

14 Appendix

14.1 Product fiche - Combination boilers

Product fiche for combination boilers

Baxi 800 Combi 2		824	830	836
Space heating - Temperature application		Medium	Medium	Medium
Water heating - Declared load profile		XL	XL	XL
Seasonal space heating energy efficiency class		A	A	A
Water heating energy efficiency class		A	A	A
Rated heat output (<i>Prated or Psup</i>)	kW	20	25	25
Space heating - Annual energy consumption	kWh GJ	62	77	77
Water heating - Annual energy consumption	kWh GJ	16	16	16
Seasonal space heating energy efficiency	%	99.0	98.8	98.8
Water heating energy efficiency	%			
Sound power level L_{WA} indoors	dB	50	51	51



See

For specific precautions about assembling, installing and maintaining consult the relevant section as detailed on the Contents page.

14.2 Package fiche - boilers

Package fiche for boilers indicating the space heating energy efficiency of the package

Seasonal space heating energy efficiency of boiler

①
 'I' %

Temperature control

from fiche of temperature control

Class I = 1%, Class II = 2%, Class III = 1.5%,
 Class IV = 2%, Class V = 3%, Class VI = 4%,
 Class VII = 3.5%, Class VIII = 5%

②
 + %

Supplementary boiler

from fiche of boiler

Seasonal space heating energy efficiency (in %)

③
 $(\text{input} - 'I') \times 0.1 = \pm \text{input} \%$

Solar contribution

from fiche of solar device

Collector size (in m²)

Tank volume (in m³)

Collector efficiency (in %)

Tank rating ⁽¹⁾
 A* = 0.95, A = 0.91,
 B = 0.86, C = 0.83,
 D - G = 0.81

$(\text{'III'} \times \text{input} + \text{'IV'} \times \text{input}) \times 0.9 \times (\text{input} / 100) \times \text{input} = + \text{input} \%$

(1) If tank rating is above A, use 0.95

Supplementary heat pump

from fiche of heat pump

Seasonal space heating energy efficiency (in %)

⑤
 $(\text{input} - 'I') \times 'II' = + \text{input} \%$

Solar contribution AND Supplementary heat pump

select smaller value

$0.5 \times \text{input} \text{ OR } 0.5 \times \text{input} = - \text{input} \%$

Seasonal space heating energy efficiency of package

⑦
 %

Seasonal space heating energy efficiency class of package

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G	F	E	D	C	B	A	A⁺	A⁺⁺	A⁺⁺⁺
<30%	≥30%	≥34%	≥36%	≥75%	≥82%	≥90%	≥98%	≥125%	≥150%

Boiler and supplementary heat pump installed with low temperature heat emitters at 35°C ?

from fiche of heat pump

⑦
 + (50 x 'II') = %

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as this efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.

- I The value of the seasonal space heating energy efficiency of the preferential space heater, expressed in %.
- II The factor for weighting the heat output of preferential and supplementary heaters of a package as set out in the following table.
- III The value of the mathematical expression: $294 / (11 \cdot \text{Prated})$, whereby 'Prated' is related to the preferential space heater.
- IV The value of the mathematical expression $115 / (11 \cdot \text{Prated})$, whereby 'Prated' is related to the preferential space heater.

Weighting of boilers

$P_{sup} / (Prated + P_{sup})^{(1)(2)}$	II, package without hot water storage tank	II, package with hot water storage tank
0	0	0
0.1	0.3	0.37
0.2	0.55	0.70
0.3	0.75	0.85
0.4	0.85	0.94
0.5	0.95	0.98
0.6	0.98	1.00
≥ 0.7	1.00	1.00

(1) The intermediate values are calculated by linear interpolation between the two adjacent values.
(2) Prated is related to the preferential space heater or combination heater.

Package efficiency

Baxi 800 Combi 2		824	830	836
Temperature control X	%			
Temperature control Y	%			

14.3 Package fiche - Combination heaters (boilers or heat pumps)

Package fiche for combination heaters (boilers or heat pumps) indicating the water heating energy efficiency of the package

Water heating energy efficiency of combination heater

①
 %

Declared load profile:

Solar contribution

from fiche of solar device

Auxiliary electricity

②
 $(1.1 \times 'I' - 10\%) \times 'II' - 'III' - 'I' = +$ %

Water heating energy efficiency of package under average climate

③
 %

Water heating energy efficiency class of package under average climate

		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		G	F	E	D	C	B	A	A⁺	A⁺⁺	A⁺⁺⁺
<input type="checkbox"/> M	<27%	≥27%	≥30%	≥33%	≥36%	≥39%	≥65%	≥100%	≥130%	≥163%	
<input type="checkbox"/> L	<27%	≥27%	≥30%	≥34%	≥37%	≥50%	≥75%	≥115%	≥150%	≥188%	
<input type="checkbox"/> XL	<27%	≥27%	≥30%	≥35%	≥38%	≥55%	≥80%	≥123%	≥160%	≥200%	
<input type="checkbox"/> XXL	<28%	≥28%	≥32%	≥36%	≥40%	≥60%	≥85%	≥131%	≥170%	≥213%	

Water heating energy efficiency under colder and warmer climate conditions

Colder: ^③ - 0.2 x ^② = %

Warmer: ^③ + 0.4 x ^② = %

The energy efficiency of the package of products provided for in this fiche may not correspond to its actual energy efficiency once installed in a building, as this efficiency is influenced by further factors such as heat loss in the distribution system and the dimensioning of the products in relation to building size and characteristics.

- I The value of the water heating energy efficiency of the combination heater, expressed in %.
- II The value of the mathematical expression $(220 \cdot Q_{ref})/Q_{nonsol}$, where Q_{ref} is taken from Regulation EU 811/2013, Annex VII Table 15 and Q_{nonsol} from the product fiche of the solar device for the declared load profile M, L, XL or XXL of the combination heater.
- III The value of the mathematical expression $(Q_{aux} \cdot 2,5)/(220 \cdot Q_{ref})$, expressed in %, where Q_{aux} is taken from the product fiche of the solar device and Q_{ref} from Regulation EU 811/2013, Annex VII Table 15 for the declared load profile M, L, XL or XXL.

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