

CA ES RANGE

"Energy Saving" in-line centrifugal fans in metal

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


VERSIONS

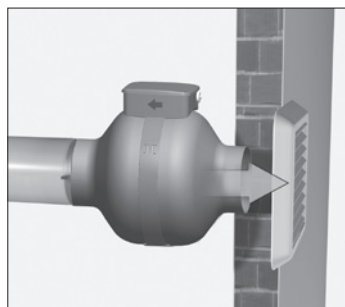
8 models, with nominal diameter between 100 and 315 mm.

KEY FEATURES

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

TECHNICAL FEATURES

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





TECHNICAL DATA

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

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

ENERGY DATA FOR REGULATION N° 1254/2014/UE

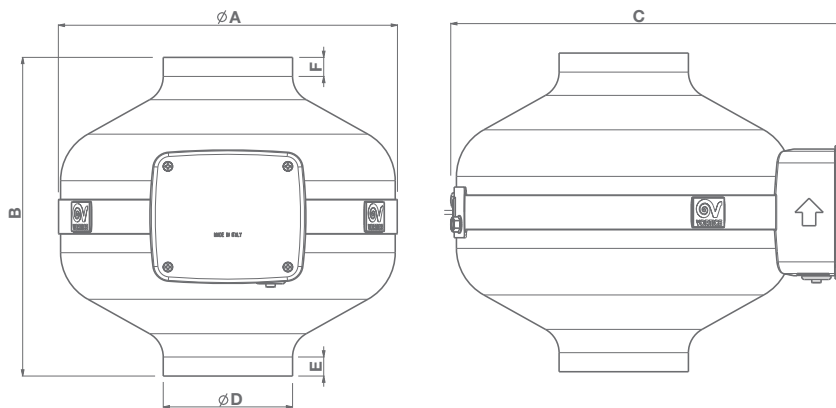
	UNIT OF MEASURE	CA 100 ES	CA 125 ES	CA 150 ES	CA 150 Q ES
CODE		16200	16201	16203	16202
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
SFPint	W(m³/s)	437,72	184,03	211,41	2121,69
Declared typology	-	NRVU-U**	NRVU-U**	NRVU-U**	NRVU-U**
Type of drive	-	MSD***	MSD***	MSD***	MSD***
Type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

