



CATALOGUE IN-LINE FANS



VORTICE S.p.A. is part of a multinational group, [1] **VORTICE GROUP**, which operates through its own companies or local distributors in over 90 countries worldwide and has a rich product portfolio that guarantees air quality and climate comfort. The headquarters of VORTICE S.p.A are in Tribiano (Milan).



VORTICE GROUP also includes:

[1/2] **BUSINESS UNIT INDUSTRIAL**, born from the acquisition in 2010 of Loran srl, based in Isola della Scala (VR). 2024 become Vortice's BUSINESS UNIT INDUSTRIAL.

[3] **VORTICE LIMITED**, the UK subsidiary of VORTICE S.p.A., established in 1977 and based in Burton on Trent.

[4] **VORTICE VENTILATION SYSTEM**, a company inaugurated in 2013 with headquarters in Changzhou, China.

[5] **VORTICE LATAM S.A.**, based in Alajuela in Costa Rica, established in 2012.

[6] **CÁSALS VENTILACIÓN AIR INDUSTRIAL S.L.** historic Spanish brand, based in Sant Joan de les Abadesses, Girona, acquired in 2019.



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CE MARKING

Commercial Ventilation appliances conform to the following European Directives:

2009/125/EC Directive Ecocompatible Design (ErP),
2014/35/UE 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 62233

Electromagnetic Compatibility

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

The fans built into the IN LINE Range are conform to the following European Directive N° 1253/2014 and N° 1254/2014.

LINEO RANGE

In-line mixed flow fans

The **LINEO** range products are “mixed flow” fans specifically designed for horizontal or vertical ducted installation.

**VENTILATION OF RESIDENTIAL,
COMMERCIAL OR INDUSTRIAL PREMISES.**



They all have high levels of energy efficiency and meet the requirements of ERP Regulation 327/2011/EU. The fans in the renewed LINEO range boast

**HIGH PERFORMANCE, LOW ENERGY CONSUMPTION, LOW NOISE
EMISSIONS AND EASE OF INSTALLATION AND MAINTENANCE.**



The LINEO range products are characterised by technopolymer enclosures for increased fire resistance safety class E2, according to EN ISO 11925-2 and have a high degree of protection against water.

The classification only applies to a properly installed product.

THE DESIGN

CONSTRUCTION FEATURES COMMON TO THE RANGE

The design consists of the following:

- a central motor mount which encloses the fan motor unit and houses the wiring devices externally, in an easily reachable position;

the main body, fixed to a pair of end supports arranged for connection to the suction and delivery pipes, which is designed to rotate on its own axis to facilitate the housing of the product in small spaces and its wiring through the contacts positioned on its external surface;

The ease with which it can be removed without altering the surrounding piping system, greatly speeds up and facilitates maintenance;

- the air flow rectifiers on the delivery side work, in synergy with the upstream impeller, optimise the managed air flow, maximising performance and increasing efficiency, reducing the occurrence of vortices and minimising noise emissions;
- the mixed flow type impellers combine the advantages of helical fans (high flow rates and flow around the axis of the impeller), with the high pressures of centrifugal fans; the directly coupled motors have shafts mounted on ball bearings, ensuring a virtually “maintenance free” operation;
- the timer in the T models allows the operation of the appliance to be programmed at maximum speed and ease at a range between 3' and 20', which can be set during installation.

KEY FEATURES

- high-performance, top-of-the-range;
- easy maintenance. Each component allows easy connection and disconnection with the nearby elements, and easy access to the inner components (motor-impeller) and their replacement. In the case of the silenced products, the sound absorbing shells refitted at the end of the maintenance process restore the original sound performance under test conditions;

- the motors have a minimum guaranteed life in continuous operation at maximum speed and at maximum ambient temperature of 30,000 or 40,000 hours depending on the type;
- completeness of the range, designed to offer the ideal product to meet the specific requirements of the system in terms of performance, consumption, quiet operation, operating costs and purchase price.

LINEO QUIET RANGE

The **LINEO QUIET** range products are characterised by the use of a **sound-absorbing coating** which is fully integrated in the outer casing and optimised to minimise environmental sound emissions.

HIGH-LEVEL PERFORMANCE,
AT THE TOP OF THE RANGE.





because energy
has to be....

SAVED

The profiles of the impeller,
of the flow rectifiers and ogival profile
of the flow driver work in synergy with
the upstream impeller to optimise the
managed air flow, maximising performance
and increasing efficiency, reducing
the occurrence of vortices and
minimising noise
emissions.

because silence has to be....

BUILT

IMPELLER

Designed to reach the ERP efficiency levels

CO-MOULDED SHELL

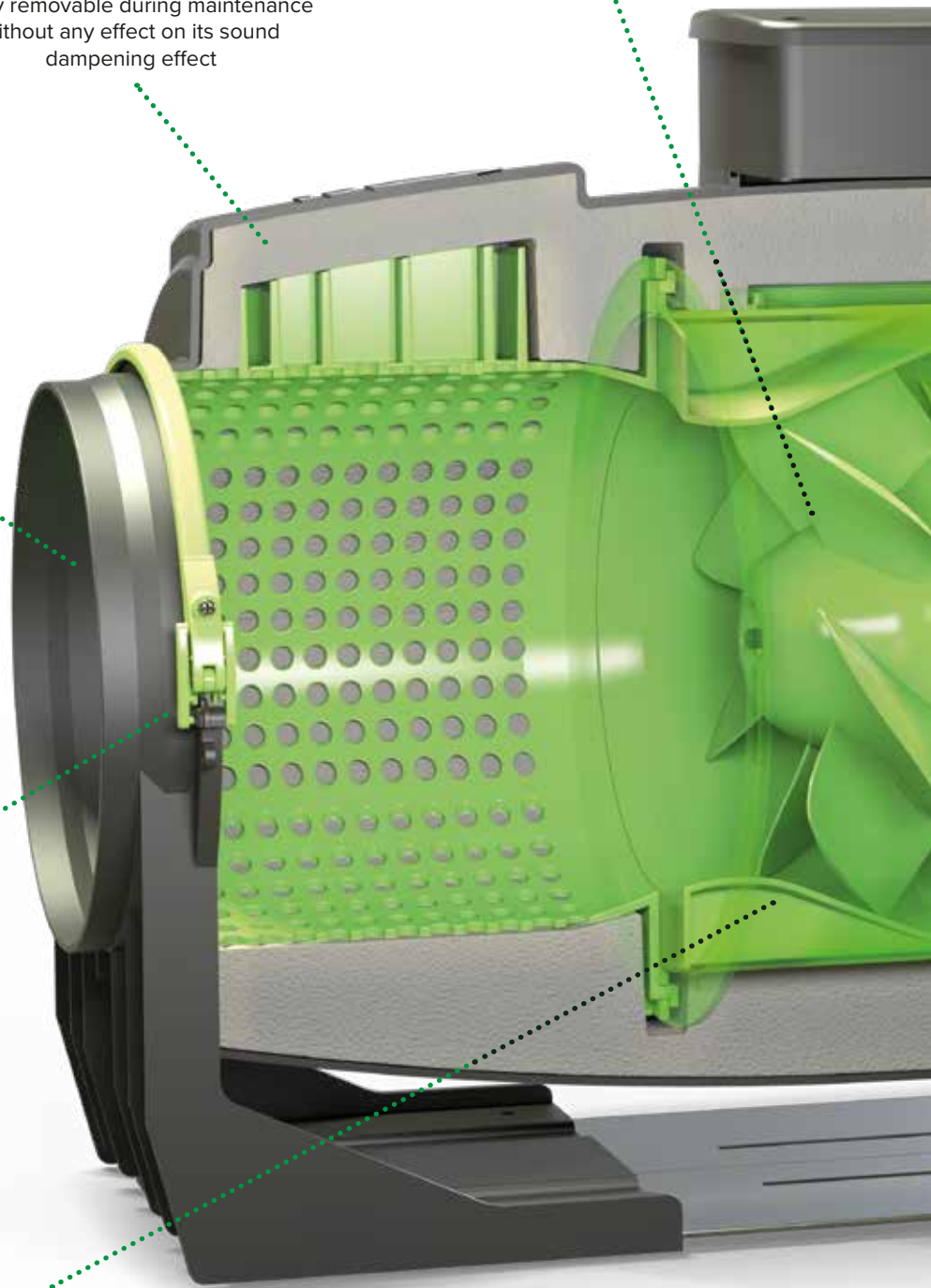
Easily removable during maintenance without any effect on its sound dampening effect

INLET NOZZLE

Dimensioned to sustain the product in the wall and ceiling installation

DIVERGENT ELEMENT

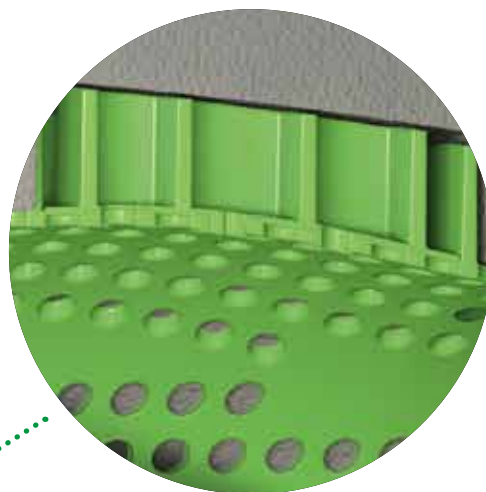
It helps the impeller to increase the performance





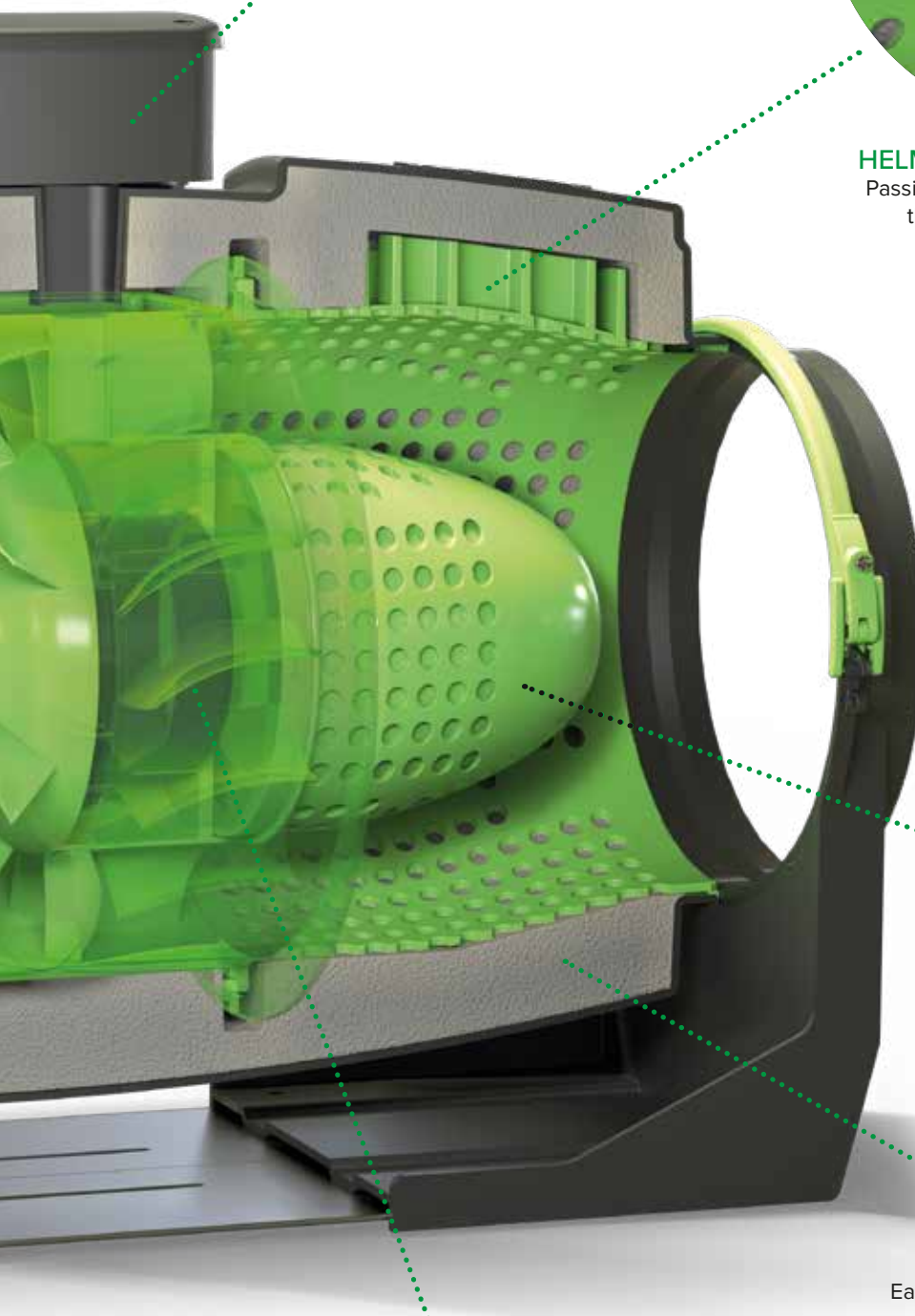
ELECTRIC BOX

Produced in a material granting electrical and fire resistance



HELMHOLTZ RESONATOR GROUP

Passive sound dampener used to decrease the noise levels at predetermined frequencies



FLOW DRIVER

It corrects the airflow after the impeller and the rectifier, avoiding energy losses due to vortices

RECTIFIER BLADES

Designed with the impeller to rectify the airflow and avoid flow problems on the downstream part of the product

CO-MOULDED SHELL

Easily removable during maintenance without any effect on his sound dampening effect

LINEO QUIET ES RANGE

equipped with EC brushless motors

The products in the **LINEO QUIET ES** range differ from the corresponding versions of the LINEO QUIET range due to the use of electronically controlled 2 speed EC brushless (low consumption) motors. Each speed can be set at installation. Alternatively the units can run at 1 speed only, adjustable by user through 0-10V signal.



LINEO QUIET RANGE

equipped with AC motors

The **LINEO QUIET** range products are fitted with traditional AC motors, 2 or 3 speed depending on the model.





because environment
has to be....

SUSTAINED



LINEO QUIET ES RANGE

IN-LINE MIXED FLOW FANS

TECHNICAL AND PERFORMANCE DATA - LINEO QUIET ES*

Models	Code	V~50/60HZ	W	A	RPM	Max Airflow		Max Pressure		Protection grade**	Max °C	KG
			4/6/8/10V	4/6/8/10V	4/6/8/10V	m³/h 4/6/8/10V	l/s 4/6/8/10V	mmH₂O 4/6/8/10V	Pa 4/6/8/10V			
LINEO 100 QUIET ES	17170	220-240	6.2	0.09	1140	135	37.5	3.5	34.3	IP45	60	3,8
			8.3	0.12	1450	175	48.6	5.8	56.9			
			14.7	0.18	2050	250	69.4	11.4	111.8			
			23	0.26	2510	300	83.3	24.8	243.2			
LINEO 125 QUIET ES	17171	220-240	6.6	0.10	1080	180	50	3.3	32.4	IP45	60	3,6
			8.8	0.12	1340	225	62.5	5.6	54.9			
			16	0.18	1865	320	88.9	11	107.9			
			24	0.26	2210	380	105.6	23.7	232.4			
LINEO 150 QUIET ES	17172	220-240	7.7	0.11	1015	250	69.4	4.6	45.1	IP45	60	5,4
			10.6	0.14	1240	305	84.7	7.5	73.6			
			20	0.24	1700	430	119.4	14.7	107.9			
			31	0.34	2030	515	143.1	24.2	237.3			
LINEO 160 QUIET ES	17173	220-240	7.7	0.11	1010	250	69.4	4.5	44.1	IP45	60	5,2
			10.6	0.14	1245	315	87.5	7.5	73.6			
			19.7	0.23	1685	435	120.8	14.4	141.2			
			31	0.34	2035	525	145.8	23.9	234.4			
LINEO 200 QUIET ES	17174	220-240	15.2	0.18	1380	570	158.3	8.6	84.3	IP45	50	8,6
			25.3	0.27	1705	720	200	13.9	136.3			
			52.4	0.52	2245	945	262.5	22.9	224.6			
			88	0.78	2700	1145	318.1	33.6	329.5			
LINEO 250 QUIET ES	17175	220-240	20	0.19	1365	750	208.3	10.1	99.1	IP45	50	13,4
			35	0.28	1680	940	261.1	15.6	153			
			75	0.60	2250	1250	347.2	26.6	260.9			
			125	0.97	2680	1485	412.4	37.5	367.8			
LINEO 315 QUIET ES	17176	220-240	42	0.31	1260	1400	388.9	12.9	126.5	IP45	50	28,3
			72	0.51	1560	1730	480.6	19.5	191.2			
			155	1.10	2070	2300	638.9	33.8	331.5			
			220	1.52	2350	2630	730.6	38.7	379.5			

* all data referred to supply at 50 Hz

** protection grade referred to ducted units

SOUND LEVELS - LINEO QUIET ES

Models	Code	SOUND POWER Lw dB (A)											
		INTAKE				SUPPLY				BREAKOUT			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 QUIET ES	17170	37,7	42,9	53,4	55,6	38,1	43,6	54,2	58,2	30,4	36,4	45,3	51,4
LINEO 125 QUIET ES	17171	37,9	41,8	52	55	38,5	43,1	53,9	57,5	31,8	36,9	45,6	49,2
LINEO 150 QUIET ES	17172	40	44,7	53,2	58,2	40,9	45,9	53,8	58,2	34,2	39,1	46,5	51,5
LINEO 160 QUIET ES	17173	40,6	45,7	54,1	59,5	41,1	46,3	54	58,8	33	37,9	45,2	49,7
LINEO 200 QUIET ES	17174	48,7	54,3	60,8	65,5	48,1	53,6	60,4	65,2	40,2	45,3	51,4	56,3
LINEO 250 QUIET ES	17175	54,4	59,5	65,9	70,4	54,8	59,9	66,2	70,7	45,2	50,3	57,8	61,5
LINEO 315 QUIET ES	17176	61,9	66,2	71,8	74	58,7	63,4	69,4	72	54	56,3	65,1	68,8

Models	Code	SOUND PRESSURE Lp dB(A)*											
		INTAKE				SUPPLY				BREAKOUT			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 QUIET ES	17170	20,2	25,4	35,9	38,1	20,6	26,1	36,7	40,7	9,9	15,9	25,8	30,9
LINEO 125 QUIET ES	17171	20,4	24,3	34,5	37,5	21	25,6	36,4	40	11,3	16,4	25,1	28,7
LINEO 150 QUIET ES	17172	22,5	27,2	35,7	40,7	23,4	28,4	36,3	40,7	13,7	18,6	26	31
LINEO 160 QUIET ES	17173	23,1	28,2	36,6	42	23,6	28,8	35,6	41,3	12,5	17,4	24,7	29,2
LINEO 200 QUIET ES	17174	31,2	36,8	43,3	48	30,6	36,1	42,9	47,7	19,7	24,8	30,9	35,8
LINEO 250 QUIET ES	17175	36,9	42	48,4	52,9	37,3	42,4	48,7	53,2	24,7	29,8	37,3	41
LINEO 315 QUIET ES	17176	44,4	48,7	54,3	56,5	41,2	45,9	51,9	54,5	33,5	35,8	44,6	48,3

* Calculated in free field conditions at 3 m distance, spherical distribution.



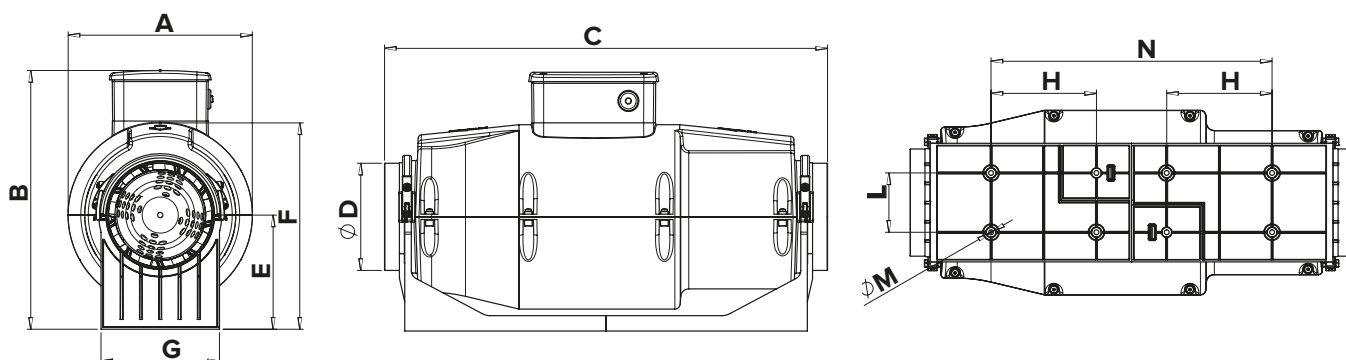


DIMENSIONS - LINEO QUIET ES

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N	VERSION
LINEO 100 QUIET ES	17170	210	294.6	639	97	130	235	135	120	67.5	5.5	320	A
LINEO 125 QUIET ES	17171	210	294.6	504.5	122	130	235	135	120	67.5	5.5	320	A
LINEO 150 QUIET ES	17172	232	320.6	685	147	145	261.5	170	132	85	5.5	360	A
LINEO 160 QUIET ES	17173	232	320.6	570	156.5	145	261.5	170	135	85	5.5	360	A
LINEO 200 QUIET ES	17174	322.5	417.6	625.5	194.5	195	363.5	190	120	155	5.5	510	B
LINEO 250 QUIET ES	17175	318	411.9	751.5	243	189.5	363.5	200	70	170	6.5	604.5	B
LINEO 315 QUIET ES	17176	415.5	557.8	940	307	234	441	309	110	255	8.5	780	C

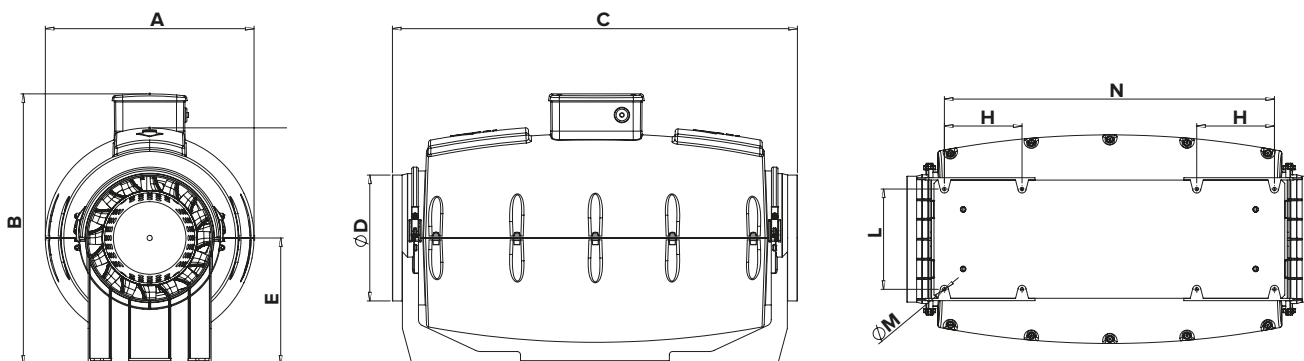
VERSION A

LINEO 100 QUIET ES - LINEO 125 QUIET ES - LINEO 150 QUIET ES - LINEO 160 QUIET ES



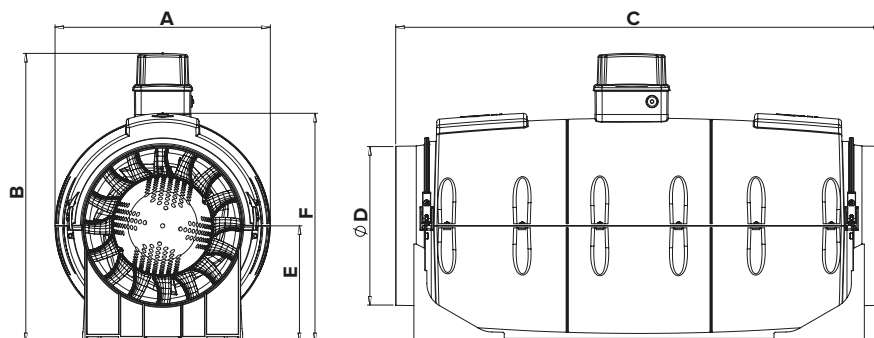
VERSION B

LINEO 200 QUIET ES - LINEO 250 QUIET ES



VERSION C

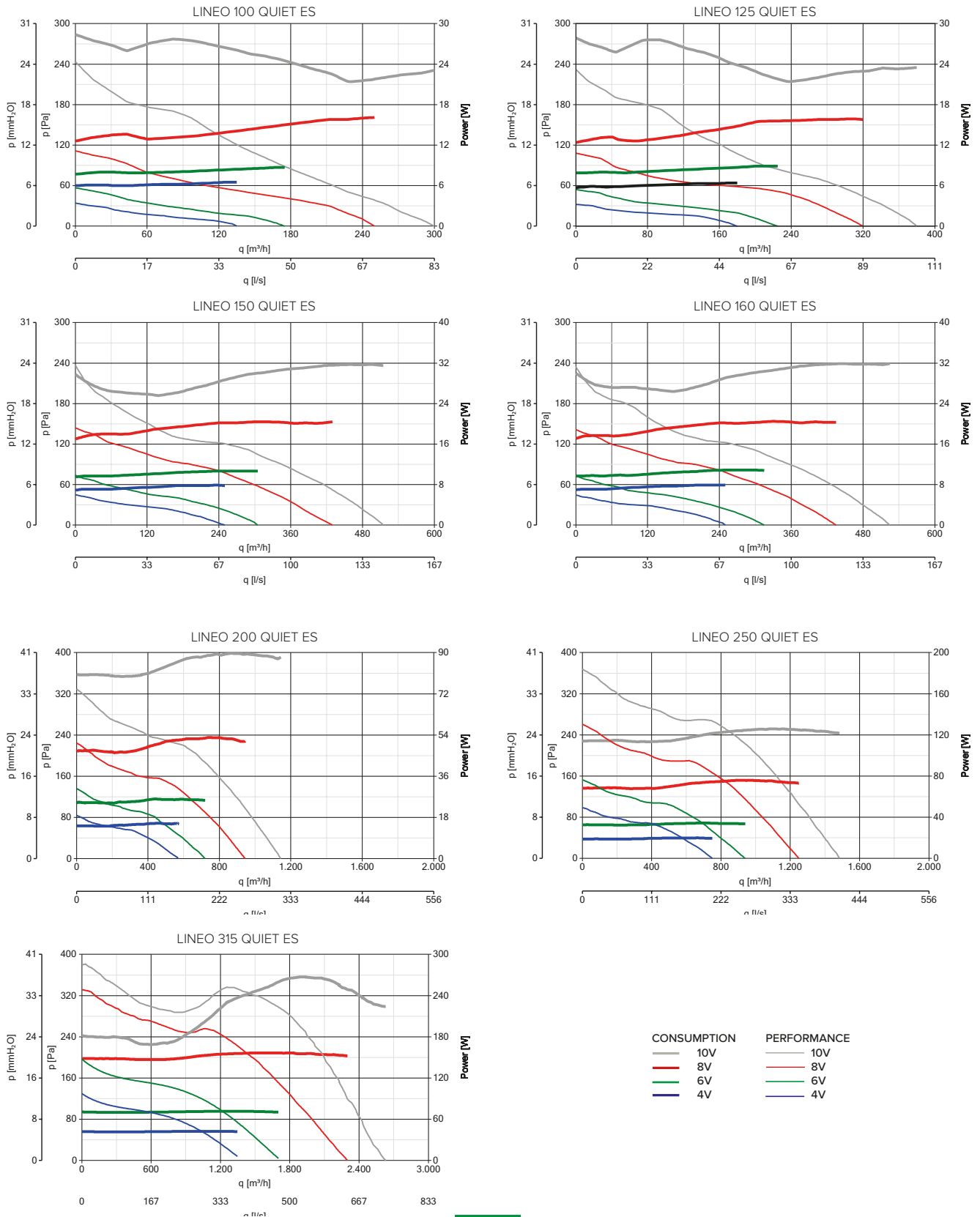
LINEO 315 QUIET ES



LINEO QUIET ES RANGE

IN-LINE MIXED FLOW FANS

PERFORMANCE AND ABSORPTION CURVES - LINEO QUIET ES





CONTROLLERS - LINEO QUIET ES

MODELS	DESCRIPTION	CODE	PRODUCT
	POT-IT - POTENTIOMETER COMPATIBLE WITH FLUSH MOUNTING IN UNI 503 ELECTRIC BOX	12826	17170 - 17171 - 17172 - 17173 - 17174 17175 - 17176
	POT - POTENTIOMETER COMPATIBLE WITH FLUSH MOUNTING IN DIN ELECTRIC BOX	12828	17170 - 17171 - 17172 - 17173 - 17174 17175 - 17176
	DUO - 2 SPEED SELECTOR	22914	ALL PRODUCTS
	C TEMP - TEMPERATURE SENSOR	12992	ALL PRODUCTS
	C SMOKE - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	C HCS - HUMIDITY SENSOR	12994	ALL PRODUCTS
	C PIR - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	C TIMER - TIMER	12999	ALL PRODUCTS

ENERGY EFFICIENCY DATA REQUIRED BY REG. ERP N° 327/211

Attribute name	LINEO 250 QUIET ES 17175	LINEO 315 QUIET ES 17176
Overall efficiency (η)	50,53	59,06
Test category	D	D
Data at the point of maximum efficiency (η)	936	1619,4
Efficiency category	total	total
Efficiency grade (η)	70,5	75,8
Variable speed drive	Si	Si
Year of construction	2020	2020
Model number	17175	17176
Power at peak efficiency (kW)	0,125	0,253
Pressure at high efficiency point (Pa)	243,38	332,35
Maximum efficiency point speed (RPM)	2617	2350
Specific ratio	<1,04	<1,04

LINEO QUIET RANGE

IN-LINE MIXED FLOW FANS

TECHNICAL AND PERFORMANCE DATA - LINEO QUIET*

Models	Code	V~50/60 HZ	W min/med/ max	A min/med/ max	RPM min/med/ max	Max Airflow		Max Pressure		grade**	Max °C	KG
						m³/h min/med/max	l/s min/med/max	mmH₂O min/med/max	Pa min/med/max			
LINEO 100 QUIET	17160	220-240	11	0.09	1455	150	41.7	9	88.3	IP45	45	3,8
LINEO 100 T QUIET	17190		24	0.11	1880	200	55.6	11.5	112.8			
			27	0.13	2260	260	72.2	15	147.1			
LINEO 125 QUIET	17161	220-240	11	0.09	1125	190	52.8	8	78.5	IP45	45	3,6
LINEO 125 T QUIET	17191		24	0.11	1475	250	69.4	10	98.1			
			27	0.13	1880	320	88.9	14	137.3			
LINEO 150 QUIET	17162	220-240	24	0.14	1040	255	70.8	10.5	103	IP45	55	5,4
LINEO 150 T QUIET	17192		37	0.17	1430	350	97.2	15.5	152			
			50	0.22	2030	510	141.7	21.5	210.9			
LINEO 160 QUIET	17163	220-240	24	0.14	1040	255	70.8	10.5	103	IP45	55	5,2
LINEO 160 T QUIET	17193		37	0.17	1430	350	97.2	15.5	152			
			50	0.22	2030	510	141.7	21.5	210.9			
LINEO 200 QUIET	17164	220-240	50	0.34	1880	805	223.6	20.6	202	IPX5	50	8,6
LINEO 200 T QUIET	17194		80	0.42	2380	1045	290.3	26.3	257.9			
			95	0.49	2690	1160	322.2	29	284.4			
LINEO 250 QUIET	17165	220-240	95	0.42	1640	960	266.7	20.2	198.1	IPX5	50	13,4
			125	0.55	2320	1340	372.2	30.3	297.2			
			150	0.65	2750	1550	430.6	34.6	339.3			
LINEO 315 QUIET	17166	220-240	215	0.95	1930	2070	575	30.6	300.1	IPX5	50	28,3
			270	1.15	2360	2530	702,8	43.3	424.6			
			360	1.55	2705	2890	802.8	53.6	525.7			

* all data referred to supply at 50 Hz

** protection grade referred to ducted units

SOUND LEVELS - LINEO QUIET

Models	Code	SOUND POWER Lw dB (A)								
		INTAKE			SUPPLY			BREAKOUT		
		min	med.	max	min	med.	max	min	med.	max
LINEO 100 QUIET	17160	40,3	48,3	52,8	40	47,8	52,6	36,5	44	48,9
LINEO 100 T QUIET	17190									
LINEO 125 QUIET	17161	39,2	44,1	52,2	38,6	44,6	52,5	32,8	40,9	47,4
LINEO 125 T QUIET	17191									
LINEO 150 QUIET	17162	39,8	48,4	58,3	40,5	48,4	58	34,9	43,4	52,1
LINEO 150 T QUIET	17192									
LINEO 160 QUIET	17163	41,6	50	60,4	42,1	49,4	59,5	34,6	43	50,7
LINEO 160 T QUIET	17193									
LINEO 200 QUIET	17164	57,2	62,8	65,5	56,2	62	64,8	48	53,4	56
LINEO 200 T QUIET	17194									
LINEO 250 QUIET	17165	61,1	67,6	70,9	61,2	67,9	71,2	52,7	59	62,4
LINEO 315 QUIET	17166	69,3	73,3	75,9	68	72,1	74,9	60	64,4	67,5

Models	Code	SOUND PRESSURE LP dB(A)*								
		INTAKE			SUPPLY			BREAKOUT		
		min	med.	max	min	med.	max	min	med.	max
LINEO 100 QUIET	17160	22,8	30,8	35,3	22,5	30,3	35,1	16	23,5	28,4
LINEO 100 T QUIET	17190									
LINEO 125 QUIET	17161	21,7	26,6	34,7	21,1	27,1	35	12,3	20,4	26,9
LINEO 125 T QUIET	17191									
LINEO 150 QUIET	17162	22,3	30,9	40,8	23	30,9	40,5	14,4	22,9	31,6
LINEO 150 T QUIET	17192									
LINEO 160 QUIET	17163	24,1	32,5	42,9	24,6	31,9	42	14,1	22,5	30,2
LINEO 160 T QUIET	17193									
LINEO 200 QUIET	17164	39,7	45,3	48	38,7	44,5	47,3	27,5	32,9	35,5
LINEO 200 T QUIET	17194									
LINEO 250 QUIET	17165	53,4	50,1	53,4	43,7	50,4	53,7	32,2	38,5	41,9
LINEO 315 QUIET	17166	51,8	55,8	58,4	50,5	54,6	57,4	39,5	43,9	47

* Calculated in free field conditions at 3 m distance, spherical distribution.



