Series VESTA Vertical

Isothermal dehumidifier with pre- and post-treatment water coil 260 m3/h



Identity

Vertical installation Suitable for radiant air conditioning Isothermal (neutral air) Centrifugal fan R 134a

Versions

VESTA 80 V Vertical dehumidifier for exposed recessed installation

VESTA 80 VD Vertical dehumidifier for ducted installation

Certifications











Description

VESTA dehumidifiers are utilised for summer dehumidification of rooms with radiant panel cooling systems.

VESTA is designed and built exclusively for indoor use and delivers air at neutral temperature with respect to the room air.

This characteristic is assured by the presence in the unit of a post-cooling coil through which water from the radiant panels system is circulated.

VESTA is controlled by the regulation and control system, also when several units are installed in parallel.



"Evolution" electronic hygrostat

Plus

QUALITY POINTS

Outer casing available in wood or metal version

Panel front cover made of wood or metal to fit into any living environment

Pre and post-treatment water coil

Centrifugal fan with 6-speed built-in motor to adjust the best operation to different working conditions.

COMANDO

"Evolution" electronic hygrostat with variable hygrometric curve to optimize operation of the dehumidifier for Comfort pourpose EBE accessory microprocessor "advanced" for the intelligent management and efficient unit in order to ensure maximum energy saving, low noise and long life of the compressor.

EASY SERVICE

Air filter easy to remove with the front panel



Technical data

| | Size | | Vesta 80V | Vesta 80VD |
|-----|---|---------------|------------|------------|
| | Termotechnical data | | | |
| | Approximate treatable volume | m³ | 200/250 | |
| (1) | Human occupancy | n° | 7 | |
| | Dehumidifing performances | | | |
| (2) | Nominal condensing capacity | I/h | 0.8 | |
| | Nominal total water flow rate to pre and post-treatment coils (coils connected in parallel) | l/h | 175 | |
| | Nominal total cooling capacity absorbed by the air pre and post-treatment coils | W | 830 | |
| | Δp pre and post-treatment coils | kPa | 7 | |
| | General | | | |
| | Power supply | (V/ph/ Hz) | 230/1/50 | |
| (3) | Nominal running current | Α | 1.8 | |
| | Maximum running current | Α | 2.6 | |
| (3) | Nominal power input | W | 360 | |
| | Maximum power input | W | 400 | |
| | Electrical box protection rating | | IP54 | |
| | R134a refrigerant charge | g | 285 | |
| | Pre and post-treatment coils hydraulic connections | n° | 2 | |
| | Pre and post-treatment coils hydraulic connections | M | 3/8 | |
| | Pre and post-treatment coils hydraulic connections | tipo | GAS female | |
| | Total sound pressure in open field at 1m distance | dB(A) | 36.6 | |
| | Fan | | | |
| | Centrifugal fan setting speed | n° | 6 | |
| | Internal width of fan outlet port | mm | 260 | |
| | Internal hight of fan outlet port | mm | 100 | |
| | Nominal air flow | m3/h | 260 | |
| | Working field | | | |
| (4) | Pre-/post-treatment coils water temperature | °C | 12 ÷ 22 | |
| (4) | Intake air db temperature | °C | 15 ÷ 35 | |
| (4) | Relative humidity | % | 45 ÷ 85 | |

⁽¹⁾ Value that depends on the level of metabolic activity and the average radiant temperature in the room.

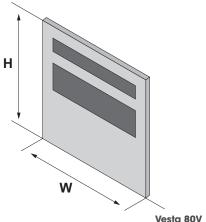


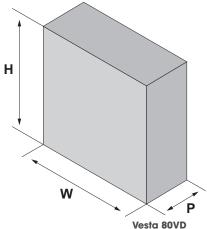
⁽²⁾ Nominal airflow; intake air 25°C ÷ 65%; nominal water flow rate; pre- and post treatment coils water inlet temperature: 15 °C.

⁽³⁾ Nominal airflow; intake air 25°C + 65%; nominal water flow rate; pre- and post treatment coils water inlet temperature: 15 °C.

⁽⁴⁾ In the case of very warm rooms and surroundings with high relative humidity (swimming pools, spa baths, etc.) consult us and provide details of the place of installation.

