73air
Calculation tool for ErP-compliant AHUs

73 air

One-click overview of ErP-compliant energy recovery.
For clever decisions.

Hoval

73air.
One-click overview for clever decisions.

Don’t waste your time calculating the complex ratio of high efficiency and low pressure drop. Complying with the Ecodesign Directive has never been easier.

Simply set the base parameters in our CASER program and let the 73air calculation mode work its magic for you. 73air immediately gives you a list of all ErP-compliant heat recovery systems and the “pressure reserve” shows the scope for design.

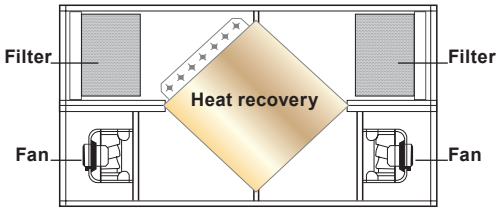
This allows you to make important decisions at the very start of the design process:

- Can I make the AHU smaller?
- Can I use cheaper filters with a higher pressure drop?
- Can I use cheaper fans with higher consumption?

Give yourself the very best start – with the 73air calculation mode in CASER!

73air.
The simple answer to a complex calculation.

The 5 elements of an ErP-compliant AHU...



The Ecodesign Directive ErP requires the calculation of a basic configuration consisting of
- energy recovery
- 2 filters and
- 2 fans

...require a complex calculation.

Energy recovery
× Fan²
× Filter²
= ErP-compliant??

The dynamic calculation algorithm considers pressure drops of
- **energy recovery** (EU 1253/2014)
  - **filters** (Eurovent 4/21) and the
  - system efficiencies of **fans** (EU 327/2011)

73air gives you a clear overview – with just one click

All you need to do is set the base parameters in our CASER software. The 73air mode will then list all ErP-compliant heat recovery systems – together with an indication of your scope for design.

List of possible plate heat exchangers:
Each one leads to an ErP-compliant AHU.

73air

Pressure reserve:
The greater the value, the more scope you have for design.

General	Heating										
Exchanger code	nt,wet [%]	nt,dry [%]	Q HRS. [kW]	t22 [°C]	ΔP1 [Pa]	ΔP2 [Pa]	Δp_HRS [Pa]	nt_nrvu [%]	ErP	E-Bonus 2018 [W/(m³/s)]	Eff. Class
KV-100/P1/0640	73,6	73,6	16,9	19,7	154	149	177	73,6	2018	19	H1
SV-100/-A/0640	77,2	77,2	17,7	20,4	223	217	108	77,2	2018	125	H1
SV-100/-E/0640	73,4	73,4	16,9	19,7	200	195	81	73,4	2018	11	H1
KV-085/P1/0640	73,5	73,5	16,9	19,7	206	199	74	73,5	2018	14	H1
KV-100/P3/0640	76,2	76,2	17,5	20,2	256	249	26	76,2	2018	97	H1
SV-100/AS/0640	74,8	74,8	17,2	20,0	244	236	24	74,8	2018	53	H1

CASER

Pressure drop values of heat recovery

Thermal efficiency

73air.
100% tested data in CASER

73air is integrated in CASER
The 73air calculation tool is part of our CASER design program as well as the DLL application. Get CASER at
www.hoval-energyrecovery.com

CASER

Reliable data – 100% tested
You can rely on the results in CASER. All data is 100% tested in our test laboratory at TÜV Süd in Germany and approved by independent institutes.

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

05/2020 | Subject to technical changes, typesetting and printing errors!

Ask for advice today!

Tel. +423 399 24 00
info.klimatechnik@hoval.com
www.hoval-energyrecovery.com