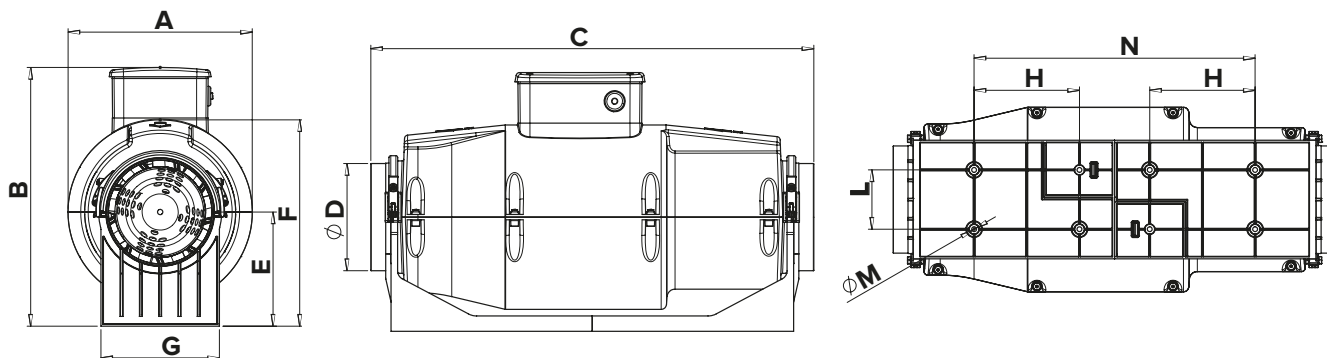


DIMENSIONS - LINEO QUIET

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N	VERSION
LINEO 100 QUIET	17160	210	294.5	639	97	130	235	135	120	67.5	5.5	320	A
LINEO 100 T QUIET	17190												
LINEO 125 QUIET	17161	210	294.6	504.5	122	130	235	135	120	67.5	5.5	320	A
LINEO 125 T QUIET	17191												
LINEO 150 QUIET	17162	232	320.5	685	147	145	261.5	170	132	85	5.5	360	A
LINEO 150 T QUIET	17192												
LINEO 160 QUIET	17163	232	320.5	570	156.5	145	261.5	170	135	85	5.5	360	A
LINEO 160 T QUIET	17193												
LINEO 200 QUIET	17164	322.5	417.5	625.5	194.5	195	363.5	190	120	155	5.5	510	B
LINEO 200 T QUIET	17194												
LINEO 250 QUIET	17165	318	412	751.5	243	189.5	363.5	200	70	170	6.5	604.5	B
LINEO 315 QUIET	17166												

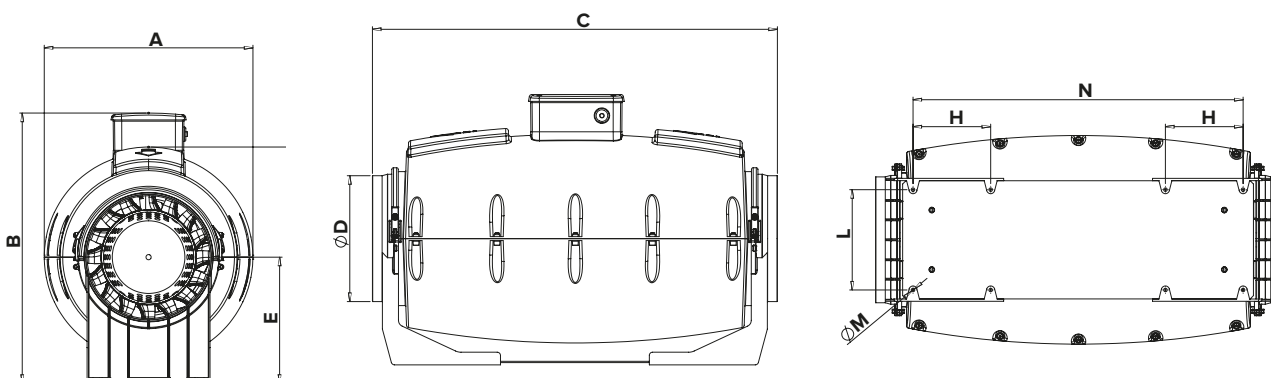
VERSION A

LINEO 100 QUIET - LINEO 100 T QUIET - LINEO 125 QUIET - LINEO 125 T QUIET
 LINEO 150 QUIET - LINEO 150 T QUIET - LINEO 160 QUIET - LINEO 160 T QUIET



VERSION B

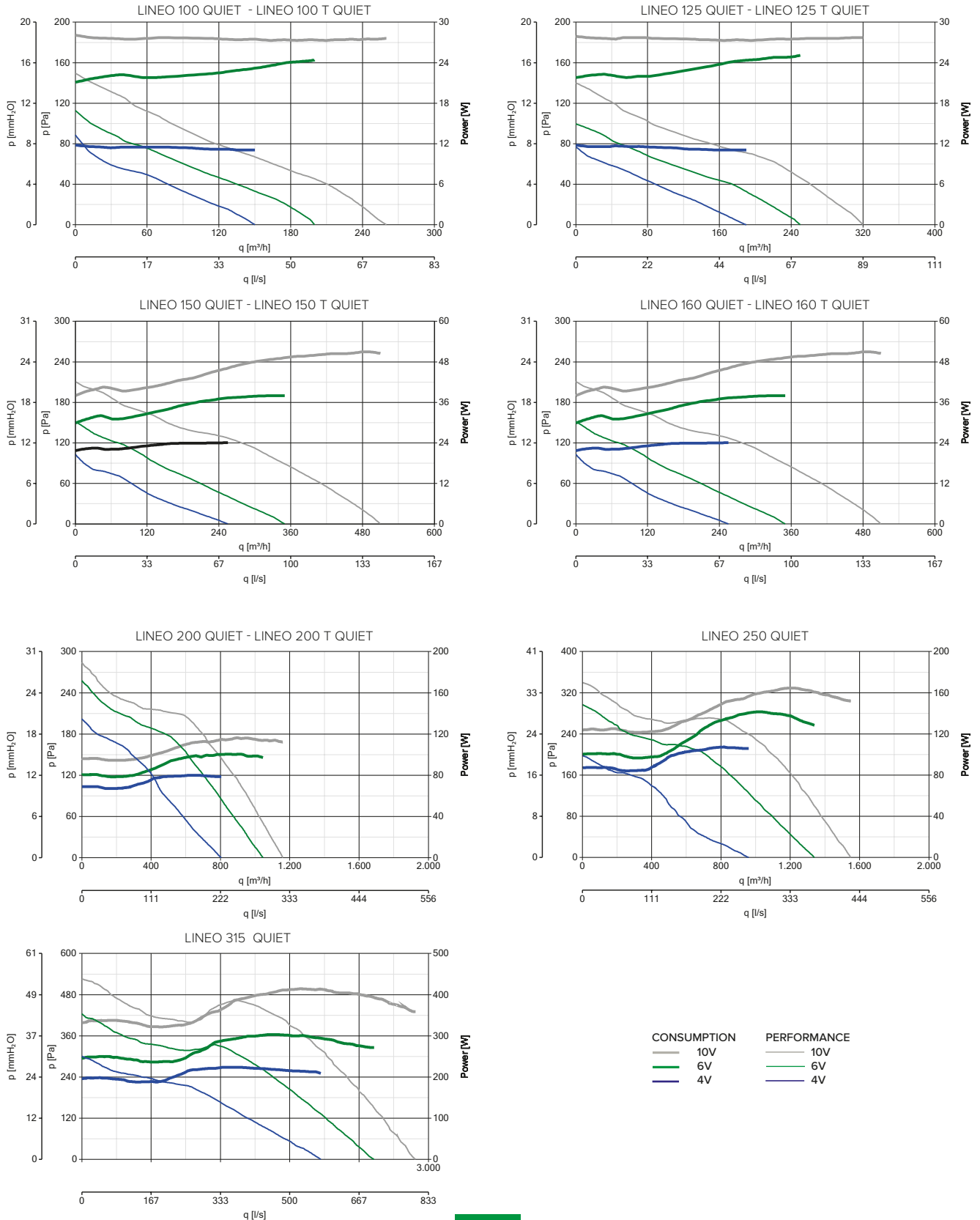
LINEO 200 QUIET - LINEO 200 T QUIET - LINEO 250 QUIET - LINEO 315 QUIET



LINEO QUIET ES RANGE

IN-LINE MIXED FLOW FANS

PERFORMANCE AND ABSORPTION CURVES - LINEO QUIET





CONTROLLERS - LINEO QUIET

MODELS	DESCRIPTION	CODE	PRODUCT
	C5 0.5 - 5 SPEED CONTROLLER	12987	17160 - 17161 - 17162 - 17163 - 17164 17165 - 17166
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	17160 - 17161 - 17162 - 17163 - 17164 17165 - 17166
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	17165 - 17166
	KIT SCB5 - CONVERTS SCR5 TO A BUILT-IN VERSION	22483	12987 - 12966 - 12967
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12987 - 12966 - 12967
	TRIO-LINEO 503 - 3 SPEED SELECTOR	12891	17160 - 17161 - 17162 - 17163 - 17164 17165 - 17166 - 17190 - 17191 17192 17193 - 17194
	C TEMP - TEMPERATURE SENSOR	12992	ALL PRODUCTS
	C SMOKE - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	C HCS - RELATIVE HUMIDITY SENSOR	12994	ALL PRODUCTS
	C PIR - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	C TIMER - TIMER	12999	ALL PRODUCTS

ENERGY EFFICIENCY DATA REQUIRED BY REG. ERP N° 327/211

Attribute name	LINEO 250 QUIET 17165	LINEO 315 QUIET 17166
Overall efficiency (η)	41,03	48,17
Test category	C	C
Data at the point of maximum efficiency (η)	925,9	1736,62
Efficiency category	static	static
Efficiency grade (η)	60,1	62,7
Variable speed drive	No	No
Year of construction	2020	2020
Model number	17165	17166
Power at peak efficiency (kW)	0,154	0,411
Pressure at high efficiency point (Pa)	245,8	410,60
Maximum efficiency point speed (RPM)	2793	2630
Specific ratio	1	1

LINEO RANGE

In-line mixed flow fans

The LINEO range products are fitted with multi speed induction motors.

THE BEST COMPROMISE AMONG
PERFORMANCE, POWER CONSUMPTION
AND NOISE EMISSION.





EASY AND FLEXIBLE INSTALLATION

KEY FEATURES

- Complete range, 26 models with a nominal diameter between 100 mm and 315 mm, 18 equipped with AC motors and 8 equipped with brushless EC motors.
- With or without timer and silenced.
- Flexibility and ease of installation ideal for your specific performance-related requirements, consumption, needs and operating costs.



easy

MAINTENANCE

ELECTRIC BOX

Produced in a material granting electrical and fire resistance

INLET NOZZLE

Dimensioned to sustain the product in the wall and ceiling installation



DIVERGENT ELEMENT

It helps the impeller to increase the performance



IMPELLER

Designed to reach the ERP efficiency levels

PROTECTIVE COVER

It corrects the airflow after the impeller and the rectifier, avoiding energy losses due to vortices



OUTLET NOZZLE

Dimensioned to sustain the product in the wall and ceiling installation

RECTIFIER BLADES

Designed with the impeller to rectify the airflow and avoid flow problems on the downstream part of the product

LINEO RANGE

IN-LINE MIXED FLOW FANS EQUIPPED WITH AC MOTORS

TECHNICAL AND PERFORMANCE DATA - LINEO*

Models	Code	V ~ 50/60HZ	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Sound Pressure Lp dB (A)**	Protection grade***	Max °C	KG
						m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max				
LINEO 100	17144	220-240	20	0.09	1520	180	50	13	127.5	30.7	IP44	60	1.8
LINEO 100 T	17185		23	0.11	2030	255	70.8	16.5	161.9	39.4			
LINEO 100 Q	17143	220-240	12	0.05	1860	155	43.1	6.5	63.8	29.4	IP44	60	1.8
LINEO 100 Q T	17184		15	0.9	2450	200	55.6	7.5	73.6	37.9			
LINEO 125	17145	220-240	25	0.11	1570	250	69.4	13	127.5	33.9	IP44	60	1.8
LINEO 125 T	17186		33	0.15	2140	365	101.4	17	166.8	43			
LINEO 150	17146	220-240	40	0.18	1580	385	106.9	21	206	41.4	IP44	60	2.5
LINEO 150 T	17187		58	0.26	2100	550	152.8	27	264.9	50.5			
LINEO 160	17147	220-240	40	0.18	1580	385	106.9	21	206	41.7	IP44	60	2.8
LINEO 160 T	17188		58	0.26	2100	550	152.8	27	264.9	50.8			
LINEO 200 Q	17148	220-240	45	0.22	1780	700	194.4	13	127.5	39.6	IP44	60	4.3
LINEO 200 Q T	17189		75	0.37	2740	950	263.9	29	284.5	49.0			
LINEO 250 Q	17149	220-240	85	0.40	1850	720	200	34	333.5	49.1	IP44	60	5.9
LINEO 250 Q T	17197		110	0.50	2550	990	275	53	519.9	56.2			

* All data referred to supply at 50 Hz

** Calculated in free field conditions at 3 m distance

*** Protection referred to ducted units

Models	Code	V ~ 50 HZ	W min/med/ max	A min/med/ max	RPM min/med/ max	Max Airflow		Max Pressure		Protection grade***	Max °C	KG
						m³/h min/med/max	l/s min/med/max	mmH₂O min/med/max	Pa min/med/max			
LINEO 200	17180	220 - 240	80	0.34	1925	815	226.4	21.5	210.9	IPX5	50	4,9
LINEO 200 T	17177		95	0.42	2450	1025	284.7	27.3	267.7			
			110	0.49	2710	1135	315.3	30	294.2			
LINEO 250	17181	220 - 240	90	0.41	1500	725	201	13.9	136.5	IPX5	50	5,3
			120	0.54	2240	1145	318	29	284.4			
			145	0.63	2730	1440	400	37.2	364.8			
LINEO 315	17182	220 - 240	190	1.14	1770	1590	442	27.1	265.8	IPX5	50	9,5
			260	1.57	2300	2115	588	42.2	413.9			
			360	1.60	2690	2590	719	55.4	543.3			

SUOND LEVELS - LINEO 200 - 250 - 315

Models	Code	INTAKE			SUPPLY			BREAKOUT		
		min	med.	max	min	med.	max	min	med.	max
LINEO 200	17180	64.9	69.5	72.9	78.6	70.5	74.3	57.4	63.7	67.5
LINEO 200 T	17177									
LINEO 250	17181	63.9	71.7	75.5	64.7	72.3	74.9	56	61.3	64.7
LINEO 315	17182	70.9	76.0	79.7	72.2	77.9	82.5	63.4	68.2	72.1

Models	Code	INTAKE			SUPPLY			BREAKOUT		
		min	med.	max	min	med.	max	min	med.	max
LINEO 200	17180	474	52.0	55.4	51.9	52.9	56.8	36.9	43.1	46.9
LINEO 200 T	17177									
LINEO 250	17181	46.4	54.1	58.0	47.1	54.8	57.4	35.5	40.8	35.5
LINEO 315	17182	53.4	58.5	62.2	54.7	60.4	64.9	42.9	47.6	51.6

* Calculated in free field conditions at 3 m distance, spherical distribution.

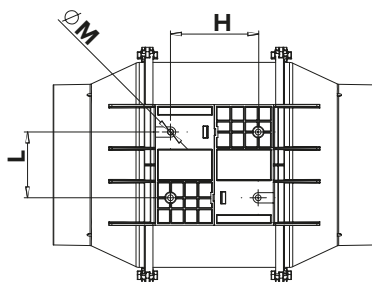


DIMENSIONS - LINEO

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N
LINEO 100	17144	188.5	211	303	96	101.5	189	90	60	80	5.5	-
LINEO 100 T	17185	188.5	211	303	96	101.5	189	90	60	80	5.5	-
LINEO 100 Q	17143	156	174	231	96	82	152	95	51.5	47.5	4.5	-
LINEO 100 Q T	17184	156	174	231	96	82	152	95	51.5	47.5	5.5	-
LINEO 125	17145	188.5	211	258	122	101.5	189	90	60	80	5.5	-
LINEO 125 T	17186	188.5	211	258	122	101.5	189	90	60	80	5.5	-
LINEO 150	17146	214.5	234	294	146	112.5	212	110	60	80	5.5	-
LINEO 150 T	17187	214.5	234	294	146	112.5	212	110	60	80	5.5	-
LINEO 160	17147	214.5	234	272.5	156	112.5	212	110	60	80	5.5	-
LINEO 160 T	17147	214.5	234	272.5	156	112.5	212	110	60	80	5.5	-
LINEO 200	17180	270	373	396	194.5	195	330	190	120	155	5.5	-
LINEO 200 T	17177	270	373	396	194.5	195	330	190	120	155	5.5	280
LINEO 200 Q	17148	234.5	266	300	196	125.5	235	140	94	100	5.5	-
LINEO 200 Q T	17189	234.5	266	300	196	125.5	235	140	94	100	5.5	-
LINEO 250	17181	300	378	322	243	190	329	200	70	170	5.5	174.5
LINEO 250 Q	17149	300	322	385	247	152.5	292	176.5	140	145	5.5	-
LINEO 250 Q T	17189	300	322	385	247	152.5	292	176.5	140	145	5.5	174.5
LINEO 315	17182	373	446	420	307	224	398	309	110	255	8.5	259.5

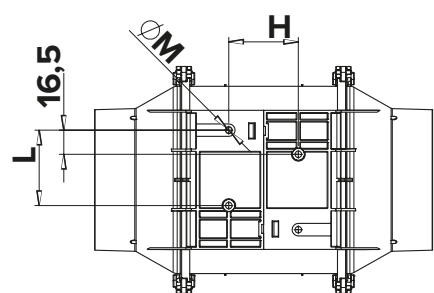
VERSION A

LINEO 100 - LINEO 100 T - LINEO 125 - LINEO 125 T - LINEO 150 - LINEO 150 T
 LINEO 160 - LINEO 160 T - LINEO 200 Q - LINEO 200 Q T - LINEO 250 Q - LINEO 250 Q T



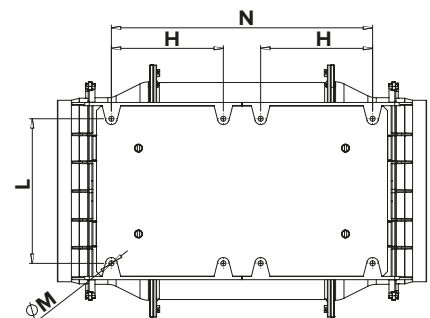
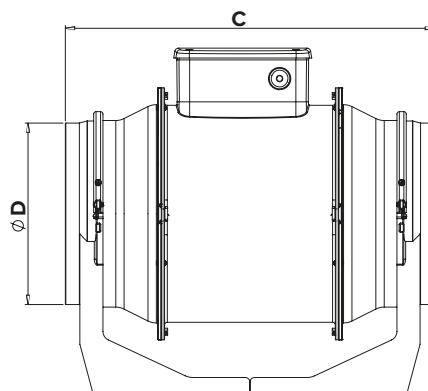
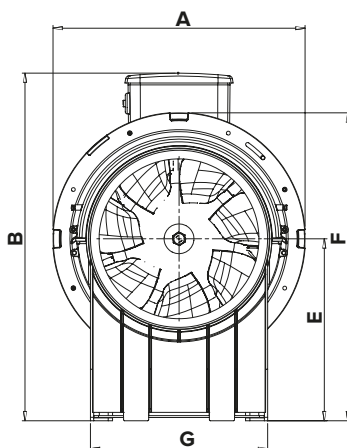
VERSION B

LINEO 100 Q
 LINEO Q T



VERSION C

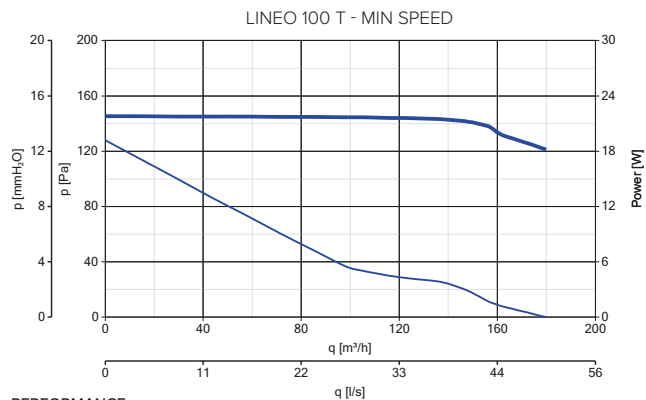
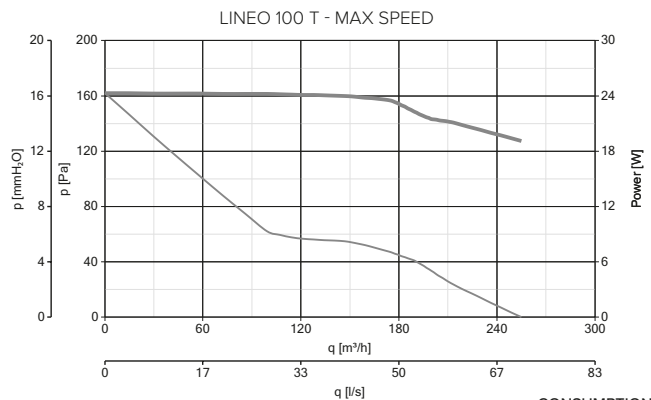
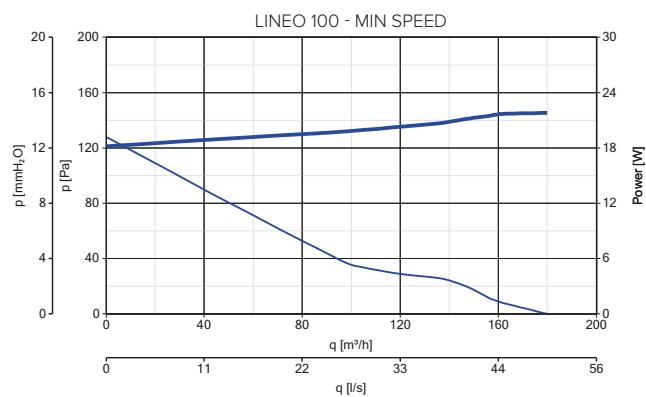
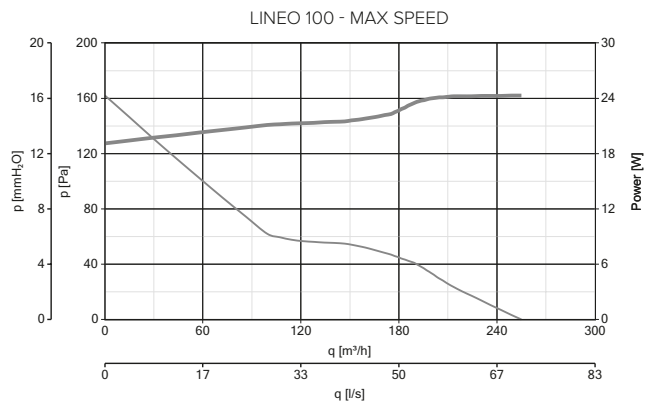
LINEO 200 - LINEO 200 T - LINEO 250 - LINEO 315



LINEO RANGE

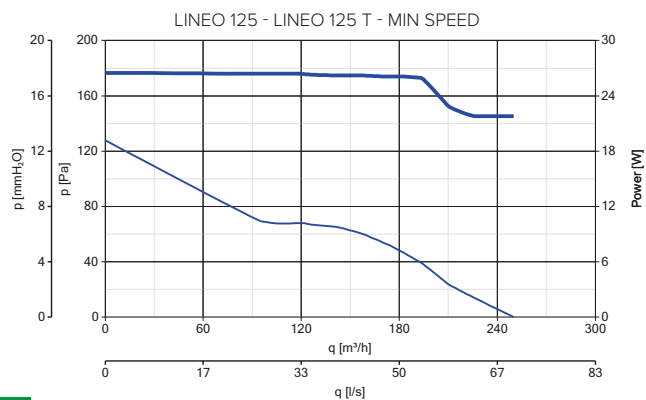
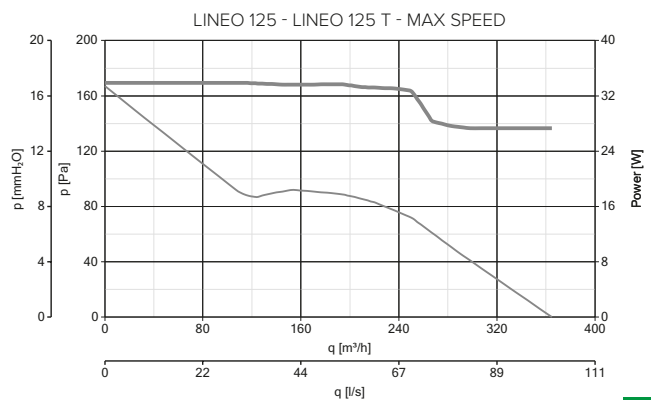
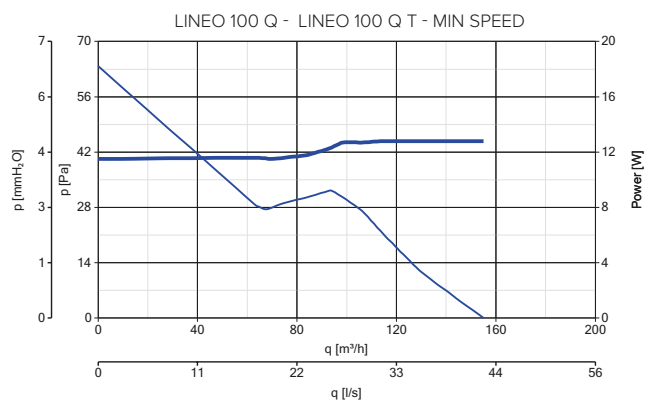
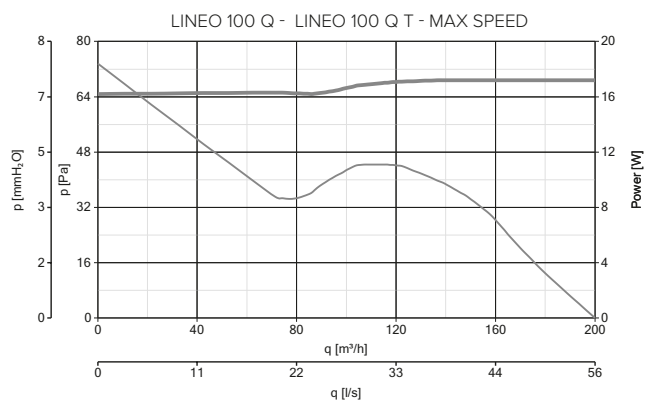
IN-LINE MIXED FLOW FANS EQUIPPED WITH AC MOTORS

PERFORMANCE AND ABSORPTION CURVES - LINEO



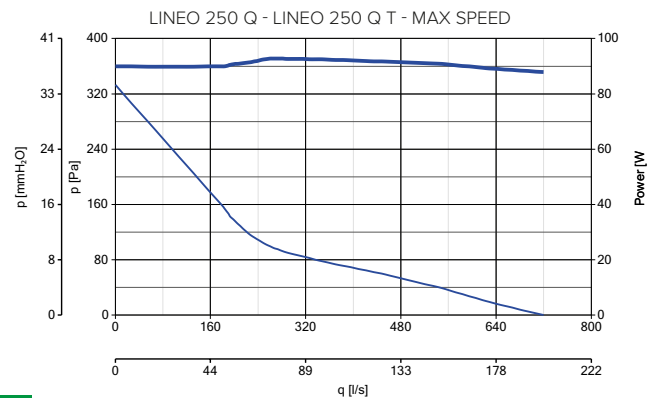
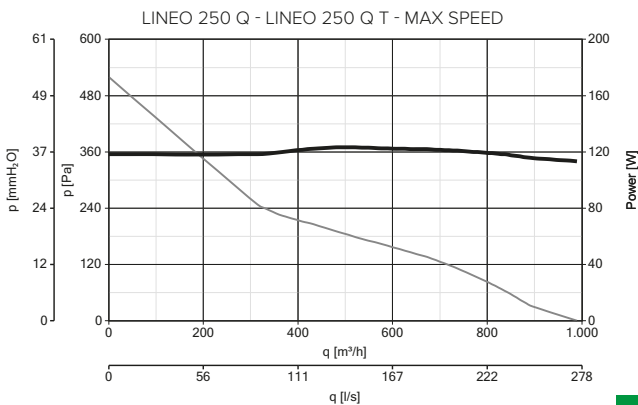
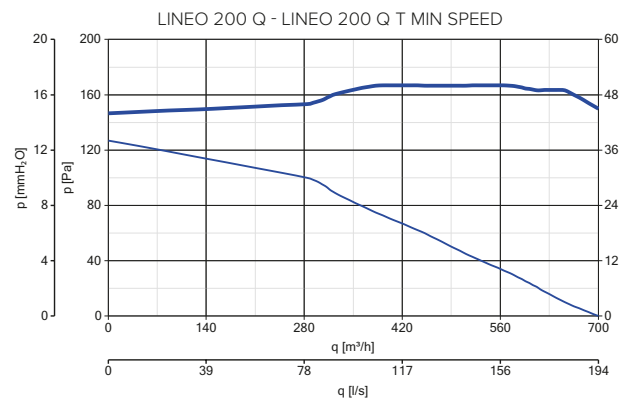
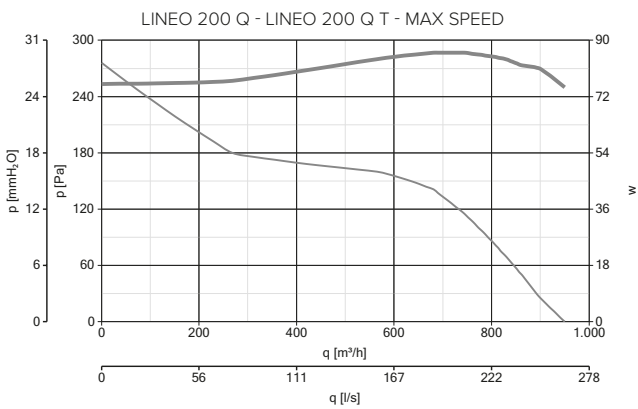
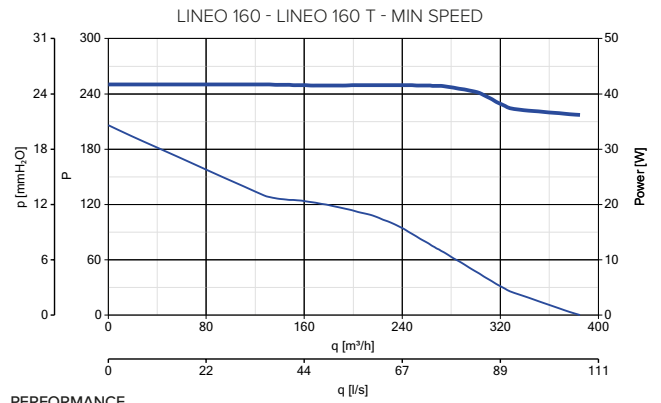
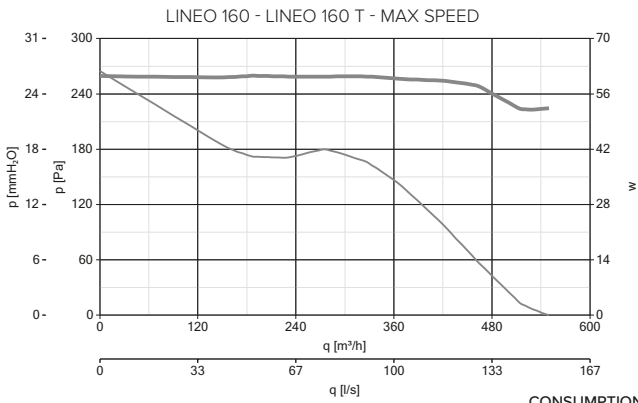
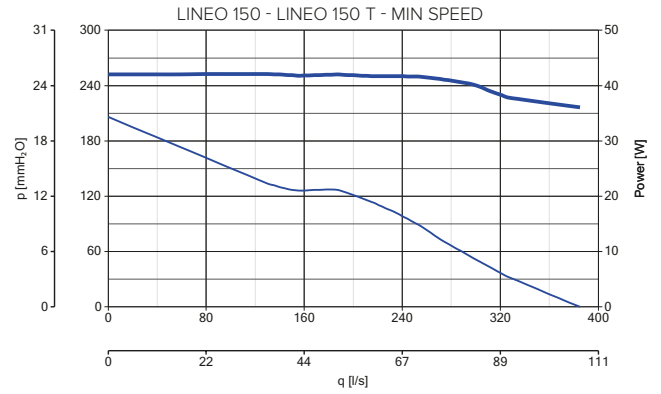
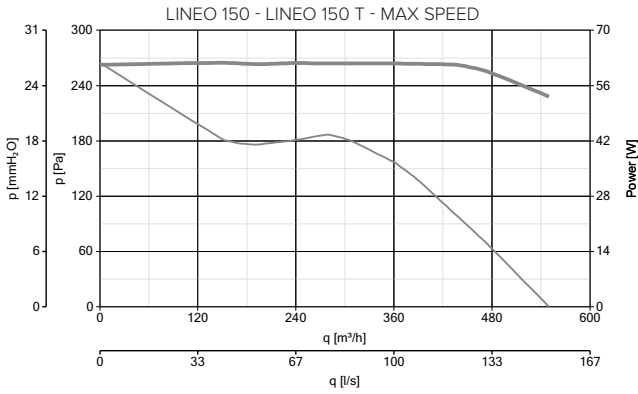
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PERFORMANCE
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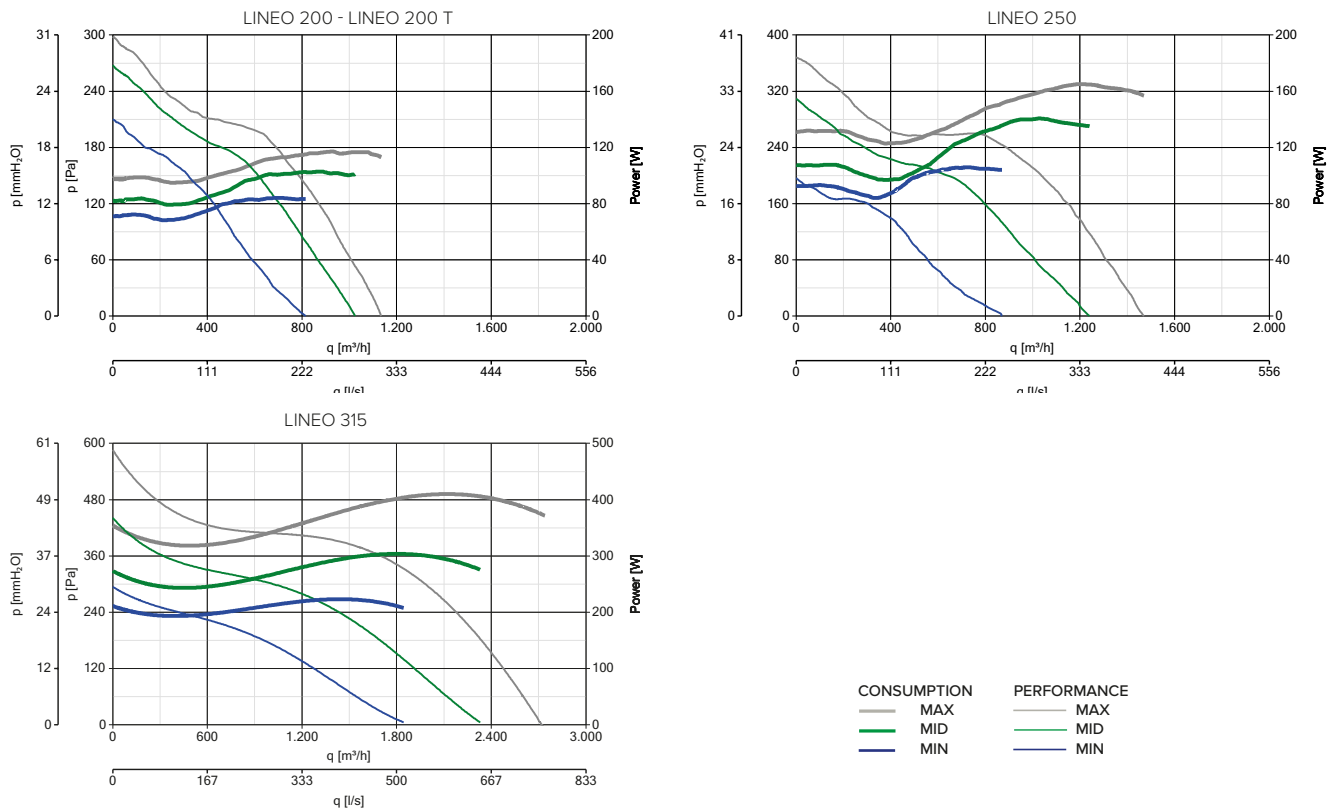
PERFORMANCE AND ABSORPTION CURVES - LINEO



LINEO RANGE

IN-LINE MIXED FLOW FANS EQUIPPED WITH AC MOTORS

PERFORMANCE AND ABSORPTION CURVES - LINEO



ENERGY EFFICIENCY DATA REQUIRED BY REG. ERP N° 327/211

Attribute name	LINEO 250 17181	LINEO 315 17166
Overall efficiency (η)	39,02	44,19
Test category	C	C
Data at the point of maximum efficiency (η)	857,5	1667,8
Efficiency category	statica	statica
Efficiency grade (η)	58,2	58,9
Variable speed drive	No	No
Year of construction	2020	2020
Model number	17181	17182
Power at peak efficiency (kW)	0,150	0,395
Pressure at high efficiency point (Pa)	246,11	376,99
Maximum efficiency point speed (RPM)	2777	2650
Specific ratio	1	1



LINEO ES RANGE

IN-LINE MIXED FLOW FANS EQUIPPED WITH EC BRUSHLESS MOTORS

TECHNICAL AND PERFORMANCE DATA - LINEO ES

Models	Code	V ~ 50/60HZ	W 4/6/8/10V	A 4/6/8/10V	RPM 4/6/8/10V	Max Airflow		Max Pressure		Protection grade***	Max °C	KG
						m³/h 4/6/8/10V	l/s 4/6/8/10V	mmH₂O 4/6/8/10V	Pa 4/6/8/10V			
LINEO 100 ES	17159	220 - 240	6.5	0.07	1070	140	38.9	3.7	36.3	IP45	60	2.3
			8.7	0.09	1345	175	48.6	6.1	59.8			
			16	0.15	1900	250	250	11.4	111.8			
			20	0.20	2220	305	84.7	26.4	258.9			
LINEO 100 Q ES	17158	220 - 240	4.5	0.05	900	60	16.7	0.9	8.8	IP45	60	1.8
			5.5	0.06	1235	80	22.2	1.7	16.7			
			9	0.08	2070	145	40.3	4.3	42.2			
			19	0.18	3230	235	65.3	9.8	96.1			
LINEO 125 ES	17178	220 - 240	7	0.07	1090	170	47.2	3.8	37.3	IP45	60	2.2
			10	0.10	1395	220	61.1	6.5	63.7			
			18	0.17	1940	315	87.5	11.8	115.7			
			25	0.25	2270	370	102.8	30.2	296.2			
LINEO 150 ES	17179	220 - 240	11	0.10	1260	290	80.6	8.5	83.4	IP45	60	2.6
			17	0.16	1595	370	102.8	13.8	135.3			
			34	0.30	2125	500	138.9	22.7	222.6			
			55	0.50	2480	590	163.9	44.2	433.5			
LINEO 160 ES	17183	220 - 240	12	0.11	1305	300	83.3	9	9	IP45	60	2.7
			19	0.17	1645	385	106.9	14.8	145.1			
			37	0.33	2165	510	141.7	23.5	230.5			
			60	0.55	2625	630	175	47.2	462.9			
LINEO 200 ES	17167	220 - 240	15.8	0.19	1380	560	155.6	9.2	90.2	IP45	50	4.6
			25.7	0.28	1700	700	194.4	14.4	141.2			
			52.8	0.53	2220	920	255.6	24	235.4			
			90	0.80	2680	1100	305.6	34.9	342.4			
LINEO 250 ES	17168	220 - 240	20	0.17	2270	755	209.7	11	107.9	IP45	50	5
			35	0.28	1695	935	259.7	16.9	165.7			
			75	0.61	1370	1235	343.1	28.9	283.4			
			126	1.00	2680	1475	409.7	40.4	396.2			
LINEO 315 ES	17169	220 - 240	45	0.37	1300	1415	393.1	14.6	143.2	IP45	50	9.2
			75	0.63	1600	1740	393.1	21.9	214.8			
			170	1.32	2130	2320	483.3	38.6	378.6			
			230	1.75	2370	2625	729.2	43	421.7			

* All data referred to supply at 50 Hz

*** Protection referred to ducted units

SUOND LEVELS - LINEO ES

Models	Code	SOUND POWER Lw dB (A)											
		INTAKE				SUPPLY				IRRADIATED			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 ES	17159	63.3	69.4	78.2	82.6	62.1	68.4	77.5	82	35.5	39.5	47.8	52.3
LINEO 100 Q ES	17158	57.8	64.9	75.1	85.7	54.9	64.9	73.5	85.7	35.1	37.4	47.5	56.6
LINEO 125 ES	17178	64.1	68.2	76.7	81.4	63.6	68.6	77.5	81.5	36.8	40.5	48.8	52.2
LINEO 150 ES	17179	67.9	74.6	82.1	87.9	69.6	75.2	82.1	86.4	41.5	47.8	56.1	62.5
LINEO 160 ES	17183	68.4	76.4	83.1	87.5	69.1	76	82.8	86.9	42.4	49.4	57	62.3
LINEO 200 ES	17167	78.5	83.9	86.9	89.4	77.5	82.9	85.4	88.4	55.6	60.4	62.8	65
LINEO 250 ES	17168	74.2	79.1	85.1	88.9	74.4	79.2	84.9	88.5	49.5	54.3	61.4	64
LINEO 315 ES	17169	83.1	88	90.7	92.8	80.8	88.2	88.8	90	63	64.6	65.3	68.1

Models	Code	SOUND PRESSURE Lp dB(A)*											
		INTAKE				SUPPLY				IRRADIATED			
		4V	6V	8V	10V	4V	6V	8V	10V	4V	6V	8V	10V
LINEO 100 ES	17159	45.8	51.9	60.7	65.1	44.6	50.9	59.9	64.4	15	18.9	27.2	31.8
LINEO 100 Q ES	17158	40.2	47.3	57.6	68.2	37.3	47.4	56	68.1	14.6	16.9	27	36.1
LINEO 125 ES	17178	46.6	50.6	59.1	63.9	46	51.1	60	64	16.2	20	28.3	31.6
LINEO 150 ES	17179	50.4	57.1	64.6	70.3	52.1	57.7	64.5	68.9	21	27.2	35.5	41.9
LINEO 160 ES	17183	50.9	58.9	65.6	70	51.5	58.5	65.6	69.3	21.9	28.9	36.5	41.8
LINEO 200 ES	17167	60.9	66.4	69.4	71.9	60	65.3	67.9	70.8	35.1	39.9	42.3	44.5
LINEO 250 ES	17168	56.7	61.5	67.6	71.3	56.9	61.6	67.3	71	29	33.7	40.9	43.4
LINEO 315 ES	17169	65.6	70.4	73.2	75.3	63.3	70.6	71.2	72.4	42.5	44	44.8	47.5

* Calculated in free field conditions at 3 m distance, spherical distribution.

