

MBC SERIES AND SCRUBBER - INSTALLATION GUIDE

Information to consider before installing your RAYPA equipment.

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MBC SERIES + SCRUBBER

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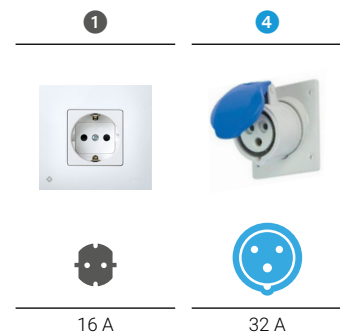


MBC SERIES

ELECTRICAL CONNECTION

The following table shows the plug configuration according to international IEC and SCHUKO standards for most European Union countries. For customers requiring other plugs and other electrical configurations, please contact our technical team at raypa@raypa.com.

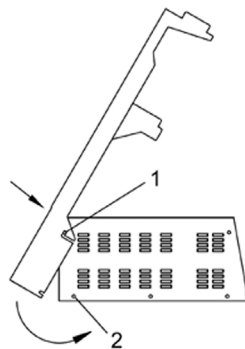
MODEL	FREQUENCY	POWER	VOLTAGE	CONNECTION
MBC-6 TS	50/60 Hz	1500 W	230 (1P+N+E) V	16 A ①
MBC-6 TS-115V	50/60 Hz	1500 W	120 (1P+N+E) V	16 A ①
MBC-12 TS	50/60 Hz	2000 W	230 (1P+N+E) V	16 A ①
MBC-12 TS-115V	50/60 Hz	2000 W	120 (1P+N+E) V	32 A ④
MBC-20 TS	50/60 Hz	2500 W	230 (1P+N+E) V	16 A ①
MBC-20 TS-115V	50/60 Hz	2500 W	120 (1P+N+E) V	32 A ④
MBCM-12 TS	50/60 Hz	1500 W	230 (1P+N+E) V	16 A ①
MBCM-12 TS-115V	50/60 Hz	1500 W	120 (1P+N+E) V	16 A ①
MBCM-24 TS	50/60 Hz	2000 W	230 (1P+N+E) V	16 A ①
MBCM-24 TS-115V	50/60 Hz	2000 W	120 (1P+N+E) V	32 A ④
MBCM-40 TS	50/60 Hz	2500 W	230 (1P+N+E) V	16 A ①
MBCM-40 TS-115V	50/60 Hz	2500 W	120 (1P+N+E) V	32 A ④



ASSEMBLY AND CONNECTIONS GRAPH

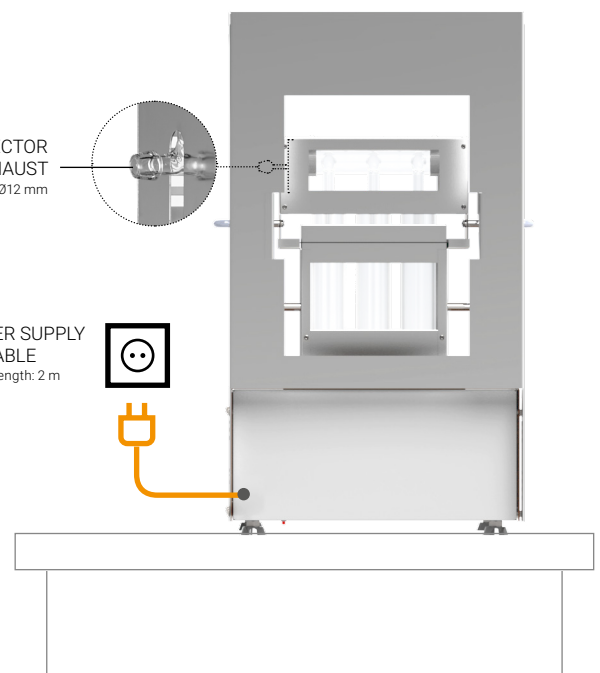
Mount the rear bracket on the metal heating block by fastening it with the rear screws (see drawing).

