

## Nuvola Duo-tec+



Technical pages



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- Wide modulation ratio up to 1:7 better efficiency and noiseless operation
- Gas Adaptive Control (GAC) system: combustion automatic control to maintain constantly the highest level of efficiency
- High DHW performances: up to 385 lt in 30 minutes ( $\Delta T$  30°C)
- Stainless steel 40 lt cylinder
- Digital control panel with back-lighted LCD display
- High efficiency full modulating circulating pump
- Frontal access for advanced diagnostics
- Ø50 mm flue pipe mod. 24 kW, 40 m max lenght

### Hydraulic system

3 way electric diverter valve  
Stainless steel premixing burner  
Stainless steel heat exchanger  
Stainless steel tank  
Modulating fan with electronic speed adjusting system  
Automatic by-pass  
High efficiency full modulating pump of the heating circuit with built-in air vent  
System to prevent pump and diverter valve sticking operating every 24 hours  
Central relief valve set at 3 bar  
Tank relief valve set at 8 bar  
Sanitary 2 litres expansion vessel available as optional  
Sanitary recirculation option

### Thermoregulation system

Built-in climatic regulation  
(outdoor sensor available as optional)  
Control of multi-zones system option

### Control system

Overheat limit thermostat of the water/flue exchanger  
Hydraulic pressure switch to prevent boiler operating in event of low water  
Overheat limit thermostat against flues overheat  
Electronic temperatures control by NTC sensors  
Anti legionella function  
Full anti-frost device  
Electronic thermometer  
Digital heating circuit pressure gauge

Product code		Combi	
		16 GA 7219553	24 GA 7219554
Maximum heat input (DHW)	kW	16,5	24,7
Maximum heat input (heating)	kW	12,4	20,6
Minimum heat input	kW	2,3	3,5
Rated heat output for DHW circuit	kW	16	24
Rated heat output <i>Prated</i>	kW	12	20
Useful heat output at rated heat output and high temperature regime* $P_d$	kW	12	20
Useful heat output at 30% of rated heat output and low temperature regime** $P_l$	kW	4	6,7
Load profile		XL	XL
Seasonal space heating energy efficiency class		A	A
Water heating energy efficiency class		A	A
Seasonal space heating energy efficiency $\eta_s$	%	92	93
Useful efficiency at rated heat output and high temperature regime* $\eta_d$	%	88,1	88
Useful efficiency at 30% of rated heat output and low temperature regime** $\eta_l$	%	98	98
Efficiency $P_n$ (lower calorific value) - average temperature 70 °C	%	97,8	97,7
Efficiency 30% (lower calorific value) - return temperature 30 °C	%	108,8	108,8
NOx emissions	mg/kWh	15	15
Minimum working temperature	°C	-5	-5
Expansion vessel capacity	l	7,5	7,5
Heating temperature range	°C	25-80	25-80
DHW temperature range	°C	35-60	35-60
Tank capacity	l	40	40
Tank expansion vessel capacity	l	2	2
Specific flow (EN 13203-1)	l/min	11,1	14,9
DHW production $\Delta T$ 25°C <sup>(1)</sup>	l/min	9,2	13,8
DHW production at discharge $\Delta T$ 30°C <sup>(1)</sup>	l/30'	275	385
Minimum pressure heating circuit	bar	3	3
Minimum pressure DHW circuit	bar	8	8
Coaxial flue system Ø 60/100 max length	m	10	10
Dual flue system Ø 80 max length	m	80	80
Maximum flue mass flow rate	kg/s	0,008	0,012
Minimum flue mass flow rate	kg/s	0,001	0,002
Maximum flue temperature	°C	75	80
Dimensions (h x l x p)	mm	950 x 600 x 466	
Net weight	kg	62	62
Gas type		Natural gas/LPG	
Power consumption	W	76	88
Auxiliary electrical power consumption - Full load $e_{max}$	kW	0,025	0,030
Auxiliary electrical power - Partial load $e_{min}$	kW	0,013	0,013
Auxiliary electrical power - Stand-by $P_{SB}$	kW	0,003	0,003
Sound power level, indoor $L_{WA}$	dB	52	49
Grade of protection		IPX5D	IPX5D

\* High temperature regime: 60°C return temperature at heater inlet and 80°C flow temperature at heater outlet

\*\* Low temperature: 30°C return temperature (at heater inlet)

<sup>(1)</sup> without flow restrictor