

C230 EVO-C340-C640

floor-standing condensing gas boiler

20% Hydrogen



Condensation technology for collective housing.

FRENCH MANUFACTURER
S I N C E 1 6 8 4

De Dietrich 

A boiler renowned for its performance



Ultra-compact and lightweight

For easy set-up: 0.54 m² footprint
for 217 kW to 1.53 m² for 651 kWh
188 kg for 217 kW to 568 kg for 651 kWh

Excellent environmental performance

NOx emissions below 60 mg/kWh
Sound level below 60 dB(A) for 573 kW

Large modulation capacity

Modulation from 15 to 100% (for the C640) for optimal fine-tuning of the heat production to the installation requirements.

Condensation is state-of-the-art boiler technology

ALU
SILICON

CO₂

Aluminium-silicon: the perfect alloy for optimised generator operation.

- **Complete chemical resistance:** the aluminium/silicone alloy withstands acid condensates produced by flue gases.
- **High resistance to corrosion** thanks to auto-passivation on the surface.
- **Aluminium is an excellent heat conductor** (5 times better than steel).
- **No return temperature constraints:** heat exchange is optimised.
- **Very responsive generator** thanks to a reduced volume of water.
- **Green material** that can be recycled endlessly.

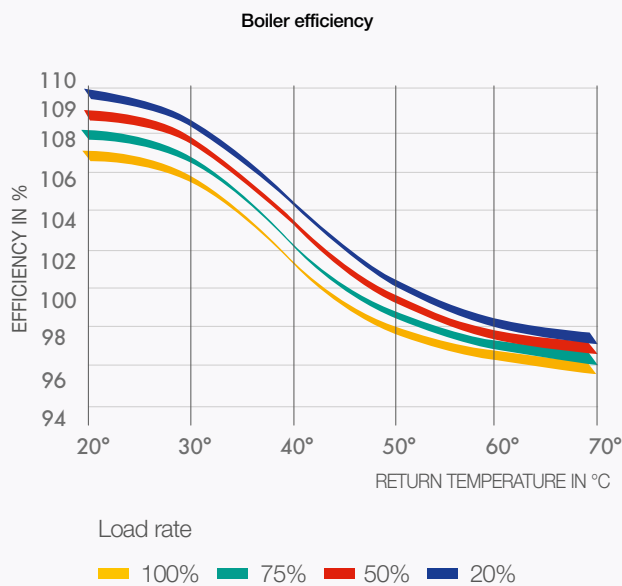


Energy savings and the environment are **now the top priorities**

Whether in collective housing, administrative, office or industrial buildings, the condensation principle enables substantial energy savings **of up to 40%**.

It also offers environmental benefits, with significant reductions in NO_x and CO₂ emissions.

Simple, economical



These condensing boilers have been designed to be both durable and easy to maintain, ensuring they offer maximum, long-lasting performance.

- **Highly durable** thanks to the cast **aluminium/silicon** alloy heating exchanger, which offers high resistance to corrosion and thermal shock.
- **Easy to maintain:** a **self-cleaning** heating exchanger with condensate run-off, quick access to all components via detachable hatches and panels.
- **Reduction in pollutant emissions** thanks to total **premix** burners. Surface combustion and very low modulation minimise start-ups and shutdowns, which cause pollutant emissions.

Ultra-adaptable



They are compatible with a wide range of configurations and their specifications mean they can be adapted to any installation requirements.

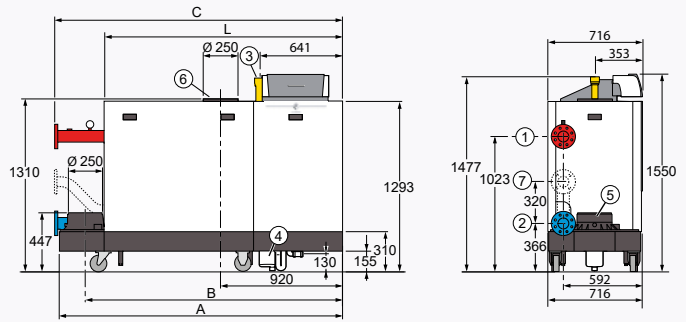
- **A broad output range from 18 to 1303 kW**, or higher for cascade type installations,
- **A large modulation capacity** enables heat production to be fine-tuned to meet the installation's requirements,
- **These highly compact units** can be installed in both new and old buildings with confined boiler rooms,
- **They are extremely quiet** and conform to applicable acoustic standards, specifically in residential buildings,
- **With no return temperature constraints**, they enable simple hydraulic installations with maximum use of condensation,
- **The flue system offers multiple connection options**, with forced flue (in line with local regulations) or chimney with small diameter ducts.