- Loosen the rear screws 1 and 2.
- Place the rear bracket on screw 1 and fit it to the end of the slot.
- Turn the bracket and fit it into the slot 2 until it stops in the slot.
- Tighten the two screws with a screwdriver.



2. FUMES COLLECTOR EXHAUST
Connection Ø12 mm

1. POWER SUPPLY CABLE
Cable length: 2 m



MBC SERIES

INCLUDED COMPONENTS



1 stainless steel rack with digestion tube holder.



1 stainless steel tabletop tray.



1 anti-drip stainless steel tray.



Multiple micro digestion tubes made of glass of 26 x 300 mm. Quantity depends on model purchased. Additional digestion tubes can also be purchased on demand.



Multiple macro digestion tubes made of glass of 42 x 300 mm. Quantity depends on model purchased. Additional digestion tubes can also be purchased on demand.

COMPACT DIGESTION SYSTEM MBC SERIES

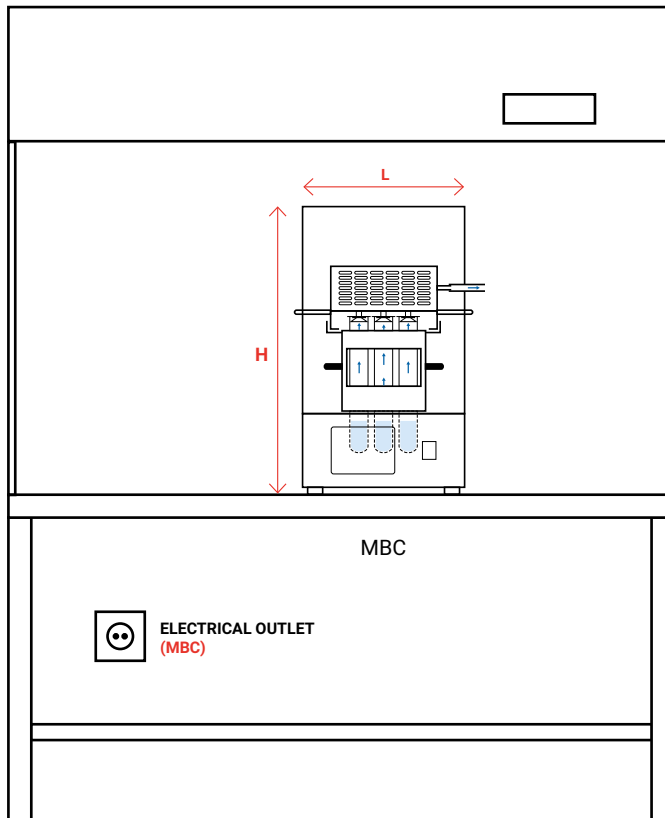
MBC SERIES



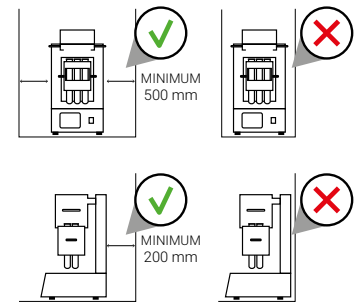
DIMENSIONS TO CONSIDER FOR THE INSTALLATION OF YOUR EQUIPMENT

The equipment shall be placed on a stable and flat surface suitable for the weight of the equipment, ideally always inside a laboratory laminar flow cabinet. At a distance of less than 1500 mm, a water supply, a drain and an electrical outlet must be provided. For safety reasons, the distance between both sides of the equipment and the wall or any other object must be 500 mm and between the equipment and the rear wall it must be at least 200 mm. Do not place containers, chemicals or other devices behind the equipment.