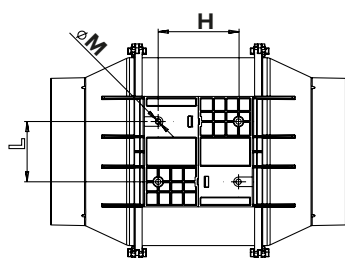


DIMENSIONS - LINEO ES

Models	Code	A	B	C	Ø D	E	F	G	H	L	Ø M	N
LINEO 100 ES	17159	188.5	240	303	96	101.5	189	90	60	80	5.5	-
LINEO 100 Q ES	17158	156	205	231	96	82	152	95	51.5	47.5	4.5	-
LINEO 125 ES	17178	188.5	240	258	122	101.5	189	90	60	80	5.5	-
LINEO 150 ES	17179	214.5	265	294	146	112.5	212	110	60	80	5.5	-
LINEO 160 ES	17183	214.5	265	272.5	156	112.5	212	110	60	80	5.5	-
LINEO 200 ES	17167	270	372.5	396	194.5	195	330	190	120	155	5.5	280
LINEO 250 ES	17168	300	377.5	322	243	190	329	200	70	170	6.5	174.5
LINEO 315 ES	17169	373	506	420	307	224	398	309	110	255	8.5	259.5

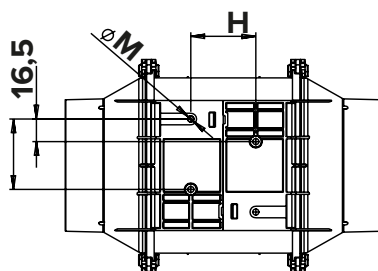
VERSION A

LINEO 100 ES - LINEO 125 ES
LINEO 150 ES - LINEO 160 ES



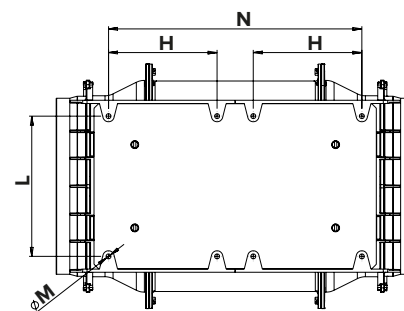
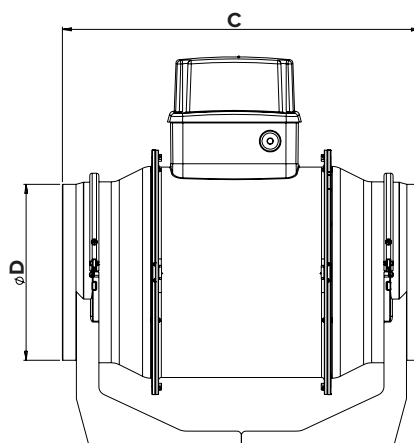
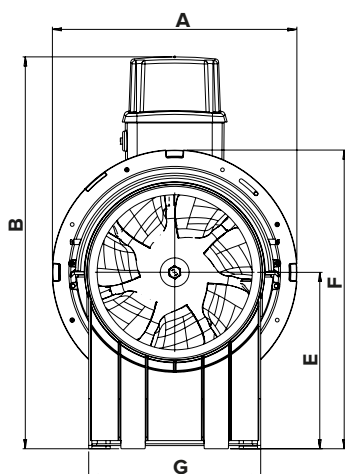
VERSION B

LINEO 100 Q ES



VERSION C

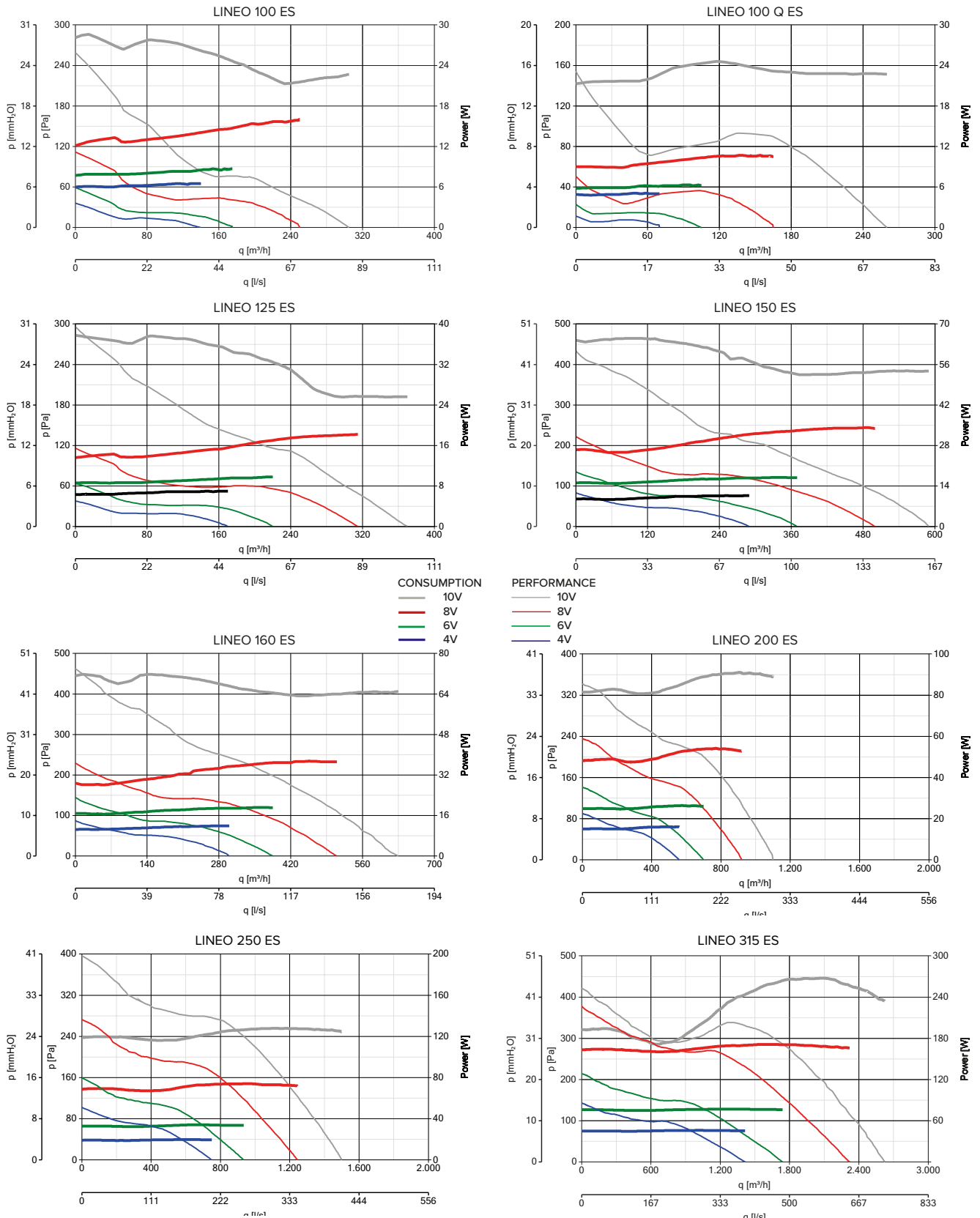
LINEO 200 ES - LINEO 250 ES - LINEO 315 ES



LINEO ES RANGE

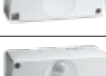
IN-LINE MIXED FLOW FANS EQUIPPED WITH EC BRUSHLESS MOTORS

PERFORMANCE AND ABSORPTION CURVES - LINEO ES

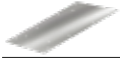




CONTROLLERS - LINEO

MODELS	DESCRIPTION	CODE	PRODUCT
	C5 0.5 - 5 SPEED CONTROLLER	12987	17180
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	17180
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	17181 - 17182
	KIT SCB5 - CONVERTS SCR5 TO A BUILT-IN VERSION	22483	12987 - 12966 - 12967
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12987 - 12966 - 12967
	POT-IT - POTENTIOMETER COMPATIBLE WITH FLUSH MOUNTING IN UNI 503 ELECTRIC BOX	12826	17158 - 17159 - 17179 - 17183 - 17187 17167 - 17168 - 17169
	POT - POTENTIOMETER COMPATIBLE WITH FLUSH MOUNTING IN DIN ELECTRIC BOX	12828	17158 - 17159 - 17179 - 17183 - 17187 17167 - 17168 - 17169
	TRIO-LINEO 503 - 3 SPEED SELECTOR	12891	17181 - 17177 - 17182
	DUO - 2 SPEED SELECTOR	22914	17144 - 17185 - 17143 - 17184 - 17145 17186 - 17146 - 17187 - 17147 - 1718 17148 - 17189 - 17149 - 17197
	C TEMP - TEMPERATURE SENSOR	12992	ALL PRODUCTS
	C SMOKE - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	C HCS - RELATIVE HUMIDITY SENSOR	12994	ALL PRODUCTS
	C PIR - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	C TIMER - TIMER	12999	ALL PRODUCTS

ACCESSORIES ON REQUEST - LINEO

MODELS	DESCRIPTION		CODE	PRODUCT
	LINEO-C - IN-LINE INSTALLATION KITS	100	22584	17159 - 17158
		125	22585	17178
		150	22586	17179
		160	22587	17183
	LINEO-PF - SIDE BY SIDE INSTALLATION KITS	100	22577	17159 - 17158
		125	22578	17178
		150	22579	17179
		160	22581	17183
	LINEO-SF 500 - BRACKET FOR IN-LINE APPLICATION		22593	17143 - 17184 - 17144 - 17185 - 17159 17158 - 17145 - 17186 - 17178 - 17146 17187 - 17179 - 17147 - 17188 - 17183 17148 - 17189 - 17180 - 17177 - 17167
	LINEO-SF 700 - BRACKET FOR IN-LINE APPLICATION		22594	17149 - 17197 - 17168 - 17169
	LINEO-G - PROTECTION GRILLE	100	22701	17143 - 17184 - 17144 17185 - 17159 - 17158
		125	22702	17145 - 17186 - 17178
		150	22703	17146 - 17187 - 17179
		160	22704	17147 - 17188 - 17183
		200	22705	17148 - 17189 - 17180 - 17177 - 17167
		250	22706	17149 - 17197 - 17168
		315	22707	17169

LINEO ES RANGE
IN-LINE MIXED FLOW FANS EQUIPPED WITH EC BRUSHLESS MOTORS

ENERGY EFFICIENCY DATA REQUIRED BY REG. ERP N° 327/211

Attribute name	LINEO 250 ES 17168	LINEO 315 ES 17169
Overall efficiency (η)	51,87	57,94
Test category	D	D
Data at the point of maximum efficiency (η)	962,9	1610,6
Efficiency category	statica	totale
Efficiency grade (η)	71,8	74,6
Variable speed drive	si	si
Year of construction	2020	2020
Model number	17168	17169
Power at peak efficiency (kW)	0,125	0,258
Pressure at high efficiency point (Pa)	243,08	334,45
Maximum efficiency point speed (RPM)	2658	2364
Specific ratio	<1,04	<1,04





CA V0 RANGE

In-line centrifugal fans in self-extinguishing plastic

Self-extinguishing plastic resin mixed flow duct fans, installed in false ceilings or in attics. The ideal low-visual impact ventilation solution for residential, commercial or industrial premises (kitchens, toilets, laboratories, bars, restaurants, laundries, shops, etc.).

VERSIONS

7 models, with nominal diameter between 100 and 315 mm.

KEY FEATURES

- Built to withstand aggressive agents.
- Standard supplied support brackets.
- High protection rating from dust and water for safe use in industrial environments.
- Wide continuous operation temperature range (-25 °C / + 50 °C).
- Can be installed horizontally, vertically or sloping.
- Fully compliant with Reg. ErP 2018 N. 1253/2014

TECHNICAL FEATURES

- Casing built into the boxes containing the mains connection terminals and the flow conditioner fins, constructed in self-extinguishing plastic resin (V0).
- 3-speed fans that can be set using optional device TRIO-CA (code 12869), composed of:
 - AC motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature.
 - Backward-curve, heat resistant plastic resin blade impellers loaded with glass fibre to combine structural strength and dimensional stability.
 - Galvanised steel sheet brackets for wall, ceiling and false ceiling installation.
- Possibility of connecting to remote environmental temperature, humidity, smoke and presence sensors (optional).
- Protection rating from dusts and water: IP44 (appliance ducted in extraction and delivery).
- Insulation Class: II .





TECHNICAL DATA

Models	Code	V~50/60HZ				Max Airflow		Max Pressure		LP DB(A) 3m	Max °C	KG
			W	A	RPM	m³/h	l/s	mmH ₂ O	Pa			
			min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max		
CA100 V0 D	16008	220-240	14 27 50	0,14 0,19 0,22	1660 - 2400	85 156 251	24 43 69,7	27 36 37	269 360 366	51 - 56	50	2,4
CA125 V0 D	16018	220-240	14 27 52	0,14 0,19 0,22	1480 - 2400	107 200 300	29 55 83	19 33 34,7	195 333 340	45 - 56	50	2,3
CA150 V0 D	16028	220-240	14 27 52	0,14 0,19 0,22	1400 - 2400	150 275 460	41 76 128	8,4 24 31,8	83 241 312	44 - 56	50	2,6
CA200 V0 Q	16035	220-240	35 48 104	0,35 0,40 0,45	- - 2355	310 415 805	87 115 224	22 35 44,7	215 351 438	- - 59	50	3,1
CA 200 V0 E	16038	220-240	39 58 90	0,35 0,40 0,40	1320 2015 2611	387,1 605 775	107,5 - 215,3	24,6 39,2 42,2	241,2 392 413,9	- - 50,3	50	3,5
CA 250 V0 E	16039	220-240	45 62 90	0,37 0,39 0,40	1600 2190 2610	525 730 855	145,8 202 237,5	22,2 35 38,1	218 344 373,3	- - 49,9	50	3,7
CA 315 V0 E	16041	220-240	48 80 120	0,48 0,57 0,54	1280 1970 2640	527 825 1100	146,3 229 305,5	27,5 50 56,6	270 488 554,7	- - 54	55	5,5
CA 315 V0 SE	16090	220-240	195	0,85	2790	1560	433	66	649	64	45	6,6

CA V0 RANGE

Available only for Extra EU market and therefore not in compliance with Reg. ErP 2018

- 4 models, with nominal diameter between 100 and 200 mm.
- 1 or 2-speed (depending on the model) motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature. Speed adjustment using Vortice accessory devices.
- Performance and safety certified by third party body (IMQ).

TECHNICAL DATA - AVAILABLE ONLY FOR EXTRA EU MARKET

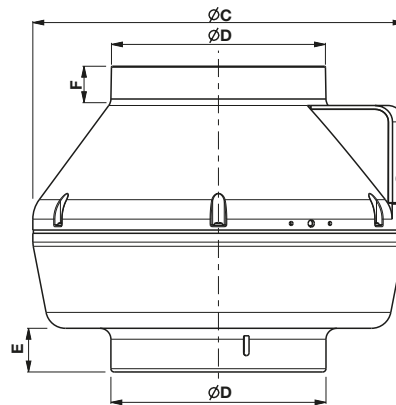
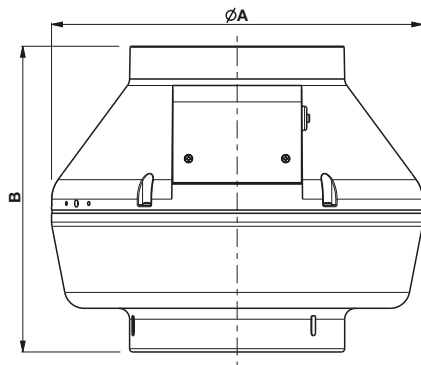
Models	Code	V~50/60HZ				Max Airflow		Max Pressure		LP DB(A) 3m	Max °C	KG
			W	A	RPM	m³/h	l/s	mmH ₂ O	Pa			
			min/max	min/max	min/max	min/max	min/max	min/max	min/max	min/max		
CA100 V0 D*	16034	220-240	65 85	0,32 0,38	1660 2540	150 235	41,7 65,3	30 40	274 392	51 56	50	2,4
CA125 V0 D*	16044	220-240	67 85	0,34 0,40	1480 2470	210 360	58,3 100	25 36	245 353	45 56	50	2,3
CA150 V0 D*	16054	220-240	70 85	0,34 0,41	1400 2390	280 500	77,8 138,9	20 34	196 333	44 56	50	2,6
CA200 V0 Q*	16064	220-240	100	0,35	2290	700	194,4	37	363	59	50	4,1

* Available only for Extra EU markets

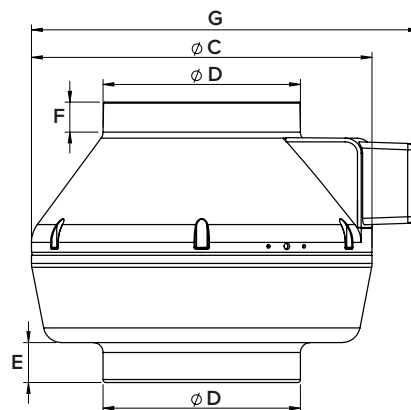
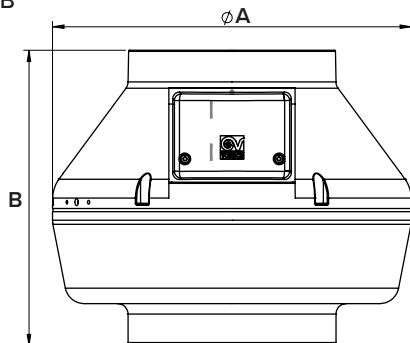
CA V0 RANGE
IN-LINE CENTRIFUGAL FANS IN SELF-EXTINGUISHING PLASTIC

DIMENSIONS

TYPE A



TYPE B



MODELS	ØA	B	ØC	ØD	E	F	G
CA 100 V0 D (TYPE A)	250	250	250	97	30	30	-
CA 125 V0 D (TYPE A)	250	250	250	122	30	30	-
CA 150 V0 D (TYPE A)	300	305	300	147/157	30/30	30/60	-
CA 200 V0 Q (TYPE B)	340	280	340	197	40	30	390
CA 200 V0 E (TYPE B)	340	280	340	197	40	30	390
CA 250 V0 E (TYPE B)	340	305	340	247	60	30	390
CA 315 V0 E (TYPE B)	400	340	400	312	75	40	438
CA 315 V0 SE (TYPE B)	400	340	400	312	75	40	438

Dimensions (mm)

AVAILABLE ONLY FOR EXTRA EU MARKET

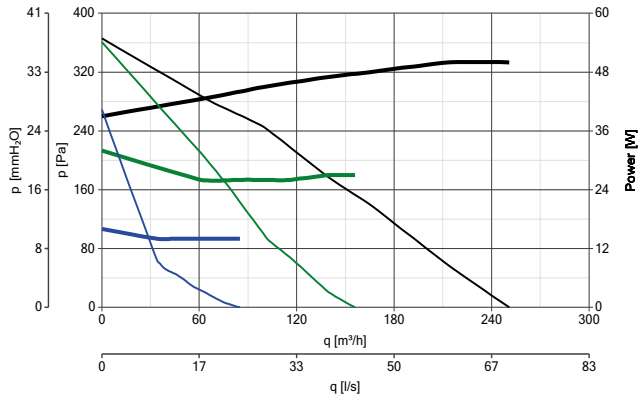
MODELS	ØA	B	ØC	ØD	E	F
CA 100 V0 D (TYPE A)	250	250	250	97	30	30
CA 125 V0 D (TYPE A)	250	250	250	122	30	30
CA 150 V0 D (TYPE A)	300	305	300	147/157	30/60	30/60
CA 200 V0 Q (TYPE A)	340	280	340	197	40	30

Dimensions (mm)

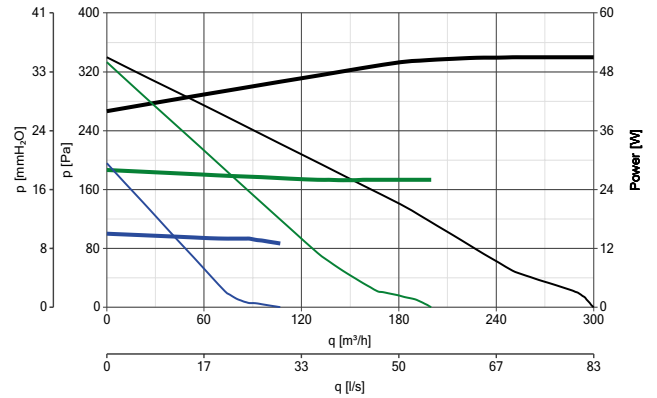


PERFORMANCE CURVES

CA 100 V0 D



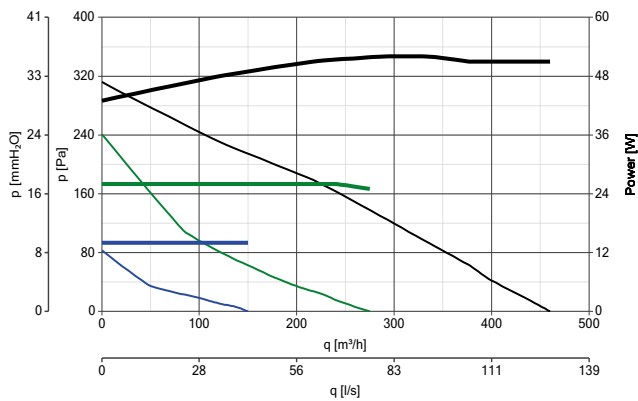
CA 125 V0 D



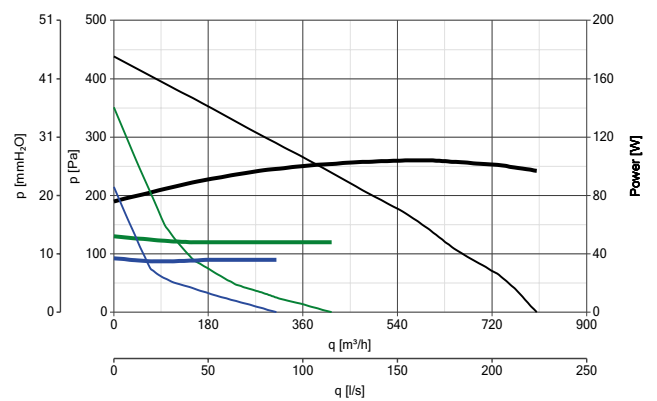
POWER CONSUMPTION
— max
— med
— min

PERFORMANCE CURVES
— max
— med
— min

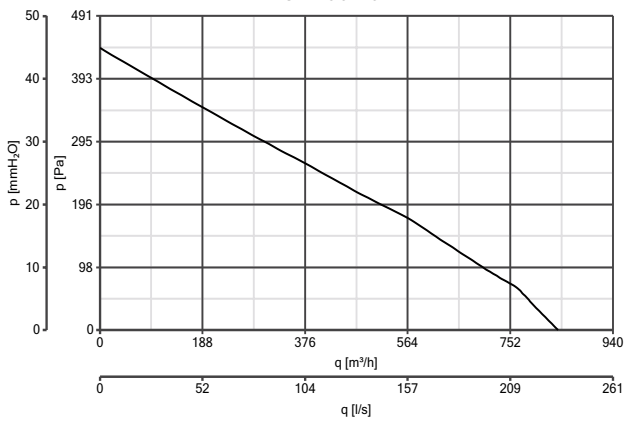
CA 150 V0 D



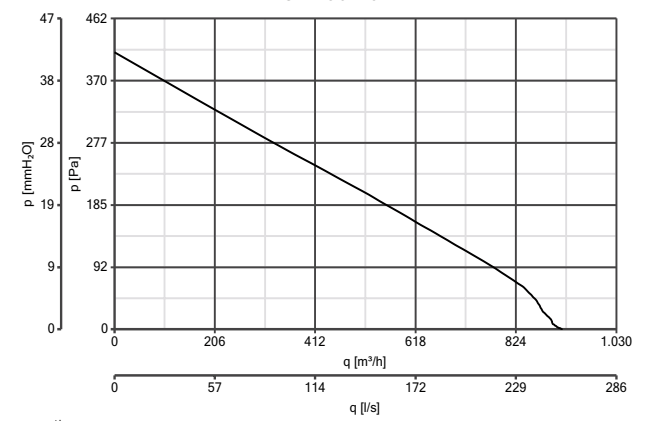
CA 200 V0 Q



CA 200 V0 E



CA 250 V0 E

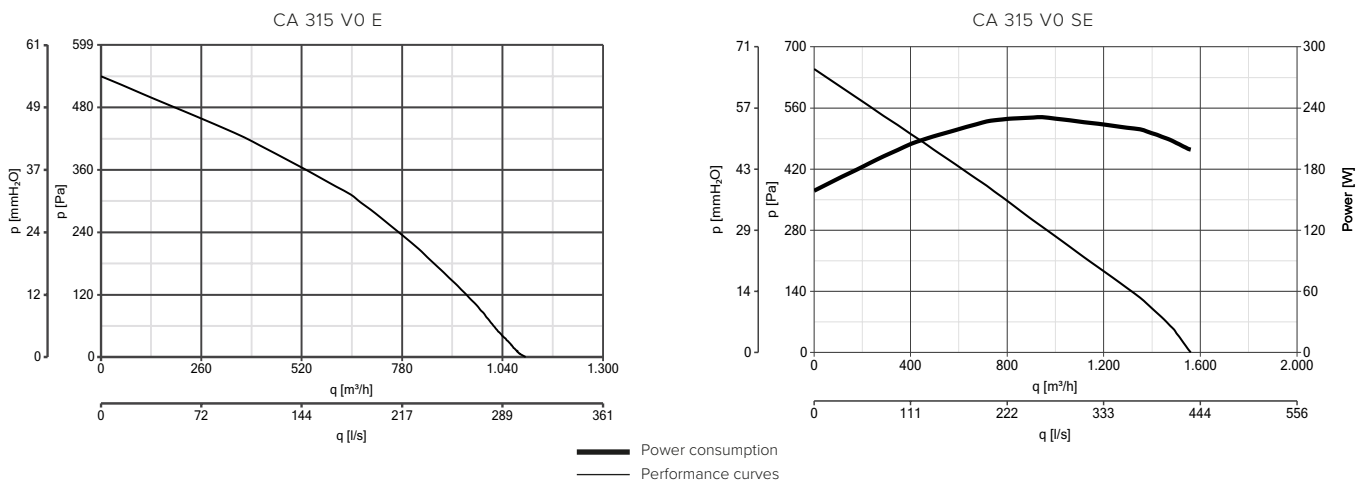


— Power consumption
— Performance curves

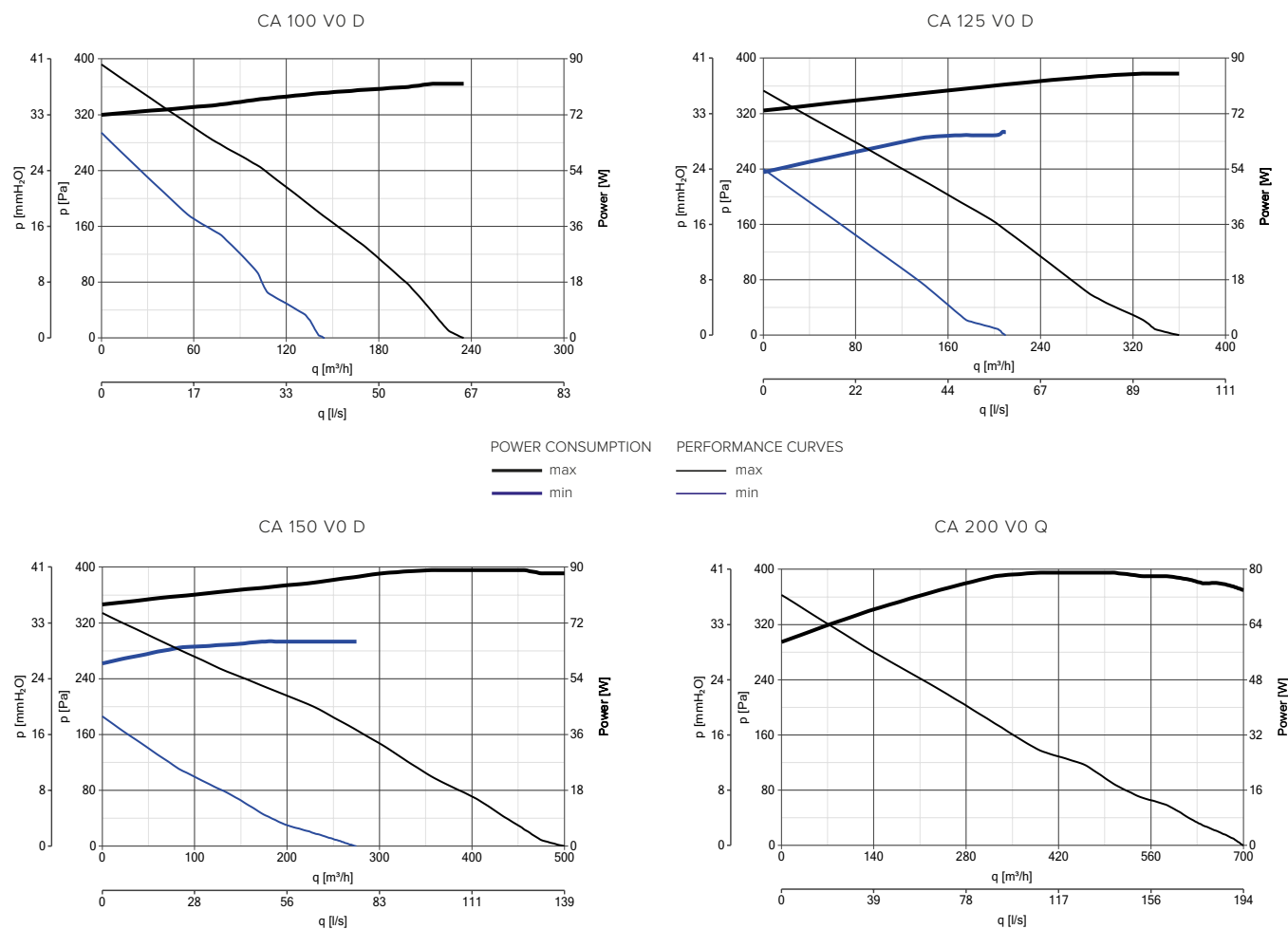
CA V0 RANGE

IN-LINE CENTRIFUGAL FANS IN SELF-EXTINGUISHING PLASTIC

PERFORMANCE CURVES



AVAILABLE ONLY FOR EXTRA EU MARKET





CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	ALL PRODUCTS
	SCNRB - BUILT-IN ELECTRONIC SPEED CONTROLLER	12971	ALL PRODUCTS
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	12869	16008 - 16018 - 16028 - 16035 - 16038 - 16039 - 16041
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966 - 12967
	IREM D - ELECTRONIC SPEED CONTROLLER FOR INSTALLATION IN STANDARD DIN BOX. MAXIMUM LOAD: 1.0 A.	12867	ALL PRODUCTS
	DUO - 2 SPEEDS CONTROLLER	22914	16034 - 16044 - 16054 - 16064
	IRM5 2B - 5-POSITION SPEED CONTROLLER OF THE AUTOTRANSFORMER TYPE, DESIGNED TO CONTROL SINGLE-PHASE ASYNCHRONOUS MOTORS.	12861	16090
	C TEMP - THERMO SWITCH	12992	ALL PRODUCTS
	C SMOKE - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	C HCS - HUMIDISTAT	12994	ALL PRODUCTS
	C PIR - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	C TIMER - TIMER	12999	ALL PRODUCTS

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT
	CA-MU - MOUNTING BRACKETS	22674	ALL PRODUCTS
		100	22750
		125	22755
		150	22760
		200	22765
		250	22770
	CA-G - PROTECTION GRILLE	315	22775
			16041 - 16090

CA MD RANGE

In-line centrifugal fans in metal

Painted sheet steel mixed flow duct fans, installed in false ceilings or in attics. The ideal low-visual impact ventilation solution for residential, commercial or industrial premises (kitchens, toilets, laboratories, bars, restaurants, laundries, shops, etc).

