## Herlos



Нeco
ventilation system

## Heat Recovery Ventilator

- High efficiency heat exchange
- Bypass ventilation
- Strong filter function
- Flexible installation
- Easy cleaning and changable filter

- BLDC Fan motor
- Linear E.S.P remote control

Key
Features

High efficiency heat exchanger
Efficiency and comfort is ensured by the high-efficiency energy recovery central core which recovers energy from the indoor air and transfers it to the fresh incoming air without mixing airstream.

## Bypass ventilation

It switches automatically the ventilation mode (Enthalpy Heat Exchange Mode / Bypass Mode) according to the indoor/outdoor temperature.

## Strong filter function

The air filter has collection efficiency above 80\%, which means it can filter particles up to 0.3 m including tobacco of smoke and even floating particles from yellow sand

## Flexibility of installation

It's possible to install the opposite direction of upper and lower part. It needs the only one inspection hole.

## Easy cleaning and changing filter

Door attached side panel and slide removable Enthalpy heat exchanger filter can be changed without additional maintenance.


Note: 1. ERV mode: Total Heat Recovery Ventilation mode
2*: Refer to dimensional drawings.

3. Noise level:

- Sound measured at 1.5 m below the center the body.
- Sound level will vary depending on a range of factors such as the construction(acoustic absorption coefficient) of particular room in which the equipment is installed. - The sound level at the air discharge port is about $8 \mathrm{~dB}(\mathrm{~A})$ higher than the unit's operating sound.

4. Temperature and Enthalpy Exchange Efficiency at cooling

Indoor Temperature: $26.5^{\circ} \mathrm{C} \mathrm{DB}, 64.5 \% \mathrm{RH}$, Outdoor Temperature: $34.5^{\circ} \mathrm{C} \mathrm{DB}, 30.4 \% \mathrm{RH}$
5. Temperature and Enthalpy Exchange Efficiency at heating

Indoor Temperature: $20.5^{\circ} \mathrm{CDB}, 59.5 \% \mathrm{RH}$, Outdoor Temperature: $5^{\circ} \mathrm{CDB}, 65 \% \mathrm{RH}$
6. Temperature Exchange efficiency is tested at heating condition.

| Nominal Capacity |  |  | CMH (CFM) | 250 (147) | 350 (206) | 500 (294) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power Supply |  |  | $\emptyset / \mathrm{V} / \mathrm{Hz}$ | 1, 220-240, 50-60 |  |  |
| ERV Mode | Step |  | - | SUPER-HIGH / HIGH / LOW |  |  |
|  | Current | SH/H/L | Amps | 0.70 / 0.60 / 0.42 | 1.10 / 0.95 / 0.60 | 1.92 / $1.58 / 0.79$ |
|  | Power Input | SH/H/L | W | 90/75/52 | 150/135/80 | 240/230/90 |
|  | Air Flow | SH / H / L | CMH (CFM) | $\begin{aligned} & 250 / 250 / 150 \\ & (147 / 147 / 88) \end{aligned}$ | $\begin{gathered} 350 / 350 / 210 \\ (206 / 206 / 123) \\ \hline \end{gathered}$ | $\begin{gathered} 500 / 500 / 320 \\ (294 / 294 / 124) \\ \hline \end{gathered}$ |
|  | External Static Pressure | SH/H/L | Pa (inWTR) | $\begin{gathered} 100 / 70 / 50 \\ (0.40 / 0.28 / 0.20) \\ \hline \end{gathered}$ | $\begin{gathered} 150 / 130 / 100 \\ (0.60 / 0.52 / 0.40) \\ \hline \end{gathered}$ | $\begin{gathered} 150 / 100 / 50 \\ (0.60 / 0.40 / 0.20) \\ \hline \end{gathered}$ |
|  | Temperature Exchange Efficiency | SH/H/L | \% | $80 / 80 / 83$ | 75/75/77 | $78 / 78 / 79$ |
|  | Enthalpy Exchange Efficiency | Heating (SH/H/L) | \% | $70 / 70 / 72$ | $68 / 68 / 70$ | $72 / 72 / 74$ |
|  |  | Cooling (SH / H / L) | \% | $66 / 66 / 68$ | 63/63/65 | 67/67/69 |
|  | Noise Level (Sound Level, 1.5m) | SH/H/L | dB (A) | 27/25/23 | 28/26/25 $34 / 32 / 25$ |  |
| Bypass Mode |  |  |  | SUPER-HIGH / HIGH / LOW |  |  |
|  | Current | SH/H/L | Amps | 0.70 / $0.60 / 0.42$ | 1.10/0.95 / 0.60 | 1.92 / $1.58 / 0.79$ |
|  | Power Input | SH/H/L | W | 90/75/52 | 150/135/80 | 240/230/90 |
|  | Air Flow | SH/H/L | CMH (CFM) | $\begin{aligned} & 250 / 250 / 150 \\ & (147 / 147 / 88) \end{aligned}$ | $\begin{gathered} 350 / 350 / 210 \\ (206 / 206 / 123) \\ \hline \end{gathered}$ | $\begin{gathered} 500 / 500 / 320 \\ (294 / 294 / 124) \\ \hline \end{gathered}$ |
|  | External Static Pressure | SH/H/L | Pa (inWTR) | $\begin{gathered} 100 / 70 / 50 \\ (0.40 / 0.28 / 0.20) \\ \hline \end{gathered}$ | $\begin{gathered} 150 / 130 / 100 \\ (0.60 / 0.52 / 0.40) \\ \hline \end{gathered}$ | $\begin{gathered} 150 / 100 / 50 \\ (0.60 / 0.40 / 0.20) \end{gathered}$ |
|  | Noise Level (Sound Level, 1.5m) | SH/H/L | dB (A) | 27/25/23 | 28/26/25 | $34 / 32$ / 25 |
| Heat Exchanger |  | Type | - | Air to air cross flow heat exchange |  |  |
| Net Weight |  |  | kg | 44 | 44 | 45 |
| Dimension |  | WxHxD | mm | $988 \times 273 \times 1,014$ | $988 \times 273 \times 1,014$ | $988 \times 273 \times 1,014$ |
| Duct work* |  | Qty | EA | 4 |  |  |
|  |  | Size (Ø) | mm | $\varnothing 200$ |  |  |
| Supply Air Fan |  | Qty | EA | 1 |  |  |
|  |  | Type | - | Direct-Drive (Sirocco Fan) |  |  |
| Exhaust Air Fan |  | Qty | EA | 1 |  |  |
|  |  | Type | - | Direct-Drive (Sirocco Fan) |  |  |
| Filters |  | Qty | EA |  |  | 2 |
|  |  | Type | - | Cleanable fibrous fleeces |  |  |
|  |  | Size (W x H x D ) | mm | $855 \times 10 \times 166$ |  | $855 \times 6 \times 230$ |

