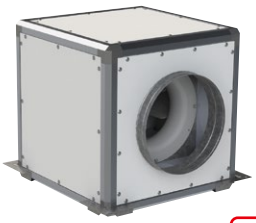
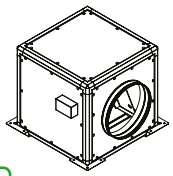
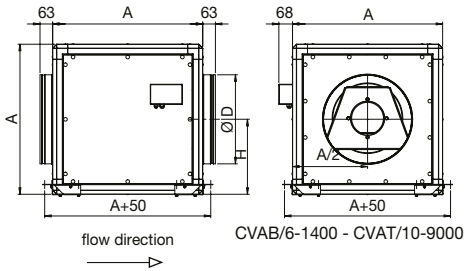
# CVAB-N, CVAT-N Ekonovent®





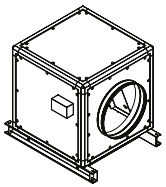


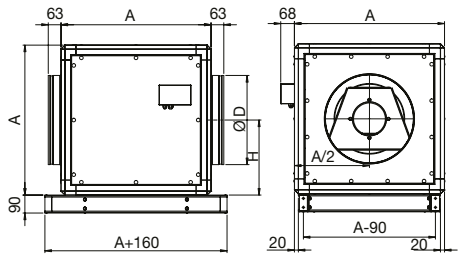



CVAB/6-1400 - CVAT/10-9000

EC motor

ErP conform






CVAT/10-12000 - CVAT/10-16000

## Technical parameters

**Box**
Frame construction with 45 mm thick sandwich side panels that are attached to the cabinet frame with self-tapping screws. The sandwich panels consist of an outer painted and inner galvanised sheet, with a sound-insulating mineral wool glass filling inside. The individual panels can be removed for service and maintenance. On the inlet and outlet, the enclosure is fitted with a circular neck for the connection of pipes with a lip seal. The cabinet can be suspended from the ceiling via steel hinges in the bottom of the cabinet (up to unit size CVAT/10-9000). From unit size CVAT/10-12000 to CVAT/10-16000, the cabinet is fitted with a frame on the bottom for suspension from the ceiling. The motor and fan are mounted on a common rigid frame and isolated from the cabinet by rubber vibration isolators. The cabinet is pressurised when the fan is in operation.

**Impeller**
radial with backward curved blades made of special composite material. The wheel is statically and dynamically balanced.

**Motor**
EC motor with stepless speed control using a 0…10 V signal. CVAB fan motors are 1-phase for 230 V voltage, CVAT are 3-phase for 400 V voltage. Motor protection IP54, operating temperature range –20 to +60 °C. Motor efficiency class IE4.

**Speed control**
The fans can be controlled in the full 0...10 V motor control range. The minimum fan speed value corresponds to 0.5 V (start value).

| Type | A [mm] | D [mm] | H [mm] |
|---|---|---|---|
| CVAB/6-1400 | 500 | 250 | 250 |
| CVAB/6-2000 | 500 | 315 | 250 |
| CVAB/10-3000 | 650 | 355 | 325 |
| CVAB/10-4000 | 650 | 400 | 325 |

| Type | A [mm] | D [mm] | H [mm] |
|---|---|---|---|
| CVAT/10-6000 | 750 | 450 | 375 |
| CVAT/10-9000 | 800 | 500 | 400 |
| CVAT/10-12000 | 900 | 560 | 450 |
| CVAT/10-15000 | 1000 | 630 | 500 |
| CVAT/10-16000 | 1100 | 710 | 550 |

**Staples**
for power and control voltage connection is accessible on the side panel of the enclosure.

**Installation**
only in the position shown in the diagram with the motor axis horizontal. The location of the discharge spout can be changed during installation by interchanging the spout panel with either side or top solid panel.

**Instructions**
The fans are suitable for air handling applications where low fan noise is advantageous – for ventilation of restaurants, kitchens, sports halls, hospitals, warehouses.

