

RESIDENTIAL VENTILATION



NEW



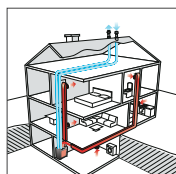
VORT PROMETEO PLUS HR 400 RANGE

Heat recovery units

Recommended application in residential buildings (such as small detached homes) up to 200 m² and commercial buildings.



- **2 models:** VORT PROMETEO PLUS HR 400, VORT PROMETEO PLUS HR 400 M.
- External Casing in polypropylene (PPE).
- Heat Exchanger – Crossed Counter-Flow type, made of PS (Polystyrene).
- Extremely high heat recovery rate (up to 92%).
- Electronically controlled EC brushless motors independently adjustable.
- Max airflow 380 m³/h.
- Three available speeds.
- Automatic frost protection.
- By-pass 100%.
- Horizontal and Vertical installation.
- Provided with 2 F5 filters (F7 optional).
- 0.5 m long silencer with nominal diameter of 150 mm supplied.
- 2 mounting brackets for vertical installation and 4 feet for horizontal installation supplied.
- Protection rate: IPX2.
- Insulation class: II.



Only for code 11585

VORT PROMETEO PLUS HR 400:

- RF remote control supplied.
- Two operating modes: automatic and manual.
- Automatic By-pass.
- Option of setting the temperature, humidity and CO₂ thresholds.
- Timer.

VORT PROMETEO PLUS HR 400 M:

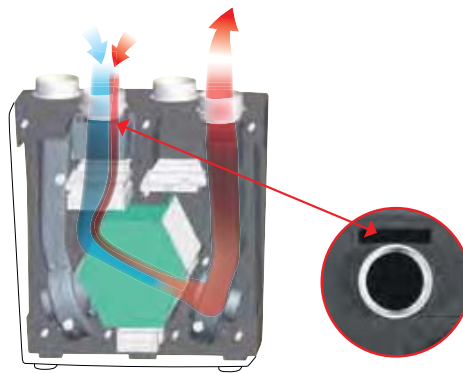
- Three available speeds chosen through external device (speed selector supplied).
- Manual By-pass.
- Can be used in conjunction with Vortice ambient sensors.

Wiring diagrams shown from page 458

FUNCTIONS AND SUPPLIES VORT PROMETEO PLUS RANGE

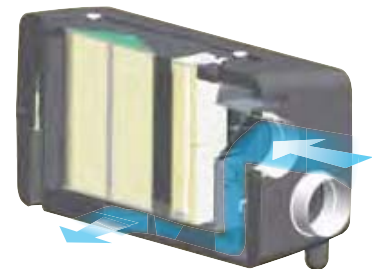
**By-pass**

In ISOTHERMAL conditions (similar indoor and outdoor air temperatures) or where the outdoor temperature is close to desired indoor temperature, the By-pass valve can be activated automatically or manually, allowing fresh air to By-pass (the heat exchanger) for natural ventilation (FREE-COOLING).

**Frost protection (Defrosting)**

In situations where the outdoor air temperature and RH % cause ice forming on heat exchanger, the frost protection valve automatically opens to mix up fresh outside air with installation room milder air. Simultaneously changes motor speed via the electronic control makes the defrosting process quicker and more efficient.

In particularly harsh climates Vortice recommends the installation of 500 W, 1200 W or 1800 W in-duct pre-heaters, available as an optional accessories, each are automatically activated by the on-board electronics.

**Filter**

VORT PROMETEO PLUS RANGE is supplied with 2 F5 filters, for cleaning fresh and stale air flows.

A further optional F7 filter is available for additional filtering of the incoming air.

An F5 filter box accessory is also available, for installation outside the machine.

Filter efficiency is monitored by the on-board electronics, providing visual and acoustic warnings via the RF remote control.

FUNCTIONS AND SUPPLIES VORT PROMETEO PLUS RANGE



Each Vort Prometeo Plus feature is controlled by the radio frequency (RF) remote control.

The RF remote control with LCD display featuring new integrated graphics can be used for the following purposes:

- Switching on/off.
- Selecting the appliance operating mode (Manual/Automatic).
- Easy initial setting of minimum and maximum speed (no need to directly operate the machine).
- Selecting one of the 3 speed settings.
- Selecting the By-pass function.
- Setting the Timer function (the product, working in Manual mode, will work at the maximum speed for: 10', 20', 30' or indefinitely, automatically slowing down to min speed).
- Configuring the automatic operating parameters:
 - desired indoor temperature (for bypass management only) can be set by the user between +15 °C and +30 °C (each step 1 °C);
 - relative humidity can be set by the user between 40% and 90% (each step 5%);
 - Max. CO₂ air concentration in the room can be set by the user between 500 ppm and 3.000 ppm (at step of 50 ppm); CO₂ level can be disabled.
- Viewing machine malfunction information.

An additional radio frequency (RF) antenna, part code (22479) including a connection cable, is available as an option, and allows control Vort Prometeo Plus even if the position chosen for its installation is screened from radio waves.

TECHNICAL DATA

Models	Code	V-50Hz	W	A	Max Airflow		Max Pressure		Max °C
					m³/h	l/s	mmH ₂ O	Pa	
VORT PROMETEO PLUS HR 400	11582	230	160	1.3	380	106	68.8	675	50
VORT PROMETEO PLUS HR 400 M	11585								

SOUND LEVELS* VORT PROMETEO PLUS RANGE

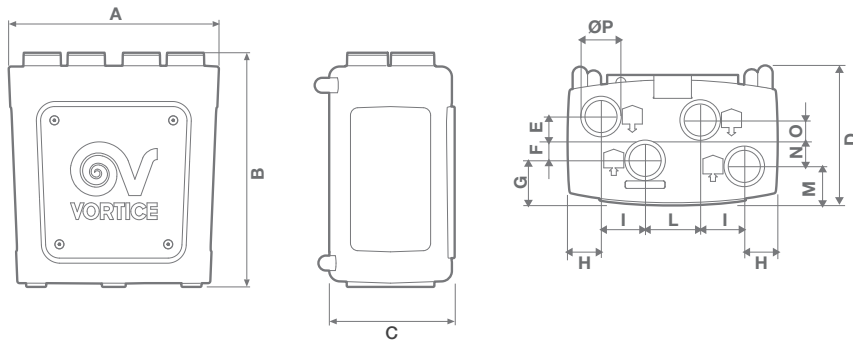
RPM		Lw dB (A)							Lw dB (A)	Lp dB (A) 3m***
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz		
700	Supply to internal	8.4	9.3	14	22.6	5	9.2	10.1	28	7.5
	Extract from internal	5.7	15	18.1	16.4	13.9	12.2	7.5	27.5	7
	Breakout	14.3	39.2	18.3	20.6	2.9	7.1	na**	44	23.5
1600	Supply to internal	18.5	24.1	29.4	37.5	24.8	15.6	13.3	43.2	22.7
	Extract from internal	16	25.6	27.9	28.4	18.8	6.8	3.3	37.6	17.1
	Breakout	21.7	31.9	38.3	34	23.8	11.8	7.5	48.4	27.9
2100	Supply to internal	16.9	32.3	36.6	48.3	35.8	24.7	10.2	56.7	36.2
	Extract from internal	14.9	34.7	32.8	38.4	29.2	15.7	nd	46.4	25.9
	Breakout	24.6	41.1	41.6	47.1	34.8	20.8	5.6	58	37.5
2650	Supply to internal	20.3	40.9	46	64.7	41.8	33.7	18.5	65.5	45
	Extract from internal	19.1	42.5	38.4	60	36	25.6	13.8	60.7	40.2
	Breakout	31.3	43	48.1	59.2	41.4	29.1	13.6	61.3	40.8
3000	Supply to internal	23.5	41.3	47.5	52	44.1	37.1	22.8	59.4	38.9
	Extract from internal	19.7	42.7	40.6	43.2	38	27.1	12.2	53.6	33.1
	Breakout	28.9	45.7	47.9	47.4	43.9	33.3	16.2	59.5	39
3350	Supply to internal	25.3	44.4	49.7	54.8	48.4	42.3	28.8	62.7	42.2
	Extract from internal	23.6	43.4	43.2	45.7	41.5	31.6	13.5	55.5	35
	Breakout	31.8	46.7	51.5	55.2	47.5	37.4	22	62.4	41.9

* Tests carried out using sound intensity measurement in a semi-anechoic chamber.

