# InspirAIR® Top VEX40T





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### THINK TO REGISTER YOUR PRODUCT

Register your InspirAIR® Top online to be sure to make the most of your warranty in the best possible conditions. Have the serial number displayed on your product to hand, then scan this QR code and/or go to the http://support.aldes.com site.



### FIND ALL THE INSPIRAIR® DOCUMENTS

Use this QR code and/or go to the www.aldes.com site to consult the documents on the InspirAIR® Top range.

### 1. FOREWORD

Thank you for choosing an ALDES product. We recommend that you read this document carefully and follow the instructions provided to ensure optimal operation of your equipment. Our liability as a manufacturer shall not be affected due to incorrect use, lack of or unsuitable servicing or incorrect installation. To ensure continuous improvement in the quality of our products, ALDES reserves the right to amend any product details published in this document at any time.

# 2. SAFETY INSTRUCTIONS

#### 2.1. General instructions

Before installing, starting or maintaining the heat recovery unit, read carefully the sheet "Precautions and regulatory information" delivered with the product (Item 85295). However, more restrictive or precise instructions can be included in these instructions, please refer to them if appropriate. Should you note damage to the product that could cause a malfunction or hazard, make sure it is not connected or operated.





#### 2.2. Mechanical risks

Always connect the air ducts to the unit before plugging in its power supply. This ensures that the motors cannot be touched when the unit is running.

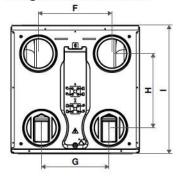
#### 2.3. Electrical risks

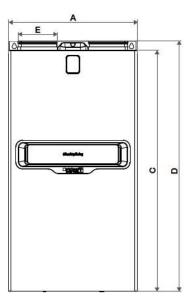
The apparatus must not be powered on and operated by the end user as long as the product's protective channel and front panel are not fixed appropriately.

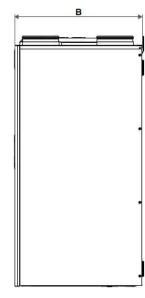
### 3. GENERAL INFORMATION

### 3.1. Technical specifications

#### Weight and dimensions







	Classic	Premium	
A (mm)	5	60	
B (mm)	5	60	
C (mm)	1	045	
D (mm)	1	088	
E (mm)	160		
F (mm)	320		
G (mm)	294		
H (mm)	323		
I (mm)	560		
kg	28	41	

InspirAIR® Top

#### **Electrical details**

Description	Power supply	Class	IP	Max. current	Max. power
InspirAIR® Top 300 (excluding options)				1.8 A	240 W
InspirAIR® Top 450 (excluding options)	230 V +/- 10%	Olessa	ID 00	2.5 A	350 W
InspirAIR® Top 300 (with internal preheating coil 11023486)	50/60 Hz +/- 10%	Class I	IP 22	6.15 A	1,240 W
InspirAIR® Top 450 (with internal preheating coil 11023486)				6.85 A	1,350 W

#### 3.2. List of accessories that can be connected to the unit

#### The InspirAIR® unit can operate with various accessories to be connected to its electronic board

Item	Description	Control/running	Electric power supply (see §4.8 Electronic connections)	
11023470	Walter® connected sensor	Wireless connection via AldesConnect™ modem	Separate power supply (charger supplied)	
11023480	InspirAIR® CO <sub>2</sub> remote control	Connected and supp	lied by the unit - HMI inlet	
11023479	InspirAIR® remote control	Connected and supp	lied by the unit - HMI inlet	
11023386	AldesConnect™ Box	Connected and supplied by the unit - USB inlet		
11017090	CO <sub>2</sub> probe	0-10 V	Separate power supply item 11017180 Power supply 230 V/24 V	
11026011	Two-speed remote control - Push button	Connected and suppl	ied by the unit - IBus inlet	
11023225	InspirAIR® external heating coil	Control by IBus inlet	Separate power supply, 230 V	
11023486	InspirAIR® Top* external heating coil	Dedicated control	Powered by the unit via relay on unit supplied with coil	
11023487	InspirAIR® Top external post-heating coil	Control by IBus inlet Separate power supply, 23		

<sup>\*</sup>If this accessory is not installed, tick the relevant box on the product's manufacturer's plate with an indelible pen (hexane-resistant) to confirm that it is not installed during commissioning (reference as example - action to be performed for all models).



