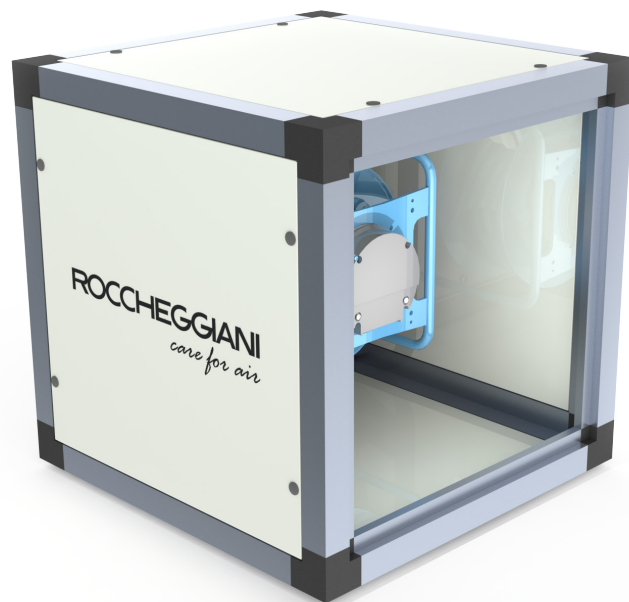


# CM

## VENTILATING BOXES



- ErP 2018
- Airflows from 1.000 to 4.500 m<sup>3</sup>/h
- Flexible configuration
- EC fans



The CM series is available in 4 sizes with nominal airflow up to 4,500 m<sup>3</sup>/h. The CM series units are equipped with plug-fans with EC brushless motors and are available in different combinations of materials and with a wide range of accessories, making them suitable for many applications. The CM ventilating boxes are designed in compliance with the Ecodesign Directive 2009/125 / EC for ventilation units, meeting the ErP 2018 requirements of regulation 1253/2014.

Publication: Sales technical data sheet for ventilating boxes (CM)

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## Regulatory Compliance

The Company Quality System has been UNI EN ISO 9001 certified since 1996. In 2014 the company obtained the UNI EN ISO 14001 Environmental Management certification. Over the years, numerous certifications have been obtained for the various Roccheggiani product ranges from the important European bodies (TÜV, EUROVENT, Istituto Giordano, VKF-AEAI, GOST, Achilles JQS, etc.). Specifically, the CM ventilating boxes are designed and produced in accordance with the following reference standards:

- Directive 2006/42/EU - Machinery
- Directive 2014/30/EU - Electromagnetic Compatibility (EMC)
- Directive 2014/35/EU Low Voltage Directive (LVD)
- Directive 2009/125/EU - EcoDesign
- Regulation (EU) No. 2016/2281 (ErP)

## Application fields

The ventilating boxes CM have been designed to respond in a specialised manner to a wide spectrum of applications and are particularly suitable for the following applications:



Industrial



Tertiary



Supermarket



Medium-small rooms

## Description of the Unit and main components

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### Casing

In the standard configuration the structure is built with UNI 9006/1 - ASTM 6060 Aluminum profiles, the corner joints are in nylon reinforced with fiberglass. The panels, sandwich type, are in galvanized steel internally and in pre-painted galvanized steel externally. The insulation is made with polyurethane foam (about 40 kg/m<sup>3</sup>).

Special executions Int / Ext panel:

- Aisi 304 / pre-painted galvanised steel
- Aisi 304 / Aisi 304

Special executions profile and insulation:

- Polyurethane foam 40 kg/m<sup>3</sup>, th.54 mm - profiles: Anticorodal aluminium, corners: nylon
- Polyurethane foam 40 kg/m<sup>3</sup>, th.54 mm - profiles: Anticorodal aluminium, corners: nylon
- Rock wool 90 kg/m<sup>3</sup>, th.54 mm - profiles: Anticorodal aluminium, corners: nylon
- Rock wool 90 kg/m<sup>3</sup>, th.54 mm - profiles: Aisi 304, corners: Aisi 304

### Elettroventilatori

The units of the CM series are equipped with high efficiency backward blades EC plug fans, which have an integrated control of the rotation speed through command 0 ... 10V, allowing high energy savings compared to traditional systems and resulting in high reliability and durability. The electronic regulation of the number of rotations, usually from 10% to 100%, allows elevated margins to adapt to the system peculiarity. Operating rules according to the Directive 2014/30 / EU and the Low Voltage Directive 2014/35 / EU.

All the fans are equipped as standard with a grille for straightening the air flow, in order to reduce the sound power in the intake.

