



## 2.4 - OPERATING DATA ACCORDING TO UNI 10348

For the adjustment data: NOZZLES - PRESSURES - DIAPHRAGMS - FLOW RATES - CONSUMPTIONS refer to the paragraph ADAPTATION TO OTHER TYPES OF GAS.





	KON	R 18 / C 18	R 24 / C 24	R 28 / C 28	R 35 / C 35
Nominal heat input in CH / DHW mode	kW	18,0 / 23,4	23,4 / 23,4	28,0 / 28,0	33,0 / 33,0
Minimum heat input with Nat. Gas / Propane	kW	3,0 / 4,4	3,0 / 4,4	4,4 / 5,6	4,4 / 5,6
Nominal heat output	kW	17,4	22,6	27,2	32,0
Minimum heat output	kW	2,9	2,9	4,3	4,3
Nominal output in condensation 50/30 °C	kW	18,4	23,6	28,9	33,8
Minimum heat output in condensation 50/30 °C	kW	3,2	3,2	4,7	4,7
Combustion efficiency at full load	%	97,6	97,2	97,6	97,2
Combustion efficiency at part load	%	98,6	98,6	98,1	98,1
Heat losses through the casing (min.-max.)	%	2,0 - 0,74	2,0 - 0,7	1,47 - 0,43	1,47 - 0,2
(*) Net flue gas temperature $t_f - t_a$ (max.)	°C	49	57,6	48	57
Flue gas mass flow rate (min.-max)	g/s	1,3 - 7,9	1,3 - 10,3	2,0 - 12,5	2,0 - 14,7
Air excess $\lambda$	%	20,6	20,6	23,0	23,0
CO <sub>2</sub>	%	9,5 - 9,5	9,5 - 9,5	9,3 - 9,3	9,3 - 9,3
CO at 0% of O <sub>2</sub> (min. - max)	ppm	20 - 95	20 - 121	19 - 100	19 - 120
Maximum production of condensate	kg/h	2,9	3,7	4,5	5,3
NOx class		5	5	5	5
Chimney heat losses with burner ON (min. - max.)	%	1,4 - 2,4	1,4 - 2,8	1,9 - 2,4	1,9 - 2,8
Chimney heat losses with burner OFF	%	0,60	0,46	0,41	0,34
Prevalenza disponibile alla base del camino min. / max.	Pa	2 / 70	2 / 70	2 / 70	2 / 70

Notes: (\*) Room Temperature = 20°C Data obtained with appliance operated with Nat Gas (G20)

### 2.4.1 - DATA ACCORDING TO ErP DIRECTIVE

Description	Symbol	Unit	KON							
			R18	C18	R24	C24	R28	C28	R35	C35
Nominal Heat Output	P <sub>nomiale</sub>	kW	17		23		27		32	
Seasonal space heating energy efficiency	$\eta_s$	%	93		92		93		93	
<b>Seasonal efficiency class in heating mode</b>			<b>A</b>		<b>A</b>		<b>A</b>		<b>A</b>	
<b>For CH only and combination boilers: useful heat output</b>										
Useful Heat Output in high-temperature regime (Tr 60 °C / Tm 80 °C)	P <sub>4</sub>	kW	10,3		12,7		15,8		18,2	
Useful efficiency at nom. heat output in high-temperature regime (Tr 60 °C / Tm 80 °C)	$\eta_4$	%	88,1		87,0		88,4		87,5	
Useful heat output at 30% of nom. heat output in low-temperature regime (Tr 30 °C)	P <sub>1</sub>	kW	3,4		4,2		5,3		6,1	
Useful efficiency at 30% of nom. heat output in low-temperature regime (Tr 30 °C)	$\eta_1$	%	97,8		96,7		97,5		97,5	
Range-rated boiler: YES / NO			YES		YES		YES		YES	
<b>Auxiliary electricity consumption</b>										
At full load	el <sub>max</sub>	kW	0,126		0,126		0,136		0,136	
At part load	el <sub>min</sub>	kW	0,091		0,091		0,093		0,093	
In stand-by mode	P <sub>SB</sub>	kW	0,003		0,003		0,003		0,003	
<b>Other items</b>										
Stand-by heat loss	P <sub>stb</sub>	kW	0,0824		0,0824		0,1136		0,1136	
Emissions of nitrogen oxides	NOx	Mg/kWh	37		50		55		43	
<b>For CH &amp; DHW production boilers</b>										
Declared load profile			-	<b>M</b>	-	<b>M</b>	-	<b>M</b>	-	<b>L</b>
Energy efficiency in DHW production mode	$\eta_{wh}$	%	-	65	-	65	-	69	-	78
Daily electricity consumption	Q <sub>elec</sub>	kWh	-	-	-	-	-	-	-	-
Daily fuel consumption	Q <sub>fuel</sub>	kWh	-	8,98	-	8,98	-	8,43	-	15,001
Inside sound power level	L <sub>wa</sub>	dB (A)	-	50,7	-	51	-	55,2	-	55,2
<b>Seasonal efficiency class in DHW production mode</b>			-	<b>A</b>	-	<b>A</b>	-	<b>A</b>	-	<b>A</b>