** Data not available.

*** In free field.





DIMENSIONS



Models	A	B	C	D	E	F	G	H	I	L	M	N	O	Ø P	Kg
VORT PROMETEO PLUS HR 400	840	935	502	560	85	100	156.7	133.6	176	220	180.7	76	99	150	25
VORT PROMETEO PLUS HR 400 M															

Dimensions (mm)

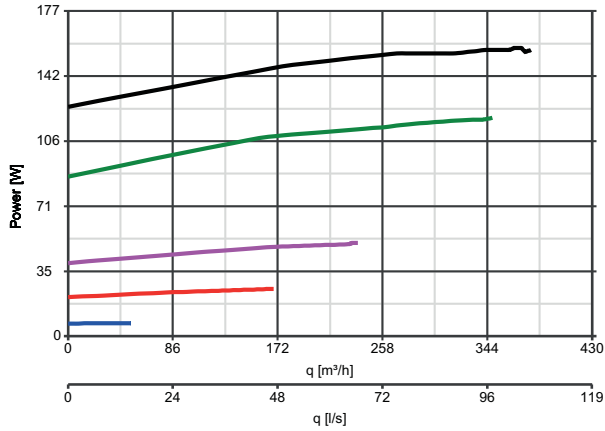
PRODUCT ACCESSORIES

Models		Code	Product	
			VORT PROMETEO PLUS HR 400 code 11585	VORT PROMETEO PLUS HR 400 M code 11582
	SPEED REGULATOR: Three-speed selector switch.	22478	•	
	CONTROLS: External RF Receiver Module	22479	•	•
	CONTROLS: RF Remote Controller White.	22464	•	•
	ELECTRIC HEATER 500 W	22467	•	•
	ELECTRIC HEATER 1200 W	22468	•	•
	ELECTRIC HEATER 1800 W	22469	•	•
	F5 Internal filter (Single)	22342	•	•
	F5 Internal filter (Single)	22321	•	•
	F7 Internal filter (Single)	22323	•	•
	HEXAGONAL SCREWDRIVER FOR MAINTENANCE	22340	•	•
	ADDITIONAL FILTER BOX	22329	•	•
	HEAT EXCHANGER for VORT PROMETEO PLUS HR 400	22318	•	•

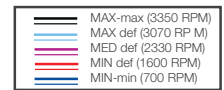
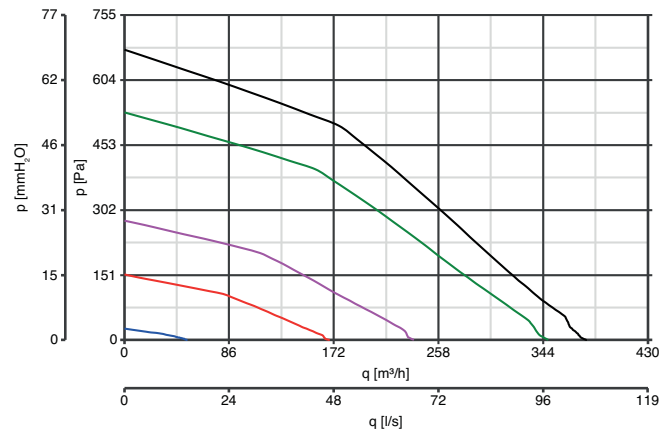
Description and sizes on page 126; System components on page 330.

PERFORMANCE CURVES

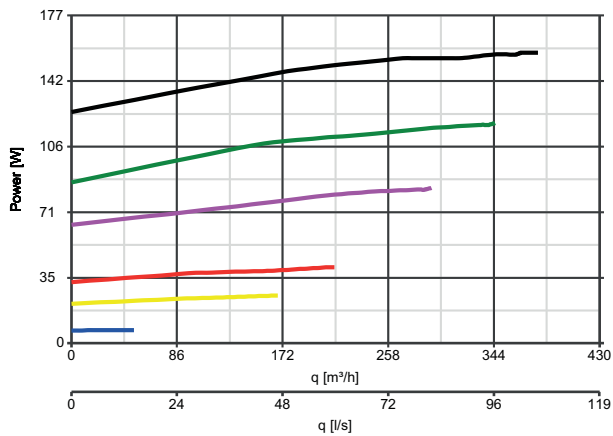
VORT PROMETEO PLUS HR 400 M code 11585
Power consumption curves



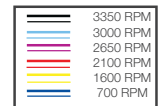
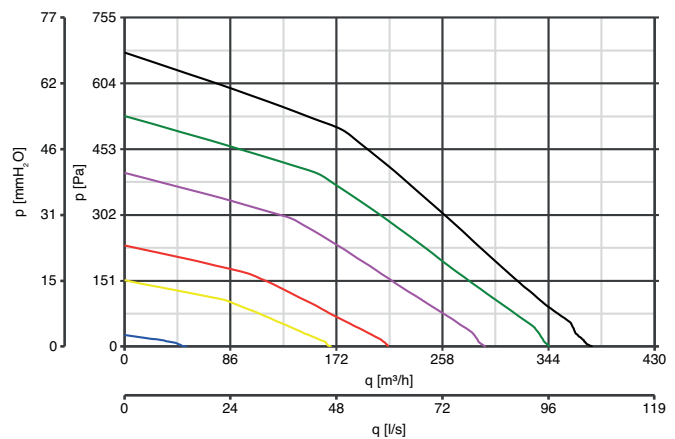
VORT PROMETEO PLUS HR 400 M code 11585
Airflow/pressure curves



VORT PROMETEO PLUS HR 400 code 11582
Power consumption curves



VORT PROMETEO PLUS HR 400 code 11582
Airflow/pressure curves



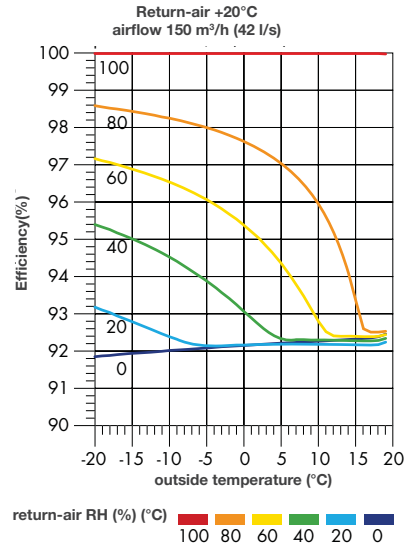
EFFICIENCY CURVES

Test according to EN 308

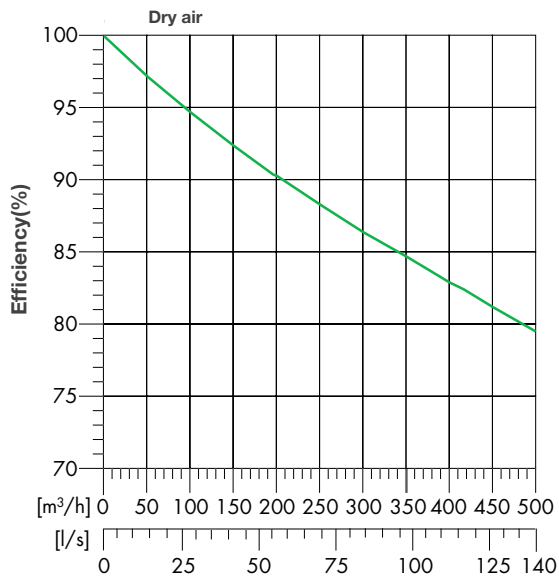
TOTAL EXHAUST FLOW RATE (m ³ /h)	HEAT RECOVERY EFFICIENCY (%)
54	92
76	91
98	90
119	90
140	89
162	88
184	88
205	87

Test conditions: +5°C/70%; +25°C/28%.
Data referred to test performed at BRE according to BRITISH SAP-Q system 4 standard.

Influence on efficiency due to condensation heat



Efficiency as a function of the airflow





VORT HR 200

Heat recovery unit

Offers continuous ventilation of the home, maintaining ideal comfortable conditions within the rooms served while minimising energy consumption. Ideal for apartments up to 120 m².



Product specifications:

- Extremely high heat recovery rate up to 93%.
- External Casing – Mild steel, powder coated white.
- Internal parts are made using expanded polypropylene (PPE).
- Heat Exchanger – Crossed Counter-Flow type, made of PS (Polystyrene).
- Electrically controlled EC brushless motors, mounted on vibration dampers, offer optimal performance and extremely low power consumption.
- Max airflow 210 m³/h.
- 2 available speeds can be chosen through external device.
- Automatic frost protection.
- 2 G3 filters (F5 optional), easily accessible by removing the front panel.
- Timer 30'.
- Minimal size (width 595 mm): compatible with standard installation recesses.
- Easy vertical or horizontal wall installation.
- Protection rating: IPX2.
- Insulation class: II. ☐



Wiring diagrams shown from page 458

TECHNICAL DATA

Models	Code	V~50Hz	W	A	RPM	Max Airflow		Max Pressure		Max °C
						m ³ /h	l/s	mmH ₂ O	Pa	
VORT HR 200	11805	230	77	0.65	2340	210	58.3	28	276	50



