

Series VESTA Horizontal

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



Identity

Horizontal ducted installation
Suitable for radiant air conditioning
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
NEW VESTA 80 HI Isotherma con possibilità di integrazione per installazione canalizzata.
VESTA 80 HI-HP Isotherma con possibilità di integrazione per installazione canalizzata con media prevalenza (50 Pa).

Certifications



Plus



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.

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

Plus

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

EASY SERVICE

Easy removable filter with the frontal panel

FLEX

The HP versions with 50 pascal fan motor can guarantee higher flexibility to the installation needs; it allow to the unit to be installed ducted in technical under-ceilings far from bedroom rooms.

HIGH PERFORMANCE

Double cooling capacity available in comparison to the medium offer of similar units on the market



Total cooling capacity in Kw
80VI Cooling Integration model

CONTROL PANEL

"Evolution" electronic hygrostat with variable hygrometric curve to optimize operation of the dehumidifier in accordance to the comfort. Versions H-HM: EBE device with microprocessor represent an "advanced" solution for the intelligent and efficient management of the unit in order to ensure the maximum energy saving, the noiseless and the long term life of the compressor.

COOLING INTEGRATION

The version of HI has been studied mainly for radiant installations with changes of temperature-humidity conditions very "sudden" or "start-up phases of the system." Unlike some units in the market that only work in integration and dehumidification, HI Vesta can also work in single isothermal dehumidification, and perfectly matched to our humidistat to the temperature curve to ensure comfort in all conditions and when not to integrate there is a need.

Technical data

Size		Vesta 80H	Vesta 80HM	Vesta 80H-HP	VESTA 80 HI	VESTA 80 HI-HP
Termotechnical data						
	Approximate treatable volume	m ³	200/250			
(1)	Human occupancy	n°	7			
Dehumidifying performances						
(2)	Nominal condensing capacity	l/h	0.8			
	Nominal total water flow rate to pre and post-treatment coils (coils connected in parallel)	l/h	175		210	
	Nominal total cooling capacity absorbed by the air pre and post-treatment coils	W	830			
	Δp pre and post-treatment coils	kPa	7			
(6)	Max integration cooling capacity	kW	2.4			
General						
	Power supply	(V/ph/Hz)	230/1/50			
(3)	Nominal running current	A	1.9			
	Maximum running current	A	2.6			
(3)	Nominal power input	W	370			
	Maximum power input	W	400			
	Electrical box protection rating		IP44			
	R134a refrigerant charge	g	285		300	
	Pre and post-treatment coils hydraulic connections	n°	2	4	2	2
	Pre and post-treatment coils hydraulic connections	"	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 height of fan outlet port	mm	100			
	Nominal air flow	m ³ /h	260			
	High static pressure	Pa	0		50	
Working field						
(4)	Pre-/post-treatment coils water temperature	°C	12 ÷ 25		15 ÷ 25	
(4)	Intake air db temperature	°C	15 ÷ 35		20 ÷ 37	
(4)	Relative humidity	%	45 ÷ 85		45 ÷ 85	

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

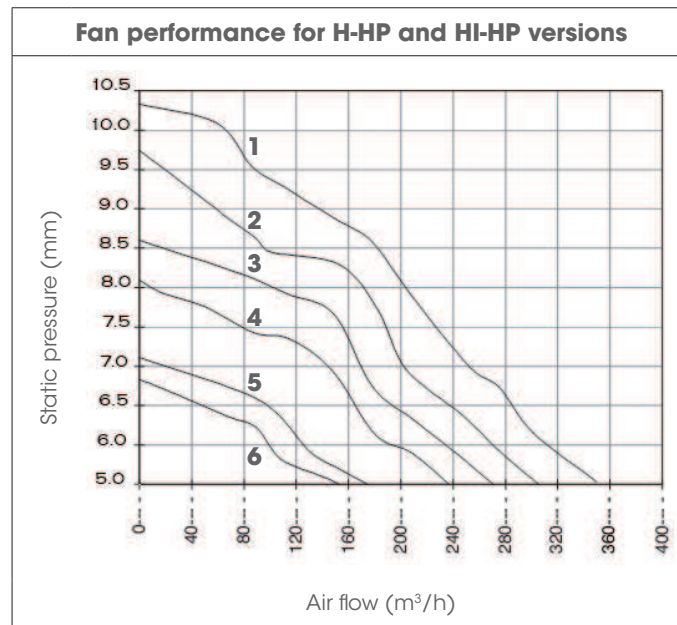
(2) Nominal airflow; intake air 25°C ÷ 65%; nominal water flow rate; pre- and post treatment coils water inlet temperature: 15 °C.