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### Accessories

The following optional accessories are available for the boxed extractors of the CM range:

- Standing legs h=100 mm
- Roof
- Electrical connection box
- Differential pressure transducer for air flow measurement
- Passive potentiometer for manual speed adjustment

## Dimensions and weights

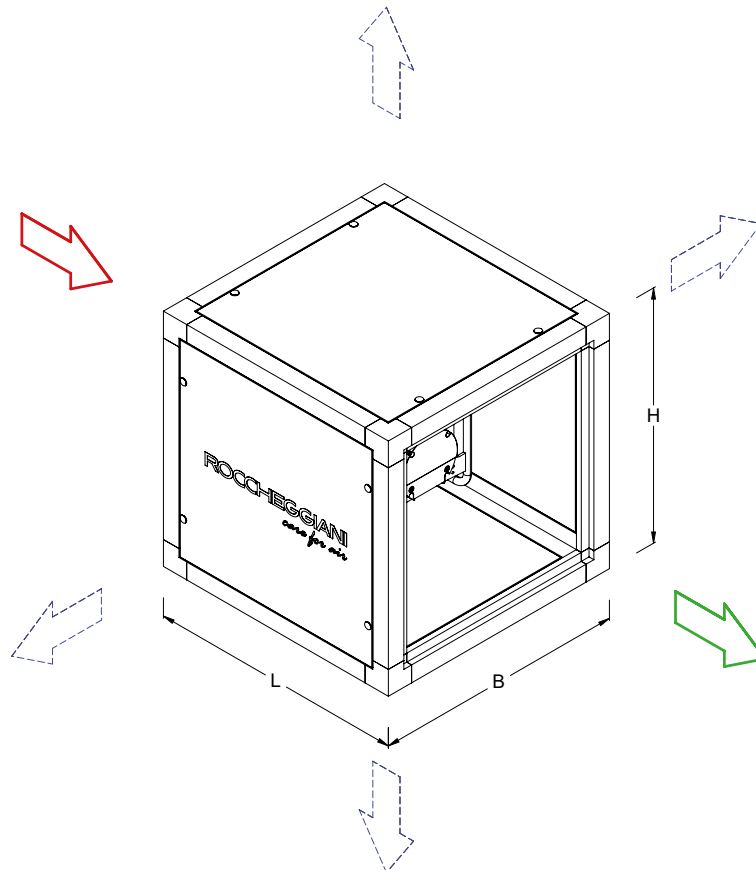
All the sizes of the CM series are characterized by a cubic geometry (L = B = H) and extreme compactness.

Dimensions and weights					
CM		CM1	CM2	CM3	CM4
B	mm	440 (500*)	480 (540*)	580 (640*)	610 (670*)
H	mm	440 (500*)	480 (540*)	580 (640*)	610 (670*)
L	mm	440 (500*)	480 (540*)	580 (640*)	610 (670*)
Weights*	kg	28 (47**)	40 (62**)	49 (76**)	59 (89**)

\*Panel 54 mm

\*\* Panel 54 mm – Rock wool insulation (90 kg/m<sup>3</sup>)

- Air intake
- Standard supply direction
- Optional supply direction



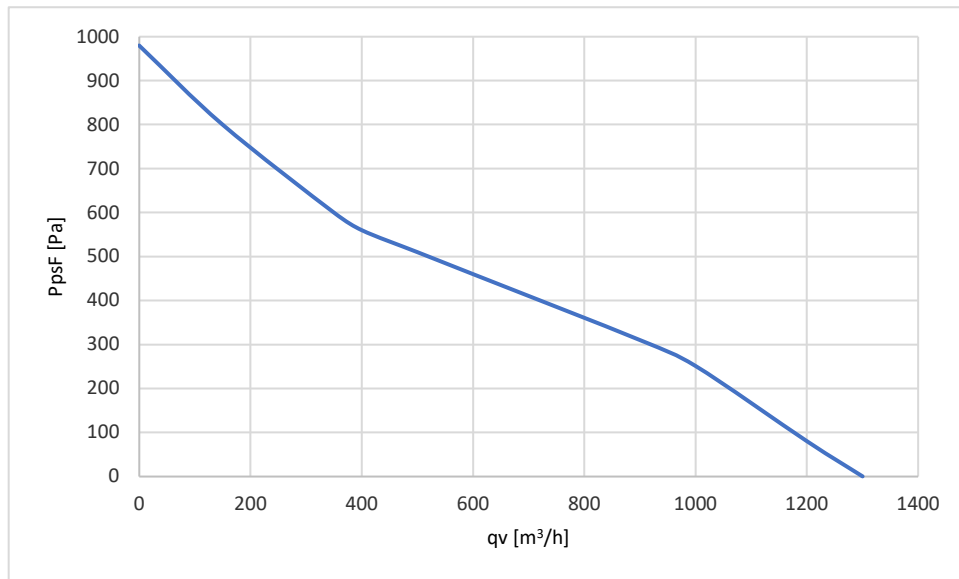
## Directions

In the standard version the direction of the supply air flow is frontal. Optional directions are possible: upwards, downwards, right and left.