If this accessory is installed, refer to the relevant instructions and tick the appropriate box.

### 4. INSTALLATION INSTRUCTIONS

#### 4.1. Transport/unpacking

On receipt of the product, verify its condition and record any remarks for the attention of the delivery company on the delivery slip. The delivery includes at least:

- The unit and a wall fastening system
- Documentation
- A connector to fix the water trap to the unit (the water trap is sold as an accessory)

Remove the banding from the product. Lift the upper cardboard cover.

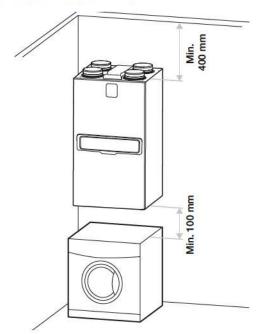
Important: Do not handle the product by its connections.

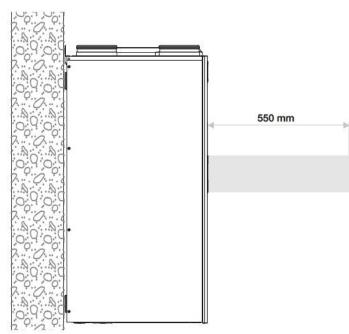
The permitted storage and transport temperature is between -20°C and +60°C. Transport and unpack the unit carefully.

Important: the installer is responsible for recycling the product packaging.

#### 4.2. Product environment

Room heated and frost-protected without fail to ensure optimum thermal performances. The system must not be installed in a room where there is a risk of explosion due to gases, emissions or dust. Provide for condensate discharge with a water trap (water trap sold as accessory). It is not recommended to install the unit in places with high humidity level. The electrical installation must be adapted to the maximum power of the unit (see point 3.2). The location and fastening must ensure minimum maintenance access.





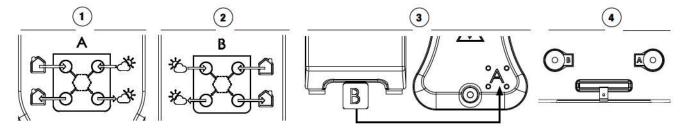
#### 4.3. Choice of A/B version

The product is delivered by default in configuration A (1).

To convert it physically to configuration B (2):

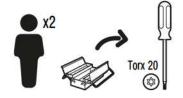
- Break tab "B" at the rear of the cable tray and clip it over the A (3).
- Reverse the two filters (see procedure and details of references §6.1).
- Confirm this configuration in the remote control or Configurator software program.
- Connect the condensate discharge of the corresponding side (A or B) (4).
- I Only for the Exhausto codes with humidity sensors:

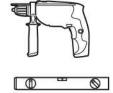
Also move the humidity probe from side A to side B ( $\mathfrak{3}$ ): the humidity sensor has to be replaced dwelling side. To do this, open the front panel, carefully remove the sensor from the sealing foam placed under the A and replace it in one of the cable feedthrough locations in the sealing foam side B.



#### 4.4. Wall fixing

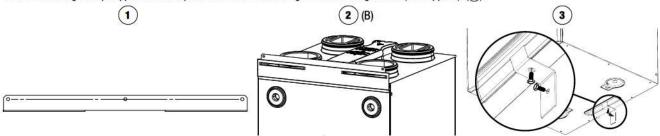
Wall fixing is the recommended mounting method for the unit. The fastening anchors must be adapted to the support wall and designed to withstand a load of 120 kg.





