



# Wall mounted gas condensing combi boiler

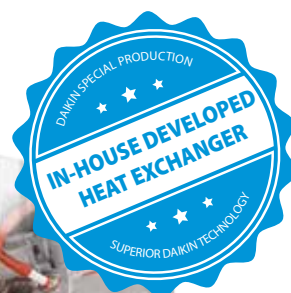


Engineered with innovative condensing technology to  
provide efficient and reliable heating and hot water

# Energy efficiency heating and hot water

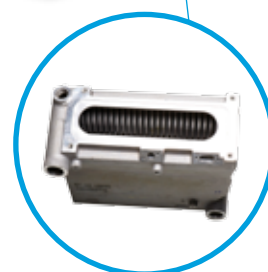
## 1 Daikin in-house developed heat exchanger

Experience the Daikin technology of the wall mounted gas condensing combi boiler



### FULL Condensing Heat Exchanger equipped with Daikin technology and R&D power

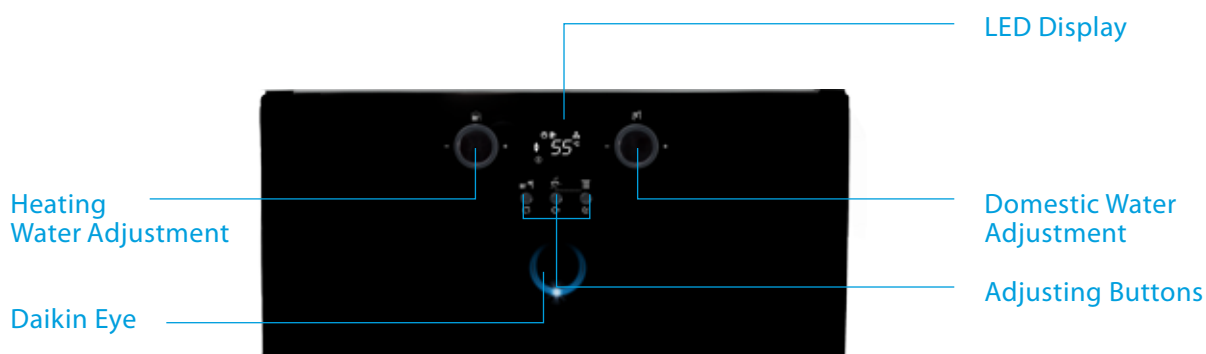
- › Flexible in use and installation thanks to most compact dimensions (only 0,23 m<sup>2</sup> wall space), low weight and Lambda Gx combustion technology.
- › Quiet operation due to wide fan modulation range
- › Facilitated maintenance thanks to front-accessible components
- › Easy heating control from your smartphone or tablet with the Daikin app.



Daikin designed heat exchanger improves the performance of your heating system

## 2 Unique design & stylish front panel

- › Unique user interface appeals to all end-users
- › State-of-the-art technology meets user-friendly design
- › The side details and convex front panel deliver an integrated view



## 3 Daikin Eye

**You can monitor the operating status of your combi boiler with the Daikin Eye**



**Blue:**

When the Daikin Eye indicates a blue colour, it means the combi boiler is functioning properly. The Daikin Eye will flash on and off when it's running on stand by mode.



**Red:**

When the Daikin Eye indicates a red colour, it means the combi boiler is out of commission and requires a maintenance check.

## 4 Daikin online controller

**The Daikin Online Controller application can control and monitor the status of your heating system and allows you to:**

**Monitor:**

- › The status of your heating system
- › The power consumption
- › Energy consumption graphs

