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COMMERCIAL VENTILATION



NEW



HEADQUARTERS



Our current Vortice Headquarters have been located in Tribiano (Milan) since 1972.

Vortice main company's philosophy is the concept that "air is our life". Our mission is always to provide effective solutions for improved air quality using the latest technology to develop and manufacture effective products worldwide.

Vortice has achieved European market leadership by dedicating their efforts to the production of products for ventilation, climate control, heating, extraction, purification and the treatment of air, for domestic, commercial and industrial applications. Since 1954 Vortice has been synonymous with quality and excellence and continues to make significant improvements by investing in continuous research to improve the efficiency and quality of its products.



VORTICE IN THE WORLD



Founded in 1974, Vortice France is located at Créteil about 10 Km from Paris.



Founded in 1977, Vortice Limited is located at Burton on Trent in the East Midlands.



2010 - Our Moscow representative office was established.



Founded in 2012, Vortice Ventilation System is located about 200 Km from Shanghai.



Founded in 2012, Vortice Latam in San José Costa Rica.

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COMMERCIAL VENTILATION

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In-line centrifugal fans in metal, 2 speeds with motor shafts mounted on ball bearings

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Energy saving in-line centrifugal fans with three-phase brushless motor, 2 speeds, motor shafts mounted on ball bearings

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In-line centrifugal fans self-extinguishing plastic with induction motor, external rotor with manual reset thermal protection device and with motor shafts mounted on ball bearings

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Centrifugal duct fans for external wall with induction motor, external rotor, 2 speeds with motor shafts mounted on ball bearings, with manual reset thermal protection device

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Centrifugal duct fans for wall mounting with induction motor, external rotor, 2 speeds with motor shafts mounted on ball bearings, with manual reset thermal protection device

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Centrifugal duct fans for roof mounting with induction motor, external rotor, 2 speeds with motor shafts mounted on ball bearings, with manual reset thermal protection device

34 **VORT QBK RANGE**

Self-supporting double inlet cabinet fans equipped with AC motor, 1 or 3 speeds, single or three-phase

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Double cabinet fans equipped with AC motor, made of aluminium frame and sandwich panels, 1 or 3 speeds single or three-phase

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Sound-proof double inlet cabinet fans equipped with AC motor, 3 or 4 speeds, single or three-phase

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Belt-driven cabinet fans equipped with double inlet centrifugal fans with forward curved blades, driven by belts and pulleys

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Soundproofed self-bearing fan units for residential, commercial and industrial applications

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Practical steps towards saving energy

Following ratification of the Kyoto Protocol, the European Commission launched the “20-20-20” plan, which sets Member States **the target of reducing energy consumption by 20% and increasing their share of renewable energies by 20% by 2020.**

Directive 2009/125/EC ErP (Energy-related Products) is aimed at achieving these results. Its purpose is to limit the direct and indirect energy consumption of products placed on EU markets. It replaces *Directive 2005/32/CE EuP (Energy-using Products)*, which referred to a smaller number of products, largely intended for private use.

The ErP Directive is applied in a series of Regulations which establish, for each type of energy-consuming product or device, the minimum efficiency limit below which they are not eligible for CE marking and may not therefore be placed on the markets of Member States.

These Regulations have the status of European Union laws. As such, they are not subject to the approval of national parliaments, and compliance with them is binding in the event of any conflict with national laws.

A common feature of all the Regulations in question is the criterion used for their application: to facilitate their assimilation by manufacturers, the legislator has established a two-stage pathway, under which the final efficiency target is preceded, generally two years earlier, by an intermediate target intended to be easier and less costly to reach.



Vortice and its commitment to the ErP Directive

The Regulations approved to date which affect Vortice products are summarised below.

» **EC Regulation N°1275/2008**, in force since January 2010, which establishes the maximum consumption of electrical appliances in stand-by mode.

» **EC Regulation N°640/2009**, in force since August 2009, which sets a minimum efficiency limit for all single-speed and three-phase electric motors having 2 to 6 poles and whose power rating is between 750 W and 375 kW.

The Regulation does not apply to certain types of motor:

- *motors which are fully integrated into a product (e.g. a fan), whose energy performance cannot be tested independently of the product itself;*
- *motors designed specifically to operate at ambient air temperatures exceeding 40 °C;*
- *motors designed to operate in potentially explosive atmospheres (ATEX).*

» **EU Regulation N°206/2012**, in force since January 2013, which establishes the minimum energy efficiency requirements for **CONDITIONERS** with rated capacity of up to 12 kW, and requires that performance, energy consumption and sound power level be declared for **COMFORT FANS** with electric power input of up to 125 W.

» **EU Regulation N°66/2014**, in force since February 2015, which establishes the minimum values of efficiency (energy and air flow) and average illumination on the cooking surface of **RANGE HOODS FOR DOMESTIC USE**.

» **EU Regulation N°327/2011**, in force since January 2013, which sets a minimum efficiency limit on all fans (whether axial, centrifugal, cross flow or mixed flow fans, such as those in the **VORTICEL E, VORTICEL A-E, VORTICEL MPC-E** and **VORTICENT C-E Series**), whose electric input power at its optimum energy efficiency point is between 125 W and 500 kW.

The Regulation does not apply to certain types of fan, including the following:

- *cooling fans of electric motors;*
- *fans specifically designed to operate in potentially explosive atmospheres (**E ATEX** and **C ATEX Series**);*
- *fans designed for emergency use only, at short-time duty, with regard to fire safety requirements (such as those installed in the **TORRETTE TR ED** and **TR ED-V Series**);*
- *fans specifically designed to operate where the operating ambient temperature for the motor, if located outside the gas stream, driving the fan, exceeds 65°C (like those used in the **TR E** and **TR E-V Series**).*

Compliance with the ErP Directive of fans placed on the markets of European Union Member States (the requirement obviously does not apply to devices intended for sale in countries outside the EU), **is indicated by affixing the CE mark** and, in the case of fans sold individually (i.e. not integrated into products of greater complexity), by the indication of a series of data, including maximum efficiency and the speed corresponding to maximum efficiency, which the manufacturer is required to publish in the respective technical documentation, on its publicly accessible web sites, and, in certain cases, on the fan itself.



In addition to the series listed above, **EU Regulation N° 327/2011** also covers products such as our **CA MD E** in-line centrifugal extractor fans, **VORT QBK**, **VORT QBK SAL**, **VORT QBK COMFORT** and **VORT QBK QUIET** box fans, **RF-EU** EU extractor fans for roof application and **VORT NRG**, heat recovery units, whose fans must in turn meet the stipulated efficiency requirements (the requirement to make a declaration of efficiency that applies to fans does not apply to these appliances); *These ranges will in turn be required to comply with a further Regulation, specifically designed to improve the energy efficiency levels of finished products. This Regulation is scheduled to come into force in January 2016.*

The Commercial and Industrial range Vortice ErP 2015

After the steps taken in 2012 to bring the following series into line with regulatory requirements ahead of 2015:

- **CA MD E,**
- **CA ES,**
- **CA VO E,**
- **CA WE D E**
- **CA MD E RF,**
- **CA MD E W,**
- **VORTICEL E,**

Vortice completed the process of bringing the following series into line with 2015 ErP requirements:

- **VORTICEL A-E,**
- **VORTICEL MPC-E,**
- **VORTICENT C-E**

The same process was also completed for the fans installed in the following series:

- **VORT QBK,**
- **VORT QBK SAL,**
- **VORT QBK COMFORT,**
- **VORT QBK QUIET,**
- **VORT NRG,**
- **TORRETTE RF-EU.**

To simplify the management of the new appliances along the entire distribution chain, **Vortice has decided to keep the respective part numbers unchanged**, fans assume responsibility for issues connected with managing the interim period.

WARNING: THE OBLIGATIONS/RESTRICTIONS REFER ONLY TO MANUFACTURERS AND IMPORTERS, NOT WHOLESALE DISTRIBUTORS OF ELECTRICAL GOODS, RETAILERS, INSTALLERS OR END USERS.

LEGEND



ErP COMPLIANT - The ErP compliant logo indicates that the appliance is eco-compatible and adheres to ErP Directive 2009/125/EC.

Er DATA: *under the terms of the regulatory framework, the energy efficiency data of fans with electric input power of between 125 W and 500 kW must be declared in all technical and commercial documentation, in addition to the electrical data and pressure/performance curves.*

- **Measurement cat.** = test category (A; B; C; D)
- **Efficiency cat.** = efficiency category (Static - Total)
- **Year of market release** = year
- **Variable drive** = variable speed drive
- **η** = overall energy efficiency
- **n.** = efficiency grade
- **(kW) P_e** = electric input power at optimum energy efficiency point
- **(m³/h) q** = air flow at optimum energy efficiency point
- **(Pa) p** = pressure (Static - Total) at optimum energy efficiency point
- **RPM** = revolutions per minute at optimum energy efficiency point
- **Rapp spec. <1.04** = specific ratio



ENERGY SAVING - The ES label shows that the appliances are fitted with EC Brushless motors and therefore offer guaranteed energy savings, thanks to the wide range of speed regulation options and significantly reduced consumption levels.

LONG LIFE 30.000 h

VERSIONE LONG LIFE - The Long Life 30,000 h label certifies that the appliance is guaranteed to operate for 30,000 continuous hours without mechanical failure thanks to its motor, which is equipped with ball bearings. This special configuration allows the appliance to be run continuously, and ensures efficient, silent operation throughout its service life.

HABITAT

VERSIONE HABITAT - The Habitat label indicates that the product is suitable for ventilating small or medium domestic or commercial environments on a continuous or intensive basis with high performance and low energy consumption.



This label means that the products are designed to offer energy savings by means of heat exchange between the inlet and outlet air flows in room ventilation systems, thereby combining comfort with a higher energy efficiency class.



The IMQ logo denotes compliance with C.E.I product safety regulations, and this is certified by the Istituto Italiano del Marchio di Qualità.



The IMQ logo denotes compliance with C.E.I product performance regulations, and this is certified by the Istituto Italiano del Marchio di Qualità.

CE MARKING

Commercial Ventilation appliances conform to the following European Directives:

- 2009/125/EC ErP Directive (ERP)
- 2006/42/EC Machine Directive (MD)
- 2006/95/EC Low Voltage Directive (LVD)
- 2004/108/EC Electromagnetic Compatibility (EMC)

According to the following state-of-the-art standards:

- **Safety:**
EN 60335-1, EN 60335-2-80, EN 62233, EN 60204-1,
EN ISO 12100-1, EN ISO 12100-2, EN ISO 12499, EN ISO 13857
- **Electromagnetic Compatibility:**
EN 55014-1, EN 55014-2, EN 61000-3-2, EN 61000-3-3
- **Ecocompatible design of energy-related products:**
EU regulation N° 327/2011.



COMMERCIAL VENTILATION





CA MD E RANGE

In-line centrifugal fans in metal

PRODUCT SPECIFICATIONS

Suitable for domestic, commercial and industrial applications as kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, restaurants, bars, theatres, ballrooms, etc.

- **8 models** different diameter.
- Stripped and phosphated steel structure, painted with polyester powder which is particularly resistant to the aggressive action of atmospheric agents.
- Backward curved centrifugal impellers.
- Two speeds ball bearing motors.
- Low noise emissions.
- Low specific consumption.
- Direction flaps optimised to reduce turbulence inside the appliance.
- Wide range of continuous operation temperatures between -25°C and +50°C.
- Mounting brackets made of galvanized steel included.
- Protection rating: IP44.
- Insulation class: II.

Fans used in CA MD range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 80.000 h



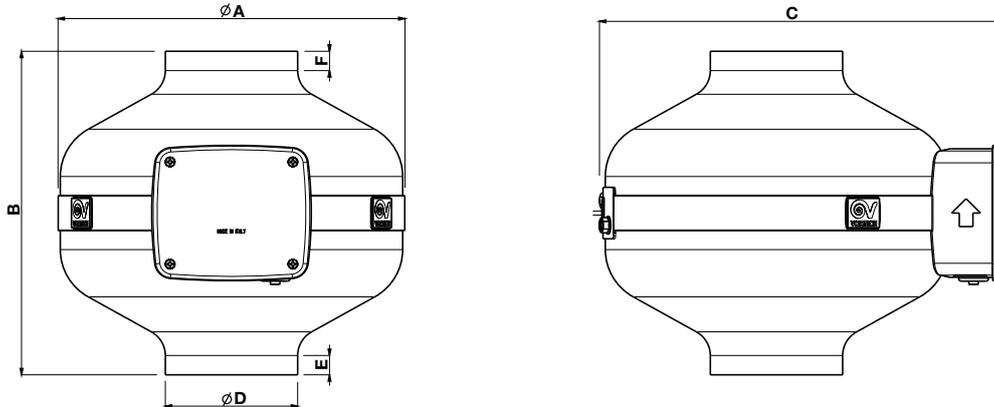
TECHNICAL DATA

Models	Code	V~50Hz	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A) 3m min/max	Max °C	Kg
						m³/h min/max	l/s min/max	mmH ₂ O min/max	Pa min/max			
CA 100 MD	16150	230	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	16151				1580 2380	280 450	78 125	27 37	265 363	30.8 45.9 *		3
CA 150 Q MD	16152				1430 2350	300 500	83 139	21 35	206 343	34.7 48.1 *		2.98
CA 150 MD E	16163		45 85	0.37 0.38	1775 2670	340 550	94 153	40 45	392 441	42.4 53.2 **		4.9
CA 160 MD E	16164		1860 2665	370 570	103 158	37 45	363 441	43.4 53.4 **	4.8			
CA 200 MD E	16165		45 90	0.37 0.40	1610 2610	500 830	139 231	42 46	412 451	36.2 48.1 **		4.8
CA 250 MD E	16166		1615 2660	600 1000	167 278	42 53	412 520	38.3 52.7 **	5.3			
CA 315 MD E	16167		58 120	0.51 0.53	1560 2660	620 1080	172 300	43 58	422 569	41.8 52.3 **		7

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 3741.

** 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.

DIMENSIONS



Models	Ø A	B	C	Ø D	E	F	
CA 100 MD	255	239	300	97	15	15	
CA 125 MD				122	23	23	
CA 150 Q MD				147	30	30	
CA 150 MD E	347	275	392	157	17	17	
CA 160 MD E					18	18	
CA 200 MD E					197	20	17
CA 250 MD E					247	38	35
CA 315 MD E	406	294	455	312	21	30	

Dimensions (mm)

PRODUCT ACCESSORIES

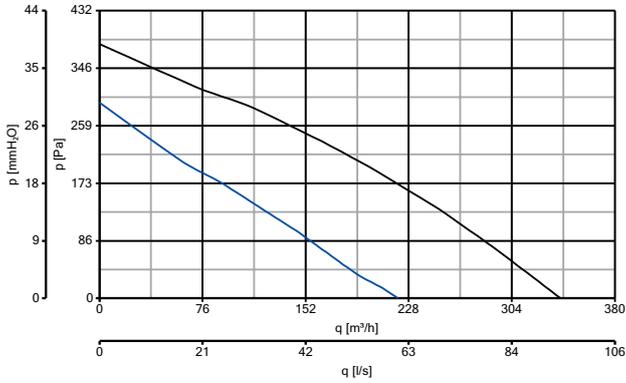
Models	Description	Code	Product	
	C 1.5 - Electronic speed controller 1.5 A	12966	for all models	
	C 2.5 - Electronic speed controller 2.5 A	12967		
	SCNRB - Electronic speed controller built-in	12971		
	KIT SCB - Built-in controller adaptor	22481	for C 1.5 and C 2.5	
	C TEMP Environmental sensor for temperature	12992	for all models	
	C SMOKE Environmental sensor for air quality	12993		
	C HCS Environmental sensor for humidity	12994		
	C PIR Passive infrared sensor	12998		
	C TIMER Adjustable over-run timer	12999		
	CA-MU - Galvanized sheet-metal brackets	22674	for all models	
	CA-G - Protection grille	Ø 100	22750	16150
		Ø 125	22755	16151
		Ø 150	22760	16152 - 16163
		Ø 160	22762	16164
		Ø 200	22765	16165
		Ø 250	22770	16166
		Ø 315	22775	16167

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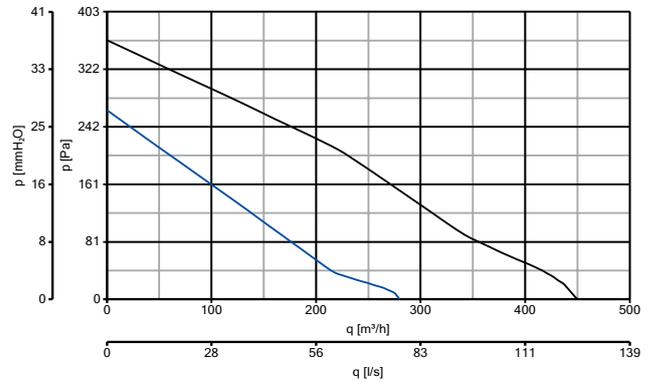


PERFORMANCE CURVES

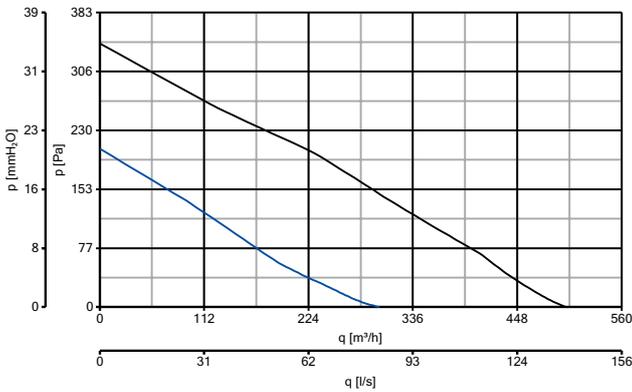
CA 100 MD



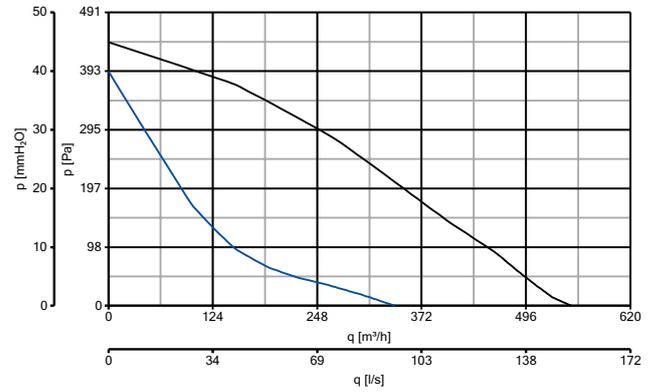
CA 125 MD



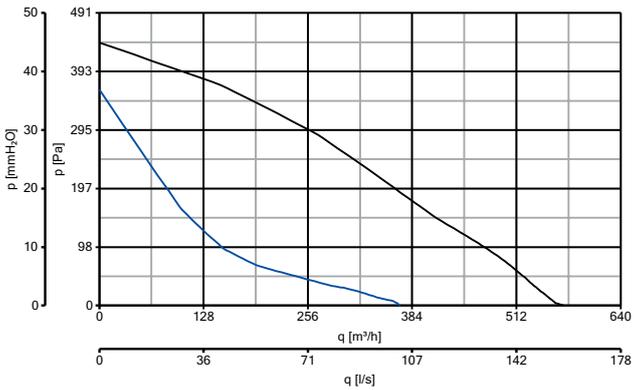
CA 150 Q MD



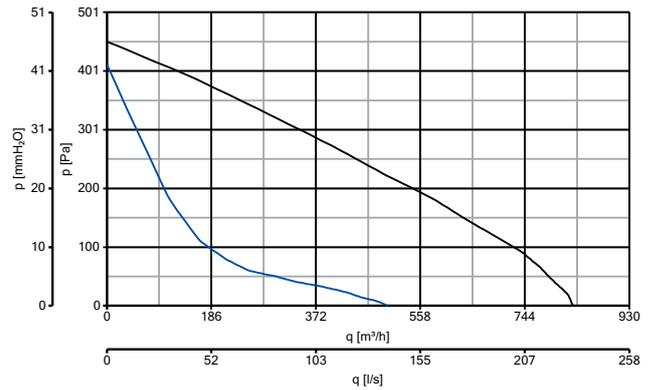
CA 150 MD E



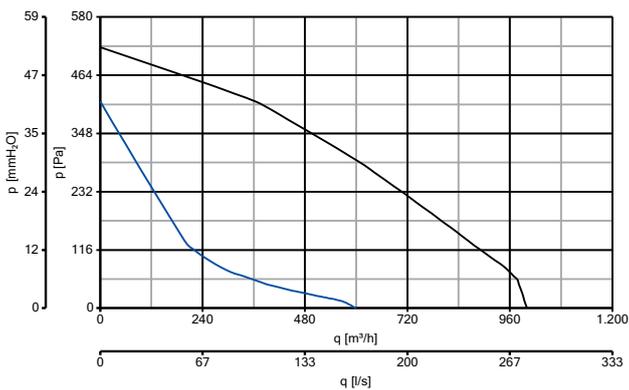
CA 160 MD E



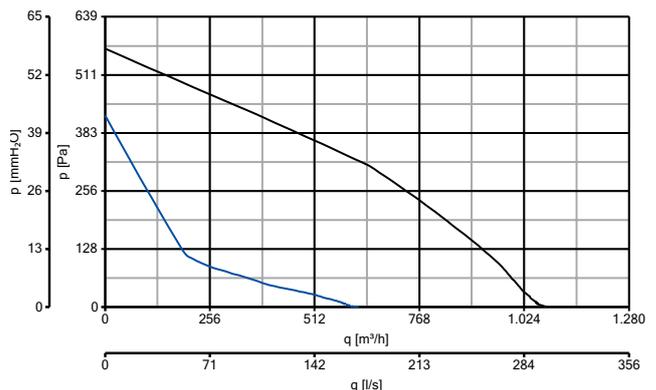
CA 200 MD E



CA 250 MD E



CA 315 MD E



— min — max



CA ES RANGE

Energy Saving in-line centrifugal fans in metal

PRODUCT SPECIFICATIONS

Suitable for domestic, commercial and industrial applications: kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, restaurants, bars, theatres, ballrooms, etc.

