

Seasonal space heating energy efficiency of heat pump

%

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 %

+ %

Supplementary boiler

From fiche of boiler

Seasonal space heating energy efficiency (in %)

$$(\text{III} - \text{I}) \times \text{II} = - \text{III} \%$$

Solar contribution

From fiche of solar device

Collector size (in m²)

Tank volume (in m³)

Collector efficiency (in %)

Tank rating
A* = 0,95, A = 0,91,
B = 0,86, C = 0,83,
D-G = 0,81

$$(\text{III} \times \text{IV} + \text{V} \times \text{VI}) \times 0,45 \times (\text{VII} / 100) \times \text{VIII} = + \text{IX} \%$$

Seasonal space heating energy efficiency of package under average climate

%

Seasonal space heating energy efficiency class of package under average climate



Seasonal space heating energy efficiency under colder and warmer climate conditions

Colder: - 'V' = %

Warmer: + 'VI' = %

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 the 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	II	III	IV	V	VI
55°C	126%	#REF!	4.46	1.74	34%	40%
35°C	183%	#REF!	4.61	1.80	54%	82%

Model	HU071MR U44, HN0916M NK4 / HU071MR U44, HN091MR NK5
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Seasonal space heating energy efficiency of heat pump ① %

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') × 'II' = - ③ %

Solar contribution
From fiche of solar device

Collector size (in m²)

Tank volume (in m³)

Collector efficiency (in %)

Tank rating
 A* = 0,95, A = 0,91,
 B = 0,86, C = 0,83,
 D-G = 0,81

('III' × + 'IV' ×) × 0,45 × (/100) × = + ④ %

Seasonal space heating energy efficiency of package under average climate ⑤ %

Seasonal space heating energy efficiency class of package under average climate

G	F	E	D	C	B	A	A*	A**	A***
< 30 %	≥ 30 %	≥ 34 %	≥ 36 %	≥ 75 %	≥ 82 %	≥ 90 %	≥ 98 %	≥ 125 %	≥ 150 %

Seasonal space heating energy efficiency under colder and warmer climate conditions

Colder: ⑤ - 'V' = % Warmer: ⑤ + 'VI' = %

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 the 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	II	III	IV	V	VI
55°C	126%	0.02	4.46	1.74	34%	40%
35°C	183%	0.02	4.61	1.80	54%	82%



Model HU071MR U44 / HN0916T NB1



Seasonal space heating energy efficiency of heat pump ① %

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 %)

$$(\text{III} - \text{IV}) \times \text{II} = - \text{III} \%$$
③ %

Solar contribution
From fiche of solar device

Collector size (in m²)

Tank volume (in m³)

Collector efficiency (in %)

Tank rating:
 A* = 0,95, A = 0,91,
 B = 0,86, C = 0,83,
 D-G = 0,81

$$(\text{III} \times \text{I} + \text{IV} \times \text{II}) \times 0,45 \times (\text{V} / 100) \times \text{VI} = + \text{III} \%$$
④ %

Seasonal space heating energy efficiency of package under average climate ⑤ %

Seasonal space heating energy efficiency class of package under average climate

G	F	E	D	C	B	A	A*	A**	A***
< 30 %	≥ 30 %	≥ 34 %	≥ 36 %	≥ 75 %	≥ 82 %	≥ 90 %	≥ 98 %	≥ 125 %	≥ 150 %

Seasonal space heating energy efficiency under colder and warmer climate conditions

Colder: ⑥ - 'V' = % Warmer: ⑦ + 'VI' = %

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 the 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	II	III	IV	V	VI
55°C	117%	0.02	4.82	1.88	18%	46%
35°C	176%	0.02	4.65	1.82	46%	77%



Water heating energy efficiency of combination heater

%

Declared load profile:

Solar contribution

From fiche of solar device

Auxiliary electricity

$$(1,1 \times \Psi - 10\%) \times \text{III} - \text{III} - \Psi = + \text{[]} \%$$

Water heating energy efficiency of package under average climate

%

Water heating energy efficiency class of package under average climate

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

Water heating energy efficiency under colder and warmer climate conditions

Colder: - 0,2 × = %

Warmer: + 0,4 × = %

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 the 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
125%

Model HU071MR U44/HN0916M NK4



Seasonal space heating energy efficiency of heat pump 1 %

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 %

+ %

Supplementary boiler

From fiche of boiler

Seasonal space heating energy efficiency (in %)

$$(\text{III} - 1) \times \text{IV} = - \text{V} \%$$

Solar contribution

From fiche of solar device

Collector size (in m²) Tank volume (in m³) Collector efficiency (in %)

Tank rating
A' = 0,95, A = 0,91,
B = 0,96, C = 0,83,
D-G = 0,91

$$(\text{III} \times \text{IV} + \text{V} \times \text{VI}) \times 0,45 \times (\text{VII} / 100) \times \text{VIII} = + \text{IX} \%$$

Seasonal space heating energy efficiency of package under average climate 2 %

Seasonal space heating energy efficiency class of package under average climate



Seasonal space heating energy efficiency under colder and warmer climate conditions

Colder: $\text{III} - \text{IV} = \text{V} \%$

Warmer: $\text{III} - \text{IV} = \text{V} \%$

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 the 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	II	III	IV	V	VI
55°C	126%	0,00	4,45	1,74	0%	-100%

Model HU071MR U44/HN0916M NK4/OSHW-200F AEU

Water heating energy efficiency of combination heater 1 %

Declared load profile:

Solar contribution

From fiche of solar device

Auxiliary electricity

$$[1,1 \times \text{I} - 10\%] \times \text{II} - \text{III} - \text{IV} = + \text{V} \%$$

Water heating energy efficiency of package under average climate 2 %

Water heating energy efficiency class of package under average climate



Water heating energy efficiency under colder and warmer climate conditions

Colder: $\text{III} - 0,2 \times \text{IV} = \text{V} \%$

Warmer: $\text{III} + 0,4 \times \text{IV} = \text{V} \%$

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 the 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
118%