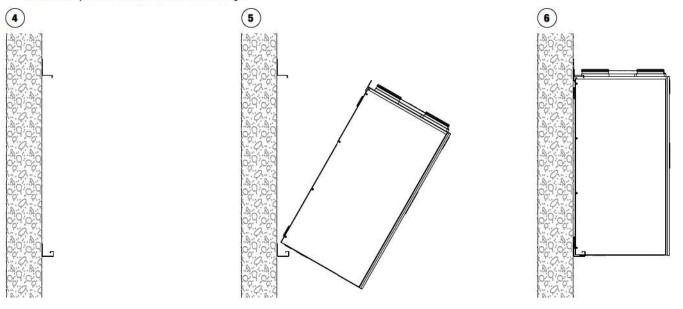
#### 4.4.1. Fastening Premium models

- Fix the guide strip to the wall ((1)) (the cardboard packaging includes a template for drilling the wall to the correct dimensions).
- Hang the product on the guide strip (1) + 2).
- Check that the product is stable and horizontal.
- Use the fastening stirrup supplied with the product to lock its fastening. Use a fastening anchor (not supplied). (3).



#### 4.4.2. Fastening Classic models

- Drill the lower cradle (BOTTOM) and the top cradle (UP) fastening holes in the wall (see marks on box).
- (4) Screw the bottom cradle in as far as it will go (screws not supplied).
- Screw the top cradle leaving it free to slide > screw in the bottom of the J.
- 5 Insert the machine into the bottom cradle.
- (6) Push it upwards against the wall.
  - Slide the top part against the metal plate of the machine.
  - Screw into the plate from above.
  - Screw the top cradle into the wall as far as it will go.



### 4.5. Installation on stand (in accessories)

Kit 11023484 sold as an accessory is used to install the unit on the ground. The unit must be fully accessible for servicing.

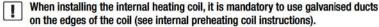
- Mount the stand kit according to the instructions supplied.
- Check that the unit is held firmly by the stand.
- Refer to the instructions delivered with the accessory for more detail.



#### 4.6. Aeraulic connections from the unit

We recommend using the following to connect the InspirAIR® Top 450:

- Flexible plastic ducting type Algaine D.200 with female connector RF D.150 (11093065)
- + RCC D160/200 (11098186) or galvanised or Alflex rigid ducts



#### Use of sound attenuator

We recommend installing sound attenuators for the two push flows (located at the front of the machine):

- Type Octa Ø160 with seal for the Top 300 units
- Type Octa Ø200 with seal for the Top 450 units

We recommend using a straight duct at least 50 cm long at product outlet preferably to ensure an optimum sound level. The same applies upstream and downstream of sound attenuators if possible. Elbows are inadvisable.



#### 4.7. Electrical connections

Connect the unit to the connector under the cable tray by a lead connected directly to the installation's switchboard.

Power supply: 230 V AC single-phase.

Characteristics and installation conditions of the power lead (not supplied)

- Cable cross-section: 3 x 1.5 mm<sup>2</sup> minimum (maximum 2.5 mm<sup>2</sup> if end piece insulated or 4 mm<sup>2</sup>)
- The earth wire must be longer than the others (the last one to be disconnected if traction occurs)

Stripping length: 10 mm

The installer must check every time that the wires are pushed correctly into the connector.

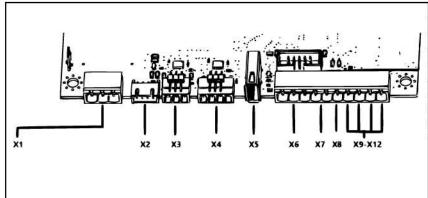
The installation will include:

- dual-pole circuit breaker
- circuit protection with 30 mA differential circuit breaker

Connection to the connection terminal block installed on the product. Comply with the connections and polarities marked on the connector.

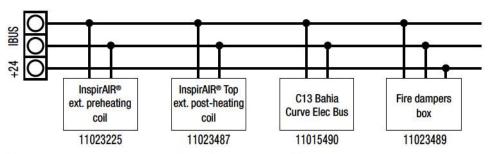
#### 4.8. Electronic connections

View of customer connections on the electronic board:



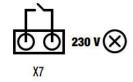
Reference	Function	
X1	Power supply 230 V	
X2	Internal preheating relay control	
Х3	Customer Modbus connection	
X4	HMI connection	
X5	USB connection	
X6	IBus connection	
X7	Push button connection	
X8	Dry contact/NO by default	
X9-X12	Inlets-outlets 0-10 V X9: Analogue input 0 X10: Analogue input 1 X11: Analogue output X12:	

IBus connection:



The top product metal plate incorporates cable tie feedthroughs to fix the cables neatly.