Dimensions and service spaces





| Size | | Vesta 80V | Vesta 80VD |
|-----------------------------|----|-----------|------------|
| Dimensions | | | |
| Weight | Kg | | 36 |
| Width/W | mm | 7 | 729 |
| Depth/P | mm | 2 | 212 |
| High/H | mm | 7 | 705 |
| Outer casing width/W | mm | 7 | 740 |
| Outer casing depth/P | mm | 2 | 230 |
| Outer casing High/H | mm | 7 | 750 |
| Wood front panel width/W | mm | 3 | 300 |
| Wood front panel High/H | mm | 3 | 300 |
| Metal front panel width/W | mm | 7 | 760 |
| Metal front panel High/H | mm | 7 | 770 |

| Size | Vesta 80V | Vesta 80VD |
|------------|-----------|------------|
| VESTA V/VD | | |

The unit should be ever combined with EBB (standard) or EBE (evolution) circuit board.



Accessories

| | | Modello | | Vesta 80V | Vesta 80VD |
|-----|-------------|---------|--|-----------|------------|
| (1) | | WPK | Outer casing + wood front panel | | |
| (1) | | MPK | Outer casing + metal front panel | | |
| (1) | | EWPK | Outer casing + wood box for installation out of the niche on the wall | | |
| | | WCV | Wood outer casing | | |
| (1) | | WP | Wood frontal panel | | |
| (1) | | MP | Metal frontal panel | | |
| | Accessories | НСР | Wall-mounted electromechanical hygrostat with humidity sensor | | |
| | | HCP-EV | "Evolution" electronic hygrostat with variable hygrometric curve to optimize operation of the dehumidifier | | |
| | | EBB | Basis electric board with microprocessor | | |
| | | EBE | Advanced electric board with microprocessor | | |

(1) Colour: RAL 9010



Series VESTA Horizontal

Isothermal dehumidifier with pre- and post-treatment water coil 260 m3/h



Identity

Horizontal ducted installation Suitable for radiant air conditioning Isothermal (neutral air) Centrifugal fan R134a

Versions

VESTA 80 H Horizontal dehumidifier for ducted installation

VESTA 80 HM Horizontal Dehumidifier with separate supply of pre-/post-treatment coils

VESTA 80 H - HP Horizontal dehumidifier for medium static pressure (50 Pa) ducted installation

Certifications









Description

VESTA dehumidifiers are utilised for summer dehumidification of rooms with radiant panel cooling systems.

VESTA is designed and built exclusively for indoor use and delivers air at neutral temperature with respect to the room air.

This characteristic is assured by the presence in the unit of a postcooling coil through which water from the radiant panels system is circulated.

VESTA is controlled by the regulation and control system, also when several units are installed in parallel.

Optimal installation for all types of system is guaranteed by a range of optional accessories.



QUALITY POINTS

Centrifugal fan with 6-speed built-in motor to adjust the best operation to different working conditions.

HM version with separate pre-/post-treatment coils supply

COMANDO

"Evolution" electronic hygrostat with variable hygrometric curve to optimize operation of the dehumidifier for Comfort pourpose EBE accessory microprocessor "advanced" for the intelligent management and efficient unit in order to ensure maximum energy saving, low noise and long life of the compressor.



"Evolution" electronic hygrostat



Technical data

| | Size | | Vesta 80H | Vesta 80HM | Vesta 80H-HP | | |
|-----|---|---------------|-----------|-------------|--------------|--|--|
| | Termotechnical data | | | | | | |
| | Approximate treatable volume | m³ | | 200/250 | | | |
| (1) | Human occupancy | n° | | 7 | | | |
| | Dehumidifing performances | | | | | | |
| (2) | Nominal condensing capacity | I/h | 0.8 | | | | |
| | Nominal total water flow rate to pre and post-treatment coils (coils connected in parallel) | l/h | | 175 | | | |
| | Nominal total cooling capacity absorbed by the air pre and post-treatment coils | W | | 830 | | | |
| | Δp pre and post-treatment coils | kPa | | 7 | | | |
| | General | | | | | | |
| | Power supply | (V/ph/ Hz) | | 230/1/50 | | | |
| (3) | Nominal running current | Α | | 1.9 | | | |
| | Maximum running current | Α | | 2.6 | | | |
| (3) | Nominal power input | W | | 370 | | | |
| | Maximum power input | W | | 400 | | | |
| | Electrical box protection rating | | | IP54 | | | |
| | R134a refrigerant charge | g | | 285 | | | |
| | Pre and post-treatment coils hydraulic connections | n° | 2 | 4 | 2 | | |
| | Pre and post-treatment coils hydraulic connections | W | | 1/2 | | | |
| | Pre and post-treatment coils hydraulic connections | tipo | | GAS femmina | | | |
| | Total sound pressure in open field at 1m distance | dB(A) | 39.5 | | | | |
| | Fan | | | | | | |
| | Centrifugal fan setting speed | n° | | 6 | | | |
| | Internal width of fan outlet port | mm | 260 | | | | |
| | Internal hight of fan outlet port | mm | 100 | | | | |
| | Nominal air flow | m3/h | 260 | | | | |
| | Working field | | | | | | |
| (4) | Pre-/post-treatment coils water temperature | °C | | 12 ÷ 22 | | | |
| (4) | Intake air db temperature | °C | | 15 ÷ 35 | | | |
| (4) | Relative humidity | % | | 45 ÷ 85 | | | |

⁽¹⁾ Value that depends on the level of metabolic activity and the average radiant temperature in the room.

