

CME Booster



TMO46620 0610

General description

The Grundfos CME Booster is a compact booster set for water supply in domestic applications. The integrated speed controller enables the CME Booster to keep constant pressure in the pipe system. A pressure sensor monitoring changes in the water consumption will signal to the speed controller to change the motor speed to adapt performance to the new situation.

The CME Booster is very easy to install. When the booster has been connected to the pipework, it is all a matter of plugging the plug into a socket, and the system is operational.

The CME Booster consists of these components:

- CME pump with integrated frequency converter
- 5-way fitting with non-return valve
- diaphragm tank
- pressure gauge
- pressure sensor.

Features

- Constant pressure via integrated speed control
- compact
- robust, stainless steel
- easy installation
- dry-running protection
- low noise, 55 dBA.

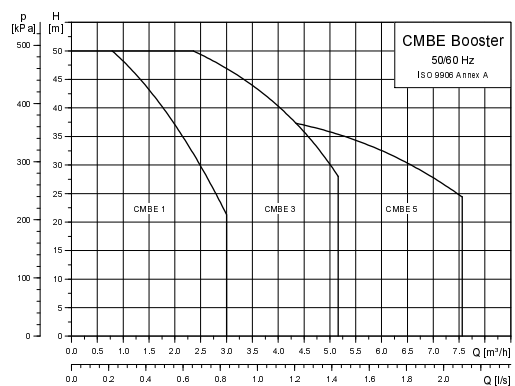
Applications

Grundfos CME Booster is mainly used for domestic and light commercial water supply or booster systems.

Application	CME 1	CME 3	CME 5
Single-family houses	●	●	○
Two-family houses	○	●	●
Cluster homes		●	●
Blocks of flats		●	●
Schools		●	●
Small hotels/guest houses		●	●
Small office buildings		●	●

● Recommended

Performance range



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Selection guide

Ex. Sizing & Selection.
A: Required comfort level
 - Adjustable, constant pressure
B: Find the right booster
 - How many taps? 6 taps
 - How many floors? 3 floors.
Result: CMBE 3-3

Taps	1-5	6-10	11-20	21-50
4	CMBE 3-4	CMBE 3-4	CMBE 3-4	
3	CMBE 3-3	CMBE 3-3	CMBE 3-4	CMBE 5-3
2	CMBE 1-4	CMBE 3-3	CMBE 3-3	CMBE 3-4
1	CMBE 1-4	CMBE 1-4	CMBE 3-3	CMBE 3-4

○ Tapping point

Pump sizing

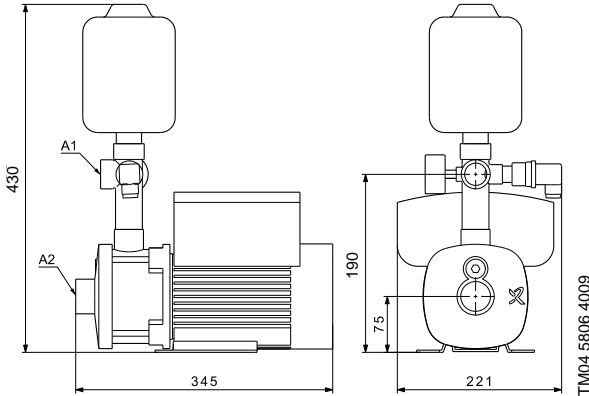
Taps	1-5	6-10	11-20	21-50
4	CMBE 3-4	CMBE 3-4	CMBE 3-4	
3	CMBE 3-3	CMBE 3-3	CMBE 3-4	CMBE 5-3
2	CMBE 1-4	CMBE 3-3	CMBE 3-3	CMBE 3-4
1	CMBE 1-4	CMBE 1-4	CMBE 3-3	CMBE 3-4

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Preconditions:

- 3 bar tap pressure is considered, to achieve 4 bar pressure add 2 more floors
- Flooded Suction. 0,5 l/s per tap average, usage pattern is taken into account
- Grundfos cannot be held responsible for wrong sizing based on this guide