**Control:**

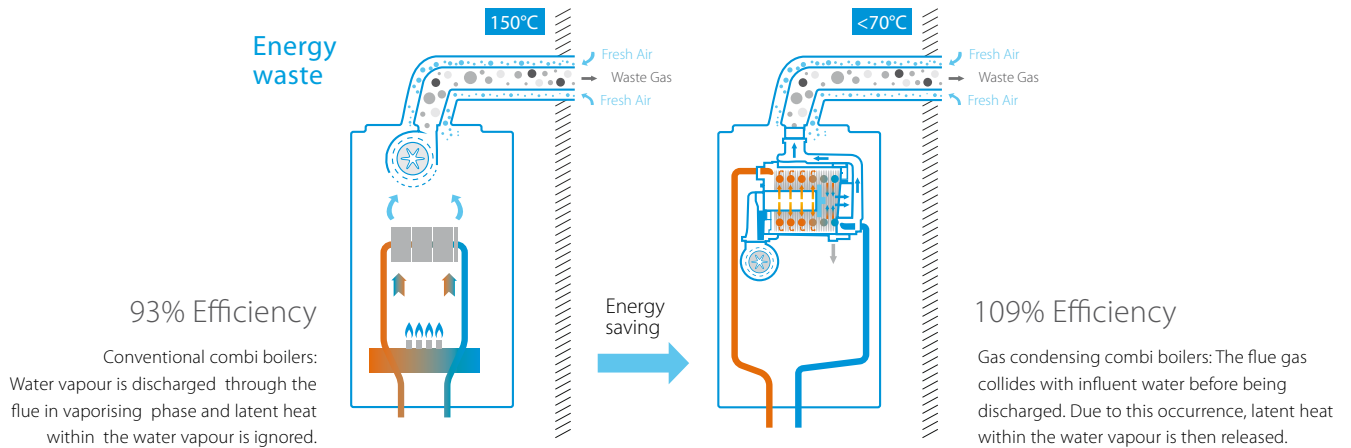
- › The operation mode and set temperature
- › Remotely control your system and domestic hot water
- › Third-party products & services integration via IFTTT

**Schedule:**

- › The set temperature and operation mode with up to 6 actions per day for 7 days
- › Holiday mode
- › View in an intuitive mode



## 5 Condensing technology



### Premix Technology

incorporates a modulation fan to perfectly mix combustion air and fuel before it reaches the burner (air/gas mixer), to ensure a high efficiency combustion.

### Condensing technology

With the combustion of 1 m<sup>3</sup> natural gas, 1.7 kg of water vapour is released in the flue gas as latent heat. Instead of being disposed through the flue, the water vapour containing latent heat is then recirculated, and subsequently reheated by a uniquely designed exchanger.

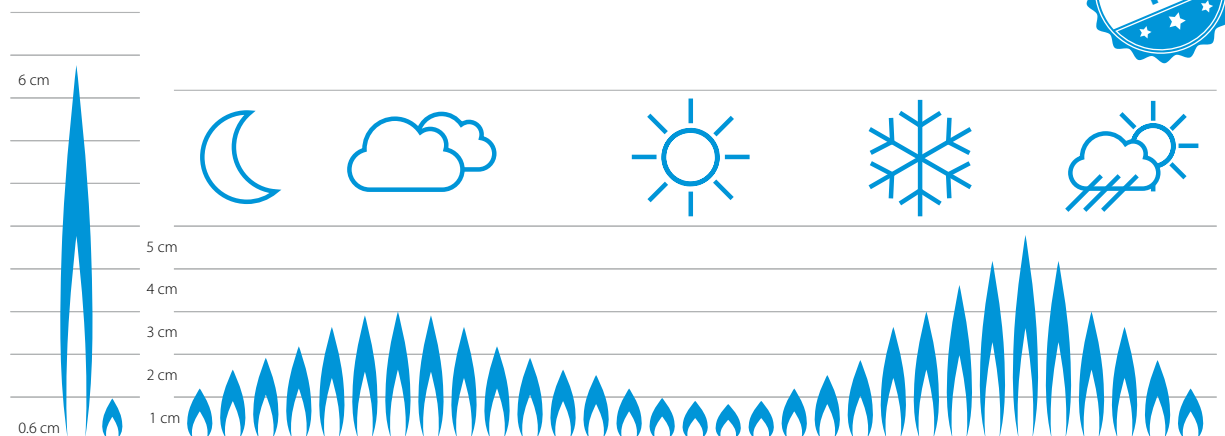
Condensation forms as a result of the water vapour being cooled to a temperature just below dew point, and then subsequently drained via a siphon. The condensing technology uses optimum fuel efficiency, with reduced emissions of NO<sub>x</sub> and CO, to ensure high cost-savings and low environmental impact.