VERSIONS

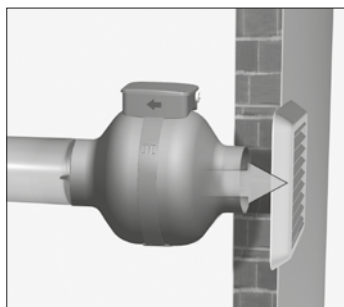
8 models, with nominal diameter between 100 and 315 mm.

KEY FEATURES

- Built to withstand weathering and high temperatures.
- Standard supplied support brackets.
- High protection rating from dust and water for safe use in industrial environments.
- Wide continuous operation temperature range (-25 °C / + 50 °C).
- Can be installed horizontally, vertically or sloping.

TECHNICAL FEATURES

- Pickled, phosphate-coated steel sheet casing that has been painted with polyester paint against aggressive weathering.
- Motor-holder built into the boxes housing the mains connection terminals and the flow conditioner fins, constructed in self-extinguishing plastic resin (V0).
- 3-speed fans that can be set using optional device TRIO-CA (code 12869), composed of:
 - AC motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature.
 - Backward-curve, heat resistant plastic resin blade impellers loaded with glass fibre to combine structural strength and dimensional stability.
- Galvanised steel sheet brackets for wall, ceiling and false ceiling installation.
- Possibility of connecting to remote environmental temperature, humidity, smoke and presence sensors (optional).
- Protection rating from dusts and water: IP44 (appliance ducted in extraction and delivery).
- Insulation Class: II .



TECHNICAL DATA

			Max Airflow					Max Pressure		LP DB(A)	Max	KG
Models	Code	V~50HZ	W	A	RPM	m³/h	l/s	mmH₂O	Pa	3m	°C	
			min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max		
CA 100 MD	16150	230	26	0,22	1190	163	45,0	19,9	195,9	32,3	50	2,97
			47	0,30	1810	250	69,4	33	323,4	-		
			85	0,40	2370	337	93,0	38,9	381,6	43,2		
CA 125 MD	16151	230	26	0,22	1130	210	58,0	17,6	172,6	30,8	50	3,0
			47	0,30	1685	315	87,5	30,7	301,3	-		
			85	0,40	2300	445	123,6	36,8	361,4	45,9		
CA 150 MD E	16163	230	26	0,22	1160	230	63,8	12,3	121,0	42,3	50	4,9
			47	0,30	1725	350	97,2	25,3	248,7	-		
			85	0,38	2650	535	148,6	44,3	435,1	53,2		
CA 150 Q MD	16152	230	26	0,22	1160	230	63,8	12,3	121,1	34,7	50	2,98
			47	0,30	1725	350	97,2	25,3	248,2	-		
			85	0,40	2340	470	130,5	33,3	327,0	48,1		
CA 160 MD E	16164	230	39	0,35	1130	325	90,2	32,7	321,5	43,4	50	4,9
			53	0,36	2160	450	125	41,8	409,8	-		
			85	0,38	2665	555	154,1	44,0	431,8	53,4		
CA 200 MD E	16165	230	39	0,35	1440	412	114,0	36,0	353,0	36,2	50	4,8
			57	0,38	2140	620	172,2	45,0	441,0	-		
			89	0,43	2630	775	215,0	45,0	441,0	48,1		
CA 250 MD E	16166	230	50	0,47	1410	540	150,0	33,7	330,8	38,3	50	5,3
			82	0,55	2120	805	223,6	49,2	482,6	-		
			120	0,53	2635	1010	280,5	54,8	537,6	52,7		
CA 315 MD E	16167	230	50	0,47	1510	570	158,3	36,0	353,2	41,8	50	7,0
			82	0,54	2150	830	230,5	50,7	497,3	-		
			120	0,53	2630	1015	281,9	55,5	544,9	52,3		
CA 315 MD SE	16097	220-240	190	0,84	2800	1550	430	67	657	58\	45	6,6

CA MD RANGE

Available only for Extra EU market and therefore not in compliance with Reg. ErP 2018

- 8 models, with nominal diameter between 100 and 315 mm.
- 2-speed motors with thermal overload cut-out and shaft turning in ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature. Speed adjustment using Vortice accessory devices.

TECHNICAL DATA - AVAILABLE ONLY FOR EXTRA EU MARKET

Models	Code	V~50/60HZ				Max Airflow		Max Pressure		LP DB(A) 3m min/max	Max °C	KG
			W min/max	A min/max	RPM min/max	m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max			
CA 100 MD*	16107	220-240	60 85	0.30 0.40	1730 2450	220 340	61 94	30 39	294 383	32.2 43.2	50	2.97
CA 125 MD*	16108	220-240	60 85	0.30 0.40	1580 2380	280 450	78 125	27 37	265 363	30.8 45.9	50	3.0
CA 150 MD*	16153	220-240	110 155	0.50 0.70	1815 2080	570 770	188 214	44 54	432 530	40.7 48.0	50	5.52
CA 150 Q MD*	16109	220-240	60 85	0.30 0.40	1430 2350	300 500	83 139	21 35	206 343	34.7 48.1	50	2.98
CA 160 M*	16154	220-240	110 155	0.55 0.70	1654 2080	640 840	178 228	41 50	402 491	40.7 47.4	50	5.47
CA 200 MD*	16155	220-240	110 155	0.55 0.70	1700 2100	820 1050	228 292	37 48	363 471	43.8 49.6	50	5.43
CA 250 MD*	16156	220-240	115 200	0.55 0.90	1800 2420	950 1300	264 361	42 56	412 549	46.7 55.9	50	6.55
CA 315 MD*	16157	220-240	190 280	0.85 1.25	1940 2500	1350 1800	375 500	52 72	510 706	52.4 57.7	50	9.47

* Available only for the Extra EU market.

CA MD RANGE
IN-LINE CENTRIFUGAL FANS IN METAL

ENERGY DATA FOR REGULATION N° 1254/2014/UE

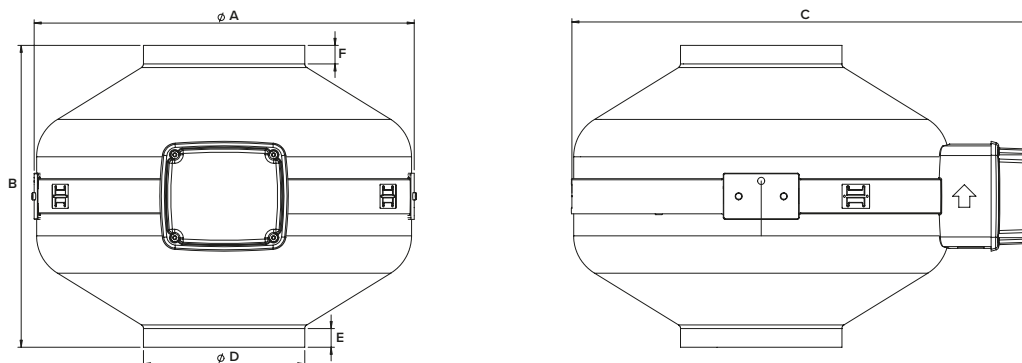
	UNIT OF MEASURE	CA 160 MD E	CA 200 MD E	CA 250 MD E	CA 15 MD E	CA 315 MD SE
CODE		16164	16165	16166	16167	16097
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	482,85	382,78	397,50	385,03	293,89
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None	NONE
Nominal NRVU flow rate	m³/s	0,13611	0,21389	0,2747	0,2791	0,361
Effective electric power input	kW	0,088	0,089	0,127	0,123	0,220
Face velocity at design flow rate	m/s	6,7696	6,8083	5,5966	3,5822	4,633
Nominal external pressure (Δps, ext)	Pa	70	12	21	18	187
Internal pressure drop of ventilation components (Δps,int)	Pa	279	135	126	122	175
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	43,2	35,3	31,8	31,8	40,2
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	5,9	4,2	2,3	2,2	0,5
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	74	69	73	73	75

	UNIT OF MEASURE	CA 100 MD	CA 125 MD	CA 150 MD E	CA 150 Q MD
CODE		16150	16151	16163	16152
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	602,29	478,53	567,30	408,13
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None
Nominal NRVU flow rate	m³/s	0,07917	0,09861	0,14333	0,10260
Effective electric power input	kW	0,051	0,051	0,086	0,053
Face velocity at design flow rate	m/s	10,08	8,0335	8,1110	5,8003
Nominal external pressure (Δps, ext)	Pa	12,8	8,8	15	31,4
Internal pressure drop of ventilation components (Δps,int)	Pa	183	148	255	149
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	30,4	30,7	44,9	28,8
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	3,6	3,0	6,3	2,8
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	64	66	74	69

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

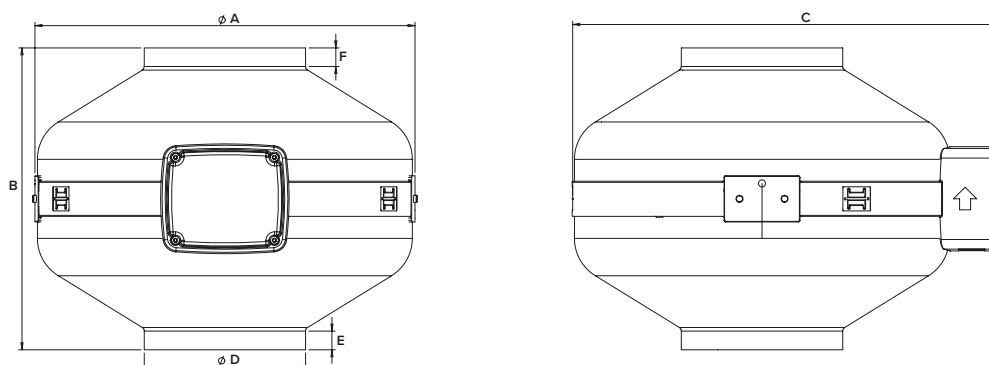


DIMENSIONS



MODELS	ϕA	B	C	ϕD	E	F
CA 100	255	239	330	97	15	15
CA 125	255	239	330	122	23	23
CA 150 Q	255	239	330	147	30	30
CA 150	347	275	424	147	17	17
CA 160	347	275	424	157	18	18
CA 200	347	275	424	197	20	17
CA 250	347	275	424	247	38	35
CA 315	406	306	488	312	21	30
CA 315 SE	415	314	455	312	29	42

Dimensions (mm)



AVAILABLE ONLY FOR EXTRA EU MARKET

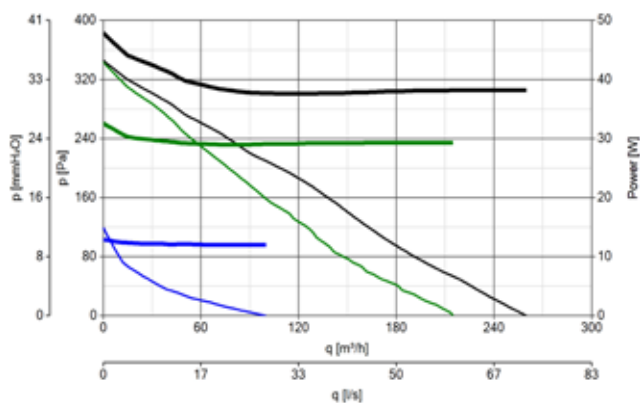
MODELS	ϕA	B	C	ϕD	E	F
CA 100	255	239	300	97	15	15
CA 125	255	239	300	122	23	23
CA 150 Q	255	239	300	147	30	30
CA 150	347	275	424	147	17	17
CA 160	347	375	424	157	18	18
CA 200	347	275	424	197	20	17
CA 250	347	375	394	247	38	35
CA 315	406	306	458	312	21	30

Dimensions (mm)

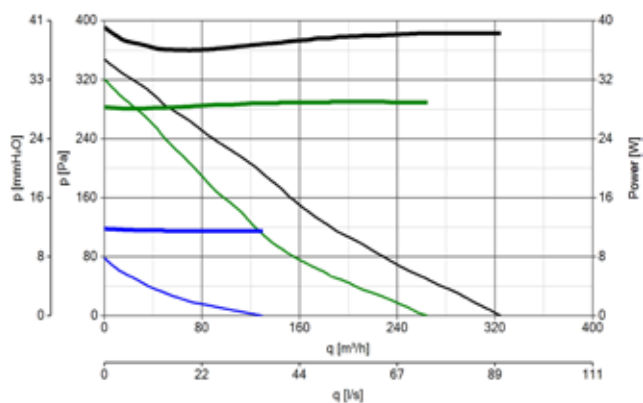
CA MD RANGE IN-LINE CENTRIFUGAL FANS IN METAL

PERFORMANCE CURVES

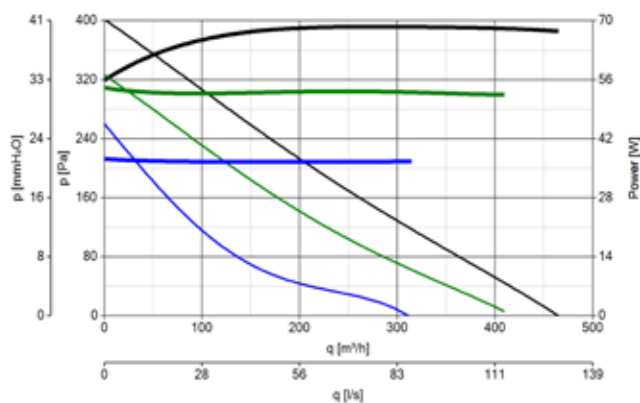
CA 100 MD / Cod. 16150



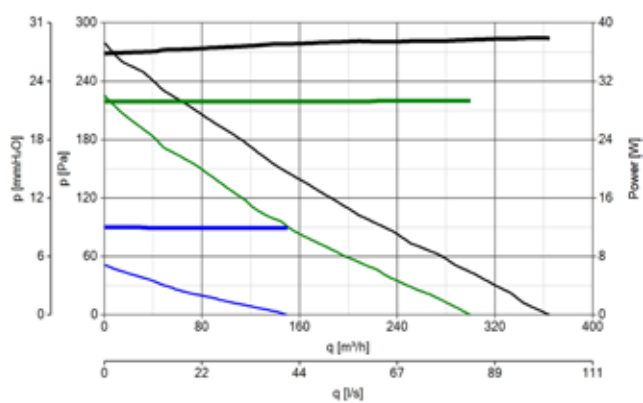
CA 125 MD / Cod. 16151



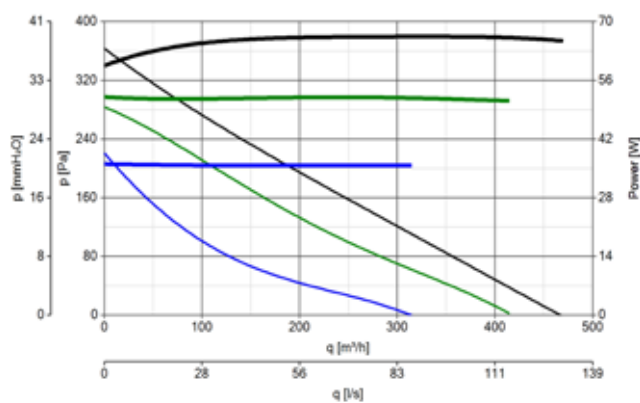
CA 150 MD E / Cod. 16163



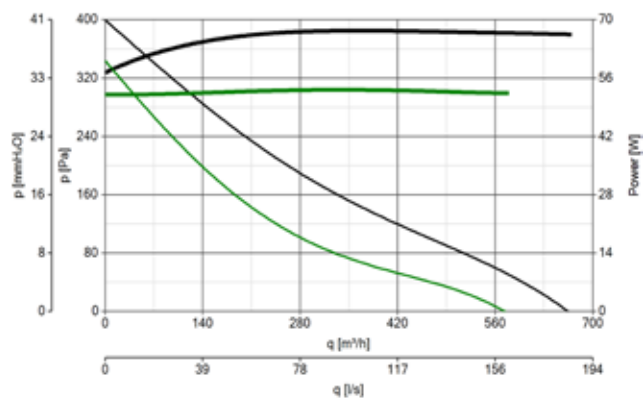
CA 150 Q MD / Cod. 16152



CA 160 MD E / Cod. 16164



CA 200 MD E / Cod. 16165



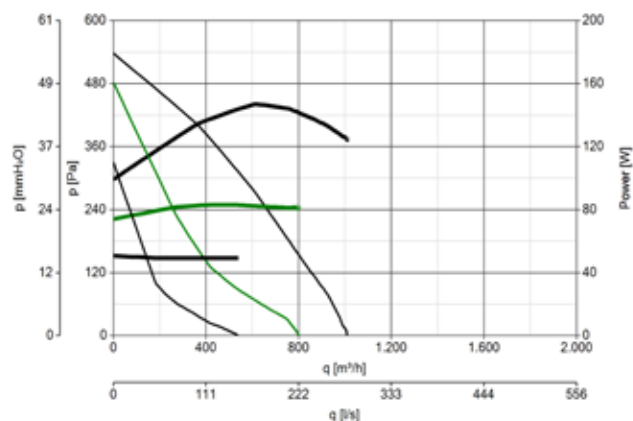
POWER CONSUMPTION
 — max
 — med
 — min

PERFORMANCE CURVES
 — max
 — med
 — min

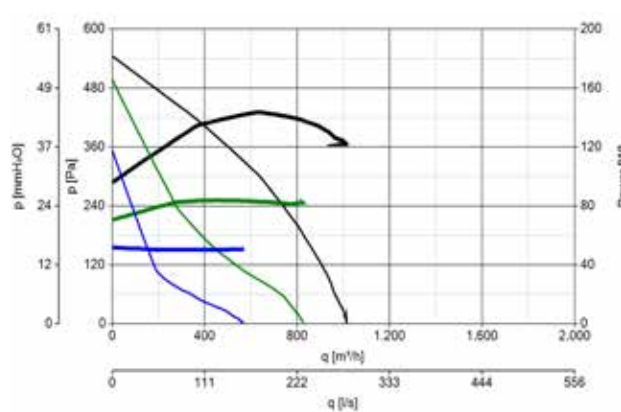


PERFORMANCE CURVES

CA 250 MD E / Cod. 16166



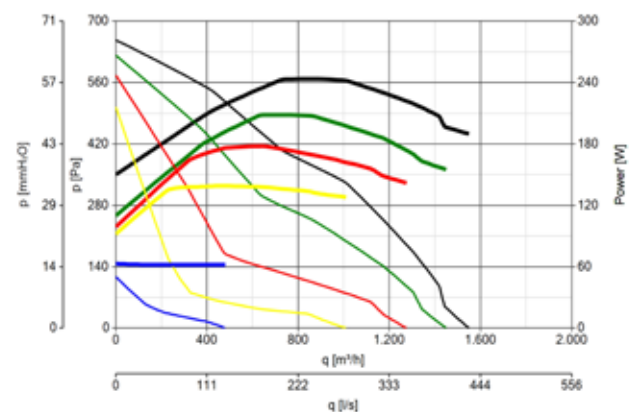
CA 315 MD E / Cod. 16167



POWER CONSUMPTION
— max
— med
— min

PERFORMANCE CURVES
— max
— med
— min

CA 315 MD SE / Cod. 16097



POWER CONSUMPTION*
— 5 Max
— 4
— 3
— 2
— 1 Min

PERFORMANCE CURVES*
— 5 Max
— 4
— 3
— 2
— 1 Min

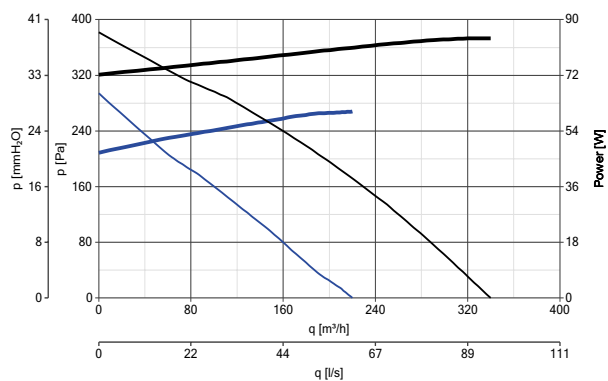
*curves made with Vortice Accessory 12861 IRM5 2B



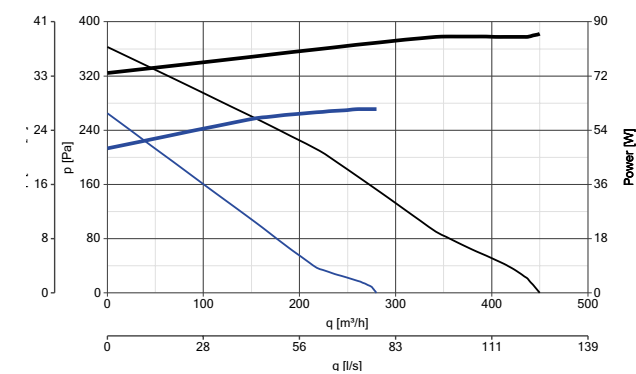
CA MD RANGE
IN-LINE CENTRIFUGAL FANS IN METAL

AVAILABLE ONLY FOR EXTRA EU MARKET

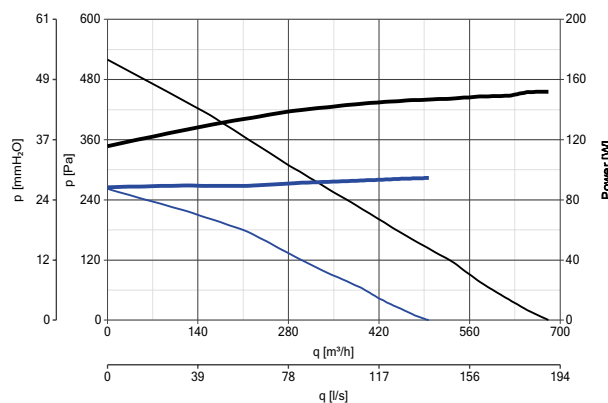
CA 100 MD*



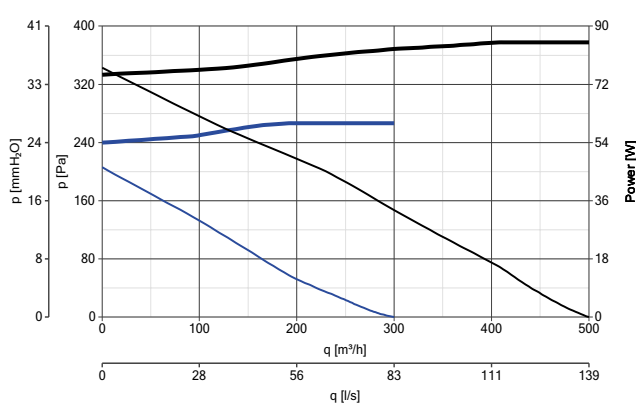
CA 125 MD*



CA 150 MD*

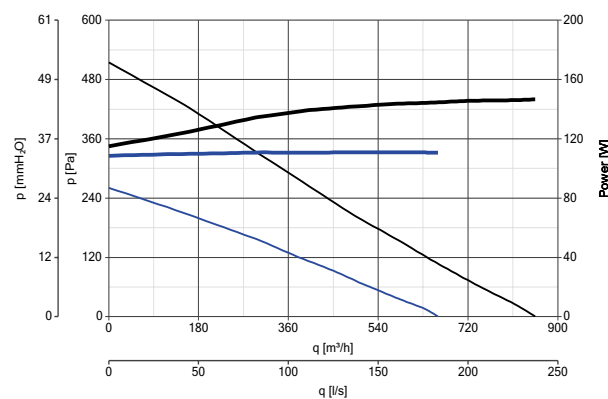


CA 150 Q MD*

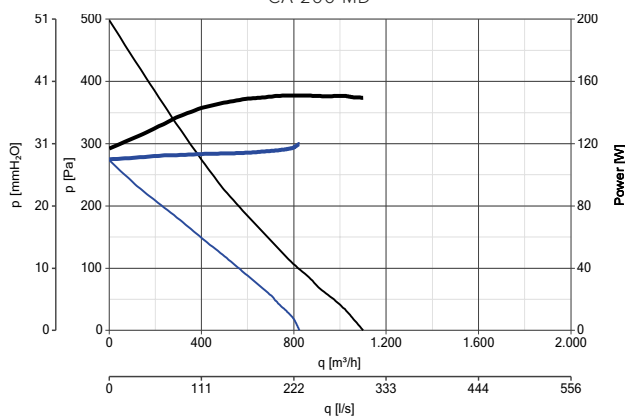


* Available only for Extra EU markets

CA 160 MD



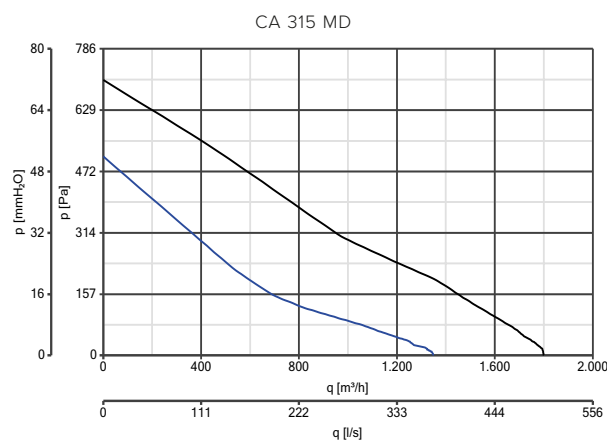
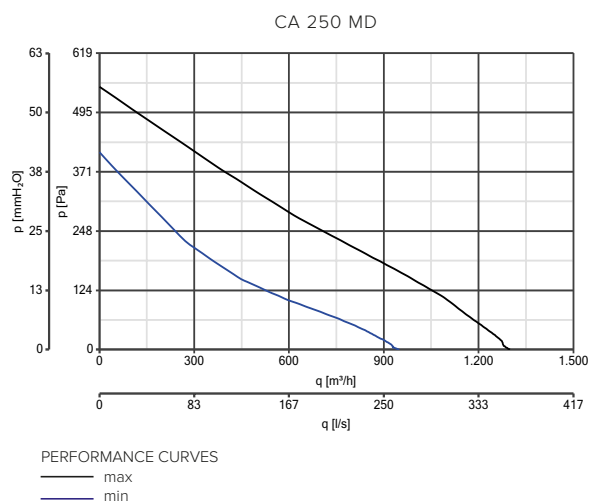
CA 200 MD



POWER CONSUMPTION PERFORMANCE CURVES
 — max — max
 — min — min



AVAILABLE ONLY FOR EXTRA EU MARKET



CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	ALL PRODUCTS
	SCNRB - ELECTRONIC SPEED CONTROLLER, BUILT-IN	12971	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966 - 12967
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	12869	16150 - 16151 - 16163 - 16152 - 16164 16165 - 16166 - 16167
	IRM5 2B - 5-POSITION SPEED CONTROLLER OF THE AUTOTRANSFORMER TYPE, DESIGNED TO CONTROL SINGLE-PHASE ASYNCHRONOUS MOTORS.	12861	16097

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT	
	CA-MU - MOUNTING BRACKETS	22674	ALL PRODUCTS	
		100	22750	16150 - 16107
		125	22755	16151 - 16108
	CA-G - PROTECTION GRILLE	150	22760	16152 - 16163 - 16109 - 16153
		200	22765	16165 - 16155
		250	22770	16166 - 16156
		315	22775	16167 - 16157 - 16097

CA ES RANGE

"Energy Saving" in-line centrifugal fans in metal

Painted sheet steel mixed flow duct fans equipped with 2-speed brushless motors. Installed in false ceilings or attics, ensuring the proper ventilation of residential, commercial or industrial premises (kitchens, toilets, laboratories, bars, restaurants, laundries, shops, etc.), combining their low-visual impact with especially low consumption.

VERSIONS

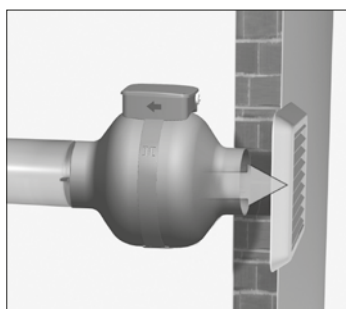
8 models, with nominal diameter between 100 and 315 mm.

KEY FEATURES

- High efficiency EC (brushless) motors that are continuously adjustable (0-10V signal) or are settable at installation for 2-speed operation that can be set as needed.
- Built to withstand weathering and high temperatures.
- Standard supplied support brackets.
- High protection rating from dust and water for safe use in industrial environments.
- Wide continuous operation temperature range (-25 °C / + 50 °C).
- Can be installed horizontally, vertically or sloping.

TECHNICAL FEATURES

- Pickled, phosphate-coated steel sheet casing that has been painted with polyester paint against aggressive weathering.
- Motor-holder built into the boxes containing motor drivers and the flow conditioner fins, constructed in self-extinguishing plastic resin (V0).
- Two-speed EC (brushless) motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting (at least 40,000 h) continuous service at the maximum plate temperature. Possibility of continuous speed adjustment through potentiometers (0-10V signal).
- Backward-curve, heat resistant plastic resin blade impellers loaded with glass fibre to combine structural strength and dimensional stability.
- Galvanised steel sheet brackets for wall, ceiling and false ceiling installation.
- Possibility of connecting to remote environmental temperature, humidity, smoke and presence sensors (optional).
- Protection rating from dusts and water: IP44 (appliance ducted in extraction and delivery).
- Insulation Class: II .





TECHNICAL DATA

Models	Code	V~50	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		LP DB(A) 3m* max	Max °C	KG
						m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max			
CA 100 ES	16200	220-240	3 80	0,05 0,7	300 2720	33 385	9 107	0,5 52	5 510	46,9	50	2,7
CA 125 ES	16201	220-240	3 80	0,05 0,7	300 2650	52 520	14 144	0,5 47	5 461	49,7	50	2,6
CA 150 ES	16203	220-240	3 120	0,05 1,0	300 2250	100 800	28 222	0,7 100	7 490	48,1	50	4,5
CA 150 Q ES	16202	220-240	3 80	0,05 0,7	300 2670	56 560	16 156	5 45	5 441	49,6	50	2,6
CA 160 ES	16204	220-240	3 120	0,05 1	300 2240	110 900	31 250	0,7 50	7 490	48,1	50	4,6
CA 200 ES	16205	220-240	3 120	0,05 1	300 2280	125 1140	35 317	0,7 50	7 490	47,6	50	4,6
CA 250 ES	16206	220-240	4,5 140	0,05 1,1	300 2500	130 1300	36 361	0,7 60	7 588	40,1	50	4,9
CA 315 ES	16207	220-240	4,5 160	0,05 1,3	300 2380	170 1600	47 444	0,8 62	8 608	39,7	50	6,9

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 9614.

ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA 100 ES	CA 125 ES	CA 150 ES	CA 150 Q ES
CODE		16200	16201	16203	16202
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	437,72	184,03	211,41	2121,69
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None
Nominal NRVU flow rate	m³/s	0,079	0,078	0,138	0,078
Effective electric power input	kW	0,08	0,078	0,12	0,084
Face velocity at design flow rate	m/s	10,044	6,338	7,797	4,401
Nominal external pressure (Δps, ext)	Pa	162	235	197	233
Internal pressure drop of ventilation components (Δps,int)	Pa	123	53	63	57
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	28,1	28,8	29,8	26,8
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	2,3	2,4	3,9	2,4
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	NA*	NA*	NA*	NA*

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

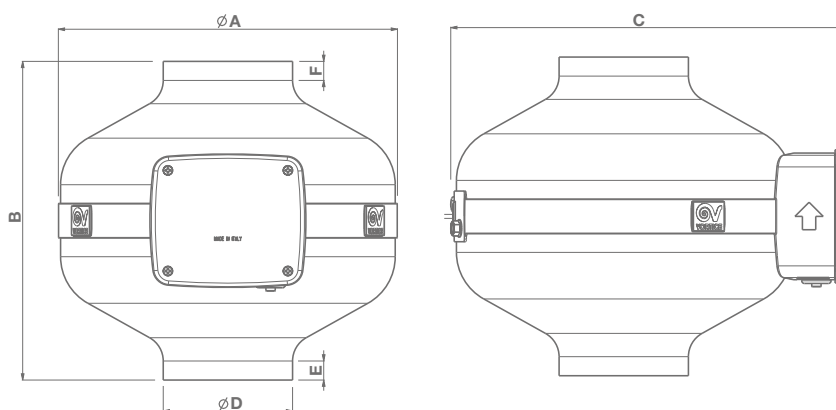
CA ES RANGE
"ENERGY SAVING" IN-LINE CENTRIFUGAL FANS IN METAL

ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA 160 ES	CA 200 ES	CA 250 ES	CA 315 ES
CODE		16204	16205	16206	16207
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	145,21	51,37	35,61	24,32
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None
Nominal NRVU flow rate	m³/s	0,140	0,142	0,225	0,236
Effective electric power input	kW	0,119	0,123	0,144	0,172
Face velocity at design flow rate	m/s	6,963	4,518	4,578	3,023
Nominal external pressure (Δp_s , ext)	Pa	214	238	203	232
Internal pressure drop of ventilation components (Δp_s , int)	Pa	44	15	12	8
Internal pressure drop of non-ventilation components (Δp_s , add)	Pa	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	30,3	29,2	33,7	32,9
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	3,8	3,8	1,8	1,7
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	NA*	NA*	NA*	NA*

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

DIMENSIONS



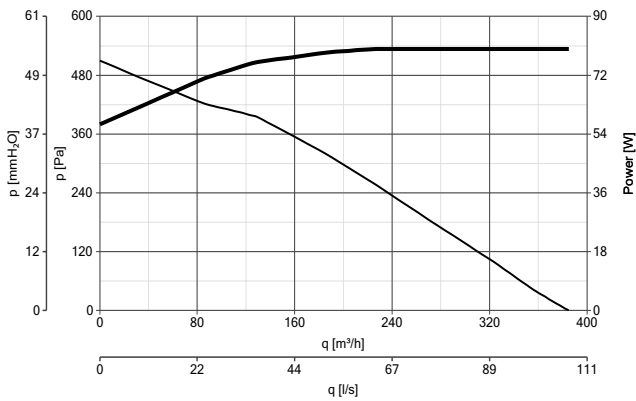
MODELS	ØA	B	C	ØD	E	F
CA 100 ES	255	239	330	97	15	15
CA 125 ES	255	239	330	122	23	23
CA 150 ES	347	275	422	147	17	17
CA 150 Q ES	255	239	330	147	30	30
CA 160 ES	347	275	422	157	18	18
CA 200 ES	347	275	422	197	20	17
CA 250 ES	347	267	392	247	30	35
CA 315 ES	406	362	455	315	35	30

Dimensions (mm)

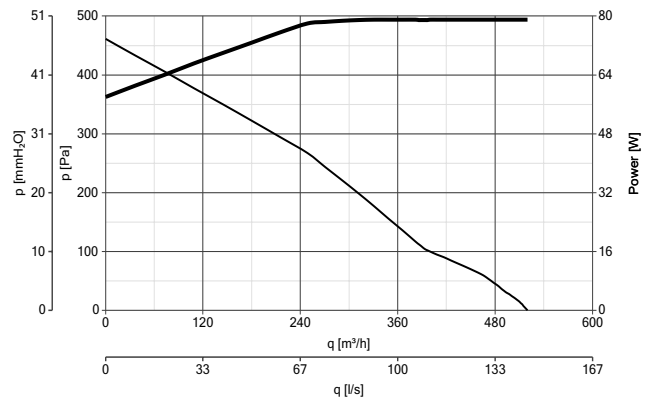


PERFORMANCE CURVES

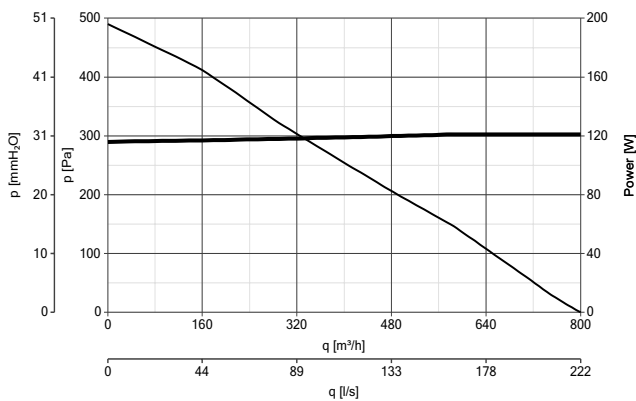
CA 100 ES



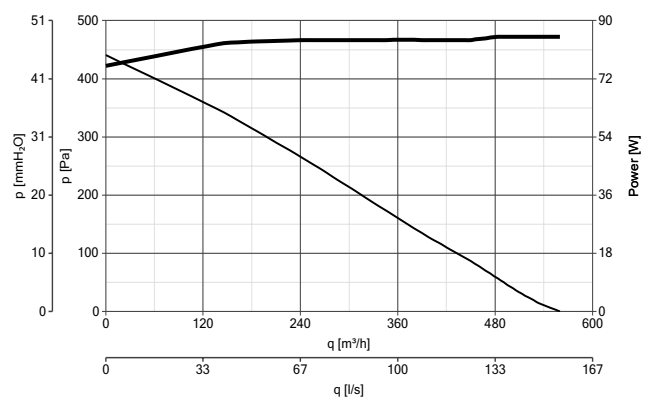
CA 125 ES



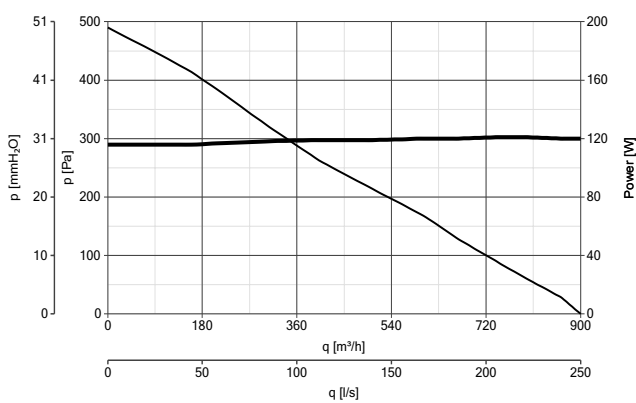
CA 150 ES



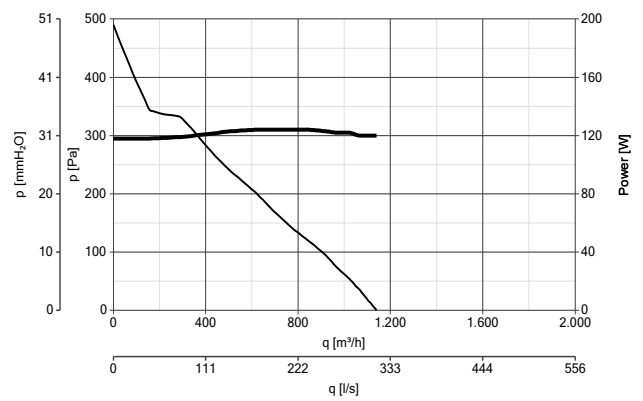
CA 150 Q ES



CA 160 ES



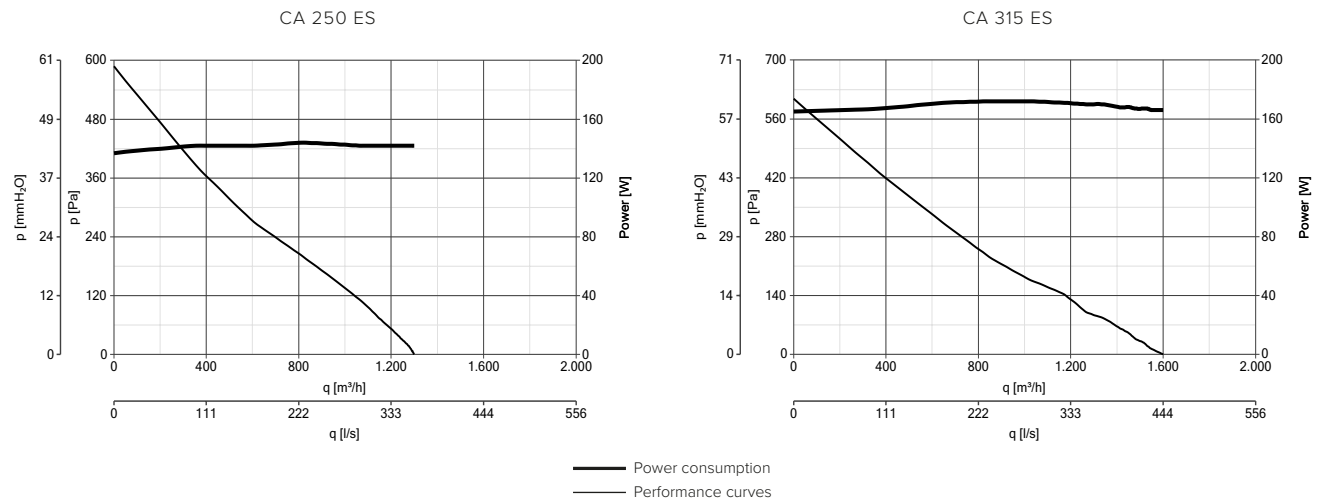
CA 200 ES



— Power consumption
— Performance curves

CA ES RANGE
"ENERGY SAVING" IN-LINE CENTRIFUGAL FANS IN METAL

PERFORMANCE CURVES





CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	POT-IT - POTENTIOMETER	12826	ALL PRODUCTS
	POT - POTENTIOMETER	12828	ALL PRODUCTS
	DUO - 2 SPEEDS CONTROLLER	22914	ALL PRODUCTS
	C TEMP - THERMO SWITCH	12992	ALL PRODUCTS
	C SMOKE - AIR QUALITY SENSOR	12993	ALL PRODUCTS
	C HCS - HUMIDISTAT	12994	ALL PRODUCTS
	C PIR - PASSIVE INFRARED SENSOR	12998	ALL PRODUCTS
	C TIMER - TIMER	12999	ALL PRODUCTS

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT
	CA-MU - MOUNTING BRACKETS	22674	ALL PRODUCTS
		100	22750
		125	22755
		150	22760
		160	22762
		200	22765
		250	22770
		315	22775
	CA-G - PROTECTION GRILLE	16200	16201
			16202 - 16203
			16204
			16205
			16206
			16207

WHAT RADON IS AND WHAT THE HEALTH RISKS ARE

Radon is a radioactive gas derived from the decay of uranium, naturally present in the soil and in rocks.

WHERE IT IS:

The main source of this gas is the soil (other sources can be building materials, especially if of volcanic origin such as tuff or granite and water) from which it leaks accumulating in closed rooms where it becomes dangerous.

HEALTH RISKS:

Once it has accumulated, Radon can be breathed and continue radioactive decay within the body. Epidemiological studies by the WHO and the AIRC have scientifically established its carcinogenicity, classifying it as the second cause of lung cancer in the world after tobacco smoke.



Regulatory Standards Directives and regulations

Electrical Safety Standard:

- EN 60335-1
- EN 60335-2-80
- EN 60529
- EN 62233

Standards for Electromagnetic Compatibility

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

European directives and regulations for CE marking

- Machinery Directive (2006/42/EC)
- Low Voltage Directive
- Electromagnetic Compatibility Directive (2004/108 / EC)
- ECODESIGN 2009/125 / EC Design Directive
- Erp Regulation N ° 327/2011 / EU (relating to fans)
- Erp Regulation 1253/2014 (relating to ventilation units)



WHAT TO DO TO HAVE A HEALTHY RADON- PROOF BUILDING AND PROTECT YOUR HEALTH?

01

Radon tends to accumulate in closed environments, especially underground ones or in any case in direct contact with the ground.

02

The most commonly used techniques are aimed at hindering its escape from the subsoil. Usually, this occurs through the passage of a sheath in gas-impermeable material, in correspondence with the foundations of the building, so as to prevent the entry of gas, or through the construction of a ventilated crawl space or by creating a ventilation system capable of sucking the radon from the underground rooms where it collects, to disperse it outside.

03

Due to its high volatility and chemical inertia, Radon hardly reacts with other elements, and actually tends to rise to the surface and be dispersed.

04

The fans of the CA-RM ES and CA-RM RF ES series can be installed indoor (in case of non-invasive interventions) or in extraction ducts outside the building, also exploiting the presence of underground wells the IP47 high protection of the CA-RM ES models ensures perfect watertight integrity and correct operation even in the event of flooding, or at the end of vertical ventilation ducts that operate on several floors. (CA-RM RF ES). In all cases, the optimal sealing of the casings and couplings to the extraction and delivery pipes ensures that there is no risk of harmful fumes.

05

The complete electronic suite supplied with it allows the constant monitoring of the correct functioning of the system, the programming of specific intervention logics and promptly signals the occurrence of any problems.

FACTORS THAT AFFECT THE PRESENCE OF RADON

In addition to the geographical area, the presence of Radon in buildings depends on:

01

Type of soil

On which the building stands. Radon is more common in areas with a strong presence of lava rocks or in permeable soils.

02

Microclimatic parameters

Which affect air circulation. In fact, if open places Radon is "diluted" by air currents, resulting in little danger to health, in confined places it tends to concentrate, easily reaching harmful concentrations.

03

Building techniques

Radon is sometimes emitted by very common building materials, mainly volcanic tuff; it penetrates through cracks in floors in basements and cellars, through joints and systems and is trapped by the presence of walls and fixtures with high insulation.

How Radon concentration is measured and new legislation

The concentration of Radon is measured in becquerel per unit of volume [Bq /m³], where the becquerel represents the activity of a radionuclide (its radioactivity), which has 1 decay per second (1 Bq is equivalent to 1 disintegration per second).

The recent approval of law 101/2020, in force since the 27th of August, which transposes the European Directive Euratom 2013/59/EU, makes the topic finally relevant also in our country.

The law, establishing safety standards aimed at protecting people from the dangers deriving from ionising radiations, sets new, stricter limits on the average annual concentration of radon activity in the air, as summarised below:

- 300 Bq/m³ for existing homes
- 200 Bq/m³ for homes built after the 31st of December 2024
- 300 Bq/m³ for the workplace

These new limits, more stringent than those previously in force (500 Bq/m³), are combined with the obligation of mitigation in the presence of concentrations exceeding the legal limits and, only if such interventions are insufficient to fall within the limits of the law, there is the possibility of acting on the maximum length of stay allowed in the premises.

The new law also imposes the obligation to measure the concentration of Radon during renovations aimed at energy efficiency. Overall, it is believed that all of this will quickly lead to the demand for ventilation devices capable of ensuring full compliance with the new legislation.



TECHNICAL CHARACTERISTICS

Available models

- 8 models: in duct version (CA-RM ES) and roof version (CA- RM RF ES).

Casing

- Enclosures in epoxy powder coated steel sheet, glued with water and light resistant epoxy resins, to guarantee a perfect seal over time. The high seal (IP45 or IP47, depending on the range), prevents the risk of radioactive gas leaks when installing fans in rooms closed (e.g. cellars, warehouses etc ...) as well as ensuring the reliable operation of the products even if exposed to the elements or immersed in submerged wells

Engine holder

- In galvanised steel sheet integrating flow rectifiers, with optimised geometry to maximise the performance of the fans, reducing pressure drops and noise emissions caused by the onset of turbulence.

Motors

- Low consumption, electronically controlled motors (EC brushless), the same technology used by the most modern electric cars, speed-adjustable with 0-10 V signal and virtually maintenance-free.

Centrifugal fans

- Centrifugal fans consisting of backward-curved centrifugal impellers, designed to guarantee high pressures with low consumption and thus favour the continuous operation of the products.

Remote control panel (optional)

Remote control panel with wired connection and LCD display, designed for wall installation and equipped with an access door with lock, to prevent inappropriate alterations to the system settings.

The device allows to:

- Autonomously set the delivered performance up to 2 fans at installation.
- Control its power supply
- Monitor the smooth operation of the fans.
- Control the regular flow of extracted air. In the presence of a flow switch (supplied as an option).
- Program, the operation of the connected fans on an hourly basis and weekly scale.
- Signal, any system malfunctions by means of an acoustic warning and display of error codes.
- The device is also designed for connection to external alarm sirens.

CA-RM RF ES



CA-RM ES

THE RANGE

AVAILABLE MODELS

3 MODELS, IN ROOF VERSION

CA-RM 150 RF ES Code 16257
CA-RM 160 RF ES Code 16258
CA-RM 200 RF ES Code 16259

DEGREE OF PROTECTION IP45



5 MODELS, IN DUCT VERSION

DEGREE OF PROTECTION IP47

CA-RM 100 ES Code 16277
CA-RM 125 ES Code 16278
CA-RM 150 ES Code 16279
CA-RM 160 ES Code 16280
CA-RM 200 ES Code 16281





TECHNICAL DATA

PRODUCTS	CODE	V~50/60 HZ	W max	A max	RPM	MAX FLOW RATE		MAX PRESSURE		Lp db(A) 3m	°C*** MAX	KG
						m³/h max	l/s max	mmH₂O max	Pa max			
CA-RM 100 ES	16277	220-240	(10V) 90 (8V) 85 (6V) 33 (4V) 11	(10V) 0.75 (8V) 0.70 (6V) 0.30 (4V) 0.12	(10V) 3335 (8V) 3190 (6V) 2450 (4V) 1670	(10V) 350 (8V) 330 (6V) 250 (4V) 150	(10V) 97 (8V) 92 (6V) 69 (4V) 42	(10V) 60 (8V) 57 (6V) 29 (4V) 11	(10V) 589 (8V) 559 (6V) 285 (4V) 108	(10V) 42.6 (8V) 40.5 (6V) 32.8 (4V) 23.7	50	3.5
CA-RM 125 ES	16278	220-240	(10V) 90 (8V) 85 (6V) 35 (4V) 15	(10V) 0.75 (8V) 0.70 (6V) 0.35 (4V) 0.15	(10V) 3280 (8V) 3210 (6V) 2480 (4V) 1750	(10V) 500 (8V) 490 (6V) 340 (4V) 215	(10V) 139 (8V) 136 (6V) 94 (4V) 60	(10V) 57.2 (8V) 55 (6V) 28 (4V) 10	(10V) 564 (8V) 539 (6V) 274 (4V) 98	(10V) 42.4 (8V) 40.5 (6V) 33.2 (4V) 23.7	50	3.5
CA-RM 150 ES	16279	220-240	(10V) 160 (8V) 120 (6V) 55 (4V) 21	(10V) 1.25 (8V) 0.95 (6V) 0.45 (4V) 0.18	(10V) 3365 (8V) 3060 (6V) 2340 (4V) 1620	(10V) 940 (8V) 855 (6V) 600 (4V) 455	(10V) 261 (8V) 238 (6V) 167 (4V) 126	(10V) 92 (8V) 63 (6V) 36 (4V) 17	(10V) 902 (8V) 618 (6V) 353 (4V) 167	(10V) 47.4 (8V) 45.5 (6V) 38.8 (4V) 29.1	50	5.3
CA-RM 160 ES	16280	220-240	(10V) 160 (8V) 120 (6V) 55 (4V) 21	(10V) 1.25 (8V) 0.95 (6V) 0.45 (4V) 0.18	(10V) 3280 (8V) 2980 (6V) 2265 (4V) 1560	(10V) 1080 (8V) 975 (6V) 740 (4V) 500	(10V) 300 (8V) 271 (6V) 206 (4V) 139	(10V) 94 (8V) 62 (6V) 35 (4V) 17	(10V) 922 (8V) 608 (6V) 343 (4V) 167	(10V) 66.4 (8V) 63.6 (6V) 57 (4V) 47.4	50	5.3
CA-RM 200 ES	16281	220-240	(10V) 165 (8V) 130 (6V) 60 (4V) 24	(10V) 1.30 (8V) 1 (6V) 0.50 (4V) 0.20	(10V) 3380 (8V) 3150 (6V) 2430 (4V) 1660	(10V) 1210 (8V) 1135 (6V) 885 (4V) 590	(10V) 336 (8V) 315 (6V) 246 (4V) 164	(10V) 105 (8V) 73 (6V) 43 (4V) 19	(10V) 1030 (8V) 716 (6V) 422 (4V) 186	(10V) 44.6 (8V) 42.7 (6V) 37.8 (4V) 28.5	50	5.7
CA-RM 150 RF ES	16257	220-240	(10V) 160 (8V) 130 (6V) 60 (4V) 24	(10V) 1.20 (8V) 0.95 (6V) 0.49 (4V) 0.22	(10V) 3300 (8V) 3085 (6V) 2360 (4V) 1625	(10V) 775 (8V) 715 (6V) 560 (4V) 380	(10V) 215 (8V) 199 (6V) 156 (4V) 106	(10V) 94 (8V) 65 (6V) 38 (4V) 17	(10V) 922 (8V) 637 (6V) 373 (4V) 164	(10V) 58.9 (8V) 57.8 (6V) 41 (4V) 38.8	50	8
CA-RM 160 RF ES	16258	220-240	(10V) 160 (8V) 140 (6V) 65 (4V) 24	(10V) 1.20 (8V) 1 (6V) 0.55 (4V) 0.22	(10V) 3220 (8V) 3080 (6V) 2405 (4V) 1650	(10V) 840 (8V) 800 (6V) 630 (4V) 425	(10V) 233 (8V) 222 (6V) 175 (4V) 118	(10V) 103 (8V) 69 (6V) 40 (4V) 18	(10V) 1010 (8V) 677 (6V) 392 (4V) 177	(10V) 58.9 (8V) 57.2 (6V) 50.4 (4V) 41	50	8
CA-RM 200 RF ES	16259	220-240	(10V) 160 (8V) 140 (6V) 65 (4V) 24	(10V) 1.20 (8V) 1 (6V) 0.55 (4V) 0.22	(10V) 3250 (8V) 3070 (6V) 2350 (4V) 1615	(10V) 985 (8V) 945 (6V) 720 (4V) 490	(10V) 274 (8V) 263 (6V) 200 (4V) 136	(10V) 106 (8V) 71 (6V) 40 (4V) 19	(10V) 1040 (8V) 696 (6V) 392 (4V) 186	(10V) 53 (8V) 51.8 (6V) 46.3 (4V) 36.8	50	7.9

** Sound pressure measured 3 m in free field in accordance with ISO 9614.

*** Maximum ambient temperature of continuous operation of the product.

CA-RM ES RANGE
IN-LINE CENTRIFUGAL FANS IN METAL FOR RADON GAS EXTRACTION

TECHNICAL DATA

ENERGY DATA ACCORDING TO REGULATION NO. 1253/2014 / EU

	UNIT OF MEASUREMENT	CA-RM 100 ES	CA-RM 125 ES	CA-RM 150 ES	CA-RM 160 ES	CA-RM 200 ES
CODE		16277	16278	16279	16280	16281
Manufacturer's name or trade name	-	VORTICE	VORTICE	VORTICE	VORTICE	VORTICE
Declared type of ventilation unit	-	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**	UVNR-U**
Drive type	-	VSD*	VSD*	VSD*	VSD*	VSD*
Type of HRS heat exchanger	-	none	none	none	none	none
Thermal efficiency of heat recovery	%	NA*	NA*	NA*	NA*	NA*
Nominal flow	m³/s	0,090	0,139	0,256	0,296	0,308
Effective electrical power consumption	kW	0,083	0,085	0,160	0,159	0,165
SFPint ****	W/(m³/s)	635,49	413,63	343,60	NA*	NA*
Front speed at nominal flow	m/s	11,49	11,385	14,493	14,755	9,813
Nominal external pressure (Δps, ext)	Pa	118	85	135	120	81
Internal pressure drop of the ventilation components (Δps, int)	Pa	264	180	165	76	86
Internal pressure drop of components unrelated to ventilation (Δps, add)	Pa	0	0	0	0	0
Static efficiency of the fans used according to Regulation 327/2011 / EU	%	41.6.	43.5	47.9	36.6	31.2
Maximum percentage of internal case leakage	%	NA*	NA*	NA*	NA*	NA*
Maximum percentage of external case leakage	%	NA*	NA*	NA*	NA*	NA*
Energy performance or energy classification of filters	-	NA*	NA*	NA*	NA*	NA*
Description of the visual signal for filters	-	NA*	NA*	NA*	NA*	NA*
LWA sound power on the speaker	dB(A)	NA*	NA*	NA*	NA*	NA*

* NA: Not applicable.

** UVNR-U: Non-Residential Ventilation Unit - Unidirectional.

*** VM: Multiple speeds. VSD: Variable Speed Drive.

**** SFPint: Internal specific power of the ventilation components.

VSD: with speed variator





TECHNICAL DATA

ENERGY DATA ACCORDING TO REGULATION NO. 1253/2014 / EU

	UNIT OF MEASUREMENT	CA-RM 150 RF ES	CA-RM 160 RF ES	CA-RM 200 RF ES
CODE		16257	16258	16259
Manufacturer's name or trade name	-	VORTICE	VORTICE	VORTICE
Declared type of ventilation unit	-	UVNR-U**	UVNR-U**	UVNR-U**
Drive type	-	VSD	VSD	VSD
Type of HRS heat exchanger	-	none	none	none
Thermal efficiency of heat recovery	%	NA*	NA*	NA*
Nominal flow	m ³ /s	0,211	0,231	0,273
Effective electrical power consumption	kW	0,160	0,166	0,159
SFPint ****	W/(m ³ /s)	NA*	NA*	NA*
Front speed at nominal flow	m/s	11,978	11,514	8,691
Nominal external pressure (Δp_s , ext)	Pa	225	119	99
Internal pressure drop of the ventilation components (Δp_s , int)	Pa	158	229	156
Internal pressure drop of components unrelated to ventilation (Δp_s , add)	Pa	0	0	0
Static efficiency of the fans used according to Regulation 327/2011 / EU	%	50,6	48,5	43,8
Maximum percentage of internal case leakage	%	NA*	NA*	NA*
Maximum percentage of external case leakage	%	NA*	NA*	NA*
Energy performance or energy classification of filters	-	NA*	NA*	NA*
Description of the visual signal for filters	-	NA*	NA*	NA*
LWA sound power on the speaker	dB(A)	NA*	NA*	NA*

* NA: Not applicable.

** UVNR-U: Non-Residential Ventilation Unit - Unidirectional.

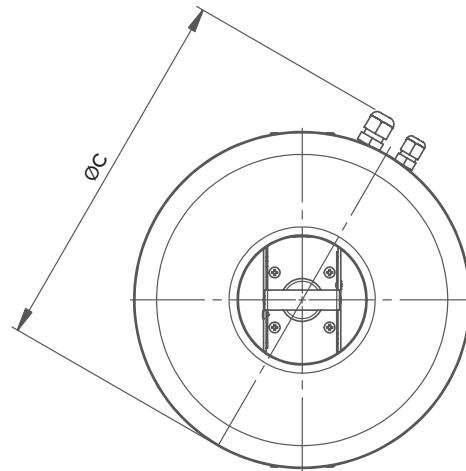
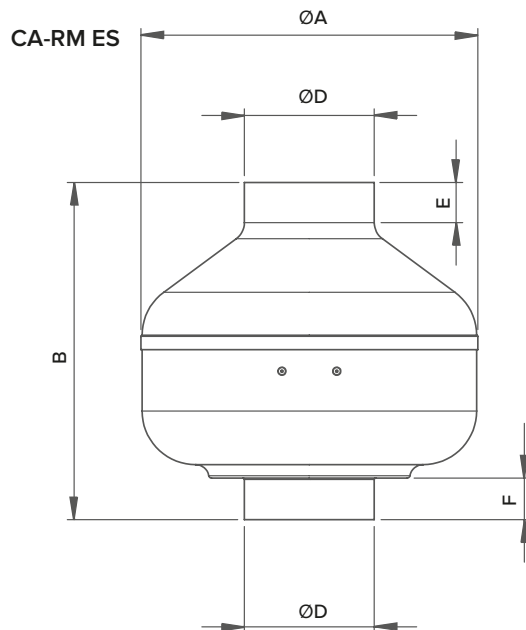
*** VM: Multiple speeds. VSD: Variable Speed Drive.

**** SFPint: Internal specific power of the ventilation components.

VSD: with speed variator

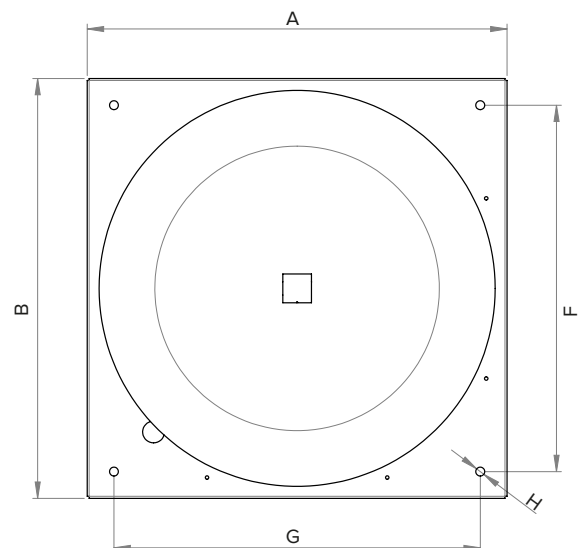
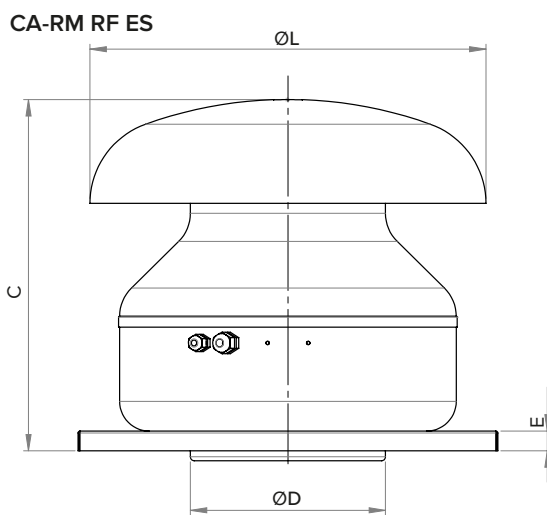
CA-RM ES RANGE
IN-LINE CENTRIFUGAL FANS IN METAL FOR RADON GAS EXTRACTION

DIMENSIONS



PRODUCTS	CODE	ØA	B	ØC	ØD	E	F
CA - RM 100 ES	16277	252	252	276	97	30	31
CA - RM 125 ES	16278	252	252	276	122	30	31
CA - RM 150 ES	16279	342	295	367	147	30	36
CA - RM 160 ES	16280	342	295	367	157	30	36
CA - RM 200 ES	16281	342	337	367	197	40	77

Dimensions in mm



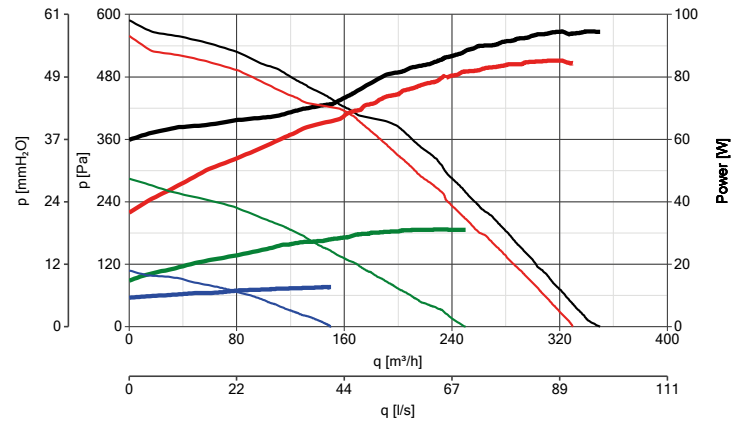
PRODUCTS	CODE	A	B	C	ØD	E	F	G	H	ØL
CA - RM 150 RF ES	16257	424	424	363	147	20	370	370	9	400
CA - RM 160 RF ES	16258	424	424	363	157	20	370	370	9	400
CA - RM 200 RF ES	16259	424	424	355	197	20	370	370	9	400

Dimensions in mm

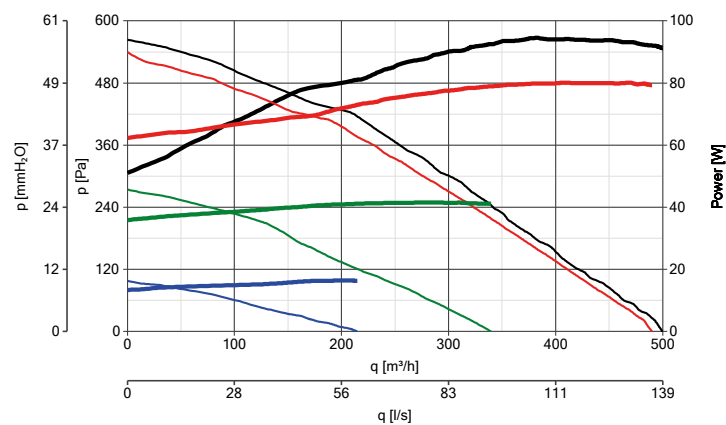


PERFORMANCE CURVES

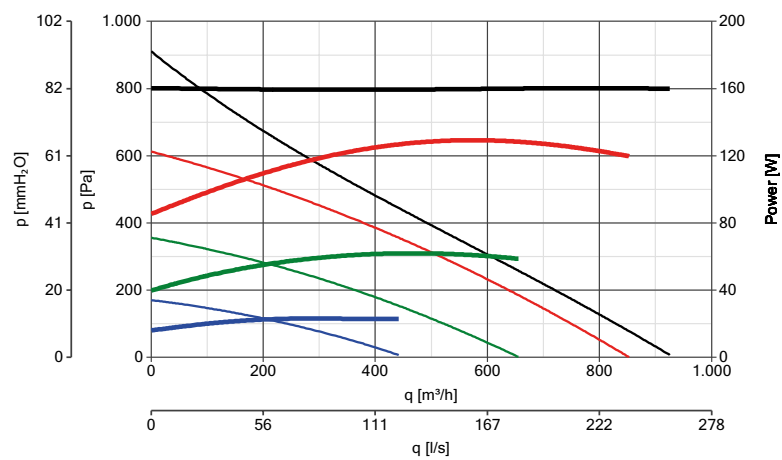
CA-RM 100 ES Cod.16277



CA-RM 125 ES Cod.16278



CA-RM 150 ES Cod.16279



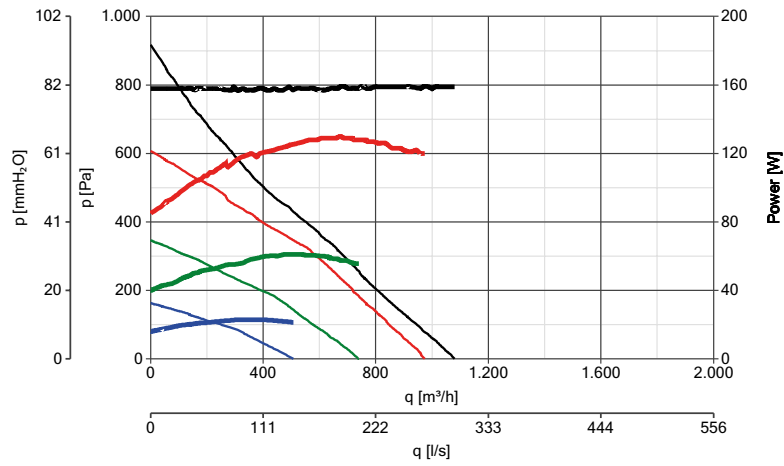
KEY:

- Power (10V regulation)
- Power (8V regulation)
- Power (6V regulation)
- Power (4V regulation)

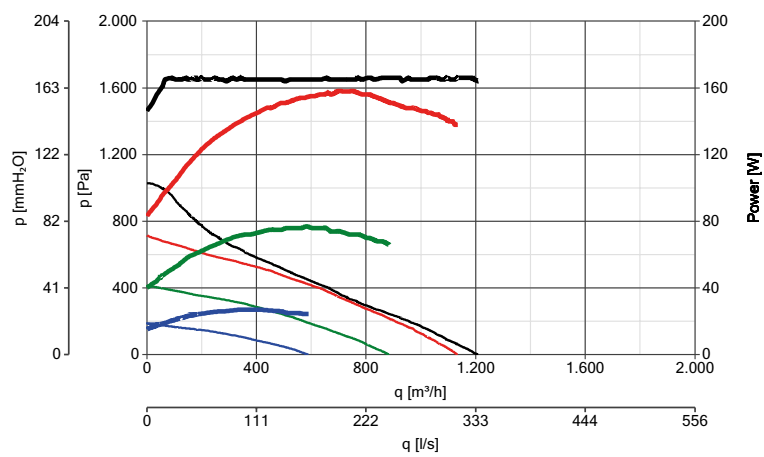
CA-RM ES RANGE
IN-LINE CENTRIFUGAL FANS IN METAL FOR RADON GAS EXTRACTION

PERFORMANCE CURVES

CA-RM 160 ES Cod.16280



CA-RM 200 ES Cod.16281



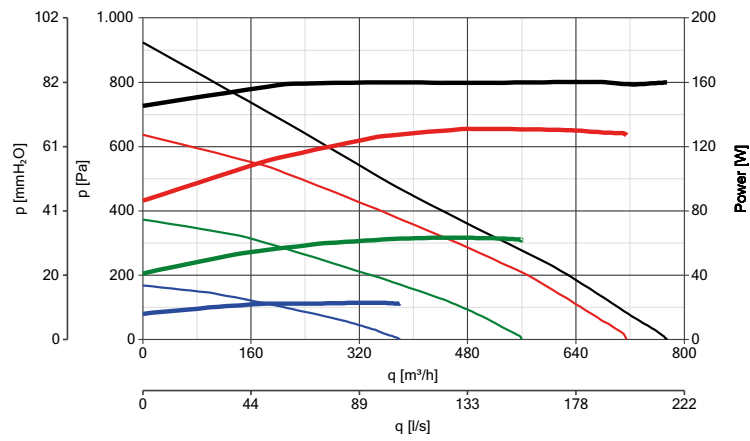
KEY:

- Power (10V regulation)
- Power (8V regulation)
- Power (6V regulation)
- Power (4V regulation)

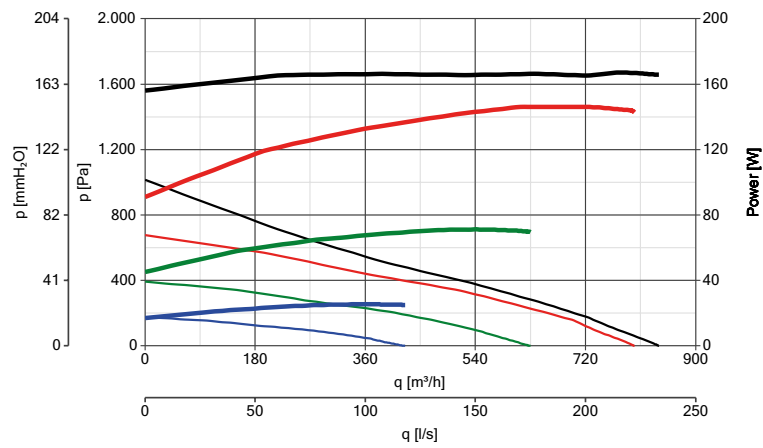


PERFORMANCE CURVES

CA-RM 150 RF ES Cod.16257



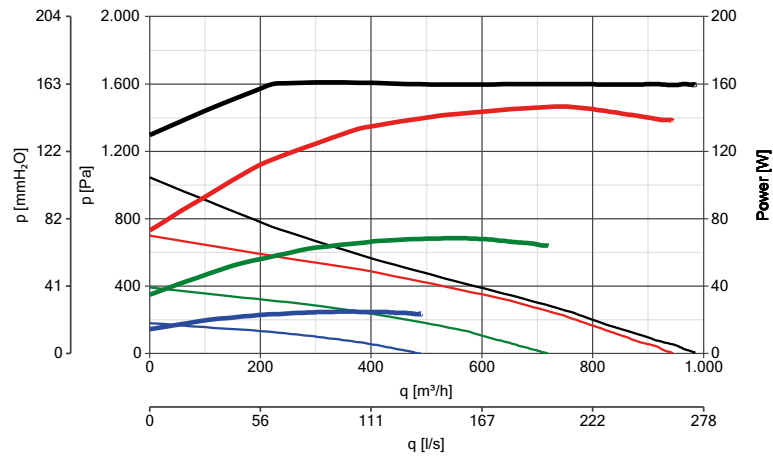
CA-RM 160 RF ES Cod.16258



CA-RM ES RANGE
IN-LINE CENTRIFUGAL FANS IN METAL FOR RADON GAS EXTRACTION

PERFORMANCE CURVES

CA-RM 200 RF ES Cod.16259



KEY:

- Power (10V regulation)
- Power (8V regulation)
- Power (6V regulation)
- Power (4V regulation)



ACCESSORIES

MODELS	DESCRIPTION	CODE	PRODUCTS
KIT FSG 100			
	Kit (2 sleeves) for duct installation CA-RM 100 ES	20210	16277
KIT FSG 125			
	Kit (2 sleeves) for duct installation CA-RM 125 ES	20211	16278
KIT FSG 150			
	Kit (2 sleeves) for duct installation CA-RM 150 ES.	20212	16279
KIT FSG 160			
	Kit (2 sleeves) for duct installation CA-RM 160 ES.	20213	16280
KIT FSG 200			
	Kit (2 sleeves) for duct installation CA-RM 200 ES. .	20214	16281
KIT FSG-FLS 100			
	Kit consisting of flow switch, for monitoring the extracted flow and 2 sleeves for the series connection of two units with nominal diameter of 100 mm.	20215	16277
KIT FSG-FLS 125			
	Kit consisting of a flow switch, for monitoring the extracted flow and 2 sleeves for the series connection of two units with a nominal diameter of 125 mm.	20216	16278

CA-RM ES RANGE
IN-LINE CENTRIFUGAL FANS IN METAL FOR RADON GAS EXTRACTION

ACCESSORIES

MODELS	DESCRIPTION	CODE	PRODUCTS
KIT FSG 150			
	Kit consisting of flow switch, for monitoring the extracted flow and 2 sleeves for the series connection of two units with a nominal diameter of 150 mm.	20217	16279 16257
KIT FSG 160			
	Kit consisting of flow switch, for monitoring the extracted flow and 2 sleeves for the series connection of two units with a nominal diameter of 150 mm.	20218	16280 16258
KIT FSG 200			
	Kit consisting of flow switch, for monitoring the extracted flow and 2 sleeves for the series connection of two units with a nominal diameter of 200 mm.	20219	16281 16259
KIT PZT Ø 100			
	Driveway in plastic material	20223	16277
KIT PZT Ø 125			
	Driveway in plastic material	20474	16278
KIT PZT Ø 150 - 160			
	Driveway in plastic material	20224	16279 16280
KIT PZT Ø 200			
	Driveway in plastic material	20475	16281
KIT RF 150			
	Accessories for installation in duct models at the end of a short vertical pipe.	20375	16279
KIT RF 160			
	Accessories for installation in duct models at the end of a short vertical pipe.	20376	16280
KIT RF 200			
	Accessories for installation in duct models at the end of a short vertical pipe.	20377	16281



REGULATORS

SICURBOX



Control unit for the management and monitoring of the system. The device allows independent regulation of up to 2 fans, verification of their correct operation and reporting of any malfunctions.

