## **Condensinox**

#### 4 models 40 kW to 100 kW



- Easy to install with the Hydrostable concept that creates a hydraulic decoupling system within the boiler
- Outstanding NCV efficiency up to 110.5%
- NOx class 5 (EN 656)
- Modulation from 20 to 100%
- Cascade configuration made easier with complete connection kits up to 400 kW
- Easy plant room access, very small foot print
- High thermal inertia
- Separated high and low temperature return
  connections available to optimise condensation
- Low carbon intensities (less than 0.061 kg/kWh)

Not available in UK



# Hydrostable concept

# The internal circulation system for optimised heat transfer

#### Hydrostable concept:

It simplifies the hydraulic system.

#### No minimum boiler flow rate:

The high water volume and low hydraulic resistance mean that a minimum boiler flow rate is unnecessary.

#### Maximum lifetime:

The parts subject to the highest temperatures receives flows in the event of heat demand. This does not break the stratification and therefore does not reduce the efficiency.

#### Supplied as standard with

- Stainless steel combustion chamber
- Modulating gas burner with full premix from 20 to 100%
- Constant air/gas ratio gas valve
- Variable speed fan
- Ionisation flame control
- In-build boiler regulation for:
- controlling the burner modulation
- burner safety panel
- managing a heating network without 3-way valve
- managing a hot water network with pump operation
- can be interfaced with optional secondary regulators

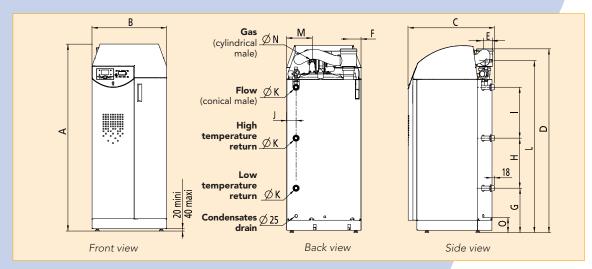
- Control panel comprising:
  - backlit digital display interface for setting parameters and reading information
- on/off switch
- pre-cut location for fitting a regulator accessory
- Jackets and doors can be removed easily
- Low pressure natural gas supply 20 mbars
- Working pressure 4 bar
- Operates on propane only for B23/B23P (from July for the 40 and 60 kW models)

#### Delivery

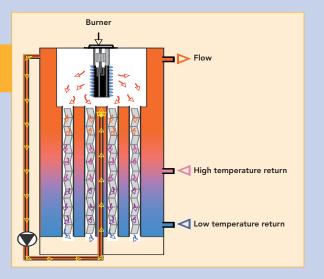
The boiler is delivered in a secured package

# **Dimensions**

## Models 40, 60,80 and 100 kW



SIZES															
Models	Α	В	С	D	Е	F	G	Н	1	J	ØK	L	М	ØN	0
CONDENSINOX 40	1494	595	670	1496	58	100	356	400	406	76	1" 1/4	1377	205	G1/2"	121
CONDENSINOX 60	1494	595	670	1469	58	100	356	400	76	1"	1/4	1377	205	G1/2"	121
CONDENSINOX 80	1728	695	779	1645	102	110	354	400	550	85	1" 1/4	1547	131	G3/4"	133
CONDENSINOX 100	1728	695	779	1645	102	110	354	400	550	85	1″ 1/4	1547	131	G3/4"	133



# Chimney/boiler single connection

The chimney kit must be used for a B23 or B23P category connection.

## B23 chimneys

The dimensions of the chimney ducts must be determined by taking into account a combustion gas pressure of 0 Pa at the boiler outlet.

The kits contain an adaptor and an air filter.

#### B23P chimney

The dimensions of the chimney ducts must be determined such that the maximum authorised pressure at the flue collar does not exceed 160 Pa for the 40 and 60 kW models and 120 Pa for the 80 and 100 kW models (80/60°C system).

The kits contain an adaptor and an air filter.

# Balanced-flue/boiler single connection

Horizontal, vertical or separate balanced-flue kits must be used for a C13, C33 or C53 category connection. Balanced-flues must not be connected to the boiler if it operates on propane.

#### Balanced-flue installation conditions

These kits are designed for use with a boiler single.