(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.

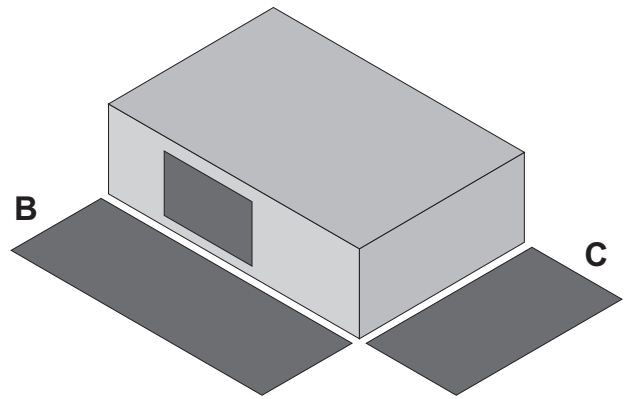
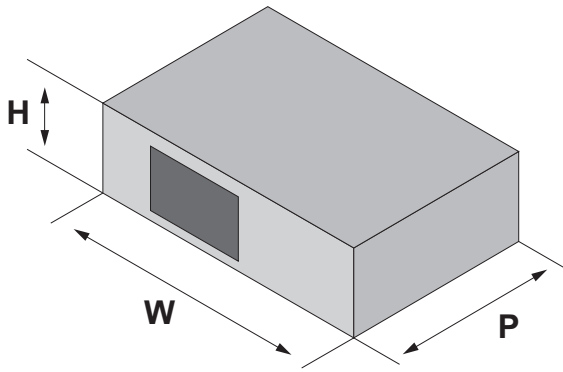
(5) Le versioni HP devono obbligatoriamente essere canalizzate con una perdita di carico lato aria di 50 Pa.

(6) Temperatura acqua 15 °C, temperatura aria ambiente 35 °C



Note: the std cabled curve of the fan is the 2nd. On demand it is possible to have a different cabling of the fan among tyhe ones indicated on the graph

Dimensions and service spaces



Grandezze		Vesta 80H	Vesta 80HM	Vesta 80H-HP	VESTA 80 HI	VESTA 80 HI-HP
Dimensions						
Weight	Kg			39		
Width/W	mm			800		
Depth/P	mm			634		
High/H	mm			250		
Service areas						
B	mm			600		
C	mm			600		

Unit price list

Size		Vesta 80H	Vesta 80HM	Vesta 80H-HP	Vesta 80HI	Vesta 80HI-HP
VESTA 80H/HM/HP/HI/HI-HP	€	1.298	2.400	1.787	1.930	2.330

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

Accessories price list

Model		Vesta 80H	Vesta 80HM	Vesta 80H-HP	Vesta 80HI	Vesta 80HI-HP		
Accessories	HCP	Wall-mounted electromechanical hygrometer with humidity sensor	€	126				
	HCP-EV	"Evolution" electronic hygrometer with variable hygrometric curve to optimize operation of the dehumidifier	€	257				
	EBB	Basis electric board with microprocessor	€	170	-	170	-	-
	EBE	Advanced electric board with microprocessor	€	350	-	350	-	-

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

VESTA 110 - 240 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.