SOUND LEVELS* VORT HR 200

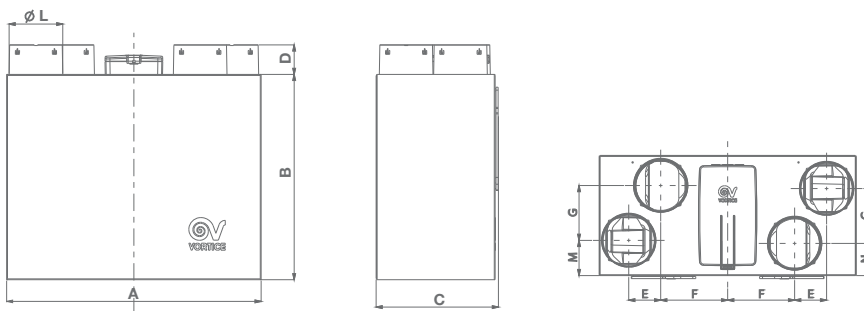
RPM		Lw dB (A)							Lw dB (LIN)	Lw dB (A)	Lp dB (A) 1m***	Lp dB (A) 3m***
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz				
1120	Supply to internal	20,7	27,5	34,1	31	27,5	14,6	14	62,9	42,4	25	12,16
	Extract from internal	nd	nd	nd	nd	nd	nd	nd	62,6	33,8		
	Breakout	12,7	17,8	29,7	19,1	14,7	14,5	14,4	61,3	32,7		
1600	Supply to internal	23,8	33,5	38,1	37,7	36	20,7	16,9	62,7	49,9	28	16,36
	Extract from internal	20,8	19,4	27,1	25,7	20,1	13,3	14,8	63,6	37,8		
	Breakout	15,1	19,6	27	24,9	18	14	14,2	63,1	36,9		
2100	Supply to internal	28,1	36,6	42,2	52,1	44,4	30,5	26,4	63,7	55,2	32	20,16
	Extract from internal	22,7	23,8	31,4	34,7	24,5	20,8	15,8	63,4	41,2		
	Breakout	19,5	27,5	30,4	37,4	25,5	16,8	14,1	60,9	40,7		
2650	Supply to internal	32,9	41	44,5	54,8	49,8	37,7	36,1	70,8	59	25	26,16
	Extract from internal	25,2	25,4	36	38,8	28,3	17,7	16,5	61,9	45,7		
	Breakout	22,4	29	33,2	41,4	32,2	25,3	16,8	63	46,7		
3000	Supply to internal	35	43,7	48,5	54,8	55,3	43,5	42,8	75,9	63,2	38	30,56
	Extract from internal	32,2	28,8	39,8	39,7	32,4	21,5	19,6	63,5	48,4		
	Breakout	26	36	41,4	41,1	37	30	20,6	64	51,1		
3350	Supply to internal	35,2	46,9	51	56,8	58,7	46,6	46,2	75,9	68,3	39,5	32,66
	Extract from internal	28	30,6	38,1	41,6	37,1	24,1	23,5	62,6	49,2		
	Breakout	28,5	38,9	50,1	43	39,8	32	25,6	64,1	53,2		

* Tests carried out using sound intensity measurement in a semi-anechoic chamber.

** Data not available.

*** In free field.







DIMENSIONS



Models	A	B	C	D	E	F	G	Ø L	M	N	Kg
VORT HR 200	595	480	292	69	74	155	127	125	86,5	79,5	19

Dimensions (mm)

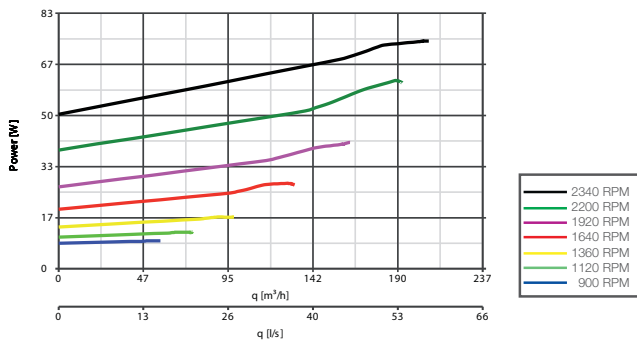
PRODUCT ACCESSORIES

Models		Code	Product
			VORT HR 200 code 11805
	HR 200 CONTROL	22359	●
	EXTERNAL RF MODULE for VORT HR 200	22315	●
	C HCS Environmental sensor for humidity	12994	●
	C PIR Passive infrared sensor	12998	●
	C SMOKE Environmental sensor for air quality	12993	●
	C TEMP Environmental sensor for temperature	12992	●
	C TIMER Adjustable over-run timer	12999	●
	HEAT EXCHANGER for VORT HR 200	22369	●
	HORIZONTAL INSTALLATION KIT	22364	●
	F5 Internal filter (Single)	22368	●
	G3 Internal filter (Single)	22367	●

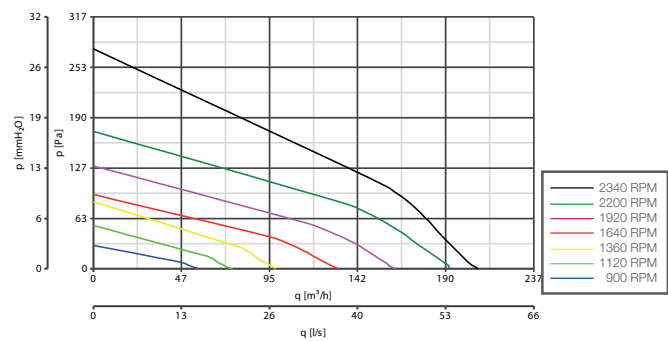
Description and sizes on page 126; System components on page 330.

PERFORMANCE CURVES

VORT HR 200 code 11805
Power consumption curves



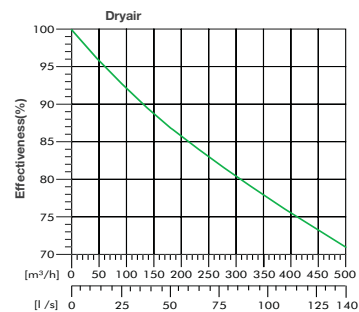
VORT HR 200 code 11805
Airflow/pressure curves



EFFICIENCY CURVES

EFFICIENCY

TOTAL EXHAUST FLOW RATE (m ³ /h)	HEAT RECOVERY EFFICIENCY %
54	93
76	91
97	90
119	89
140	87



Effectiveness as a function of the airflow.



NEW



HR INVISIBLE-E RANGE

Heat recovery units for installation in false ceiling

Offers continuous ventilation of the home. Ideal for apartments up to 120 m². Ideal for apartments up to 90 m² (ONE version), up to 160 m² (TWO version).



- **6 models:** HRI-E ONE, HRI-E one BP, HRI-E ONE F, HRI-E TWO, HRI-E TWO BP, HRI-E TWO F.
- External and internal parts made of expanded polypropylene (PPE).
- Heat Exchanger – Crossed Counter-Flow type, made of PS (Polystyrene).
- Extremely high heat recovery rate (up to 94%).
- Electronically controlled EC brushless motors, mounted on vibration dampers, offer optimal performance and extremely low power consumption.
- Max airflow 187 m³/h (ONE version), 365 m³/h (TWO version).
- Three operating pre-set speeds.
- Automatic frost protection.
- Available with or without automatic By-pass.
- Provided with 2 F5 filters (F7 optional).
- Collection water tray with dual condensate drain.
- Low energy consumption, thanks to the brushless motors and high efficiency heat recovery.
- Very thin: height < 250 mm (ONE), specifically designed for horizontal installation in false ceilings.
- Very quiet.
- Very light: 17.5 kg (ONE version), 33.5 kg (TWO version); it makes easy the installation.
- Filters can be removed easily through special panels; more straightforward access from the bottom, for routine and non-routine maintenance, without having to uninstall the appliance.
- Protection rating: IPX2.
- Insulation class: I. Ⓣ

HRI-E, HRI-E BP (with integrated By-pass)

- Three operating pre-set speeds manually selectable.
- 100% manual and filtered By-pass: BP version.

HRI-E F (Full functionalities)

- Fitted with display panel.
- 100% automatic and filtered By-pass.
- Can be integrated into a Building Management System (BMS) network (ModBus protocol on RS485 in slave mode).
- Can be used in conjunction with Vortice environmental sensors.

Wiring diagrams shown from page 458

TECHNICAL DATA

Models	Code	V~50Hz	W	A	Max Airflow		Max Pressure		Max °C
					m³/h	l/s	mmH ₂ O	Pa	
HRI-E ONE	11216	230	71	0.5	187	52	21.9	215	45
	11217								
	11218								
HRI-E TWO	11226		167	1.4	365	101	77.3	758	
	11227								
	11228								

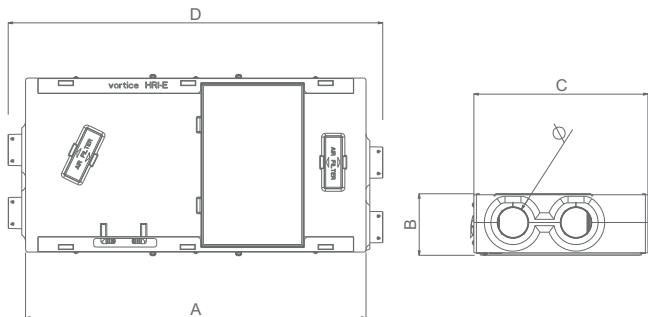
SOUND LEVELS*

SPEEDS		Lw dB (A)							Lw dB (A)	Lp dB (A) 3m**	
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
HRI-E ONE	MIN. SPEED	Supply to internal	3.1	14.7	17.4	20.5	2.7	7.2	24.2	27.3	6.8
		Extract from internal	7.3	17.6	20.4	27.6	14.6	0.4	14.1	33.4	12.9
		Breakout	11.4	21.9	31.4	32.4	19.2	9.3	4	39.1	18.6
	MID. SPEED	Supply to internal	13.7	23.9	25.8	31.2	14.8	7.5	9	37	16.5
		Extract from internal	15.3	23	25.6	35.5	23	12.8	3	40.2	19.7
		Breakout	19.7	28.9	36.7	42.4	30.5	25.4	15.5	48.1	27.6
	MAX. SPEED	Supply to internal	22.3	30.7	32.1	36.5	23.7	16.7	3.9	43.7	23.2
		Extract from internal	22.5	29.9	32.9	40.9	31.1	21.1	9.3	46.8	26.3
		Breakout	23.4	35.7	50.9	46.9	38.5	33.9	25.7	55.5	35.2
HRI-E TWO	MIN. SPEED	Supply to internal	23.7	32	37.6	34.8	28.9	20	15.2	59.3	47.5
		Extract from internal	17.1	24.7	23.5	16.3	15.2	13.6	14.9	59.3	31.8
		Breakout	23.8	32.5	39.4	33.1	27.4	18.2	17.7	61.1	45.5
	MID. SPEED	Supply to internal	31.3	52.4	54	53.4	48.4	43.2	29.2	69.9	64.7
		Extract from internal	16.7	39.2	35.3	28.5	24.7	16	15.4	60.2	45.7
		Breakout	36.1	48.7	51.1	46.8	43.6	35.3	22	64.3	58.2
	MAX. SPEED	Supply to internal	39.2	53.4	64	63.2	59.8	55.6	43.9	83.7	78.3
		Extract from internal	24.1	41.7	44.3	34.6	35.2	23.6	15.2	65.6	54.7
		Breakout	42.5	51.3	60.2	55.5	53.9	47.2	33.2	74.4	69.3

* Tests carried out using sound intensity measurement in a semi-anechoic chamber.

