



*The competent brand for energy saving systems*

**NEW**

Gas-combi boiler  
CGG-1K-24/28

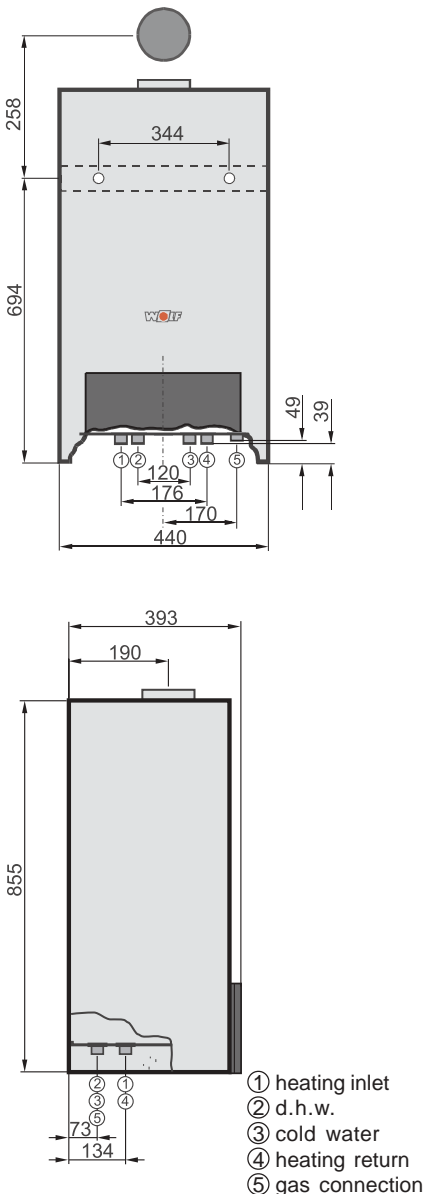


# Gas-combi boiler CGG-1K



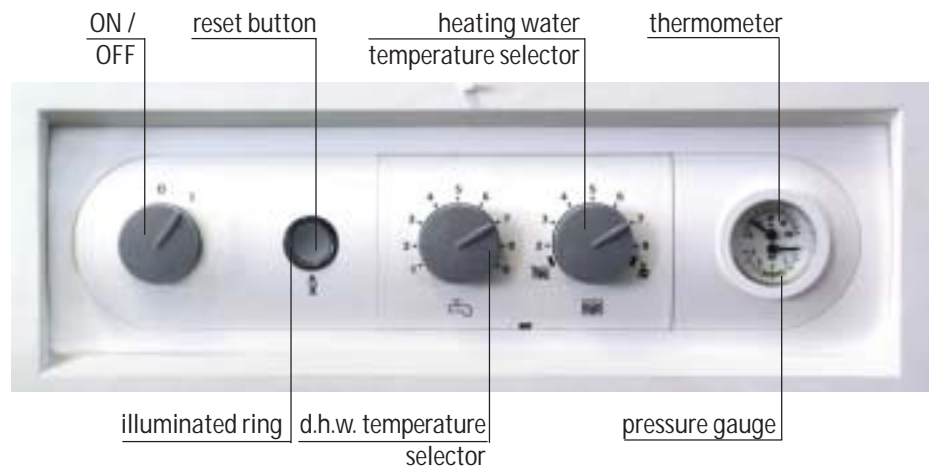
- room sealed fanned flue model gas combi boiler for low temperature heating and d.h.w. preparation with integrated d.h.w. heat exchanger made of stainless steel
- certified according to the valid EG-guidelines
- adequate for flow temperature up to 90°C, maximal permitted operation overpressure heating 3 bar and d.h.w. 10 bar, for sliding lowered operation, performance controlled in modulation, factory made equipped for operation with natural gas H, gas conversion kit for B/P accessory
- eBus-capable control for connection of digital Wolf control accessory
- with electrical ignition and ionisational flame monitoring and integrated flue gas fan, combustion air monitoring by differential pressure motor
- serially with 3-step heating circuit pump, expansion vessel 8 l and safety vessel
- unit for connection to air / flue gas pipe system, chimney or rather air / flue gas chimney of types C12x, C32x, C42x, C52x, and B32 in an open flue model or rather room sealed fanned flue operating method
- casing white RAL 9016 powder-coated, control with plastic cap in black
- energy efficiency according to efficiency guideline ☆☆☆ (3 stars according to 92/42/EWG)
- emissions according to NOx- class 3