- **8 models** different diameter.
- Stripped and phosphated steel structure, painted with polyester powder which is particularly resistant to the aggressive action of atmospheric agents.
- Two speeds, one speed for models CA 250 ES and CA 315 ES.
- Backward curved centrifugal impellers.
- Highly efficient ball bearing EC motors.
- Low noise emissions.
- Low specific consumption.
- Two levels of airflow, pressure, noise emissions and consumption (for all the models with a diameter until 200).
- Wide range of continuous operation temperatures between -25°C and +50°C.
- Mounting brackets made of galvanized steel included.
- Protection rating: IP44.
- Insulation class: II. □ .
- Insulation class: I. ⊕ (for models 250 ES and 315 ES).

Fans used in CA MD E range comply with ErP Lot. 6 Reg. N° 327/2011/UE.

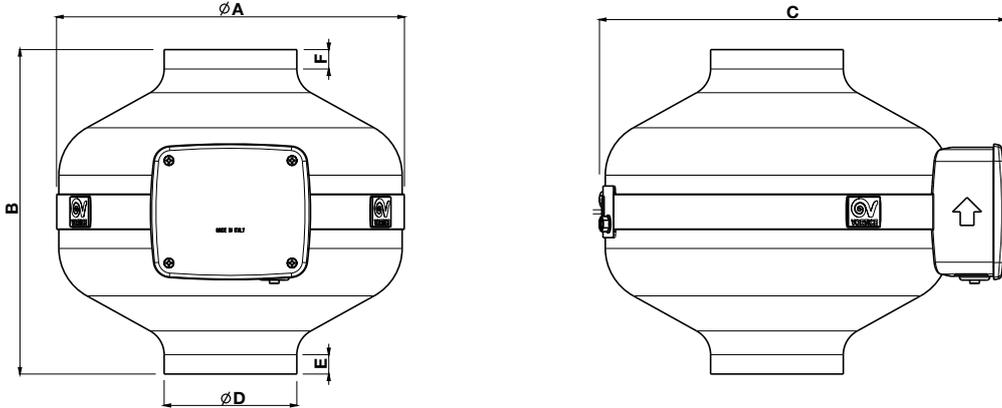


TECHNICAL DATA

Models	Code	V~50Hz	W		A		RPM		Max Airflow				Max Pressure				Lp dB(A)*		Max °C	Kg	
			min/max		min/max		min/max		m³/h	l/s	mmH₂O	Pa	min/max	min/max	3m	min/max					
CA 100 ES	16170	230					1310	2020	170	270	47	75	16	37	157	363	24.9	36.8	50	2.7	
							1690	2530	220	340	61	94	27	49	265	480	35.4	43.4			
							2140	2880	280	380	78	105	43	51	422	500	38.5	46.9			
CA 125 ES	16171		11	29	0.12	0.29	1180	1820	220	350	61	97	14	34	137	333	25.3	38.4		2.6	
			19	55	0.20	0.53	1520	2310	280	440	78	122	23	47	225	461	33.2	45.9			
			35	80	0.35	0.75	1930	2620	370	500	103	139	38	49	373	480	40.3	49.7			
CA 150 Q ES	16172		1170	1810	240	380	67	105	11	26	108	255	27.5	40.0	4.5						
			1515	2300	310	490	86	136	18	42	176	412	34.7	46.6							
			1925	2590	410	560	114	155	30	45	294	441	41.5	49.6							
CA 150 ES	16173		1230	1420	420	480	117	133	17	22	167	216	30.3	34.3	4.5						
			1620	2170	550	750	153	208	29	51	284	500	38.0	47.3							
			1800	2260	630	820	175	228	36	56	353	549	41.4	48.1							
CA 160 ES	16174	20	30	0.21	0.30	1230	1410	470	540	130	150	17	22	167	216	34.3	35.1	4.6			
		44	105	0.43	0.93	1620	2160	630	840	175	233	29	51	284	500	39.2	47.1				
		58	120	0.55	1.05	1780	2230	700	890	194	247	36	56	353	549	41.7	48.1				
CA 200 ES	16175	1210	1385	580	675	161	187	15	20	147	196	32.1	34.8	4.9							
		1600	2140	770	1050	214	292	26	47	255	461	38.0	46.7								
		1760	2240	880	1120	244	311	31	50	304	490	40.8	47.6								
CA 250 ES	16176		140		1.20		3050		1150		319		73		716		57.3		4.9		
CA 315 ES	16177		148		1.27		1935		1800		500		51		500		50.7		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.

DIMENSIONS



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

Dimensions (mm)

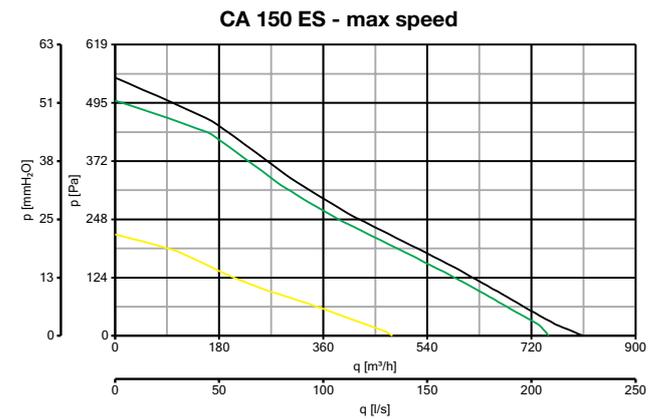
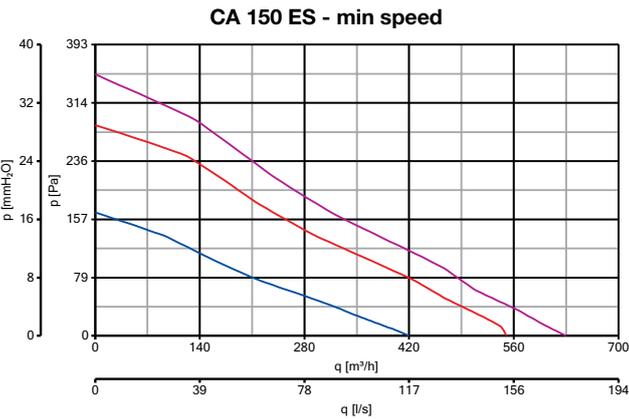
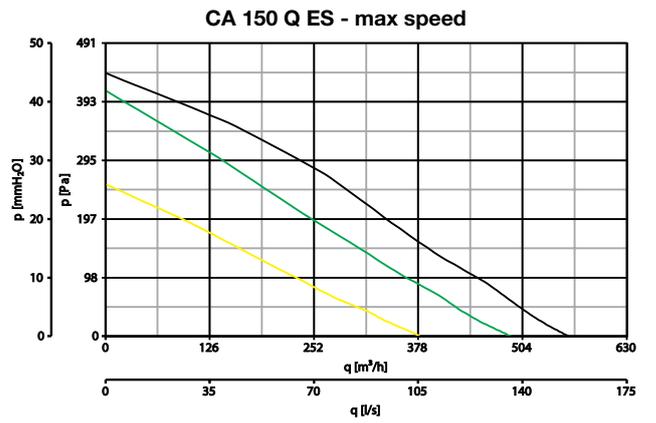
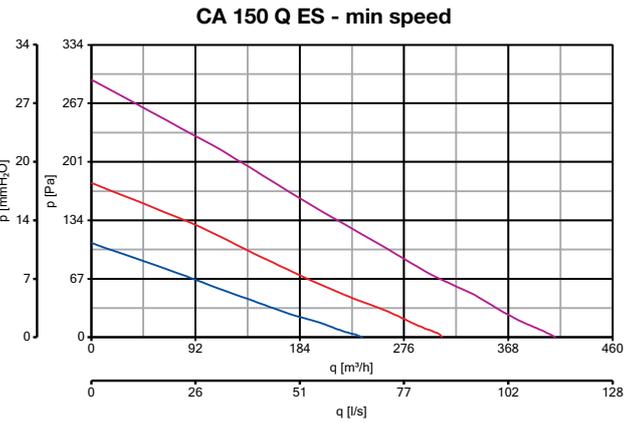
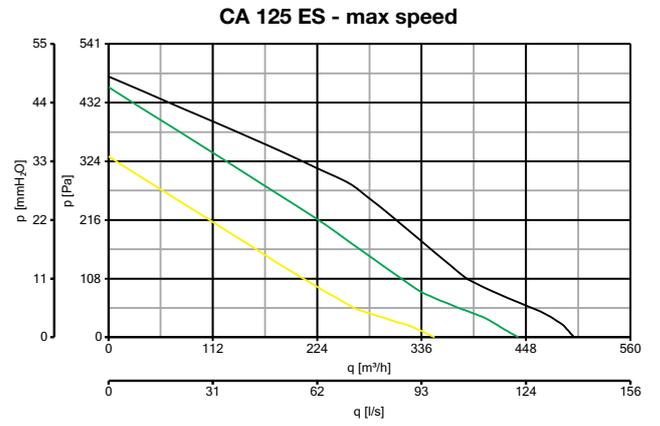
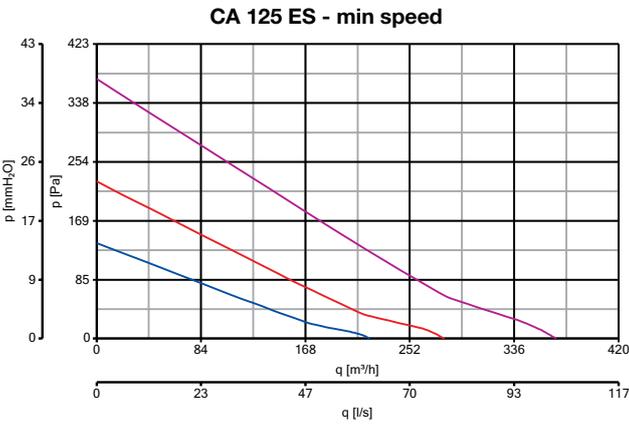
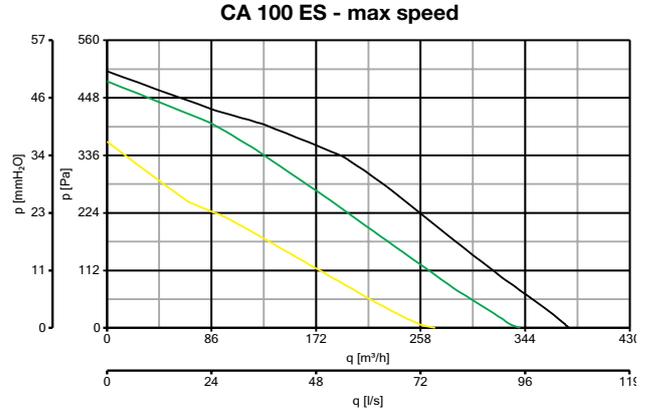
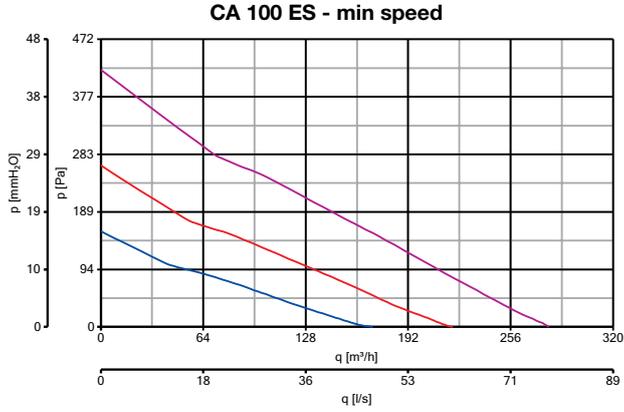
PRODUCT ACCESSORIES

Models	Description	Code	Product	
	C TEMP Environmental sensor for temperature	12992	for all models	
	C SMOKE Environmental sensor for air quality	12993		
	C HCS Environmental sensor for humidity	12994		
	C PIR Passive infrared sensor	12998		
	C TIMER Adjustable over-run timer	12999		
	CA-MU - Galvanized sheet-metal brackets	22674	for all models	
	CA-G - Protection grille	Ø 100	22750	16170
		Ø 125	22755	16171
		Ø 150	22760	16172 - 16173
		Ø 160	22762	16174
		Ø 200	22765	16175
		Ø 250	22770	16176
		Ø 315	22775	16177

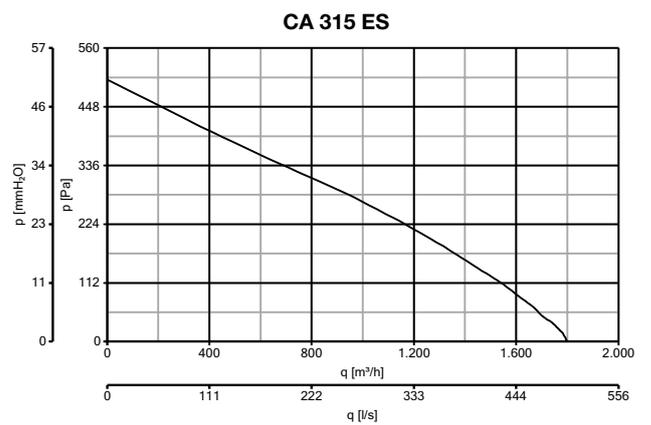
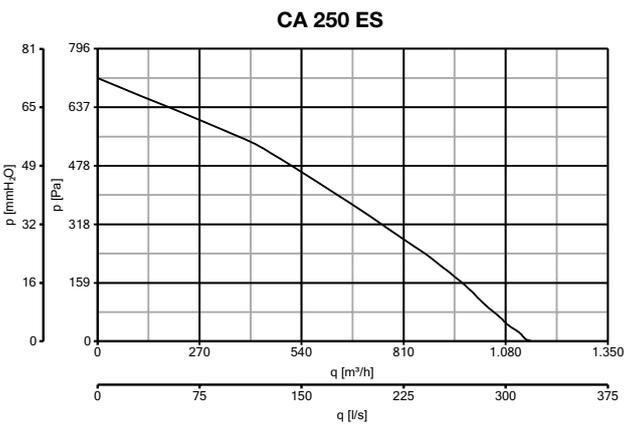
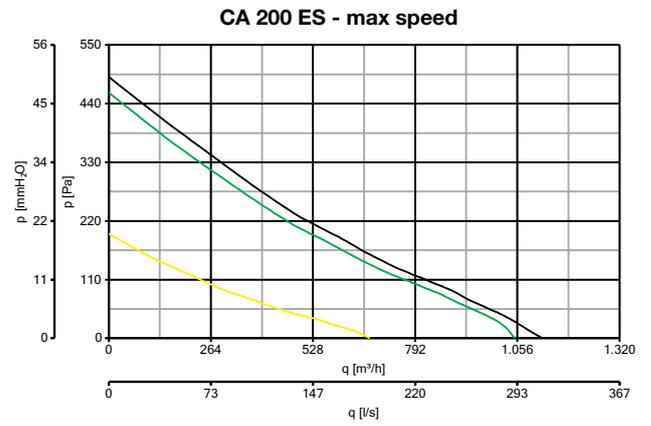
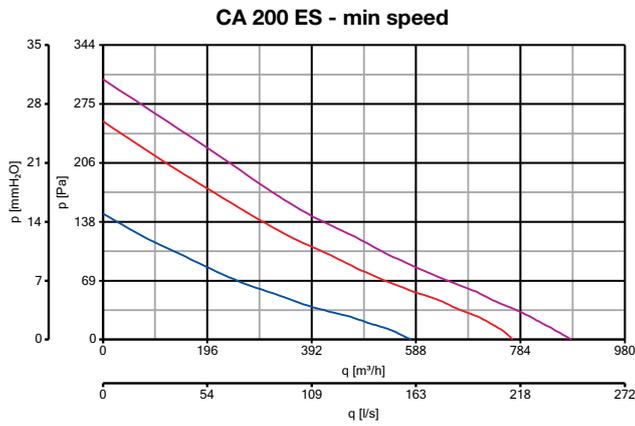
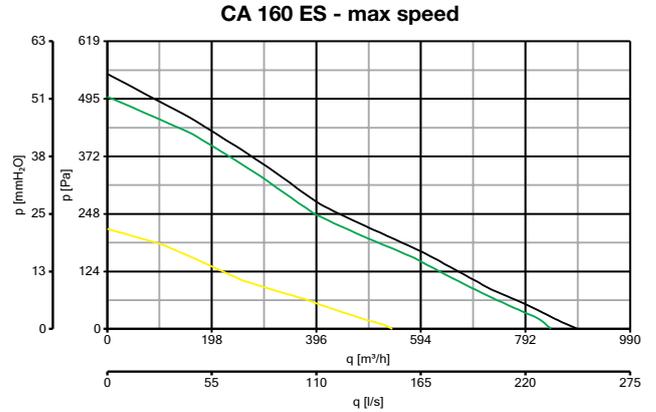
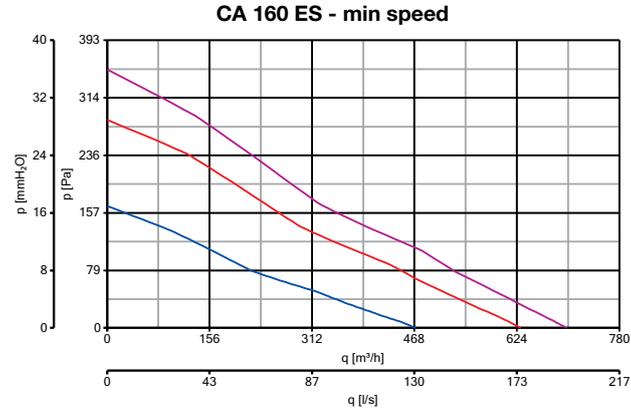
Description and sizes on page 90



PERFORMANCE CURVES



PERFORMANCE CURVES



min speed — min. setting — nominal setting — max setting
max speed — min. setting — nominal setting — max setting
— p= static pressure



Design: F. Trabucco - M Vecchi

CA V0 E RANGE

In-line centrifugal fans in self-extinguishing plastic

PRODUCT SPECIFICATIONS

Suitable for the continuous or intensive ventilation of medium or large domestic, commercial or industrial environments.

- **7 models** different diameter.
- Structure in self-extinguishing V0 PP thermoplastic resin.
- Backward curved centrifugal impellers.
- Ball bearing motors (two speeds for CA 100, 125 and 150 models).
- Low noise emissions.
- Low specific consumption.
- Constructed to withstand splashing (suitable for damp environments).
- Wide range of continuous operation temperatures between -25°C and +55°C.
- Mounting brackets made of galvanized steel included.
- Protection rating: IP44 CA V0 E.
- Protection rating: IPX4 CA V0.
- Insulation class: II. □.

Fans used in CA V0 E range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 30.000 h



TECHNICAL DATA

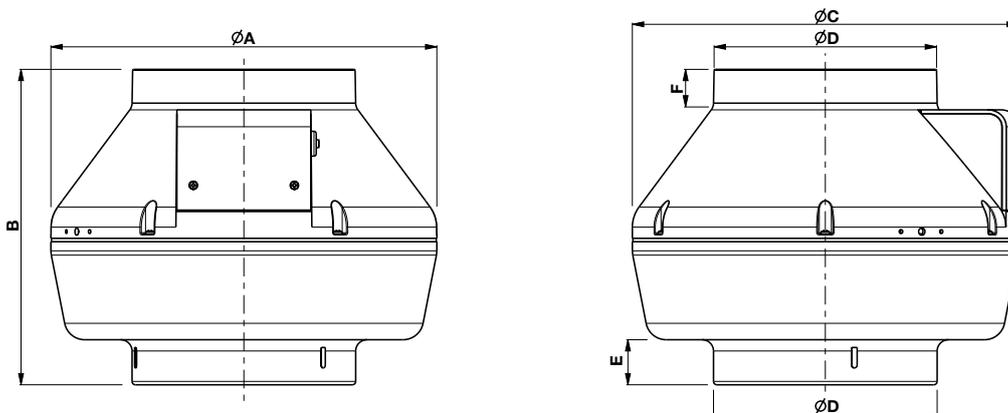
SELF-EXTINGUISHING

Models	Code	V~50Hz	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A) 3m min/max	Max °C	Kg
						m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max			
CA 100 V0 D	16008	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
CA 125 V0 D	16018		67 85	0.34 0.40	1480 2470	210 360	58.3 100	25 36	245 353	45 56 *		2.3
CA 150 V0 D	16028		70 85	0.34 0.41	1400 2390	280 500	77.8 138.9	20 34	196 333	44 56 *		2.6
CA 200 V0 Q	16035		100	0.35	2290	700	194.4	37	363	59 *		3.1
CA 200 V0 E	16038	230	90	0.40	2615	840	233	45	441	50.3 **	55	4.0
CA 250 V0 E	16039				2650	920	256	42	412	49.9 **		4.3
CA 315 V0 E	16041				2660	1100	305	55	539	54 **		6.5

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 3741:2009.