** Free field condition.

DIMENSIONS



Models	A	B	C	D	Ø	kg
HRI-E ONE	1350	244	690	1485	123	17.5
HRI-E TWO	1500	290	916	1640	149	149

Dimensions (mm)



Control panel FULL versions (supplied):



TIME Area

TEMPERATURE Area

Icones	Functions
	No-Frost
P1 - P2	Programs profile
	Speeds
	Standby
	Alarms
	By-pass ACTIVE
	Time/Programmable timetable
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Sunday
FILT	Filter warning

- Switching the machine on/off.
- Selecting one of the three speed settings.
- Selecting the By-pass function.
- Programmable timetable setting.
- Set point environmental temperature.
- Warnings display.
- Time or external temperature display.

STANDARD and STANDARD WITH BY-PASS control box (accessory code: 22478):



- Switching the machine on/off.
- Selecting one of the three speed settings.
- Selecting the By-pass function.

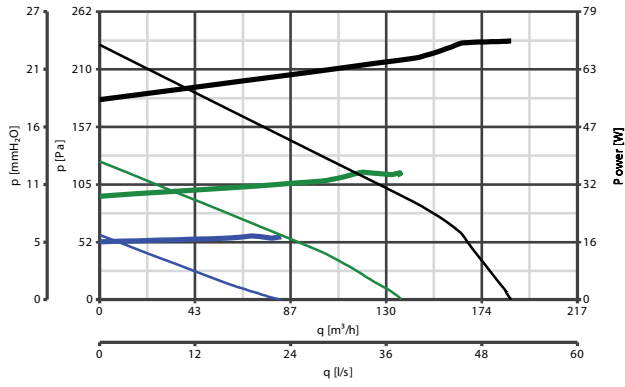
Machine set-up kit for versions FULL, STANDARD and STANDARD WITH BY-PASS (accessory code: 22629):



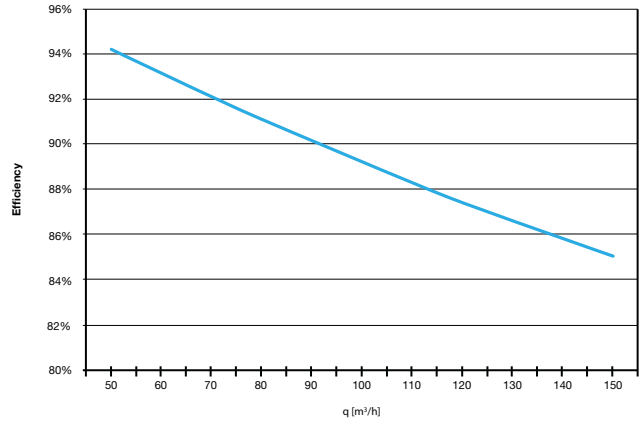
- Setting of machine parameters during initial installation procedures:
 - speeds
 - motors independently adjustable
 - defrosting
 - connection to any external accessories (pre-heaters, sensors...).

PERFORMANCE CURVES

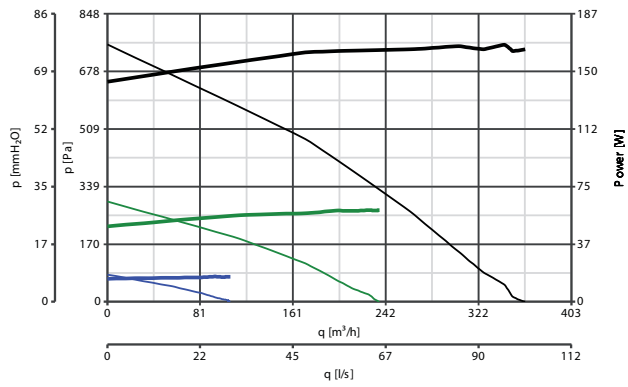
HRI-E ONE



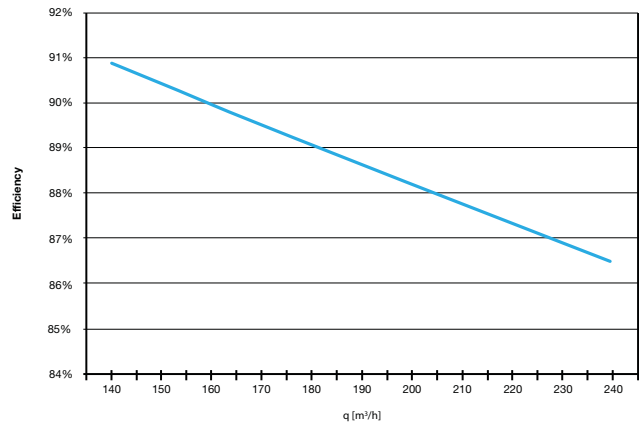
HRI-E ONE - EFFICIENCY



HRI-E TWO











HRI-E TWO - EFFICIENCY



Power consumption		Performance curves	
—	max.	—	max.
—	mid.	—	mid.
—	min.	—	min.

PRODUCT ACCESSORIES

Models		Code	Product					
			HRI-E ONE code 11216	HRI-E ONE BP code 11217	HRI-E ONE F code 11218	HRI-E TWO code 11226	HRI-E TWO code 11227	HRI-E TWO code 11228
	F7 HRI-E ONE Filter	22549	●	●	●			
	F5 HRI-E ONE Filter	22645	●	●	●			
	F7 HRI-E TWO Filter	22628				●	●	●
	F5 HRI-E TWO Filter	22646				●	●	●
	PRE-HEATING BOX HRI-E ONE (500 W)	22598	●	●	●			
	PRE-HEATING BOX HRI-E TWO (500 W)	22627				●	●	●
	SKP 10 Control panel	22629	●	●	●	●	●	●
	HR 400 M PLUS Speed controller	22478	●	●		●	●	
	C HCS Measures ambient relative humidity (R.H.)	12994			●			●
	C PIR Detects the presence of a moving body	12998			●			●
	C SMOKE Measures the air quality	12993			●			●
	C TEMP Adjustable over-run timer	12992			●			●
	FIXING BRACKETS KIT	22548	●	●	●	●	●	●

Description and sizes on page 126; System components on page 330.

NEW



HR INVISIBLE RANGE

Heat recovery units for installation in false ceiling

Ideal for apartments up to 80 m² (ONE version), 160 m² (TWO version).



- **2 models:** HRI ONE, HRI TWO.
- Sheet steel galvanized outer body lined with soundproof material.
- Heat Exchanger – Crossed Counter-Flow type, made of PS (Polystyrene).
- Extremely high heat recovery rate (up to 92%).
- Two speeds AC motors.
- Max airflow 156 m³/h (ONE version), 354 m³/h (TWO version).
- Provided with 2 F5 filters (F7 optional).
- Collection tray with dual condensate drain.
- 100% manual By-pass available as accessory.
- Provided with 4 fixing brackets.
- Very thin: height < 250 mm (ONE version), specifically designed for horizontal installation in false ceilings.
- Very light: 26.5 kg (ONE version), 39 kg (TWO version); it makes easy the installation.
- Filters can be removed easily through special panels; more straightforward access from the bottom, for routine and non-routine maintenance, without having to uninstall the appliance.
- Protection rating: IPX4.
- Insulation class: II.