## Technical data



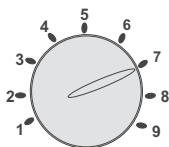
Type		CGG-1K-24	CGG-1K-28
Rated output	kW	24	28
Rated thermal load	kW	26,7	31,1
Lowest output (modulating)	kW	9,4	10,9
Lowest thermal load (modulating)	kW	10,4	12,0
Heating flow	G	¾"	¾"
Heating return	G	¾"	¾"
DHW connection	G	¾"	¾"
Cold water connection	G	¾"	¾"
Gas connection	R	¾"	¾"
Air/ flue gas connection	mm	100/60	100/60
Gas supply details:			
Natural gas H (Hi = 9,5 kWh/m <sup>3</sup> = 34,02 MJ/m <sup>3</sup> )	m <sup>3</sup> /h	2,8	3,3
LPG B/P (Hi = 12,9 kWh/kg = 46,3 MJ/kg)	kg/h	2,1	2,4
Gas supply pressure: Natural gas H	mbar	20	20
LPG B/P	mbar	50	50
Flow temperature	°C	40-90	40-90
Heating water temperature range (pre-selected)	°C	40-80	40-80
Max. overall pressure, heating	bar	3	3
Heating water heat exchanger content	Ltr.	0,5	0,5
Residual pump head/ stage 1/2/3			
Rated output (Δt = 20 K)	mbar	- / 220 / 320	- / 120 / 210
Specific throughput D to Δt = 30K	l/min	11,5	14,4
DHW throughput (version IT, ES)	l/min	2-8 (12)	2-8 (12)
Minimum flow pressure/ min. flow pressure to EN 625	bar	0,2 / 0,9	0,2 / 0,9
Max. permissible overall pressure	bar	10	10
DHW temperature range	°C	40-60	40-60
Expansion vessel: Total capacity	l	8	8
Inlet pressure	bar	0,75	0,75
Flue gas volume flow <sup>1)</sup>	g/s	13,8 / 14,9	17,2 / 18,2
Flue gas temperature <sup>1)</sup>	°C	125-165	125-165
Required boiler draught	Pa	0	0
Flue gas category to DVGW G 635	U <sub>02</sub>	U <sub>02</sub>	U <sub>02</sub>
Electrical connection	V~/Hz	230/50	230/50
Integral fuse A		3,15	3,15
Power consumption	W	120	120
Protection		IPX 4D	IPX 4D
Total weight (dry)	kg	40	42
CE ID		CE0085BR0377	CE0085BR0377

# Standard control



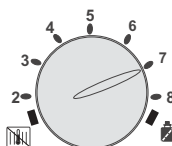
## Illuminated indicator ring as status display

Display	Explanation
Flashing green	Standby (power supply ON, burner OFF)
Constant green	Heat demand: pump running, burner OFF
Flashing yellow	Emissions test mode
Constant yellow	Burner ON, flame steady
Flashing red	Fault



### DHW temperature selector

The setting range 1-9 corresponds to a cylinder temperature of 40-60°C. Combined with a control thermostat for wall mounted gas fired boilers, the adjustment at the DHW temperature selector is disabled; instead the temperature is selected at the boiler control thermostat.



### Heating water temperature selector

The setting range 2-8 corresponds to a heating water temperature of 40-80°C. Combined with a control thermostat for wall mounted gas fired boilers, the adjustment at the heating water temperature selector is disabled; instead the temperature is selected at the boiler control thermostat.

## Settings




### Winter mode (position 2 to 8)

The circulation pump operates in heating mode.




### Summer mode

Switch set to  circulation pump OFF (heating OFF); only DHW heating, frost protection, pump anti-seizing protection enabled; i.e. the circulation pump runs for approx. 30s every 24 hours.



### Emissions test mode

Turning the switch to position  lets the boiler operate at maximum output. The illuminated indicator ring flashes yellow for 15 minutes or until the maximum flow temperature has been exceeded.