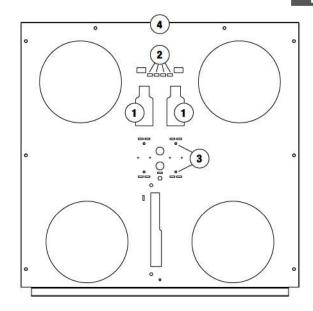
Push button connection:



Dry contact/NO by default:



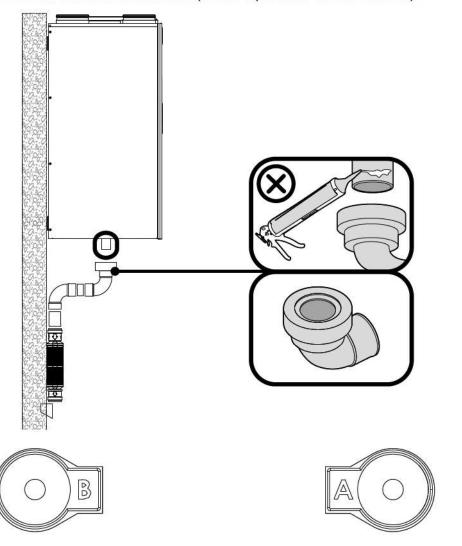
Reference	Function
1	Internal preheating coil cable feedthrough
2	Attachment points for Rilsan cable ties (not supplied) Recommendation: separate the power cables from the signal cables
3	Attachment points for internal preheating coil static relay
4	Classic cradle fastening point (Classic only)



### 4.9. Connecting condensates

The water trap connection delivered with the unit must be screwed in by drilling the product's body on the side identified A or B depending on the product configuration (see point 4.3).

An airflow water trap (membrane or ball) is mandatory. U-bend water traps are strictly prohibited. It is forbidden to glue the connectors together. Connections must be made with seal connectors as below: (the water trap kit and the elbow are accessories)



### 5. STARTING/ADJUSTMENTS

#### 5.1. Starting

The product must without fail be configured by one of these two interfaces:

- Aldes InspirAIR® remote control
- Aldes Configurator

Refer to the documents on these elements

The unit will not operate if it is not started successfully

### 5.2. Structure of InspirAIR® remote control menus

The INFORMATION menu can be accessed without password. It display the unit's key settings without being able to alter them. The installer can thus find out about the unit's characteristics and operation. The user can use it to communicate elements remotely to the installer if the unit does not seem to be working properly and for initial remote troubleshooting.

INFORMATION	Settings	Display the unit's key settings without being able to alter them: - control type - time delay - filter type - current speed - comfort temperature
	Filter alert	Display without being able to alter them: - filter type - filter status (timer elapsed or not) - number of days remaining
(i)	Error	Display the error code(s) activated by the unit
$[\mathbf{U}]$	Product ID	Display without being able to alter them: - item no. of the unit - serial no unit and remote control software no.
	Connectivity	Display which accessory is connected to the unit and confirm its operating state:  - remote controls  - 0-10 V sensors  - heating coils  - Aldes Connect modem  - ModBus connectivity

The USER menu is specific for the user and can be accessed without password. Here he can adjust his ventilation every day and launch simple actions.

USER	Languages	Choose the use language
	Light signal (Premium unit only)	Choose the unit's beat on the Premium unit: - change of colour according to the air quality - beat in time with the fan speed - not lit
	Filters	Choose the period and reset the filter timer to zero
***	Programming	Launch rapid programming of the ventilation in the dwelling
	Sensors	Activate or deactivate, temporarily or permanently, taking the indoor air quality into account to run the ventilation automatically
	Open fire	Activate for two hours positive pressure ventilation operation to encourage a fire to develop in an open fireplace

The INSTALLER menu is specific for a competent installer and can be accessed with the password: 0405. The installer can access all the settings, accessories and operating and maintenance data for the machine.