Wiring diagrams shown from page 458

TECHNICAL DATA

Models	Code	V~50Hz	W	A	Max Airflow		Max Pressure		Max °C
					m ³ /h	l/s	mmH ₂ O	Pa	
HRI ONE	11224	230	95	0.41	156	43	26.1	256	50
HRI TWO	11234		235	1.04	354	98	40.7	399	



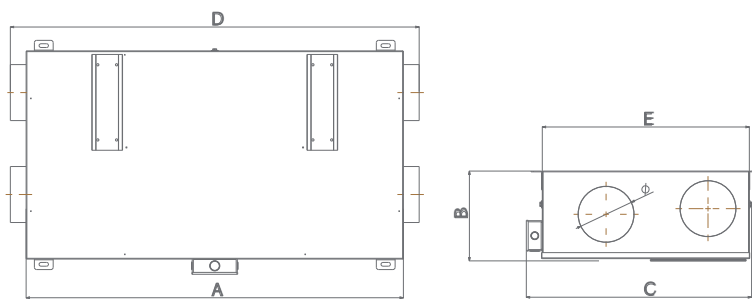
SOUND LEVELS*

SPEEDS		Lw dB (A)							Lw dB (A)	Lp dB (A) 3m*	
		125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
HRI ONE	MIN. SPEED	Supply to internal	41.8	43.1	26.6	51.4	48.4	49	39.5	58.7	38.2
		Extract from internal	31.6	24.8	30.6	27.4	27.8	14	3.9	36.6	16.1
		Breakout	32.2	29.8	35.7	32	30.9	29.5	20.5	46	25.5
	MAX. SPEED	Supply to internal	47.8	47.9	39.6	52.7	48.3	50.7	42.9	59.9	39.4
		Extract from internal	40.7	27.8	20.6	37.9	38	22.1	16.3	39.4	18.9
		Breakout	39.5	33.2	41	44.9	33.8	34.3	17.5	51.6	31.1
HRI TWO	1 SPEED	Supply to internal	25.5	32	36	41.7	35	29	18.6	48.9	28.4
		Extract from internal	**	**	**	**	**	**	**	**	**
		Breakout	22.4	21.3	31	24.6	15.7	10.5	0	36.8	16.3
	2 SPEEDS	Supply to internal	31.7	38.4	41.8	46.7	43.7	38.8	30.2	55.4	34.9
		Extract from internal	**	**	**	**	**	**	**	**	**
		Breakout	27.8	26.8	35.8	29.5	23.5	20.4	11	42.2	21.7
	3 SPEEDS	Supply to internal	32.8	42.4	45.3	50.5	48.6	45.5	37.5	59.5	39
		Extract from internal	**	**	**	**	**	**	**	**	**
		Breakout	32.3	30.9	40.2	34.2	29.9	27.1	18.6	46.7	26.2
	4 SPEEDS	Supply to internal	32.5	45.8	49.1	55	57.7	51.6	46	64.5	44
		Extract from internal	28.4	31.8	33.8	27.7	23.8	15.1	4.4	42.5	22
		Breakout	24.8	26.7	43.9	38.1	35.5	33	26.1	51	30.5

* Sound pressure level calculated in free field conditions starting at the sound power level.

** Minor noise (lower than the background noise level).

DIMENSIONS

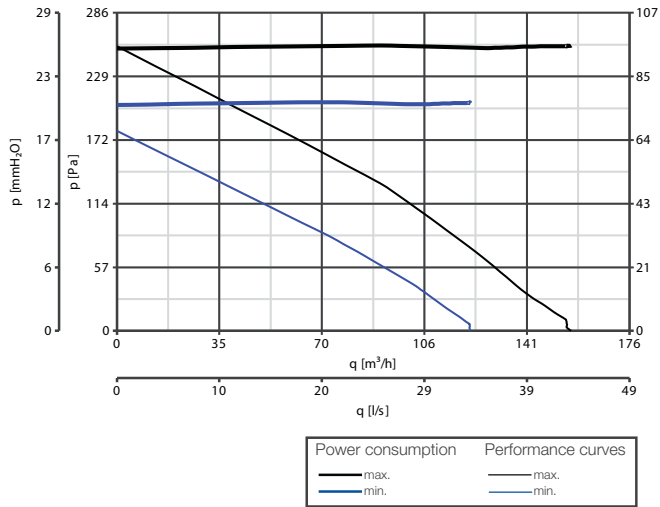


Models	A	B	C	D		Ø	kg
HRI ONE	1004	610	240	1098	550	150	26.5
HRI TWO	1151	700	285	1250	650		38.6

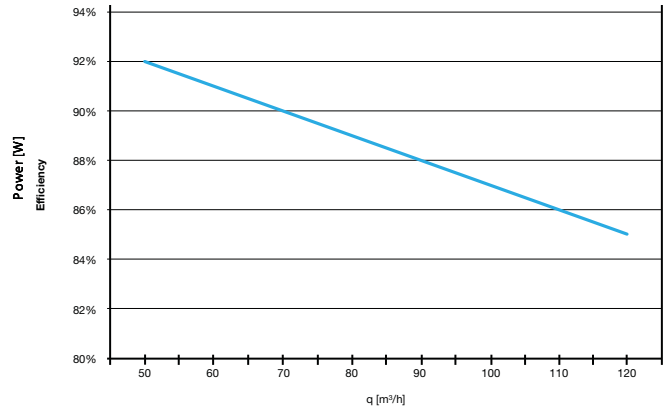
Dimensions (mm)

PERFORMANCE CURVES

HRI ONE

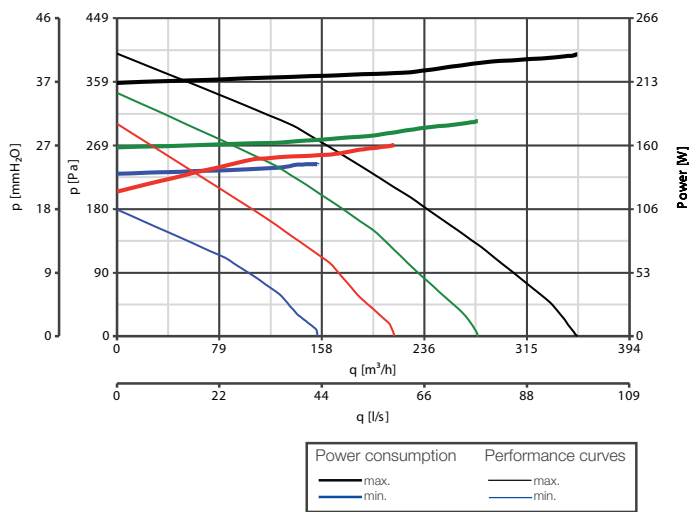


HRI ONE - EFFICIENCY

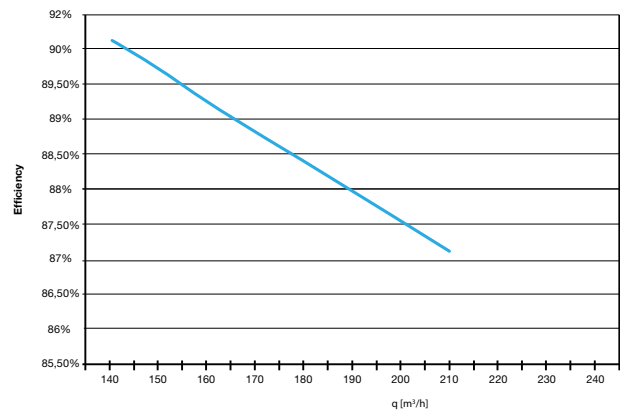


Test conditions according to EN 308: +5°C/70%; +25°C/28%.

HRI TWO







HRI TWO - EFFICIENCY






Test conditions according to EN 308: +5°C/70%; +25°C/28%.

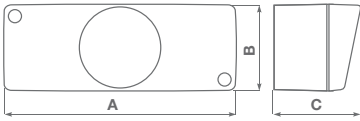





PRODUCT ACCESSORIES




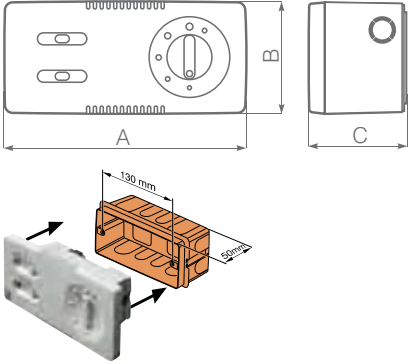

Models		Code	Product	
			HRI ONE code 11224	HRI TWO code 11234
	F7 HRI ONE Filter	22625	●	
	F5 HRI ONE Filter	22647	●	
	F7 HRI TWO Filter	22626		●
	F5 HRI TWO Filter	22649		●
	BY-PASS HRI ONE	22546	●	
	BY-PASS HRI TWO	22547		●
	LINEO-S 150	24019	●	●
	C5 0.5 Speed controller	12987	●	
	C4VM16 4 speeds selector	14021		●
	SCB5 KIT	22483	●	


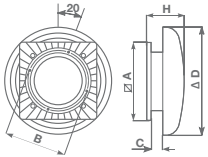

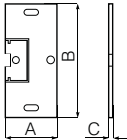

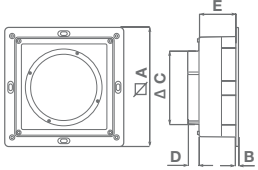



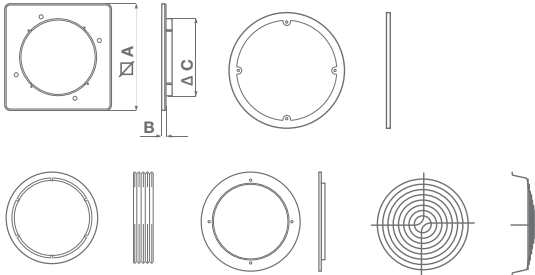
Description and sizes on page 126; System components on page 330.