## 6 High modulation rate

### High Modulation Rate 1/8

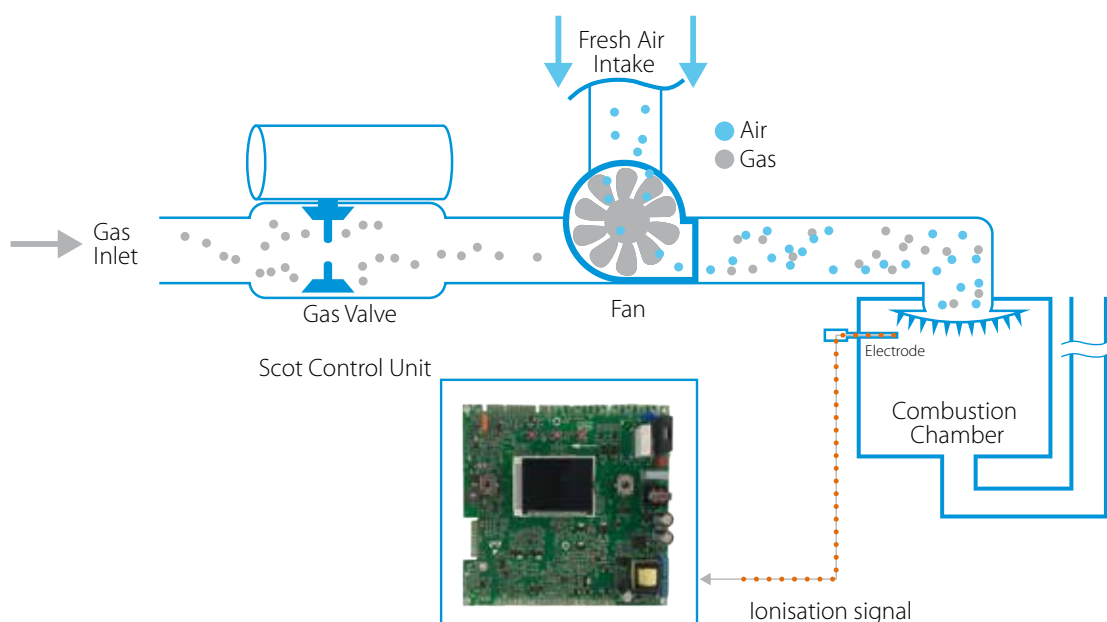
The opportunity to adjust the burner power ensures the seamless and continuous operation of the device. Smooth functioning of the system means increased comfort, a low risk for system failure and the ability

to neutralise harmful substance emissions that may occur during ignition. Modulation is also automatically provided by the electronic control.



## 7 Lambda Gx, automatic gas adaptation system

With the Lambda GX control system, the correct combination of air and gas is regulated to achieve efficient combustion, which leads to higher cost savings.



**Lambda Gx** aims to regulate the combustion of air and gas in suitable amounts to ensure the lambda (excess air factor) meets the required level.

- › The system controls the amount of air and gas independently, based on the flame quality (ionisation current).
- › Any fluctuation in the air and gas balance, (due to either outside air temperature or natural gas quality), can be detected by an ionisation current and electronically corrected.
- › To achieve an efficient combustion process, gas is gradually released into the mixture until the ideal ratio between gas and air is attained. This function also extends the service life of the device and reduces the emission of harmful gases into the environment.

## 8 High efficiency pump

### High efficiency pump with frequency control

There is a circulation pump to distribute water through the heating installation

### Pressure sensor



Complies with Directive EU/TR ERP LOT11.

## 9 Small gas condensing combi boiler

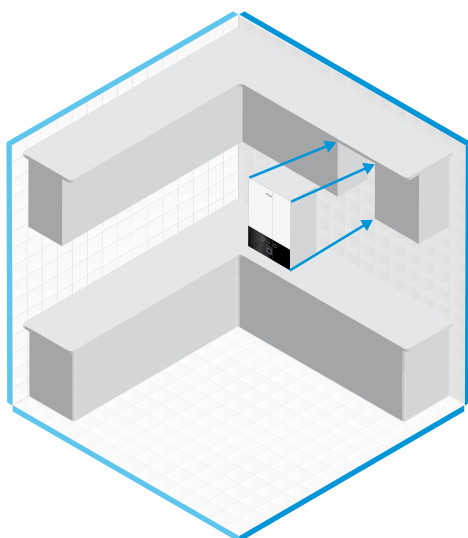
The smallest Combi boiler

Lightweight Combi boiler



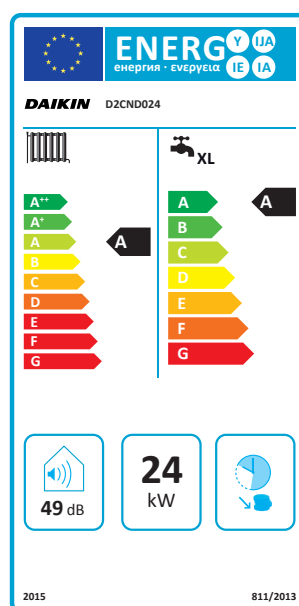
### Easy installation & maintenance

The small and lightweight combi boiler guarantees fast installation, minimal maintenance and a flexible system to adapt to various rooms.