20204

16277
16278
16279
16280
16281
16257
16258
16259

POT-IT



Potentiometer for adjusting the fan speed, compatible with wall and recessed installation in UNI503 standard box.

12826

16277
16278
16279
16280
16281
16257
16258
16259

POT



Potentiometer for adjusting the fan speed, compatible with wall and recessed installation in a standard DIN box.

12828

16277
16278
16279
16280
16281
16257
16258
16259

EXAMPLE OF DUCT INSTALLATION

RADON GAS REMEDIATION (WORK)



Preparation of extraction point



CA-RM 160 ES installation
in line with the duct



SICURBOX control unit installation
for control, monitoring and
management.



EXAMPLE OF ROOF INSTALLATION

Terminal section of the exhaust duct



CA-RM 200 RF ES installation



CA WE D E RANGE

Painted sheet steel mixed flow duct fans for external wall

Painted sheet steel mixed flow duct fans, designed for outdoor installation. The ideal low-visual impact, low-noise ventilation solution for residential or commercial premises (kitchens, toilets, laboratories, bars, restaurants, laundries, shops, etc.).

VERSIONS

6 models, with nominal diameter between 100 and 200 mm.

KEY FEATURES

- Built to withstand weathering and high temperatures.
- Designed to minimise noise in the environment.
- Automatic delivery closing to prevent air re-entry and the entry of foreign bodies.
- Fully compliant with Reg. ErP 2018 N. 1253/2014.

TECHNICAL FEATURES

- Steel sheet front covers that have been painted with polyester paint against aggressive weathering. Grille-protected delivery spigots with automatic spring closure device to prevent the entry of foreign bodies.
- Rear flanges in plastic resin with a mineral-based additive to dampen vibrations and soften noise.
- 3-speed fans that can be set using optional device TRIO-CA (code 12869), composed of:
 - AC motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting (at least 40,000 h) continuous service at the maximum plate temperature.
 - Backward-curve, heat resistant plastic resin blade impellers loaded with glass fibre to combine structural strength and dimensional stability.
- Possibility of connecting to remote environmental temperature, humidity, smoke and presence sensors (optional).
- Performance and safety certified by third party body (IMQ).
- Protection rating from the water: IPX5.
- Insulation Class: II .





TECHNICAL DATA

Models	Code	V~50	Max Airflow					Max Pressure		LP DB(A) 3m	Max °C	KG
			W	A	RPM	m³/h	l/s	mmH₂O	Pa			
			min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max			
CA 100 WED	16091	220-240	12 24 50	0,13 0,18 0,23	925 1515 2390	68 150 252	18,8 41,6 70	18,3 37,4 38,6	180 366,4 379,4	38,3 - 50,1	60	4,5
CA 125 WED	16092	220-240	12 24 50	0,13 0,18 0,23	880 1400 2350	85 175 328	23,6 48,6 91,1	15,3 34,3 36,7	150,4 336,3 359,5	36,3 - 49,5	60	4,5
CA 150 Q WED	16093	220-240	12 57 50	0,13 0,18 0,23	870 1410 2345	95 190 350	26,3 52,7 97,2	12,4 33,0 36,7	121,6 324 360	37,1 - 49,5	60	4,5
CA 150 WEDE	16087	230	38 100	0,36 0,44 0,44	1015 1455 2520	215 335 625	59,7 93 173,1	27,2 42,1 45,5	267,1 413,6 446,6	23,1 - 42,9	55	8
CA 160 WEDE	16088	230	38 57 100	0,36 0,44 0,44	1060 1475 2490	235 362 660	65,2 100,5 183,3	30,1 43,4 45,2	295,7 425,8 443,9	22 - 37,5	55	8
CA 200 WEDE	16089	230	38 53 100	0,36 0,44 0,44	1100 1460 2495	245 353 680	60 90 188,8	24,9 38,9 44,3	244,4 381,7 434,3	20,9 - 39,1	55	8

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 9614.

ENERGY DATA FOR REGULATION N° 1254/2014/UE

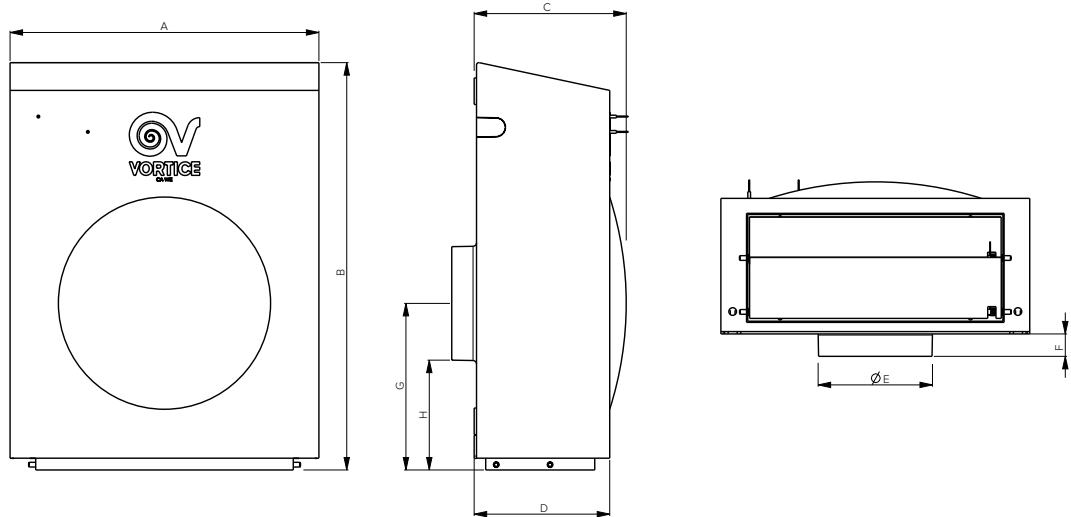
	UNIT OF MEASURE	CA 100 WED	CA 125 WED	CA 150 Q WED	CA 150 WEDE	CA 160 WEDE	CA 200 WEDE
CODE		16091	16092	16093	16087	16088	16089
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	NA*	NA*	NA*	NA*	NA*	NA*
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None	None	None
Nominal NRVU flow rate	m³/s	0,06328	0,08097	0,09533	0,17219	0,18325	0,18492
Effective electric power input	kW	0,052	0,053	0,053	0,104	0,105	0,103
Face velocity at design flow rate	m/s	8,05678	6,59821	5,39476	9,74421	9,11411	5,88608
Nominal external pressure (Δps, ext)	Pa	471	314	20	69	20	98
Internal pressure drop of ventilation components (Δps,int)	Pa	-234	-121	144	157	187	107
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	28,8	29,5	29,5	37,4	36,1	36,8
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	50	50	50	43	38	39

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

CA WE D RANGE

PAINTED SHEET STEEL MIXED FLOW DUCT FANS FOR EXTERNAL WALL

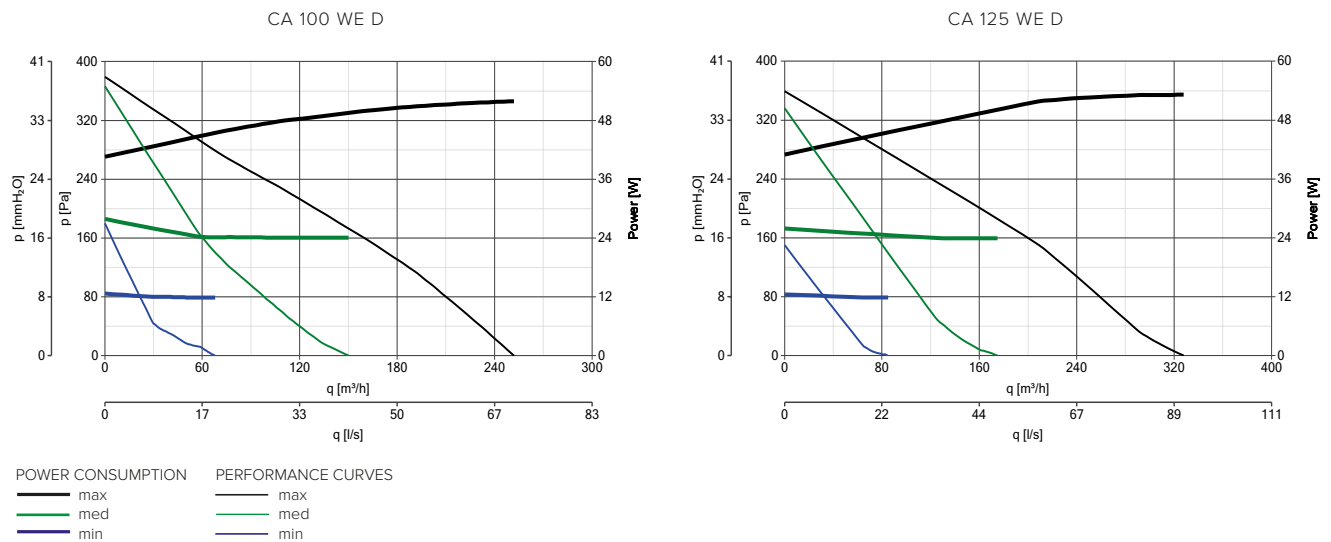
DIMENSIONS



MODELS	A	B	C	D	ØE	F	G	H
CA100 WED	262	345	127	113	97	20	142	93
CA125 WED	262	345	127	113	122	20	142	80,5
CA 150 Q WED	262	345	127	113	147	20	142	68
CA 150 WEDE	360	430	173	155	147	20	180	106
CA 160 WEDE	360	430	173	155	157	20	180	101
CA 200 WEDE	360	430	173	155	157	20	180	81

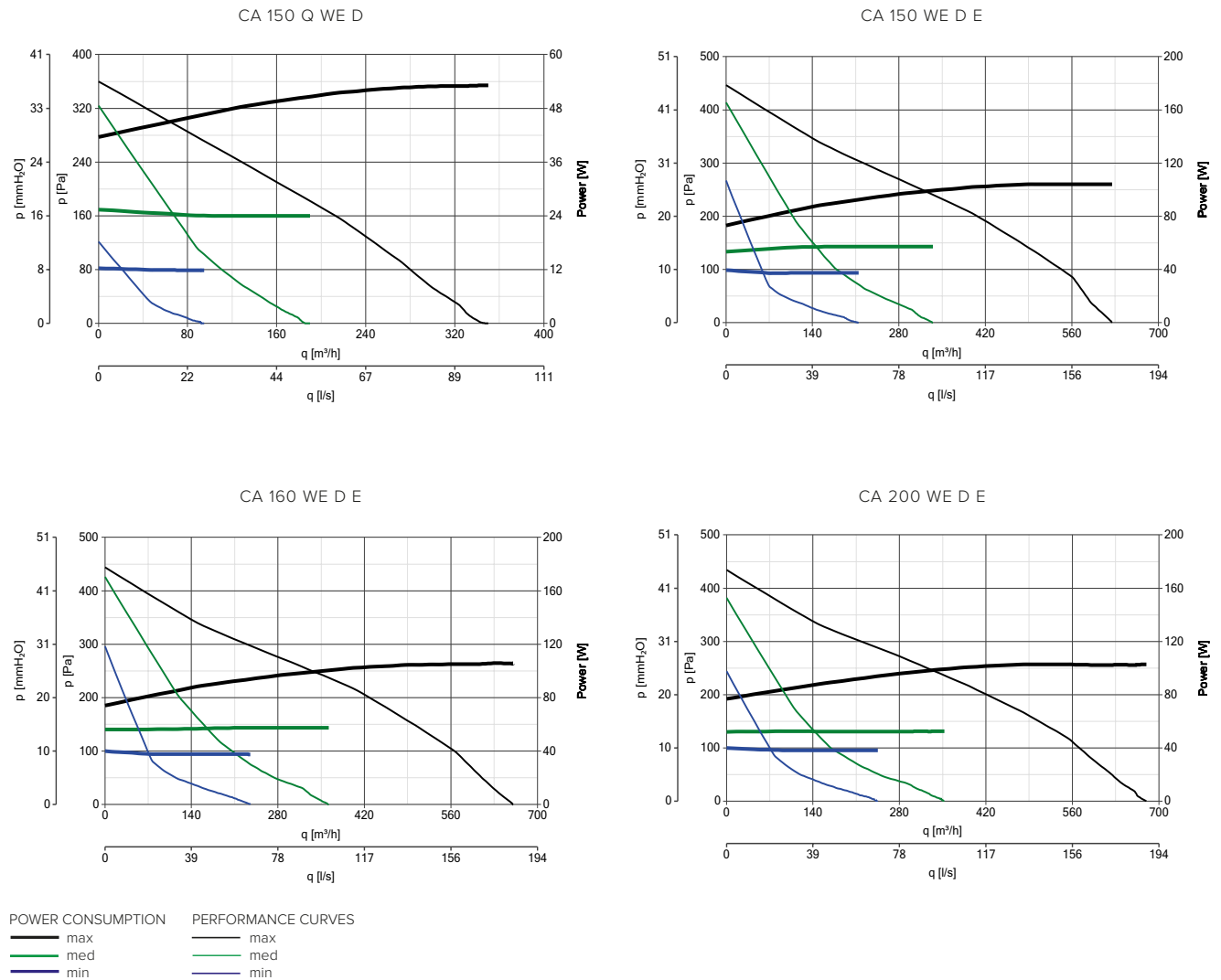
Dimensions (mm)

PERFORMANCE CURVES





PERFORMANCE CURVES



CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966 - 12967
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	12869	ALL PRODUCTS

CA MD E W RANGE

Steel sheet mixed flow wall fans

Steel sheet mixed flow wall fans. Installed at the end of the ventilation duct, effectively meet the ventilation needs of commercial or industrial premises (laboratories, bars, restaurants, laundries, gyms, etc.).

VERSIONS

8 models, with nominal diameter between 100 and 315 mm.

KEY FEATURES

- Built to withstand weathering and high temperatures.
- Extremely reliable and low maintenance.
- Wide continuous operation temperature range.
- Fully compliant with Reg. ErP 2018 N. 1253/2014.

TECHNICAL FEATURES

- Pickled, phosphate-coated steel sheet casing and wall fixing plates that have been painted with polyester paint against aggressive weathering.
- Motor-holder built into the boxes housing the mains connection terminals and the flow conditioner fins, constructed in self-extinguishing plastic resin (V0).
- 3-speed fans that can be set using optional device TRIO-CA (code 12869), composed of:
 - AC motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature.
 - Backward-curve, heat resistant plastic resin blade impellers loaded with glass fibre to combine structural strength and dimensional stability.
- Possibility of connecting to remote environmental temperature, humidity, smoke and presence sensors (optional).
- Performance and safety certified by third party body (IMQ).
- Protection rating from the water: IP44 (appliance ducted in extraction and delivery).
- Insulation Class: II .



TECHNICAL DATA

Models	Code	V~50/60				Max Airflow		Max Pressure		LP DB(A) 3m*	Max °C	KG
			W	A	RPM	m³/h	l/s	mmH ₂ O	Pa			
			min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max		
CA100 MDEW	16120	220-240	25 24 85	0,13 0,18 0,23	970 1650 2450	160 262 400	44,4 72,7 111,1	26,8 38,8 38,8	262,2 380,1 380,1	19,2 - 35,7	50	3,7
CA125 MDEW	16121	220-240	25 24 85	0,13 0,18 0,23	935 1660 2445	160 295 445	44,4 81,9 123,6	13,9 34,5 36,2	136,5 338,0 355,9	25,5 - 39,4	50	3,8
CA150 Q MDEW	16122	220-240	25 24 85	0,13 0,18 0,23	965 1615 2435	168 295 455	46,6 81,9 126,3	7,1 21 32,5	69,5 206,0 318,7	28,3 - 38	50	4,8
CA 150 MD E W	16133	220-240	39 50 85	0,34 0,35 0,38	1740 2230 2690	400 510 617	111,1 141,6 171,3	31,6 40,0 43,8	310,4 392,6 429,7	41,4 - 53,3	55	4,8
CA 160 MD E W	16134	220-240	38 50 85	0,35 0,35 0,38	1570 2120 2680	385,8 515 665	107,1 143 184,7	28 37,8 42,4	275,1 370,8 416,7	43 - 53	55	6,2
CA 200 MD E W	16135	220-240	39 50 90	0,35 0,35 0,40	1455 1960 2630	455 635 825	126,3 176,3 229,1	34,3 42,2 44	337,1 413,6 432,3	37,9 - 48,2	55	6
CA 250 MD E W	16136	220-240	48 79 130	0,48 0,57 0,55	1340 2015 2675	500 760 1030	138,8 211,1 286,1	34,9 52,8 55,9	342,3 518,4 548,3	31,6 - 50,8	50	6,2
CA 315 MD E W	16137	220-240	48 79 120	0,48 0,57 0,55	1335 2020 2670	490 765 1030	136,1 212,5 286,1	35,7 54,5 58,2	350,5 534,8 570,8	41,2 - 51,4	50	9,4
CA 315 MD SE W	16099	220-240	190	0,84	2800	1550	430	67	653	54	45	6,6

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 9614.

ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA 100 MD E W	CA 125 MD E W	CA 150 Q MD E W	CA 150 MD E W
CODE		16120	16121	16122	16133
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	NA*	NA*	NA*	NA*
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None
Nominal NRVU flow rate	m³/s	0,10994	0,12206	0,12328	0,17025
Effective electric power input	kW	0,050	0,050	0,050	0,081
Face velocity at design flow rate	m/s	13,99856	9,94598	6,97610	9,63418
Nominal external pressure (Δps, ext)	Pa	88	108	137	59
Internal pressure drop of ventilation components (Δps,int)	Pa	44	-6	-40	171
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	29,0	24,9	23,9	48,2
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	36	39	38	53

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

ENERGY DATA FOR REGULATION N° 1254/2014/UE

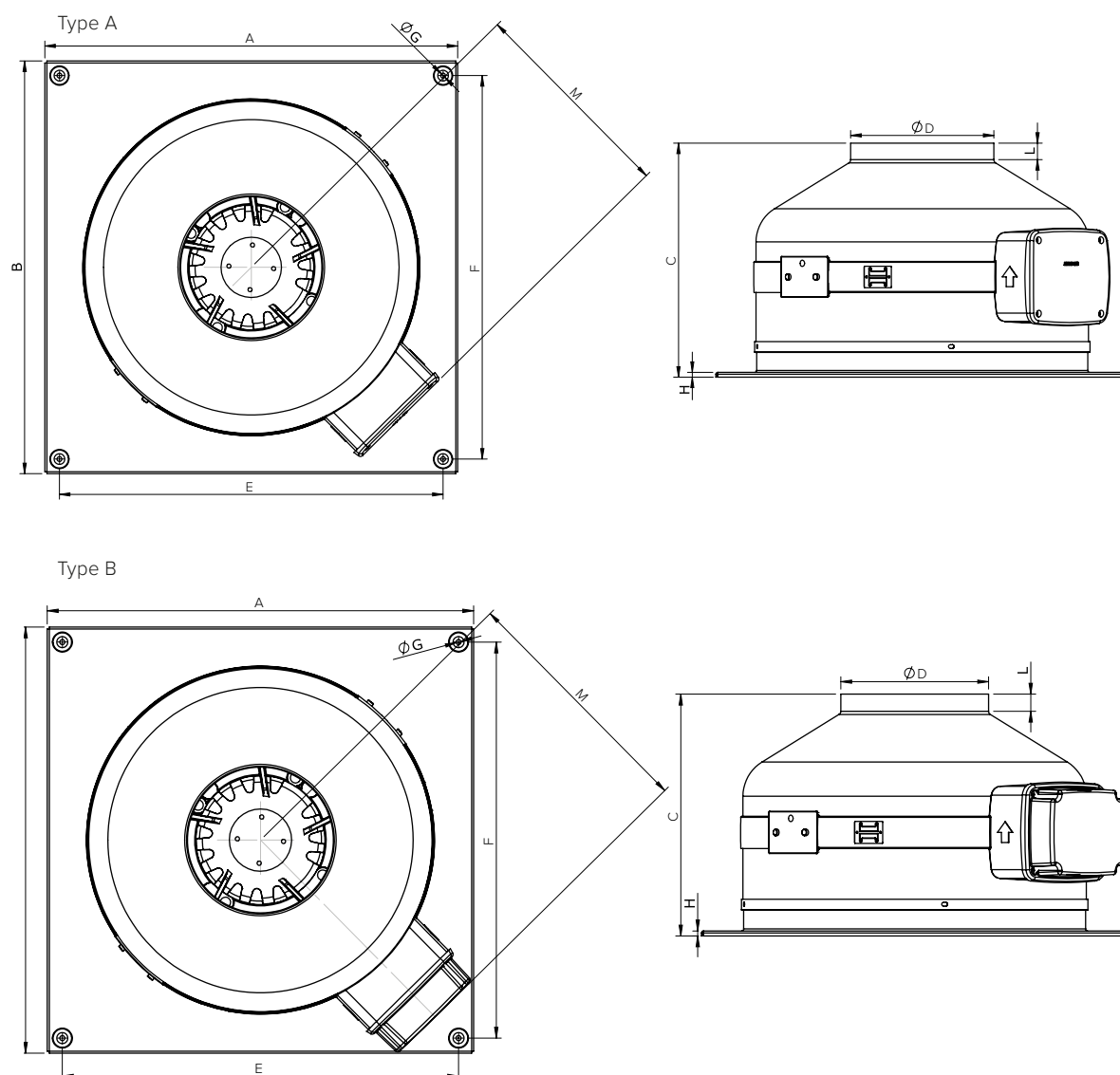
	UNIT OF MEASURE	CA 160 MD E W	CA 200 MD E W	CA 250 MD E W	CA 315 MD E W	CA 315 MD SE W
CODE		16134	16135	16136	16137	16099
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	NA*	NA*	NA*	NA*	206,48
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None	None
Nominal NRVU flow rate	m³/s	0,18356	0,22633	0,28222	0,28083	0,379
Effective electric power input	kW	0,083	0,088	0,127	0,127	0,216
Face velocity at design flow rate	m/s	9,12931	7,20442	5,74939	3,60361	4,8582
Nominal external pressure (Δp_s , ext)	Pa	49	128	108	128	135
Internal pressure drop of ventilation components (Δp_s , int)	Pa	158	-16	25	8	75
Internal pressure drop of non-ventilation components (Δp_s , add)	Pa	0	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	45,9	28,7	29,6	30,0	37
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	0,5
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	53	48	51	51	71

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive





DIMENSIONS



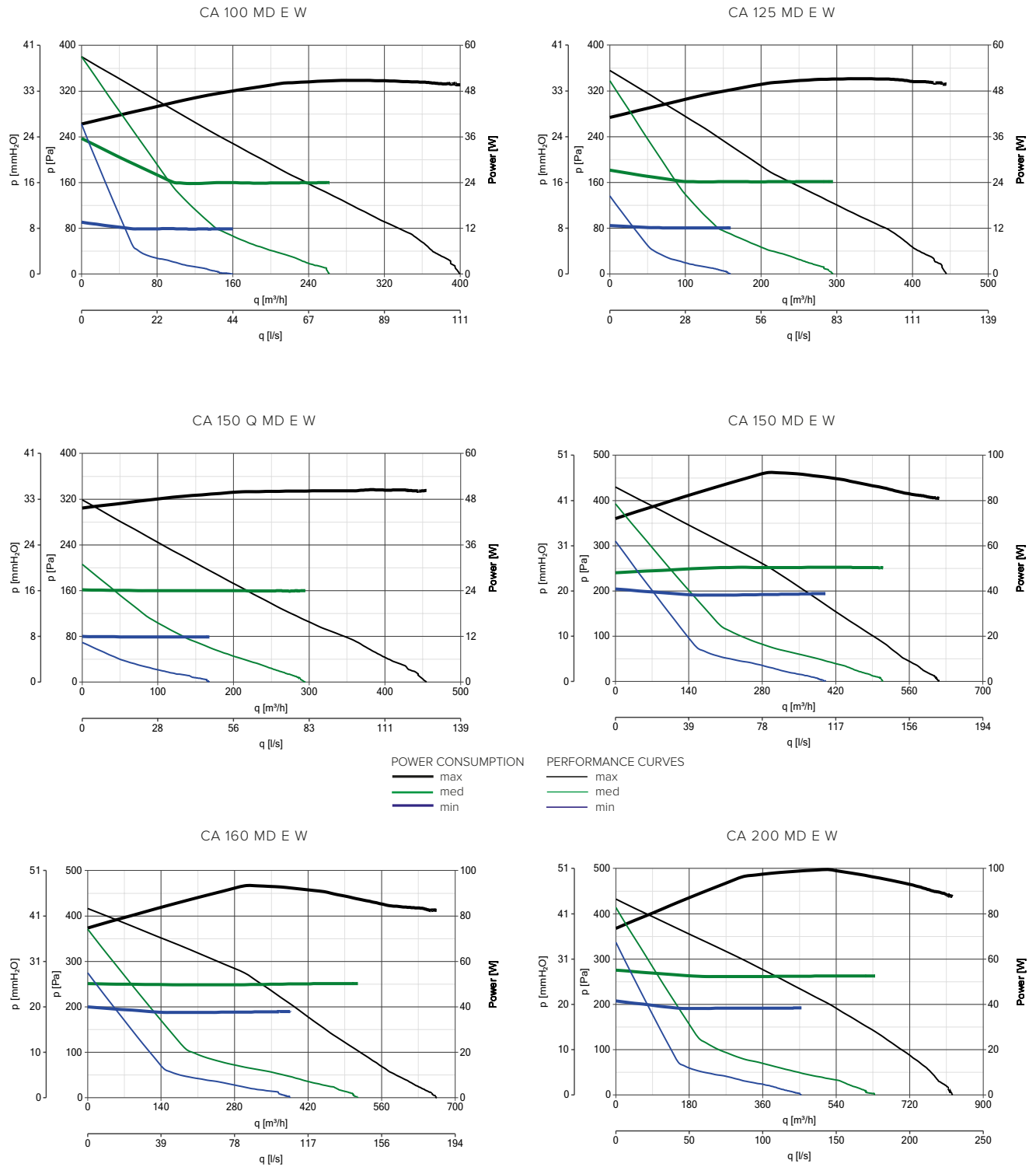
MODELS	TYPE	ϕA	B	C	ϕD	E	F	G	H	L	M
CA 100 MD E W	B	334	334	210	97	304	304	5	5	15	198
CA 125 MD E W	B	334	334	210	122	304	304	5	5	23	198
CA 150 Q MD E W	B	334	334	210	147	304	304	5	5	30	198
CA 150 MD E W	A	424	424	245	147	394	394	5	5	17	220
CA 160 MD E W	A	424	424	245	157	394	394	5	5	18	220
CA 200 MD E W	A	424	424	245	197	394	394	5	5	20	220
CA 250 MD E W	B	424	424	237	247	394	394	5	5	38	250
CA 315 MD E W	A	489	489	260	312	459	459	5	5	36	252
CA 315 MD SE W	A	489	489	268	312	459	459	5	5	42	252

Dimensions (mm)

CA MD E W RANGE

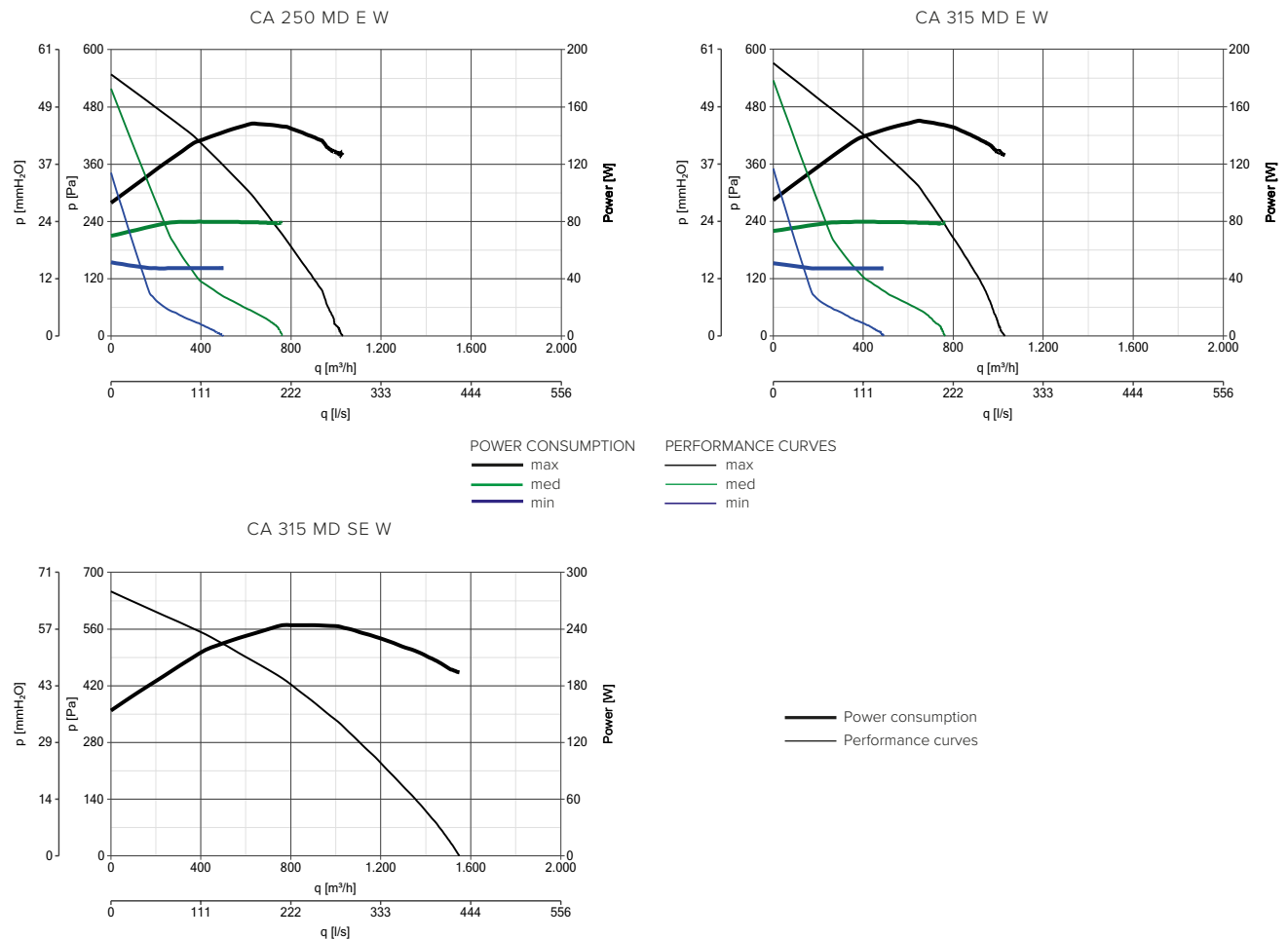
STEEL SHEET MIXED FLOW WALL FANS

PERFORMANCE CURVES





PERFORMANCE CURVES



CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966 - 12967
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	12869	16120 - 16121 - 16122 - 16133 - 16134 16135 - 16136 - 16137
	IRM5 2B - 5-POSITION SPEED CONTROLLER OF THE AUTOTRANSFORMER TYPE, DESIGNED TO CONTROL SINGLE-PHASE ASYNCHRONOUS MOTORS.	12861	16099

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT
	CA-G - PROTECTION GRILLE	100 125 150 160 200 250 315	22750 22755 22760 22762 22765 22770 22775
			16120 16121 16122 - 16133 16134 16135 16136 16137 - 16099



CA MD E RF RANGE

Painted steel sheet mixed flow roof fans

Painted steel sheet mixed flow roof fans. Installed at the end of the ventilation duct, effectively and economically meet the ventilation needs of commercial or industrial premises (laboratories, bars, restaurants, laundries, gyms, etc.) with a roof-mounted exhaust.

VERSIONS

8 models, with nominal diameter between 100 and 315 mm.

KEY FEATURES

- Excellent price-to-performance ratio
- Built to withstand weathering and high temperatures.
- Extremely reliable and low maintenance.
- Wide continuous operation temperature range.
- Fully compliant with Reg. ErP 2018 N. 1253/2014.

TECHNICAL FEATURES

- Pickled, phosphate-coated steel sheet casing and roof fixing plates that have been painted with polyester paint against aggressive weathering.
- Motor-holder built into the boxes housing the mains connection terminals and the flow conditioner fins, constructed in self-extinguishing plastic resin (V0).
- Plastic resin covering that is resistant to weathering and to ageing induced by UV rays ("UV resistant").
- 3-speed fans that can be set using optional device TRIO-CA (code 12869), composed of:
 - AC motors with thermal overload cut-out and shafts turning on ball bearings to guarantee long lasting continuous service (at least 30,000 h) at the maximum plate temperature.
 - Centrifugal impellers with backward curved blades in heat-resistant plastic resin loaded with glass fibres to combine structural strength and dimensional stability.
- Possibility of connecting to remote environmental temperature, humidity, smoke and presence sensors (optional).
- Performance and safety certified by third party body (IMQ).
- Protection rating from dusts and water: IP44 (appliance ducted in extraction and delivery).
- Insulation Class: II .