The burnt gases must be discharged into a well-ventilated area that is as large as possible; the dominant winds must be perpendicular to the terminal.

#### It is prohibited to have an outlet facing dominant wind and rain.

The terminal is a source of noise and pollutants, so its location must respect the environment and the surrounding neighbourhood. The air inlet terminal must be sufficiently far from any possible source of pollution. The combustion air must not contain any halogens (chlorine, bromine, fluorine, etc.), Freon, CFCs or sea salt so as not to interfere with the combustion hygiene of the boiler and/or significantly affect its lifetime.

For a horizontal balanced-flue and improved ease of use, Ygnis recommends to allow for higher distance to doors and windows than required by the regulation.

## Concentric horizontal balanced-flue (C13)

Composition of the horizontal balanced-flue kit:

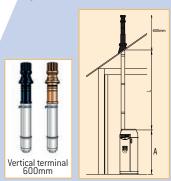


SIZES										
Condensinox	Concentr	ric Ø 80/125	Concentric Ø 100/150							
	40 kW 60 kW		80 kW 100 kW							
Linear length L maximum* (m)	12 15		10	10						
A mini. (mm)	1552		1750							

<sup>\*</sup>Take the following rules into account when calculating the duct: 90° elbow = 1 m of straight duct, 45° elbow = 0.5m of straight duct.

## Concentric vertical balanced-flue (C33)

Composition of the vertical balanced-flue kit:



SIZES									
Condensinox	Concentr	ric Ø 80/125	Concentric Ø 100/150						
	40 kW	60 kW	80 kW	100 kW					
Linear length L maximum* (m)	12	15	10	10					
A mini. (mm)	14	169	1645						

## Twin duct balanced-flue (C53)

Composition of the separate balanced-flue kit:



vertical terminal 600 mm

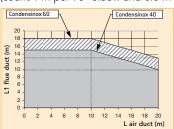


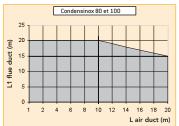
bi-flux adapter + 90° elbow for combustion air

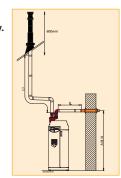


air inlet terminal

The intersection of lengths L + L1 must fall within the coloured area of the graph below. (count 1 m per  $90^{\circ}$  elbow and 0.5 m per  $45^{\circ}$  elbow)







# Condensinox in cascade

#### B23 / B23P flue header connection kits

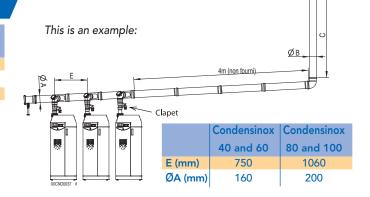
The dimensions of the combustion product evacuation duct must be determined such that the maximum authorised pressure at the boiler outlet does not exceed the value specified in the table below (80°/60° system).

#### PRODUCT DESCRIPTION

Models	Maximum eligible pressure (Pa)						
	60°/80°C						
CONDENSINOX 40	160						
<b>CONDENSINOX 60</b>	160						
CONDENSINOX 80	120						
<b>CONDENSINOX 100</b>	120						

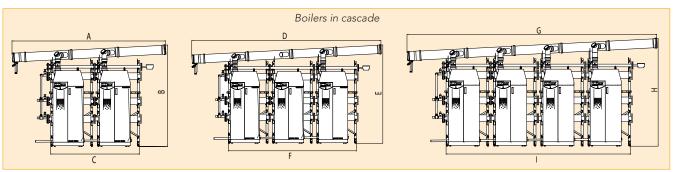


Our accessories can be used with the 40 and 60 models as well as with the 80 and 100 models.



# **Dimensions**

## Condensinox 40, 60, 80 and 100



Consult us for flue header and hydraulic kits.

Dimensions (mm)	DUO			TRIO			QUAT <b>R</b> O		
	Α	В	С	D	Е	F	G	Н	- 1
CONDENSINOX 40 and 60	2015	2011	1500	2768	2022	2253	3518	2061	3003
CONDENSINOX 80 and 100	3483	2304	2017	4542	2360	3077	5600	2415	437

The 40 and 60 kW model boilers can be connected back-to-back (please consult us).