



## CA MD E RF RANGE

### Centrifugal duct fans for roof mounting

#### PRODUCT SPECIFICATIONS



**LONG LIFE 30.000 h**



*Suitable for outdoor installation on roof at the end of ventilation ducts in residential and industrial environments as factories, hospitals, gyms, restaurants, etc...*

- **8 models:** CA 100 MD E RF, CA 125 MD E RF, CA 150 Q MD E RF, CA 150 MD E RF, CA 160 MD E RF, CA 200 MD E RF, CA 250 MD E RF, CA 315 MD E RF.
- Stripped and phosphated steel structure, bands and bases, painted with polyester powder which is resistant to atmospheric agents.
- Induction motor with built-in rotor, manual reset thermal protection device for diameters 100, 125 and 150 Q.
- Induction motor with external rotor, manual reset thermal protection device for diameters 150, 160, 200, 250 and 315.
- Two speed motors (offer two levels of airflow, pressure, noise emissions and consumption).
- 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 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: II □.

#### TECHNICAL DATA

Models	Code	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A)* min/max	Max °C	Kg
					m <sup>3</sup> /h min/max	l/s min/max	mmH <sub>2</sub> O min/max	Pa min/max			
CA 100 MD E RF	16140	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	38 - 85	0.28 - 0.40	1345 - 2400	220 - 380	61 - 106	26 - 38	255 - 373	21.1 - 40.2	50	
CA 150 Q MD E RF	16142	38 - 85	0.28 - 0.40	1490 - 2370	250 - 400	69 - 111	21 - 32	206 - 314	23.8 - 37.5	50	
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	55	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	55	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	55	7.9
CA 315 MD E RF	16187	58 - 130	0.51 - 0.57	1450 - 2630	450 - 900	125 - 250	50 - 58	490 - 569	32.8 - 40.7	55	14

\* 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.

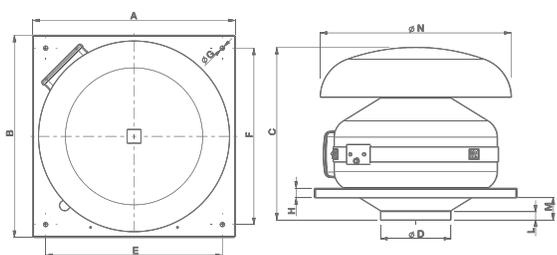
Electric supply: 230 V ~ 50 Hz.



CA MD E RF  
RANGE



## DIMENSIONS



Models	A	B	C	Ø D	E	F	Ø G	H	L	M	Ø N
CA 100 MD E RF				97					15		
CA 125 MD E RF	334	334	305	122	280	280			23	35	300
CA 150 Q MD E RF				147					30		
CA 150 MD E RF				147			9	20	17	47	
CA 160 MD E RF	424	424	365	157	370	370			18		400
CA 200 MD E RF				197					20	49	
CA 250 MD E RF				367	435	435			38	41	
CA 315 MD E RF	489	489	415	312					36	65	534

Dimensions (mm)

## PRODUCT ACCESSORIES

	Description	Code	Product
	C HCS Environmental sensor for humidity	12994	All products
	C PIR Passive infrared sensor	12998	
	C SMOKE Environmental sensor for air quality	12993	
	C TEMP Environmental sensor for temperature	12992	
	C TIMER Adjustable over-run timer	12999	
	DUO Speed controller	22914	16140 - 16141 - 16142
	C 1.5 Electronic speed controller 1.5 A	12966	All products
	C 2.5 Electronic speed controller 2.5 A	12967	
	KIT SCB Built-in controller adaptors for C 1.5 and C 2.5	22481	12966 - 12967
	CA-G 100 Protection grille nominal diameter 100 mm	22750	16140
	CA-G 125 Protection grille nominal diameter 125 mm	22755	16141
	CA-G 150 Protection grille nominal diameter 150 mm	22760	16143 - 16183
	CA-G 160 Protection grille nominal diameter 160 mm	22762	16184
	CA-G 200 Protection grille nominal diameter 200 mm	22765	16185
	CA-G 250 Protection grille nominal diameter 250 mm	22770	16186
	CA-G 315 Protection grille nominal diameter 315 mm	22771	16187
	CARF-C 125 Sub-frame	22543	16140 - 16141 - 16142
	CARF-C 150-160-200 Sub-frame	22544	16183 - 16184 - 16186
	CARF-C 250-315 Sub-frame	22545	16186 - 16187

