



RINNOVA COND 24S RINNOVA COND 28S RINNOVA COND 32S

# **RinNova Cond**

PRE-MIX CONDENSING BOILER



# **Condensing boiler**



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### **RinNova Cond**

RinNova Cond completes the range of BIASI **pre-mix condensing boilers**, perfect for radiator systems and suitable for radiating systems with mixing units.

RinNova Cond is a **compact** condensing boiler, which ensures high efficiency, low energy consumption and respect for the environment.

It is available in the versions for heating and DHW production, with a heat output of **24, 28 and 32 kW**.



## RinNova Cond PRE-MIX CONDENSING BOILER





# **Main features**

Primary condensing exchanger in stainless steel with steel coating to offer maximum resistance to corrosion

Pre-mix burner in stainless steel (NOx class 6)

Modulation 1:5 Methane and also LPG

DHW exchanger with stainless steel plates

7-litre expansion vessel

High-efficiency pump with low energy consumption

Integration with BIASI solar systems with a solar kit

Digital pressure reading display

Provision for remote control and external probe



Compact brass hydraulic unit. Delivery unit with motorised diverter, by-pass and system filling valve built in. ErP pump with manual pump release on return unit.



#### Boiler control panel



Basic remote control



Top remote control

## **Control panel operation**

Summer/winter/off selector

Heating temperature regulator

DHW temperature regulator

Digital pressure reading

Screen display of DHW and heating temperature

Fault diagnostics, lockout conditions and fault log display

The display works in the following modes:

- 1. INFO Information on the operating status and alarm history
- 2. FREE PROGRAMMING Parameters can be programmed to adapt boiler/system and user SET
- 3. INSTALLER PROGRAMMING Generator parameters
- 3. SUPPORT PROGRAMMING Authorised service centre parameters

### **Remote controls**

#### The RinNova Cond range has

**two remote class V commands** (65% deduction), in the Basic and Top versions, with a weekly programmable thermostat with up to 4 programmable time periods with independent temperatures. All the information on the boiler display can also be viewed remotely.

# **Technical specifications**

Technical specifications			<b>RinNova Cond</b>	
		24S	285	32S
Heating/DHW nominal heat input	kW	21.0 / 25.0	25.0 / 29.0	27.5 / 32.0
Heating/DHW minimum heat input	kW	5.1	5.1	5.1
Heating/DHW maximum output power 60°/80°C *	kW	20.6 / 24.6	24.5 / 28.4	24.0 / 31.3
Heating/DHW minimum output power 60°/80°C *	kW	4.8	4.8	5.8
Heating/DHW maximum output power 30°/50°C **	kW	22.6 / 26.9	26.9 / 31.1	29.9 / 34.8
Heating/DHW minimum output power 30°/50°C **	kW	5.3	5.3	6.6
Quantity of condensate at nom.Q. 30°/50°C (in heating mode) **	l/h	4	4.6	5.1
Quantity of condensate at min.Q. 30°/50°C (in heating mode) **	l/h	0.8	0.8	1
Condensate pH		4	4	4
Nominal efficiency 60°/80°C *	%	98.2	98.0	98.2
Min. efficiency 60°/80°C *	%	94.1	94.1	94.0
Nominal efficiency 30°/50°C **	%	107.5	107.4	108.6
Min. efficiency 30°/50°C **	%	104.9	104.9	105.7
Efficiency at 30% of load **	%	109.1	108.9	109.0
Energy efficiency ηs	%	93	93	93
Heat loss at the flue with burner operating	Pf (%)	1.6	1.8	1.6
Heat loss at the flue with burner off $\Delta T$ 50°C	Pfbs (%)	0.2	0.2	0.2
Heat loss towards the environment through the casing with the burner operating	Pd (%)	0.2	0.2	0.2
NOx class	no.	6	6	6
Weighted NOx [Hs] ***	mg/kWh	33	28	29
Minimum/maximum heating temperature ****	°C	25 / 85	25 / 85	25 / 85
Minimum/maximum heating pressure	bar	0.3 / 3	0.3 / 3	0.3 / 3
Available heating head (at 1000 l/h)	mbar	385	385	385
Total expansion vessel capacity	I	7	7	7
Minimum/maximum DHW temperature	°C	30 / 60	30 / 60	30 / 60
Minimum/maximum DHW pressure	bar	0.3 / 10	0.3 / 10	0.3 / 10
Maximum flow rate (ΔT=25 K) / (ΔT=35 K)	l/min	14.3 / 10.0	16.5 / 11.5	18.4 / 12.9
Specific DHW flow rate ( $\Delta$ T=30 K) *****	l/min	12.0	13.8	15.4
Voltage/output at nominal heat input	V~/ W	230 / 91	230 / 114	230 / 106
Output at minimum heat input	W	14	14	14
Output in stand-by	W	3.3	3.3	3.3
Protection rating	no.	IPX5D	IPX5D	IPX5D
Minimum/maximum flue gas temperature #	°C	52 / 82	56 / 85	57 / 83
Minimum/maximum flue gas mass flow rate #	kg/s	0.0025 / 0.0111	0.0025 / 0.0129	0.0030 / 0.0142
Minimum/maximum air mass flow rate #	kg/s	0.0024 / 0.0107	0.0024 / 0.0124	0.0029 / 0.0137
Max. coaxial flue gas outlet length (Ø 60/100 mm / Ø 80/125 mm)	m	10 / 14	10 / 12	10 / 12
Max. twin flue gas outlet length (Ø 80+80 mm)	m	40	40	40
Height x Width x Depth	mm	700 x 400 x 300	700 x 400 x 300	700 x 400 x 300
Weight	kg	29.3	31.3	31.3
Boiler water content	I	2.0	2.0	2.5
Fuel		Methane (G20) - Propane (G31)	Methane (G20) - Propane (G31)	Methane (G20) - Propane (G31)

\* With return water temperatures that do not permit condensation. \*\* With return water temperatures that permit condensation. \*\*\* With coaxial flue gas outlet 60/100 L 0.9 m and G20 METHANE gas. \*\*\*\* At minimum output power. \*\*\*\*\* Reference standard EN 625. # Tested with 80 mm 1 + 1 twin outlet and G20 methane gas.



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