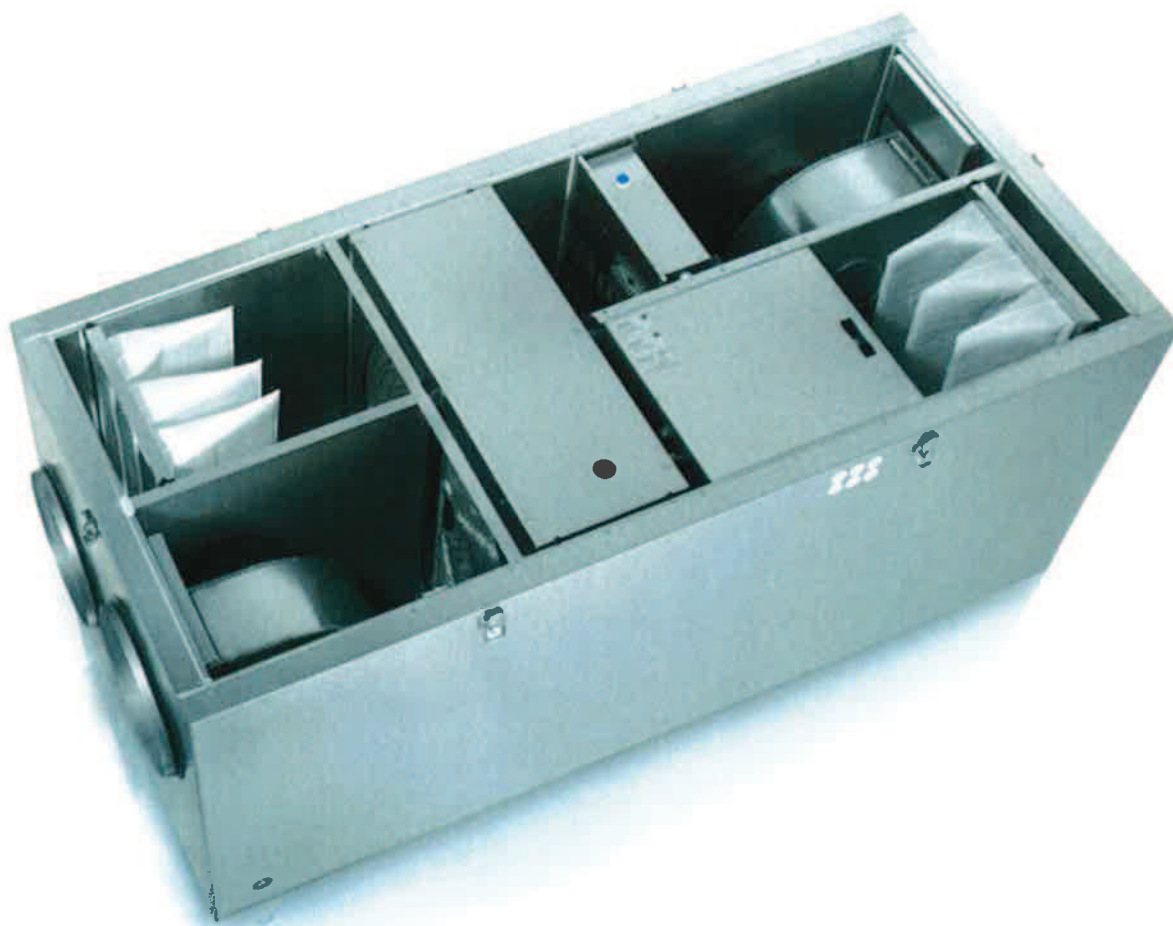


LTR-7-XL epbd-test



Performance of ventilation units Enervent LTR-7 eco XL ECE, eco XL EC, eco XL EDE and XL MDE

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



Assignment

Performance of ventilation unit Enervent LTR-7 eco XL EC, eco XL ECE, eco XL EDE and XL MDE

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.

LTR-7 eco XL units were the same units as LTR-7 eco units but with different fans. LTR-7 eco XL EC was the same unit as LTR-7 eco XL ECE but with the supply air heater detached from the unit. LTR-7 eco XL EDE was the same unit as LTR-7 XL MDE.

The measurements took place in February and May 2014 in the lab of Ensto Enervent Oy, Kipinätie 1, 06150 Porvoo, FINLAND.

Results of the measurements

LTR-7 eco XL EC

- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate $\leq 490 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 75,5 % at flow rate $\leq 769 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 71,7 % at flow rate $\leq 1\,044 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 69,0 % at flow rate $\leq 1\,259 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 66,9 % at flow rate $\leq 1\,393 \text{ m}^3/\text{h}$
- Maximum electric power F5/F5 filters 991 W
- Maximum electric power F7/F5 filters 996 W
- Summer by-pass: By-pass complete

LTR-7 eco XL ECE

- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate $\leq 490 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 75,5 % at flow rate $\leq 769 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 71,7 % at flow rate $\leq 1\,044 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 69,0 % at flow rate $\leq 1\,259 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 66,9 % at flow rate $\leq 1\,393 \text{ m}^3/\text{h}$
- Maximum electric power F5/F5 filters 991 W
- Maximum electric power F7/F5 filters 996 W
- Summer by-pass: By-pass complete



LTR-7 eco XL EDE

- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate $\leq 490 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 75,5 % at flow rate $\leq 769 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 71,7 % at flow rate $\leq 1\,044 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 69,0 % at flow rate $\leq 1\,259 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 66,9 % at flow rate $\leq 1\,393 \text{ m}^3/\text{h}$
- Maximum electric power F5/F5 filters 971 W
- Maximum electric power F7/F5 filters 1 004 W
- Summer by-pass: By-pass complete

LTR-7 XL MDE

- Thermal efficiency $\eta_{t,epb}$ 78,1 % at flow rate $\leq 490 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 75,5 % at flow rate $\leq 769 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 71,7 % at flow rate $\leq 1\,044 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 69,0 % at flow rate $\leq 1\,259 \text{ m}^3/\text{h}$
- Thermal efficiency $\eta_{t,epb}$ 66,9 % at flow rate $\leq 1\,393 \text{ m}^3/\text{h}$
- Maximum electric power F5/F5 filters 1 001 W
- Maximum electric power F7/F5 filters 1 023 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 LTR-7 eco XL EDE and LTR-7 XL MDE models. Controls fan speed according to indoor humidity level.

Possible on LTR-7 eco XL EC and LTR-7 eco XL ECE models with separate hygrostat (sold separately).

CO₂ level control: Possible on LTR-7 eco XL EDE and LTR-7 XL MDE models; CO₂ sensors are sold separately. Controls fan speed according to indoor Carbon dioxide level.

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