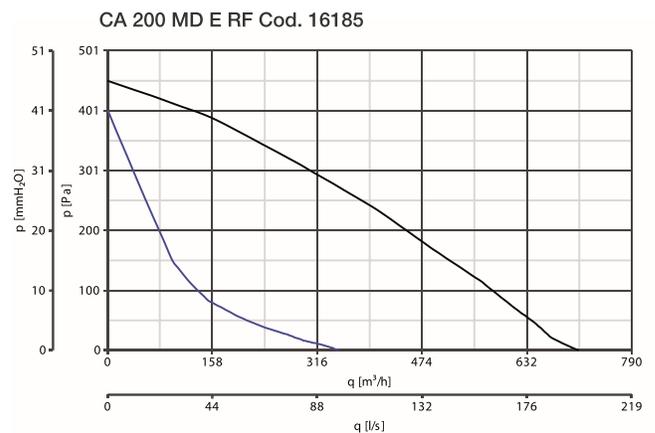
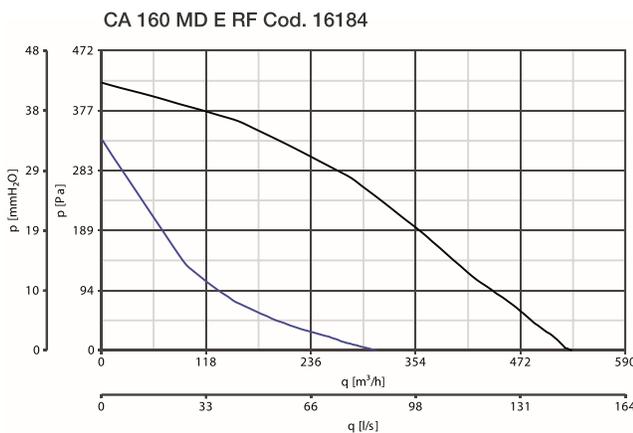
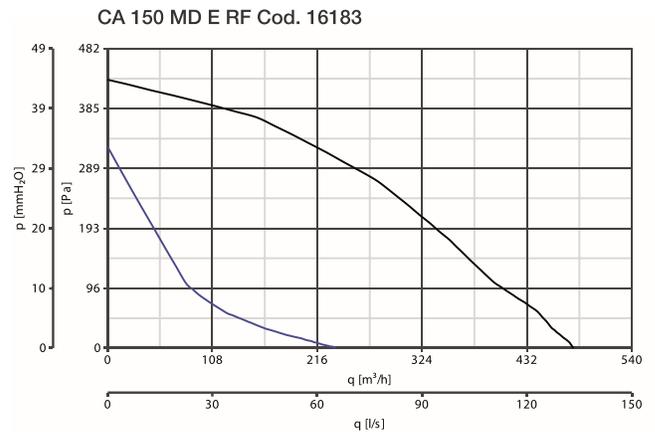
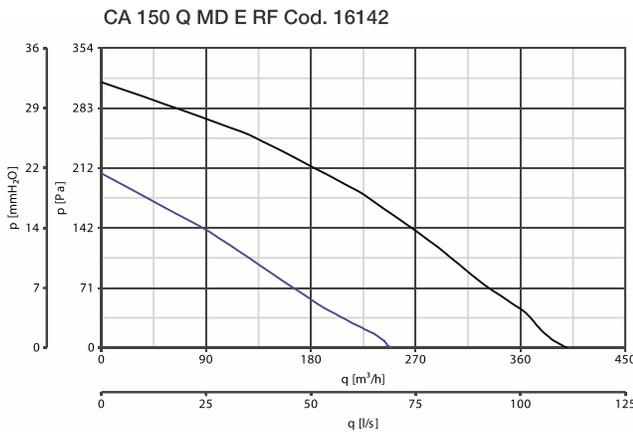
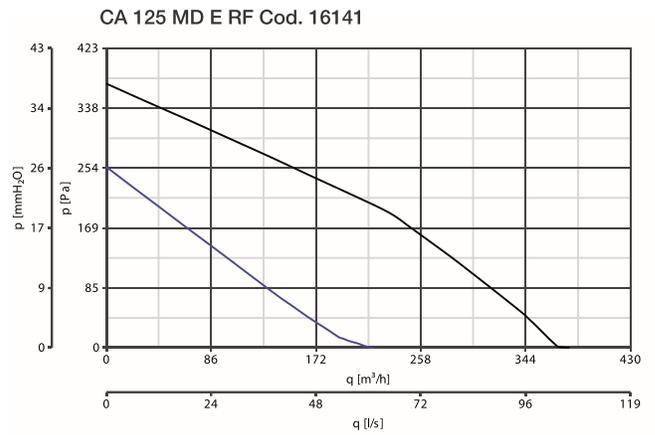
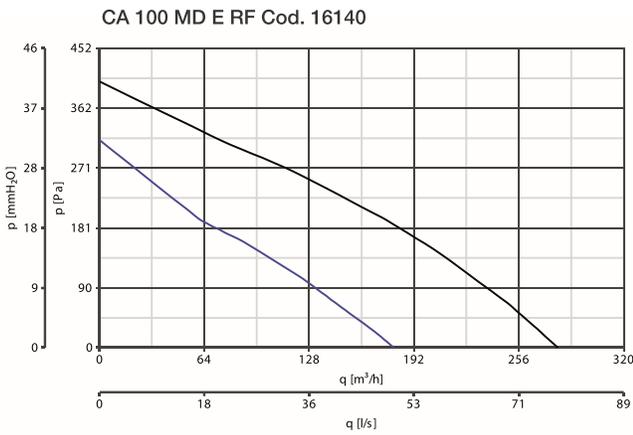
Description and size on page 52; System components on page 54



