



2.4 - OPERATING DATA ACCORDING TO UNI 10348

For the adjustment data: NOZZLES - PRESSURE - DIAGRAMS - FLOW RATES - CONSUMPTION refer to the paragraph ADAPTATION TO OTHER TYPES OF GAS.







	KON ^e	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	4,67	4,67
Combustion efficiency at full load	%	97,6	97,2	97,6	97,26
Combustion efficiency at part load	%	98,6	98,6	98,1	98,1
Heat losses through the casing (min.-max.)	%	2,0 - 0,67	2,0 - 0,6	1,47 - 0,43	1,47 - 0,2
(*) Net flue gas temperature $t_f - t_a$ (max.)	°C	49,0	57,4	47,9	57,0
Flue gas mass flow rate (min.-max)	g/s	1,35 - 8,1	1,35 - 10,5	2 - 12,5	2 - 14,7
Air excess λ	%	24,3	24,3	23,0	23,0
CO ₂	%	9,2 - 9,2	9,2 - 9,2	9,3 - 9,3	9,3 - 9,3
CO at 0% of O ₂ (min. - max)	ppm	22 - 95	22 - 114	11 - 93	11 - 120
Maximum production of condensate	kg/h	2,9	3,8	4,5	5,3
NOx class		5	5	5	5
Chimney heat losses with burner ON (min. - max.)	%	1,4 - 2,4	1,4 - 2,9	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 ^e							
			R18	C18	R24	C24	R28	C28	R35	C35
Nominal Heat Output	P _{nomiale}	kW	17		23		27		32	
Seasonal space heating energy efficiency	η_s	%	93		92		93		93	
Seasonal efficiency class in heating mode			A		A		A		A	
For CH only and combination boilers: useful heat output										
Useful Heat Output in high-temperature regime (Tr 60 °C / Tm 80 °C)	P ₄	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)	η_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 ₁	kW	3,4		4,2		5,3		6,1	
Useful efficiency at 30% of nom. heat output in low-temperature regime (Tr 30 °C)	η_1	%	97,8		96,7		97,5		97,5	
Range-rated boiler: YES / NO			YES		YES		YES		YES	
Auxiliary electricity consumption										
At full load	el _{max}	kW	0,085		0,085		0,116		0,116	
At part load	el _{min}	kW	0,012		0,012		0,012		0,012	
In stand-by mode	P _{SB}	kW	0,003		0,003		0,003		0,003	
Other items										
Stand-by heat loss	P _{stb}	kW	0,0824		0,0824		0,1136		0,1136	
Emissions of nitrogen oxides	NOx	Mg/kWh	37		50		55		43	
For CH & DHW production boilers										
Declared load profile			-	M	-	M	-	M	-	L
Energy efficiency in DHW production mode	η_{wh}	%	-	65	-	65	-	69	-	78
Daily electricity consumption	Q _{elec}	kWh	-	-	-	-	-	-	-	-
Daily fuel consumption	Q _{fuel}	kWh	-	8,98	-	8,98	-	8,43	-	15,001
Inside sound power level	L _{wa}	dB (A)	-	50,7	-	51	-	55,2	-	55,2
Seasonal efficiency class in DHW production mode			-	A	-	A	-	A	-	A

2.5 - GENERAL FEATURES

	KON ^e	R 18		C 18		R 24		C 24		R 28		C 28		R 35		C 35	
Appliance category		II _{2H3P}				II _{2H3P}				II _{2H3P}				II _{2H3P}			
Minimum heat. circuit output (Δt 20 °C)	l/min	1,2		1,2		1,7		1,7		1,7		1,7		1,7		1,7	
Minimum heating circuit pressure	bar	0,5		0,5		0,5		0,5		0,5		0,5		0,5		0,5	
Maximum heating circuit pressure	bar	3		3		3		3		3		3		3		3	
Primary circuit content	l	2,2		2,2		2,2		2,2		2,2		2,2		2,2		2,2	
Maximum operating temperature in heat.	°C	85		85		85		85		85		85		85		85	
Minimum operating temperature in heat.	°C	30		30		30		30		30		30		30		30	
Expansion vessel total capacity	l	8		8		10		10		10		10		10		10	
Expansion vessel pre-load	bar	1		1		1		1		1		1		1		1	
Maximum system capacity (max temp. calc.)	l	164				164				205				205			
Minimum domestic hot water circuit flow rate	l/min.	-	2	-	2	-	2	-	2	-	2	-	2	-	2	-	2
Minimum domestic hot water circuit pressure	bar	-	0,5	-	0,5	-	0,5	-	0,5	-	0,5	-	0,5	-	0,5	-	0,5
Maximum domestic hot water circuit pressure	bar	-	6	-	6	-	6	-	6	-	6	-	6	-	6	-	6
Domestic hot water specific flow rate (Δt 30 °C) "D"	l/min.	-	11,2	-	11,2	-	13	-	13	-	13	-	13	-	13	-	13
Domestic hot water flow rate limiter	l/min.	-	10	-	10	-	15	-	15	-	15	-	15	-	15	-	15
Production of D.H.W. in continuous operation with Δt 45 K	l/min.	-	7,4	-	7,4	-	8,6	-	8,6	-	8,6	-	8,6	-	8,6	-	8,6
Production of D.H.W. in continuous operation with Δt 40 K	l/min.	-	8,3	-	8,3	-	9,7	-	9,7	-	9,7	-	9,7	-	9,7	-	9,7
Production of D.H.W. in continuous operation with Δt 35 K	l/min.	-	9,5	-	9,5	-	11,1	-	11,1	-	11,1	-	11,1	-	11,1	-	11,1
Production of D.H.W. in continuous operation with Δt 30 K	l/min.	-	11,0	-	11,0	-	12,9	-	12,9	-	12,9	-	12,9	-	12,9	-	12,9
Production of D.H.W. in continuous operation with Δt 25 K (*)	l/min.	-	13,3	-	13,3	-	15,5	-	15,5	-	15,5	-	15,5	-	15,5	-	15,5
Voltage/Frequency electric power supply	°C	-	35-60	-	35-60	-	35-60	-	35-60	-	35-60	-	35-60	-	35-60	-	35-60
Fuse on the power supply	V-Hz	230/50		230/50		230/50		230/50		230/50		230/50		230/50		230/50	
Maximum absorbed output	A (F)	3,15		3,15		3,15		3,15		3,15		3,15		3,15		3,15	
Protection rating	IP	X5D		X5D		X5D		X5D		X5D		X5D		X5D		X5D	
Net weight	kg	32,5	34	32,5	34	35,5	37	35,5	37	35,5	37	35,5	37	35,5	37	35,5	37
Gross weight	kg	35,5	37	35,5	37	38,5	40	38,5	40	38,5	40	38,5	40	38,5	40	38,5	40
F Factor		-	1	-	1	-	2	-	2	-	2	-	2	-	2	-	2
R Factor		-		-		-		-		-		-		-		-	
(*) mixed																	