## 2.5 - GENERAL FEATURES

	KON	R 18	C 18	R 24	C 24	R 28	C 28	R 35	C 35
Appliance category		II <sub>2H3P</sub>		II <sub>2H3P</sub>		II <sub>2H3P</sub>		II <sub>2H3P</sub>	
Minimum heat. circuit output ( $\Delta t$ 20 °C)	l/min	1,2		1,2		1,7		1,7	
Minimum heating circuit pressure	bar	0,5		0,5		0,5		0,5	
Maximum heating circuit pressure	bar	3		3		3		3	
Primary circuit content	l	2,2		2,2		2,8		2,8	
Maximum operating temperature in heat.	°C	85		85		85		85	
Minimum operating temperature in heat.	°C	30		30		30		30	
Expansion vessel total capacity	l	8		8		8		8	
Expansion vessel pre-load	bar	1		1		1		1	
Maximum system capacity (max temp. calc.)	l	184		184		184		184	
Minimum domestic hot water circuit flow rate	l/min.	-	2,0	-	2,0	-	2,0	-	2,0
Minimum domestic hot water circuit pressure	bar	-	0,5	-	0,5	-	0,5	-	0,5
Maximum domestic hot water circuit pressure	bar	-	6	-	6	-	6	-	6
Domestic hot water specific flow rate ( $\Delta t$ 30 °C) "D"	l/min.	-	11,2	-	11,2	-	13	-	16
Domestic hot water flow rate limiter	l/min.	-	10	-	10	-	12	-	15
Production of D.H.W. in continuous operation with $\Delta t$ 45 K	l/min.	-	7,34	-	7,34	-	8,6	-	10,1
Production of D.H.W. in continuous operation with $\Delta t$ 40 K	l/min.	-	8,26	-	8,26	-	9,7	-	11,4
Production of D.H.W. in continuous operation with $\Delta t$ 35 K	l/min.	-	9,44	-	9,44	-	11,1	-	13,0
Production of D.H.W. in continuous operation with $\Delta t$ 30 K	l/min.	-	11,0	-	11,0	-	12,9	-	15,2
Production of D.H.W. in continuous operation with $\Delta t$ 25 K (*)	l/min.	-	13,2	-	13,2	-	15,5	-	18,3
Voltage/Frequency electric power supply	°C	-	38-60	-	38-60	-	38-60	-	38-60
Fuse on the power supply	V-Hz	230/50		230/50		230/50		230/50	
Maximum absorbed output	A (F)	4		4		4		4	
Protection rating	IP	X5D		X5D		X5D		X5D	
Net weight	kg	32,5	34	32,5	34	35	36,5	35	36,5
Gross weight	kg	35,5	37	35,5	37	38	39,5	38	39,5
<b>F Factor</b>		-	1	-	1	-	2	-	2
<b>R Factor</b>		-		-		-		-	
(*) mixed									