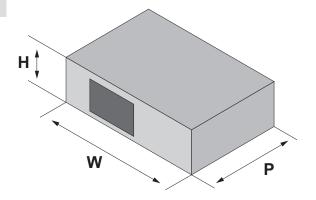


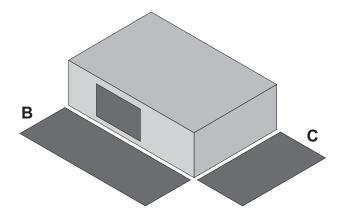
⁽²⁾ Nominal airflow; intake air 25°C + 65%; nominal water flow rate; pre- and post treatment coils water inlet temperature: 15 °C.

⁽³⁾ Nominal airflow; intake air 25°C \div 65%; nominal water flow rate; pre- and post treatment coils water inlet temperature: 15 °C.

⁽⁴⁾ In the case of very warm rooms and surroundings with high relative humidity (swimming pools, spa baths, etc.) consult us and provide details of the place of installation.

Dimensions and service spaces





| Size | | Vesta 80H | Vesta 80HM | Vesta 80H-HP |
|---------------|----|-----------|------------|--------------|
| Dimensions | | | | |
| Weight | Kg | | 39 | |
| Width/W | mm | | 800 | |
| Depth/P | mm | | 634 | |
| High/H | mm | | 250 | |
| Service areas | | | | |
| В | mm | | 600 | |
| С | mm | | 600 | |

| Size | Vesta 80H | Vesta 80HM | Vesta 80H-HP |
|-----------------|-----------|------------|--------------|
| VESTA 80H/HM/HP | | | |

VESTA 80 HM inclusive of electronic board.

The units VESTA 80H and VESTA 80H-HP should be ever combined with EBB (standard) or EBE (evolution) circuit board.



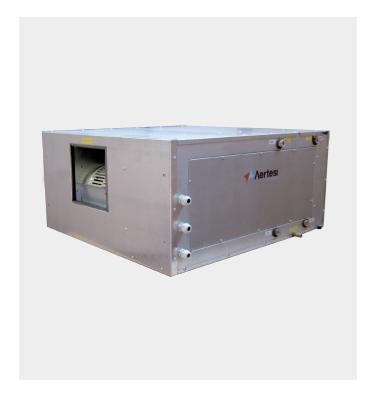
Accessories

| | Modello | | | Vesta 80H | Vesta 80HM | Vesta 80H-HP |
|-------------|---------|---|---|-----------|------------|--------------|
| | НСР | Wall-mounted electromechanical hygrostat with humidity sensor | € | | | |
| Accessories | HCP-EV | "Evolution" electronic hygrostat with variable hygrometric curve to optimize operation of the dehumidifier | € | | | |
| | EBB | Basis electric board with microprocessor | € | | - | |
| | EBE | Advanced electric board with microprocessor | € | | - | |



Series VESTA Horizontal

Isothermal dehumidifier with pre- and post-treatment water coil 450-900 m3/h



Identity

Horizontal ducted installation Suitable for radiant air conditioning Isothermal (neutral air) Centrifugal fan R134a

Versions

Horizontal for ducted installation

Certifications



Plus







Description

The VESTA 110 / 240 is a ductable unit designed and built for dehumidification and fresh air intake in rooms cooled by means of radiant panels.

The unit also provides the facility for fresh air intake during winter mode operation of the system.

The unit can be operated also in complete or partial recirculation mode.

These latter two installation modes are useful during summer operation in rooms in which high levels of air exchange are required and in conditions of very high ambient air absolute humidity levels.

The energy recovery unit, which is available as an accessory, makes for significant energy savings and a consequent increase in unit efficiency in the case of operation entirely with external ambient air.

VESTA 110 / 240 was designed primarily for medium/large size homes, public premises and retail units generally with occupancy levels of 12÷20 persons per unit.



"Evolution" electronic hygrostat

Plus

QUALITY POINTS

Centrifugal fan with 3-speed built-in motor to adjust the best operation to different working conditions.

