

# Gas condensing technology

Gas compact unit  
for the installer



# Combustion Gas Compact Unit



## Why choose Rotex GCU?

The Rotex GCU compact combines modern gas condensing technology with a thermal store and solar connection in the smallest possible space. Due to its integrated design and special features, the ROTEX GCU compact enables you to make the most of your energy saving options, as it can also be used as an efficient thermal store for other heat sources.

### **Systematic condensing technology**

With modern condensing technology, the GCU compact converts the fuel used into usable heat virtually without loss. This is both good for the environment and for economy, resulting in lower heating costs, less use of energy resources and a reduction in CO<sub>2</sub> emissions. During this process, flue gases are cooled to the extent that the steam they contain is condensed. The energy that is generated is used as heating energy.

### **The heat stays inside**

The storage tank is a twin layer structure made entirely out of plastic. The space between the inside and outside container has excellent foam heat insulation. This extreme heat insulation ensures low overall heat losses for the ROTEX GCU compact.

### **Optimum domestic hot water hygiene**

Hygienic fresh water technology, the GCU compact has an integral thermal store, with state-of-the-art stratification store for hygienic water provision.

### **Integral solar option**

The ROTEX GCU compact is optimally equipped for the utilisation of solar energy right from the start. So, if you decide to install a solar thermal system at a later date, it can be retrofitted quickly and easily.

### **Hybrid heating centre**

The GCU compact internal unit can furthermore be used as an efficient thermal store for additional heat sources, with bivalent options available.

## ✓ Made to measure for your home

### A perfect team

The ROTEX GCU compact combines modern gas condensing technology with a thermal store and solar storage tank in the smallest possible space. Despite its compact dimensions, the condensing heating boiler is, however, separated from the thermal store by a fully insulated cover. This reduces the surface losses of the unit to a minimum.

### Gas condensing/solar combination ROTEX GCU compact



### Solar system from Daikin



## ✓ Smart technology

### Intelligent Store Management (ISM)

Using intelligent Store Management for gas condensing boilers and thermal stores simultaneously, maximises energy efficiency, as well as heating and domestic hot water convenience. It can also cover the lower energy demand of highly insulated new build houses. In existing housing stock, intelligent control systems optimise burner runtimes and thus reduce emissions, while increasing energy efficiency.

### Lambda-Gx

The GCU compact gas condensing boiler is fitted with an automated combustion controller. This means the system is able to adapt to different gas types, so enabling the gas condensing boiler to be operated efficiently. It ensures that the combustion of most types of gas, including LPG, can be very tightly

controlled. Consistent application of condensing technology and the combination of a condensing boiler and thermal store, work together to keep energy consumption low.

### Easy control

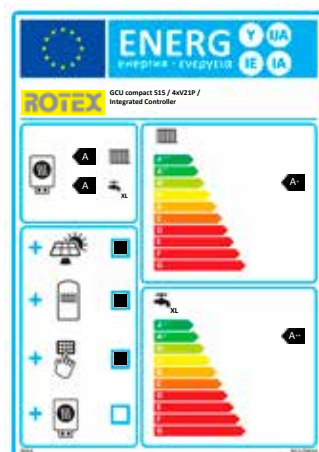
The digital RoCon controller is a simple and easy to use controller that is built into the GCU. Operating values and parameters are in plain text, allowing all the parameters and modes to be set and modified easily and quickly. The controller automatically recognises summer and winter time and switches the heating mode on or off depending on the demand. The in-built adjustable timer programs allow for convenient control of the central heating system and domestic hot water generation.

## ✓ Accessories

### High specification solar thermal technology

Daikin's highly efficient solar panels absorb solar energy and convert it into useful heat:

- › Combining 1 to 5 panel systems available
- › Pressurised or drain-back applications
- › Available for on-roof, in-roof and flat roof installations



### Remote user interface

Easy control with comprehensive management ensures the highest system efficiency and optimum convenience for heating and hot water. Simple and consistent handling for the ROTEX GCU compact is available with intuitive menu navigation and optional control via your smartphone using the ROTEX app.



# Gas Compact Unit

GCU315-533 / GCU315-533 Bivalent



Gas Compact Unit		GCU315	GCU315 Bivalent	GCU324	GCU324 Bivalent	GCU515	GCU515 Bivalent	GCU524	GCU524 Bivalent	GCU533	GCU533 Bivalent
Part Number		157401	157402	157409	157408	157403	157404	157410	157406	157405	157407
Efficiency	%	91%		91%		91%		91%		92%	
Energy rating		A		A		A		A		A	
Tank energy rating		B		B		B		B		B	
Tank storage volume		294		294		477		477		477	
DHW efficiency	%	75%		75%		83%		85%		80%	
DHW energy rating		A		A		A		A		A	
Tapping profile		L		L		XL		XL		XL	
Empty weight	kg	86		86		124		124		124	
Total filled weight	kg	386		386		624		624		624	
Dimensions (W x D x H)	mm	592x615x1950		592x615x1950		790x790x1950		790x790x1950		790x790x1950	
Max. permissible storage tank water temperature	°C	85		85		85		85		85	
Heat loss	kWh/24h	1.7		1.7		1.8		1.8		1.8	
<b>Domestic hot water (DHW) heat exchanger</b>											
Volume	Litres	19		19		24.5		24.5		24.5	
Maximum operating pressure	bar	6		6		6		6		6	
Surface area	m <sup>2</sup>	4		4		5		5		5	
<b>Storage tank charging heat exchanger</b>											
Surface area	m <sup>2</sup>	1.9		1.9		2.1		2.1		4.0	
<b>Auxiliary heat source heat exchanger (Bivalent models)</b>											
Surface area	m <sup>2</sup>	0.8		0.8		1.7		1.7		1.7	
<b>Thermal output data</b>											
D value (specific water flow to EN 625*)	l/min	22		24		23		25		27	
Max. draw-off rate for a period of 10min at (TCW = 10°C/TSP = 60°C/TWW = 40°C)**	l/min	19		21		20		23		24	
<b>Boiler data</b>											
Nominal output	kW	6.5-15		6.5-24		6.5-15		6.5-24		6.5-33	
Device type		C13x / C33x / C43x / C53x / C63x / C83x									
Electrical data	V/Hz	230/50		230/50		230/50		230/50		230/50	
Maximum permissible operating pressure	bar	3		3		3		3		3	
Maximum permissible operating temperature	°C	85		85		85		85		85	
Flue gas / air inlet connection diameter	mm	DN60 / 100									
SEDBUK rating (2009) (natural gas / LPG)	%	89.1 / 90.1		88.7 / 89.7		89.2 / 90.2		88.8 / 89.7		89.5 / 90.5	
<b>Piping connections</b>											
Hot and cold water	inch	1									
Heating (flow and return)	inch	1									

\* The specific water flow as defined in EN 625 is the domestic hot water flow which the Gas Compact Unit can supply at an average temperature increase of 30K with two successive withdrawals of water of ten minutes duration each, assuming a charging temperature of 65°C. An interval of 20 minutes is normally assumed between the withdrawals. The Gas Compact Unit achieves these values even with shorter intervals.

\*\* TCW: incoming cold water temperature; TSP: store set point temperature; TWW: tapping water temperature.

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Heating installer line: 0845 641 9070

Dedicated homeowner support line: 0845 641 9271

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