MODEL	L LENGTH	D DEPTH	H HEIGHT
MBC-6 TS	350 mm	400 mm	635 mm
MBC-12 TS	350 mm	560 mm	635 mm
MBC-20 TS	460 mm	560 mm	635 mm
MBCM-12 TS	350 mm	400 mm	635 mm
MBCM-24 TS	350 mm	560 mm	635 mm
MBCM-40 TS	460 mm	560 mm	635 mm



WARNING:
Respect the recommended distances



ENVIRONMENTAL CONDITIONS

This equipment is prepared to operate under the following maximum conditions:

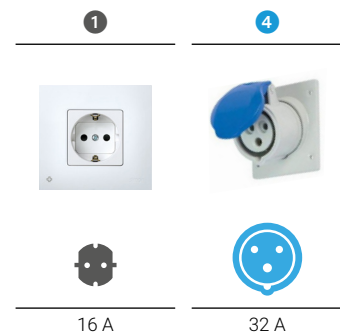
- Ambient temp.: 5 to 40 °C
- Humidity: 30 to 80 %

MBC SERIES + SCRUBBER

ELECTRICAL CONNECTION

The following table shows the plug configuration according to international IEC and SCHUKO standards for most European Union countries. For customers requiring other plugs and other electrical configurations, please contact our technical team at raypa@raypa.com.

MODEL	FREQUENCY	POWER	VOLTAGE	CONNECTION
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MBCM-40 TS-115V	50/60 Hz	2500 W	120 (1P+N+E) V	32 A ④
SCRUBBER	50/60 Hz	100 W	230 (1P+N+E) V	16 A ①
SCRUBBER-115V	50/60 Hz	100 W	120 (1P+N+E) V	16 A ①

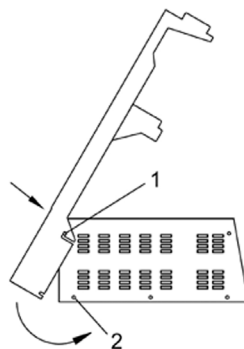


ASSEMBLY AND CONNECTIONS GRAPH

MBC

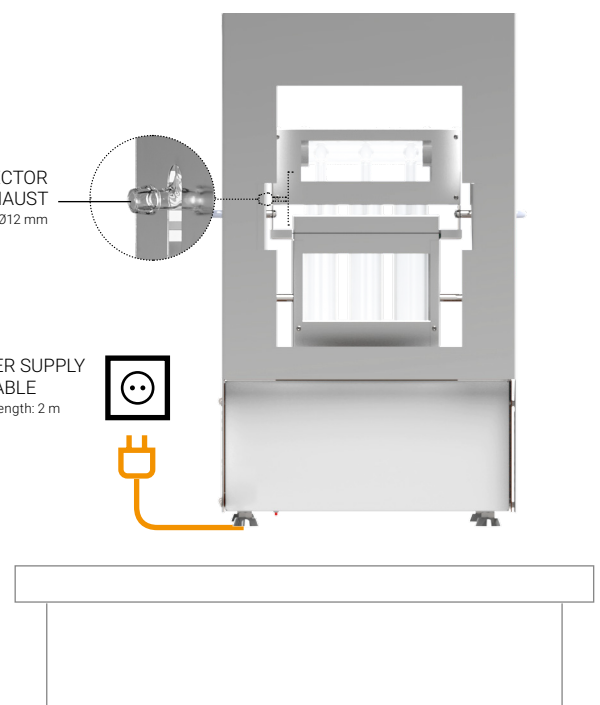
Mount the rear bracket on the metal heating block by fastening it with the rear screws (see drawing).

- Loosen the rear screws 1 and 2.
- Place the rear bracket on screw 1 and fit it to the end of the slot.
- Turn the bracket and fit it into the screw 2 until it stops in the slot.
- Tighten the two screws with a screwdriver.



2. FUMES COLLECTOR EXHAUST
Connection Ø12 mm

1. POWER SUPPLY CABLE
Cable length: 2 m



MBC SERIES + SCRUBBER

INCLUDED COMPONENTS

MBC SERIES



1 stainless steel rack with digestion tube holder.



1 stainless steel tabletop tray.



1 non-drip stainless steel tray.