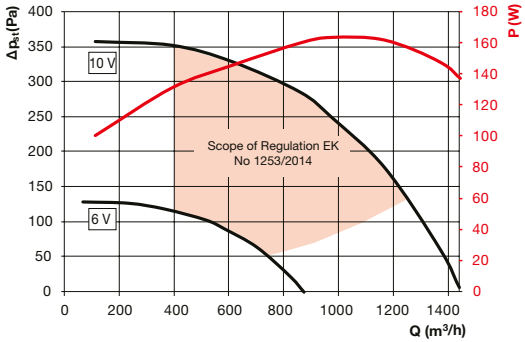
**HVAC accessories**
- **VBM, KAA** – connecting sleeves (K 7.1)
- **MSK, MSKT** – throttle valves (K 7.1)
- **MAA, MTS** – dampers (K 7.1)
- **MBE** – electric heaters (K 7.1)
- **MBW** – water heaters (K 7.1)
- **MFL** – filters (K 7.1)
- **CSC-N** – outdoor canopy (K 7.1)

**EL accessories**
- **DTS PSA** – pressure switches (K 8.2)
- **REB Ecowatt** – speed controller (K 8.1)
- **Digireg®** – digital control system (K 9)
- **AIRSENS** intel. sensors RH, VOC, CO2 (K 8.2)
- **CONTROL Ecowatt Basic** speed controller (K 8.1)
- **CVF Ecowatt** speed controller (K 8.1)

| Type | max. speed[-min$^{-1}$] | power [W] | supply voltage [V] | current [A] | flow (0 Pa) [m$^3$/h] | weight [kg] |
|---|---|---|---|---|---|---|
| CVAB/6-1400/250 N Ekonovent® | 1993 | 164 | | 0,7 | 1420 | 38,5 |
| CVAB/6-2000/315 N Ekonovent® | 1472 | 174 | | 0,75 | 2020 | 38,8 |
| CVAB/10-3000/355 N Ekonovent® | 1380 | 276 | 1 × 230 V / 50 Hz | 1,3 | 3020 | 62,3 |
| CVAB/10-4000/400 N Ekonovent® | 1372 | 445 | | 2,1 | 4200 | 63,6 |
| CVAT/10-6000/450 N Ekonovent® | 1354 | 728 | | 1,2 | 5950 | 87,8 |
| CVAT/10-9000/500 N Ekonovent® | 1411 | 1543 | | 2,4 | 9100 | 107,1 |
| CVAT/10-12000/560 N Ekonovent® | 1346 | 2230 | 3 × 400 V / 50 Hz | 3,45 | 12400 | 140,0 |
| CVAT/10-15000/630 N Ekonovent® | 1129 | 2306 | | 3,6 | 14990 | 170,6 |
| CVAT/10-16000/710 N Ekonovent® | 1244 | 3078 | | 4,8 | 15900 | 190,4 |

## Characteristics

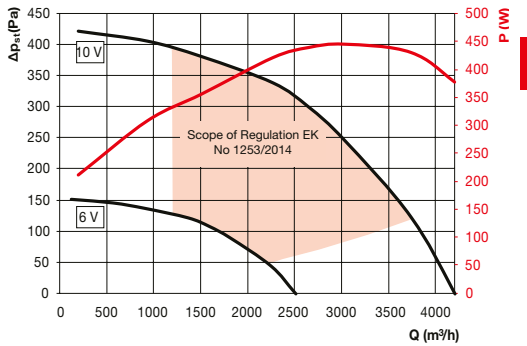
### CVAB/6-1400/250 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 113 | 393 | 611 | 860 | 976 | 1170 | 1374 | 1480 | 1570 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 63 | 64 | 61 | 60 | 60 | 62 | 63 | 64 | 65 |
| displacement | 70 | 70 | 68 | 66 | 66 | 68 | 70 | 71 | 72 |

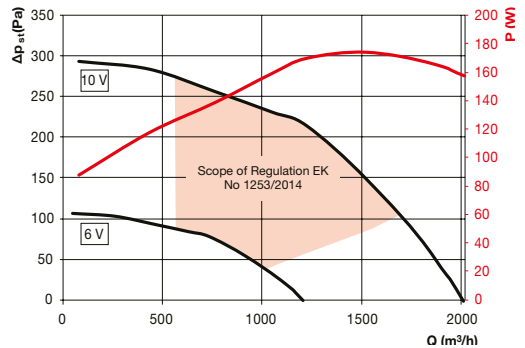
### CVAB/10-4000/400 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 200 | 936 | 1515 | 2272 | 2650 | 3030 | 3743 | 4277 | 4856 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 69 | 70 | 68 | 65 | 64 | 64 | 66 | 69 | 74 |
| displacement | 77 | 76 | 74 | 72 | 71 | 71 | 73 | 75 | 79 |