Quick and easy to set up



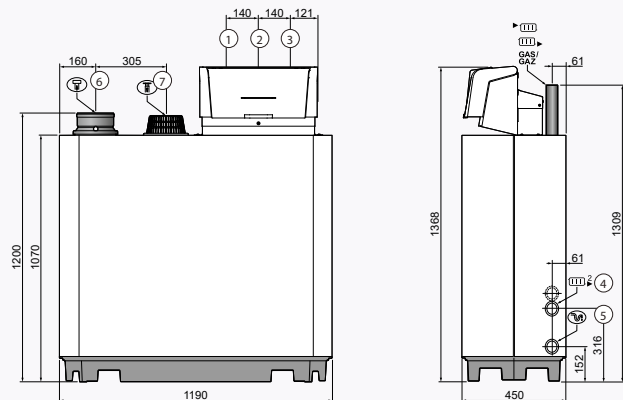
These new condensing boilers make handling, installation and start-up exceptionally easy, thanks to their handy features:

- They are **extremely light** for their output and easy to handle (only 2 people required),
- **With ergonomic handles** and/or castor wheels, the C 340 and C 640 models feature a clever pallet lowering system in which the top part of the packaging serves as a pallet lowering ramp when the boiler is being unpacked,
- **Delivered fully assembled** (body, casing, control system, etc.), they can be quickly installed and connected,
- **Their control systems are equipped** with colour-coded connectors for extremely simple, foolproof electrical connection,
- **Delivered preset and tested** warm in the factory, they are quick and easy to start up.
- The boiler components can be **easily dismantled and refitted** to facilitate installation in confined boiler rooms.



- ① Heating flow, DN 80 flange (DIN 2576 standard)
- ② Heating return, DN 80 flange (DIN 2576 standard)
- ③ Gas inlet, G 2 (tapped)
- ④ Condensate drain, siphon provided, for PVC Ø 32 mm tube (int.)
- ⑤ Flue gas outlet, Ø 250 mm
- ⑥ Combustion air inlet, Ø 250 mm
- ⑦ Heating return (option), DN 65 flange (DIN 2576 standard)

	C 340	280	350	430	500	570	650
A (mm)	1833	1833	1833	2142	2142	2142	
B (mm)	1635	1635	1635	1944	1944	1944	
C (mm)	1862	1862	1862	2172	2172	2172	
L (mm)	1490	1490	1490	1800	1800	1800	



- ① Heating flow
- ② Heating return
- ③ Gas inlet, R 1 1/4
- ④ Connection for second return R 1 1/4 (Option)
- ⑤ Condensate run-off trap supplied, Ø 32 mm ext.
- ⑥ Flue gas outlet, Ø 150 mm
- ⑦ Combustion air inlet

For optimal running

Added security:

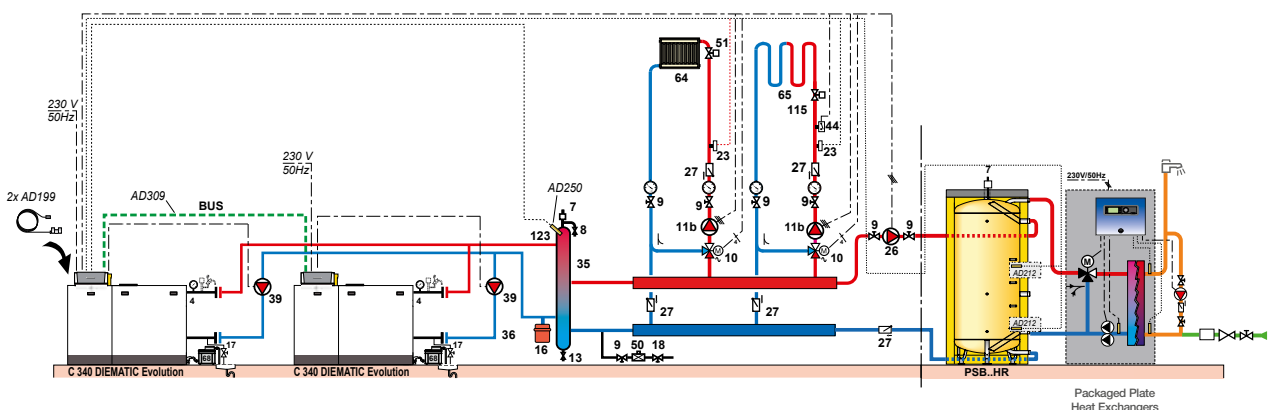
the cascade-configured controllers enable the flow to be switched and guaranteed, even if one of the pumps fails.

Improved performance:

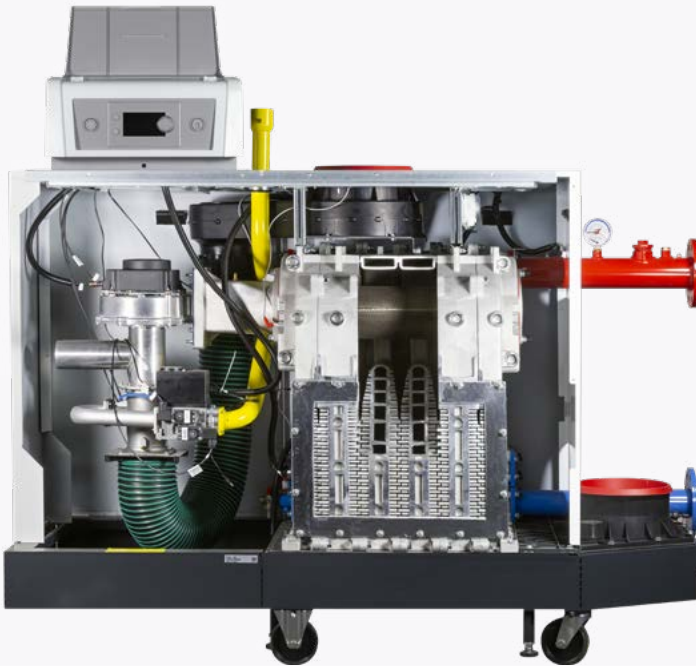
thanks to their large Delta T, the C340 models offer ultra-high DHW production, thanks to Instantaneous Hot Water Heating Systems with Packaged Plate Heat Exchangers.

More economical:

the highly responsive boilers guarantee ever greater savings by precisely tracking demand.



A high-performance boiler



For C 340 and 640

- New heating exchanger design to obtain a Delta T of 40K.
- Improved self-cleaning capability for the exchanger on the flue gas side.
- 5% more efficient thanks to the compatibility of very high-performance
- Highly responsive boiler thanks to rapid warm-up

The new Diematic Evolution control system platform



Diematic EVOLUTION

Simple and intuitive

- Factory-installed control system.
- Intuitive navigation: new control ergonomics.
- Perfect legibility: high resolution colour screen, clear text.
- Instant overview: all the information on the home screen, selected with the rotary button.

Advanced functions

- Analysis of the situation, clear simple overview for everyday use.
- Access reserved for the installer.
- Integrated troubleshooting system.
- Multi-zone heating management as standard for added comfort.
- As standard, option to control 2 direct or mixed circuits (+1 optional) and 1 DHW circuit.
- Cascade control with up to 8x C240 EVO/C340 or 4x C640.
- 0-10 V control with 3 feedback functions as standard.
- Integrated Bluetooth card.
- Optional remote control with Modbus RTU RS485 to connect the boiler to a BMS.



