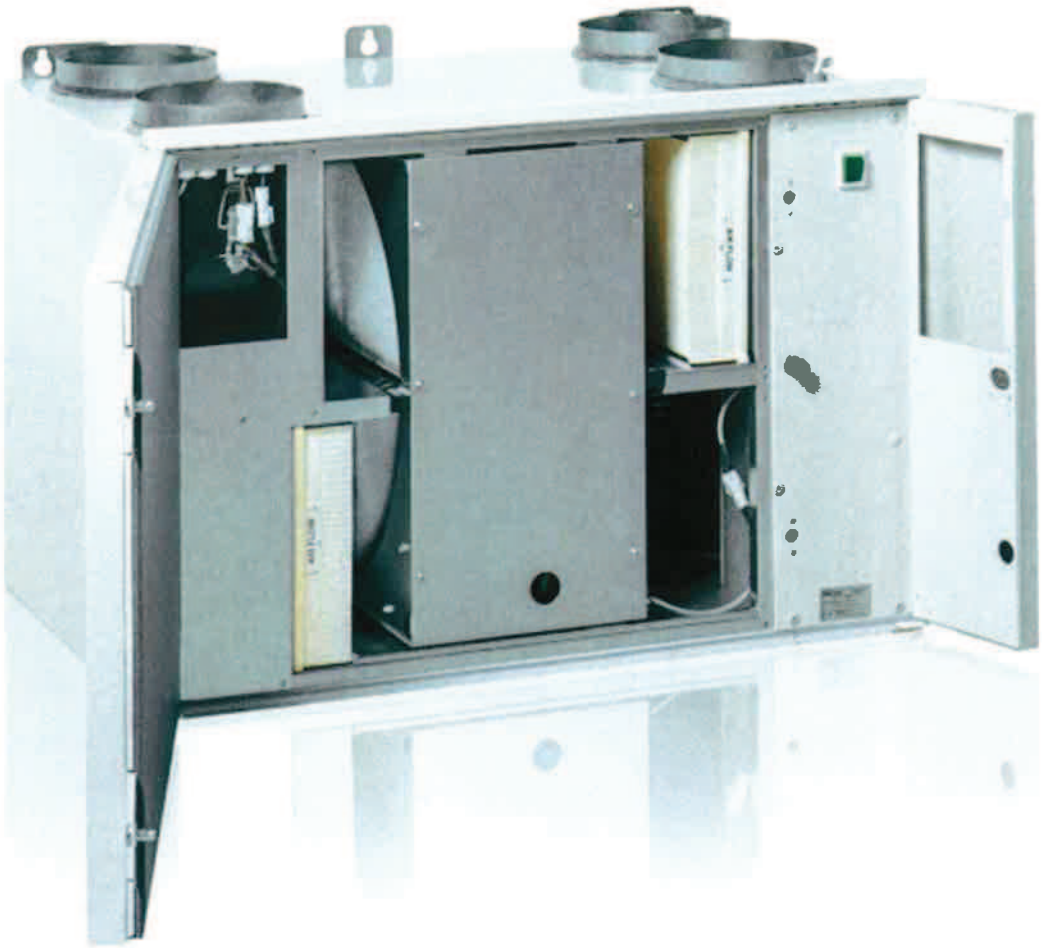
Pingvin XL epbd-test



Performance of ventilation units Enervent Pingvin XL eco ECE, eco EC and eco EDE

- thermal efficiency
- maximum electric power
- Summer by-pass (summer night cooling)

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Assignment

Performance of ventilation unit Enervent Pingvin XL eco EC, eco ECE and eco EDE

Measurements

The thermal efficiency of the ventilation unit was determined following the standard NBN EN 308 in accordance with the procedure described in §5.2.1 of document doc_4.4_S.a. of EPBD specific procedures.

The maximum electric power used by the machine was measured in accordance with the procedure described in §5.1.3 of document doc_4.4_S.a. of EPBD specific procedures.

Pingvin XL eco EC was the same unit as Pingvin XL eco ECE but with the supply air heater detached from the unit.

The measurements took place in August-September 2013 in the lab of Ensto Enervent Oy, Kipinätie 1, 06150 Porvoo, FINLAND

Results of the measurements

Pingvin XL eco EC

- Thermal efficiency $\eta_{t,epb}$ 79,2 % at flow rate ≤ 255 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate ≤ 407 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 78,2 % at flow rate ≤ 455 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 77,3 % at flow rate ≤ 497 m^3/h
- Maximum electric power F5/F5 filters 344 W
- Maximum electric power F7/F5 filters 343 W
- Summer by-pass: By-pass complete

Pingvin XL eco ECE

- Thermal efficiency $\eta_{t,epb}$ 79,2 % at flow rate ≤ 255 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate ≤ 407 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 78,2 % at flow rate ≤ 455 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 77,3 % at flow rate ≤ 497 m^3/h
- Maximum electric power F5/F5 filters 344 W
- Maximum electric power F7/F5 filters 343 W
- Summer by-pass: By-pass complete

Pingvin XL eco EDE

- Thermal efficiency $\eta_{t,epb}$ 79,2 % at flow rate ≤ 255 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate ≤ 407 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 78,2 % at flow rate ≤ 455 m^3/h
- Thermal efficiency $\eta_{t,epb}$ 77,3 % at flow rate ≤ 497 m^3/h
- Maximum electric power F5/F5 filters 347 W
- Maximum electric power F7/F5 filters 349 W
- Summer by-pass: By-pass complete

Additional information:

Fans motor type:	All models are equipped with DC fans
Automatic regulation:	No
Humidity-based control:	One built-in humidity sensor on Pingvin XL eco EDE model. Controls fan speed according to indoor humidity level. Possible on Pingvin XL eco EC and eco ECE models with separate hygrostat (sold separately).
CO_2 level control:	Possible on Pingvin XL eco EDE model; CO_2 sensors are sold separately. Controls fan speed according to indoor Carbon dioxide level.

Porvoo, 11 April 2014

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