# CA MD E RF RANGE

Centrifugal duct fans for roof mounting

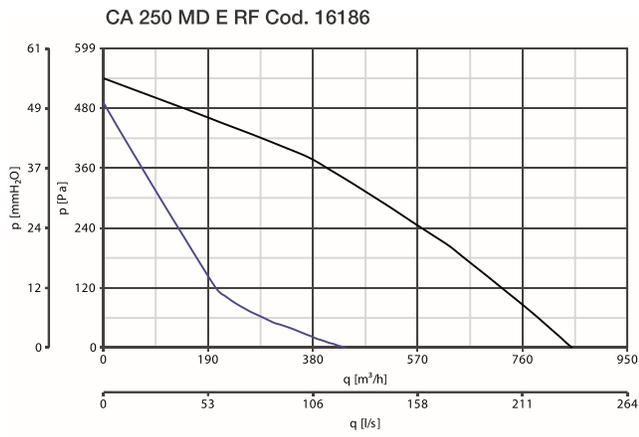
## PERFORMANCE CURVES



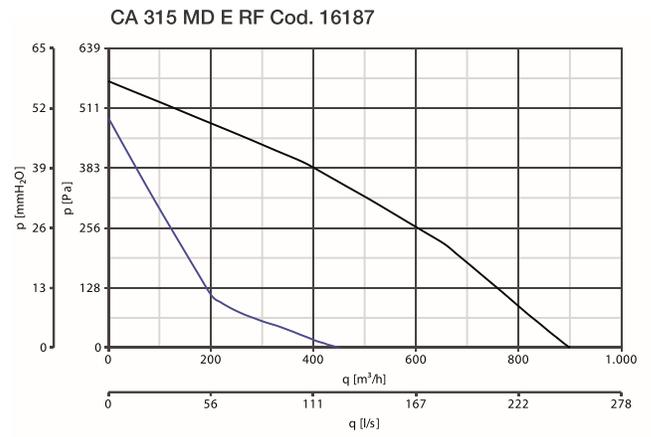


CA MD E RF  
RANGE

## PERFORMANCE CURVES



— min. — max.





