

Gas condensing boiler  
Output: 60 - 140 kW



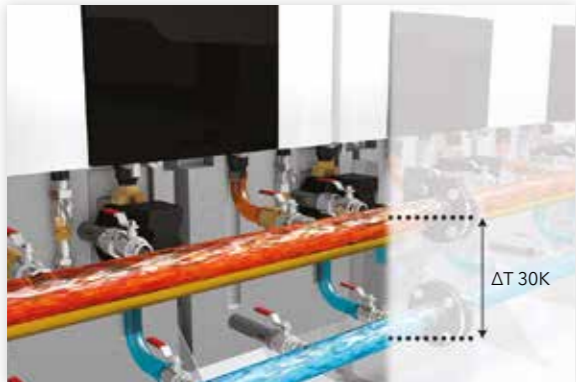
# R40 EVO

The commercial boiler redefined



# R40 EVO – Stunning flexibility in every application

**Designed to deliver**  
 The R40 EVO pushes the boundaries of engineering to offer the most advanced and capable wall mounted boiler yet. It is not only superior in every aspect of performance, but also incredibly flexible for commercial environments. This is not just a new boiler: R40 EVO is the future of the boiler.



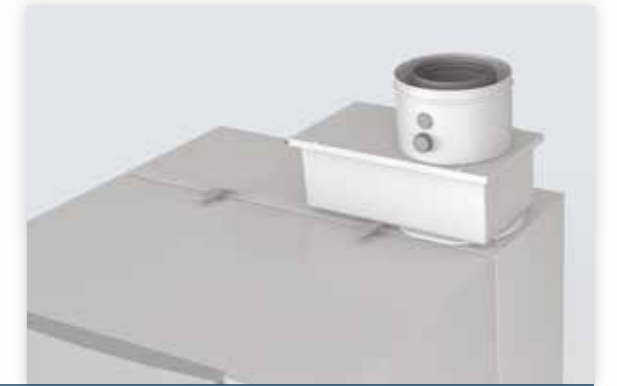
**30°C (30K) flow/return temperature differential**  
 An improved temperature differential allows easier integration with district heating systems while maintaining optimum efficiency.



**8 bar max water pressure**  
 With an enhanced capacity to supply heating and hot water to higher buildings, there is no need for hydraulic system separation.



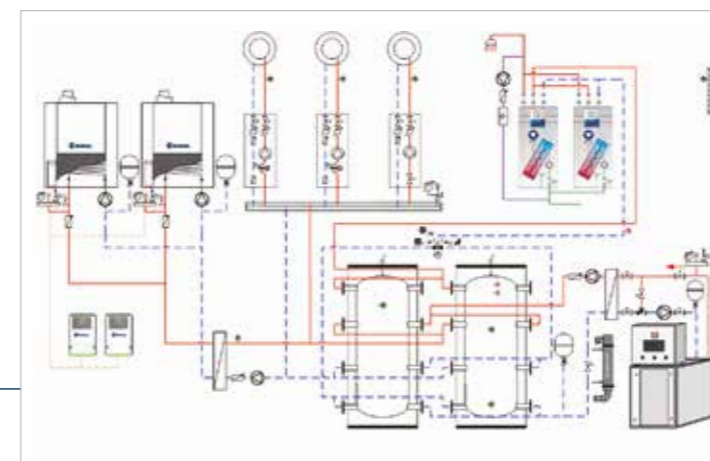
**Comprehensive control features**  
 A clear text display with integrated master-slave cascade functionality makes commissioning simple. Plus, an upgraded module capacity provides straightforward connections for additional heating zones, solar system or external heat sources.



**Flue connections**  
 Compatible with both parallel and concentric flue systems, simplifying room sealed installation in commercial buildings.



**Cascade packages**  
 In line and back to back arrangements facilitate quick installation of systems up to 1,1 MW – even in limited plant room spaces. They also provide inherent back up and system security.



**Pre-fabricated cascade rigs**  
 Single and cascade arrangements can be easily transported on site and set up by only one person.

# R40 EVO – Ultimate lifetime performance

## Economical in operation

The R40 EVO incorporates the latest high-performance technology to deliver unrivalled operation. As well as delivering impressive headline figures, it's also engineered to offer class leading efficiencies for its entire life cycle in the most demanding installations. This is a boiler that is both practical and future proof.