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

ENERGY DATA FOR REGULATION N° 1254/2014/UE

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

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

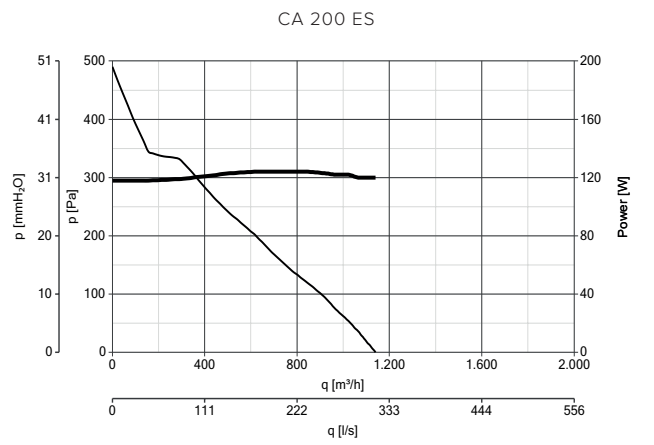
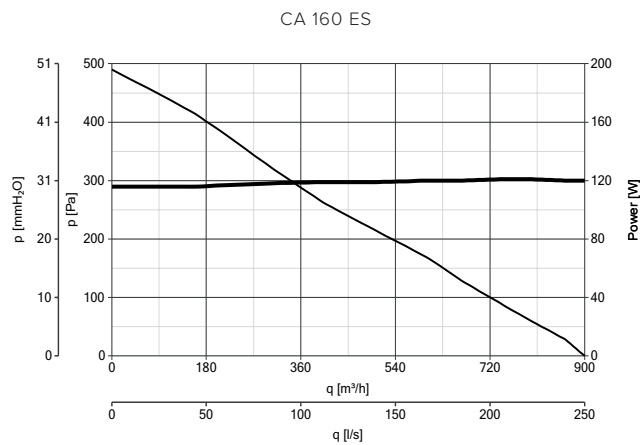
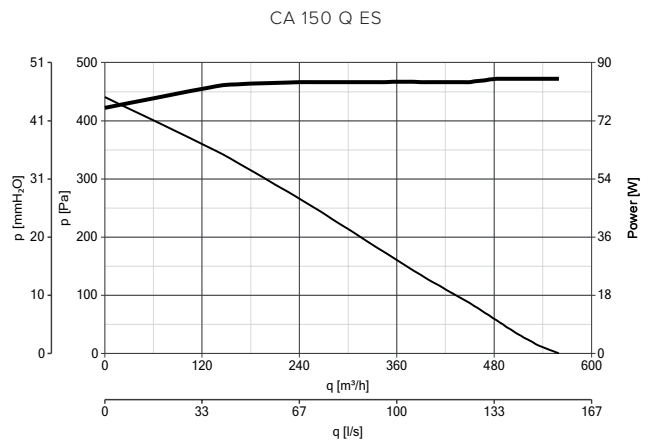
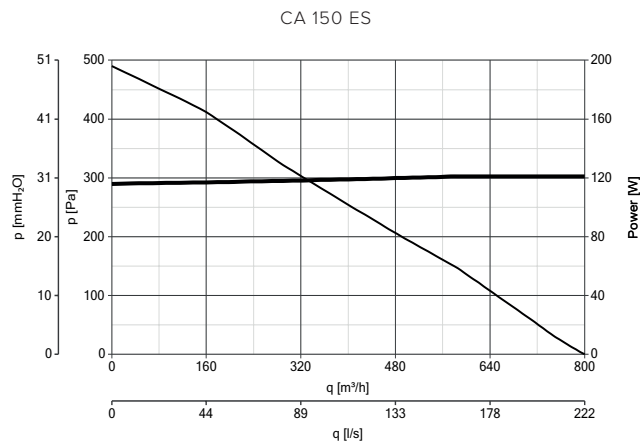
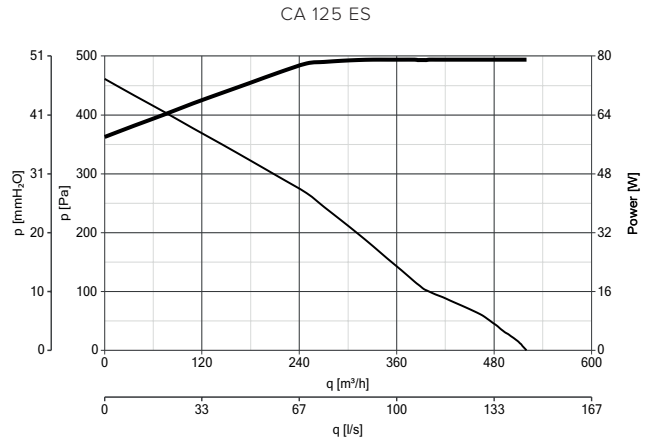
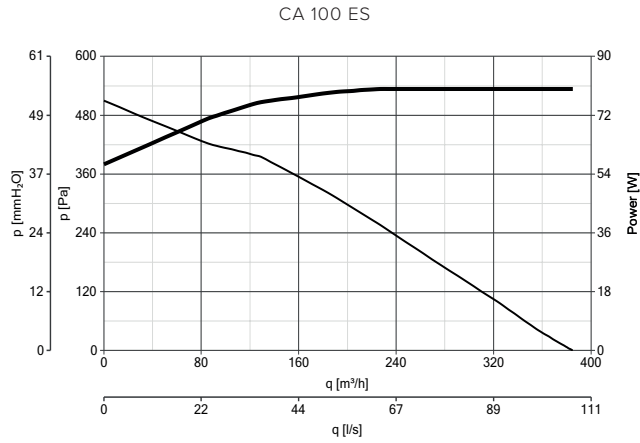
DIMENSIONS


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

Dimensions (mm)



PERFORMANCES CURVES



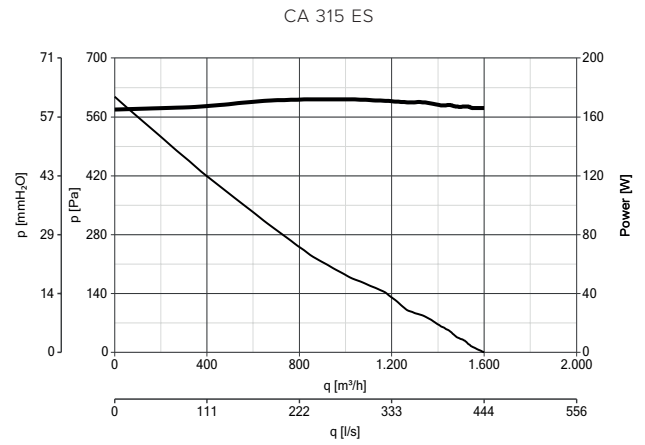
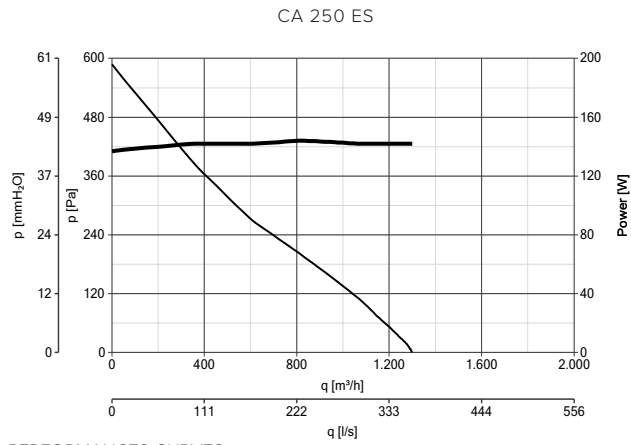
PERFORMANCES CURVES
 — max
 — min



COMMERCIAL VENTILATION

CA ES RANGE

PERFORMANCES CURVES








PERFORMANCES CURVES
— max
— min





CONTROLLERS

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

ACCESSORIES ON REQUEST

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