The installer will be able to configure the product via the InspirAIR® remote control (11023480 - InspirAIR® CO<sub>2</sub> remote control or 11023479 - InspirAIR® remote control) as well as via the configuration software Aldes Configurator available on the https://services.aldes.com/logiciels site.

	Settings	Set the unit's key operational settings  - Country and language  - Control mode, speeds and associated imbalances  - Radon mode according to geographical area  - Open fire mode if the dwelling has an open fireplace  - The comfort temperature for the By-pass and post-heating coil control  - The units (airflows/pressure/temperature, etc.)  - Type of certification for the dwelling (PassivHaus or not) to adapt the frost protection strategy  - Rapid adjustment of airflows  - Launch factory reset
INSTALLER	Connectivity	Displays and allows the configuration of all accessories that can be connected to the unit:  - InspirAIR® CO₂ remote control  - InspirAIR®/VEX 40T remote control  - Modem  - CO₂ sensor remote control  - 0-10 V sensor 1  - 0-10 V sensor 2  - Internal preheating coil 1 kW  - External preheating coil 1.5 kW  - External post-heating coil 300 W
	USB	Launch actions from the unit's USB port:  - Download the history  - Load an update  - Load a new Aldes Configurator configuration
	Maintenance	Display the unit's actual operating values: - Motors setpoint/actual motor value and voltage
	Signal demo.	Activate a demonstration mode for signal beats in the PREMIUM unit

<sup>\*</sup> The "Rapid adjustment" function available for the constant airflow mode is used to configure airflow compensation on the four ventilation levels. The installer may choose to add the airflow separately for the air supply and exhaust fans to ensure that the measured airflow meets demand regardless of the ventilation ductwork characteristics.

### 5.3. Updating unit software from USB key

The software can be updated with the following procedure:

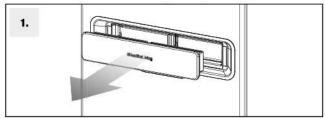
- 1) Stop the product (power it off) [Open the door for Classic models]
- 2) Insert the USB key into the USB port
- 3) Power the product back on
- 4) Wait for the LED to turn green or about 30 s
- 5) Remove USB key

The USB key must only contain the update file supplied by Aldes.

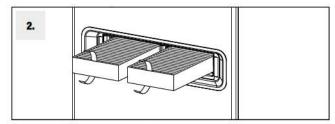
# 6. MAINTENANCE

### 6.1. Filter replacement

Filters must be changed regularly depending on use conditions and the machine's environment. The installer can configure the filter timer from nine to twelve months







Remove the filters and replace them with new ones.

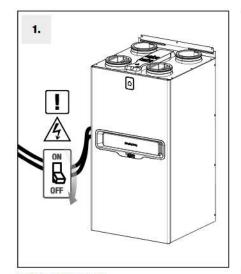
#### Filter references

	D	If configuration A		If configuration B	
Item	Description	Left	Right	Left	Right
11023490	Dust filter	Standard Top 300			Standard Top 300
11023491	Pollen filter	Standard Top 450			Standard Top 450
11023492	Particle filter		Right only	Left only	
11023493	Fine particle filter		Right only*	Left only*	
11023494	Bacteria filter		Right only*	Left only*	
11023495	VOC filter		Right only*	Left only*	

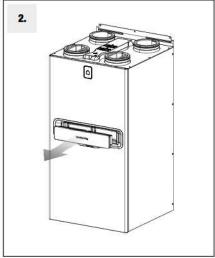
<sup>\*</sup> We recommend using a Dust filter 11023490 in addition to these filters to guarantee their lifetime and effectiveness.

### 6.2. Cleaning the heat exchanger

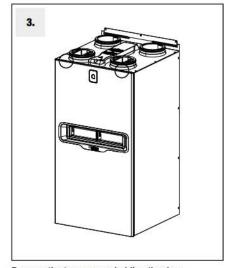
We recommend servicing the heat exchange very two years using the following procedure:



Switch off the power.