Dimensional drawings



Technical data

Product no.	Pump type	Thread [RP]		Voltage [V]	I _{MAX} [A]	P ₁ [W]	Plug type
		A1	A2				
97529687	CMBE 1-4	1"	1"	1x 200-240	4.1 - 3.4	685	USA
97529686	CMBE 1-4	1"	1"	1x 200-240	4.1 - 3.4	685	AUS
97529685	CMBE 1-4	1"	1"	1x 200-240	4.1 - 3.4	685	Schuko
97529688	CMBE 1-4	1"	1"	1x 200-240	4.1 - 3.4	685	-
97529691	CMBE 3-3	1"	1"	1x 200-240	7.8 - 6.6	815	USA
97529690	CMBE 3-3	1"	1"	1x 200-240	7.8 - 6.6	815	AUS
97529689	CMBE 3-3	1"	1"	1x 200-240	7.8 - 6.6	815	Schuko
97529692	CMBE 3-3	1"	1"	1x 200-240	7.8 - 6.6	815	-
97529695	CMBE 3-4	1"	1"	1x 200-240	7.8 - 6.6	1050	USA
97529694	CMBE 3-4	1"	1"	1x 200-240	7.8 - 6.6	1050	AUS
97529693	CMBE 3-4	1"	1"	1x 200-240	7.8 - 6.6	1050	Schuko
97529696	CMBE 3-4	1"	1"	1x 200-240	7.8 - 6.6	1050	-
97529699	CMBE 5-3	1"	1 1/4"	1x 200-240	7.8 - 6.6	1300	USA
97529698	CMBE 5-3	1"	1 1/4"	1x 200-240	7.8 - 6.6	1300	AUS
97529697	CMBE 5-3	1"	1 1/4"	1x 200-240	7.8 - 6.6	1300	Schuko
97529700	CMBE 5-3	1"	1 1/4"	1x 200-240	7.8 - 6.6	1300	-

Materials

Component	Material
Terminal box	Composite PC/ASA and silumin (Alu)
Stator housing	Silumin (Alu)
Fan cover	Composite PBT/PC
Pump housing	Stainless steel EN 1.4301/AISI 304
Shaft and impeller	Stainless steel EN 1.4301/AISI 304
Flange	Cast iron

Thermal protection

CME Booster pumps require no external motor protection. The MGE motor incorporates thermal protection against slow overloading and blocking (IEC 34.11: TP 211).

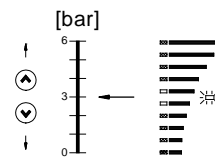
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Type key

Example	CMBE 1 - 4 - I - K - A - C - D
Type range CMBE: CM Booster with integrated frequency converter	
Rated flow Rated flow at 50 Hz [m ³ /h]	
Number of impellers	
Materials in contact with pumped liquid I: Sleeve: EN 1.4301/AISI 304 Impellers/chambers - EN 1.4301/AISI 304	
Supply voltage K: 1 x 220-240 V, MGE motor	
Motor information A: Standard motor (IP55)	
Mains cable and plug A: 1.5 m cable with Australian plug B: 1.5 m cable with Schuko plug C: 1.5 m cable with US plug D: 1.5 m cable without plug	
Controller D: Integrated frequency converter	

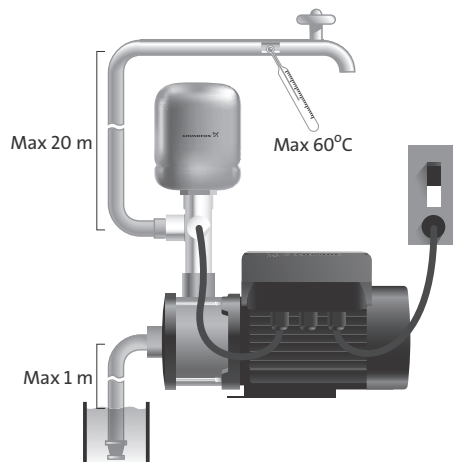
Control panel

The CME Booster pumps can be operated manually by means of the control panel.



Set the desired setpoint by pressing button ☺ or ☹. The light fields on the control panel will indicate the setpoint set. Continuously pressing button ☹ will stop the pump.

Installation



Subject to alterations.