**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.

DIMENSIONS



Models	$\varnothing A$	B	$\varnothing C$	$\varnothing D$	E	F
CA 100 V0 D	250	250	250	97	30	30
CA 125 V0 D				122		
CA 150 V0 D	300	305	300	147/157		
CA 200 V0 Q	340	280	340	197	40	40
CA 200 V0 E				247	60	
CA 250 V0 E		305		75		
CA 315 V0 E	400	340	400	312	75	40

Dimensions (mm)

PRODUCT ACCESSORIES

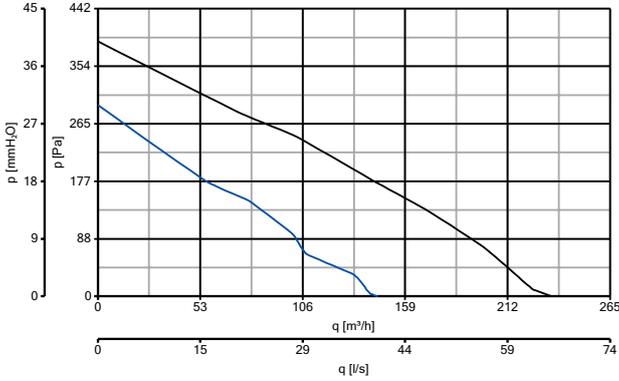
Models	Description	Code	Product	
	C 1.5 - Electronic speed controller 1.5 A	12966	for all models	
	C 2.5 - Electronic speed controller 2.5 A	12967		
	SCNRB - Electronic speed controller built-in	12971		
	SCNRB - Electronic speed controller built-in	22481	for C 1.5 and C 2.5	
	C TEMP Environmental sensor for temperature	12992	for all models	
	C SMOKE Environmental sensor for air quality	12993		
	C HCS Environmental sensor for humidity	12994		
	C PIR Passive infrared sensor	12998		
	C TIMER Adjustable over-run timer	12999		
	CA-MU - Galvanized sheet-metal brackets	22674	for all models	
	CA-G - Protection grille	$\varnothing 100$	22750	16008
		$\varnothing 125$	22755	16018
		$\varnothing 150$	22760	16028
		$\varnothing 200$	22765	16035 - 16038
		$\varnothing 250$	22770	16039
		$\varnothing 315$	22775	16041

Description and sizes on page 90

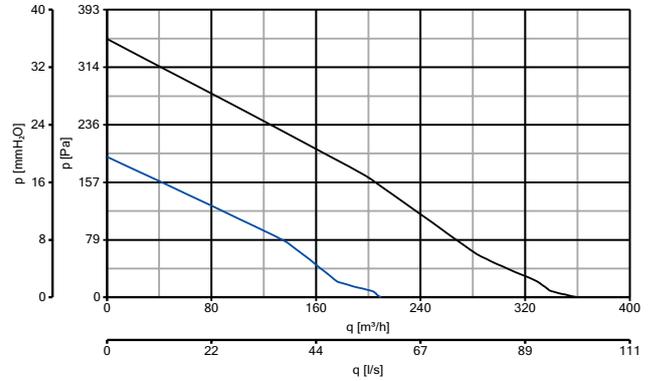


PERFORMANCE CURVES

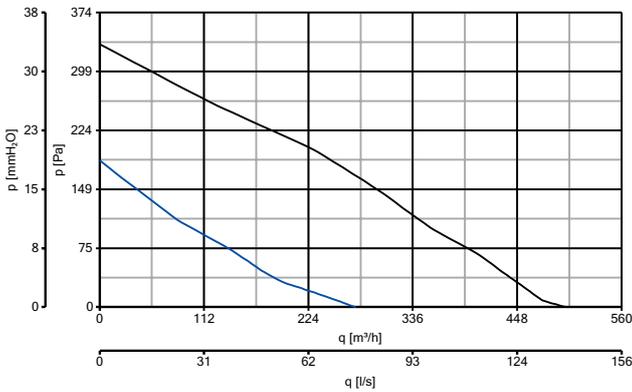
CA 100 V0 D



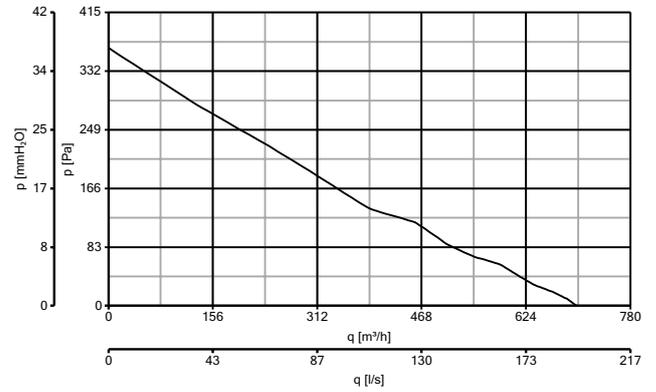
CA 125 V0 D



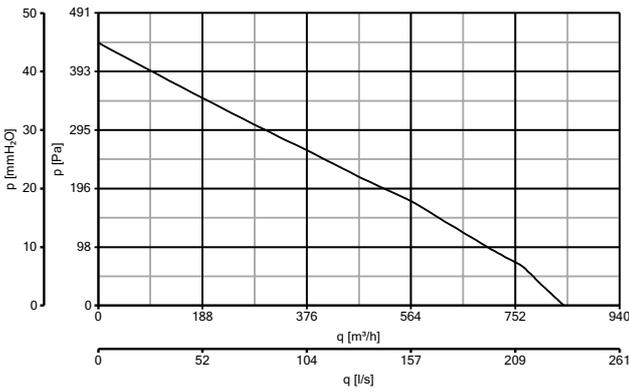
CA 150 V0 D



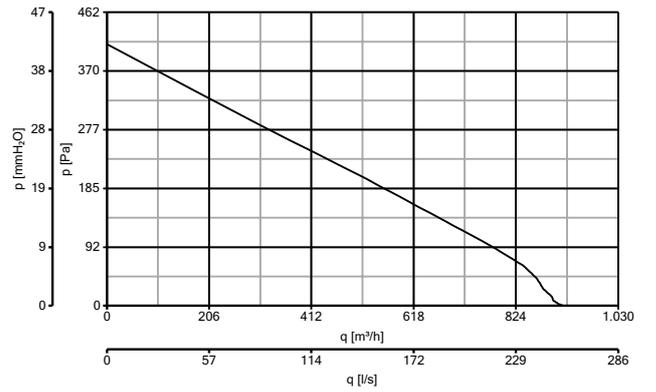
CA 200 V0 Q



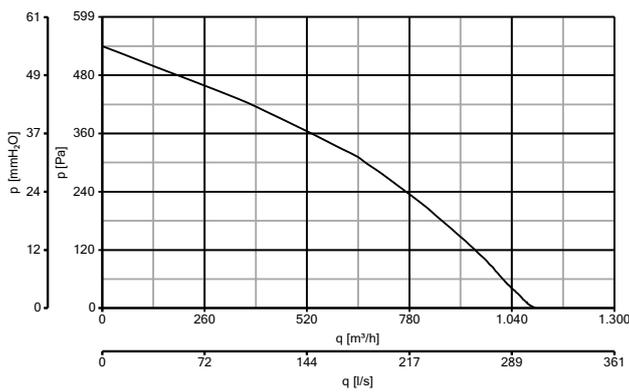
CA 200 V0 E



CA 250 V0 E



CA 315 V0 E



— min — max



Design: F. Trabucco - M Vecchi

CA WE D E RANGE

Centrifugal duct fans for external wall

PRODUCT SPECIFICATIONS

Suitable in all situations requiring centralised intake from several rooms, such as kitchens, bathrooms, utility rooms, cellars, garages, public spaces such as bars and shops, and workplaces such as workshops and laboratories.

- **5 models** different diameter.
- P04 sheet steel structure painted with polyester paint which is resistant to atmospheric agents.
- Induction motor with external rotor, manual reset thermal protection device.
- Two speeds ball bearing motors.
- Backward curved centrifugal impellers.
- Motor support flange in mineral charged PP.
- Low noise emissions.
- Low consumption.
- PVC made gravity shutters.
- Protective grille on inlet.
- Wide range of continuous operation temperatures between -25 °C and +60 °C.
- Protection rating IPX5.
- Insulation class: Cl. I. (⊕).

Fans used in CA WE D E range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 80.000 h



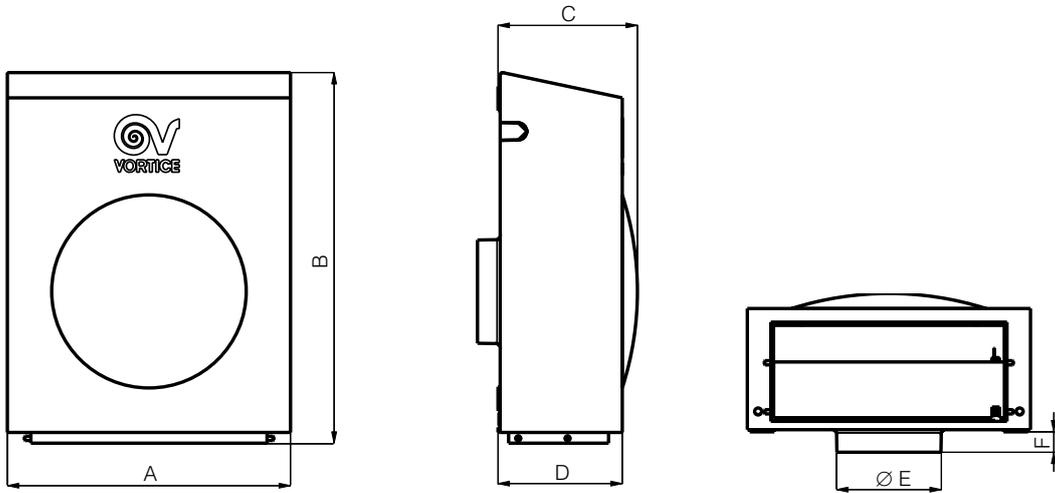
TECHNICAL DATA

Models	Code	V~50Hz	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A) 3m min/max	Max °C	Kg
						m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max			
CA 100 WE D	16091	220-240	60 80	0.26 0.35	1600 2380	200 330	56 92	29 37	284 363	38.3 50.1 *	60	4.6
CA 125 WE D	16092				1400 2325	215 380	60 106	30 39	294 383	36.3 49.5 *		
CA 150 WE D E	16087	230	45 100	0.39 0.44	1230 2520	275 620	76 172	33 43	324 422	23.1 42.9 **	55	6.7
CA 160 WE D E	16088					280 660	78 183	36 45	353 441	22.0 37.5 **		
CA 200 WE D E	16089				1310 2530	310 680	86 189	33 44	324 431	20.9 39.1 **		

* Sound pressure level measured at 3 m in free field conditions with long-cased appliance in delivery mode in accordance with standard EN ISO 3741.

** 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.

DIMENSIONS



Models	A	B	C	D	Ø E	F
CA 100 WE D	262	345	127	113	97	20
CA 125 WE D					122	
CA 150 WE D E	360	430	173	155	147	
CA 160 WE D E					157	
CA 200 WE D E					197	

Dimensions (mm)

PRODUCT ACCESSORIES

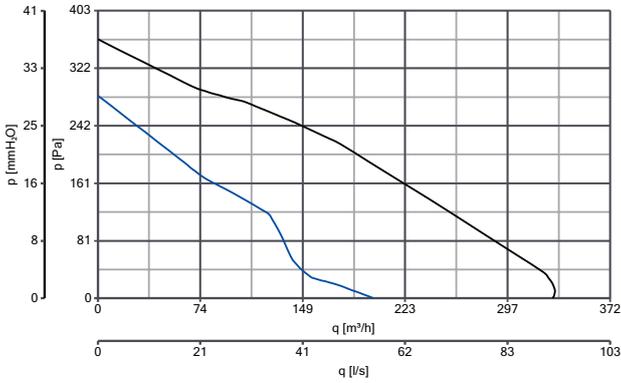
Models	Description	Code	Product
	C 1.5 - Electronic speed controller 1.5 A	12966	for all models
	C 2.5 - Electronic speed controller 2.5 A	12967	
	KIT SCB - Built-in controller adaptor	22481	for C 1.5 and C 2.5
	C TEMP Environmental sensor for temperature	12992	for all models
	C SMOKE Environmental sensor for air quality	12993	
	C HCS Environmental sensor for humidity	12994	
	C PIR Passive infrared sensor	12998	
	C TIMER Adjustable over-run timer	12999	

Description and sizes on page 90

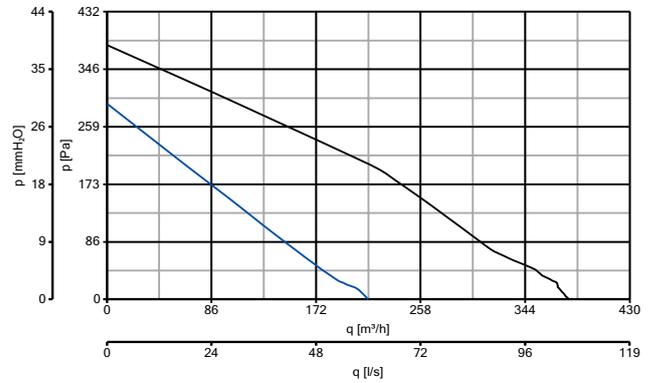


PERFORMANCE CURVES

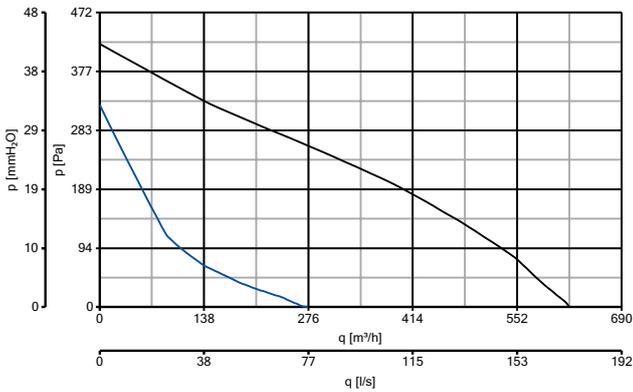
CA 100 WE D



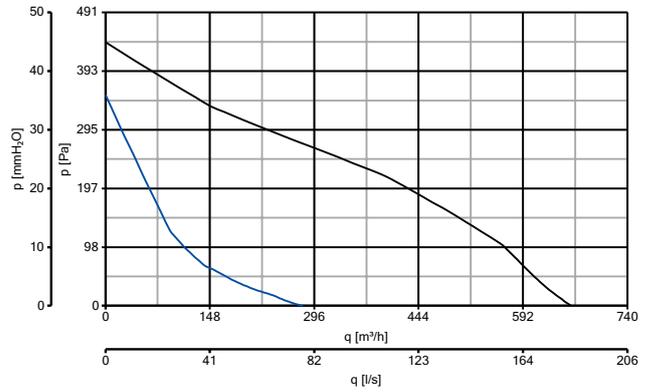
CA 125 WE D



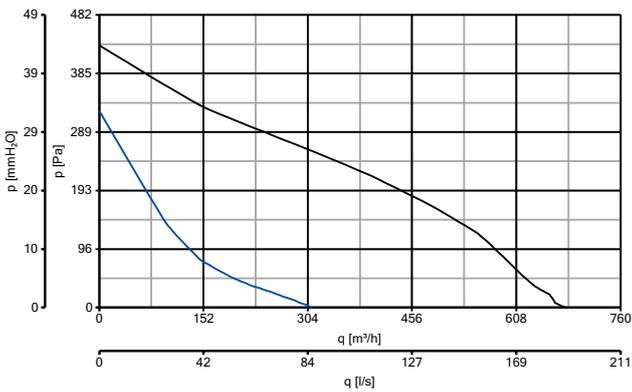
CA 150 WE D E



CA 160 WE D E



CA 200 WE D



— min — max



CA MD E WALL RANGE

Centrifugal duct fans for wall mounting

PRODUCT SPECIFICATIONS

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

- **8 models** different diameter.
- Stripped and phosphated steel structure, bands and bases, painted with polyester powder which is resistant to atmospheric agents.
- Two speeds ball bearing motors, all protected against overheating.
- Model 150, 160, 200, 250 and 315 are equipped with external rotor motors.
- Low noise emissions.
- Low specific consumption.
- Motor supports with built-in airflow direction flaps in resin plastic material with high structural strength.
- Wiring box in plastic material with high structural strength.
- Centrifugal impellers with reverse blades in charged P for diameters 100, 125 and 150 Q, and in charged PA for diameters 150, 160, 200 and 250.
- Wide range of continuous operation temperatures, comprehended between -25°C and +55°C.
- Protection rating: IP44.
- Insulation class: II. □ .

Fans used in CA MD E WALL range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 90.000 h

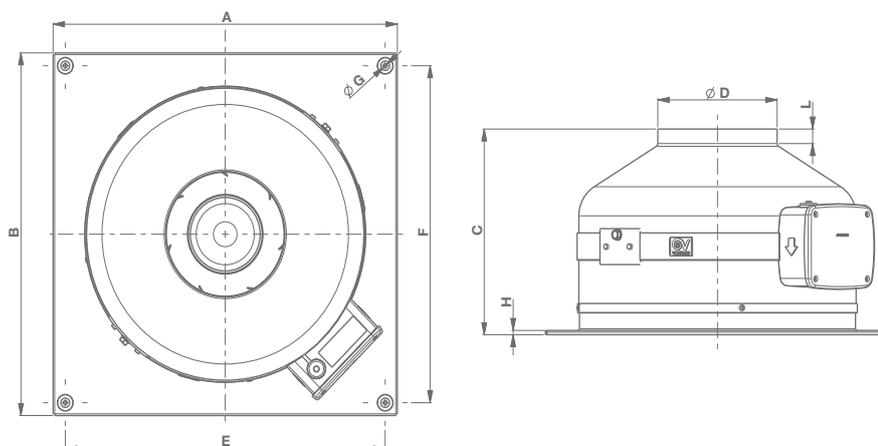


TECHNICAL DATA

Models	Code	V-50Hz	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A)* 3m min/max	Max °C	Kg
						m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max			
CA 100 MD E W	16120	230	38 85	0.28 0.40	1520 2400	250 470	69 130	26 37	255 363	19.2 35.7	50	3.3
CA 125 MD E W	16121				1300 2350	300 490	83 136	23 36	225 353	25.5 39.4		
CA 150 Q MD E W	16122				1460 2340	305 510	85 142	20 32	196 314	28.3 38.0		
CA 150 MD E W	16133				1925 2690	480 630	133 175	37 43	363 422	41.4 53.3		
CA 160 MD E W	16134		45 85	0.37 0.38	1785 2650	570 690	158 191	35 43	343 422	43.0 53.0	55	5.5
CA 200 MD E W	16135		45 90	0.37 0.40	1590 2590	590 870	164 241	39 45	382 441	37.9 48.2		
CA 250 MD E W	16136		58 125	0.51 0.55	1450 2620	595 1000	165 278	40 54	392 530	31.6 50.8		
CA 315 MD E W	16137		1500 2650	600 1050	167 292	37 56	363 549	41.2 51.4			11	

* 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.

DIMENSIONS



Models	A	B	C	Ø D	E	F	Ø G	H	L
CA 100 MD E W	334	334	210	97	304	304	5	5	15
CA 125 MD E W				122					23
CA 150 Q MD E W				147					30
CA 150 MD E W	424	424	245	157	394	394	5	5	17
CA 160 MD E W				197					18
CA 200 MD E W				247					20
CA 250 MD E W				237					38
CA 315 MD E W	489	489	260	312	459	459			36

Dimensions (mm)

PRODUCT ACCESSORIES

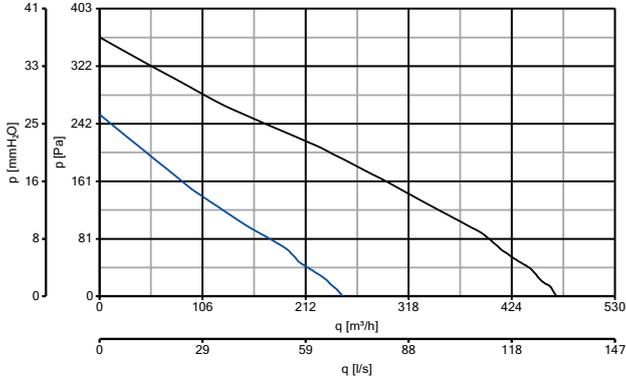
Models	Description	Code	Product	
	C 1.5 - Electronic speed controller 1.5 A	12966	for all models	
	C 2.5 - Electronic speed controller 2.5 A	12967		
	SCNRB - Electronic speed controller built-in	22481	for C 1.5 and C 2.5	
	C TEMP Environmental sensor for temperature	12992	for all models	
	C SMOKE Environmental sensor for air quality	12993		
	C HCS Environmental sensor for humidity	12994		
	C PIR Passive infrared sensor	12998		
	C TIMER Adjustable over-run timer	12999		
	CA-G - Protection grille	Ø 100	22750	16120
		Ø 125	22755	16121
		Ø 150	22760	16122 - 16133
		Ø 160	22762	16134
		Ø 200	22765	16135
		Ø 250	22770	16136
		Ø 315	22775	16137