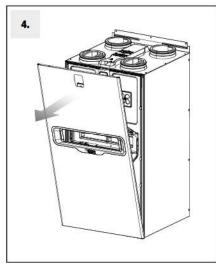


Open the filter flap.

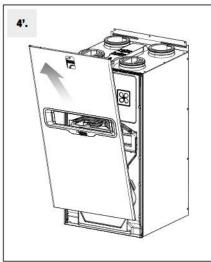


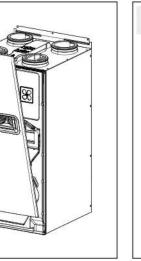
Remove the two screws holding the door.

5.

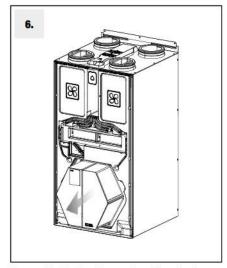


Tilt the door forwards and lift it.

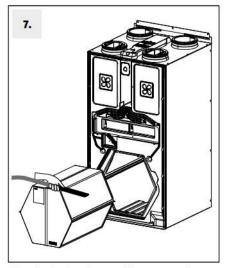




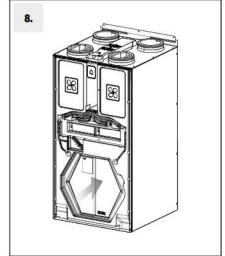
Remove the heat exchanger plug.



Remove the heat exchanger by pulling slowly on the strap.



Clean the heat exchanger with a vacuum cleaner (no water or solvents).



Reinsert the heat exchanger by pushing it carefully horizontally.

Re-insert the heat exchanger plug, then the front door and lastly the filter plug (steps 1 to 5)

#### 6.3. Servicing



- . Do not attempt to repair the equipment yourself.
- This equipment does not contain any components that can be repaired by the user.
- · Removing panels or covers could expose you to hazardous electric shocks.
- In no event is cutting off the mains power supply sufficient to protect you against electrical shocks (due to the presence of capacitors).
- · Cut off the power supply if the equipment emits abnormal noises, odours or smoke and contact your installer immediately.
- · Cut the power supply to the equipment before performing any cleaning.
- . Do not use aggressive cleaning fluids or solvents to clean the equipment.
- Do not user pressure sprays to clean the air terminals. You risk damaging the air heat exchanger and introducing water into the electrical circuits.

#### 6.4. Operating anomalies

Anomaly	Cause	Remedy	
Filter indicator lamp lit	- Filters need replacing	- Replace the filters see 6.1	
Fault indicator lamp lit	- Motor problem - Temperature probe problem	- Cut power for 30 seconds and reset     - Contact your installer if the product does not restart	
Insufficient airflows at terminals	- Ductwork incorrectly balanced  - Leaks in the ductwork	Verify the ductwork branch lengths     Seal the ductwork better	
Noisy product	- Aeraulic ductwork crushed or has too many elbows     - Product configuration not suited to the dwelling     - Filters clogged	Verify the ductwork     Verify the product configuration see 5.3     Replace the filters see 6.1	
The product does not start	- Waiting time too short	- Wait 30 s to 1 mn before switching on	

#### 6.5. Spare parts list

Refer to the Aldes document: InspirAIR® Top after-sales service guide.

#### 7. WARRANTY

#### 7.1. General warranty terms and conditions

Refer to the general terms and conditions on the www.aldes.fr site. The system must be installed by a qualified professional in compliance with best practices, the standards in force and the recommendations in our instructions. The system must be used normally and regularly serviced by a specialist.

#### 7.2. Warranty period

The product is covered by a two-year parts warranty (excluding labour). The warranty period is effective from the purchase date of the product, as proven by the invoice.

#### 7.3. Warranty exclusions

The following are excluded from this warranty: installation failure due to failure to comply with manufacturer recommendations, including lack of airflow water trap, and with standards and regulations in effect, or lack of servicing.

#### 7.4. After-sales service:



In the event of a problem, please contact your installer or retailer.