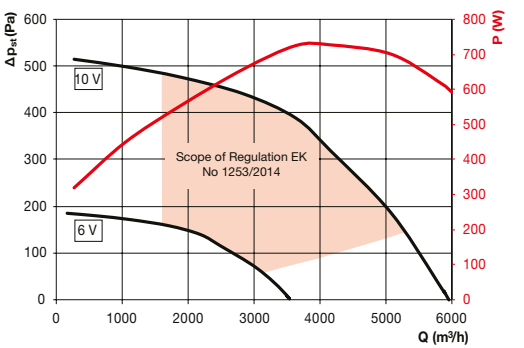
### CVAB/6-2000/315 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 81 | 435 | 767 | 1051 | 1224 | 1525 | 1869 | 2172 | 2535 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 64 | 64 | 62 | 60 | 59 | 59 | 59 | 61 | 64 |
| displacement | 70 | 69 | 68 | 66,5 | 66 | 65 | 65 | 67 | 70 |

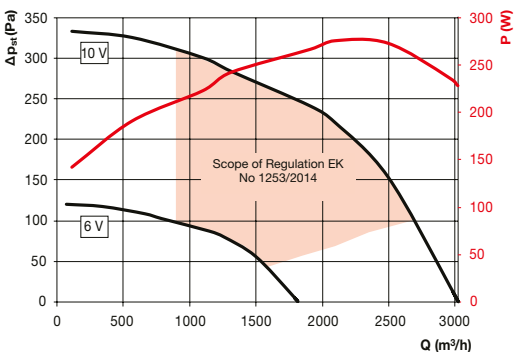
### CVAT/10-6000/450 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 272 | 1040 | 1881 | 2847 | 4158 | 5074 | 5792 | 6436 | 6807 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 72 | 72 | 71 | 68 | 67 | 69 | 72 | 75 | 78 |
| displacement | 79 | 79 | 78 | 74 | 73 | 75 | 77 | 80 | 82 |

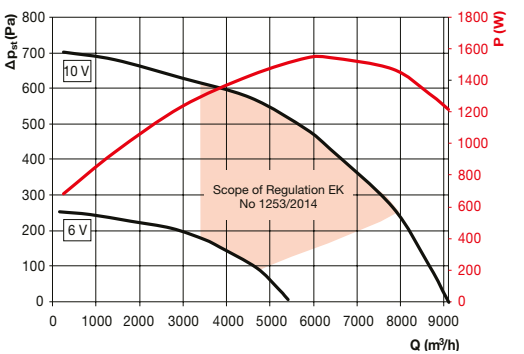
### CVAB/10-3000/355 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 113 | 567 | 1101 | 1311 | 1910 | 2093 | 2493 | 2963 | 3334 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 65 | 65 | 63 | 62 | 60 | 60 | 61 | 65 | 68 |
| displacement | 72 | 72 | 69 | 68 | 67 | 67 | 69 | 71 | 73 |

### CVAT/10-9000/500 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 258 | 1432 | 2975 | 4555 | 6392 | 7824 | 8669 | 9477 | 10138 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 79 | 79 | 77 | 73 | 72 | 73 | 76 | 78 | 80 |
| displacement | 86 | 86 | 84 | 80 | 79 | 81 | 83 | 84 | 86 |

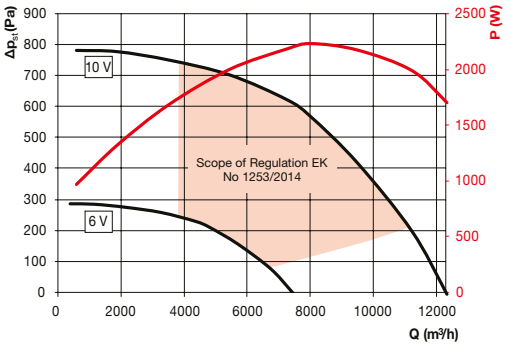
# CVAB-N, CVAT-N Ekonovent®





## Characteristics

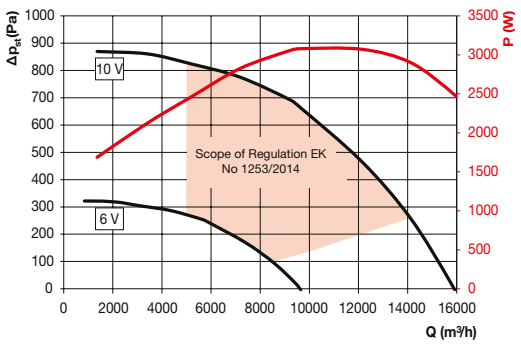
### CVAT/10-12000/560 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 579 | 1871 | 3520 | 5436 | 7262 | 9490 | 11228 | 12342 | 13455 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 80 | 79 | 79 | 76 | 74 | 75 | 78 | 80 | 83 |
| displacement | 86 | 86 | 85 | 82 | 80 | 82 | 84 | 86 | 88 |

