150	1 ¼"	1 ¼"	1 "
Formax 100	490 mm	783 mm	515 mm	100/150	1 ¼"	1 ¼"	1 "
Formax 125	490 mm	783 mm	650 mm	100/150	1 ¼"	1 ¼"	1 "
Formax 150	490 mm	783 mm	650 mm	100/150	1 ¼"	1 ¼"	1 "











## Technical Specifications Table

Capacity and Efficiency		Formax 65	Formax 90	Formax 100	Formax 125	Formax 150
Heating mode maximum thermal load	Kw	62	90	98	117,1	142
Heating mode minimum thermal load	Kw	17,2	18	20	21	26
Maximum thermal power in heating mode(80/60°C)	Kw	58,4	88	97	117,3	140,71
Minimum thermal power in heating mode (80/60°C)	Kw	17,1	18	20,01	19	27,01
Maximum thermal power in heating mode (50/30°C)	Kw	63,5	91,2	101	119,5	150,1
Minimum thermal power in heating mode (50/30°C)	Kw	18,2	19,8	22,14	21,3	28,3
Efficiency at partial (30%) load (30°C return temperature)	%	106,5	107	108	106,4	107,8
General Features						
Gas ategory		I2H	I2H	I2H	I2H	I2H
Gas inlet pressure	mbar	20	20	20	20	20
Electrical supply						
Electricity consumption	Watt	117	135	144	221	304
Protection class		IPX4D				
NOx class		6				
Weight	kg	55	67	67	73	87
Chimney types		C13(x), C33(x), C43(x), C53(x), C63(x), C93(x), B23				
Hermetic type		Fully Hermetic				
Water inlet and outlet diameters		1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Gas inlet diameter	Ø	1"				
Waste gas outlet	Ø	80 / 125	100/150	100/150	100/150	100/150
Minimum water pressure	mm	0,8				
Maximum water pressure	Bar	3	6	6	6	6
Operating temperature (Heating)	Bar	30/85				
Operating temperature (Domestic water)	°C	65				
Erp Information						
Heating circuit Efficiency Class		A				
Sound power level	db	52	53	53	55	56
NOx emission	mg/kWh	26,8	26,1	26,7	45,7	45,4
Heating loss in standby mode	Kw	0,079	0,081	0,084	0,088	0,1

Performance and efficiency		Flue Type	Flue Diameters	Formax 65	Formax 90	Formax 100	Formax 125	Formax 150
Horizontal flue with coaxial flue connection	C13	Ø 80/125 mm	X	---	---	---	---	---
		Ø 100/150 mm	---	X	X	X	X	X
Vertical flue with coaxial flue connection	C33	Ø 80/125 mm	X	---	---	---	---	---
		Ø 100/150 mm	---	X	X	X	X	X
Coaxial flue connection is made to the main building flue as horizontal flue	C43	Ø 80/125 mm	X	---	---	---	---	---
		Ø 100/150 mm	---	X	X	X	X	X
Coaxial flue connection is made to the main flue in the boiler room as horizontal flue	C93	Ø 80/125 mm	X	---	---	---	---	---
		Ø 100/150 mm	---	X	X	X	X	X
Flex or rigid flammable air is taken from the environment in the flue. Usually used in cascade flue connections"	B23	Ø 80/125 mm	X	---	---	---	---	---
		Ø 100/150 mm	---	X	X	X	X	X

# Technical Application Type



	Horizontal Concentric Terminal	80/125 100/150	1 1		Roof mounted vertical chimney kit	80/125 100/150	--- ---
	Elbow 87° Concentric	80/125 100/150	--- ---		Ceiling Support (flat flashing)	80/125 100/150	--- ---
	Elbow 45° Concentric	80/125 100/150	--- ---		Sloping ceiling support	80/125 100/150	--- ---
	Concentric flue extension	80/125 100/150	1 1		Concentric horizontal flue kit	80/125 100/150	1 1
	Concentric flue extension	80/125 100/150	0,5 0,5		Twin flue adapter	80/125 100/150	--- ---



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