### High energy class

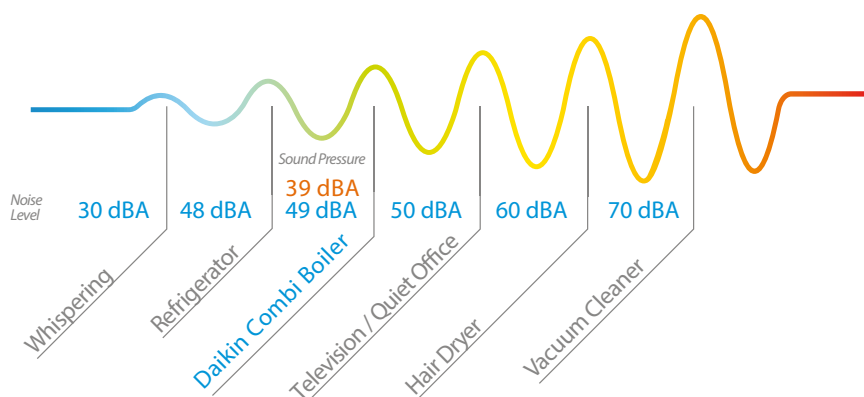
Energy Class A adheres to European ERP Standards



### Silence

Sound power: 49 db(A): The sound level heard when close to the device. The noise level is similar to heating a dishwasher operating in an adjacent room.

Sound Pressure: 39 db(A): The sound level heard when standing 1 metre from the device. The noise level is akin to the quiet environment of a library.



## 10 Best for your home with compact dimensions



### Capacity

Maintains a capacity of 24 kW, both in heating and hot water circuit.



### Modulation

The device can drop down to 3 kW with a modulation ratio of 1:8. This ensures minimal energy is consumed during start/stop operations.



### Full condensation

Latent heat from the flue gas is obtained and added to the system, leading to both increased efficiency and energy savings.



### Comfort mode

The DK combi boiler is designed to provide optimal comfort levels.



### Electrical Protection

Safe combi boiler with a protection class of IP5D.



### Efficiency

Achieves up to 109% efficiency with full condensation.



### Frequency controlled pump

The frequency control monitors power consumption to boost efficiency and save energy.



### Quiet

Delivers a very low sound level that reflects the new EU standards.



### Thermo regulation

The device runs the system based on data obtained from the outside temperature sensor and room thermostat.



### Compact size

Measuring only 0.06 m³, this slim, state-of-the-art design combines power with aesthetics.



### High energy class

Efficiency class according to EU Ecodesign Lot1. (A)



### Lambda Gx system

Superior combustion technology delivers unparalleled efficiency and energy savings.



### Premix combustion

Achieves an efficient combustion process by creating the perfect combination of air and gas before it reaches the burner.



### Lcd display

Eye-catching and user-friendly design.



### Double heat exchanger

The device uses a Daikin-specific main exchanger equipped with in-house technology and a stainless steel domestic water exchanger.



### Easy maintenance

Details in design allows for easy maintenance.



### Online controller via app

Control your indoor unit from any location via app (optional WLAN adapter)

## 11 Heating redesigned

Using high-quality Daikin technology, Daikin Combi Boilers are designed to occupy less space and run at low sound levels to guarantee superb comfort, reliability and optimal energy efficiency.

### Daikin Custom Design Exchanger

FULL Condensing, High Efficiency and Premix Heat Exchanger - designed with technology and R&D power of Daikin.

### Gas Valve

Lambda Gx system ensures combustion control with optimal air and gas combination. Provides fast and automatic adaptation to different types of gases and prevents unstable combustion in device to ensure a long service life.

### Hydraulics Group

Brass soldered, stainless heat exchanger with high heat transfer capacity and high corrosion resistance. High material quality with brass hydraulics group and Daikin's custom designed siphon.



### Burner Group

The combi boiler can continuously operate at a minimum capacity of 3 kW thanks to its metal-fibre alloy burner.

### Fan



High seasonal efficiency 1/8 modulation ratio thanks to frequency controlled fan construction.