TECHNICAL DATA

Models	Code	V~50/60				Max Airflow		Max Pressure		LP DB(A) 3m*	Max °C	KG
			W	A	RPM	m³/h	l/s	mmH ₂ O	Pa			
			min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max	min/med/max		
CA 100 MD E RF	16140	220-240	12 24 50	0,13 0,18 0,23	900 1555 2405	95 167 265	26,3 46 73,6	27,7 39,7 39,7	272,2 389,3 389,3	27,3 - 37,5	50	4,6
CA 125 MD E RF	16141	220-240	12 24 50	0,13 0,18 0,23	915 1538 2405	118 200 312	32,7 55,5 86,6	16,5 34,8 36,3	161,8 340,8 356,1	21,5 - 40,2	50	4,6
CA 150 Q MD E RF	16142	220-240	12 24 50	0,13 0,18 0,23	963 1608 2430	122 207 312	33,8 57,5 86,6	7,2 21,7 31,4	70,7 212,8 307,9	23,8 - 37,5	50	7,5
CA 150 MD E RF	16183	220-240	33 45 85	0,33 0,37 0,39	1240 1660 2630	230 310 490	63,8 86,1 136,1	31,3 41,2 44	307,6 404,7 432,1	24,6 - 43,8	55	7,5
CA 160 MD E RF	16184	220-240	33 45 88	0,33 0,37 0,39	1300 1740 2655	245 325 500	68 90 138	20,5 32,9 40,5	201 322,6 400	30,4 - 44,8	55	9
CA 200 MD E RF	16185	220-240	33 45 95	0,33 0,37 0,42	1156 1465 2555	310 395 700	86,1 109,7 194,7	31,9 41,3 44,9	313,4 405,5 440,6	23 - 31,7	55	9,6
CA 250 MD E RF	16186	220-240	48 80 130	0,47 0,57 0,57	1195 1752 2665	385 570 850	106,9 158,3 236,1	39,1 53,2 56,3	384,1 521,5 552,2	28,6 - 43,8	50	10
CA 315 MD E RF	16187	220-240	48 80 130	0,48 0,57 0,57	1186 1755 2590	370 565 865	102,7 156,9 240,2	37,6 55,2 58,5	368,9 542,1 573,7	32,8 - 40,7	50	12
CA 315 MD SE RF	16098	220-240	190	0,84	2800	1220	339	69	673	55	45	6,6

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 9614.

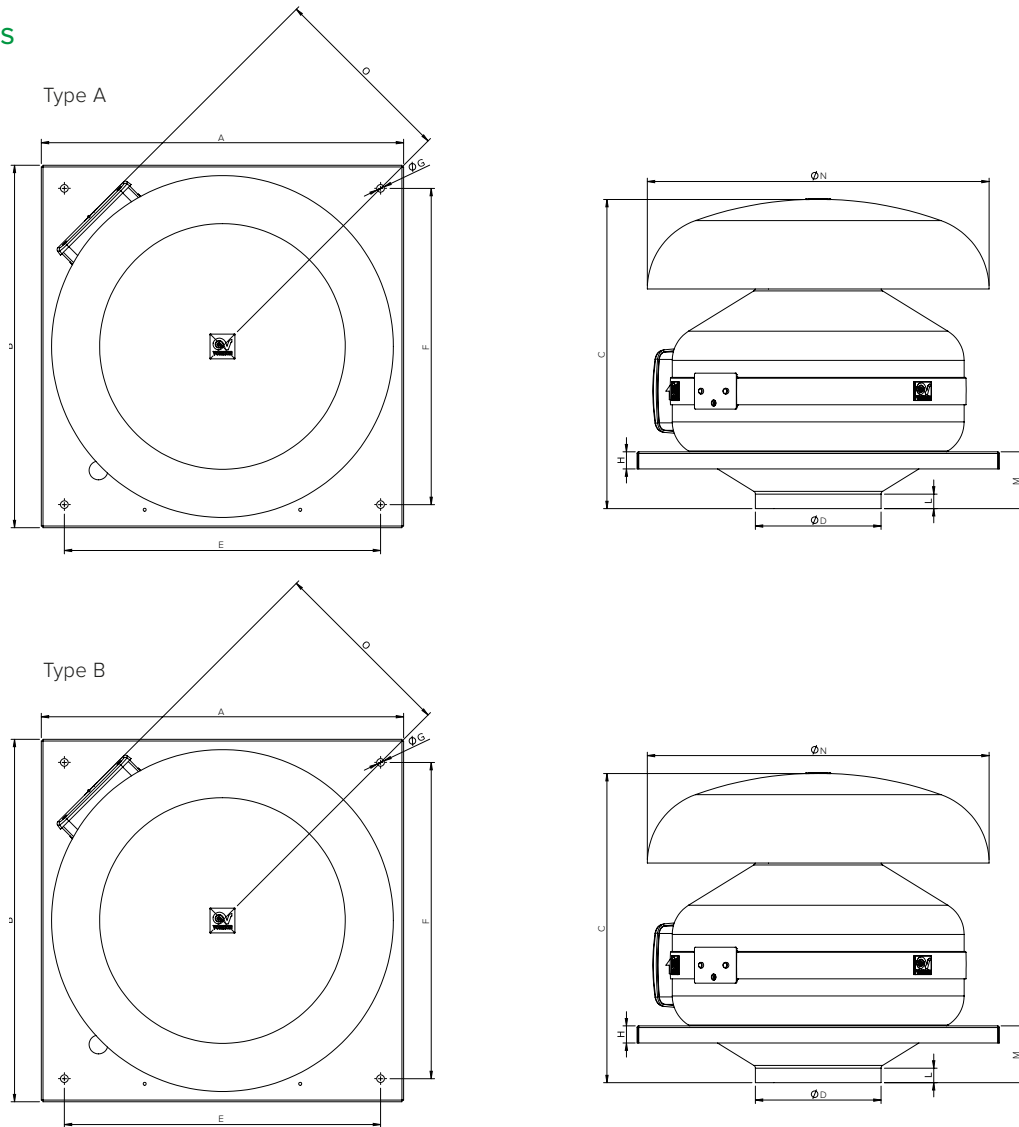
ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA 100 MD E RF	CA 125 MD E RF	CA 150 Q MD E RF	CA 150 MD E RF	CA 315 MD SE RF
CODE		16140	16141	16142	16183	16098
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	NA*	NA*	NA*	NA*	NA*
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None	None
Nominal NRVU flow rate	m³/s	0,06967	0,08597	0,08589	0,13508	0,321
Effective electric power input	kW	0,051	0,051	0,050	0,089	0,236
Face velocity at design flow rate	m/s	8,87024	7,00565	4,86032	7,64415	4,348
Nominal external pressure (Δps, ext)	Pa	108	29	29	69	59
Internal pressure drop of ventilation components (Δps,int)	Pa	110	154	154	213	256
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	29,8	30,8	31,4	42,8	43
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	0,5
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	38	40	38	44	73

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

CA MD E RF RANGE
PAINTED STEEL SHEET MIXED FLOW ROOF FANS

DIMENSIONS



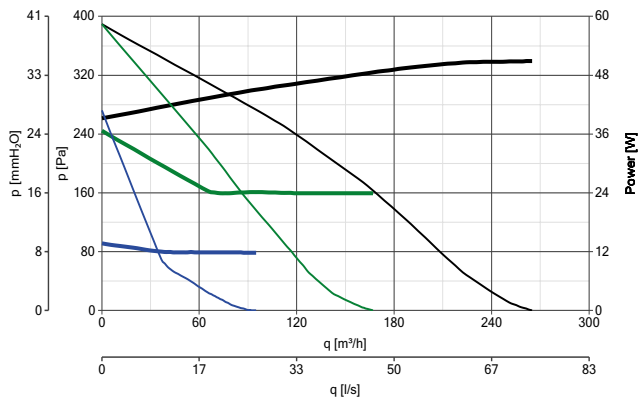
MODELS	TYPE	A	B	C	ØD	E	F	ØG	H	L	M	ØN	O
CA 100 MD E RF	B	334	334	305	97	280	280	9	20	15	35	300	198
CA 125 MD E W	B	334	334	305	122	280	280	9	20	23	35	300	198
CA 150 Q MD E RF	B	334	334	305	147	280	280	9	20	30	35	300	198
CA 150 MD E RF	A	424	424	365	147	370	370	9	20	17	47	400	220
CA 160 MD E RF	B	424	424	365	157	370	370	9	20	18	47	400	250
CA 200 MD E RF	B	424	424	365	197	370	370	9	20	20	49	400	250
CA 250 MD E RF	A	489	489	367	247	435	435	9	20	38	41	400	220
CA 315 MD E RF	A	489	489	415	312	435	435	9	20	36	65	534	250
CA 315 MD SE RF	A	489	489	423	312	435	435	9	20	42	74	534	260

Dimensions (mm)

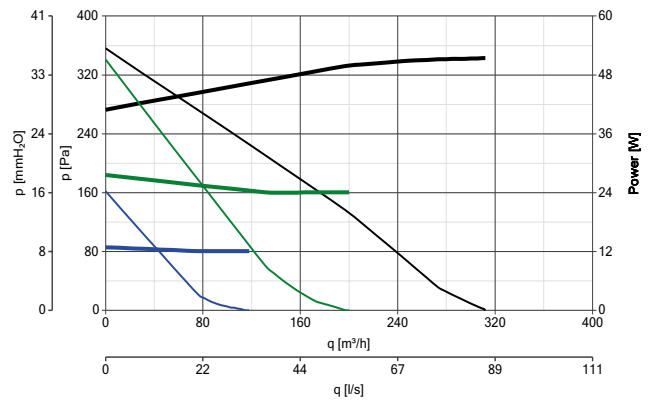


PERFORMANCE CURVES

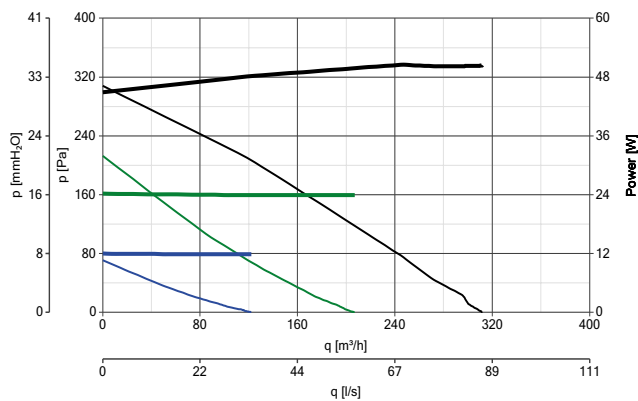
CA 100 MD E RF



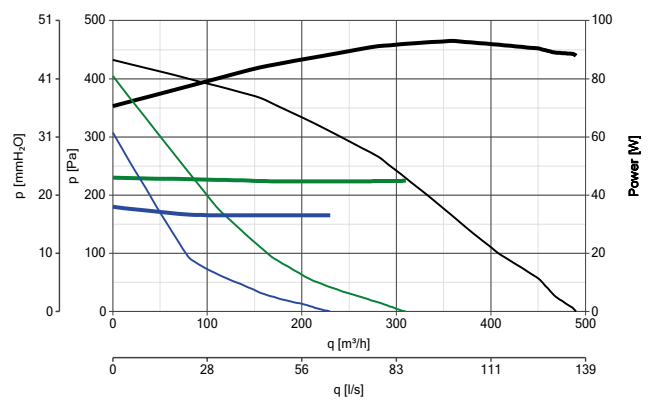
CA 125 MD E RF



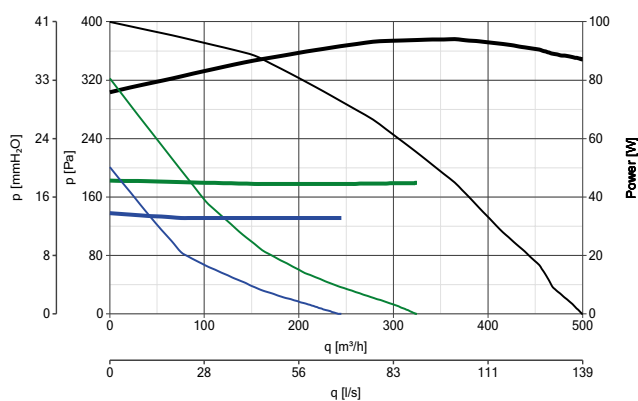
CA 150 Q MD E RF



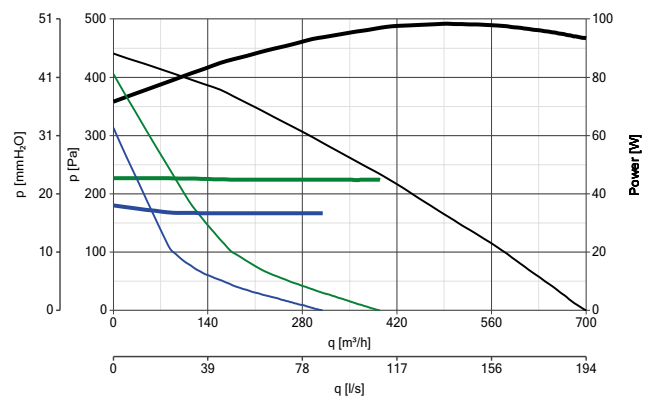
CA 150 MD E RF



CA 160 MD E RF



CA 200 MD E RF



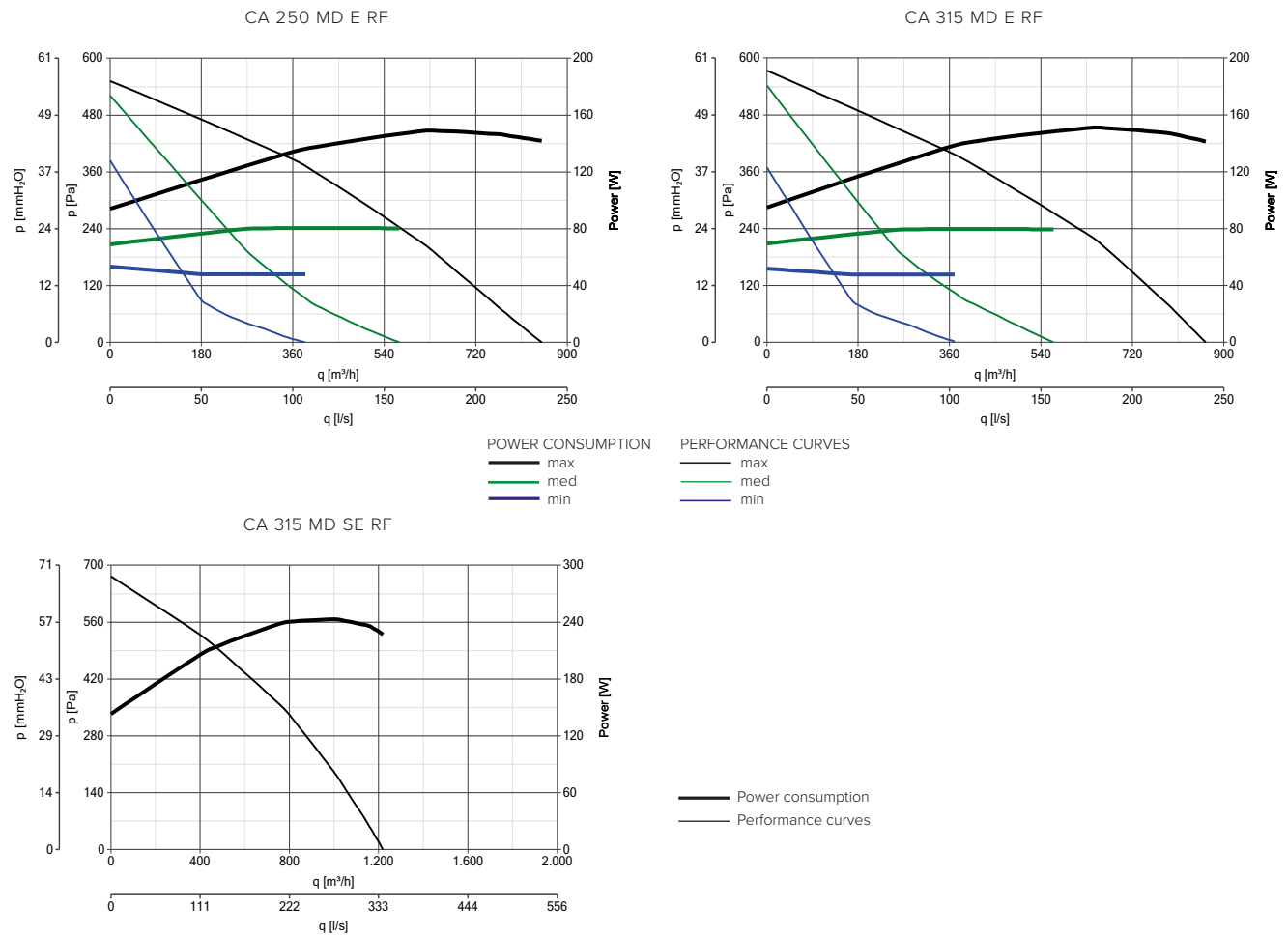
POWER CONSUMPTION
— max
— med
— min

PERFORMANCE CURVES
— max
— med
— min

CA MD E RF RANGE

PAINTED STEEL SHEET MIXED FLOW ROOF FANS

PERFORMANCE CURVES





CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	C 2.5 - ELECTRONIC SPEED CONTROLLER 2.5 A	12967	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966 - 12967
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	12869	16140 - 16141 - 16142 - 16183 - 16184 16185 - 16186 - 16187
	IRM5 2B - 5-POSITION SPEED CONTROLLER OF THE AUTOTRANSFORMER TYPE, DESIGNED TO CONTROL SINGLE-PHASE ASYNCHRONOUS MOTORS.	12861	16098

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT	
	CA-G - PROTECTION GRILLE	100	22750	16140
		125	22755	16141
		150	22760	16142 - 16183
		160	22762	16184
		200	22765	16185
		250	22770	16186
		315	22775	16187 - 16098
	CARF-C 125 - SUB-FRAME	22543	16140 - 16141	
	CARF-C 150/160/200 - SUB-FRAME	22544	16142 - 16183 - 16184 - 16185	
	CARF-C 250/315 - SUB-FRAME	22545	16186 - 16187 - 16098	

CA IN-LINE RANGE

CA IN-LINE are compact centrifugal in-line fans designed to extract low to larger air volumes from residential, commercial and industrial premises like service rooms, wet rooms, offices, laboratories, shops, bars, restaurants, laundries, etc...

Their installation in industrial areas is favored by robust construction (casings are made of galvanized steel sheet) and high (IP44) level of protection against dust and water when ducted. Thanks to their very short height, CA IN-LINE units are ideal for mounting in short false ceilings, while they are fully compatible with installation on wall and ceilings; on this respect, integrated brackets facilitate their commissioning.

Swing-out motorfans facilitate cleaning and extraordinary maintenance. Alternative speed settings (AC versions are equipped with 3 speed motors, while EC models can be adjusted through 0-10 V potentiometers) offer the best compromise among performance, consumption and noise.

COMPOSITION RANGE

CA IN-LINE range consists of 19 models, nominal diameters between 100 mm and 200 mm, divided into 3 series: CA IN-LINE, CA IN-LINE QUIET and CA IN-LINE QUIET ES, each with alternative type of motorfans and different levels of soundproofing.

KEY FEATURES

- Easy installation in small spaces thanks to short height.
- Flexible installation, horizontal, vertical and slanted, on walls, ceilings and in false-ceilings, even in the presence of high concentrations of dust or water.
- Quick commissioning: all electrical connections are located inside a highly (IP55) protected box outside the casing.
- Easy maintenance, thanks to the motorfans fixed to the lower covers hinged to the casings to allow them to rotate outwardly.
- Possibility to conveniently adapt the performance according to real needs, for the best balance of airflow, consumption and noise emissions.
- Very low noise emissions (CA IN-LINE QUIET and CA IN-LINE QUIET ES).
- Very low consumptions (CA IN-LINE QUIET ES).
- Long lasting reliability, thanks to high quality, virtually maintenance free motors.





CONSTRUCTION RANGE

1. TERMINAL BOXES

Highly (IP55) protected against dust and water, are located outside the casings and fitted to power cables to allow their positioning in the most appropriate place, depending on the specific installation needs.

2. ROBUST GALVANIZED STEEL SHEET CASINGS

Inner sound proof lining (material and thickness change with the series) to reduce noise emissions. Protection grade IP44 when ducted.

3. CIRCULAR SPIGOTS

On supply and extract, equipped with double lip rubber gaskets to avoid air leakages, fitting into standard ducts.

5. GALVANIZED STEEL SHEET BRACKETS

Directly fixed to the casing for faster installation.

5. MOTOR FANS

Dynamically balanced as a unit; centrifugal impellers with backward curved blades directly coupled with single-phase, external rotors (EC in ES models). Ball bearings to grant long lasting maintenance free operation.

4. COWER COVERS

Hinged to the casings and free to rotate downwards and backwards to facilitate access to the attached motorfan, thus granting easier cleaning and extraordinary maintenance.



CA IN-LINE RANGE

Compact flat in-line centrifugal fans

Suitable for indoor wall-mounted applications at the end of ventilation ducts in residential and industrial environments as factories, hospitals, gyms, restaurants, etc...

TECHNICAL FEATURES

- Casings made of galvanized steel sheet, robust and resistant to corrosion, highly (IP44) protected against dust and water when ducted; inner soundproof lining, consisting of 10 mm thick PE foam, to reduce noise emissions into adjacent rooms.
- Fixing brackets, made of galvanized steel sheet, integrated in the casings to speed up installation.
- Circular spigots for connection to standard commercial hoses, fitted with a double lip rubber gasket for perfect air tightness.
- Highly efficient backward curved centrifugal impellers directly coupled to single-phase, 3 speed, protected against overheating, external rotor motors. Ball bearings to grant long lasting (at least 30.000 h) continuous duty at the maximum rated temperature. Speed setting through Vortice speed switches (optional); speed control from 0-100% by means of Vortice's electronic speed controllers (optional).
- Electrical connection boxes, made of plastic resin, shock proof and resistant to aggressive agents, with a very high (IP55 protection against dust and water.
- Protection against dust and water: IP44 (when ducted).
- Electric insulation class: I (grounding mandatory).

TECHNICAL DATA

Models	Code	V 50/60Hz	W* max/mid/min			A max	Max airflow*						Max pressure*						Max* °C	Kg
							m³/h max/mid./min.			l/s max/mid/min			mmH₂O max/mid/min			Pa max/mid/min				
CA-IL 100	16250	230	50	33	18	0,22	250	200	120	69	55	33	35,7	32,8	17,7	350	315	170	40	5,4
CA-IL 125	16251	230	50	33	18	0,22	310	250	160	86	69	44	35,7	33,8	19,7	350	325	190	40	5,4
CA-IL 150 Q	16252	230	50	33	18	0,23	350	280	160	97	78	44	30,6	29,1	15,1	300	280	145	40	5,8
CA-IL 150	16254	230	100	65	49	0,44	460	320	230	128	89	64	44,1	33,3	19,2	435	320	185	40	6,2
CA-IL 160 Q	16253	230	50	33	18	0,23	350	250	160	97	69	44	30,6	27	22,9	300	260	220	40	6
CA-IL 160	16255	230	100	70	50	0,46	460	330	250	128	92	69	45,9	42,7	32,2	450	410	310	40	6
CA-IL 200	16256	230	140	85	50	0,61	830	600	410	231	167	114	55,3	50	34,8	550	480	335	40	9,4

* Values referred to 230V/50Hz



ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA-IL 100	CA-IL 125	CA-IL 150 Q	CA-IL 150
CODE		16250	16251	16252	16254
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	690,92	564,90	470,53	771,93
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None
Nominal NRVU flow rate	m³/s	0,0661	0,0803	0,889	0,1225
Effective electric power input	kW	0,050	0,050	0,050	0,100
Face velocity at design flow rate	m/s	8,471	6,541	5,030	6,9320
Nominal external pressure (Δp_s , ext)	Pa	19	18	29	16
Internal pressure drop of ventilation components (Δp_s , int)	Pa	200	175	148	278
Internal pressure drop of non-ventilation components (Δp_s , add)	Pa	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	29	31	31,5	36,0
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	51	51	53	57

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

	UNIT OF MEASURE	CA-IL160 Q	CA-IL 160	CA-IL 200
CODE		16253	16255	16256
Supplier's name or trade mark	-	Vortice	Vortice	Vortice
SFPint	W(m³/s)	518,36	835,83	569,95
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None
Nominal NRVU flow rate	m³/s	0,0781	0,1186	0,2183
Effective electric power input	kW	0,050	0,105	0,141
Face velocity at design flow rate	m/s	3,882	5,8992	6,9497
Nominal external pressure (Δp_s , ext)	Pa	38	17	34
Internal pressure drop of ventilation components (Δp_s , int)	Pa	161	287	255
Internal pressure drop of non-ventilation components (Δp_s , add)	Pa	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	31,1	34,3	44,8
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	54	57	62

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

CA IN-LINE RANGE

COMPACT FLAT IN-LINE CENTRIFUGAL FANS

SOUNDS LEVELS

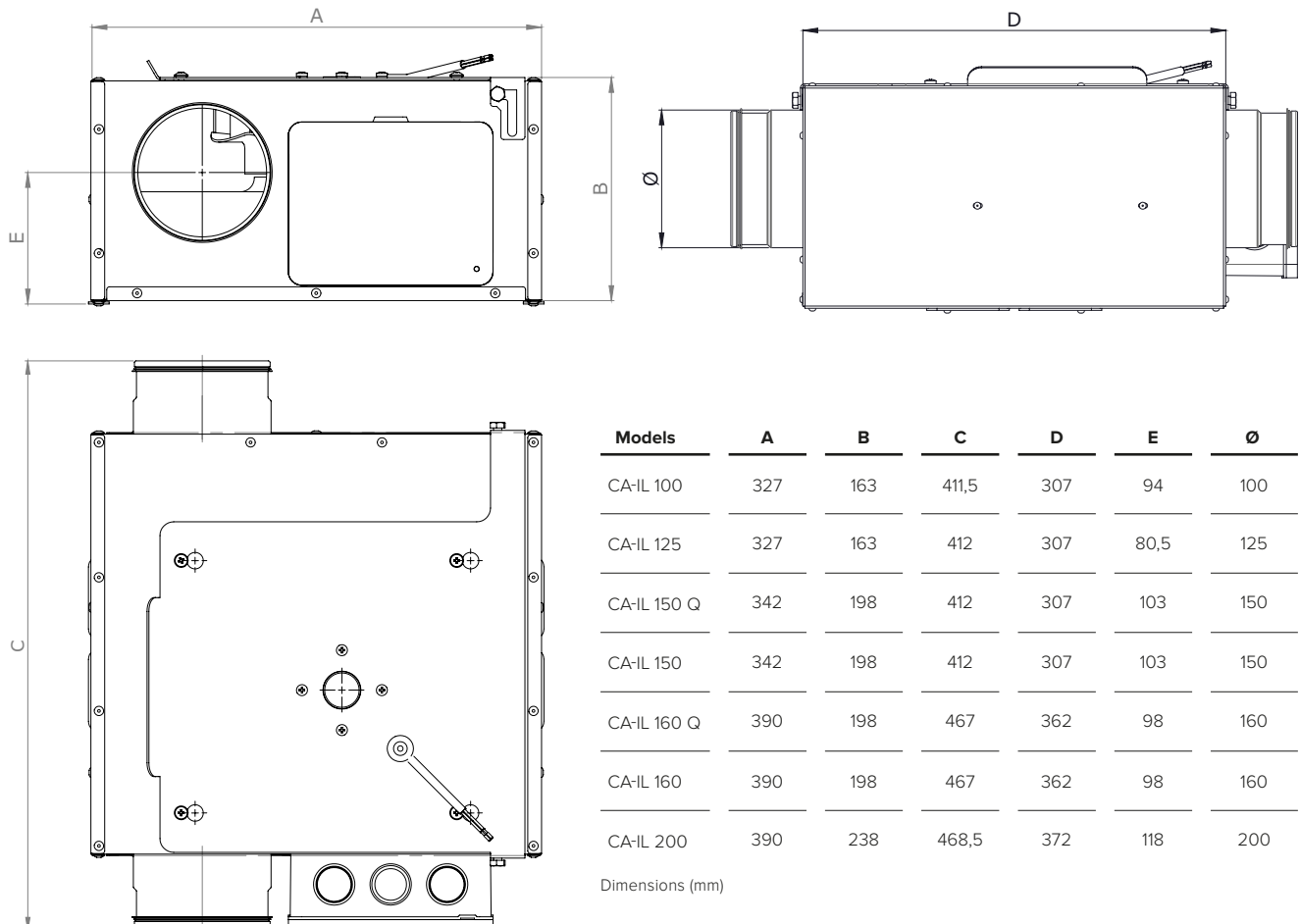
Models	Breakout sound power LwA dB(A)			Sound pressure Lp _{3m} * dB(A)			Sound power on extract dB(A)			Sound power on supply dB(A)		
	Max Speed	Mid. Speed	Min. Speed	Max Speed	Mid. Speed	Min. Speed	Max Speed	Mid. Speed	Min. Speed	Max Speed	Mid. Speed	Min. Speed
CA-IL 100	51	45	34	30,5	24,5	13,5	60	57	42	64	60	46
CA-IL 125	52	46	35	31,5	25,5	14,5	60	56	42	72	63	52
CA-IL 150 Q	53	48	36	32,5	27,5	15,5	61	54	41	65	58	45
CA-IL 150	57	50	42	36,5	29,5	21,5	67	60	51	70	63	54
CA-IL 160 Q	54	46	38	33,7	25,6	17,4	62	54	41	63	58	44
CA-IL 160	57	50	42	36,5	29,5	21,5	67	57	48	69	60	51
CA-IL 200	62	50	40	41,5	29,5	19,5	71	59	49	78	67	54

*Calculated in free field conditions at 3 m distance in accordance with EN ISO 3741 standard.

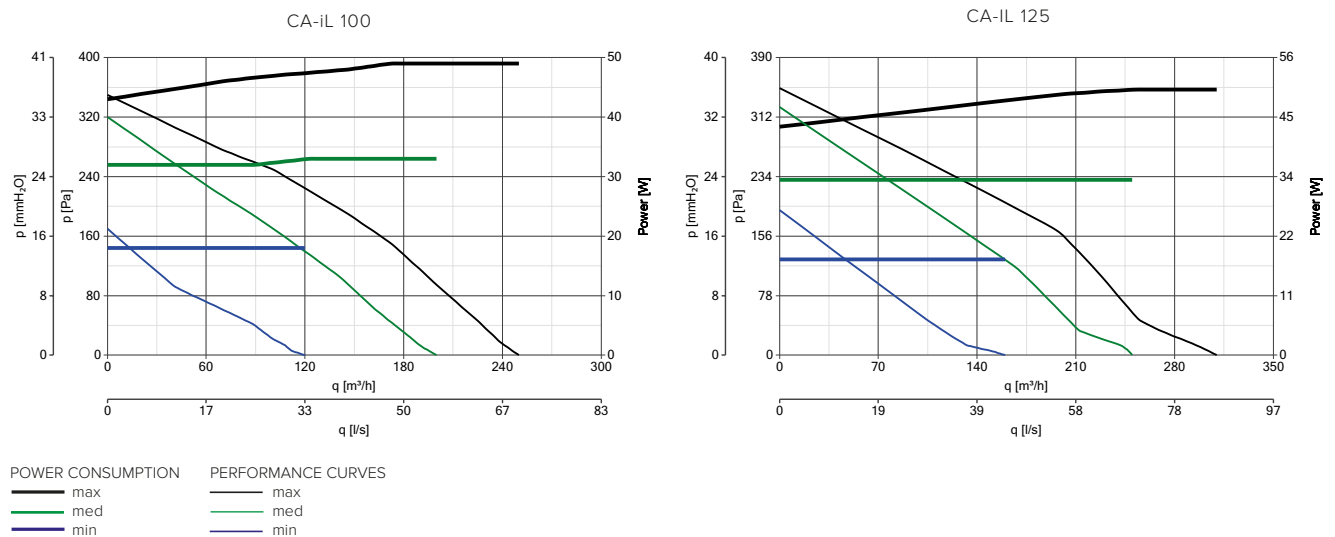




DIMENSIONS



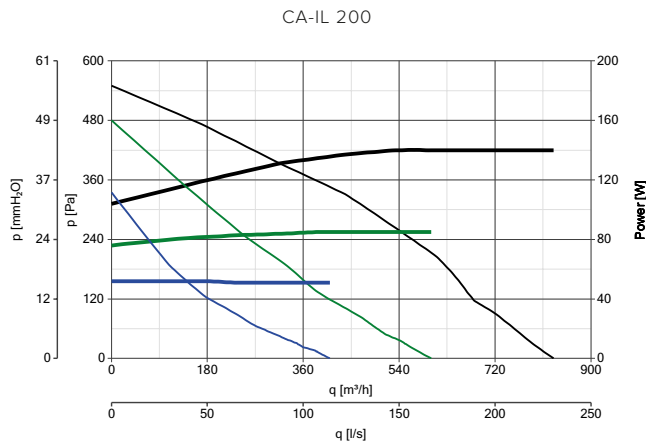
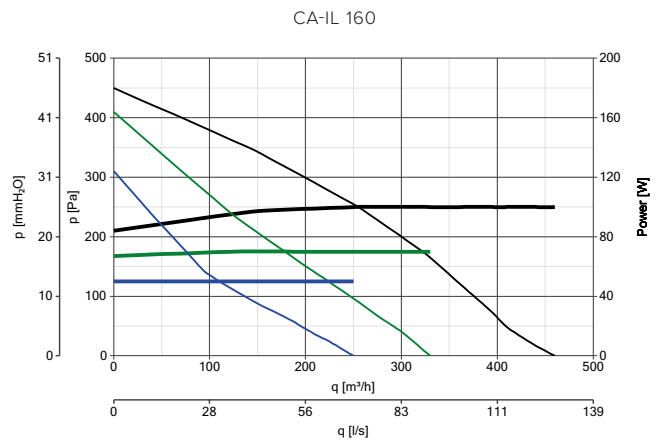
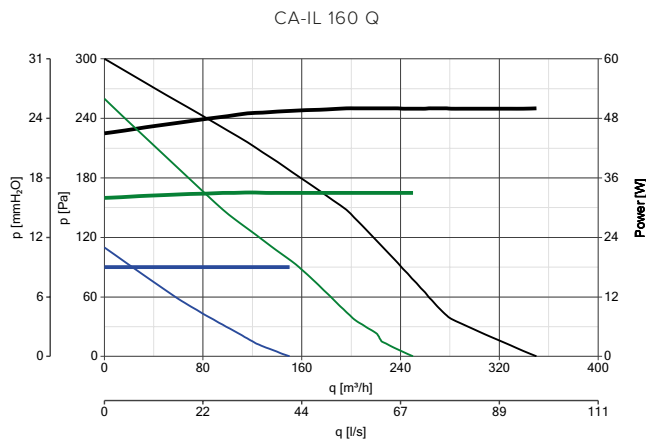
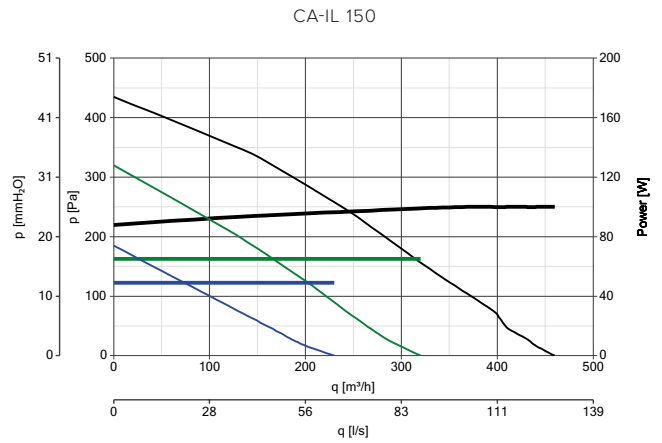
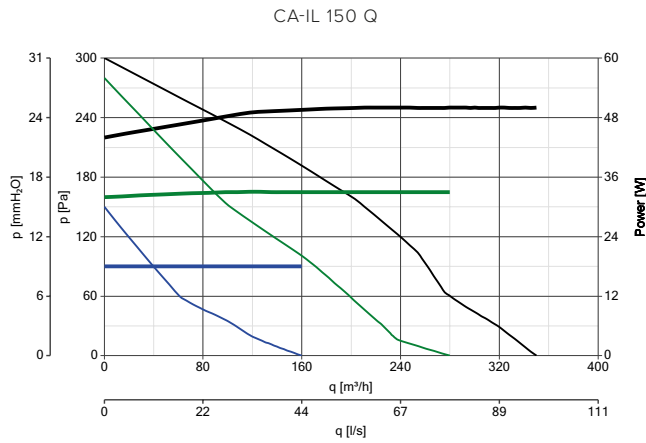
PERFORMANCE CURVES



CA IN-LINE RANGE

COMPACT FLAT IN-LINE CENTRIFUGAL FANS

PERFORMANCE CURVES



POWER CONSUMPTION PERFORMANCE CURVES

— max — max
— med — med
— min — min



CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966
	POT-IT - POTENTIOMETER	12826	ALL PRODUCTS
	POT - POTENTIOMETER	12828	ALL PRODUCTS
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	21196	ALL PRODUCTS
	TRIO D - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE DIN STANDARD ELECTRIC BOXES	12866	ALL PRODUCTS
	IREM D - ELECTRONIC STEPLESS SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE DIN STANDARD ELECTRIC BOX	12867	ALL PRODUCTS

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT
	GR - PROTECTIVE METAL GRIDS (TO BE ASSEMBLED ON THE PRODUCT)	100	21177
		125	21178
		150	21179
		160	21180
		200	21181
	FS - FLEXIBLE SLEEVES WITH CLAMPS FOR HOSE FASTENING	100	21182
		125	21183
		150	21184
		160	21185
		200	21186
	TRA 250 - OUTLET PORT PROTECTION GRILLES - FITTED TO THE APPLIANCE INTAKE TO PREVENT ACCIDENTAL CONTACT WITH MOVING PARTS IF THE APPLIANCE IS INSTALLED IN AN ACCESSIBLE POSITION	51150	16253 - 16255 - 16256
	PGR 250 - PLASTIC MADE GRAVITY SHUTTERS	50150	16253 - 16255 - 16256

CA IN-LINE QUIET RANGE

Soundproof compact flat in-line centrifugal fans

Suitable for indoor wall-mounted applications at the end of ventilation ducts in residential and industrial environments as factories, hospitals, gyms, restaurants, etc...