Description and sizes on page 90

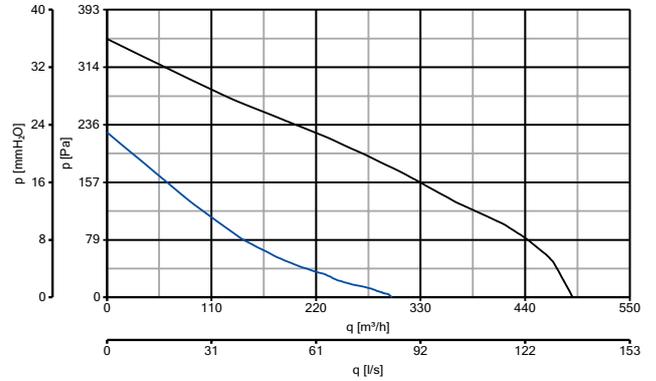


PERFORMANCE CURVES

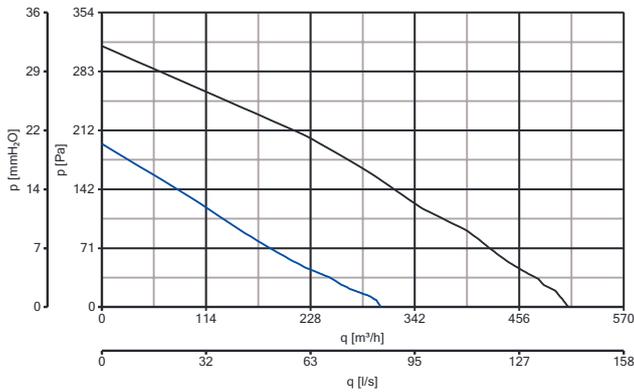
CA 100 MD E W



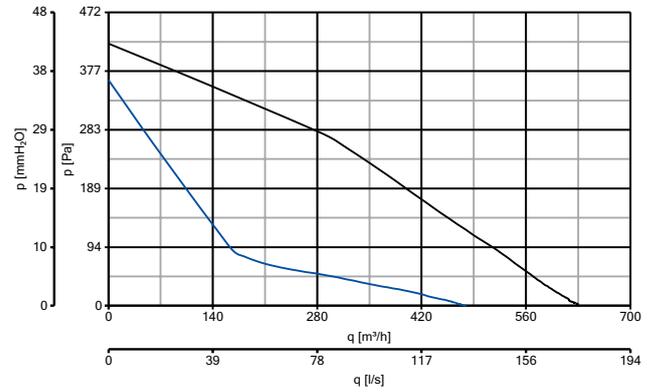
CA 125 MD E W



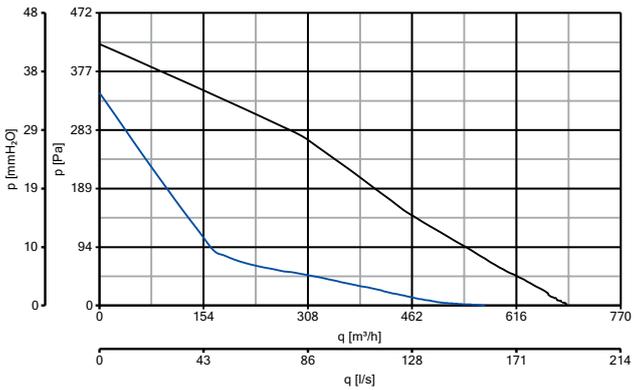
CA 150 Q MD E W



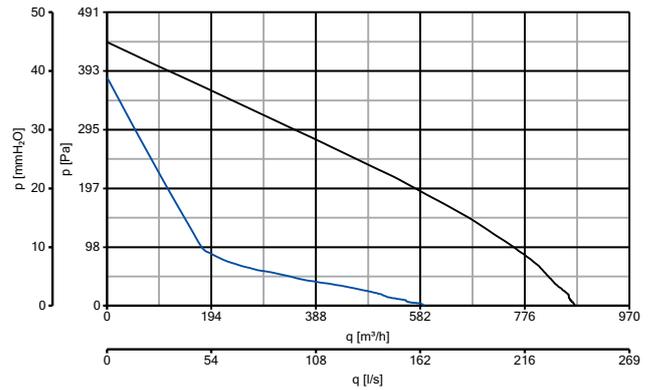
CA 150 MD E W



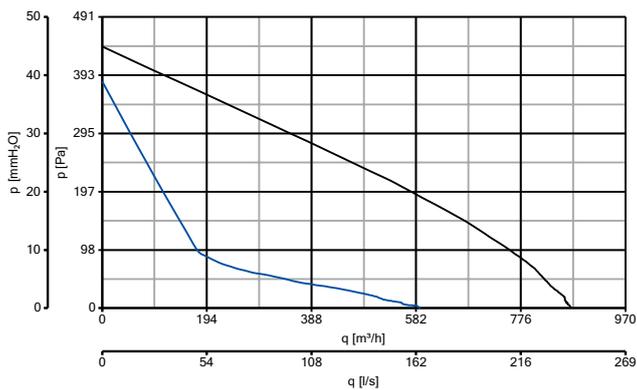
CA 160 MD E W



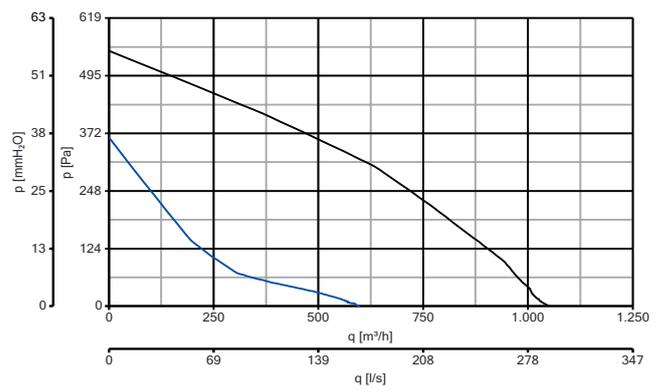
CA 200 MD E W



CA 250 MD E W



CA 315 MD E W



— min — max



CA MD E ROOF RANGE

Centrifugal duct fans for roof mounting

PRODUCT SPECIFICATIONS

Suitable for outdoor roof installation at the end of ventilation ducts in residential and industrial environments for the channelling of clean air: factories, hospitals, gyms, restaurants, etc.

- **8 models** different diameter.
- Stripped and phosphated steel structure, bands and bases, painted with polyester powder which is resistant to atmospheric agents.
- Two speeds ball bearing motors, all protected against overheating.
- Model 150, 160, 200, 250 and 315 are equipped with external rotor motors.
- Low noise emissions.
- Low specific consumption.
- Motor supports with built-in airflow direction flaps in resin plastic material with high structural strength.
- Wiring box in plastic material with high structural strength.
- Anti-UV thermoplastic resin cover in grey.
- Anti-UV thermoplastic resin support in grey for diameters 100, 125, 150 and 160.
- Wide range of continuous operation temperatures comprehended between -25°C and +55°C.
- Protection rating: IP44 for model 150, 160, 200, 250, 315 CA MD E RF.
- Protection rating: IP45 for model 100, 125 and 150 Q CA MD E RF.
- Insulation class: Cl.II. □ .

Fans used in CA MD E ROOF range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 80.000 h

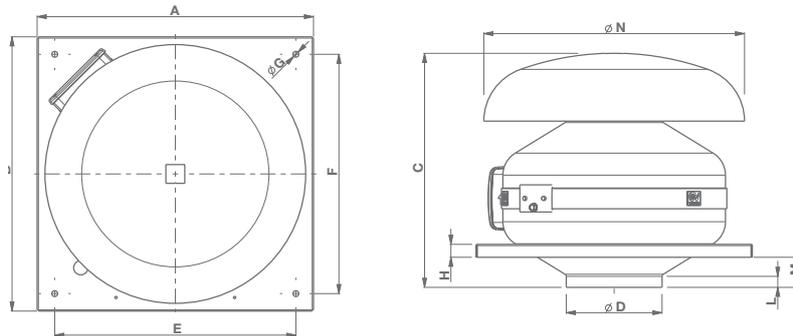


TECHNICAL DATA

Models	Code	V~50Hz	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A)* 3m min/max	Max °C	Kg
						m³/h min/max	l/s min/max	mmH₂O min/max	Pa min/max			
CA 100 MD E RF	16140	230	38 85	0.28 0.40	1590 2430	180 280	50 78	32 41	314 402	27.3 37.5	50	3.5
CA 125 MD E RF	16141				1345 2400	220 380	61 106	26 38	255 373	21.1 40.2		
CA 150 Q MD E RF	16142				1490 2370	250 400	69 111	21 32	206 314	23.8 37.5		
CA 150 MD E RF	16183		35 88	0.34 0.39	1290 2650	235 480	65 133	33 44	324 431	24.6 43.8	55	5.8
CA 160 MD E RF	16184		40 88	0.36 0.39	1500 2640	310 530	86 147	34 43	333 422	30.4 44.8		5.9
CA 200 MD E RF	16185		40 95	0.36 0.41	1300 2560	350 710	97 197	41 46	402 451	23.0 31.7	6.1	
CA 250 MD E RF	16186		58 130	0.51 0.57	1450 2600	440 850	122 236	50 55	490 539	28.6 43.8	14.0	7.9
CA 315 MD E RF	16187				1450 2630	450 900	125 250	50 58	490 569	32.8 40.7		

* 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.

DIMENSIONS



Models	A	B	C	Ø D	E	F	Ø G	H	L	M	Ø N
CA 100 MD E RF	334	334	305	97	280	280	9	20	15	35	300
CA 125 MD E RF				122					23		
CA 150 Q MD E RF				147					30		
CA 150 MD E RF	424	424	365	157	370	370	9	20	17	47	400
CA 160 MD E RF				197					18		
CA 200 MD E RF				247					20		
CA 250 MD E RF	489	489	367	312	435	435	9	20	38	41	534
CA 315 MD E RF			415	36					65		

Dimensions (mm)

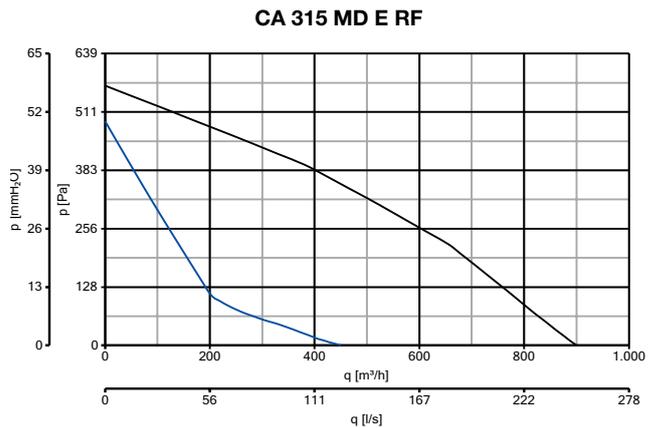
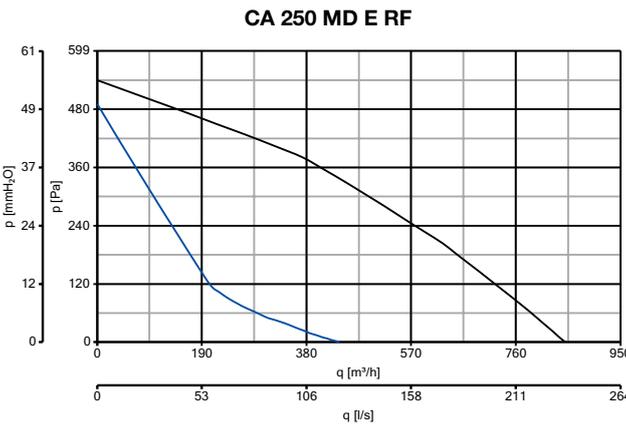
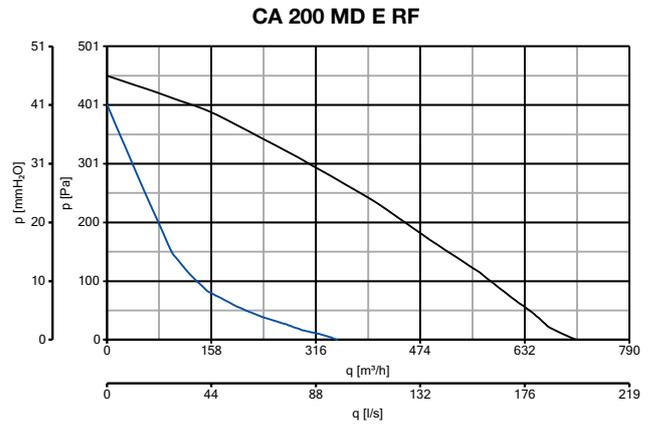
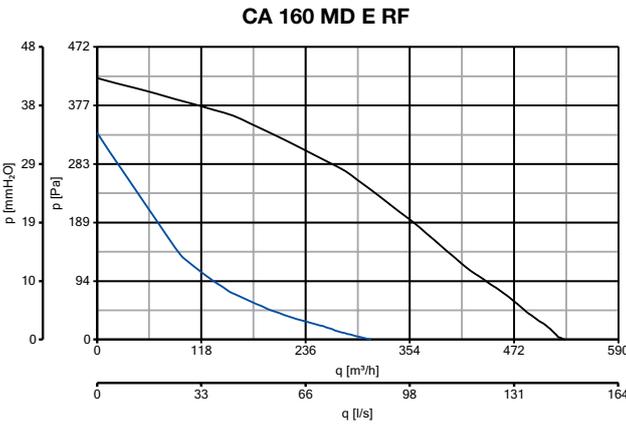
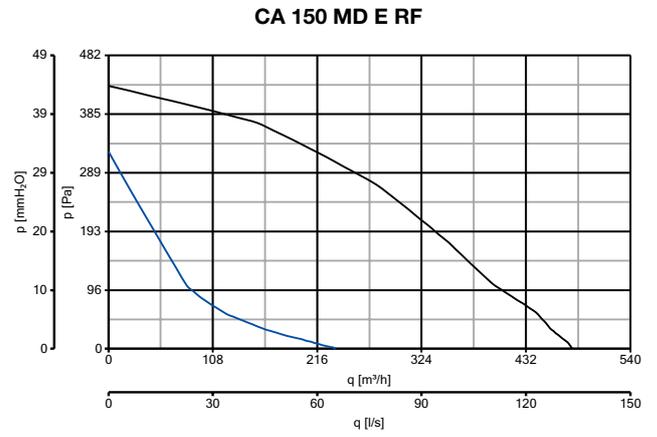
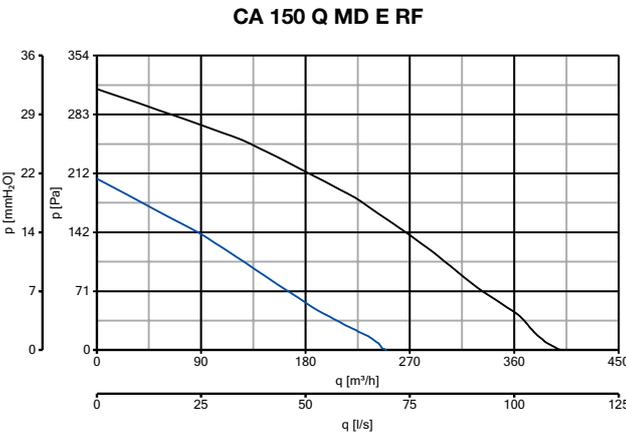
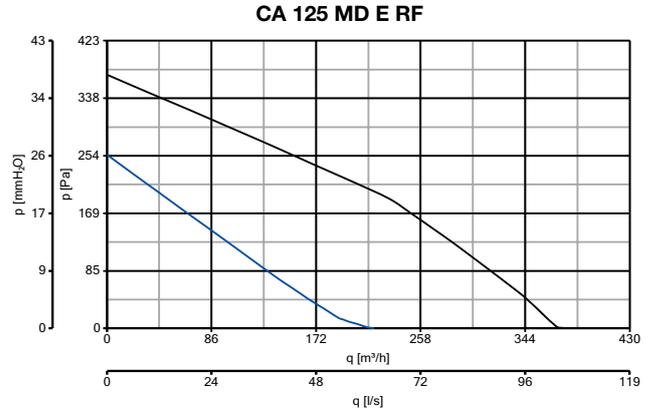
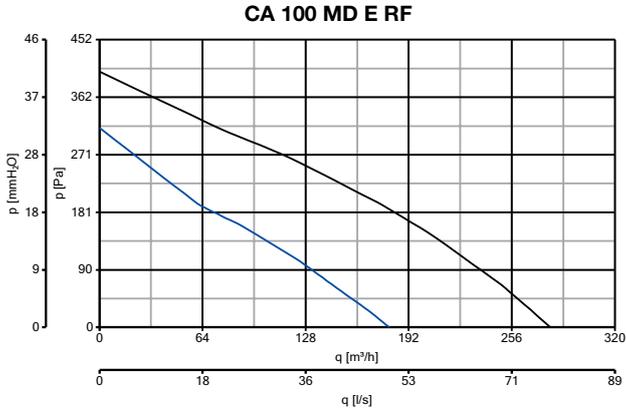
PRODUCT ACCESSORIES

Models	Description	Code	Product	
	C 1.5 - Electronic speed controller 1.5 A	12966	for all models	
	C 2.5 - Electronic speed controller 2.5 A	12967		
	SCNRB - Electronic speed controller built-in	22481	for C 1.5 and C 2.5	
	C TEMP Environmental sensor for temperature	12992	for all models	
	C SMOKE Environmental sensor for air quality	12993		
	C HCS Environmental sensor for humidity	12994		
	C PIR Passive infrared sensor	12998		
	C TIMER Adjustable over-run timer	12999		
	CA-G - Protection grille	Ø 100	22750	16140
		Ø 125	22755	16141
		Ø 150	22760	16142 - 16183
		Ø 160	22762	16184
		Ø 200	22765	16185
		Ø 250	22770	16186
		Ø 315	22775	16187
	CARF-C - Sub-frame	125	22543	16140 - 16141 - 16142
		150/160/200	22544	16183 - 16184 - 16185
		250/315	22545	16186 - 16187

Description and sizes on page 90



PERFORMANCE CURVES





VORT QBK RANGE

Self-supporting double inlet cabinet fans

PRODUCT SPECIFICATIONS

Designed for ducted ventilation applications: kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, models, restaurants, bars, theatres, ballrooms, etc.

- **7 models** 6 single-phase and 1 three-phase.
- Zinc-coated self-supporting cabinet (10/10), polyethylene padding, with metal and adhesive finishing (10 mm), class I.
- Double inlet centrifugal, forward curved impellers, directly coupled to AC one speed, one or three phase motors.
- Double interchangeable inspection panel with handle and triangular key.
- Flow rates up to 8000 m³/h.
- Operating temperature between -20°C and + 40°C.
- Insulation class: I. Ⓡ .

Fans used in VORT QBK range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 30.000 h

TECHNICAL DATA

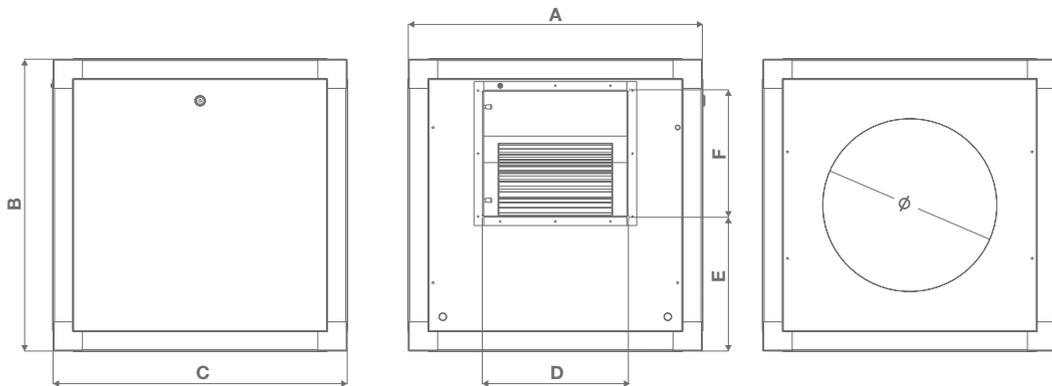
Models	Code	V ~ 50 Hz	W nom/max	A max	Poles	RPM	Max Airflow		Max Pressure		Max °C	IP motor	Kg
							m ³ /h	l/s	mmH ₂ O	Pa			
VORT QBK 1000	45260	230	90 202	0.9	2	1270	700	194	36.7	360	40	54	30
VORT QBK 7/7 4M 1V	45261		200 450	2.0	4	1260	1890	525	30	295	50	55	31
VORT QBK 9/9 4M 1V	45263		550 1180	5.2	4	1200	3950	1097	43.3	425	40	44	33
VORT QBK 10/10 6M 1V	45264		315 640	2.9	6	600	3700	1028	26	255	50	55	38
VORT QBK 10/10 4M 1V	45205		550 1330	6.1	4	1400	4150	1150	48.9	480		20	35.3
VORT QBK 12/12 6M 1V	45206		736 1290	6.15	6	925	6000	1662	32.1	315	40	59.1	
VORT QBK 12/12 6T 1V IP20	45207		1100 2455	4.3		900	8000	2216	33.6	330	50	58.7	

SOUND LEVELS

Models	Code	speed	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	Lw dB(A)	Lp dB(A)* 1 m
VORT QBK 1000	45260	1	32.5	38.6	44.0	52.0	49.9	47.2	43.9	55.7	47.6
VORT QBK 7/7 4M 1V	45261		39.7	48.8	52.9	62.6	62.5	60.4	56.8	67.4	59.3
VORT QBK 9/9 4M 1V	45263		47.6	61.0	59.7	69.3	70.3	71.0	65.8	75.8	67.8
VORT QBK 10/10 6M 1V	45264		43.9	57.5	55.4	63.1	63.7	63.7	55.5	69.0	61.0
VORT QBK 10/10 4M 1V	45205		50.2	57.2	61.0	66.7	66.7	64.9	59.6	71.8	63.8
VORT QBK 12/12 6M 1V	45206		56.1	59.8	66.2	68.9	69.3	67.5	60.8	74.6	66.6
VORT QBK 12/12 6T 1V IP20	45207		56.0		70.2	71.2	71.4	71.8	65.9	77.6	69.6

* Sound pressure level measured at 1 m in free field conditions with long-cased appliance in delivery mode, in accordance with standard EN ISO 3741:2009.

