

NEW

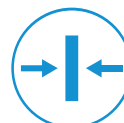
# UNICO VERTICAL [EVAN]

Heat pump air conditioner without outdoor unit



### SPACE SAVING

Developed vertically, it brings comfort where any other installation would be impossible, such as the corner of a room or the space between two windows.



### PRO POWER

Super cooling power (up to 3.5 kW) to meet the needs of even the largest environments.



### AVAILABLE IN RECESSED VERSION

Available for both free-standing and recessed installation (customised or with metal panel) for best architectural integration even in indoor spaces.



### CONDENSATE DRAIN

Always mandatory (even when used only for cooling). See the installation manual for details.



### FEATURES

- Max power: 3.5 kW
- Available in the version: HP (heat pump)
- Cooling class: A (on a range between A+++ and D)
- Refrigerant gas: R32 (GWP=675)
- Available in aesthetic and recessed version
- Floor installation for aesthetic version
- Recessed installation for naked version
- On-board touchscreen display (Only for aesthetic version).
- Multifunctional remote control with LCD display (Only for aesthetic version).
- On/off contact for enabling or energy boost
- An RS485 port is available to control the unit with external BMS in Modbus RTU language.
- Condensate basin heating cable as standard.

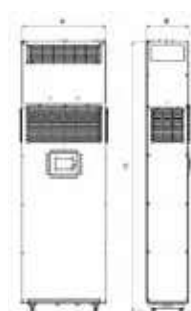
### FUNCTIONS

- **Cooling, heating, dehumidification and ventilation**
- **Economy function:** allows energy savings, automatically optimising machine performance
- **Auto function:** modulates the operating parameters in relation to the room temperature.
- **Silent Mode function:** mode that sets the machine to the lowest noise level. The compressor and fans are set to reduce the sound pressure down to 38 dB(A).
- **24 H timer**

### DIMENSIONS AND WEIGHT



		35	
A	mm	523	
B	mm	255	
C	mm	1590	



		35 - NK	
A	mm	517	
B	mm	260	
C	mm	1585	

**TECHNICAL DATA**

			Unico Vertical 35 HP EVAN	Unico Vertical-NK 35 HP EVAN
<b>PRODUCT CODE</b>			02559	02557
<b>EAN CODE</b>			8021183025590	8021183025576
Cooling power (min/max)		kW	1,8/3,5	1,8/3,5
Heating power (min/max)		kW	1,7/3,2	1,7/3,2
Nominal cooling capacity (1)	Prated	kW	3.1	3.1
Nominal heating capacity (1)	Prated	kW	2.4	2.4
Nominal power consumption for cooling (1)	PEER	kW	1.2	1.2
Nominal absorption for cooling (1)		A	5.7	5.7
Nominal power consumption for heating (1)	PCOP	kW	0.8	0.8
Nominal absorption for heating (1)		A	3.7	3.7
Nominal energy efficiency index (1)	EERd		2.6	2.6
Nominal efficiency coefficient (1)	COPd		3.1	3.1
Energy efficiency class in cooling (1)			A	A
Energy efficiency class in heating (1)			A	A
Energy consumption in "thermostat off" mode	PTO	W	21	21
Energy consumption in "standby" mode (EN 62301)	PSB	W	0.5	0.5
Energy consumption for double pipe appliances (1) cooling function	QDD	kWh/h	1.2	1.2
Energy consumption for double pipe appliances (1) heating function	QDD	kWh/h	0.8	0.8
Cooling power with Silent Mode function		kW	1.8	1.8
Heating power with Silent Mode function		kW	1.7	1.7
Supply voltage		V-F-Hz	230-1-50	230-1-50
Supply voltage (min/max)		V	198 / 264	198 / 264
Power consumption in cooling mode (min/max)		kW	0,5 / 1,5	0,5 / 1,5
Absorption in cooling mode (min/max)		A	2,8 / 7,2	2,8 / 7,2
Absorbed power in heating mode (min/max)		kW	0,3 / 1,4	0,3 / 1,4
Absorption in heating mode (min/max)		A	2,5/6,8	2,5/6,8
Maximum power consumption with electric resistance heating		kW	-	-
Maximum absorption with electric resistance heating		A	-	-
Dehumidification capacity		l/h	1.1	1.1
Air flow rate in cooling environment (max/med/min)		m³/h	290/390/440	290/390/440
Air flow rate in heating environment (max/med/min)		m³/h	290/390/440	290/390/440
Air flow rate with electric resistance heating environment (max/med/min)		m³/h	-	-
External air flow rate in cooling (max/min)		m³/h	190/640	190/640
External air flow rate in heating (max/min)		m³/h	190/640	190/640
Internal ventilation speed			3	3
External ventilation speed			5	5
Diameter wall holes**		mm	202	202
Electric resistance heating		kW	-	-
Maximum remote control range (distance/angle)		m / °	8 / ±80°	8 / ±80°
Dimensions (WxHxD) (without packaging)		mm	523x1590x255	517x1585x260
Dimensions (WxHxD) (with packaging)		mm	593x1727x328	593x1727x328
Weight (without packaging)		kg	84	69
Weight (with packaging)		kg	87	72
Internal sound pressure (min/max) (2)		dB(A)	36-44	36-44
Silent Mode sound pressure level		dB(A)	38	38
Degree of protection provided by covers			IP20	IP20
Refrigerant gas*		Type	R32	R32
Refrigerant gas charge		kg	0.4	0.4
Global warming potential	GWP		675	675
Maximum operating pressure		MPa	4.28	4.28
Power cable (N° pole x section mmq)			3 x 1,5	3 x 1,5