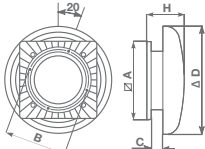

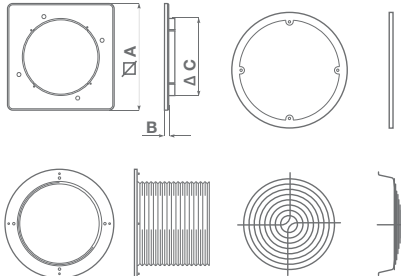

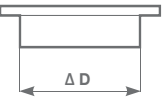

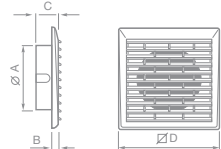

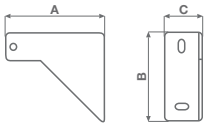
RESIDENTIAL VENTILATION ACCESSORIES


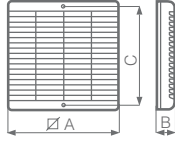

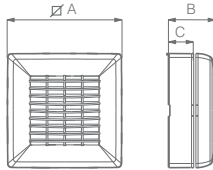
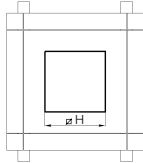

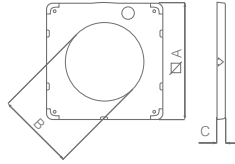


Models		Code	Dimensions																							
	<p>C 1.5 Non reversible variable electronic speed controller</p> <ul style="list-style-type: none"> - Not suitable for products with timer or automatic shutters - Convertible to flush-mounted using SCB5 kit - Weight 0.2 Kg - Maximum load: 200 W (for C 1.5) - Double insulation 	12966			<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>C 1.5</td> <td>12966</td> <td>120</td> <td>43</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	C	C 1.5	12966	120	43													
Models	Code	∅A	C																							
C 1.5	12966	120	43																							
	<p>SCNRB Non reversible variable electronic speed controller (built-in)</p> <ul style="list-style-type: none"> - Not suitable for products with timer or automatic shutters - Weight 0.2 Kg - Maximum load: 200 W - Double insulation 	12971			<table border="1"> <thead> <tr> <th>∅A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>142</td> <td>135</td> <td>59.5</td> <td>4.5</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅A	B	C	D	142	135	59.5	4.5													
∅A	B	C	D																							
142	135	59.5	4.5																							
	<p>C5 0.5 5 position speed controller</p> <ul style="list-style-type: none"> - 5 speeds controller - Not suitable for timer, automatic, automatic timer and cord operated appliances - Convertible to flush-mounted using SCB5 kit - Weight 0.2 Kg - Double insulation <p>Non reversible variable electronic speed controller (built-in)</p> <ul style="list-style-type: none"> - Not suitable for products with timer or automatic shutters - Weight 0.2 Kg - Maximum load: 200 W - Double insulation 	12987			<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>C5 0.5</td> <td>12987</td> <td>120</td> <td>43</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	C	C5 0.5	12987	120	43													
Models	Code	∅A	C																							
C5 0.5	12987	120	43																							
	<p>C4VM16 Four-speed selector, single phase</p>	14021			<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>C4VM16</td> <td>14021</td> <td>120</td> <td>55</td> </tr> <tr> <td>C3VM3</td> <td>12949</td> <td></td> <td></td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	C	C4VM16	14021	120	55	C3VM3	12949											
Models	Code	∅A	C																							
C4VM16	14021	120	55																							
C3VM3	12949																									
	<p>C3VM3 Three-speed selector, single phase</p> <ul style="list-style-type: none"> - 3 speeds controller - Weight 0.25 Kg 	12949			<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>V-50Hz</th> <th>A</th> <th>Kg</th> <th>Insulation</th> <th>IP</th> </tr> </thead> <tbody> <tr> <td>C4VM16</td> <td>14021</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>C3VM3</td> <td>12949</td> <td>220-240</td> <td>3</td> <td>0.25</td> <td>Cl.II.</td> <td>20</td> </tr> </tbody> </table>	Models	Code	V-50Hz	A	Kg	Insulation	IP	C4VM16	14021						C3VM3	12949	220-240	3	0.25	Cl.II.	20
Models	Code	V-50Hz	A	Kg	Insulation	IP																				
C4VM16	14021																									
C3VM3	12949	220-240	3	0.25	Cl.II.	20																				
	<p>SPEED REGULATOR Three-speed selector switch</p>	22478			<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>C 1.5</td> <td>12966</td> <td>120</td> <td>43</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	C	C 1.5	12966	120	43													
Models	Code	∅A	C																							
C 1.5	12966	120	43																							
	<p>KIT SCB</p> <ul style="list-style-type: none"> - Kit to convert C1.5 to built-in model 	22481																								
	<p>KIT SCB5</p> <ul style="list-style-type: none"> - Kit to convert C5 0.5 to built-in model 	22483																								
					<table border="1"> <thead> <tr> <th>∅A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>142</td> <td>135</td> <td>59.5</td> <td>4.5</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅A	B	C	D	142	135	59.5	4.5													
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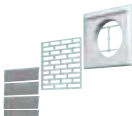
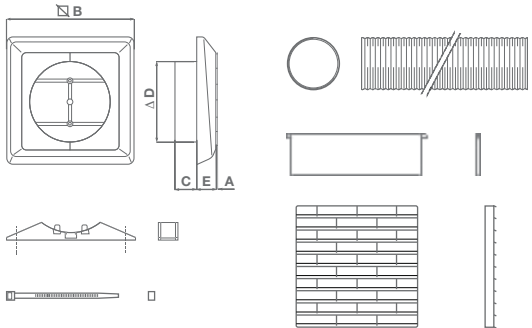

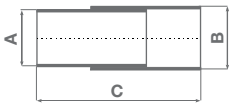

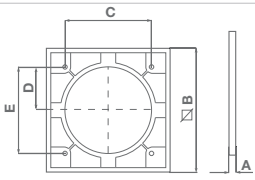

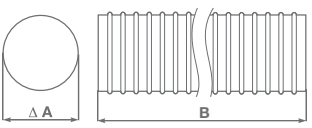
Models		Code	Dimensions																				
	<p>Sensor units</p> <p>Sensor units are appliances which detect certain environmental conditions (humidity, temperature, human motion, odour and smoke concentration) and automatically activate the extractor fans. They may also be connected to Vortice control units, enhancing their functions.</p> <ul style="list-style-type: none"> - Supply voltage 220-240 V - Frequency: 50/60 Hz - Max load 3A - Operating temperature: 50°C - Protection rating IP20 																						
	<p>C HCS (code 12994)</p> <p>Checks the relative humidity of the air: the extractor fan is activated automatically when the relative humidity percentage exceeds 65%. Otherwise, the appliance starts automatically a few seconds after the light is switched on and continues to run for a set time after it has been switched off again; this time period can be adjusted to a value between 3 and 20 minutes using a built-in trimmer.</p>		<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>C HCS</td> <td>12994</td> <td rowspan="5">144</td> <td rowspan="5">54</td> <td rowspan="5">55.8</td> </tr> <tr> <td>C TEMP</td> <td>12992</td> </tr> <tr> <td>C SMOKE</td> <td>12993</td> </tr> <tr> <td>C PIR</td> <td>12998</td> </tr> <tr> <td>C TIMER</td> <td>12999</td> </tr> </tbody> </table>			Models	Code	A	B	C	C HCS	12994	144	54	55.8	C TEMP	12992	C SMOKE	12993	C PIR	12998	C TIMER	12999
Models	Code	A	B	C																			
C HCS	12994	144	54	55.8																			
C TEMP	12992																						
C SMOKE	12993																						
C PIR	12998																						
C TIMER	12999																						
		12994	Dimensions (mm)																				
	<p>C TEMP (code 12992)</p> <p>Checks the temperature of the surrounding air: the extractor fan is activated automatically when a certain temperature is recorded; this can be adjusted, using an external trimmer, to a value between 10°C and 40°C above the set threshold. A timer keeps it running after the temperature has fallen below the set threshold, for a period of time which can be adjusted to a value between 3 and 20 minutes using a built-in trimmer.</p>	12992																					
	<p>C SMOKE (code 12993)</p> <p>Checks the quality of the air when the air contains cigarette smoke, odours and other pollutants: the extractor fan is activated automatically when a concentration of odours higher than the set value is detected; this value can be adjusted using an external trimmer. A pre-set timer, which can be adjusted to a value between 3 and 20 minutes using a built-in trimmer, keeps the extractor fan running for the desired period of time.</p>	12993																					
	<p>C PIR (code 12998)</p> <p>Checks for human motion in the room: the extractor fan is activated automatically for a specified time period, which can be adjusted between 3 and 20 minutes using a trimmer, when human movement is detected in its range.</p>	12998																					
	<p>C TIMER (code 12999)</p> <p>Checks the operating time of the appliance to which it is connected: the extractor fan is activated automatically a few seconds after the light is switched on and continues to run for a set time, which can be adjusted to a value between 3 and 20 minutes using a built-in trimmer, after it has been switched off again.</p>	12999																					