DIMENSIONS



Models	A	B	C	D	E	F	Ø
VORT QBK 1000	440	440	440	226	286	92	250
VORT QBK 7/7 4M 1V				232	172	208	
VORT QBK 9/9 4M 1V	540	540	540	292	222	256	355
VORT QBK 10/10 6M 1V	540	540	540	331	192	289	400
VORT QBK 10/10 4M 1V							
VORT QBK 12/12 6M 1V	680	680	680	395	282	341	450
VORT QBK 12/12 6T 1V IP20							

Dimensions (mm)

PRODUCT ACCESSORIES

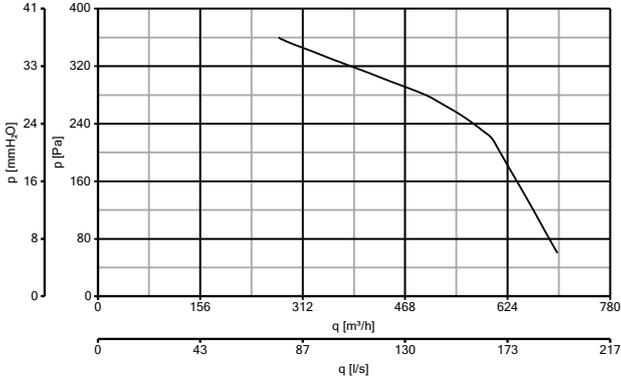
Models	Description	Code	Product	
	IREM 3 - Single-phase speed controller	12931	45260 - 45261 - 45264	
	IREM 5 - Single-phase speed controller	12932	45263	
	IREM 9 - Single-phase speed controller	12933	45205 - 45206	
	IRET 6 - Three-phase speed controller	12934	45207	
	QBK ABC - Air cowling	7/7 - 9/9	24200	45260 - 45261 - 45263
		10/10 - 12/12	24202	45264 - 45205 - 45206 -45207
	QBK RRS - Round nipple joint intake	Ø 250	24205	45260 - 45261
		Ø 315	24206	45263
		Ø 400	24207	45264 - 45205
		Ø 450	24208	45206 - 45207
	QBK RRC SAL - Rain guard	7/7 - 9/9	24209	45260 - 45261 - 45263
		10/10	24210	45264 - 45205
		12/12	24211	45206 - 45207
	QBK F - Feet	24204	for all models	

Description and sizes on page 90

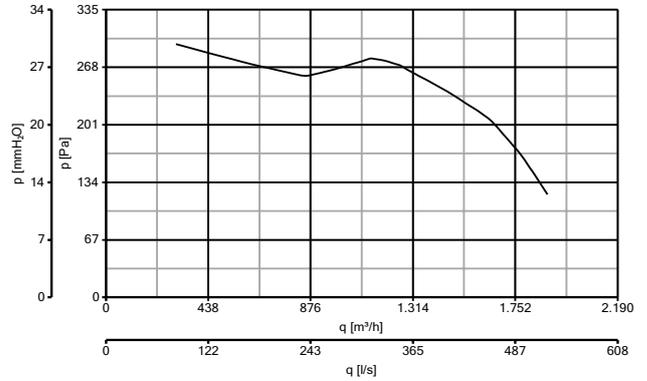


PERFORMANCE CURVES

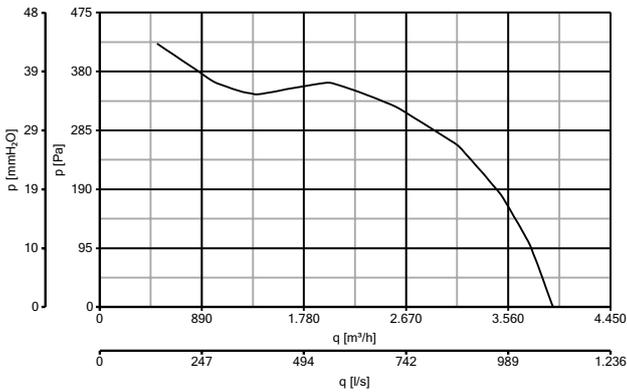
VORT QBK 1000



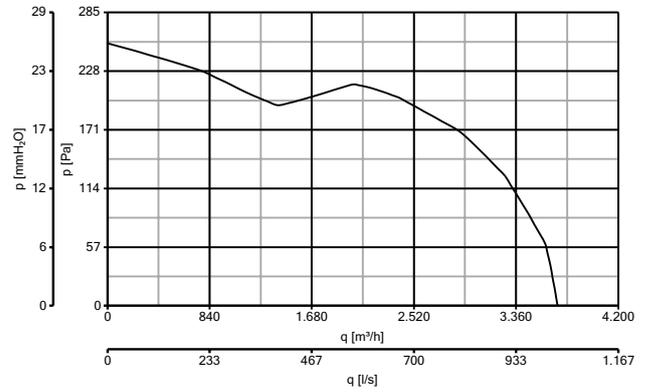
VORT QBK 7/7 4M 1V



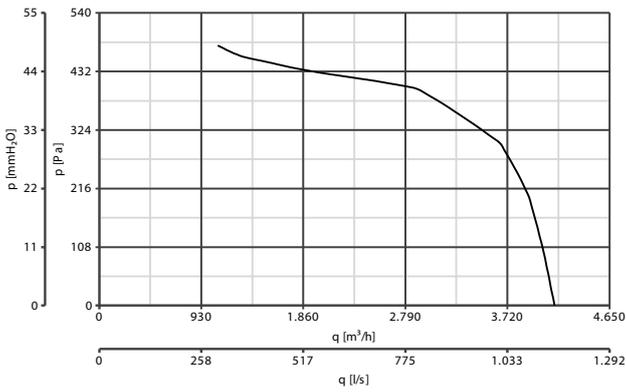
VORT QBK 9/9 4M 1V



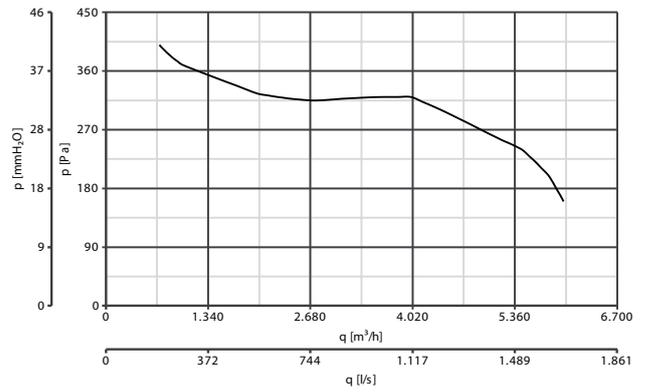
VORT QBK 10/10 6M 1V



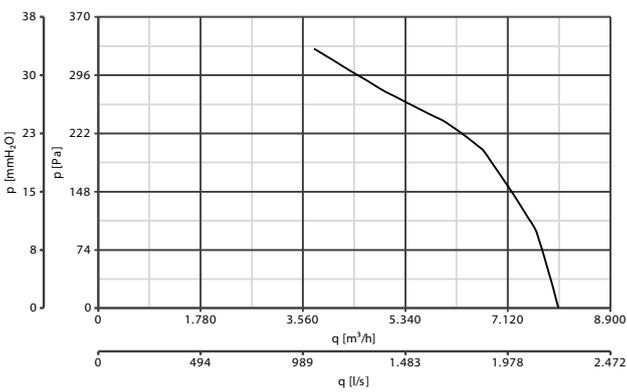
VORT QBK 10/10 4M 1V



VORT QBK 12/12 6M 1V



VORT QBK 12/12 6T 1V IP 20



— Delivery

VORT QBK SAL RANGE

Double inlet cabinet fans

PRODUCT SPECIFICATIONS

Designed for ducted ventilation applications: kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, models, restaurants, bars, theatres, ballrooms, etc.

- **7 models** 6 single-phase and 1 three-phase.
- Extruded UNI 9006 aluminium casings assembled with diecast aluminium joints.
- Sandwich panels, insulated by expanded polyurethane (densit 40 kg/m³), sheet 23 mm thick (external 6/10 thick zinc treated).
- 1 pre-cut intake panel to accommodate square ducting.
- 1 pre-cut intake panel to accommodate round ducting.
- 1 inspection panel with triangular key.
- Double inlet centrifugal, forward curved impellers, directly coupled to AC one speed, one or three phase motors.
- Operating temperature between -20°C and +40°C.
- Insulation class: I. Ⓧ .

Fans used in VORT QBK SAL range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 80.000 h

TECHNICAL DATA

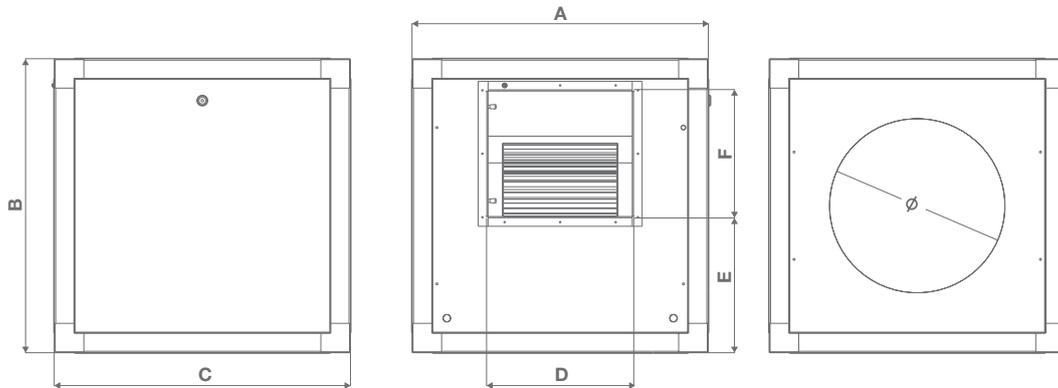
Models	Code	V ~ 50 Hz	W		A max	Poles	RPM	Max Airflow		Max Pressure		Max °C	IP motor	Kg
			nom/max					m ³ /h	l/s	mmH ₂ O	Pa			
VORT QBK SAL 1000	45270	230	90 202	0.9	2	1270	700	194	36.7	360	40	54	47.0	
VORT QBK SAL 7/7 4M 1V	45271		200 450	2.0	4	1260	1890	525	30	295	50	55	48.0	
VORT QBK SAL 9/9 4M 1V	45273		550 1180	5.2	4	1200	3950	1097	43.3	425	40	44	56.0	
VORT QBK SAL 10/10 6M 1V	45274		315 640	2.9	6	600	3700	1028	26	255	50	55	61.0	
VORT QBK SAL 10/10 4M 1V	45225		550 1330	6.1	4	900	4150	1150	48.9	480		20	44.0	
VORT QBK SAL 12/12 6M 1V	45226		736 1290	6.15	6	925	6000	1662	32.1	315	40	61.2		
VORT QBK SAL 12/12 6T 1V IP20	45227		1100 2455	4.3		900	8000	2216	33.6	330	50	61.6		

SOUND LEVELS

Models	Code	Speed	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	Lw dB(A)	Lp dB(A)* 1 m
VORT QBK SAL 1000	45270	1	28.3	34.2	40.3	43.7	39.9	19.7	8.2	46.8	38.7
VORT QBK SAL 7/7 4M 1V	45271		35.5	44.4	49.2	54.3	52.5	32.9	21.1	57.5	49.5
VORT QBK SAL 9/9 4M 1V	45273		43.4	56.6	56	61	60.3	43.5	30.1	65.1	57.1
VORT QBK SAL 10/10 6M 1V	45274		39.7	53.1	51.7	54.8	53.7	36.2	19.8	59.6	51.5
VORT QBK SAL 10/10 4M 1V	45225		46.0	52.8	57.3	58.4	56.7	37.4	23.9	62.9	54.9
VORT QBK SAL 12/12 6M 1V	45226		51.9	55.4	62.5	60.6	59.3	40.0	25.1	66.3	58.3
VORT QBK SAL 12/12 6T 1V IP20	45227		51.8	55.4	66.5	62.9	61.4	44.3	30.2	69.2	61.2

* Sound pressure level measured at 1 m in free field conditions with long-cased appliance in delivery mode, in accordance with standard EN ISO 3741:2009.

DIMENSIONS



Models	A	B	C	D	E	F	Ø
VORT QBK SAL 1000	500	500	500	226	324	93	250
VORT QBK SAL 7/7 4M 1V				232	229	208	
VORT QBK SAL 9/9 4M 1V	600	600	600	298	275	262	355
VORT QBK SAL 10/10 6M 1V				331	248	289	400
VORT QBK SAL 10/10 4M 1V							
VORT QBK SAL 12/12 6M 1V	700	700	700	395	296	341	450
VORT QBK SAL 12/12 6T 1V IP20							

Dimensions (mm)

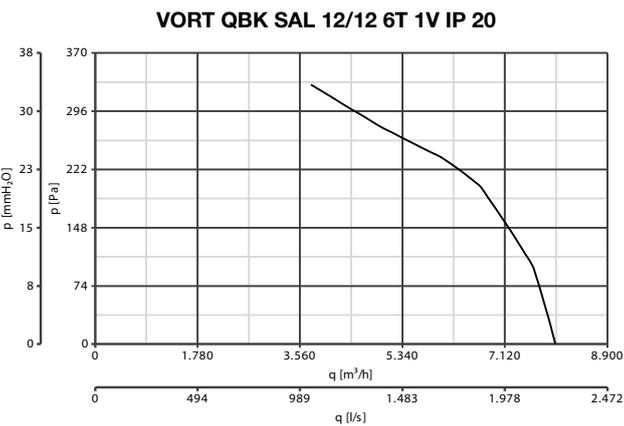
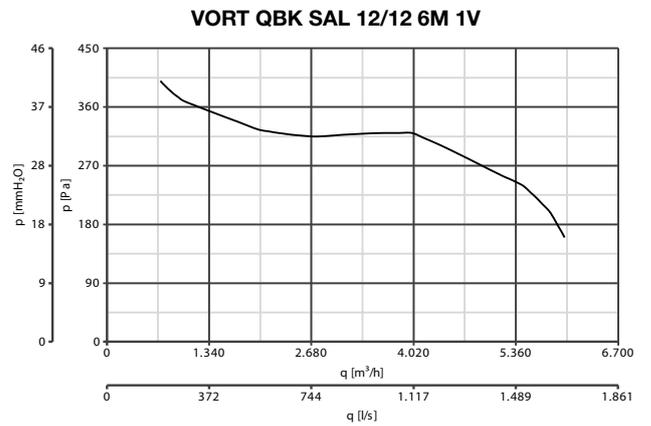
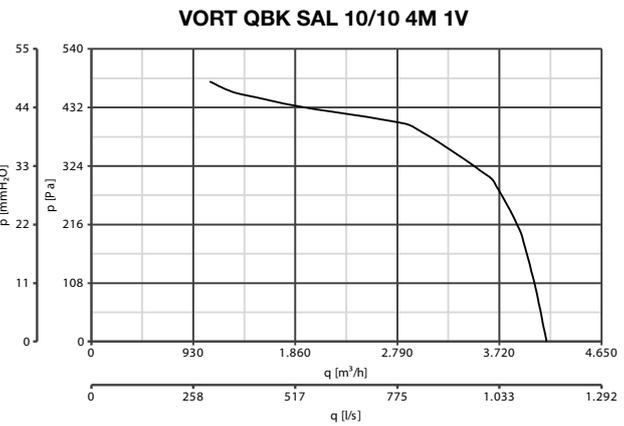
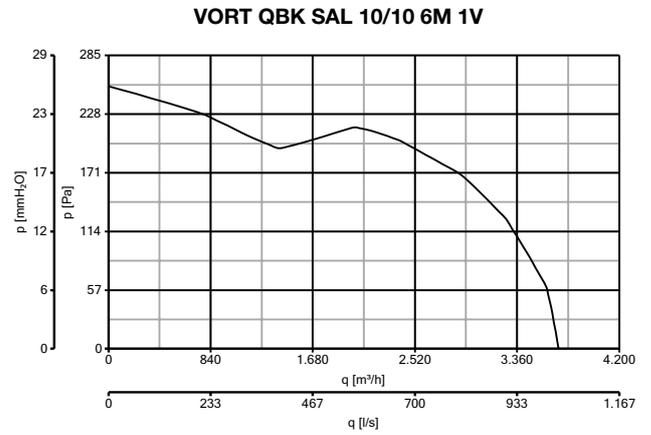
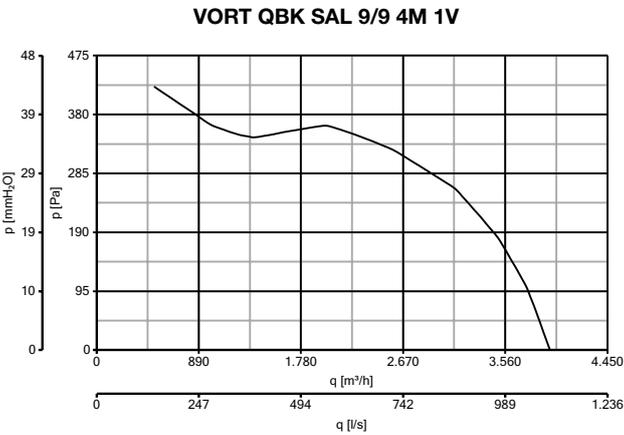
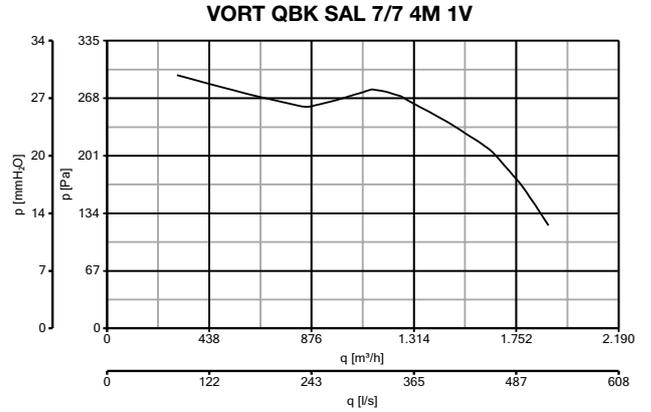
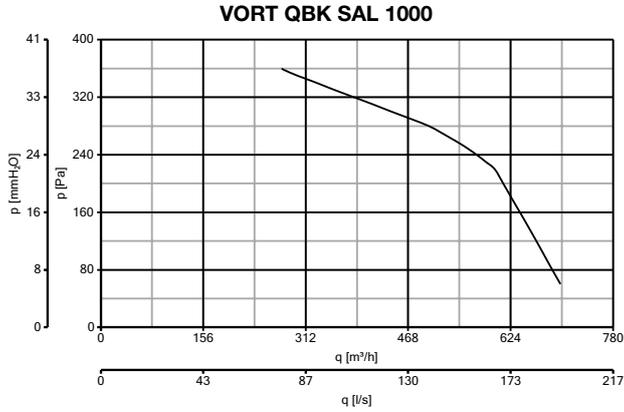
PRODUCT ACCESSORIES

Models	Description	Code	Product	
	IREM 3 - Single-phase speed controller	12931	45270 - 45271 - 45274	
	IREM 5 - Single-phase speed controller	12932	45273	
	IREM 9 - Single-phase speed controller	12933	45225 - 45226	
	IRET 6 - Three-phase speed controller	12934	45227	
	QBK ABC - Air cowling	7/7 - 9/9	24200	45270 - 45271 - 45273
		10/10 - 12/12	24202	45274 - 45225 - 45226 - 45207
	QBK RRS - Round nipple joint intake	Ø 250	24205	45270 - 45271
		Ø 315	24206	45272 - 45273
		Ø 400	24207	45274 - 45225
		Ø 450	24208	45226 - 45227
	QBK RRC SAL - Rain guard	7/7 - 9/9	24209	45270 - 45271 - 45273
		10/10	24210	45274 - 45225
		12/12	24211	45226 - 45227
	QBK F - Feet	24204	for all models	

Description and sizes on page 90



PERFORMANCE CURVES



— Delivery



VORT QBK COMFORT RANGE

Sound-proof double inlet cabinet fans

PRODUCT SPECIFICATIONS

Suitable for domestic, commercial and industrial applications: kitchens, bathrooms, offices, laboratories, factories, shops, laundromats, models, restaurants, bars, theatres, ballrooms, etc.

- **9 modelli** 8 single-phase and 1 three-phase.
- Extruded UNI 9006 aluminium frames assembled with diecast aluminium joints.
- Zinc treated sandwich panels, sound-proof through mineral wool (density 90/100 Kg/m³) covered with 48 mm layer of fibreglass.
- 1 inspection panel with locking handle.
- 1 intake panel with smooth round nipple.
- 1 smooth round nipple on inlet vent.
- Double inlet centrifugal, forward curved impellers, directly coupled to AC one speed, one or three phase motors.
- Operating temperature between -20 °C and +40 °C.
- Insulation class: I. Ⓧ .

