Nuvola Duo-tec+

- 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 500 lt in 30 minutes (ΔT 30°C)
- Stainless steel 40 lt cylinder
- Digital control panel with back-lit LCD display
- Remote control Baxi Mago available as optional
- Included DHW expansion vessel (mod. 33 GA VES)
- High efficiency full modulating circulating pump
- Frontal access for advanced diagnostics
- Ø50 mm flue pipe mod. 24 kW, 40 m max length
- Installation kit supplied with the boiler (telescopic connection pipes/gas inlet/gas tap)

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 4 litres expansion vessel available as optional (mod. 16, 24 kW)
Sanitary recirculation option

Thermoregulation system

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

Control system

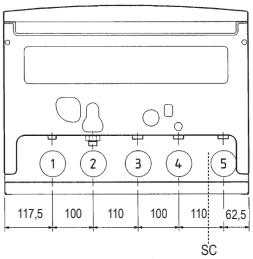
Overheat limit thermostat of the water/flue exchanger
Hydraulic pressure switch to prevent boiler operating in event of low water
Overheat limit thermostat against flues overheat
Electronic temperatures control by NTC sensors
Anti legionella function
Full anti-frost device
Electronic thermometer
Digital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

		Combi		
		16 GA	24 GA	33 GA VES
Maximum heat input (DHW)	kW	16,5	24,7	34
Maximum heat input (heating)	kW	12,4	20,6	28,9
Minimum heat input	kW	2,3	3,5	4,8
Rated heat output for DHW circuit	kW	16	24	33
Useful heat output at rated heat output and high temperature regime* P_4	kW	12	20	28
Useful heat output at 30% of rated heat output and low temperature regime** P_1	kW	4	6,7	9,4
Load profile		XL	XL	XL
Seasonal space heating energy efficiency class		A	A	A
Water heating energy efficiency class		A	A	A
Seasonal space heating energy efficiency ηs	%	92	93	93
Useful efficiency at rated heat output and high temperature regime* $\eta 4$	%	88,1	88	88
Useful efficiency at 30% of rated heat output and low temperature regime** $\eta 1$	%	98	98	98,1
Efficiency Pn (lower calorific value) - average temperature 70 °C	%	97,8	97,7	97,7
Efficiency 30% (lower calorific value) - return temperature 30 °C	%	108,8	108,8	108,9
NOx emissions	mg/kWh	22	15	15
Minimum working temperature	°C	-5	-5	-5
Expansion vessel capacity	l	7,5	7,5	7,5
Heating temperature range	°C	25-80	25-80	25-80
DHW temperature range	°C	35-60	35-60	35-60
Tank capacity	l	40	40	40
Tank expansion vessel capacity	l	2	2	2
Specific flow (EN 13203-1)	l/min	11,1	14,9	18,3
DHW production ΔT 25°C (1)	l/min	9,2	13,8	18,9
Maximum pressure heating circuit	bar	3	3	3
Maximum pressure DHW circuit	bar	8	8	-
Coaxial flue system Ø 60/100 max length	m	10	10	10
Dual flue system Ø 80 max length	m	80	80	80
Maximum flue mass flow rate	kg/s	0,008	0,012	0,016
Minimum flue mass flow rate	kg/s	0,001	0,002	0,002
Maximum flue temperature	°C	75	80	80
Dimensions (h x w x d)	mm		950 x 600 x 466	
Net weight	kg	62	62	67,5
Gas type			Natural gas/LPG	
Rated power supply	W	76	88	106
Auxiliary electrical power consumption - Full load *elmax*	kW	0,025	0,030	0,041
Auxiliary electrical power - Partial load *elmin*	kW	0,013	0,013	0,013
Auxiliary electrical power - Stand-by P_{SB}	kW	0,003	0,003	0,003
Sound power level, indoor L_{WA}	dB	52	49	53
Grade of protection		IPX5D	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)
(1) without flow restrictor