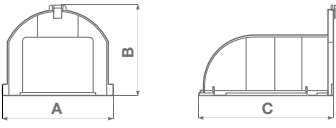

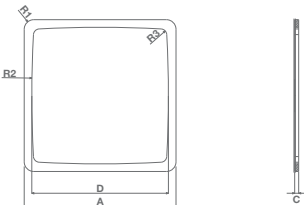

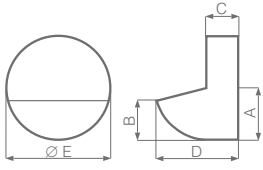

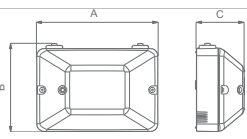
Models		Code	Dimensions																
	<p>CONTROLS External RF Receiver Module RF Remote Controller White</p> <p>An additional remote-controlled radiofrequency RF device including a connection cable is available as an optional accessory and allows control of the appliance even if the position chosen for its installation is shielded from radio waves.</p>	<p>22479 22464</p>																	
	<p>CONTROL PANEL</p> <p>For all HRI-E versions. Control panel for the installer required to set the operating parameters of unit during the initial installation procedure:</p> <ul style="list-style-type: none"> - speeds - defrosting - connection to any external accessories 	<p>22629</p>																	
	<p>CR Speed controllers</p> <p>CR5N CR5 CREN CRN</p> <ul style="list-style-type: none"> - Wall mounted reversible speed controllers suitable for use with the automatic Vortice Vario models (except for pull cord models). - Supply power: 220-240 V. - Frequency: 50/60Hz. - Operating temperature: 50 °C. - Protection class: IP20. - The controller can also be recessed using a suitable backbox. <p>CR5N (code 12941) – It can control more than one exhaust fan at the time for a maximum load of 1.2 A. 5 speed controller; On/Off; Reversible; Natural Ventilation; Can be used to regulate more than one fan; Maximum load 100 W.</p> <p>CR5 (code 12943) – 5-speed controller; On/Off; Reversible; Can be used to regulate more than one fan; Maximum load 100 W.</p> <p>CREN (code 12944) – It can control more than one exhaust fan at the time for a maximum load of 1.2 A. Variable electronic speed controller; On/Off; Reversible; Natural Ventilation; Can be used to regulate more than one fan; Maximum load 1.2 A.</p> <p>CRN (code 12945) – On/Off; Reversible; Natural Ventilation; Can be used to regulate more than one fan; Maximum load 100 W.</p>	<p>12941 12943 12944 12945</p>	 <table border="1" data-bbox="938 1373 1377 1535"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>CR5N</td> <td>12941</td> <td rowspan="4">160</td> <td rowspan="4">75</td> <td rowspan="4">63</td> </tr> <tr> <td>CR5</td> <td>12943</td> </tr> <tr> <td>CREN</td> <td>12944</td> </tr> <tr> <td>CRN</td> <td>12945</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	CR5N	12941	160	75	63	CR5	12943	CREN	12944	CRN	12945
Models	Code	A	B	C															
CR5N	12941	160	75	63															
CR5	12943																		
CREN	12944																		
CRN	12945																		
	<p>CONTROLS RF Remote Controller White.</p>	<p>22315</p>																	