Heco 25



Heco 50



| Nominal Capacity |  |  | CMH (CFM) | 800 (471) | 1,000 (589) | 1,500 (883) | 2,000 (1,177) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Power Supply |  |  | $\emptyset / \mathrm{V} / \mathrm{Hz}$ | 1, 220-240, 50-60 |  |  |  |
| ERV Mode | Step |  | - | SUPER-HIGH / HIGH / LOW |  |  |  |
|  | Current | SH/H/L | Amps | $2.77 / 2.16 / 1.44$ | 3.41 / 2.90 / 1.76 | $5.60 / 5.40$ / 2.90 | 6.80 / 5.90 / 3.60 |
|  | Power Input | SH/H/L | W | 370 / $280 / 170$ | 480 / 385 / 210 | $740 / 540 / 340$ | 960 / 770 / 420 |
|  | Air Flow | SH / H / L | CMH (CFM) | $\begin{gathered} 800 / 800 / 660 \\ (471 / 471 / 388) \end{gathered}$ | $\begin{gathered} 1,000 / 1,000 / 800 \\ (589 / 589 / 471) \\ \hline \end{gathered}$ | $\begin{gathered} 1,500 / 1,500 / 1,200 \\ (883 / 883 / 706) \\ \hline \end{gathered}$ | $\begin{aligned} & 2,000 / 2,000 / 1,600 \\ & (1,177 / 1,177 / 942) \\ & \hline \end{aligned}$ |
|  | External Static Pressure | SH/H/L | Pa (inWTR) | $\begin{gathered} 200 / 110 / 60 \\ (0.80 / 0.44 / 0.24) \\ \hline \end{gathered}$ | $\begin{gathered} 160 / 90 / 50 \\ (0.64 / 0.36 / 0.20) \\ \hline \end{gathered}$ | $\begin{gathered} 200 / 110 / 60 \\ (0.80 / 0.44 / 0.24) \end{gathered}$ | $\begin{gathered} 160 / 90 / 50 \\ (0.64 / 0.36 / 0.20) \\ \hline \end{gathered}$ |
|  | Temperature Exchange Efficiency | SH/H/L | \% | 79/79/82 | $77 / 77 / 78$ | 79/79/82 | $77 / 77 / 78$ |
|  | Enthalpy Exchange Efficiency | Heating (SH / H / L) | \% | $71 / 71 / 72$ | $70 / 70 / 72$ | 71 / 71 / 72 | 70/70/72 |
|  |  | Cooling (SH / H / L) | \% | 64/64/66 | 62/62/64 | 64/64/66 | $62 / 62 / 64$ |
|  | Noise Level (Sound Level, 1.5m) | SH/H/L | dB (A) | 37/35/31 | 38/36/32 | 39/37/33 | 40/38/34 |
| Bypass Mode | Step |  | - | SUPER-HIGH / HIGH / LOW |  |  |  |
|  | Current | SH/H/L | Amps | $2.77 / 2.16 / 1.44$ | 3.41 / 2.90 / 1.76 | $5.60 / 5.40$ / 2.90 | 6.80 / 5.90 / 3.60 |
|  | Power Input | SH/H/L | W | 370 / 280 / 170 | $480 / 385 / 210$ | 740 / 540 / 340 | 960 / 770/420 |
|  | Air Flow | SH/H/L | CMH (CFM) | $\begin{gathered} 800 / 800 / 660 \\ (471 / 471 / 388) \\ \hline \end{gathered}$ | $\begin{gathered} 1,000 / 1,000 / 800 \\ (589 / 589 / 471) \end{gathered}$ | $\begin{gathered} \hline 1,500 / 1,500 / 1,200 \\ (883 / 883 / 706) \\ \hline \end{gathered}$ | $\begin{aligned} & 2,000 / 2,000 / 1,600 \\ & (1,177 / 1,177 / 942) \\ & \hline \end{aligned}$ |