Pre and post-treatment coils with different hydraulic connections Return air plenum and air renewal and recovery module in combination

COMANDO

"Evolution" electronic hygrostat with variable hygrometric curve to optimize operation of the dehumidifier for Comfort pourpose EBE accessory microprocessor "advanced" for the intelligent management and efficient unit in order to ensure maximum energy saving, low noise and long life of the compressor.

EASY SERVICE

Air filter efficiency G3 corrugated acrylic



Technical data

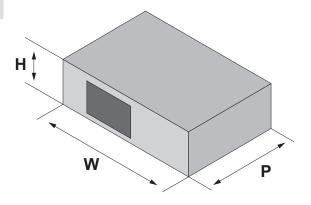
| Size | | Vesta 110 | Vesta 240 | | | |
|--|---------------|-----------|------------------|--|--|--|
| Termotechnical data | | | | | | |
| Human occupancy | n° | 15 | 25 | | | |
| General | | | | | | |
| Power supply | (V/ph/ Hz) | 230/1/50 | (V/ph/Hz) | | | |
| Maximum running current | A | 4.4 | 7.5 | | | |
| Maximum power input | W | 570 | 1100 | | | |
| R134a refrigerant charge | g | 750 | 1200 | | | |
| External fuse | Α | 10 | 12 | | | |
| Pre and post-treatment coils hydraulic connections | n° | | 4 | | | |
| Pre and post-treatment coils hydraulic connections | W | | 1/2 | | | |
| Pre and post-treatment coils hydraulic connections | tipo | GASf | r r emmina | | | |
| Total sound pressure in open field at 1m distance | dB(A) | 67.6 | 68.3 | | | |
| Fan | | | | | | |
| Main fan fuse | Α | | 2.5 | | | |
| Centrifugal fan setting speed | n° | | 3 | | | |
| Nominal air flow | m3/h | 450 | 900 | | | |
| Max available pressure | Pa | 200 | 145 | | | |
| Dehumidifing performances | | | | | | |
| Dehumidification capacity | I/h | 1.25 | 2.4 | | | |
| Power input | W | 420 | 920 | | | |
| Running current | Α | 2.5 | 5.2 | | | |
| Nominal water flow rate to pre- treatment coils | l/h | 120 | 200 | | | |
| Water coil pressure drop at 200 l/h | kPa | 6 | - | | | |
| Water coil pressure drop at 300 l/h Working field | | - 11 | | | | |
| Pre-/post-treatment coils water temperature | °C | 12 ÷ 22 | | | | |
| Intake air db temperature | °C | 10 ÷ 50 | | | | |
| Relative humidity | % | 20 |) ÷ 90 | | | |

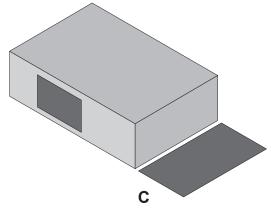
- (1) Value that depends on the level of metabolic activity and the average radiant temperature in the room.
- (2) A flow control valve is supplied for fitting to the pre-treatment coil. The connections are 1/2" male (see section "Flow control valve connection")
- (3) According to fan speed

- (4) At the following conditions, typical of operation with recovery exchanger or in partial recirculation mode: Unit inlet air: 29°C-60% RH. Pre- and post-treatment coils water inlet temperature: 15°C
- (5) In the case of very warm rooms and surroundings with high relative humidity (swimming pools, spa baths, etc.) consult us and provide details of the place of installation.



Dimensions and service spaces





| Size | | Vesta 110 | Vesta 240 |
|---------------|----|-----------|-----------|
| Dimensions | | | |
| Weight | Kg | 72 | 95 |
| Width/W | mm | 655 | 805 |
| Depth/P | mm | 8 | 75 |
| High/H | mm | 4 | 05 |
| Service areas | | | |
| С | mm | 7 | 00 |

| Size | Vesta 110 | Vesta 240 |
|---------------|-----------|-----------|
| VESTA 110-240 | | |

Accessories

| | Modello | | Vesta 110 | Vesta 240 |
|-------------|---------|--|-----------|-----------|
| | HR 110 | Cross-flow recovery heat exchanger | | - |
| | PL110 | Intake plenum for Vesta 110 | | - |
| | HR 240 | Counter-flow energy recovery heat exchanger | - | |
| Various | PL240 | Intake plenum for Vesta 240 | - | |
| accessories | НСР | Wall-mounted electromechanical hygrostat with humidity sensor | | |
| | HCP-EV | Electronic humidistat with variable operating humidity curve "Evolution" | | |