NEW

## CA MD RF EP RANGE

### Centrifugal duct fans for roof mounting

#### PRODUCT SPECIFICATIONS



Suitable for outdoor installation on roof at the end of ventilation ducts in residential and industrial environments as factories, hospitals, gyms, restaurants, etc...

LONG LIFE 30.000 h



- **8 models:** CA 100 MD E RF, CA 125 MD E RF, CA 150 Q MD E RF, CA 150 MD E RF, CA 160 MD E RF, CA 200 MD E RF, CA 250 MD E RF, CA 315 MD E RF.
- Stripped and phosphated steel structure, bands and bases, painted with polyester powder which is resistant to atmospheric agents.
- Induction motor with built-in rotor, manual reset thermal protection device for diameters 100, 125 and 150 Q.
- Induction motor with external rotor, manual reset thermal protection device for diameters 150, 160, 200, 250 and 315.
- Two speed motors (offer two levels of airflow, pressure, noise emissions and consumption).
- 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 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: II □.

#### TECHNICAL DATA

Models	Code	W min/max	A min/max	RPM min/max	Max Airflow		Max Pressure		Lp dB(A)* min/max	Max °C	Kg
					m <sup>3</sup> /h min/max	l/s min/max	mmH <sub>2</sub> O min/max	Pa min/max			
CA 100 MD RF EP	16237	12 - 85	0.13 - 0.40	900 - 2405	95 - 265	26.3 - 73.6	27.7 - 39.7	272.2 - 389.3	27.3 - 37.5	50	3.5
CA 125 MD RF EP	16238	12 - 85	0.13 - 0.40	915 - 2405	118 - 312	32.7 - 86.6	16.5 - 6.3	161.8 - 356.1	21.1 - 40.2	50	
CA 150 Q MD RF EP	16239	12 - 85	0.13 - 0.40	963 - 2430	122 - 312	33.8 - 86.6	7.2 - 31.4	70.7 - 307.9	23.8 - 37.5	50	
CA 150 MD RF EP	16240	33 - 88	0.33 - 0.39	1240 - 2630	230 - 490	63.8 - 136.1	31.3 - 44.0	307.6 - 432.1	24.6 - 43.8	55	5.8
CA 160 MD RF EP	16241	33 - 88	0.33 - 0.39	1300 - 2655	245 - 500	68.0 - 138.8	20.5 - 40.7	201.0 - 399.7	30.4 - 44.8	55	5.9
CA 200 MD RF EP	16242	33 - 95	0.36 - 0.42	1156 - 2555	310 - 700	86.1 - 194.7	31.9 - 44.9	313.4 - 440.6	23.0 - 31.7	55	6.1
CA 250 MD RF EP	16243	48 - 130	0.47 - 0.57	1195 - 2565	385 - 850	106.9 - 236.1	39.1 - 56.3	384.1 - 552.2	28.6 - 43.8	55	7.9
CA 315 MD RF EP	16244	48 - 130	0.48 - 0.57	1186 - 2590	370 - 865	102.7 - 240.2	37.6 - 58.5	368.9 - 573.7	32.8 - 40.7	55	14

\* 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.

Electric supply: 230 V - 50 Hz.