This product must not be disposed of with household waste. At the end of its life or if replaced, it returned to a retailer or sent to a collection centre. ALDES belongs to the Ecosystem eco-body www.ecosystem.eco

# 8. ErP

# 8.1. InspirAIR® Top 300

Supplier brand	Aldes	Aldes	Aldes
Designation	InspirAIR® Top 300 Classic	InspirAIR® Top 300 Premium	InspirAIR® Top 300 Premium ERV
References	11023473	11023474	11023477
Energy class - Average climate	A	Α	Α
Average climate - SEC - Specific energy consumption (kWh/(m² a)	-39,28	-39,04	-36,40
Cold climate - SEC - Specific energy consumption (kWh/(m² a)	-77,11	-77,47	-72,40
Warm climate - SEC - Specific energy consumption (kWh/(m² a)	-14,98	-14,39	-13,15
Declared type	RVU	RVU	RVU
Type of airflow	Bidirectional ventilation unit	Bidirectional ventilation unit	Bidirectional ventilation
Type of motor installed or planned	4/ Variable speed	4/ Variable speed	4/ Variable speed
Type of heat recovery system	Recuperation	Recuperation	Recuperation
Thermal efficiency of heat recovery (%)	88	90	82
Maximum RVU (m³/h)	330	330	320
Electric power absorbed at Qmax (W)	102	115	116
LwA - Sound power level (dB)	51	46	45
Reference airflow (m³/s)	0,064	0,064	0,062
Difference in reference pressure (Pa)	50	50	50
SPI (W/(m³/h)	0,17	0,20	0,20
Control factor (%)	1	1	1
Type of control system	Manual control	Manual control	Manual control
Maximum declared internal leakage rate under negative pressure for BVU (%)	1,3	1,3	1,3
Maximum declared external leakage rate under negative pressure for UVU and BVU (%)	1,3	1,4	1,4
Maximum declared internal leakage rate under positive pressure for BVU (%)	0,7	0,7	0,7
Maximum declared external leakage rate under positive pressure for UVU and BVU (%)	0,7	0,7	0,7
Mixing rate for standalone BVU without branch connections (%)	NA NA	NA	NA
Position of visual alarm	cf. notice	cf. notice	cf. notice
Description of visual alarm	cf. notice	cf. notice	cf. notice
Regular replacement of filters to ensure unit performance and energy efficiency	cf. notice	cf. notice	cf. notice
Instructions for installation of fresh air inlets	NA	NA	NA
Sensitivity of airflow to pressure variations at +20 Pa	NA	NA	NA
Sensitivity of airflow to pressure variations at -20 Pa	NA	NA	NA
indoor/outdoor air tightness (m³/h)	NA	NA	NA
Annual electricity consumption - AEC (kWh electricity/a)	236	271	275
Average climate - AHS - Annual heating savings (kWh primary energy/a)	4518	4582	4327
Cold climate - AHS - Annual heating savings (kWh primary energy/a year)	8839	8963	8465
Warm climate - AHS - Annual heating savings (kWh primary energy/a year)	2043	2072	1957