**LIMITS OF OPERATING CONDITIONS**

Indoor ambient temperature	<b>Maximum temperature in cooling</b>	DB 35°C - WB 24°C
	<b>Minimum temperature in cooling</b>	DB 18°C
	<b>Maximum temperature in heating</b>	DB 27°C
	<b>Minimum temperature in heating</b>	-
Outdoor ambient temperature	<b>Maximum temperature in cooling</b>	DB 43°C - WB 32°C
	<b>Minimum temperature in cooling</b>	-
	<b>Maximum temperature in heating</b>	DB 24°C - WB 18°C
	<b>Minimum temperature in heating</b>	DB -15°C

(1) Test conditions: the data refer to the EN14511 standard - HEATING MODE: Temperature: outdoor environment DB 7°C / WB 6°C; indoor environment DB 20°C / WB 15°C - COOLING MODE: outdoor ambient temperature DB 35°C / WB 24°C; indoor environment DB 27°C / WB 19°C

(2): Declaration of test data in a semi-anechoic chamber at a distance of 2m, minimum pressure in ventilation only.

\* Hermetically sealed equipment containing fluorinated gas with GWP equivalent 675.

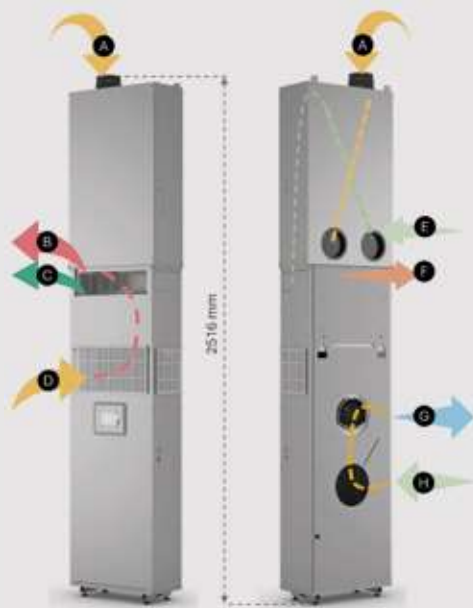
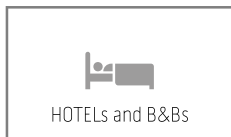
Energy efficiency classes refer to a range between A+++ and D.

# Vertical and multifunctional

## A Unico generator for building climate comfort

Unico Vertical offers a comprehensive solution for indoor climate control in a fully electric, energy-efficient design with a low architectural impact. Like all heat pump air conditioners without outdoor unit, Unico Vertical allows complete management from within the building simply by drilling two 20 cm diameter holes on an external wall and installing a compact unit, thanks to its vertical design.

With Unico Vertical, it is possible to cool, heat (also with a supplementary electric heating element for the colder months) and effectively handle the air in each room, making it the ideal solution for new constructions and renovations in residential, commercial and tourism settings.