### Circulation Pump

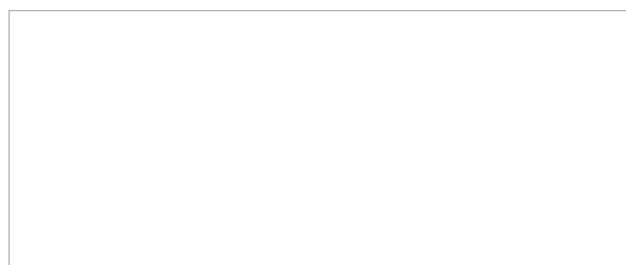
High efficiency. Save on electric power with the frequency controlled circulation pump.

For small applications the intelligent Tablet Controller is recommended



Indoor unit				D2xND	2TND012A4A	2TND018A4A	2TND024A4A	2TND028A4A	2TND035A4A	2CND024A1A	2CND028A4A	2CND035A1A	
Central heating	Heat input Qn (net calorific value)	Nom	Min/Max	kW	2.9/11.2	2.9/17.0	2.9/23.5	4.8/27	4.8/34	2.9/23.5	4.8/27	4.8/34	
	Heat input Qn (gross calorific value)	Nom	Min/Max	kW	3.2/12.4	3.2/18.9	3.2/26.1	5.3/30	5.3/37.8	3.2/26.1	5.3/30	5.3/37.8	
	Output Pn at 80/60°C	Min/Nom		kW	2.8/10.9	2.8/16.6	2.8/22.8	4.6/26.3	4.6/33.2	2.8/22.8	4.6/26.3	4.6/33.2	
	Output Pnc at 50/30°C	Min/Nom		kW	3.1/12.0	3.1/18.0	3.1/24.0	5.2/28.2	5.2/35	3.1/24.0	5.2/28.2	5.2/35	
	Water pressure (PMS)	Max		bar	3								
	Water temperature	Max		°C	100								
	Efficiency	Net calorific value		%	98.6	98.2	97.9	98.2	97.9	-	-		
	Operation range	Min/Max		°C	30/80								
	Piping connections	19 (3/4") Male											
	Domestic hot water	Heat input (net calorific value) Qnw	Nom	Min/Max	kW	2.9/11.2	2.9/17.0	2.9/23.5	4.8/29.5	4.8/34	2.9/23.5	4.8/29.5	4.8/34
Heat input (gross calorific value) Qnw		Nom	Min/Max	kW	3.2/12.4	3.2/18.1	3.2/26.1	5.3/32.7	5.3/37.7	3.2/26.1	5.3/32.7	5.3/37.7	
Domestic hot water threshold				l/min	-				2.5	2.0	2.5		
Temperature Factory setting				°C	50								
Operation range		Min/Max		°C	35/60								
Piping connections				19 (3/4") Male									
Connection diameter for heat flow and return				mm	12.7 (1/2") Male								
Gas	Connection diameter			mm									
	Gas connection diameter			mm	19 (3/4") Male								
	Consumption (G20)	Min/Max		m³/h	0.31/1.18	0.31/1.80	0.31/2.48	0.511/2.89	0.511/3.63	0.31/2.48	0.511/2.89	0.511/3.63	
	Consumption (G25)	Min/Max		m³/h	0.36/1.38	0.36/2.09	0.36/2.89	0.59/3.32	0.59/4.19	0.36/2.89	0.59/3.32	0.59/4.19	
Supply air	Consumption (G31)	Min/Max		m³/h	0.12/0.46	0.12/0.69		0.2/1.1	0.2/1.38	0.12/0.96	0.2/1.1	0.2/1.38	
	Connection			mm	100								
Flue gas	Concentric				1								
	Connection			mm	60								
Space heating	General	ηs (Seasonal space heating efficiency)		%	93								
	General	Seasonal space heating eff. class			A								
		Declared load profile			-					XL			
		ηwh (water heating efficiency)		%	-					85	83		
		Water heating energy efficiency class			-					A			
Casing	Colour				Titanium White (Ral9003)								
	Material				Sheet metal		Powder painted galvanised steel plate		Sheet metal	Powder painted galvanised steel plate			
Dimensions	Unit	Height x Width x Depth	Casing	mm	590x400x256		690x440x295		590x400x256	690x440x295			
Weight	Unit	Empty		kg	27		36		27	37			
Power supply	Phase/Frequency/Voltage			Hz/V	1~/50/230			1~/50/230		1~/50/230			
Electrical power consumption	Max.			W	86			92	112	86	92	112	
	Standby			W	3.5			2.7	3.5	2.7			

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