Fans used in VORT QBK COMFORT range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 90.000 h

TECHNICAL DATA

Models	Code	V ~ 50 Hz	W nom/max	A max	Poles	RPM	Max Airflow		Max Pressure		Max °C	IP motor	Kg
							m ³ /h min/max	l/s min/max	mmH ₂ O min/max	Pa min/max			
VORT QBK COMFORT 500 4V	45288	230	nd* 140	0.62	6	1030	610	169	42.3	415	50	20	26.5
VORT QBK COMFORT 800 4V	45250		nd* 355	1.55		1850	450 1060	125 294	42.28 48.93	420 480			40
VORT QBK COMFORT 1000	45280		90 202	0.9	2	1270	700	194	36.7	360	54	48.0	
VORT QBK COMFORT 7/7 4M 1V	45281		200 450	2.0	4	1260	1890	525	30.0	295	55	49.0	
VORT QBK COMFORT 9/9 4M 1V	45283		550 1180	5.2	4	1200	3950	1097	43.3	425	44	49.5	
VORT QBK COMFORT 10/10 6M 1V	45284		315 640	2.9	6	600	3700	1028	26.0	255	55	58.0	
VORT QBK COMFORT 10/10 4M 1V	45285		550 1330	6.1	4	900	4150	1150	48.9	480			
VORT QBK COMFORT 12/12 6M 1V	45286		736 1290	6.15	6	925	6000	1662	32.1	315	40	20	57.0
VORT QBK COMFORT 12/12 6T 1V	45287		400	1100 2455		4.3	900	8000	2216	33.6	330		

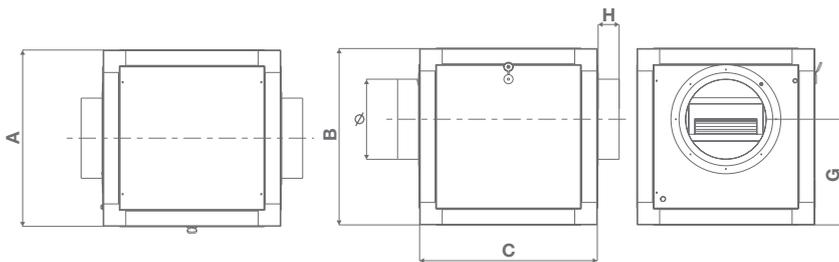
* Not available

SOUND LEVELS

Models	Code	speed	125 Hz	250 Hz	500 Hz	1K Hz	2K Hz	4K Hz	8K Hz	Lw dB(A)	Lp dB(A)* 1 m
VORT QBK COMFORT 500 4V/1	45288	4-max	29.2	32.2	38.0	39.5	33.0	12.6	<10	43.0	35.0
		3	21.3	24.7	30.8	29.8	24.6	34.6		26.6	
		2	15.1	19.4	26.3	24.0	17.6	29.3		21.3	
		1-min	10.8	14.4	19.7	16.1	10.1	22.7		14.7	
VORT QBK COMFORT 800 MC/H 4V	45250	4-max	46.3	52.3	54.6	51.2	47.1	29.1	20.4	58.5	50.4
		3	44.1	45.9	48.8	46.4	41.5	23.1	13.9	53.0	45.0
		2	38.3	39.3	42.1	40.3	34.1	14.8	<10	46.5	38.5
		1-min	28.4	30.3	35.0	31.8	25.3	<10		38.3	30.3
VORT QBK COMFORT 1000	45280	1	26.3	32.2	39.3	42.7	38.9	17.7	7.2	45.7	37.7
VORT QBK COMFORT 7/7 4M 1V	45281		33.5	42.4	48.2	53.3	51.5	30.9	20.1	56.5	48.4
VORT QBK COMFORT 9/9 4M 1V	45283		41.4	54.6	55	60	59.3	41.5	29.1	64.0	55.9
VORT QBK COMFORT 10/10 6M 1V	45284		37.78	51.1	50.7	53.8	52.7	34.2	18.8	58.3	50.3
VORT QBK COMFORT 10/10 4M 1V	45285		44.0	50.8	56.3	57.4	55.7	35.4	22.9	64.8	56.7
VORT QBK COMFORT 12/12 6M 1V	45286		49.0	53.4	61.5	59.6	58.3	38	24.1	68.2	60.2
VORT QBK COMFORT 12/12 6T 1V	45287		49.8		65.5	61.9	60.4	42.3	29.2	71.2	63.1

* Sound pressure level measured at 1 m in free field conditions with long-cased appliance in delivery mode, in accordance with standard EN ISO 3741:2009.

DIMENSIONS



Models	A	B	C	G	H	Ø
VORT QBK COMFORT 500	400	400	400	230	45	200
VORT QBK COMFORT 800	450	450	450	280		
VORT QBK COMFORT 1000	550	550	550	330	60	250
VORT QBK COMFORT 7/7 4M 1V				417.5		
VORT QBK COMFORT 9/9 4M 1V	650	650	650	375	90	400
VORT QBK COMFORT 10/10 6M 1V						
VORT QBK COMFORT 10/10 4M 1V						
VORT QBK COMFORT 12/12 6M 1V	750	750	750	450	90	450
VORT QBK COMFORT 12/12 6T 1V						

Dimensions (mm)

PRODUCT ACCESSORIES

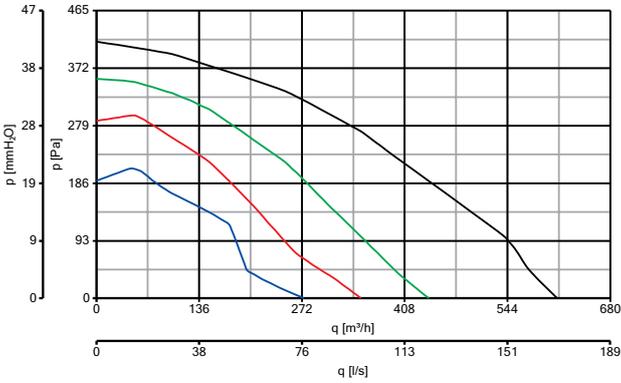
Models	Description	Code	Product	
	IREM 3 - Single-phase speed controller	12931	45280 - 45281 - 45284	
	IREM 5 - Single-phase speed controller	12932	45283	
	IREM 9 - Single-phase speed controller	12933	45285 - 45286	
	IRET 6 - Three-phase speed controller	12934	45287	
	C4VM16 - Three-phase speed controller	14021	45288 - 45250	
	QBK RRC COMFORT - Rain guard	7/7 - 9/9	24212	45280 - 45281
		10/10	24213	45283 - 45284 - 45285
		12/12	24214	45286 - 45287
	QBK COMFORT - Feet	24247	for all models	

Description and sizes on page 90

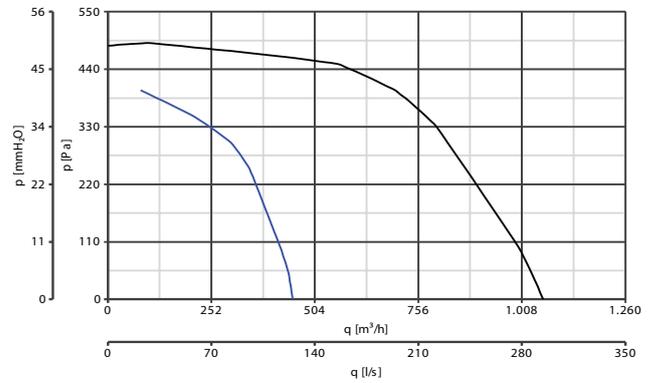


PERFORMANCE CURVES

VORT QBK COMFORT 500 4V

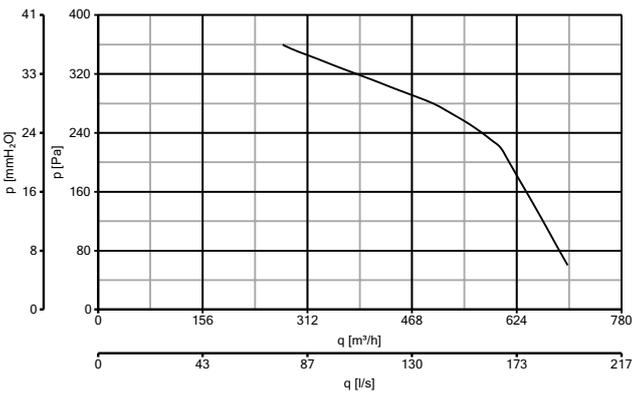


VORT QBK COMFORT 800 MC/H 4V

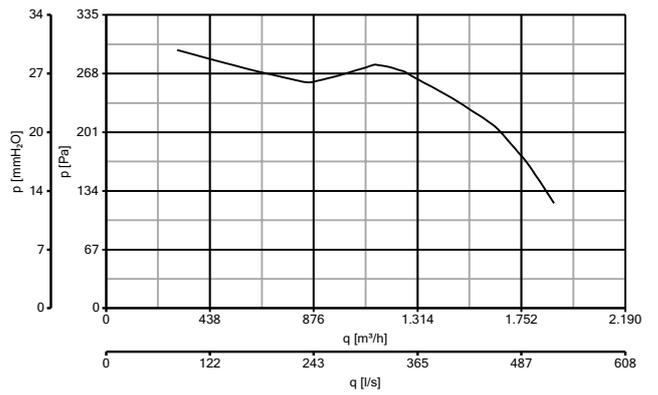


— p = static pressure

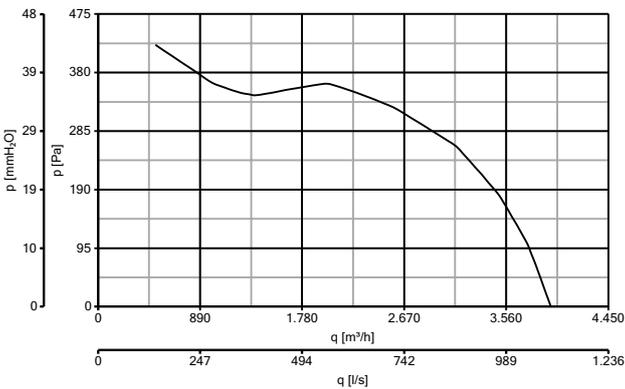
VORT QBK COMFORT 1000



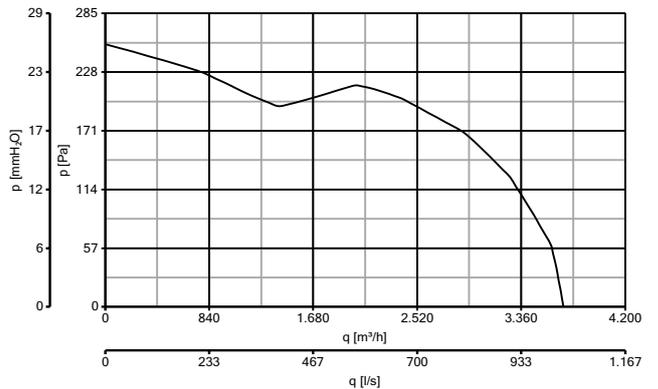
VORT QBK COMFORT 7/7 4M 1V



VORT QBK COMFORT 9/9 4M 1 V

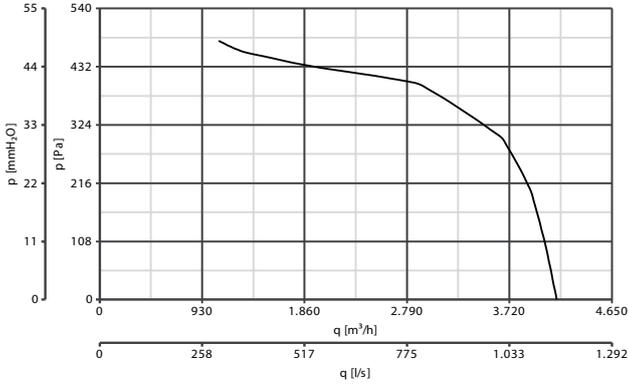


VORT QBK COMFORT 10/10 6M 1V

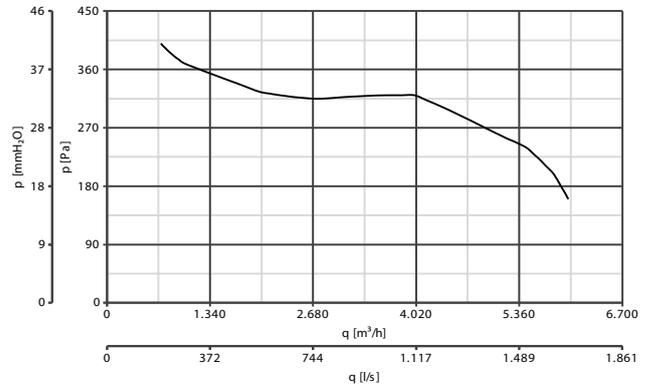


PERFORMANCE CURVES

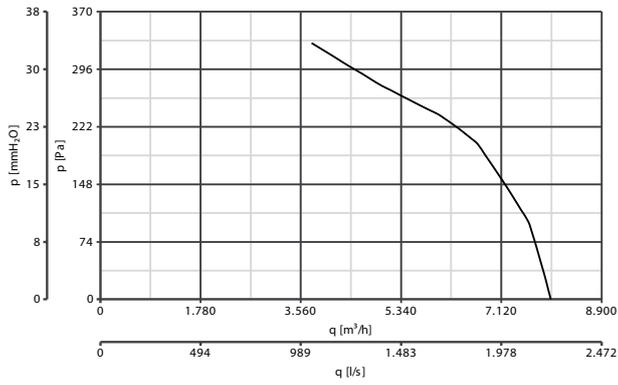
VORT QBK COMFORT 10/10 4M 1V



VORT QBK COMFORT 12/12 6M 1V



VORT QBK COMFORT 12/12 6T 1V



— min — max — p= static pressure



QBK POWER RANGE

Sound-proof double inlet cabinet fans

PRODUCT SPECIFICATIONS

*Design for ducted ventilation applications.
Suitable for internal or external installations.*

- **33 models** one-speed (upon request) and **28 models** two-speed (upon request).
- Extruded aluminium frames assembled with diecast aluminium joints.
- Zinc-coated, sound-proof frames in polyethylene padding, with metal and adhesive finishing, class I.
- One or two-speed three-phase motors, depending on model.
- Belt driven double inlet centrifugal fans equipped with forward curves centrifugal impellers.
- Access through removeable panels or hinged door depending on model.
- Operating temperature between -20°C and +40°C.
Operation at higher temperatures allowed, accepting a power drop.
- Flow rates up to 30000 m³/h.
- Designed for ducted ventilation applications.
- Suitable for internal or external installations.
- Insulation class: I. ⊕ .

Fans used in QBK POWER range comply with ErP Lot. 6 Reg. N° 327/2011/UE.



LONG LIFE 30.000 h



TECHNICAL DATA

Models	Code	Speed N°	V ~ 50 Hz	kW nom.	A nom.	RPM	Max Airflow m3/h	Lp (dBA)* 1m max	Kg	Amb temp. max (°C)	Mot. Insul.	IP Motor
VORT QBK POWER 9/7 1V 0.37	45301	1	230/400	0.37	1.11	1350	2500	70	58	40	cl F	55
VORT QBK POWER 9/7 1V 0.55	45302		230/400	0.55	1.6	1520	2500	72	58	40	cl F	
VORT QBK POWER 9/7 1V 0.75	45303		230/400	0.75	1.93	1030	2500	69	58	40	cl F	
VORT QBK POWER 9/9 1V 0.37	45304		230/400	0.37	1.11	1030	2500	69	62	40	cl F	
VORT QBK POWER 9/9 1V 0.55	45305		230/400	0.55	1.6	1420	3500	72	62	40	cl F	
VORT QBK POWER 9/9 1V 0.75	45306		230/400	0.75	1.93	1590	3500	72	62	40	cl F	
VORT QBK POWER 9/9 1V 1.1	45307		230/400	1.1	2.64	1600	3500	73	62	40	cl F	
VORT QBK POWER 10/10 1V 0.55	45308		230/400	0.55	1.6	895	3500	72	83	40	cl F	
VORT QBK POWER 10/10 1V 0.75	45309		230/400	0.75	1.93	1050	4500	71	83	40	cl F	
VORT QBK POWER 10/10 1V 1.1	45310		230/400	1.1	2.64	1345	4500	73	83	40	cl F	
VORT QBK POWER 10/10 1V 1.5	45311		230/400	1.5	3.45	1360	4500	74	83	40	cl F	
VORT QBK POWER 12/12 1V 0.75	45312		230/400	0.75	1.93	735	5000	68	104	40	cl F	
VORT QBK POWER 12/12 1V 1.1	45313		230/400	1.1	2.64	1020	6000	71	104	40	cl F	
VORT QBK POWER 12/12 1V 1.5	45314		230/400	1.5	3.45	1150	7000	75	104	40	cl F	
VORT QBK POWER 12/12 1V 2.2	45315		230/400	2.2	4.84	1150	7000	76	104	40	cl F	
VORT QBK POWER 15/15 1V 1.1	45316		230/400	1.1	2.64	640	7000	70	139	40	cl F	
VORT QBK POWER 15/15 1V 1.5	45317		230/400	1.5	3.45	740	9000	73	139	40	cl F	
VORT QBK POWER 15/15 1V 2.2	45318		230/400	2.2	4.84	950	10000	77	139	40	cl F	
VORT QBK POWER 15/15 1V 3	45319		230/400	3	6.47	960	10000	78	139	40	cl F	
VORT QBK POWER 18/18 1V 1.5	45320		230/400	1.5	3.45	520	10000	72	208	40	cl F	
VORT QBK POWER 18/18 1V 2.2	45321		230/400	2.2	4.84	730	14000	79	208	40	cl F	
VORT QBK POWER 18/18 1V 3	45322		230/400	3	6.47	820	14000	79	208	40	cl F	
VORT QBK POWER 18/18 1V 4	45323		230/400	4	8.26	820	16000	82	208	40	cl F	
VORT QBK POWER 18/18 1V 5.5	45324		230/400	5.5	11.03	820	16000	82	208	40	cl F	
VORT QBK POWER 560 1V 3	45325		230/400	3	6.47	600	18000	73	276	40	cl F	
VORT QBK POWER 560 1V 4	45326		230/400	4	8.26	670	20000	76	276	40	cl F	
VORT QBK POWER 560 1V 5.5	45327		230/400	5.5	11.03	770	22000	78	276	40	cl F	
VORT QBK POWER 560 1V 7.5	45328		230/400	7.5	14.64	790	22000	79	276	40	cl F	
VORT QBK POWER 630 1V 4	45329		230/400	4	8.26	460	22000	73	276	40	cl F	
VORT QBK POWER 630 1V 5.5	45330		230/400	5.5	11.03	600	27000	78	348	40	cl F	
VORT QBK POWER 630 1V 7.5	45331		230/400	7.5	14.64	670	30000	80	348	40	cl F	
VORT QBK POWER 630 1V 9.2	45332		230/400	9.2	17.85	670	30000	80	348	40	cl F	
VORT QBK POWER 630 1V 11	45333		230/400	11	20.64	700	30000	81	348	40	cl F	



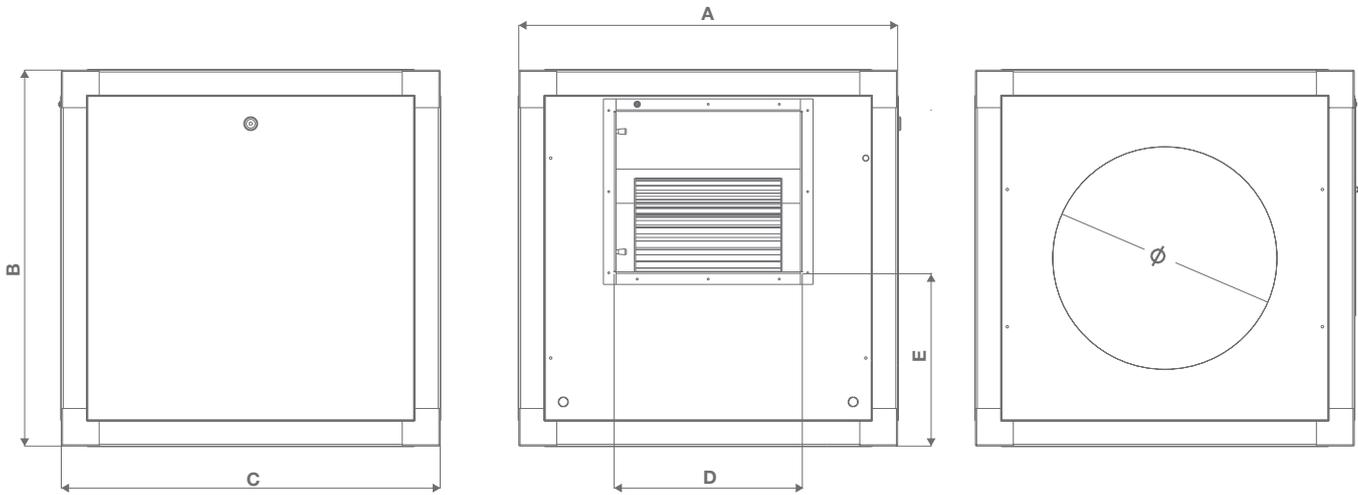
TECHNICAL DATA

Models	Code	Speed N°	V ~ 50 Hz	kW nom.	A nom.	RPM	Max Airflow m3/h	Lp (dBA)* 1m max	Kg	Amb temp. max (°C)	Mot. Insul.	IP Motor
VORT QBK POWER 9/7 2V 0.55	45342	2	400	0.5-0.19	1.4-0.7	1520	2500	72	58	cl F	40	55
VORT QBK POWER 9/7 2V 0.75	45343		400	0.66-0.25	1.75-0.8	1490	2500	73	58	cl F	40	
VORT QBK POWER 9/9 2V 0.55	45345		400	0.5-0.19	1.4-0.7	1420	3500	72	62	cl F	40	
VORT QBK POWER 9/9 2V 0.75	45346		400	0.66-0.25	1.75-0.8	1590	3500	72	62	cl F	40	
VORT QBK POWER 9/9 2V 1.1	45347		400	1-0.3	2.5-1.2	1600	3500	73	62	cl F	40	
VORT QBK POWER 10/10 2V 0.55	45348		400	0.5-0.19	1.4-0.7	895	3500	72	83	cl F	40	
VORT QBK POWER 10/10 2V 0.75	45349		400	0.66-0.25	1.75-0.8	1050	4500	71	83	cl F	40	
VORT QBK POWER 10/10 2V 1.1	45350		400	1-0.3	2.5-1.2	1345	4500	73	83	cl F	40	
VORT QBK POWER 10/10 2V 1.5	45351		400	1.5-0.45	3.5-1.6	1360	4500	74	83	cl F	40	
VORT QBK POWER 12/12 2V 0.75	45352		400	0.66-0.25	1.75-0.8	735	5000	68	104	cl F	40	
VORT QBK POWER 12/12 2V 1.1	45353		400	1-0.3	2.5-1.2	1020	6000	71	104	cl F	40	
VORT QBK POWER 12/12 2V 1.5	45354		400	1.5-0.45	3.5-1.6	1150	7000	75	104	cl F	40	
VORT QBK POWER 12/12 2V 2.2	45355		400	2-0.6	4.5-2	1150	7000	76	104	cl F	40	
VORT QBK POWER 15/15 2V 1.1	45356		400	1-0.3	2.5-1.2	640	7000	70	139	cl F	40	
VORT QBK POWER 15/15 2V 1.5	45357		400	1.5-0.45	3.5-1.6	740	9000	73	139	cl F	40	
VORT QBK POWER 15/15 2V 2.2	45358		400	2-0.6	4.5-2	950	10000	77	139	cl F	40	
VORT QBK POWER 15/15 2V 3	45359		400	3-1	6.3-3.1	960	10000	78	139	cl F	40	
VORT QBK POWER 18/18 2V 1.5	45360		400	1.5-0.45	3.5-1.6	520	10000	72	208	cl F	40	
VORT QBK POWER 18/18 2V 2.2	45361		400	2-0.6	4.5-2	730	14000	79	208	cl F	40	
VORT QBK POWER 18/18 2V 3	45362		400	3-1	6.3-3.1	820	14000	79	208	cl F	40	
VORT QBK POWER 18/18 2V 4	45363		400	4.5-1.5	9.2-5.1	820	16000	82	208	cl F	40	
VORT QBK POWER 18/18 2V 5.5	45364		400	6-2	12-5.6	820	16000	82	208	cl F	40	
VORT QBK POWER 560 2V 3	45365		400	3-1	6.3-3.1	600	18000	73	276	cl F	40	
VORT QBK POWER 560 2V 4	45366		400	4.5-1.5	9.2-5.1	670	20000	76	276	cl F	40	
VORT QBK POWER 560 2V 5.5	45367		400	6-2	12-5.6	770	22000	78	276	cl F	40	
VORT QBK POWER 630 2V 4	45369		400	4.5-1.5	9.2-5.1	460	22000	73	348	cl F	40	
VORT QBK POWER 630 2V 5.5	45370		400	6-2	12-5.6	600	27000	78	348	cl F	40	
VORT QBK POWER 630 2V 11	45373		400	10.5-3.5	21-8.6	700	30000	81	348	cl F	40	

NOTE: Operation at higher temperatures is also possible. At higher temperatures however, there is a drop in power (contact our technical-sales office).