TECHNICAL FEATURES

- Casings made of galvanized steel sheet, robust and resistant to corrosion, highly (IP44) protected against dust and water when ducted; improved inner sound proof lining, consisting of 50 mm thick melamine coating, to dramatically reduce noise emissions into adjacent rooms.
- Fixing brackets, made of galvanized steel sheet, integrated in the casings to speed up installation.
- Circular spigots for connection to standard commercial hoses, fitted with a double lip rubber gasket for perfect air tightness.
- Highly efficient backward curved centrifugal impellers directly coupled to single-phase, 3 speed, protected against overheating, external rotor motors. Ball bearings to grant long lasting (at least 30.000 h) continuous duty at the maximum rated temperature. Speed setting through Vortice speed switches (optional); speed control from 0-100% by means of Vortice's electronic speed controllers (optional).
- Electrical connection boxes, made of plastic resin shock proof and resistant to aggressive agents, with a very high (IP55) protection against dust and water.
- Protection against dust and water: IP44 (when ducted).
- Electric insulation class: I (grounding mandatory).

TECHNICAL DATA

Models	Code	V 50/60Hz	W* max/med/min			A max	Max airflow*						Max pressure*						Max* °C	Kg
							m³/h max/med/min			l/s max			mmH ₂ O max/med/min			Pa max/med/min				
CA-IL 100 QUIET	16260	230	50	33	18	0,22	250	200	120	69	55	33	35,7	32,8	17,7	350	315	170	40	5,6
CA-IL 125 QUIET	16261	230	50	33	18	0,22	310	250	160	86,1	69	44	35,7	33,8	19,7	350	325	190	40	5,6
CA-IL 150 Q QUIET	16262	230	50	33	18	0,23	350	280	160	97,2	97	44	30,6	29,1	15,1	300	280	145	40	6
CA-IL 150 QUIET	16264	230	100	65	49	0,44	460	320	230	128	89	64	44,1	33,3	19,2	435	320	185	40	6
CA-IL 160 Q QUIET	16263	230	50	33	18	0,23	350	250	160	97	64	69	30,6	27	22,9	300	260	220	40	6,2
CA-IL 160 QUIET	16265	230	100	70	50	0,46	460	330	250	128	92	69	45,9	42,7	32,2	450	410	310	40	6,2
CA-IL 200 QUIET	16266	230	140	85	50	0,61	830	600	410	231	167	114	55,3	50	3,8	550	480	335	40	9,6

* Values referred to 230V/50Hz



ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA-IL 100 QUIET	CA-IL 125 QUIET	CA-IL 150 Q QUIET	CA-IL 150 QUIET
CODE		16260	16261	16262	16264
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	690,92	564,90	470,53	771,93
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None
Nominal NRVU flow rate	m³/s	0,0661	0,0803	0,0889	0,1225
Effective electric power input	kW	0,050	0,050	0,050	0,100
Face velocity at design flow rate	m/s	8,417	6,541	5,030	6,9320
Nominal external pressure (Δp_s , ext)	Pa	19	18	29	16
Internal pressure drop of ventilation components (Δp_s , int)	Pa	200	175	148	278
Internal pressure drop of non-ventilation components (Δp_s , add)	Pa	0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	29	31	31,5	36,0
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	51	51	51	55

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

	UNIT OF MEASURE	CA-IL160 Q QUIET	CA-IL 160 QUIET	CA-IL 200 QUIET
CODE		16263	16265	16266
Supplier's name or trade mark	-	Vortice	Vortice	Vortice
SFPint	W(m³/s)	518,36	835,83	569,95
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None
Nominal NRVU flow rate	m³/s	0,0781	0,1186	0,2183
Effective electric power input	kW	0,050	0,105	0,141
Face velocity at design flow rate	m/s	3,882	5,8992	6,9497
Nominal external pressure (Δp_s , ext)	Pa	38	17	34
Internal pressure drop of ventilation components (Δp_s , int)	Pa	161	287	255
Internal pressure drop of non-ventilation components (Δp_s , add)	Pa	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	31,1	34,3	44,8
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	49	55	59

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

CA IN-LINE QUIET RANGE

SOUNDPROOF COMPACT FLAT IN-LINE CENTRIFUGAL FANS

SOUNDS LEVELS

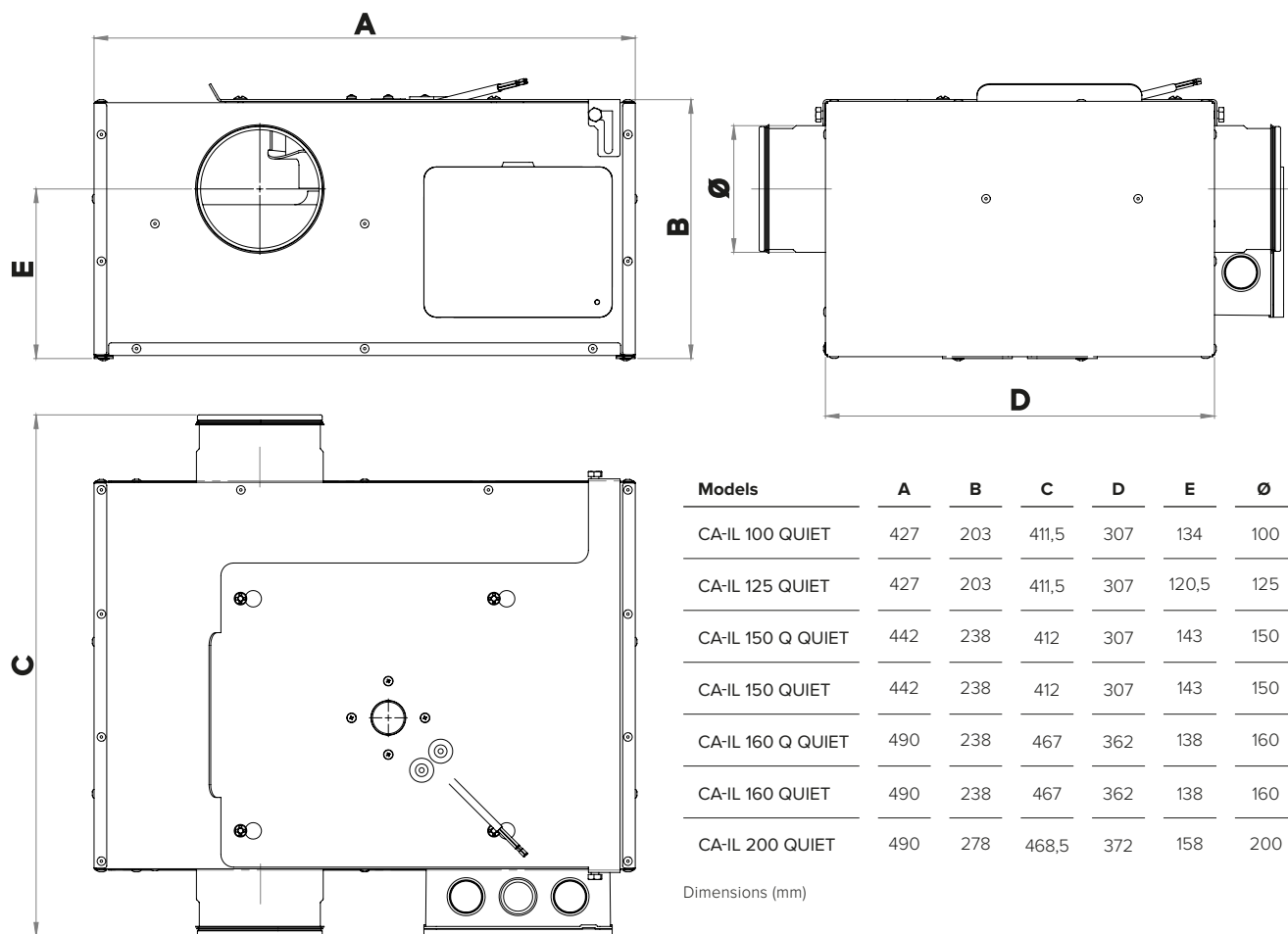
Models	Breakout sound power LwA dB(A)			Sound pressure Lp _{3m} * dB(A)			Sound power on extract dB(A)			Sound power on supply dB(A)		
	Max Speed	Mid. Speed	Min. Speed	Max Speed	Mid. Speed	Min. Speed	Max Speed	Mid. Speed	Min. Speed	Max Speed	Mid. Speed	Min. Speed
CA-IL 100 QUIET	51	44	30	30,5	23,5	9,5	52	47	34	63	59	44
CA-IL 125 QUIET	51	44	34	30,5	23,5	13,5	52	49	34	64	60	45
CA-150 Q QUIET	51	44	33	30,5	23,5	12,5	53	45	32	64	57	44
CA-IL 150 QUIET	55	47	40	34,5	26,5	19,5	63	50	42	71	59	51
CA-IL 160 Q QUIET	49	44	33	28,5	23,5	12,5	51	46	33	64	58	44
CA-IL 160 QUIET	55	47	40	34,5	26,5	19,5	60	48	40	68	58	49
CA-IL 200 QUIET	59	50	37	38,5	29,5	16,5	66	53	44	76	65	54

*Calculated in free field conditions at 3 m distance in accordance with EN ISO 3741 standard.

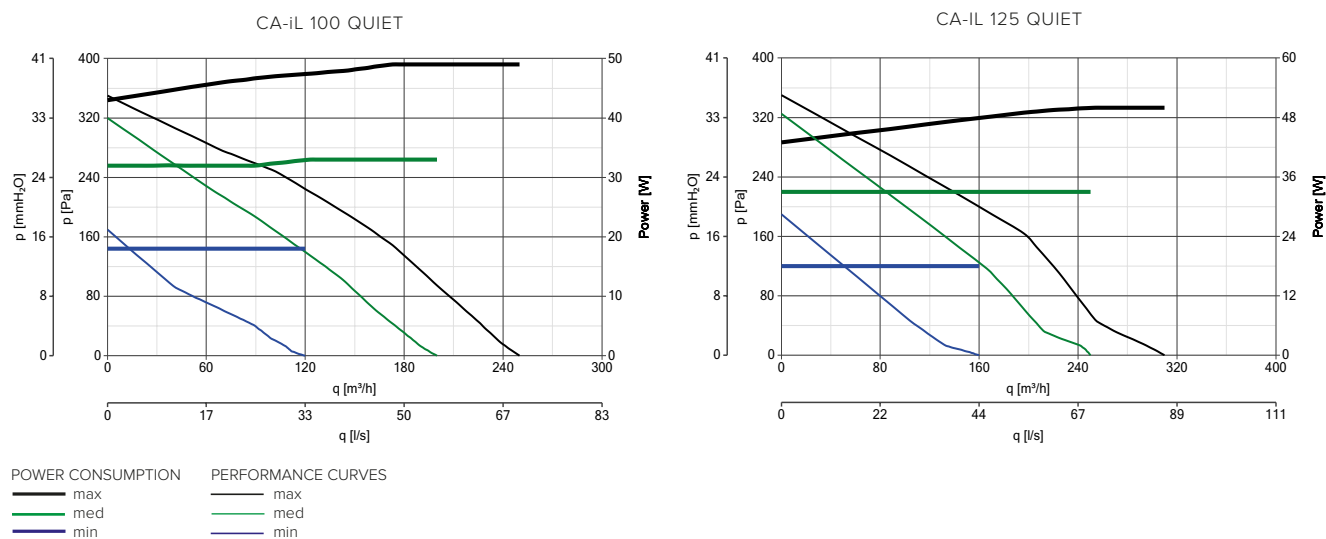




DIMENSIONS



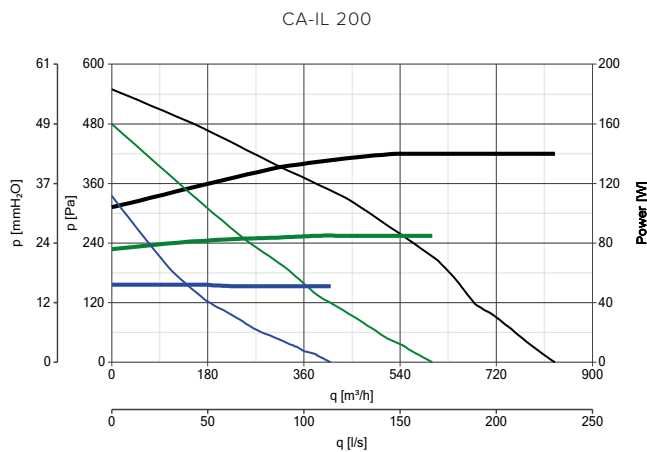
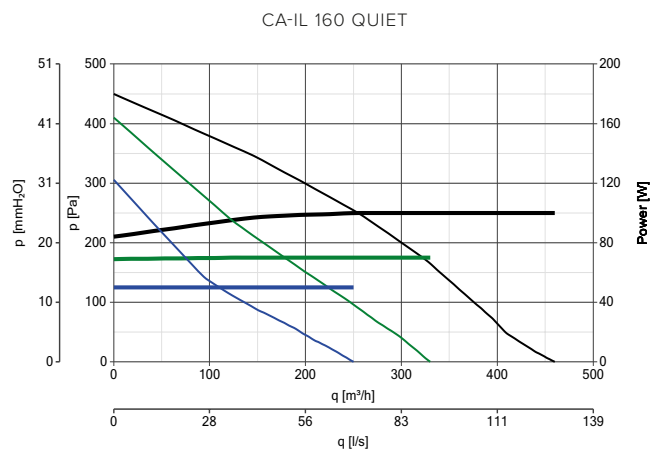
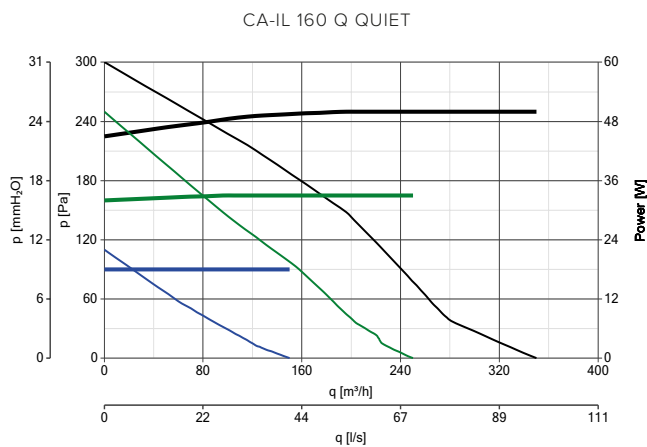
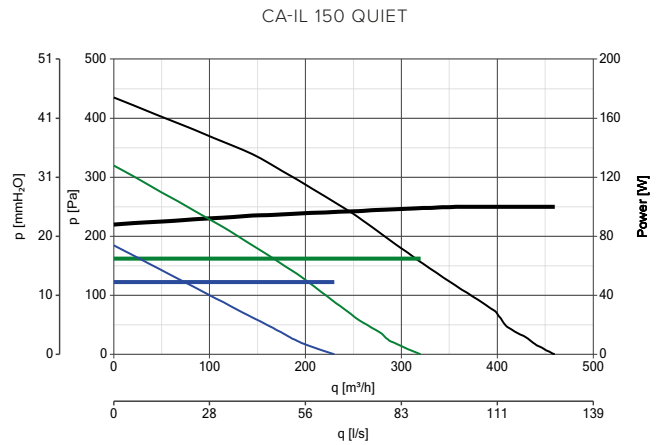
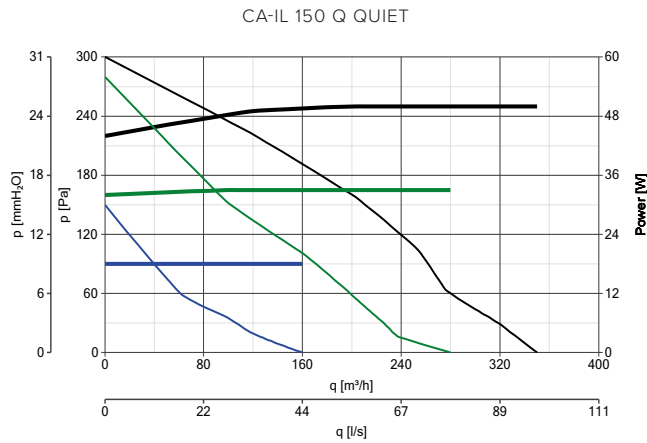
PERFORMANCE CURVES



CA IN-LINE QUIET RANGE

SOUNDPROOF COMPACT FLAT IN-LINE CENTRIFUGAL FANS

PERFORMANCE CURVES



POWER CONSUMPTION PERFORMANCE CURVES

— max — max
— med — med
— min — min



CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966
	POT-IT - POTENTIOMETER	12826	ALL PRODUCTS
	POT - POTENTIOMETER	12828	ALL PRODUCTS
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	21196	ALL PRODUCTS
	TRIO D - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE DIN STANDARD ELECTRIC BOXES	12866	ALL PRODUCTS
	IREM D - ELECTRONIC STEPLESS SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE DIN STANDARD ELECTRIC BOX	12867	ALL PRODUCTS

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT
	GR - PROTECTIVE METAL GRIDS (TO BE ASSEMBLED ON THE PRODUCT)	100	21177
		125	21178
		150	21179
		160	21180
		200	21181
	FS - FLEXIBLE SLEEVES WITH CLAMPS FOR HOSE FASTENING	100	21182
		125	21182
		150	21183
		160	21185
		200	21186
	TRA 250 - OUTLET PORT PROTECTION GRILLES - FITTED TO THE APPLIANCE INTAKE TO PREVENT ACCIDENTAL CONTACT WITH MOVING PARTS IF THE APPLIANCE IS INSTALLED IN AN ACCESSIBLE POSITION	51150	16265 - 16266
	PGR 250 - PLASTIC MADE GRAVITY SHUTTERS	50150	16265 - 16266

CA IN-LINE QUIET ES RANGE

Soundproof compact flat in-line centrifugal EC fans

Suitable for indoor wall-mounted applications at the end of ventilation ducts in residential and industrial environments as factories, hospitals, gyms, restaurants, etc...

TECHNICAL FEATURES

- Casings made of galvanized steel sheet, robust and resistant to corrosion, highly (IP44) protected against dust and water when ducted; improved inner sound proof lining, consisting of 50 mm thick melamine coating, to dramatically reduce noise emissions into adjacent rooms.
- Fixing brackets, made of galvanized steel sheet, integrated in the casings to speed up installation.
- Circular spigots for connection to standard commercial hoses, fitted with a double lip rubber gasket for perfect air tightness.
- Highly efficient backward curved centrifugal impellers directly coupled with energy saving, speed controllable (0-10 V signal) single-phase, EC (brushless), protected against overheating, external rotor motors. Ball bearings to grant long lasting (at least 40.000 h) continuous duty at the maximum rated temperature. Speed setting through Vortice potentiometers (optional).
- Electrical connection boxes, made of plastic resin shock proof and resistant to aggressive agents, with a very high (IP55) protection against dust and water.
- Protection against dust and water: IP44 (when ducted)
- Electric insulation class: I (grounding mandatory).

TECHNICAL DATA

Models	Code	V 50/60Hz	W*	A	Max airflow*		Max pressure*		Max* °C	Kg
					m³/h max	l/s max	mmH ₂ O max	Pa max		
CA-IL 100 QUIET ES	16270	220/240	85	0,73	310	86,1	71,4	700	40	5,6
CA-IL 125 QUIET ES	16271	220/240	85	0,74	380	105,5	72,4	710	40	5,6
CA-IL 150 QUIET ES	16274	220/240	85	0,73	450	125	63,2	620	40	6
CA-IL 160 QUIET ES	16275	220/240	85	0,74	480	133,3	61,1	600	40	6
CA-IL 200 QUIET ES	16276	220/240	110	0,91	850	236,1	56	550	40	6,2

* Values referred to 230V/50Hz



ENERGY DATA FOR REGULATION N° 1254/2014/UE

	UNIT OF MEASURE	CA-IL 100 QUIET ES	CA-IL 125 QUIET ES	CA-IL 150 QUIET ES	CA-IL 160 QUIET ES	CA-IL 200 QUIET ES
CODE		16270	16271	16274	16275	16276
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	1002,42	770,82	644,12	585,45	413,18
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NR-VU-U**	NR-VU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***	MSD***
Type of heat recovery system HRS	-	None	None	None	None	None
Nominal NRVU flow rate	m³/s	0,0794	0,0883	0,1150	0,1197	0,2208
Effective electric power input	kW	0,085	0,085	0,085	0,085	0,109
Face velocity at design flow rate	m/s	10,115	7,1980	6,5076	5,9545	413,18
Nominal external pressure (Δps, ext)	Pa	26	78	41	52	36
Internal pressure drop of ventilation components (Δps,int)	Pa	386	314	278	262	185
Internal pressure drop of non-ventilation components (Δps,add)	Pa	0	0	0	0	
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	38,5	40,7	43,2	44,8	44,8
Declared maximum internal leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*
Declared maximum external leakage rate of the casing of ventilation units	%	NA*	NA*	NA*	NA*	NA*
Energy performance or classification of the filters	-	NA*	NA*	NA*	NA*	NA*
Description of visual filter warning	-	NA*	NA*	NA*	NA*	NA*
Casing sound power level	LWA[dB(A)]	59	59	56	56	58

*NA: Not applicable - **RVU-U: Non Residential Ventilation Unit - Unidirectional - ***MSD: Multi-Speed Drive

SOUNDS LEVELS

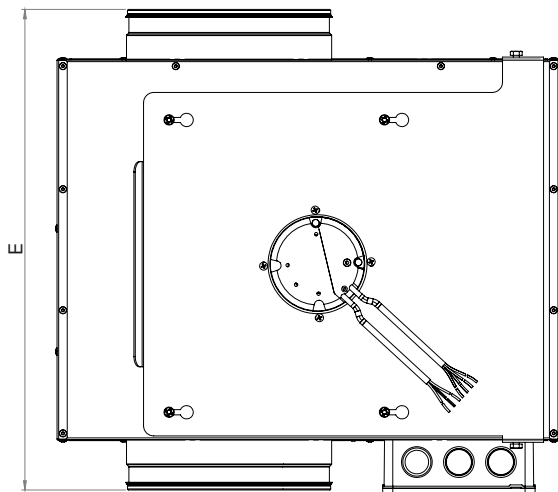
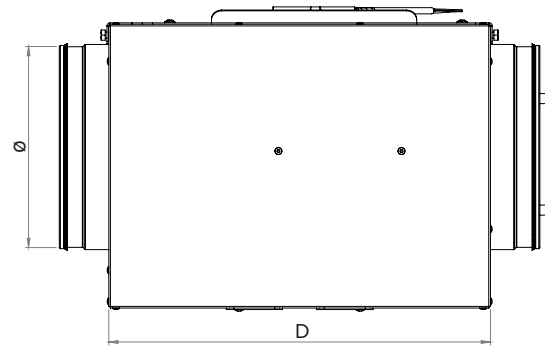
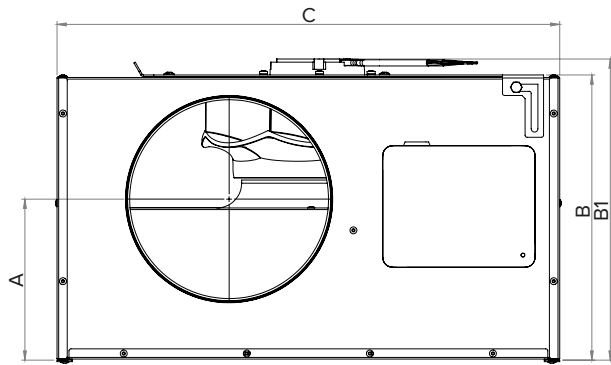
Models	Breakout sound power LwA dB(A)			Sound pressure Lp _{3m} * dB(A)			Sound power on extract dB(A)			Sound power on supply dB(A)		
	Max Speed	Mid Speed	Min Speed	Max Speed	Mid Speed	Min Speed	Max Speed	Mid Speed	Min Speed	Max Speed	Mid Speed	Min Speed
CA-IL 100 QUIET ES	60	47	36	39,5	26,5	15,5	61	52	42	72	63	53
CA-IL 125 QUIET ES	59	47	37	38,5	26,5	16,5	62	51	41	71	61	52
CA-IL-150 QUIET ES	56	47	41	35,5	26,5	20,5	60	53	47	71	64	57
CA-IL 160 QUIET ES	56	47	41	35,5	26,5	20,5	58	48	40	68	60	51
CA-IL 200 QUIET ES	58	53	43	37,5	32,5	22,5	63	55	46	74	67	56

*Calculated in free field conditions at 3 m distance in accordance with EN ISO 374 standard.

CA IN-LINE QUIET ES RANGE

SOUNDPROOF COMPACT FLAT IN-LINE CENTRIFUGAL EC FANS

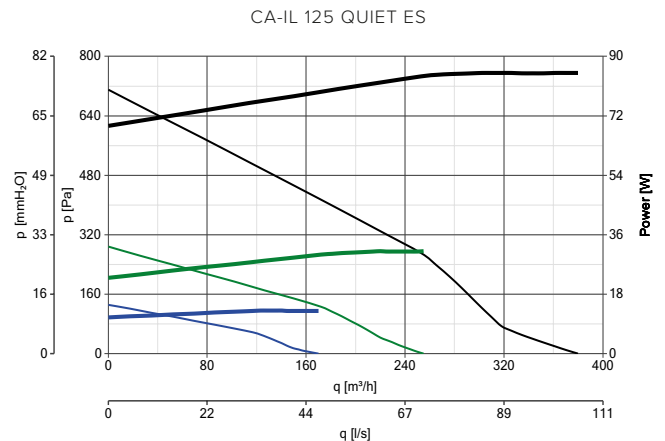
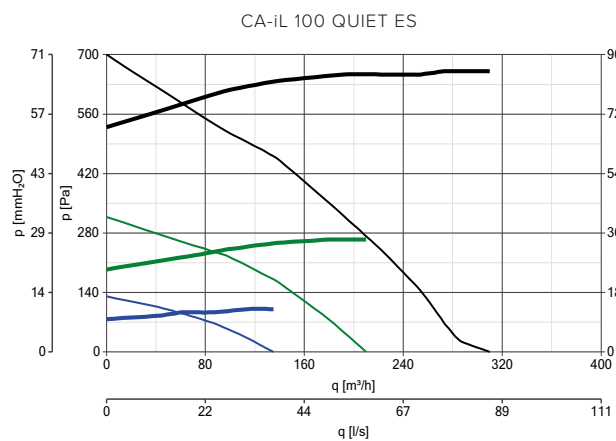
DIMENSIONS



Models	A	B	B1	C	D	E	Ø
CA-IL 100 QUIET ES	134	203	203	427	307	411,5	100
CA-IL 125 QUIET ES	120,5	203	203	427	307	411,5	125
CA-IL 150 QUIET ES	143	238	203	442	307	412	150
CA-IL 160 QUIET ES	138	238	203	490	362	467	160
CA-IL 200 QUIET ES	163	277	288,5	490	372	468,5	200

Dimensions (mm)

PERFORMANCE CURVES



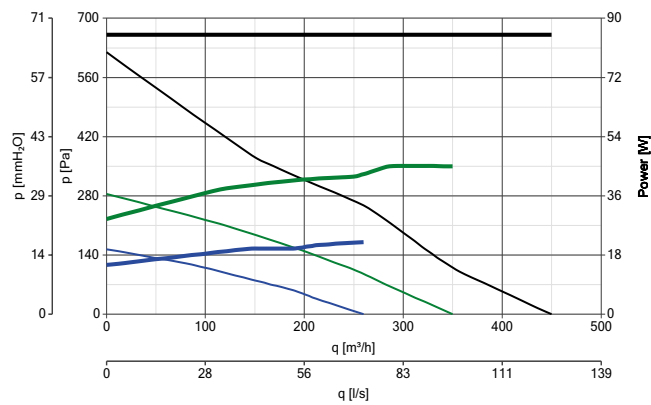
POWER CONSUMPTION
 — max
 — med
 — min

PERFORMANCE CURVES
 — max
 — med
 — min

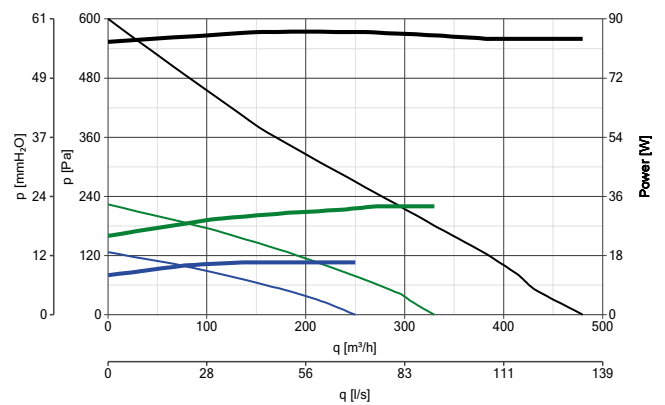


PERFORMANCE CURVES

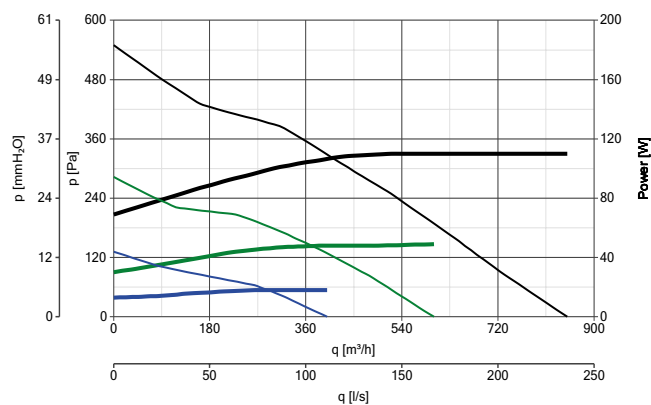
CA-IL 150 QUIET ES



CA-IL 160 QUIET ES



CA-IL 200 QUIET ES



POWER CONSUMPTION
— max
— med
— min

PERFORMANCE CURVES
— max
— med
— min

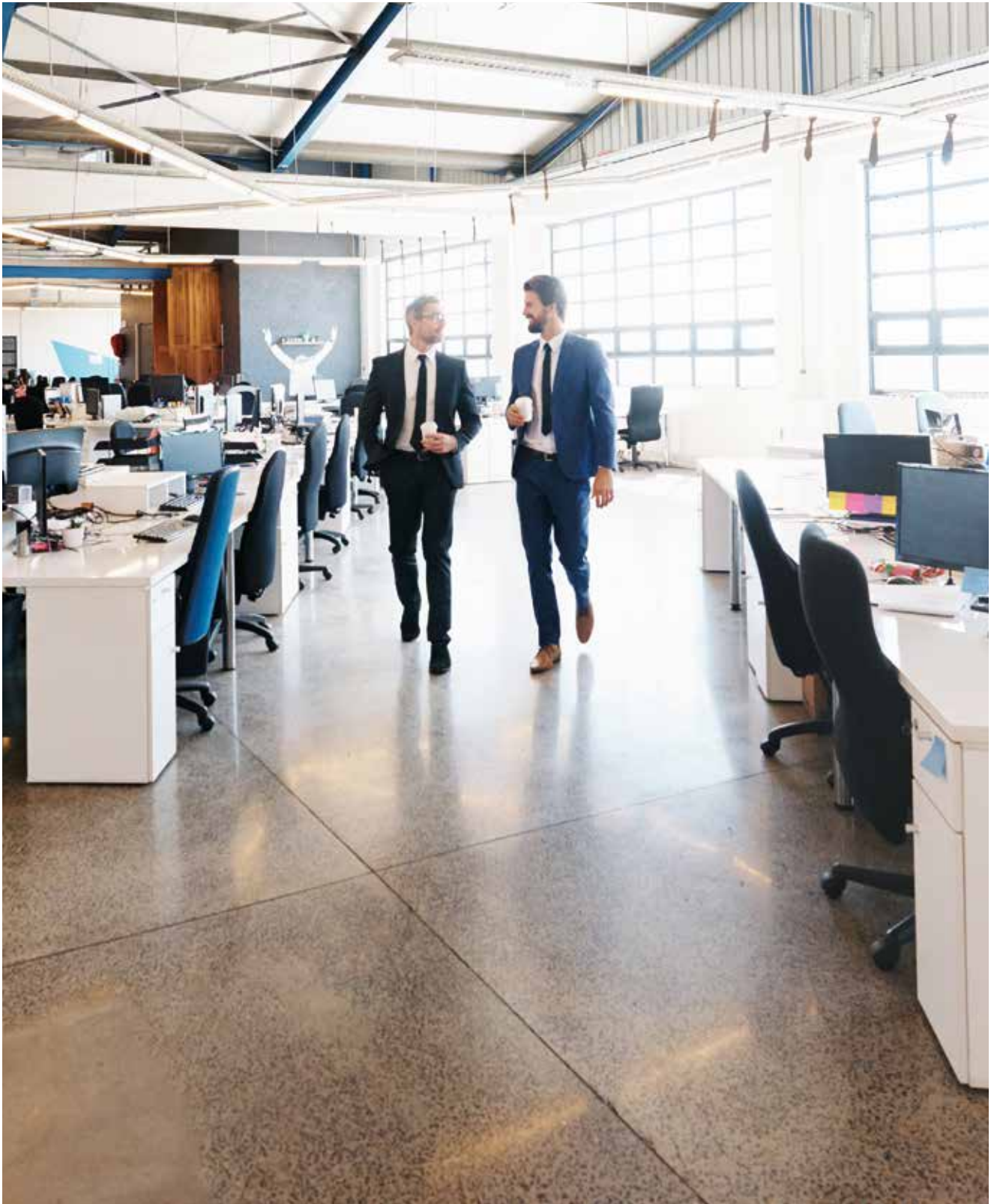
CA IN-LINE QUIET ES RANGE
SOUNDPROOF COMPACT FLAT IN-LINE CENTRIFUGAL EC FANS

CONTROLLERS

MODELS	DESCRIPTION	CODE	PRODUCT
	C 1.5 - ELECTRONIC SPEED CONTROLLER 1.5 A	12966	ALL PRODUCTS
	KIT SCB - BUILT-IN CONTROLLER ADAPTOR	22481	12966
	POT-IT - POTENTIOMETER	12826	ALL PRODUCTS
	POT - POTENTIOMETER	12828	ALL PRODUCTS
	TRIO - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE UNI 503 STANDARD ELECTRIC BOXES	21196	ALL PRODUCTS
	TRIO D - 3 SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE DIN STANDARD ELECTRIC BOXES	12866	ALL PRODUCTS
	IREM D - ELECTRONIC STEPLESS SPEED SWITCH FOR WALL AND FLUSH MOUNTING INSIDE DIN STANDARD ELECTRIC BOX	12867	ALL PRODUCTS

ACCESSORIES ON REQUEST

MODELS	DESCRIPTION	CODE	PRODUCT
	GR - PROTECTIVE METAL GRIDS (TO BE ASSEMBLED ON THE PRODUCT)	100	21177
		125	21178
		150	21179
		160	21180
		200	21181
	FS - FLEXIBLE SLEEVES WITH CLAMPS FOR HOSE FASTENING	100	21182
		125	21183
		150	21184
		160	21185
		200	21186
	TRA 250 - OUTLET PORT PROTECTION GRILLES - FITTED TO THE APPLIANCE INTAKE TO PREVENT ACCIDENTAL CONTACT WITH MOVING PARTS IF THE APPLIANCE IS INSTALLED IN AN ACCESSIBLE POSITION	51150	16275 - 16276
	PGR 250 - PLASTIC MADE GRAVITY SHUTTERS	50150	16275 - 16276



[illegible]

[illegible]

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