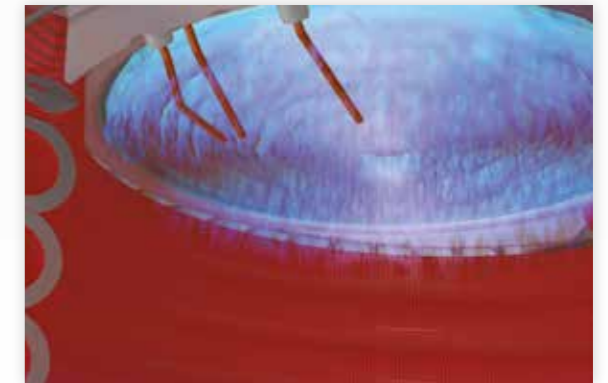
## Low heat loss and noise emissions

A fully insulated casing reduces noise emissions and excess radiation, recovering it within the appliance and restricting heat loss to just 81W.



## Low auxiliary energy consumption

An extremely low resistance within the heat exchanger's geometry ensures less than 0,15 kW of electrical energy is needed to run a 140 kW boiler at full load.



## Flat metal fibre cool flame burner

An optimised combustion zone achieves extremely low NOx emissions of 36 mg/kWh, which already complies with future Ecodesign requirements.



## Robust heat exchanger with double-wall geometry

Superb heat transfer at both full and partial load, achieving a flue gas temperature only 2°C above the return temperature at full load.



## Double helix coil

Minimum hydraulic resistance provides significant reduction in electrical energy usage by the boiler pump.



## Stainless steel 316L laser welded fin tube

Advanced robot laser welded technology minimises heat losses between tube and fin, guaranteeing the highest possible heat transfer from the extended heat exchanger surface.



# Superb access and control

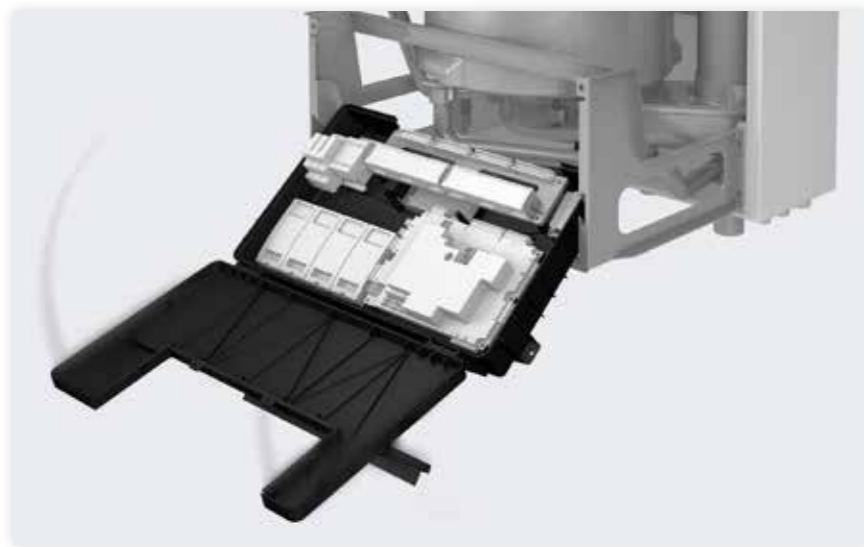
## Combustion unit

The combustion chamber of the R40 EVO is easily accessible, allowing the internal components to be maintained and cleaned quickly and effectively - greatly reducing time on site.



## Control box

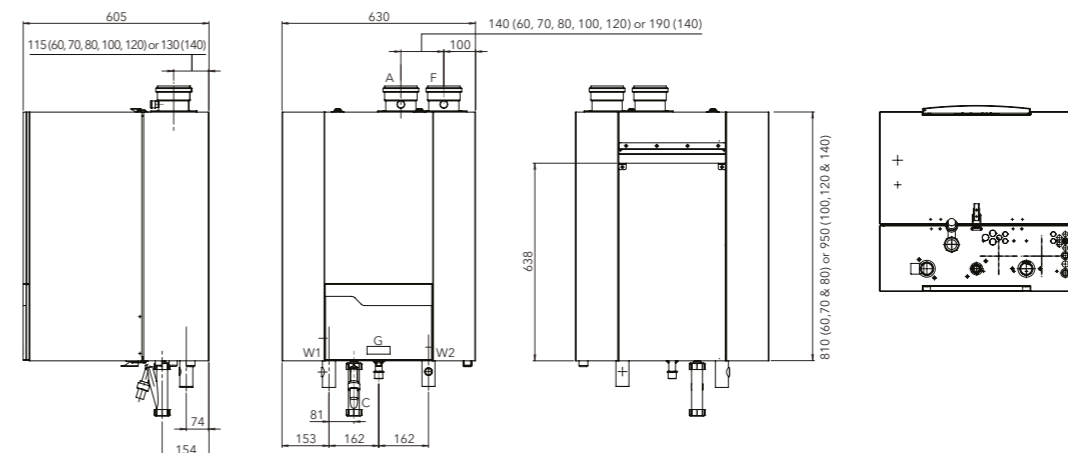
The R40 EVO's control box neatly folds open to offer simple management of electrical connections, plus rapid access to extension modules which regulate peripheral systems, zones or heat sources.