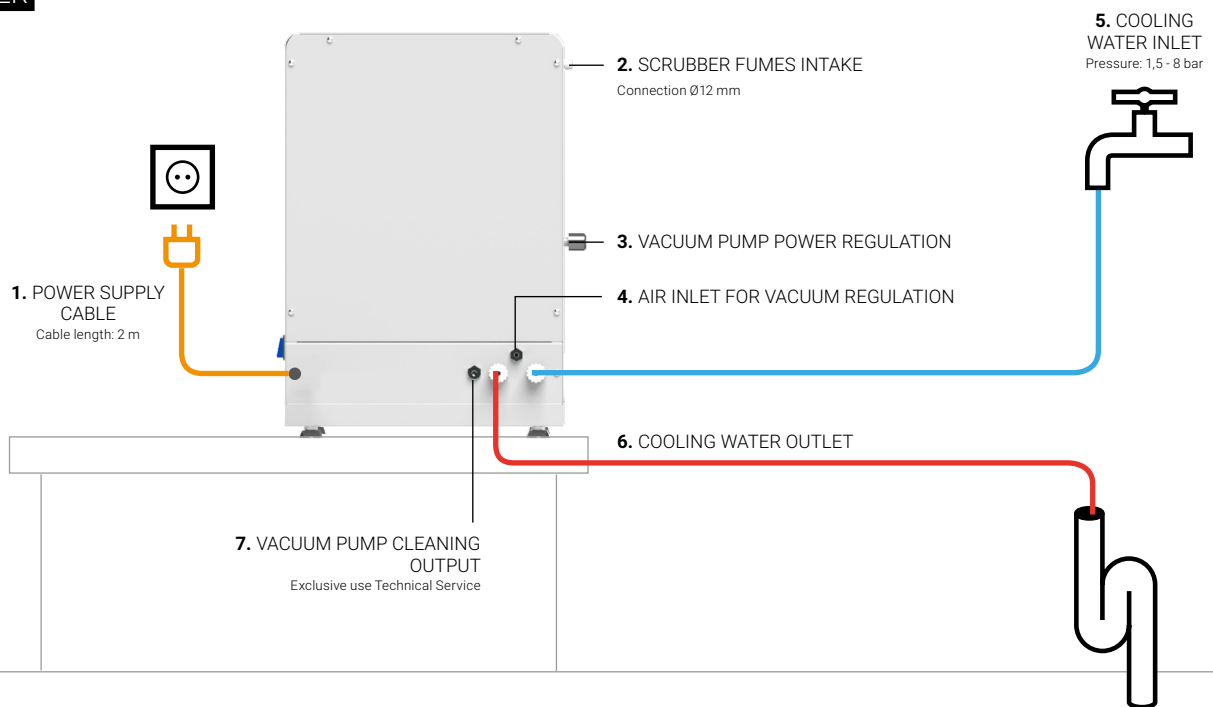
Multiple micro digestion tubes made of glass of 26 x 300 mm. Quantity depends on model purchased. Additional digestion tubes can also be purchased on demand.



Multiple macro digestion tubes made of glass of 42 x 300 mm. Quantity depends on model purchased. Additional digestion tubes can also be purchased on demand.

MBC SERIES + SCRUBBER

ASSEMBLY AND CONNECTIONS GRAPH SCRUBBER



Align the condensate bottle **2** with the cap **1** and screw it on loosely. Place the lifting bracket **3** under the bottle **2** resting it on the equipment cabinet, lower the bottle **2** until it rests on the lifting bracket **3** and tighten the stopper by hand **1**. To remove the condensate bottle, proceed in reverse order.

Tilt the neutralization bottle **6** and face the cap **5** with the thread **4**, so that the glass tube is inside the thread. Rotate the bottle **6** to the vertical position together with the anti-drip tray **7** and place it on the cabinet. Hand tighten the cap **5**.

Attach the Teflon tubing **8** between the cooling unit and the neutralization bottle so that the tubing enters the threads. Tighten the plugs by hand **9** and **10**. To remove the neutralization bottle, proceed in reverse order.