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 hygrometer with variable hygrometric curve to optimize operation of the dehumidifier for Comfort purpose
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

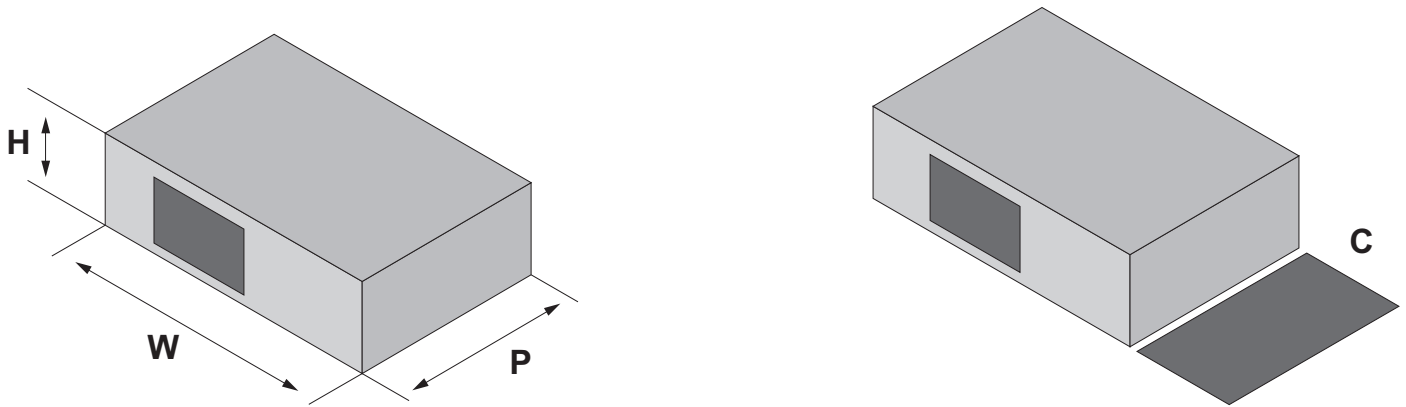
Air filter efficiency G3 corrugated acrylic

Technical data

Size		Vesta 110	Vesta 240	
Termotechnical data				
(1)	Human occupancy	n°	15	25
General				
	Power supply	(V/ph/Hz)	230/1/50	
	Maximum running current	A	4.4	7.5
	Maximum power input	W	570	1100
	R134a refrigerant charge	g	750	1200
	External fuse	A	10	12
(2)	Pre and post-treatment coils hydraulic connections	n°	4	
(2)	Pre and post-treatment coils hydraulic connections	"	1/2	
(2)	Pre and post-treatment coils hydraulic connections	tipo	GAS femmina	
	Total sound pressure in open field at 1m distance	dB(A)	67.6	68.3
Fan				
	Main fan fuse	A	2.5	
	Centrifugal fan setting speed	n°	3	
	Nominal air flow	m3/h	450	900
(3)	Max available pressure	Pa	200	145
Dehumidifying performances				
(4)	Dehumidification capacity	l/h	1.25	2.4
(4)	Power input	W	420	920
(4)	Running current	A	2.5	5.2
(4)	Nominal water flow rate to pre-treatment coils	l/h	120	200
(4)	Water coil pressure drop at 200 l/h	kPa	6	-
(4)	Water coil pressure drop at 300 l/h	kPa	-	11
Working field				
(5)	Pre-/post-treatment coils water temperature	°C	12 ÷ 22	
(5)	Intake air db temperature	°C	10 ÷ 50	
(5)	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	875	
High/H	mm	405	
Service areas			
C	mm	700	

Unit price list

Size		Vesta 110	Vesta 240
VESTA 110-240	€	3.284	3.620

Accessories price list

Model		Vesta 110	Vesta 240	
Various accessories	HR 110	Cross-flow recovery heat exchanger	€ 1.543	-
	PL110	Intake plenum for Vesta 110	€ 240	-
	HR 240	Counter-flow energy recovery heat exchanger	-	2044
	PL240	Intake plenum for Vesta 240	€ -	256
	HCP	Wall-mounted electromechanical hygrostat with humidity sensor	€	126
	HCP-EV	Electronic humidistat with variable operating humidity curve "Evolution"	€	257