CA MD RF EP  
RANGE



Remote Control Unit  
included



CA MD RF EP RANGE | TECHNICAL DATA FOR REGULATION N° 1254/2014/UE

	Models	CA 100 MD E RF	CCA 125 MD E RF	CA 150 Q MD E RF	CA 150 MD E RF
	Code	16237	16238	16239	16240
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
Nominal NRVU flow rate	m <sup>3</sup> /s	0,06967	0,08597	0,08589	0,13508
Effective electric power input [kW]	kW	0,051	0,051	0,05	0,089
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
SFPint	W/(m <sup>3</sup> /h)	N.A.	497,81	488,53	498,41
Face velocity at design flow rate	m/s	8,9	7	4,9	7,6
Nominal external pressure (ps, ext) [Pa]	Pa	108	29	29	69
Internal pressure drop of ventilation components (ps,int)		110	154	154	213
Internal pressure drop of non-ventilation components (ps,add)		0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	29,8	30,8	31,4	42,8
Declared maximum internal leakage rate of the casing of ventilation units		N.A.	N.A.	N.A.	N.A.
Declared maximum external leakage rate of the casing of ventilation units		N.A.	N.A.	N.A.	N.A.
Energy performance energy or classification of the filters	-	N.A.	N.A.	N.A.	N.A.
Description of visual filter warning	-	-	-	-	-
Casing sound power level	LWA [dB(A)]	37,5	40	38	42,8

\* RVU-U: Unit Ventilation Residential - Unidirectional

\*\* NRVU-U: Unit Ventilation Non Residential - Unidirectional

\*\*\* MSD: Multi-Speed Drive



# CA MD RF EP RANGE

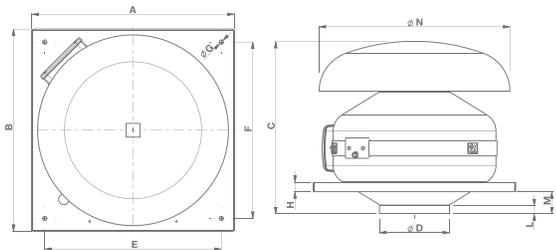
## Centrifugal duct fans for roof mounting

CA MD RF EP RANGE | TECHNICAL DATA FOR REGULATION N° 1254/2014/UE

Models		CA 160 MD E RF	CA 200 MD E RF	CA 250 MD E RF	CA 315 MD E RF
Code		16241	16242	16243	16244
Supplier's name or trade mark	-	Vortice	Vortice	Vortice	Vortice
Nominal NRUV flow rate	m³/s	0,13794	0,13794	0,21314	0,21992
Effective electric power input [kW]	kW	0,087	0,094	0,147	0,147
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
SFPint	W/(m³/h)	541,51	239,18	-911,31	-1087,6
Face velocity at design flow rate	m/s	6,9	4,4	4,3	2,8
Nominal external pressure (?ps, ext) [Pa]	Pa	39	128	716	775
Internal pressure drop of ventilation components (?ps,int)		238	69	-408	-480
Internal pressure drop of non-ventilation components (?ps,add)		0	0	0	0
Static efficiency of fans used in accordance with Regulation (EU) N. 327/2011	%	44	28,8	44,7	44,1
Declared maximum internal leakage rate of the casing of ventilation units		N.A.	N.A.	N.A.	N.A.
Declared maximum external leakage rate of the casing of ventilation units		N.A.	N.A.	N.A.	N.A.
Energy performance energy or classification of the filters	-	N.A.	N.A.	N.A.	N.A.
Description of visual filter warning	-	-	-	-	-
Casing sound power level	LWA [dB(A)]	45	32	32	44

\* RVU-U: Unit Ventilation Residential - Unidirectional  
 \*\* NRVU-U: Unit Ventilation Non Residential - Unidirectional  
 \*\*\* MSD: Multi-Speed Drive

### 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	147	370	370			17	47	400
CA 160 MD E RF				157					18		
CA 200 MD E RF				197					20		
CA 250 MD E RF				367			38	41			
CA 315 MD E RF	489	489	415	312	435	435	36	65	534		

Dimensions (mm)