Built-in flexibility

for easy installation and efficient reliable heat delivery

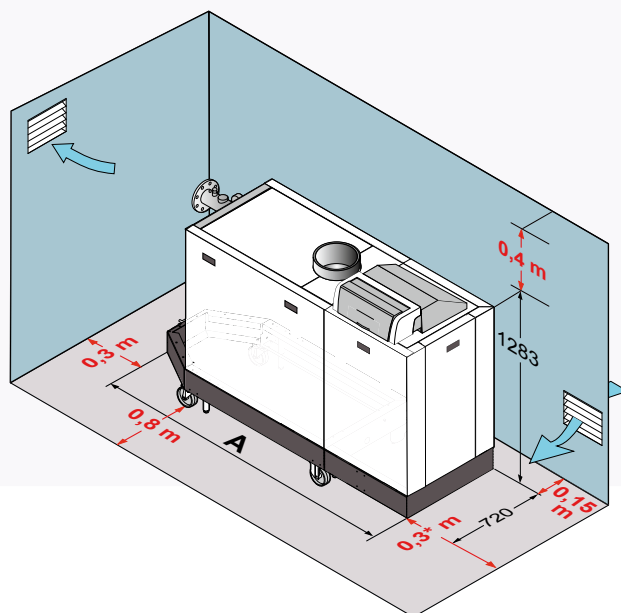
Future oriented

Operation with no minimum flow
All our boilers are compatible with
20% hydrogen blend.



Easy to install in smaller spaces

Small boiler footprint. Few space
needed around.



Best in Class Spare part center

AFTER SALES SERVICE

Order your parts online via the website

www.dedietrich-heating.com

which can be accessed directly from the pro site

C230 EVO-C340-C640

MODELS - C230 EVO (modulation from 18% to 100%)			85	130	170	210
TECHNICAL SPECIFICATIONS						
Max. nominal output at 50/30°C (Pn) (natural gas H)	kW		93	129	179	217
Efficiency in % LVH	%	100% Pn at av. temp. 70°C	97.4	97.5	97.5	97.6
load... % Pn	%	100% Pn at return temp. 30 °C	104.3	104.7	105.2	105.7
and water temp... (°C)	%	30% Pn at return temp. 30 °C	107.9	108.1	108.3	108.4
Max. flue gas temperature at 40/30 °C	°C		43	43	43	43
Pressure available at boiler outlet	Pa		130	130	130	130
Footprint	m ²		0.54	0.54	0.54	0.54
Weight (empty)	kg		115	135	165	188

MODELS - C340 (modulation from 20% to 100%)			280	350	430	500	570	650
TECHNICAL SPECIFICATIONS								
Max. nominal output at 50/30°C (Pn) (natural gas H)	kW		279	350	425	497	574	652
Efficiency in % LVH	%	100% Pn at av. temp. 70°C	98	98.1	98.2	98.3	98.4	98.5
load... % Pn	%	100% Pn at return temp. 30 °C	104.8	105.2	105.6	106	106.4	106.8
and water temp... (°C)	%	30% Pn at return temp. 30 °C	109.2	109	108.8	108.6	108.3	108.1
Max. flue gas temperature at 40/30 °C	°C		60	61	64	63	66	65
Pressure available at boiler outlet	Pa		130	120	130	150	150	150
Footprint	m ²		1.31	1.31	1.31	1.53	1.53	1.53
Weight (empty)	kg		366	400	435	497	533	570

MODELS - C640 (modulation from 15% to 100%)			560	700	860	1000	1140	1300
TECHNICAL SPECIFICATIONS								
Max. nominal output at 50/30°C (Pn) (natural gas H)	kW		558	701	849	994	1147	1303
Efficiency in % LVH	%	100% Pn at av. temp. 70°C	98	98.1	98.2	98.3	98.4	98.5
load... % Pn	%	100% Pn at return temp. 30 °C	104.8	105.2	105.6	106	106.4	106.8
and water temp... (°C)	%	30% Pn at return temp. 30 °C	109.2	109	108.8	108.6	108.3	108.1
Max. flue gas temperature at 40/30 °C	°C		60	61	64	63	66	65
Pressure available at boiler outlet	Pa		130	120	130	150	150	150
Footprint	m ²		2.68	2.68	2.68	3.13	3.13	3.13
Weight (empty)	kg		711	775	841	961	1029	1099

Your installer



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