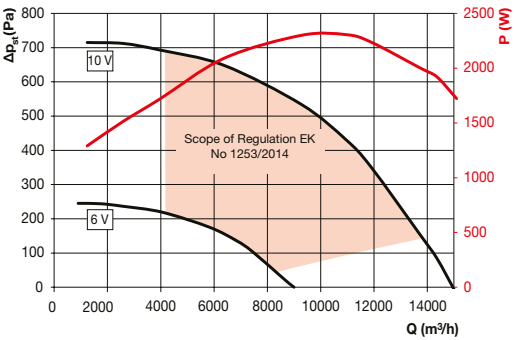
### CVAT/10-16000/710 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 1361 | 3403 | 5136 | 7178 | 9653 | 12129 | 14109 | 15780 | 17574 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 82 | 82 | 80 | 78 | 75 | 76 | 78 | 81 | 87 |
| displacement | 89 | 88 | 87 | 84 | 82 | 82 | 84 | 87 | 91 |

### CVAT/10-15000/630 N Ekonovent®




**Total sound power levels $L_{WAtot}$ [dB(A)]**

| Q (m³/h) | 1238 | 3960 | 6374 | 9282 | 11881 | 13738 | 14356 | 15099 | 15903 |
|---|---|---|---|---|---|---|---|---|---|
| suction | 79 | 78 | 75 | 72 | 74 | 77 | 78 | 80 | 82 |
| displacement | 86 | 85 | 81 | 79 | 80 | 83 | 84 | 85 | 87 |

## Accessories

**PER, TRKS** self-weighted outdoor blinds

**PRG, TWG** rain shutter

**SG** protective grille

**Aluflex®, Semiflex®, Greyflex®, Sonoflex®** flex guides

**VBM** connecting sleeve

**PRO** transition

**PT, DME** door grille for air inlet

**SQA** electronic spatial air quality sensor

**RTR 6721** room thermostat

**DT 3** timer switch

**HYG 7001** mechanical room hygrostat with thermostat

**MFL** filter cartridge EU 3 with plate or pocket filter

**DTS PSA** differential pressure sensor

**MAA** dampers for circular pipe

**MBW** pipe water heater

**MBE** pipe electric heaters

**REG 230/400** temperature control for **MBE, UNIREG®** control for MBW

## Additional illustrations

MRW-HE (high efficiency) – heat recovery heat exchangers made of Al, suitable for circular pipes, see K 3

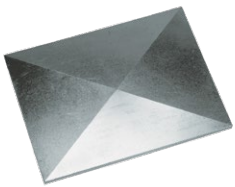
RRW – regenerative heat exchangers with high efficiency for square pipe

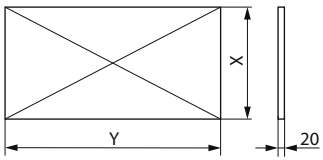
MR measuring rings and IRIS apertures with measuring taps for differential pressure sensor are in K 7.2

IRIS aperture K 7.2

MR measuring circle (K. 7.2) with TDP-D for flow measurement (K 8.2)

## CSC-N – outdoor canopy for CVAB-N/CVAT-N, CVAB-N /CVAT-N Ekonovent, CVAB-N/CVAT-N Ecowatt






## Technical parameters

**Version**
The splashbacks are made of galvanized steel sheet.

**Installation**
outdoors according to the location of the fans.

**Notice**
The fan type must be specified in the order!

**CVAB-N/CVAT-N, CVAB-N /CVAT-N Ekonovent, CVAB-N/CVAT-N Ecowatt**

| Type | for fan sizes | X [mm] | Y [mm] |
|---|---|---|---|
| CSC 250/315 N | 1400/250, 2000/315 | 530 | 600 |
| CSC 355/400 N | 3000/355, 4000/400 | 680 | 750 |
| CSC 450 N | 6000/450 | 780 | 850 |
| CSC 500 N | 9000/500 | 830 | 900 |
| CSC 560 N | 12000/560 | 930 | 1000 |
| CSC 630 N | 16000/630, 15000/630 | 1030 | 1100 |
| CSC 710 N | 15000/710, 16000/710 | 1130 | 1200 |