## CA MD RF EP RANGE | TECHNICAL DATA FOR REGULATION N° 1254/2014/UE

	Description	Code	Product
	C HCS Environmental sensor for humidity	12994	All products
	C PIR Passive infrared sensor	12998	
	C SMOKE Environmental sensor for air quality	12993	
	C TEMP Environmental sensor for temperature	12992	
	C TIMER Adjustable over-run timer	12999	
	CA-G 100 Protection grille nominal diameter 100 mm	22750	16237
	CA-G 125 Protection grille nominal diameter 125 mm	22755	16238
	CA-G 150 Protection grille nominal diameter 150 mm	22760	16239 - 16240
	CA-G 160 Protection grille nominal diameter 160 mm	22762	16241
	CA-G 200 Protection grille nominal diameter 200 mm	22765	16242
	CA-G 250 Protection grille nominal diameter 250 mm	22770	16243
	CA-G 315 Protection grille nominal diameter 315 mm	22775	16244
	CARF-C 125 Sub-frame	22543	16237 - 16238 - 16239
	CARF-C 150-160-200 Sub-frame	22544	16240 - 16241 - 16242
	CARF-C 250-315 Sub-frame	22545	16243 - 16244

Description and size on page 52; System components on page 54

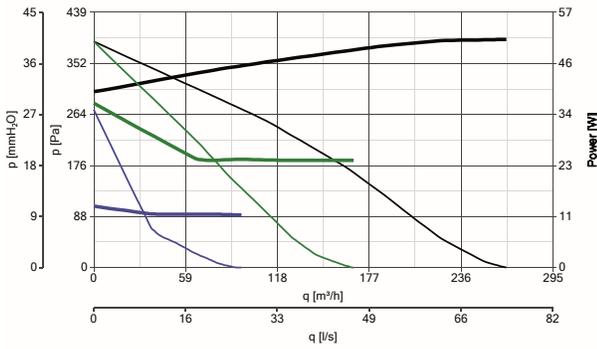


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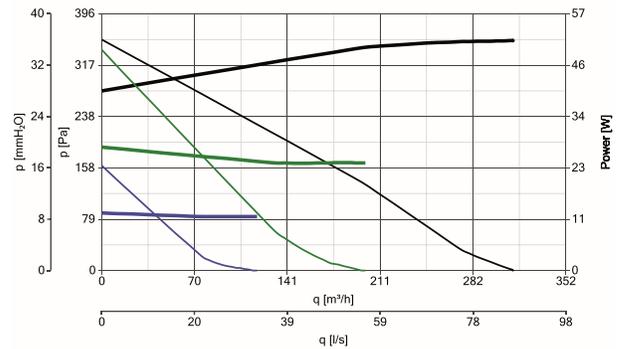
Centrifugal duct fans for roof mounting