|  | External Static Pressure | SH/H/L | Pa (inWTR) | $\begin{gathered} 200 / 110 / 60 \\ (0.80 / 0.44 / 0.24) \\ \hline \end{gathered}$ | $\begin{gathered} 160 / 90 / 50 \\ (0.64 / 0.36 / 0.20) \\ \hline \end{gathered}$ | $\begin{gathered} 200 / 110 / 60 \\ (0.80 / 0.44 / 0.24) \\ \hline \end{gathered}$ | $\begin{gathered} 160 / 90 / 50 \\ (0.64 / 0.36 / 0.20) \\ \hline \end{gathered}$ |
|  | Noise Level (Sound Level, 1.5m) | SH/H/L | dB (A) | 37/35/31 | 38/36/32 | 39/37/33 | 40/38/34 |
| Heat Exchanger |  | Type | - | Air to air cross flow heat exchange |  |  |  |
| Net Weight |  |  | kg | 60 |  | 140 |  |
| Dimension |  | W x H x D | mm | $1,062 \times 365 \times 1,140$ |  | $1,313 \times 738 \times 1,140$ |  |
| Duct work* |  | Qty | EA | 4 |  | $4+2$ |  |
|  |  | Size (Ø) | mm | $\emptyset 250$ |  | $\emptyset 250+\emptyset 350$ |  |
| Supply Air Fan |  | Qty | EA | 1 |  | 2 |  |
|  |  | Type | - | Direct-Drive (Sirocco Fan) |  |  |  |
| Exhaust Air Fan |  | Qty | EA | 1 |  | 2 |  |
|  |  | Type | - | Direct-Drive (Sirocco Fan) |  |  |  |
| Filters |  | Qty | EA | 2 |  | 4 |  |
|  |  | Type | - | Cleanable fibrous fleeces |  |  |  |
|  |  | Size (W x H x D | mm | $1,056 \times 6 \times 212.5$ |  |  |  |

Heco 80


Heco 100


Heco 150


Heco 200


Ventilation system

## Accessories

Wired remote controller


## DRY CONTACT



| PQDSA/ PQDSB |  | PQDSA1/ PQDSB |  |
| :---: | :---: | :---: | :---: |
| Contact point | 1 control point | 1 control point |  |
| Power input | AC 220V from outside power source | AC 24 V from outside power source |  |
| Voltage / non voltage input | - | - |  |
| On_off control | $\checkmark$ | $\checkmark$ |  |
| Lock / unlock | - | - |  |
| Fan speed setting | - | - |  |
| Thermo off | - | - |  |
| Energy saving | - | - |  |
| Temperature setting | - | - |  |
| Error monitoring | $\checkmark$ | $\checkmark$ |  |
| Operation monitoring | $\checkmark$ | DC 10V |  |
| Volt Free Switching | - | - |  |

Electric duct heater

Electric duct heaters are designed to heat clean air in ventilation systems. Casings are made from aluzinc coated steel which is high temperature proof. Heating elements tubes are made from stainless steel.
Heaters can be installed vertically or horizontally.
M aximum output air temperature $50^{\circ} \mathrm{C}$.


## Water heater

Warm water heater battery for rectangular duct connection.
Casing made form galvanised steel with flanges on both sides.
Heating elements made of copper with aluminium fins.
M ax. Operating temp: 120 degrees c .
Max. Operating pressure : 8 bar.
Water pipes with male thread and equipped with water and air outlets.


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[^0]:    Triclke \& Boost