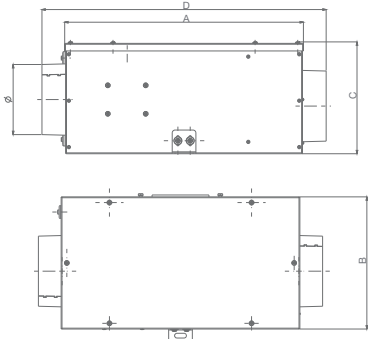


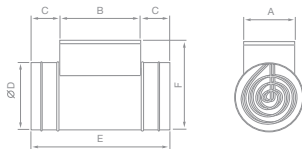

Models		Code	Dimensions																											
 <p>KIT TE Roof cowl/wind baffle kit</p> <p>150/6" 230/9" 300/12"</p>		<p>13001 13002 13003</p>  <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>B</th> <th>C</th> <th>∅D</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>150/6"</td> <td>13001</td> <td>215</td> <td>175</td> <td>28</td> <td>300</td> <td>111</td> </tr> <tr> <td>230/9"</td> <td>13002</td> <td>294</td> <td>249</td> <td>30</td> <td>400</td> <td>145</td> </tr> <tr> <td>300/12"</td> <td>13003</td> <td>390</td> <td>316</td> <td>33</td> <td>534</td> <td>181</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	B	C	∅D	H	150/6"	13001	215	175	28	300	111	230/9"	13002	294	249	30	400	145	300/12"	13003	390	316	33	534	181
Models	Code	∅A	B	C	∅D	H																								
150/6"	13001	215	175	28	300	111																								
230/9"	13002	294	249	30	400	145																								
300/12"	13003	390	316	33	534	181																								
 <p>KIT SO Ceiling, false ceiling and panel kit</p> <p>150/6"-230/9" 300/12"</p>		<p>13012 13014</p>  <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>150/6"</td> <td>13012</td> <td rowspan="2">65</td> <td rowspan="2">145</td> <td rowspan="2">2</td> </tr> <tr> <td>230/9"</td> <td>13014</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	150/6"	13012	65	145	2	230/9"	13014																
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 <p>KIT ML Deep wall installation kit</p> <p>150/6" 230/9" 300/12"</p>		<p>13015 13016 13017</p>  <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>B</th> <th>∅C</th> <th>D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>KIT ML 150/6"</td> <td>13015</td> <td>294</td> <td rowspan="3">8</td> <td>171</td> <td rowspan="3">30</td> <td>94</td> </tr> <tr> <td>KIT ML 230/9"</td> <td>13016</td> <td>393</td> <td>240</td> <td>125</td> </tr> <tr> <td>KIT ML 300/12"</td> <td>13017</td> <td>487</td> <td>300</td> <td>41</td> <td>142</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	B	∅C	D	E	KIT ML 150/6"	13015	294	8	171	30	94	KIT ML 230/9"	13016	393	240	125	KIT ML 300/12"	13017	487	300	41	142			
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KIT ML 230/9"	13016	393		240		125																								
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 <p>KIT MU Wall mounting kit with rods</p>		<p>13018</p>  <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>∅B</th> </tr> </thead> <tbody> <tr> <td>KIT MU</td> <td>13018</td> <td>380</td> <td>M4</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	∅B	KIT MU	13018	380	M4																				
Models	Code	A	∅B																											
KIT MU	13018	380	M4																											
 <p>KIT VV Double opening window, secondary glazed kit</p> <p>KIT VV 150/6" KIT VV 230/9" KIT VV 300/12"</p>		<p>13021 13022 13023</p>  <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>B</th> <th>∅C</th> </tr> </thead> <tbody> <tr> <td>KIT VV 150/6"</td> <td>13021</td> <td>215</td> <td rowspan="3">7</td> <td>157</td> </tr> <tr> <td>KIT VV 230/9"</td> <td>13022</td> <td>294</td> <td>233</td> </tr> <tr> <td>KIT VV 300/12"</td> <td>13023</td> <td>390</td> <td>303</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	B	∅C	KIT VV 150/6"	13021	215	7	157	KIT VV 230/9"	13022	294	233	KIT VV 300/12"	13023	390	303										
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Models		Code	Dimensions																								
	KIT SA 230/9" Darkroom cowl kit	13004	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅ A</th> <th>B</th> <th>C</th> <th>∅ D</th> <th>H</th> </tr> </thead> <tbody> <tr> <td>KIT SA 230/9"</td> <td>13004</td> <td>294</td> <td>249</td> <td>30</td> <td>400</td> <td>145</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅ A	B	C	∅ D	H	KIT SA 230/9"	13004	294	249	30	400	145										
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	KIT FF Double opening window kit KIT FF 150/6" KIT FF 230/9" KIT FF 300/12"	13024 13025 13026	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅ A</th> <th>B</th> <th>∅ C ext.</th> </tr> </thead> <tbody> <tr> <td>KIT VV 150/6"</td> <td>13024</td> <td>215</td> <td rowspan="3">7</td> <td>157</td> </tr> <tr> <td>KIT VV 230/9"</td> <td>13025</td> <td>294</td> <td>233</td> </tr> <tr> <td>KIT VV 300/12"</td> <td>13026</td> <td>390</td> <td>303</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅ A	B	∅ C ext.	KIT VV 150/6"	13024	215	7	157	KIT VV 230/9"	13025	294	233	KIT VV 300/12"	13026	390	303						
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	KIT TC Duct diameter for Spigot Plate	13027 13028 13029	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅ D</th> </tr> </thead> <tbody> <tr> <td>KIT TC 150/6"</td> <td>13027</td> <td>171</td> </tr> <tr> <td>KIT TC 230/9"</td> <td>13028</td> <td>240</td> </tr> <tr> <td>KIT TC 300/12"</td> <td>13029</td> <td>300</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅ D	KIT TC 150/6"	13027	171	KIT TC 230/9"	13028	240	KIT TC 300/12"	13029	300												
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	GRILLE KIT - To be mounted at the beginning or the end of a ventilation duct. - Totally manufactured from shockproof thermoplastic anti UV resin.	22140 22141 22142 22143	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅ A</th> <th>B</th> <th>C</th> <th>∅ D</th> </tr> </thead> <tbody> <tr> <td>D 100</td> <td>22140</td> <td>99</td> <td rowspan="4">8</td> <td rowspan="4">20</td> <td>140</td> </tr> <tr> <td>D 125</td> <td>22141</td> <td>119</td> <td>160</td> </tr> <tr> <td>D 150</td> <td>22142</td> <td>155</td> <td>198</td> </tr> <tr> <td>D 90</td> <td>22143</td> <td>92.5</td> <td>140</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅ A	B	C	∅ D	D 100	22140	99	8	20	140	D 125	22141	119	160	D 150	22142	155	198	D 90	22143	92.5	140
Models	Code	∅ A	B	C	∅ D																						
D 100	22140	99	8	20	140																						
D 125	22141	119			160																						
D 150	22142	155			198																						
D 90	22143	92.5			140																						
	CA-MU Galvanized sheet-metal brackets - For wall or ceiling mounting	22674	 <table border="1"> <thead> <tr> <th>A</th> <th>∅ B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>84</td> <td>75</td> <td>35</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	A	∅ B	C	84	75	35																		
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Models		Code	Dimensions																										
	<p>AIR ENTRY GRILLE Includes a grille with a protective screen for fixing to the external wall and one for fixing inside the room.</p>	22114 22113	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>G-23/9"</td> <td>22114</td> <td>291</td> <td>31</td> <td>241</td> </tr> <tr> <td>G-30/12"</td> <td>22113</td> <td>370</td> <td></td> <td>308</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	B	C	G-23/9"	22114	291	31	241	G-30/12"	22113	370		308											
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G-23/9"	22114	291	31	241																									
G-30/12"	22113	370		308																									
	<p>KIT TO WINDOW-MOUNT Will allow any Vortice® Punto unit to be fitted to any single or double glazed window. - IPX4. - Insulation: Cl.II - Weight Kg. 0.85/1.15/1.56.</p>	22131 22132 22133	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>B</th> <th>C</th> <th>∅ hole glass</th> <th>thickness max</th> </tr> </thead> <tbody> <tr> <td>F 100/4"</td> <td>22131</td> <td>158</td> <td>69</td> <td>22</td> <td>123÷128</td> <td rowspan="3">20</td> </tr> <tr> <td>F 120/5"</td> <td>22132</td> <td>179</td> <td>80</td> <td>33</td> <td>143÷148</td> </tr> <tr> <td>F 150/6"</td> <td>22133</td> <td>213</td> <td>87</td> <td>40</td> <td>178÷183</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	B	C	∅ hole glass	thickness max	F 100/4"	22131	158	69	22	123÷128	20	F 120/5"	22132	179	80	33	143÷148	F 150/6"	22133	213	87	40	178÷183
Models	Code	∅A	B	C	∅ hole glass	thickness max																							
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	<p>RECESSED CEILING INSTALLATION KIT</p>	22491 22492 22493	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅H</th> </tr> </thead> <tbody> <tr> <td>MICRO</td> <td>22491</td> <td>265</td> </tr> <tr> <td>MEDIO</td> <td>22492</td> <td>285</td> </tr> <tr> <td>SUPER</td> <td>22493</td> <td>330</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅H	MICRO	22491	265	MEDIO	22492	285	SUPER	22493	330														
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MEDIO	22492	285																											
SUPER	22493	330																											
	<p>RUBBER CEILING KIT - Made of soft rubber to prevent water infiltration and to maintain IPX4 protection on all surfaces.</p>	22154 22155 22156	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>∅B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>S 100/4"</td> <td>22154</td> <td>166</td> <td>99</td> <td rowspan="3">10.5</td> </tr> <tr> <td>S 120/5"</td> <td>22155</td> <td>187</td> <td>119</td> </tr> <tr> <td>S 150/6"</td> <td>22156</td> <td>222</td> <td>156</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	∅B	C	S 100/4"	22154	166	99	10.5	S 120/5"	22155	187	119	S 150/6"	22156	222	156								
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S 100/4"	22154	166	99	10.5																									
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	<p>LOFT MOUNTING BRACKETS</p>	22259 22260 22261	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>D 90/100</td> <td>22259</td> <td rowspan="3">22.5</td> <td>115</td> </tr> <tr> <td>D 120</td> <td>22260</td> <td>135</td> </tr> <tr> <td>D 150</td> <td>22260</td> <td>172</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	D 90/100	22259	22.5	115	D 120	22260	135	D 150	22260	172												
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Models		Code	Dimensions																										
	<p>Complete installation kit - External and filtered (F5) by-pass can be activated manually allowing fresh air to by-pass for natural ventilation.</p>	<p>22265 22263 22264</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>∅B</th> <th>C</th> <th>∅D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>MG 90/3"</td> <td>22265</td> <td rowspan="3">2.5</td> <td>140</td> <td rowspan="3">20</td> <td>92.5</td> <td rowspan="3">8</td> </tr> <tr> <td>MG 120/5"</td> <td>22263</td> <td>160</td> <td>120</td> </tr> <tr> <td>MG 150/6"</td> <td>22264</td> <td>198</td> <td>150</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	∅B	C	∅D	E	MG 90/3"	22265	2.5	140	20	92.5	8	MG 120/5"	22263	160	120	MG 150/6"	22264	198	150				
Models	Code	A	∅B	C	∅D	E																							
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	<p>TELESCOPIC WALL LINER</p>	<p>22256 22257 22258</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>D 100</td> <td>22256</td> <td>110</td> <td>114</td> <td rowspan="3">200-380</td> </tr> <tr> <td>D 120</td> <td>22257</td> <td>130</td> <td>135</td> </tr> <tr> <td>D 150</td> <td>22258</td> <td>160</td> <td>168</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	D 100	22256	110	114	200-380	D 120	22257	130	135	D 150	22258	160	168								
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	<p>SPACER FLANGE - For external wiring</p>	<p>22253 22254 22255</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>∅B</th> <th>C</th> <th>D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>D 100</td> <td>22253</td> <td rowspan="3">10</td> <td>140</td> <td>104</td> <td>50</td> <td>102</td> </tr> <tr> <td>D 120</td> <td>22254</td> <td>161</td> <td>125</td> <td>59</td> <td>122</td> </tr> <tr> <td>D 150</td> <td>22255</td> <td>198</td> <td>162</td> <td>78</td> <td>157</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	∅B	C	D	E	D 100	22253	10	140	104	50	102	D 120	22254	161	125	59	122	D 150	22255	198	162	78	157
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	<p>FLEXIBLE DUCT - Flexible PVC duct (extendable up to 3 m)</p>	<p>22250 22251 22252</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>PVC ∅ 100</td> <td>22250</td> <td>110</td> <td rowspan="3">3000</td> </tr> <tr> <td>PVC ∅ 120</td> <td>22251</td> <td>130</td> </tr> <tr> <td>PVC ∅ 150</td> <td>22252</td> <td>160</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅A	B	PVC ∅ 100	22250	110	3000	PVC ∅ 120	22251	130	PVC ∅ 150	22252	160												
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	<p>FALSE CEILING KIT - Kit for false ceiling installations (max. height 40 cm)</p>	<p>22815 22823</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>VP-C</td> <td>22815</td> <td rowspan="2">275</td> <td rowspan="2">20</td> <td rowspan="2">3</td> <td>324</td> <td rowspan="2">20</td> <td rowspan="2">3</td> </tr> <tr> <td>Kit false ceiling</td> <td>22823</td> <td>226</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	D	E	F	VP-C	22815	275	20	3	324	20	3	Kit false ceiling	22823	226																
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VP-C	22815	275	20	3	324	20	3																															
Kit false ceiling	22823				226																																	
	<p>HORIZONTAL OUTLET SPIGOT For fitting to extractors to direct the outlet horizontally, 105x82 mm, white, plastic for Ariett I</p>	<p>22841</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>Outlet spigot</td> <td>22841</td> <td>105</td> <td>82</td> <td>175</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	Outlet spigot	22841	105	82	175																									
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	<p>SF Ceiling Kit</p>	<p>22162 22163 22164</p>	<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>R1</th> <th>R2</th> <th>R3</th> </tr> </thead> <tbody> <tr> <td>SF Ø 90-100</td> <td>22162</td> <td>171</td> <td>171</td> <td rowspan="2">5</td> <td>150.5</td> <td>7.5</td> <td>1200</td> <td>7</td> </tr> <tr> <td>SF Ø 120</td> <td>22163</td> <td>190</td> <td>190</td> <td>171</td> <td>12</td> <td>1400</td> <td>7.5</td> </tr> <tr> <td>SF Ø 150</td> <td>22164</td> <td>230</td> <td>230</td> <td></td> <td>205.5</td> <td>13</td> <td>1700</td> <td>5</td> </tr> </tbody> </table> <p>Dimensions (mm)</p> 	Models	Code	A	B	C	D	R1	R2	R3	SF Ø 90-100	22162	171	171	5	150.5	7.5	1200	7	SF Ø 120	22163	190	190	171	12	1400	7.5	SF Ø 150	22164	230	230		205.5	13	1700	5
Models	Code	A	B	C	D	R1	R2	R3																														
SF Ø 90-100	22162	171	171	5	150.5	7.5	1200	7																														
SF Ø 120	22163	190	190		171	12	1400	7.5																														
SF Ø 150	22164	230	230		205.5	13	1700	5																														
	<p>M 10/4 Air flow deflector For fitting to the delivery side of extractor fans to direct the air flow in any required direction within 360° - Weight kg. 0.2. Design: F. Trabucco - M. Vecchi</p>	<p>22310 22320</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> <th>D</th> <th>Ø E</th> </tr> </thead> <tbody> <tr> <td>M 10/4</td> <td>22310</td> <td>49.5</td> <td>37</td> <td rowspan="2">30</td> <td>77</td> <td>99</td> </tr> <tr> <td>M 12/5</td> <td>22320</td> <td>59.5</td> <td>44</td> <td>87</td> <td>119</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	D	Ø E	M 10/4	22310	49.5	37	30	77	99	M 12/5	22320	59.5	44	87	119															
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Vortice® provides comfort indoors.

*Air pollution in the home is caused by
the presence of people and their activities.
In order to safeguard our health, rooms must be properly
ventilated to improve the quality of the air we breathe.
Vortice® offers a wide range of products that are specially
designed for Residential place.*

CE MARKING

Residential ventilation products comply with the following European Directives:

- 2006/95/EC Low Voltage Directive (LVD)
- 2004/108/EC Electromagnetic Compatibility Directive (EMC)

According to the following state of the art Standards:

Safety:

EN 60335-1
EN 60335-2-80
EN 60335-2-31
EN 62233

EMC:

EN 55014-1
EN 55014-2
EN 61000-3-2
EN 61000-3-3

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