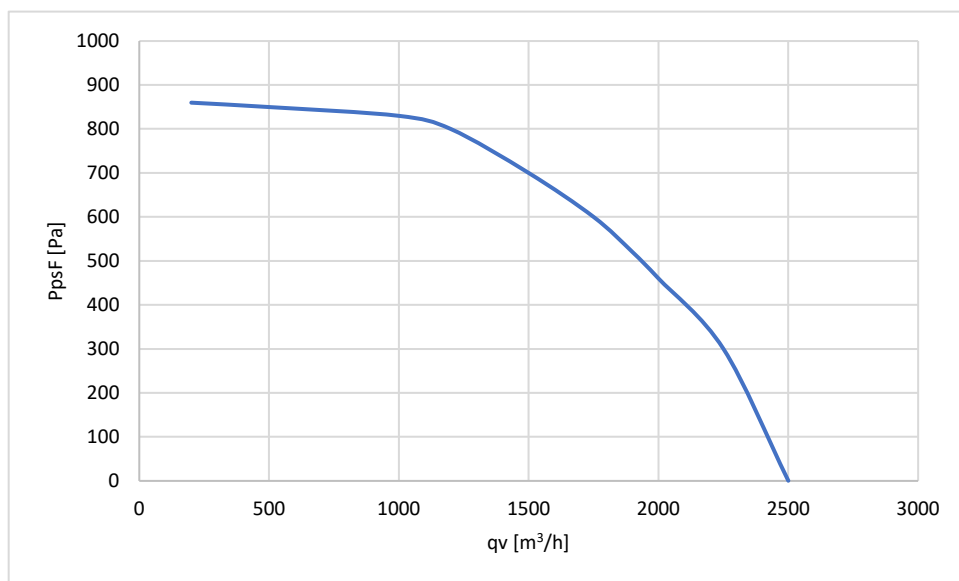
## Technical Data

Fans					
Nominal power rating	kW	0,5	0,5	0,78	1,3
Nominal electric current	A	1,4	1,57	2,52	4,17
Supply voltage	Vac/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50
Air flow control	Vdc	0-10	0-10	0-10	0-10
Temperature range	°C	-25/+50	-20/+60	-20/+50	-20/+50
Efficiency class	-	IE4	IE4	IE4	IE5
Compliance EN 1253/2014 and other functional data					
Declared typology	-	UVU			
Type of operation	-	Variable speed			
Electric power input	kW	0,166	0,43	0,68	1,15
Specific fan power internal	W/m <sup>3</sup> /s	0	0	0	0
Nominal air flow	m/s	1,90	3,00	3,29	3,99
Maximun external leakage	%	0,37	0,24	0,23	0,19
Fans static efficiency	%	42,0	38,76	45,75	43,48
Sound power	dB(A)	60,7	64,6	64,4	69,1