### Heat recovery ventilation unit can be integrated

The special-purpose kit (cod. B1031), allows integration of a dual-flow HRV unit in the heat pump air conditioner without outdoor unit. In addition to the traditional cooling and heating functions, Unico Vertical can thus also guarantee an effective and efficient air exchange, improving indoor air quality and overall system efficiency. The HRV unit is equipped with an energy-efficient, cross-flow and counter-flow heat exchanger.

- A - HRV air intake
- B - Heating/cooling air supply
- C - HRV replacement air supply
- D - Heating/cooling air intake
- E - HRV external air intake
- F - HRV ejection
- G - Outside air extraction heating/cooling
- H - Outside air intake heating/cooling

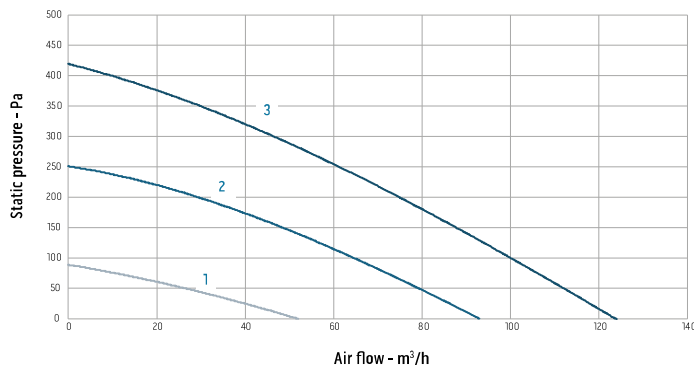
Maximum flow rate @100 Pa	m <sup>3</sup> /h	103
Electrical power consumption (at the maximum flow rate)	W	58
SEC class (local demand control)		A
SEC class (central demand control)		NA
SEC class (manual control - No demand control ventilation)		B
Thermal efficiency	%	77
Reference flow rate	m <sup>3</sup> /h	72

Reference pressure difference	Pa	0
Specific power consumption (SPI)	W/m <sup>3</sup> /h	0.389
Sound power level (LWA)	dB(A)	56
Electrical power supply		220-240V/7 1ph/50-60Hz
IP protection rating		X2
Sound pressure @2m(1)	dB(A)	29
Max room temperature	°C	40

(1) Sound pressure level at 2 m in free field conditions, speed 40%, reported for comparison purposes only.

Performances relating to the extraction of the B1031 kit only

**B1031-KIT VMC UNICO VERTICAL**



	Speed %	m <sup>3</sup> /h max
1	40	52
2	70	93
3	100	124

Unico Vertical can be installed in various ways depending on the architectural features of the space, enabling perfect integration between building and system. Depending on the chosen installation method, additional features are available (such as air exchange via integrated HRV units, available only in recessed versions), along with different control options. Like all heat pump air conditioners without outdoor unit, Unico Vertical must be installed on an external wall and requires two 20 cm diameter holes for the heat pump unit, and an additional two 16cm holes for the optional HRV unit.

**Free standing**

**Custom recessed**

**Recessed with metal panel**



List of useful codes

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	02559	Unico Vertical 35 HP EVAN	02557	Unico Vertical-NK 35 HP EVAN	02557	Unico Vertical-NK 35 HP EVAN
MODELS	02558	Unico Vertical 35 HP EVANX	02556	Unico Vertical-NK 35 HP EVANX	02556	Unico Vertical-NK 35 HP EVANX
CONTROLS	Remote control (standard)		B1029	Wireless thermostat	B1029	Wireless thermostat
	On-board display (standard)		B1030	IAQ wireless thermostat	B1030	IAQ wireless thermostat
	-		B1128	Wireless relay	B1128	Wireless relay
HRV	-		B1031	HRV kit for Unico Vertical-NK integration	B1031	HRV kit for Unico Vertical-NK integration
RECESSED	-		B0998	Kit for 160mm grille for CMV installation	B0998	Kit for 160mm grille for CMV installation
	-			-	B1032	Kit for recessed wall installation Unico Vertical-NK
	-			-	B1033	Kit for recessed wall installation of Unico Vertical-NK e HRV