# 8.2. InspirAIR® Top 450

Supplier brand	Aldes	Aldes	Aldes
Designation	InspirAIR® Top 450 Classic	InspirAIR® Top 450 Premium	InspirAIR® Top 450 PREMIUM ERV
References	11023476	11023478	11023478
Energy class - Average climate	A	Α	В
Average climate - SEC - Specific energy consumption (kWh/(m² a)	-36,70	-36,03	-32,10
Cold climate - SEC - Specific energy consumption (kWh/(m² a)	-74,37	-74,16	-66,88
Warm climate - SEC - Specific energy consumption (kWh/(m² a)	-12,49	-11,55	-9,55
Declared type	RVU	RVU	RVU
Type of airflow	Bidirectional ventilation unit	Bidirectional ventilation unit	Bidirectional ventilatio unit
Type of motor installed or planned	4/ Variable speed	4/ Variable speed	4/ Variable speed
Type of heat recovery system	Recuperation	Recuperation	Recuperation
Thermal efficiency of heat recovery (%)	88	89	78
Maximum RVU (m³/h)	470	470	480
Electric power absorbed at Qmax (W)	218	244	255
_wA - Sound power level (dB)	57	53	53
Reference airflow (m³/s)	0,091	0,091	0,088
Difference in reference pressure (Pa)	50	50	50
SPI (W/(m³/h)	0,25	0,29	0,30
Control factor (%)	1	1	1
Type of control system	Manual control	Manual control	Manual control
Maximum declared internal leakage rate under negative pressure for BVU (%)	1	1	1
Maximum declared external leakage rate under negative pressure for UVU and BVU (%)	Н	1	1
Maximum declared internal leakage rate under positive pressure for BVU (%)	0,5	0,5	0,5
Maximum declared external leakage rate under positive pressure for UVU and BVU (%)	0,6	0,6	0,6
Mixing rate for standalone BVU without branch connections (%)	NA	NA	NA
Position of visual alarm	cf. notice	cf. notice	cf. notice
Description of visual alarm	cf. notice	cf. notice	cf. notice
Regular replacement of filters to ensure unit performance and energy efficiency	cf. notice	cf. notice	cf. notice
Instructions for installation of fresh air inlets	NA	NA	NA
Sensitivity of airflow to pressure variations at +20 Pa	NA	NA	NA
Sensitivity of airflow to pressure variations at -20 Pa	NA	NA	NA
ndoor/outdoor air tightness (m³/h)	NA	NA	NA
Annual electricity consumption - AEC (kWh electricity/a)	333	379	396
Average climate - AHS - Annual heating savings (kWh primary energy/a)	4502	4550	4200
Cold climate - AHS - Annual heating savings (kWh primary energy/a year)	8808	8901	8216
Warm climate - AHS - Annual heating savings (kWh primary energy/a year)	2036	2057	1899

## 8.3. VEX40T

Supplier brand	Exhausto	Exhausto
Designation	VEX40T Classic	VEX40T Premium
References	11023471	11023472
Energy class - Average climate	A	Α
Average climate - SEC - Specific energy consumption (kWh/(m² a)	-41,37	-41,27
Cold climate - SEC - Specific energy consumption (kWh/(m² a)	-79,74	-80,16
Varm climate - SEC - Specific energy consumption (kWh/(m² a)	-16,75	-16,36
Declared type	RVU	RVU
ype of airflow	Bidirectional ventilation unit	Bidirectional ventilation unit
ype of motor installed or planned	4/ Variable speed	4/ Variable speed
ype of heat recovery system	Recuperation	Recuperation
hermal efficiency of heat recovery (%)	88	90
Maximum RVU (m³/h)	330	330
lectric power absorbed at Qmax (W)	102	115
wA - Sound power level (dB)	51	46
eference airflow (m³/s)	0,064	0,064
oifference in reference pressure (Pa)	50	50
PI (W/(m³/h)	0,17	0,20
Control factor (%)	0.85	0.85
ype of control system	Central Demand Control	Central Demand Control
Maximum declared internal leakage rate under negative pressure or BVU (%)	1,3	1,3
Maximum declared external leakage rate under negative ressure for UVU and BVU (%)	1,3	1,4
Maximum declared internal leakage rate under positive pressure or BVU (%)	0,7	0,7
Maximum declared external leakage rate under positive pressure or UVU and BVU (%)	0,7	0,7
Mixing rate for standalone BVU without branch connections (%)	NA	NA
osition of visual alarm	cf. notice	cf. notice
Description of visual alarm	cf. notice	cf. notice
Regular replacement of filters to ensure unit performance and energy efficiency	cf. notice	cf. notice
nstructions for installation of fresh air inlets	NA	NA
Sensitivity of airflow to pressure variations at +20 Pa	NA	NA
ensitivity of airflow to pressure variations at -20 Pa	NA	NA
ndoor/outdoor air tightness (m³/h)	NA	NA
nnual electricity consumption - AEC (kWh electricity/a)	176	201
werage climate - AHS - Annual heating savings (kWh primary energy/a)	<b>4</b> 576	4630
Cold climate - AHS - Annual heating savings (kWh primary energy/a year)	8951	9057
Narm climate - AHS - Annual heating savings (kWh primary energy/a year)	2069	2093