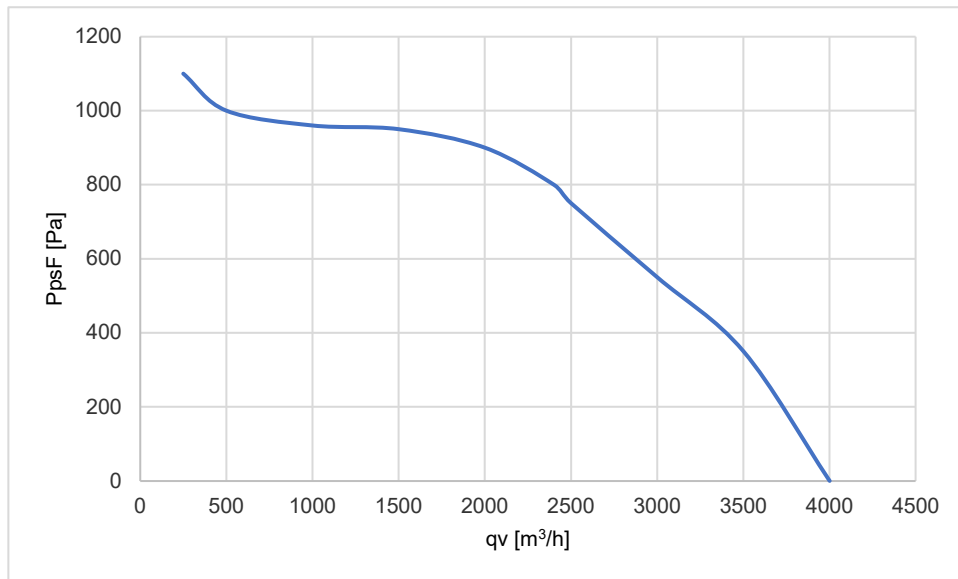
## CM1



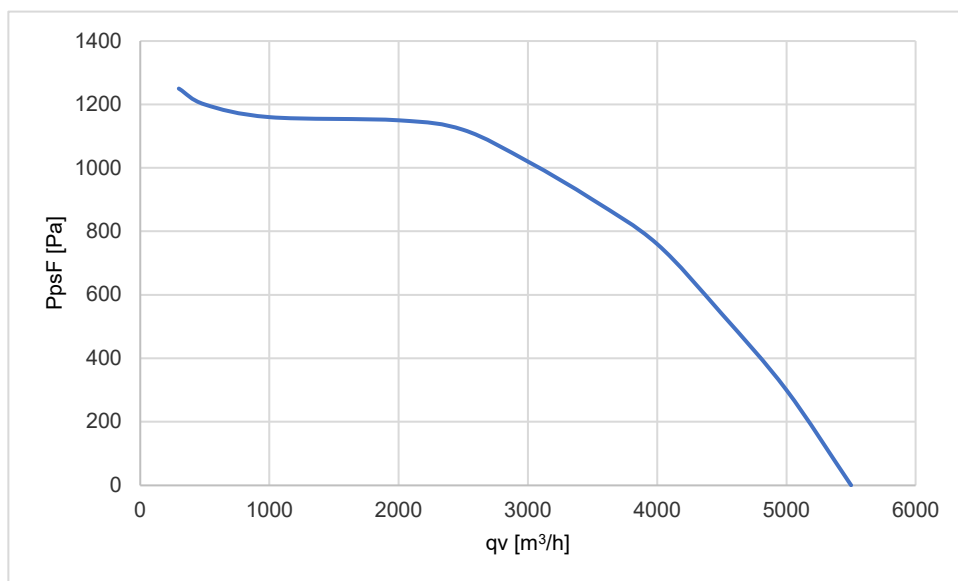
## CM2



### CM3



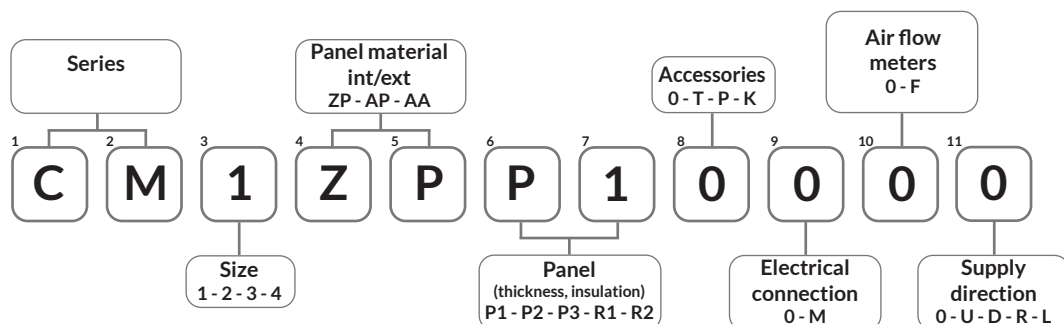
### CM4



## CM Code Configurator

Position	Position description	Values	Values description
1 - 2	Series	CM	
3	Size	1	1000 m³/h - 250 Pa
		2	2000 m³/h - 300 Pa
		3	3200 m³/h - 350 Pa
		4	4500 m³/h - 400 Pa
4 - 5	Panel material int./ext.	ZP	Standard galvanised steel / pre-painted galvanised steel
		AP	Aisi 304 / pre-painted galvanised steel
		AA	Aisi 304 / Aisi 304
6 - 7	Panel (thickness, foam)	P1	Standard - Panel Polyurethane 40 kg/m3 - th. 25 mm - profiles: Anticorodal aluminium, corners: nylon
		P2	Panel Polyurethane 40 kg/m3 - th. 54 mm - profiles: Anticorodal aluminium, corners: nylon
		P3	Panel Polyurethane 40 kg/m3 - th. 54 mm - profiles: Aisi 304, corners: Aisi 304
		R1	Panel Rock wool 90 kg/m3 - th.54 mm - profiles: Anticorodal aluminium, corners: nylon
		R2	Panel Rock wool 90 kg/m3 - th.54 mm - profiles: Aisi 304, corners: Aisi 304
8	Accessories	0	No accessories
		T	Roof
		P	Standing legs
		K	Roof + Standing legs
9	Electrical connection	0	No electrical connection box
		M	Electrical connection box
10	Airflow meters	0	No airflow meter
		F	Airflow meter installed on board (not available for CM1)
11	Supply direction	0	Standard - frontal
		U	Up
		D	Down
		R	Right
		L	Left

## Example













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