* Sound pressure level measured at 1 m in free field conditions.

DIMENSIONS

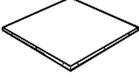
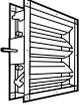


Models	A	B	C	D	E
VORT QBK POWER 9/7	790	600	600	235	265
VORT QBK POWER 9/9				300	265
VORT QBK POWER 10/10	1040	700	700	335	295
VORT QBK POWER 12/12		790	790	395	340
VORT QBK POWER 15/15		1040	1040	470	405
VORT QBK POWER 18/18	1290	1290	1290	560	480
VORT QBK POWER 560	1540			640	640
VORT QBK POWER 630		1540	1540	1540	720

Dimensions (mm)

NOTE:
The overall dimensions of QBK POWER are indicative since they are subject to change upon final order confirmation.
In case the unit is fitted with the filtering section accessory, dimension A will increase by 250 mm.

PRODUCT ACCESSORIES

Models		Code	Product
	QBK RRC POWER 9/7 - 9/9 Rain guard	24215	45300 - 45301 - 45302 - 45303 - 45304 - 45305 - 45306 - 45307 - 45340 - 45341 - 45342 - 45343 - 45344 - 45345 - 45346 - 45347
	QBK RRC POWER 10/10 Rain guard	24216	45308 - 45309 - 45310 - 45311 - 45348 - 45349 - 45350 - 45351
	QBK RRC POWER 12/12 Rain guard	24217	45312 - 45313 - 45314 - 45315 - 45352 - 45353 - 45354 - 45355
	QBK RRC POWER 15/15 Rain guard	24218	45316 - 45317 - 45318 - 45319 - 45356 - 45357 - 45358 - 45359
	QBK RRC POWER 18/18 Rain guard	24219	45320 - 45321 - 45322 - 45323 - 45324 - 45360 45361 - 45362 - 45363 - 45364
	QBK RRC POWER 560 Rain guard	24220	45325 - 45326 - 45327 - 45328 - 45365 - 45366 - 45367 - 45368
	QBK RRC POWER 630 Rain guard	24221	45329 - 45330 - 45331 - 45332 - 45333 - 45369 - 45370 - 45371 - 45372 - 45373
	QBK VCD POWER 9/7 - 9/9 Adjustment shutter	24222	45300 - 45301 - 45302 - 45303 - 45304 - 45305 - 45306 - 45307 - 45340 - 45341 - 45342 - 45343 - 45344 - 45345 - 45346 - 45347
	QBK VCD POWER 10/10 Adjustment shutter	24223	45308 - 45309 - 45310 - 45311 - 45348 - 45349 - 45350 - 45351
	QBK VCD POWER 12/12 Adjustment shutter	24224	45312 - 45313 - 45314 - 45315 - 45352 - 45353 - 45354 - 45355
	QBK VCD POWER 15/15 Adjustment shutter	24225	45316 - 45317 - 45318 - 45319 - 45356 - 45357 - 45358 - 45359
	QBK VCD POWER 18/18 Adjustment shutter	24226	45320 - 45321 - 45322 - 45323 - 45324 - 45360 45361 - 45362 - 45363 - 45364
	QBK VCD POWER 560 Adjustment shutter	24227	45325 - 45326 - 45327 - 45328 - 45365 - 45366 - 45367 - 45368
	QBK VCD POWER 630 Adjustment shutter	24228	45329 - 45330 - 45331 - 45332 - 45333 - 45369 - 45370 - 45371 - 45372 - 45373
	QBK IG 9/7 - 9/9 Intake grille	24230	45300 - 45301 - 45302 - 45303 - 45304 - 45305 - 45306 - 45307 - 45340 - 45341 - 45342 - 45343 - 45344 - 45345 - 45346 - 45347
	QBK IG 10/10 Intake grille	24231	45308 - 45309 - 45310 - 45311 - 45348 - 45349 - 45350 - 45351
	QBK IG 12/12 Intake grille	24232	45312 - 45313 - 45314 - 45315 - 45352 - 45353 - 45354 - 45355
	QBK IG 15/15 Intake grille	24233	45316 - 45317 - 45318 - 45319 - 45356 - 45357 - 45358 - 45359
	QBK IG 18/18 Intake grille	24234	45320 - 45321 - 45322 - 45323 - 45324 - 45360 45361 - 45362 - 45363 - 45364
	QBK IG 560 Intake grille	24235	45325 - 45326 - 45327 - 45328 - 45365 - 45366 - 45367 - 45368
	QBK IG 630 Intake grille	24236	45329 - 45330 - 45331 - 45332 - 45333 - 45369 - 45370 - 45373
	QBK SS Safety micro-switch	24237	for all models
	QBK VDP 9 - 10 - 12 - 15 - 18 Variable pulley	24238	45300 - 45301 - 45302 - 45303 - 45304 - 45305 - 45306 - 45307 - 45340 - 45341 - 45342 - 45343 - 45344 - 45345 - 45346 - 45347
	QBK VDP 560 - 630 Variable pulley	24239	45325 - 45326 - 45327 - 45328 - 45329 - 45330 - 45331 - 45332 - 45333 - 45365 - 45366 - 45367 - 45368 - 45369 - 45370 - 45373
	QBK FS 9/7 - 9/9 Filtering section	24240	45300 - 45301 - 45302 - 45303 - 45304 - 45305 - 45306 - 45307 - 45342 - 45343 - 45345 - 45346 - 45347
	QBK FS 10/10 Filtering section	24241	45308 - 45309 - 45310 - 45311 - 45348 - 45349 - 45350 - 45351
	QBK FS 12/12 Filtering section	24242	45312 - 45313 - 45314 - 45315 - 45352 - 45353 - 45354 - 45355
	QBK FS 15/15 Filtering section	24243	45316 - 45317 - 45318 - 45319 - 45356 - 45357 - 45358 - 45359
	QBK FS 18/18 Filtering section	24244	45320 - 45321 - 45322 - 45323 - 45324 - 45360 45361 - 45362 - 45363 - 45364
	QBK FS 560 Filtering section	24245	45325 - 45326 - 45327 - 45328 - 45365 - 45366 - 45367 - 45368
	QBK FS 630 Filtering section	24246	45329 - 45330 - 45331 - 45332 - 45333 - 45369 - 45370 - 45372 - 45373
	QBK ABC 7/7 - 9/9 Filtering section	24200	45301 - 45302 - 45303 - 45304 - 45305 - 45306 - 45307 - 45342 - 45343 - 45345 - 45346 - 45347
	QBK ABC 10/10 - 12/12 Air cowling	24202	45308 - 45309 - 45310 - 45311 - 45348 - 45349 - 45350 - 45351 - 45312 - 45313 - 45314 - 45315 - 45352 - 45353 - 45354 - 45355

Accessories of cabinet QBK POWER cannot be ordered separately but only in association with them. The required accessories will be mounted directly on the cabinets prior to delivery.



VORT QBK QUIET RANGE

Soundproof cabinet fans for residential, commercial and industrial applications

PRODUCT SPECIFICATIONS

Appliances for ducted ventilation specifically designed to ensure low noise emissions and to facilitate installation on false ceilings thanks to their compact size.

- **6 models:** nominal diameters comprehended between 100 e 315 mm.
- Covers equipped with 4 snap hinges for easy inspection and maintenance.
- Gravity-operated anti-backflow internal dampers.
- Single-speed fans suitable for control with electronic or auto-transformer devices, and designed for continuous operation between -15°C to + 50°C. Class B, external rotor motors with ball-bearings and IP44 protection rating. Forward curved centrifugal impellers made of galvanized steel, dynamically balanced (standard ISO 1940).
- IP55 electrical connection box complete with cable grommet diam. 20 mm.
- Protection rating: IPX2.
- Insulation class: I.

Fans used in VORT QBK QUIET range comply with ErP Lot. 6 Reg. N° 327/2011/UE.

TECHNICAL DATA

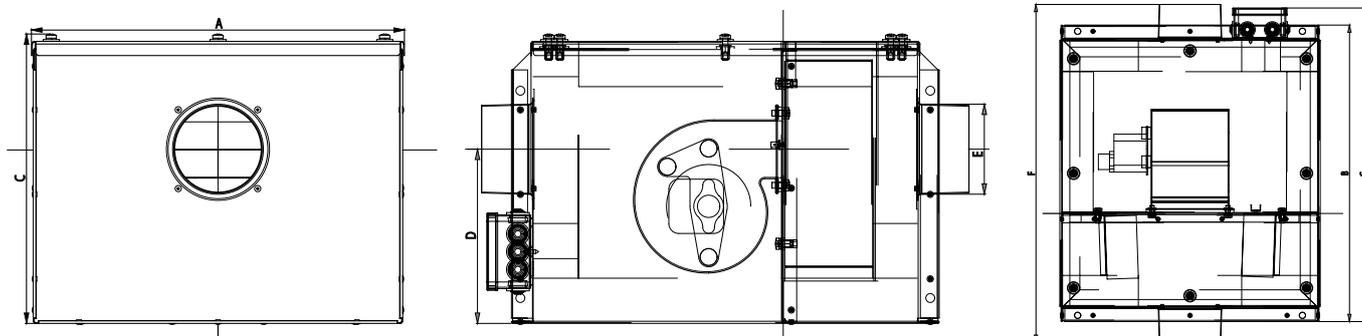
Models	Code	V ~ 50 Hz	W nom/max	A max	RPM	Max Airflow		Max Pressure		Max °C	IP motor	Kg
						m³/h	l/s	mmH₂O	Pa			
VORT QBK QUIET 100	45251	230	54	0.4	2410	175	48.6	20.7	203	50	H	12
VORT QBK QUIET 125	45252		56		2268	230	63.9	20.3	199			
VORT QBK QUIET 150	45253		128	0.6	2051	520	144.4	40.6	398	B	18	
VORT QBK QUIET 200	45254		174	0.8	1811	760	211.1	48.3	474			
VORT QBK QUIET 250	45255		410	2.0	1311	1715	476.4	51.9	509	F	40	
VORT QBK QUIET 315	45256		780	3.7	1390	2421	672.5	26.9	264			

SOUND LEVELS

Models	Code	Speed	Lp dB(A)* 3 m
VORT QBK QUIET 100	45251	Max	24
			19
			23
VORT QBK QUIET 125	45252		31
			22
			22
VORT QBK QUIET 150	45253		35
			30
			33
VORT QBK QUIET 200	45254		36
			32
			31
VORT QBK QUIET 250	45255	41	
		35	
		37	
VORT QBK QUIET 315	45256	52	
		48	
		39	

* Sound pressure level measured at 1 m in free field conditions with long-cased appliance in delivery mode, in accordance with standard EN ISO 3741:2009.

DIMENSIONS



Models	A	B	C	D	Ø E	F	G
VORT QBK QUIET 100	416	477	317	195	100	544	505
VORT QBK QUIET 125					125		
VORT QBK QUIET 150	488	572	375	224	150	680	600
VORT QBK QUIET 200					200		
VORT QBK QUIET 250	609	719	551	352	250	870	746
VORT QBK QUIET 315					315		

Dimensions (mm)

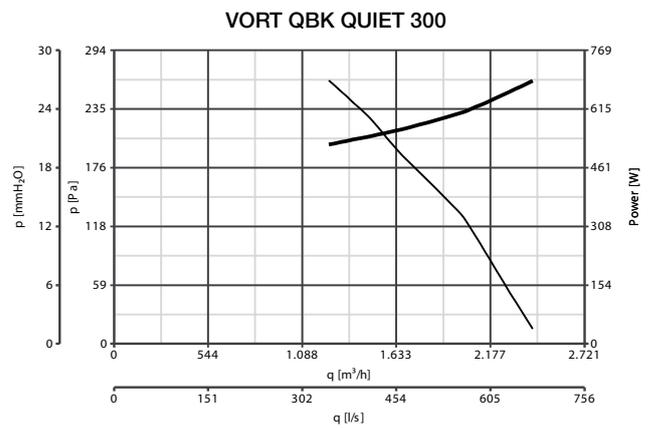
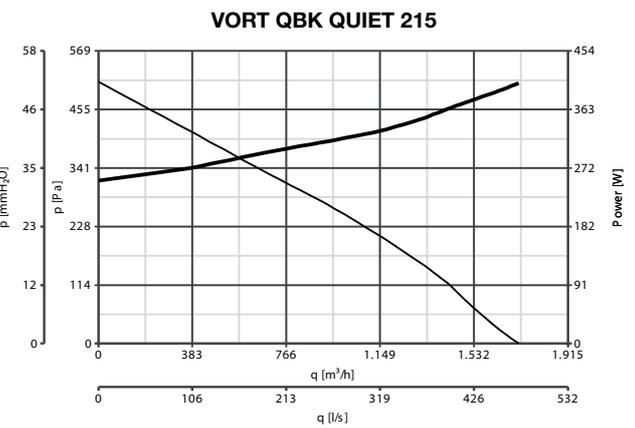
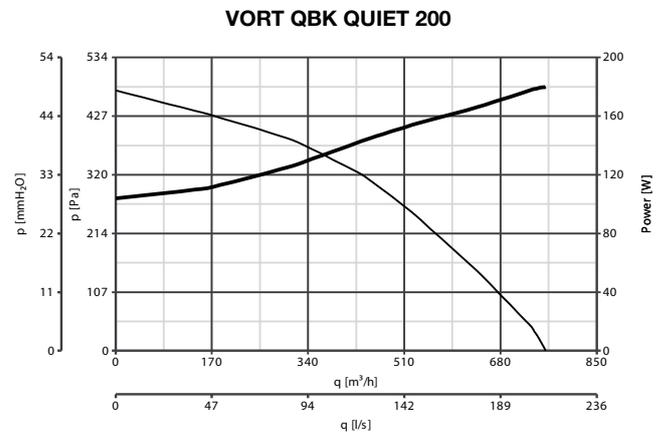
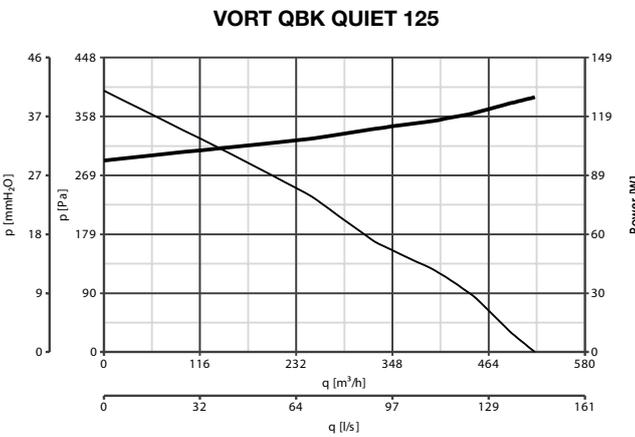
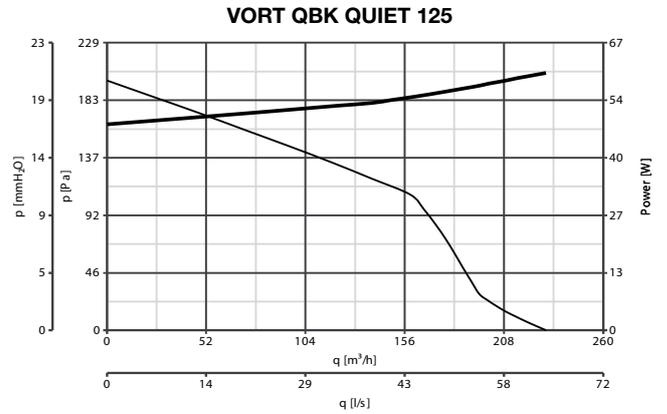
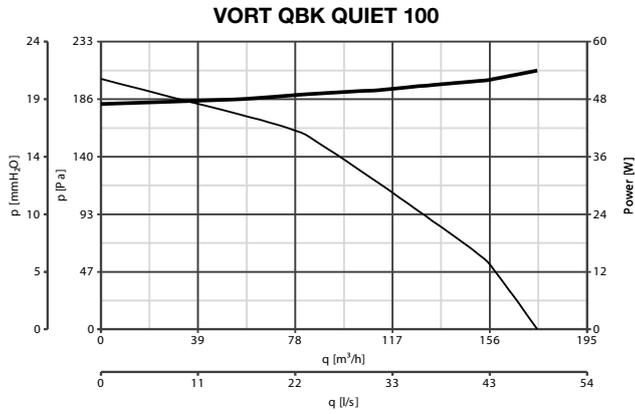
PRODUCT ACCESSORIES

Models	Description	Code	Product
	C 1.5 - Electronic speed controller 1.5 A	11296	45251 - 45252 - 45253 -45254
	IREM 3 - Single-phase speed controller	12931	45255
	IREM 5 - Single-phase speed controller	12932	45256

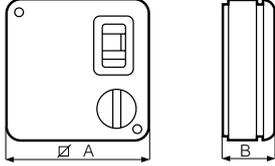
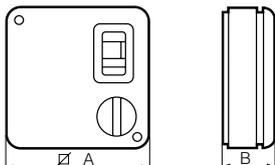
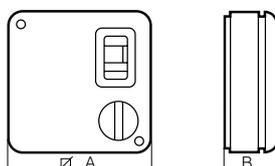
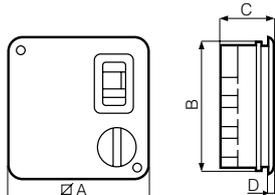
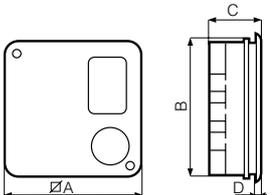
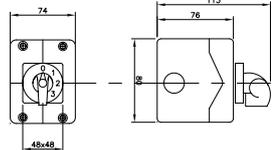
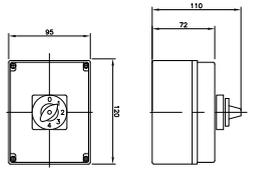
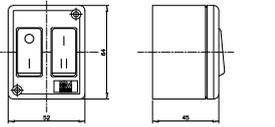
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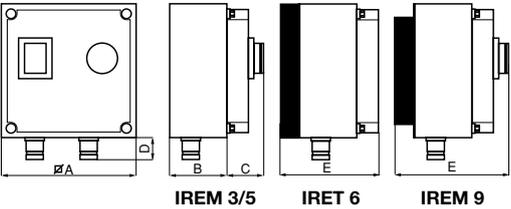
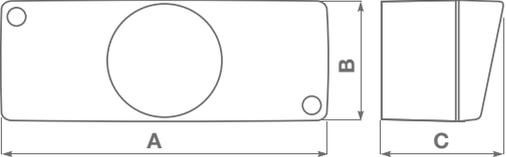


PERFORMANCE CURVES

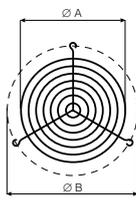
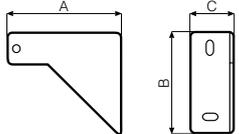
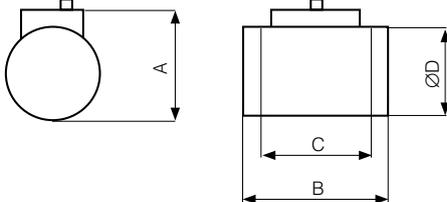
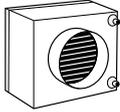
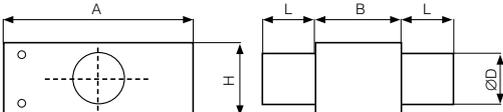
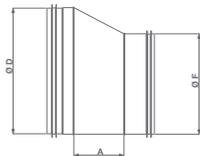


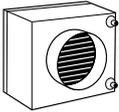
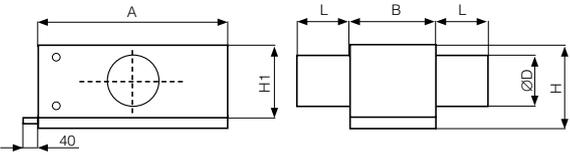
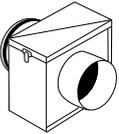
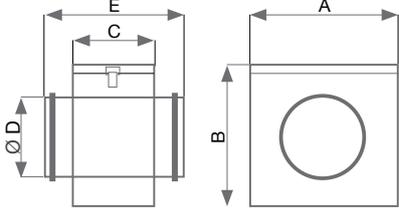
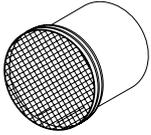
— Power consumption — p = static pressure