## PERFORMANCE CURVES

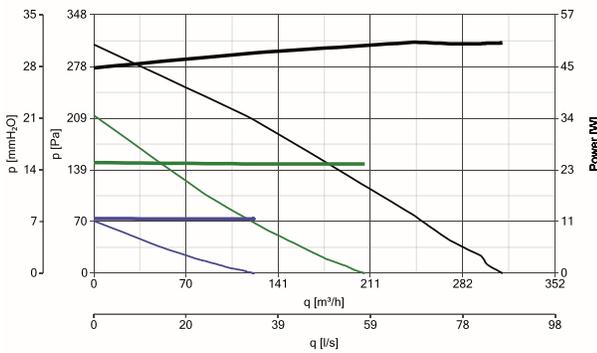
CA 100 MD RF EP cod. 16237



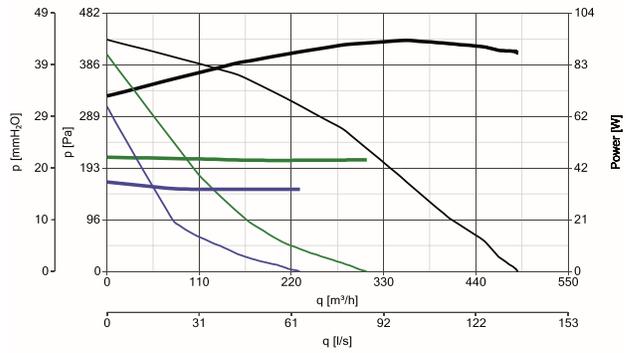
CA 125 MD RF EP cod. 16238



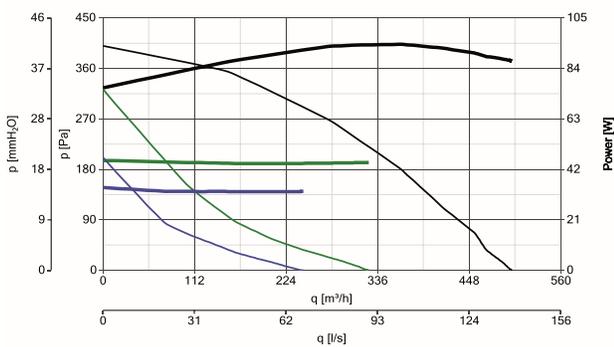
CA 150 Q MD RF EP cod. 16239



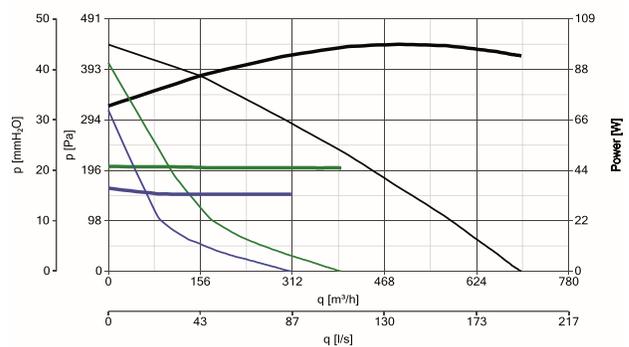
CA 150 MD RF EP cod. 16240



CA 160 MD RF EP cod. 16241



CA 200 MD RF EP cod. 16242

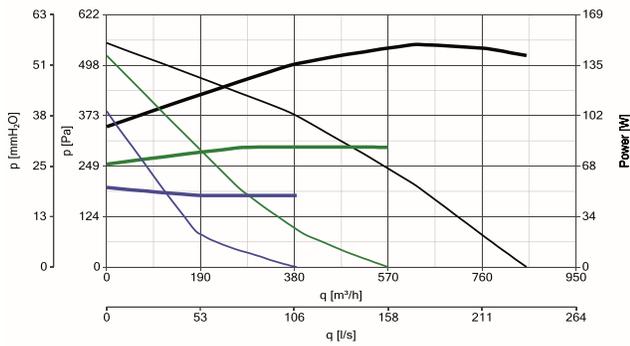




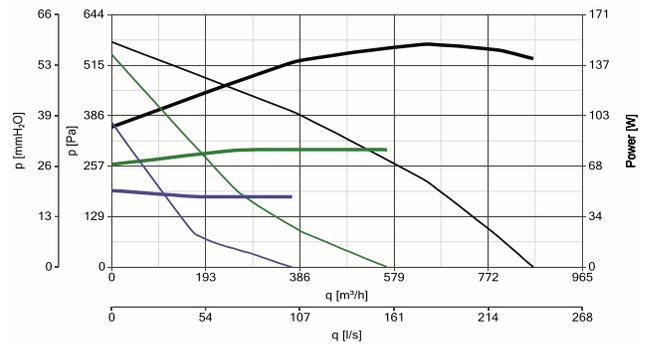
CA MD RF EP  
RANGE

## PERFORMANCE CURVES

CA 250 MD RF EP cod. 16243



CA 315 MD RF EP cod. 16244



POWER CONSUMPTION

— max  
— med  
— min

PERFORMANCE CURVES

— max  
— med  
— min