### Thermometer/ pressure gauge

The heating water temperature is displayed in the upper half, the heating system water pressure in the lower half.

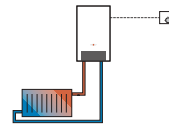
# Control accessories



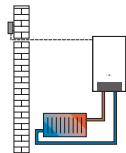
Standard controller; part of the standard delivery of the gas boiler



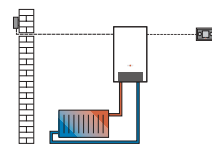
Room thermostat



BM programming module (incl. outside sensor) as weather compensated control thermostat



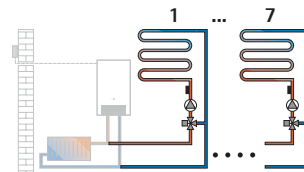
BM programming module with wall mounted base (accessory) as remote control



- Time programs for DHW and central heating
- LCD with background illumination
- Simple plain text guide through the menus
- Control by rotary selector with key function
- 4 function keys for frequently used functions (heating, DHW, setback, information)
- Installation either inside the boiler control unit or as remote control, in a wall hung base
- Option for mixer module MM
- Only one programming is required for multi-boiler systems
- May be extended with mixer module MM (up to 7 circuits)
- Error diagnosis

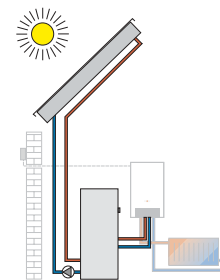
## MM mixer module

- Extension module for regulating of one mixer circuit
- Weather compensated flow temperature control
- Easy controller configuration by selecting one of the preset system versions
- BM programming module to clip into boiler, or extendable with wall mounting base as remote control
- Rast-5 connection technology
- Incl. flow temperature sensor



## Solar module SM1

- Extension module for the regulation of one solar circuit
- In conjunction with Wolf boilers, greater energy savings through intelligent cylinder reheating, i.e. blocking cylinder reheating when there is sufficient solar yield
- Temperature differential controller for one heat consumer
- Maximum cylinder temperature limit
- Display of the set and actual values on the BM programming module
- Integrated hours run meter
- Optional connection of heat meters
- Rast-5 connection technology
- Incl. collector sensor and cylinder sensor, each with sensor well



Two-wire eBUS vable

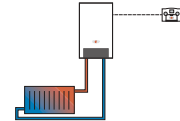


Two-wire eBUS cable



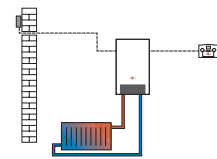
### ART

- Analog room temperature controller with day program for DHW and central heating
- Room temperature-dependent flow temperature
- Display for showing the room temperature, time and fault messages
- Room temperature -dependent frost protection



### AWT

- Analog weather-compensated temperature controller with day program for DHW and central heating
- Weather-compensated flow temperature
- Display for showing the room temperature, outside temperature, time and fault messages
- Room temperature hook-up
- Frost protection
- Automatic energy-saving device



### Wireless receiver for wireless outside temperature sensor and wireless remote control

Incl. radio clock (DCF77 Signal)



### External wireless sensor

(only in conjunction with a receiver for external wireless sensor and remote control, part no. 27 44 209)