# Technical data R40 EVO

R40 EVO		60	70	80	100	120	140
Seasonal space heating efficiency class*	-	A	A	-	-	-	-
Nominal heat output at 80/60 °C	kW	56,5	65,5	75,3	92,9	111,9	130,4
Minimum heat output at 80/60 °C	kW	15,5	15,6	19,4	18,7	22,5	26,2
Nominal heat output at 50/30 °C	kW	60,4	70,0	79,7	98,9	118,5	137,8
Minimum heat output at 50/30 °C	kW	17,2	17,2	21,2	20,6	24,8	28,9
Nominal heat input Hi full load	kW	57,9	66,8	76,8	95,2	114,3	133,3
Minimum heat input Hi min load	kW	16,0	16,0	19,8	19,0	22,9	26,7
Efficiency at 80/60 °C Hi full load	%	97,6	98,0	98,0	97,6	97,9	97,8
Efficiency at 50/30 °C Hi min load	%	107,4	107,3	107,2	108,5	108,4	108,3
Efficiency at 40/30 °C min load	%	108,3	108,5	108,6	110,0	109,9	109,8
Annual efficiency (NNG 40/30 °C)	%	108,7	109,1	109,4	109,4	109,1	108,7
NOx level (EN15502)	mg/kWh	25	33	41	47	38	30
Flue gas temperature at 80/60 °C full load	°C	59	60	61	60	63	66
Max. permissible flue resistance	Pa	167	200	200	173	134	200
Water pressure max/min	bar	8/1					
Maximum temperature setpoint	°C	90					
Water flow at ΔT=10K	m³/h	4,8	5,6	6,4	8,0	9,6	11,2
Hydraulic resistance at ΔT=10K	kPa	60	72	88	28	36	44
Water flow at ΔT=20K (nominal)	m³/h	2,4	2,8	3,2	4,0	4,8	5,6
Hydraulic resistance at ΔT=20K	kPa	15	18	22	7	9	11
Water flow at ΔT=30K	m³/h	1,6	1,9	2,1	2,7	3,2	3,7
Hydraulic resistance at ΔT=30K	kPa	7	8	9	3	4	5
Electrical connection	V/Hz	230/50					
Electrical power consumption (excl. pump)	W	96	122	130	131	119	149
Noise level	dB(A)	55	55	56	62	57	59
Water content	l	6	6	6	9	9	9
Weight	kg	83	83	83	96	96	96
<b>Dimensions</b>							
Water connections (W1/W2)	-	R1¼"	R1¼"	R1¼"	R1½"	R1½"	R1½"
Gas connection (G)	-	R¾"	R¾"	R¾"	R1"	R1"	R1"
Flue gas connection (F)	mm	100	100	100	100	100	130
Air intake connection (A)	mm	100	100	100	100	100	130
Condensate connection (C)	mm	22					

\*In accordance with directive 2010/30/EU and regulation (EU) 813/2013





# Rendamax - quality comes first

Rendamax is a leading manufacturer of high quality central heating and hot water equipment. Represented by dedicated companies/distributors worldwide, all products in the company's range offer substantial benefits, including superb efficiencies, ultra-low energy consumption and the lowest environmental impact.

By creating long-term relationships and remaining at the forefront of boiler technology, Rendamax is committed to adding value for its customers, employees and shareholders alike.

## Discover the full range of gas condensing commercial boilers



### R40 EVO

- Wall mounted
- 6 models (60 - 140 kW)
- Cascade up to 1,1 MW
- Pre-mix modulating
- Highly efficient (up to 110 %)



### R600 EVO

- Floor standing
- 7 models (150 - 570 kW)
- Pre-mix modulating
- Highly efficient (up to 110 %)
- Stainless steel heat exchangers



### R3456 EVO

- Floor standing
- 29 models (650 - 2.000 kW)
- Highly efficient (up to 109,7 %)
- Stainless steel heat exchangers

## More information



[www.rendamax.com](http://www.rendamax.com)

