

Pegasos HP epbd-test



Performance of ventilation units Pegasos eco PRO greenair HP and Pegasos HP eAir

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



Assignment

Performance of ventilation unit Enervent Pegasos eco PRO greenair HP and Enervent Pegasos HP eAir

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.

Pegasos eco PRO Greenair HP and Pegasos HP eAir was the same unit, but with different control system. The heat pump was not in operation.

The measurements took place in March-April 2014 in the lab of Ensto Enervent Oy, Kipinätie 1, 06150 Porvoo, FINLAND

Results of the measurements

Pegasos eco PRO greenair HP

- Thermal efficiency $\eta_{t,epb}$ 76,3 % at flow rate $\leq 484 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 75,2 % at flow rate $\leq 695 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 71,5 % at flow rate $\leq 1\ 048 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 69 % at flow rate $\leq 1\ 260 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 67,2 % at flow rate $\leq 1\ 400 \text{ m}^3/\text{h}$
- Maximum electric power F5/F5 filters 1 036 W
- Maximum electric power F7/F5 filters 1 016 W
- Summer by-pass: By-pass complete

Enervent Pegasos HP eAir

- Thermal efficiency $\eta_{t,epb}$ 76,3 % at flow rate $\leq 484 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 75,2 % at flow rate $\leq 695 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 71,5 % at flow rate $\leq 1\ 048 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 69 % at flow rate $\leq 1\ 260 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 67,2 % at flow rate $\leq 1\ 400 \text{ m}^3/\text{h}$
- Maximum electric power F5/F5 filters 992 W
- Maximum electric power F7/F5 filters 983 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 Pegasos eco PRO greenair HP and Pegasos HP eAir models. Controls fan speed according to indoor humidity level.

Also possible on Pegasos eco PRO greenair HP and Pegasos HP eAir models with external humidity sensor (sold separately).

CO₂ level control: Possible on Pegasos eco PRO greenair HP and Pegasos HP eAir models; CO₂ sensors are sold separately. Controls fan speed according to indoor Carbon dioxide level.

Porvoo, 28 April 2014

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