Models		Code	Dimensions																		
	<p>C5 0.5 5 position speed controller. 5 speeds controller. Not suitable for timer, automatic, automatic timer and cord operated appliances. Weight 0.2 Kg. Convertible to flush-mounted using SCB5 kit. Maximum load 200 W (for C 1.5). Double insulation.</p>	12987	 <table border="1"> <thead> <tr> <th>∅ A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>120</td> <td>43</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅ A	B	120	43														
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	<p>C1.5 Non reversible variable electronic speed controller. Not suitable for products with timer or automatic shutters. Convertible to flush-mounted using SCB5 kit. Weight 0.2 Kg. Maximum load 200 W (for C 1.5). Double insulation.</p>	12966	 <table border="1"> <thead> <tr> <th>∅ A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>120</td> <td>43</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅ A	B	120	43														
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	<p>C2.5 Non reversible variable electronic speed controller. Not suitable for products with timer or automatic shutters. Convertible to flush-mounted using SCB5 kit. Weight 0.2 Kg. Maximum load 450 W (for C 2.5). Double insulation.</p>	12967	 <table border="1"> <thead> <tr> <th>∅ A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>120</td> <td>43</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅ A	B	120	43														
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	<p>SCNRB Non reversible variable electronic speed controller (built-in). Weight 0.2 Kg. Maximum load 200 W. Double insulation.</p>	12971	 <table border="1"> <thead> <tr> <th>∅ A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>142</td> <td>135</td> <td>59.5</td> <td>4.5</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅ A	B	C	D	142	135	59.5	4.5										
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	<p>KIT SCB Kit to convert C1.5 to built-in model.</p> <p>KIT SCB5 Kit to convert C5 0.5 to built-in model.</p>	22481 22483	 <table border="1"> <thead> <tr> <th>∅ A</th> <th>B</th> <th>C</th> <th>D</th> </tr> </thead> <tbody> <tr> <td>142</td> <td>135</td> <td>59.5</td> <td>4.5</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	∅ A	B	C	D	142	135	59.5	4.5										
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	<p>C3VM16 Comm. 3V single phase 16 A.</p>	22916	<table border="1"> <thead> <tr> <th>V~50Hz</th> <th>A</th> <th>Kg</th> <th>Insulation</th> <th>IP</th> </tr> </thead> <tbody> <tr> <td>220-240</td> <td>16</td> <td>0.33</td> <td>Cl.II</td> <td>65</td> </tr> </tbody> </table>  <table border="1"> <thead> <tr> <th>A</th> <th>B</th> <th>C</th> <th>C₁</th> </tr> </thead> <tbody> <tr> <td>74</td> <td>80</td> <td>76</td> <td>113</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	V~50Hz	A	Kg	Insulation	IP	220-240	16	0.33	Cl.II	65	A	B	C	C ₁	74	80	76	113
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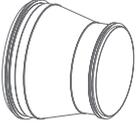
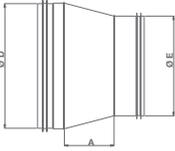
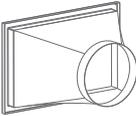
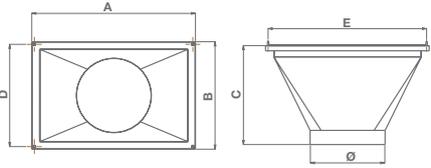
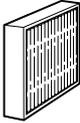
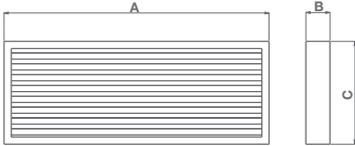
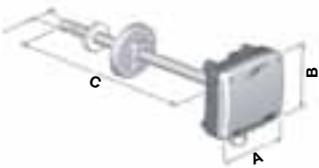
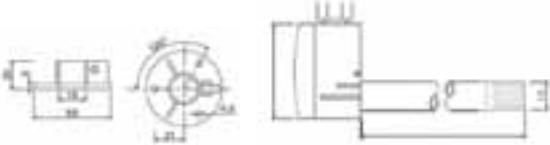
Models		Code	Dimensions																																	
	<p>IREM and IRET Single-phase and three-phase speed controller. Supply voltage: 220-240 V for single-phase models. Supply voltage: 380-415 V for three-phase models. Frequency: 50Hz. Protection rating: IP54. Insulation class: Cl. I</p>	<p>12931 12932 12933 12934</p>	<div style="display: flex; justify-content: space-around; align-items: center;">  </div> <table border="1" data-bbox="959 640 1465 815"> <thead> <tr> <th>Models</th> <th>Code</th> <th>∅ A</th> <th>C</th> <th>D</th> <th>E</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>IREM 3</td> <td>12931</td> <td rowspan="2">125</td> <td>57</td> <td>31</td> <td rowspan="2">25</td> <td>-</td> </tr> <tr> <td>IREM 5</td> <td>12932</td> <td>-</td> <td>-</td> <td>103</td> </tr> <tr> <td>IREM 9</td> <td>12933</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>IRET 6</td> <td>12934</td> <td>175</td> <td>-</td> <td>-</td> <td>30</td> <td>105</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	∅ A	C	D	E	F	IREM 3	12931	125	57	31	25	-	IREM 5	12932	-	-	103	IREM 9	12933						IRET 6	12934	175	-	-	30	105
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	<p>SENSOR UNITS Sensor units are appliances which detect certain environmental conditions (humidity, temperature, human motion, odour and smoke concentration) and automatically activate the extractor fans. They may also be connected to Vortice control units, enhancing their functions.</p> <p>Supply voltage 220-240 V Frequency: 50/60 Hz Max load 3A Operating temperature: 50 °C Protection rating IP20</p> <p>C TEMP (cod. 12992) Checks the temperature of the surrounding air: the extractor fan is activated automatically when a certain temperature is recorded; this can be adjusted, using an external trimmer, to a value between 10°C and 40°C above the set threshold. A timer keeps it running after the temperature has fallen below the set threshold, for a period of time which can be adjusted to a value between 3 and 20 minutes using a built-in trimmer.</p> <p>C SMOKE (cod. 12993) Checks the quality of the air when the air contains cigarette smoke, odours and other pollutants: the extractor fan is activated automatically when a concentration of odours higher than the set value is detected; this value can be adjusted using an external trimmer. A pre-set timer, which can be adjusted to a value between 3 and 20 minutes using a built-in trimmer, keeps the extractor fan running for the desired period of time.</p> <p>C HCS (cod.12994) Checks the relative humidity of the air: the extractor fan is activated automatically when the relative humidity percentage exceeds 65%. Otherwise, the appliance starts automatically a few seconds after the light is switched on and continues to run for a set time after it has been switched off again; this time period can be adjusted to a value between 3 and 20 minutes using a built-in trimmer.</p> <p>C PIR (cod. 12998) Checks for human motion in the room: the extractor fan is activated automatically for a specified time period, which can be adjusted between 3 and 20 minutes using a trimmer, when human movement is detected in its range.</p> <p>C TIMER (cod. 12999) Checks the operating time of the appliance to which it is connected: the extractor fan is activated automatically a few seconds after the light is switched on and continues to run for a set time, which can be adjusted to a value between 3 and 20 minutes using a built-in trimmer, after it has been switched off again.</p>	<p>12994 12998 12999 12992 12993</p>	<div style="display: flex; justify-content: space-around; align-items: center;">  </div> <table border="1" data-bbox="959 1442 1465 1653"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>C TEMP</td> <td>12992</td> <td rowspan="5">144</td> <td rowspan="5">54</td> <td rowspan="5">55.8</td> </tr> <tr> <td>C SMOKE</td> <td>12993</td> </tr> <tr> <td>C HCS</td> <td>12994</td> </tr> <tr> <td>C PIR</td> <td>12998</td> </tr> <tr> <td>C TIMER</td> <td>12999</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	C TEMP	12992	144	54	55.8	C SMOKE	12993	C HCS	12994	C PIR	12998	C TIMER	12999															
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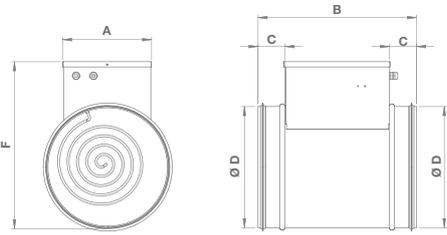
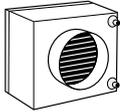
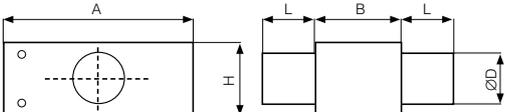
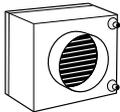
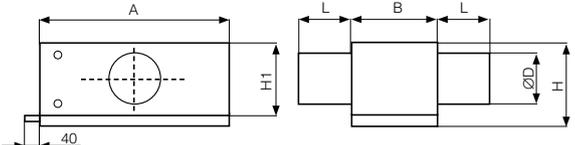


Models		Code	Dimensions																																																			
 <p>CA-G Griglia di protezione. Fitted to the appliance intake to prevent accidental contact with moving parts if the appliance is installed in an accessible position (STANDARD EN 294).</p>		22750		<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>Ø A</th> <th>Ø B</th> <th>N. fiss.</th> </tr> </thead> <tbody> <tr> <td>CA-G 100</td> <td>22750</td> <td>82</td> <td>99</td> <td rowspan="8">3X120°</td> </tr> <tr> <td>CA-G 125</td> <td>22755</td> <td>102</td> <td>124</td> </tr> <tr> <td>CA-G 150</td> <td>22760</td> <td></td> <td>149</td> </tr> <tr> <td>CA-G 160</td> <td>22762</td> <td>142</td> <td>159</td> </tr> <tr> <td>CA-G 200</td> <td>22765</td> <td></td> <td>183</td> </tr> <tr> <td>CA-G 250</td> <td>22770</td> <td>182</td> <td>220</td> </tr> <tr> <td>CA-G 315</td> <td>22775</td> <td>222</td> <td>260</td> </tr> </tbody> </table>				Models	Code	Ø A	Ø B	N. fiss.	CA-G 100	22750	82	99	3X120°	CA-G 125	22755	102	124	CA-G 150	22760		149	CA-G 160	22762	142	159	CA-G 200	22765		183	CA-G 250	22770	182	220	CA-G 315	22775	222	260													
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 <p>NRG DEH Pre-post electrical heating. Circular duct batteries with automatic-reset control thermostat and manual-reset safety thermostat. A differential flow meter or pressure switch is recommended to increase the operating safety level. Command and control from external probes (thermostat/differential probe).</p>		24158																																																				
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 <p>NRG DHW Post water heating. Circular duct water coil with copper and aluminium tube bundle. The post-cooling units can also be used for post-heating.</p>		24148																																																				
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 <p>RLU NRG HE Eccentric sleeve. Made using galvanised sheet steel, this can be used to join two eccentric ducts between Ø 200 mm and Ø 50 mm: it is especially useful for successfully joining circular ducts and coils associated with the recovery unit</p>		24172	<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>Ø D</th> <th>Ø E</th> </tr> </thead> <tbody> <tr> <td>RLU Ø 200 250 NRG HE</td> <td>24172</td> <td>99</td> <td>250</td> <td>200</td> </tr> <tr> <td>RLU Ø 315 250 NRG HE</td> <td>24174</td> <td>119</td> <td>315</td> <td>250</td> </tr> <tr> <td>RLU Ø 355 315 NRG HE</td> <td>24176</td> <td>85</td> <td>355</td> <td>315</td> </tr> <tr> <td>RLU Ø 315 400 NRG HE</td> <td>24178</td> <td>152</td> <td>400</td> <td>315</td> </tr> </tbody> </table>			Models	Code	A	Ø D	Ø E	RLU Ø 200 250 NRG HE	24172	99	250	200	RLU Ø 315 250 NRG HE	24174	119	315	250	RLU Ø 355 315 NRG HE	24176	85	355	315	RLU Ø 315 400 NRG HE	24178	152	400	315																								
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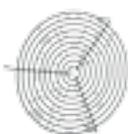
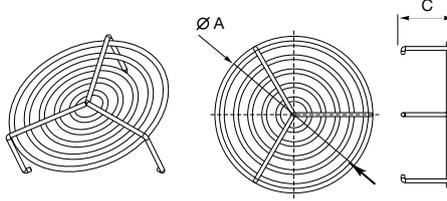
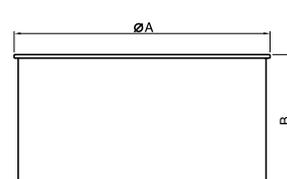
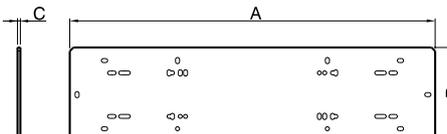
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	<p>FB Box Filtranti F7 Box filtranti da canalizzazione circolare completi di filtro F7. Realizzati per ottemperare agli obblighi della legge (16 gennaio 2003, n° 3) per la tutela dei non fumatori, permettono anche di facilitare la manutenzione dei recuperatori: eliminando i filtri F5 a bordo ed installando i Box filtranti F7, si evita di intervenire direttamente sulla macchina, avendo contemporaneamente la possibilità di delocalizzare le unità filtranti in siti di più facile accessibilità.</p>	24139	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> <th>Ø D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>FB 500</td> <td>24139</td> <td>235</td> <td>290</td> <td>300</td> <td>200</td> <td>396</td> </tr> <tr> <td>FB 800</td> <td>24140</td> <td>405</td> <td>320</td> <td>300</td> <td>250</td> <td></td> </tr> <tr> <td>FB 1200</td> <td>24141</td> <td>465</td> <td>375</td> <td></td> <td>315</td> <td>696</td> </tr> <tr> <td>FB 2000</td> <td>24142</td> <td>555</td> <td>490</td> <td>600</td> <td></td> <td></td> </tr> <tr> <td>FB 2500-3000</td> <td>24143</td> <td>625</td> <td>520</td> <td>700</td> <td>355</td> <td>796</td> </tr> <tr> <td>FB 4000-5000</td> <td>24145</td> <td rowspan="2">705</td> <td></td> <td>610</td> <td></td> <td>996</td> </tr> <tr> <td>FB 6000</td> <td>24147</td> <td></td> <td>810</td> <td>900</td> <td>450</td> <td></td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	Ø D	E	FB 500	24139	235	290	300	200	396	FB 800	24140	405	320	300	250		FB 1200	24141	465	375		315	696	FB 2000	24142	555	490	600			FB 2500-3000	24143	625	520	700	355	796	FB 4000-5000	24145	705		610		996	FB 6000	24147		810	900	450	
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	<p>NRG ABC Expulsion sleeve. Made using galvanised sheet steel, this allows the expulsion of air directly from the machine, preventing foreign bodies from entering while the machine is not running by means of a 10x10 mm mesh.</p>	22296	<table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>ABC 500</td> <td>22296</td> </tr> <tr> <td>ABC 800</td> <td>22297</td> </tr> <tr> <td>ABC1200 - 2000</td> <td>22298</td> </tr> <tr> <td>ABC 2500- 3000</td> <td>22299</td> </tr> <tr> <td>ABC 4000- 5000 - 6000</td> <td>22749</td> </tr> </tbody> </table>	Models	Code	ABC 500	22296	ABC 800	22297	ABC1200 - 2000	22298	ABC 2500- 3000	22299	ABC 4000- 5000 - 6000	22749																																												
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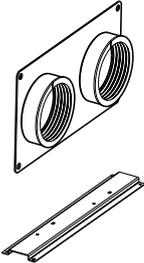
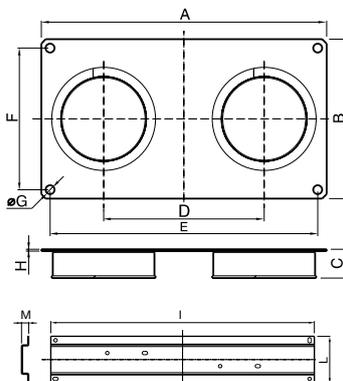
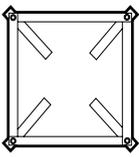
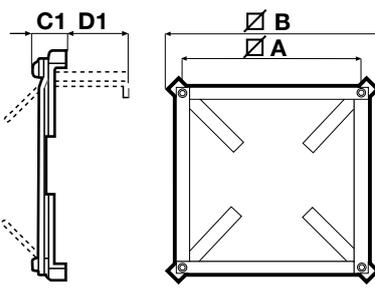


Models		Code	Dimensions																																										
	<p>RVLU NRG HE Coaxial adapter. Made using galvanised sheet steel, this can be used to join two coaxial ducts between Ø 200 mm and Ø 50 mm: it is especially useful for successfully joining circular ducts and coils associated with the recovery unit.</p>	24171																																											
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	<p>NRG HE PRE-HEATER Coil with heating element for pre-heating modulated by solid state relay: installed in ducts, this increases the temperature of the air entering the exchanger, preventing frost from forming on the heat exchanger and increasing its output. Recommended in areas where external temperatures are particularly severe.</p>	24167	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> <th>Ø D</th> <th>E</th> </tr> </thead> <tbody> <tr> <td>PRE-HEATER Ø 200 3 KW NRG HE</td> <td>24167</td> <td>200.4</td> <td>400</td> <td>50</td> <td>196</td> <td>289</td> </tr> <tr> <td>PRE-HEATER Ø 315 6 KW NRG HE</td> <td>24168</td> <td>256</td> <td>456</td> <td>78</td> <td>311</td> <td>432</td> </tr> <tr> <td>PRE-HEATER Ø 315 9 KW NRG HE</td> <td>24169</td> <td>256</td> <td>456</td> <td>78</td> <td>311</td> <td>433</td> </tr> <tr> <td>PRE-HEATER Ø 355 12 KW NRG HE</td> <td>24170</td> <td>256</td> <td>456</td> <td>78</td> <td>351</td> <td>484</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	Ø D	E	PRE-HEATER Ø 200 3 KW NRG HE	24167	200.4	400	50	196	289	PRE-HEATER Ø 315 6 KW NRG HE	24168	256	456	78	311	432	PRE-HEATER Ø 315 9 KW NRG HE	24169	256	456	78	311	433	PRE-HEATER Ø 355 12 KW NRG HE	24170	256	456	78	351	484																		
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	<p>NRG DCW Post water cooling. Circular duct water coil with copper and aluminium tube bundle. The post-cooling units can also be used for post-heating.</p>	24153	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>Ø D</th> <th>H</th> <th>H₁</th> <th>L</th> <th>Ø water IN-OUT</th> </tr> </thead> <tbody> <tr> <td>DCW 500</td> <td>24153</td> <td>425</td> <td></td> <td>200</td> <td>320</td> <td>275</td> <td></td> <td rowspan="2">12 mm</td> </tr> <tr> <td>DCW 800</td> <td>24154</td> <td>520</td> <td></td> <td>250</td> <td>350</td> <td>305</td> <td></td> </tr> <tr> <td>DCW 1500</td> <td>24155</td> <td>655</td> <td>400</td> <td>315</td> <td>400</td> <td>365</td> <td>150</td> <td>1/2"</td> </tr> <tr> <td>DCW 3000</td> <td>24156</td> <td>900</td> <td></td> <td>355</td> <td>530</td> <td>490</td> <td></td> <td>3/4"</td> </tr> <tr> <td>DCW 5000</td> <td>24157</td> <td>1250</td> <td></td> <td>450</td> <td>740</td> <td>730</td> <td></td> <td>1"</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	Ø D	H	H ₁	L	Ø water IN-OUT	DCW 500	24153	425		200	320	275		12 mm	DCW 800	24154	520		250	350	305		DCW 1500	24155	655	400	315	400	365	150	1/2"	DCW 3000	24156	900		355	530	490		3/4"	DCW 5000	24157	1250		450	740	730		1"
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 <p>LINEO-G Protection grille (not suitable for Lineo Es). To be mounted directly on the product at inlet/outlet. Useful for safety and to protect the product from external bodies. Totally manufactured from steel. black epoxy powder coated for perfect weather protection.</p>	<p>22701 22702 22703 22704 22705 22706</p>	 <table border="1"> <thead> <tr> <th>Models</th> <th>Code</th> <th>Ø A</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>LINEO-G 100</td> <td>22701</td> <td>101</td> <td>29</td> </tr> <tr> <td>LINEO-G 125</td> <td>22702</td> <td>127</td> <td>29</td> </tr> <tr> <td>LINEO-G 150</td> <td>22703</td> <td>151</td> <td>35.5</td> </tr> <tr> <td>LINEO-G 160</td> <td>22704</td> <td>161</td> <td>34</td> </tr> <tr> <td>LINEO-G 200</td> <td>22705</td> <td>201</td> <td>42</td> </tr> <tr> <td>LINEO-G 250</td> <td>22706</td> <td>255</td> <td>50.5</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	Ø A	C	LINEO-G 100	22701	101	29	LINEO-G 125	22702	127	29	LINEO-G 150	22703	151	35.5	LINEO-G 160	22704	161	34	LINEO-G 200	22705	201	42	LINEO-G 250	22706	255	50.5
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	<p>CARF-C Sub-frame. For preventing air back-draught or rain penetration when the unit is turned off.</p>	<p>22543 22544 22545</p>	 <table border="1" data-bbox="981 1736 1428 1825"> <thead> <tr> <th>Models</th> <th>Code</th> <th>A</th> <th>B</th> <th>C</th> </tr> </thead> <tbody> <tr> <td>LINEO-SF 500</td> <td>22593</td> <td>500</td> <td>130</td> <td rowspan="2">2</td> </tr> <tr> <td>LINEO-SF 700</td> <td>22594</td> <td>730</td> <td>220</td> </tr> </tbody> </table> <p>Dimensions (mm)</p>	Models	Code	A	B	C	LINEO-SF 500	22593	500	130	2	LINEO-SF 700	22594	730	220														
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