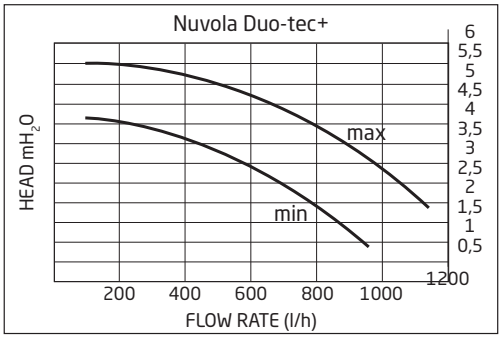
BAXI

Nuvola Duo-tec+
16, 24, 33 VES

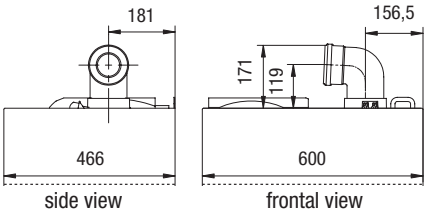


bottom view

1 DHW outlet G 1/2"
2 Mains water G 1/2"
3 Heating system return G 3/4"
4 Heating system flow G 3/4"
5 Gas inlet G 3/4"
SC Condensing trap possible to connect on a pipe Ø22



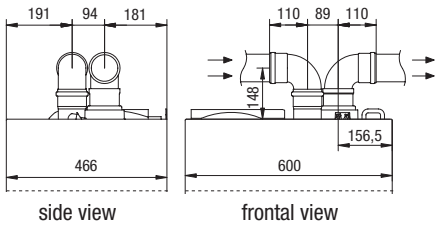
Coaxial flue system



Flue pipe dimensions (mm)

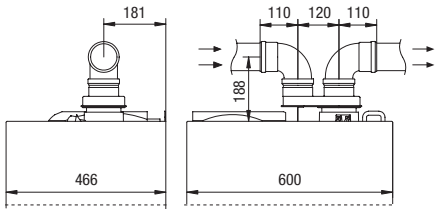
Model	Tubes maximum length (m)		Length reduction for a 90° bend insertion (m)	Length reduction for a 45° bend insertion (m)
	Ø 60/100	Ø 80/125		
Nuvola Duo-tec+	10	25	1	0,5

Dual flue system



Flue pipe dimensions (mm)

with adjustable dual flue kit



Model	RIGID FLUE PIPE								
	Length (m)			Length (m)			Length (m)		
	intake pipe (L1) Ø80, flue pipe (L2) Ø80			intake pipe (L1) Ø80, flue pipe (L2) Ø60			intake pipe (L1) Ø80, flue pipe (L2) Ø50*		
	L max = L1+L2	L1 max	L2 max = L max-L1 max	L max = L1+L2	L1 max	L2 max = L max-L1 max	L max = L1+L2	L1 max	L2 max
Nuvola Duo-tec+	80	15	65	40	10	30	40	10	30

Ø 80 mm Length reduction for a 90° bend insertion (m) = 0,5 m, Length reduction for a 45° bend insertion (m) = 0,25 m
Ø 60 mm Length reduction for a 90° bend insertion (m) = 1 m, Length reduction for a 45° bend insertion (m) = 0,5 m
Ø 50 mm Length reduction for a 90° bend insertion (m) = 3 m, Length reduction for a 45° bend insertion (m) = 1,5 m

Model	FLEXIBLE FLUE PIPE					
	Length (m)			Length (m)		
	intake pipe (L1) Ø80, flue pipe (L2) Ø80			intake pipe (L1) Ø80, flue pipe (L2) Ø50*		
	L max = L1+L2	L1 max	L2 max = L max-L1 max	L max = L1+L2	L1 max	L2 max
Nuvola Duo-tec+	80	15	65	40	10	30

Ø 80 mm Length reduction for a 90° bend insertion (m) = 0,5 m, Length reduction for a 45° bend insertion (m) = 0,25 m
Ø 50 mm Length reduction for a 90° bend insertion (m) = 2 m, Length reduction for a 45° bend insertion (m) = 1 m

For flue pipes Ø 80 and 60, the maximum length of intake pipe (L1 max) can't be exceeded
* Ø50 flue pipe only for 24 kW boilers. The maximum length of intake (L1 max) and flue (L2 max) pipes can't be exceeded.

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