

## 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 B 28
Nominal heat input in CH / DHW mode	kW	28,0 / 28,0
Minimum heat input with Nat. Gas / Propane	kW	4,4 / 5,6
Nominal heat output	kW	27
Minimum heat output	kW	4,2
Nominal output in condensation 50/30 °C	kW	28,5
Minimum heat output in condensation 50/30 °C	kW	4,56
Combustion efficiency at full load	%	97,5
Combustion efficiency at part load	%	98,0
Heat losses through the casing (min.-max.)	%	3,4 - 1,2
(*) Net flue gas temperature $t_f - t_a$ (max.)	°C	50,5
Flue gas mass flow rate (min.-max)	g/s	1,9 - 12,3
Air excess $\lambda$	%	20,6
CO <sub>2</sub> (min. - max)	%	9,3 - 9,2
CO at 0% of O <sub>2</sub> (min. - max)	ppm	13 - 70
Maximum production of condensate	kg/h	4,5
NOx class		5
Chimney heat losses with burner ON (min. - max.)	%	2,9 - 2,4
Chimney heat losses with burner OFF	%	0,3
Prevalenza disponibile alla base del camino min. / max.	Pa	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 B 28
Nominal Heat Output	P <sub>nomiale</sub>	kW	27
Seasonal space heating energy efficiency	$\eta_s$	%	93
<b>Seasonal efficiency class in heating mode</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	15,6
Useful efficiency at nom. heat output in high-temperature regime (Tr 60 °C / Tm 80 °C)	$\eta_4$	%	86,8
Useful heat output at 30% of nom. heat output in low-temperature regime (Tr 30 °C)	P <sub>1</sub>	kW	5,26
Useful efficiency at 30% of nom. heat output in low-temperature regime (Tr 30 °C)	$\eta_1$	%	97,5
Caldaia con regolazione range di potenza: SI / NO			SI
<b>Auxiliary electricity consumption</b>			
At full load	el <sub>max</sub>	kW	0,087
At part load	el <sub>min</sub>	kW	0,058
In stand-by mode	P <sub>SB</sub>	kW	0,009
<b>Other items</b>			
Stand-by heat loss	P <sub>stb</sub>	kW	0,0843
Emissions of nitrogen oxides	NOx	Mg/kWh	58
<b>For CH &amp; DHW production boilers</b>			
Declared load profile			<b>XL</b>
Energy efficiency in DHW production mode	$\eta_{wh}$	%	68,1
Daily electricity consumption	Q <sub>elec</sub>	kWh	-
Daily fuel consumption	Q <sub>fuel</sub>	kWh	27,99
Inside sound power level	L <sub>wa</sub>	dB (A)	-
<b>Seasonal efficiency class in DHW production mode</b>			<b>B</b>

## 2.5 - CARATTERISTICHE GENERALI

		KON B 28
Appliance category		II <sub>2H3P</sub> / I <sub>2H</sub>
Minimum heat. circuit output ( $\Delta t$ 20 °C)	l/min	3
Minimum heating circuit pressure	bar	0,5
Maximum heating circuit pressure	bar	3
Primary circuit content	l	2
Maximum operating temperature in heat.	°C	85
Minimum operating temperature in heat.	°C	30
Expansion vessel total capacity	l	10
Expansion vessel pre-load	bar	1
Maximum system capacity (max temp. calc.)	l	186
Minimum domestic hot water circuit flow rate	l/min.	2,5
Minimum domestic hot water circuit pressure	bar	0,5
Maximum domestic hot water circuit pressure	bar	8
Domestic hot water specific flow rate ( $\Delta t$ 30 °C) "D"	l/min.	18,4
Domestic hot water flow rate limiter	l/min.	12
Production of D.H.W. in continuous operation with $\Delta t$ 45 K	l/min.	9
Production of D.H.W. in continuous operation with $\Delta t$ 40 K	l/min.	10,1
Production of D.H.W. in continuous operation with $\Delta t$ 35 K	l/min.	11,5
Production of D.H.W. in continuous operation with $\Delta t$ 30 K	l/min.	13,4
Production of D.H.W. in continuous operation with $\Delta t$ 25 K (*)	l/min.	16,1
Temperature adjustable in domestic hot water mode	°C	25-65
Voltage/Frequency electric power supply	V-Hz	230/50
Fuse on the power supply	A (F)	2
Maximum absorbed output	IP	X4D
Protection rating	kg	70,5
Net weight	kg	84,5
Gross weight	bar	2,5
DHW Expansion vessel pre-load	l	3
Expansion vessel DHW total capacity	l	60
Capabilities water tank	l.	163
<b>F factor</b>		2
<b>R factor</b>		

(\*) Mixing water (\*\*) the first 10 mins of draw-off with storage tank water at 60°C and cold water at 10°C