12 Appendix

12.1 ErP information

12.1.1 Product fiche - Boiler space heaters

Tab.8 Product fiche for boiler space heaters

Brand name – Product name		Paramount 30	Paramount 40
Seasonal space heating energy efficiency class (A++ to G)		A	A
Rated heat output *(Prated or Psup)*	kW	29	37
Seasonal space heating energy efficiency	%	93	93
Annual energy consumption	GJ	90	114
Sound power level L_{WA} indoors	dB	50	53

See
For specific precautions about assembling, installing and maintaining: Safety, page 5

12.1.2 Product fiche - Boiler space heaters

Tab.9 Product fiche for boiler space heaters

Brand name – Product name		Paramount 50	Paramount 60	Paramount 80	Paramount 95	Paramount 115
Seasonal space heating energy efficiency class (A ++ to G)		A	A	–	–	–
Rated heat output *(Prated or Psup)*	kW	49	56	75	93	112
Seasonal space heating energy efficiency	%	93	93	–	–	–
Annual energy consumption	GJ	151	175	–	–	–
Sound power level L_{WA} indoors	dB	56	55	55	58	60

See
For specific precautions about assembling, installing and maintaining: Safety, page 5

12.1.3 Product fiche – temperature control

Tab.10 Product fiche for temperature control

Brand name – Product name		Paramount		
		with outside temperature sensor (supplied state)	with room device RGx(1)	with outside temperature sensor and room device RGx(1)
Class		II	V	VI
Contribution to energy efficiency index heating	%	2.0	3.0	4.0
(1) RGx = room device e.g. Basic/Top				

12.1.4 Package fiche - Boilers

Fig.5 Package fiche for boilers indicating the water 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 %)

(- 'I') x 0.1 = ± (3) %

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

('III' x + 'IV' x) x 0.9 x (/100) x = + (4) %

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

Supplementary heat pump

from fiche of heat pump

Seasonal space heating energy efficiency (in %)

(- 'I') x 'II' = + (5) %

Solar contribution AND Supplementary heat pump

select smaller value

0.5 x (4) OR 0.5 x (5) = - (6) %

Seasonal space heating energy efficiency of package

(7) %

Seasonal space heating energy efficiency class of package

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.

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I The value of the space heating energy efficiency of the preferential space heater, expressed in %.

II The factor for weighting the heat output of the preferential and supplementary heaters of a package as set out in the following table.

III The value of the mathematical expression: 26.73/Prated, whereby 'Prated' is related to the preferential space heater.

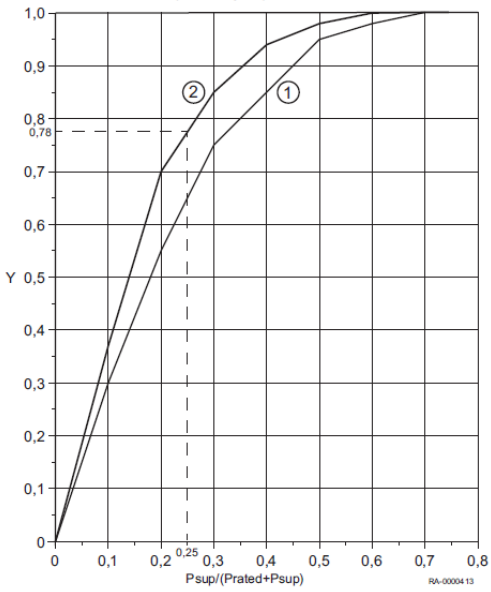
IV The value of the mathematical expression 10.45/Prated, whereby 'Prated' is related to the preferential space heater.

Tab.11 Weighting of boilers

Psup / (Prated + Psup)(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) Psup: Rated heat output of the supplementary heater (here: heat pump)
Prated: Rated heat output of the preferential space heater (here: boiler)

Fig.6 Interpolation of the intermediate values (example)



Key:

Y-axis:

- Value "II", package without hot water storage tank (curve 1)
- Value "II", package with hot water storage tank (curve 2)

Example:

- Package with hot water storage tank => curve 2
- PSUP/(Prated+Psup) = 0.25
- => Interpolated value for "II", package with hot water storage tank (curve 2) = **0.78**

Tab.12 Package efficiency

Brand name - Product name		Paramount 30	Paramount 40
Regulator ISR Plus with outside temperature sensor	%	95	95

Tab.13 Package efficiency

Brand name - Product name		Paramount 50	Paramount 60	Paramount 80	Paramount 95	Paramount 115
Regulator ISR Plus with outside temperature sensor	%	95	95	–	–	–