### Wireless remote control

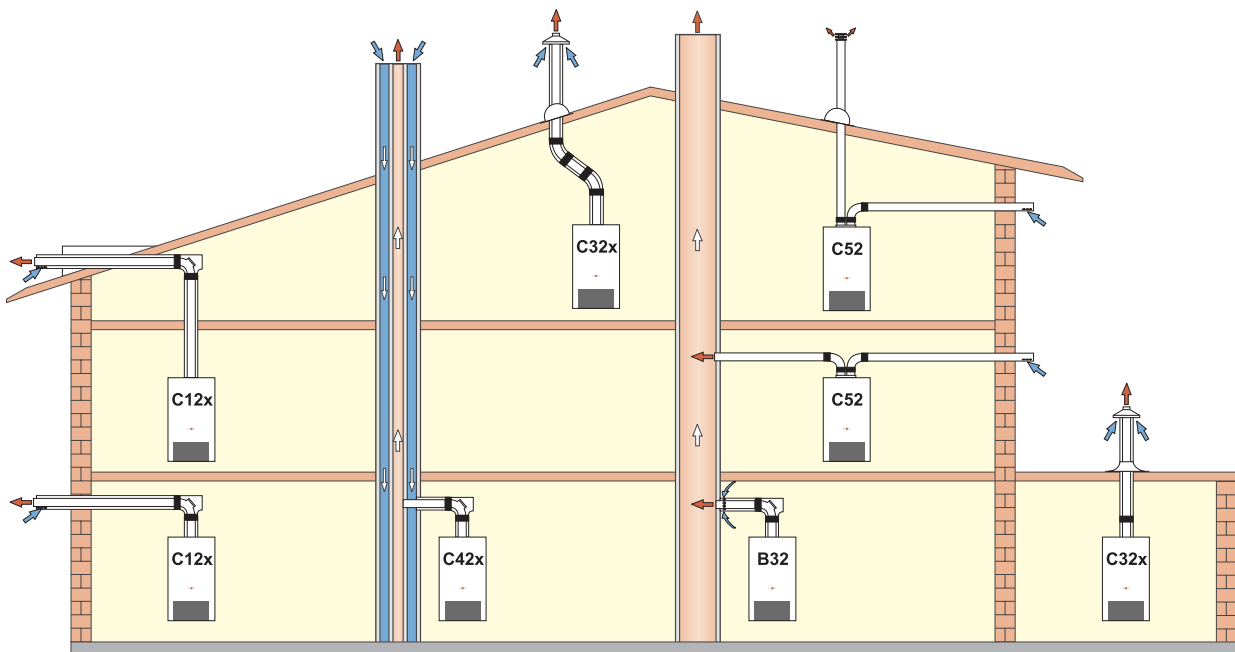
(only in conjunction with a receiver for external wireless sensor and remote control)  
Max. one wireless remote control per mixer circuit.



### ISM 1 - interface module

for transferring data to a PC and text messages to a mobile phone

# Air / flue gas system types



Type		max. length* [m] CGG-1K-24/28
C 12 x	External wall connection (balanced flue)	5 / 5
C 42 x	Connection to a moisture-resistant balanced flue chimney (LAS) max. pipe length from the centre of the boiler bend to the connector 2 m (balanced flue)	Calc. acc. to DIN 4705 (LAS-manufact)
B 32	Flue pipe inside a duct with horizontal, concentric connection pipe. max. pipe the centre of the boiler bend to the connector 2 m (open flue)	Calc. acc. to DIN 4705 (Chimney manufact.)
C 32 x	Vertical flue pipe for duct installation with vertical concentric connection pipe	5 / 5
C 52	Connection to a flue pipe on an external wall ( balanced flue) system 80/80 mm	13 / 12

**Note: Systems C 12x, C 32x and C 42x are also suitable for installation in garages.**

Where necessary, adapt the installation examples to the relevant building regulations and requirements in your country/ region. Discuss any questions relating to the installation, particularly of inspection pieces and ventilation terminals (ventilation generally required above 50 kW output) with your local heating engineer/flue gas inspector.

## Air pipe/ flue gas pipe

It is not allowed to exceed the calculated length of the air pipe/ flue gas pipe of 4 meters for installation of external wall hung boiler or for air pipe/ flue gas pipe through the roof!

The calculated length of the air pipe/ flue gas pipe consists of: - length of the straight duct  
- length of the bend pipes.

Thereby a 90° bend is calculated as 1 m and a 45° bend as 0,5 m.

Example:

Length of a straight air pipe/ flue gas pipe:

1,5 m

1 x 90° bend  $\triangleq$  1 m

2 x 45° bend  $\triangleq$  2 x 0,5 m

L = straight length + length of the bend

L = 1,5 m + 1 x 1 m + 2 x 0,5 m

L = 3,5 m

## Connection to moisture-resistant balanced flue chimney (LAS) or flue gas chimney

Is is not allowed to exceed the length of the straight air pipe/ flue gas pipe of 2 m for installation on a moisture-resistant balanced flue chimney (LAS) and for installation on a flue gas chimney. As a maximum, two 90° baffles can be assembled in addition to the bend of the boiler connection





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