*See section of supplied components for more information on the components mentioned on this page.

MBC SERIES + SCRUBBER

WATER SUPPLY FOR COOLING

SCRUBBER

Decalcified water is required for cooling the equipment. Connect the WATER INLET FOR COOLING (5) with the supplied hose* to a decalcified water supply (pressure between 1,5 and 8 bar).

It is recommended that the inlet water for cooling have a temperature equal to or lower than 25 °C.

*See section of supplied components for more information on the technical characteristics of this hose.

DRAINAGE CONNECTIONS

SCRUBBER

Connect the COOLING WATER OUTLET (3) with the supplied hose* and direct it to a drain.

*See section of supplied components for more information on the technical characteristics of this hose.

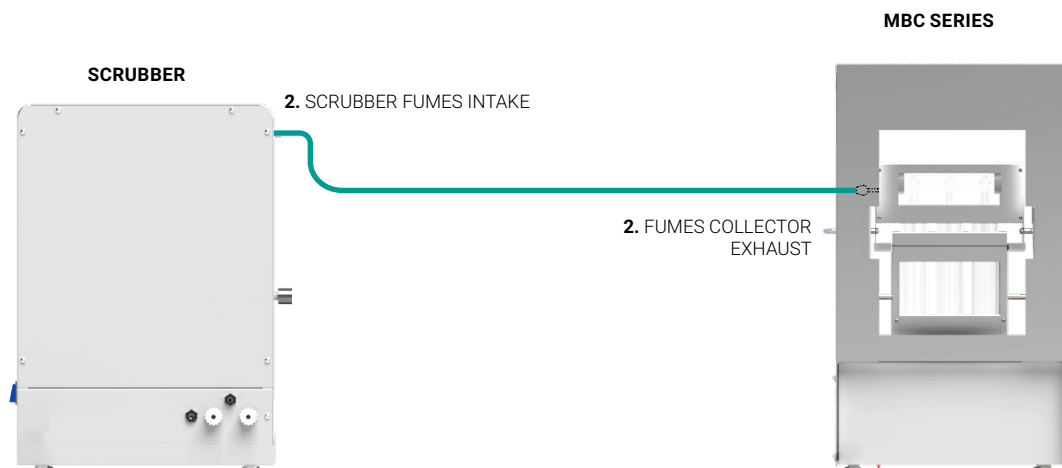


IMPORTANT:

For a proper operation of the equipment, the hose connected to the COOLING WATER OUTLET (3), must be routed to a drain so that the free end is not submerged in water. It must not present bends or siphons.

JOINT USE OF MBC AND SCRUBBER

Simply connect the supplied Viton® fluorinated rubber tubing to the SCRUBBER FUMES INTAKE (2) of the SCRUBBER unit and direct the other end of the tubing to the FUMES COLLECTOR EXHAUST (2) of the MBC digester.



MBC SERIES + SCRUBBER

INCLUDED COMPONENTS SCRUBBER



1 reinforced NBR hose 2 m long with a 3/4" threaded connection both at the equipment and a tap (gaskets included).

For:

5. COOLING WATER INLET



1 transparent silicone hose of Ø8 X Ø14 mm diameter and 1 m length with a 3/8" threaded connection on one end to connect to the equipment (gaskets included) and an unthreaded end to connect to the drainage.

For:

6. COOLING WATER OUTLET



1 Viton® fluorinated rubber tube Ø12 X Ø16 mm diameter and 1 m length with *press-fit* connection. Used to connect the SCRUBBER to the Compact Digestion System (MBC Series).

For:

2. SCRUBBER FUMES INTAKE



1 1/8" cylindrical metal dowel.

For:

4. AIR INLET FOR VACUUM REGULATION



1 plastic anti-drip tray for the neutralization bottle.



1 plastic lifting bracket for the condensates bottle.

MBC SERIES + SCRUBBER

ELEMENTS INCLUDED FOR THE INSTALLATION OF THE EQUIPMENT

SCRUBBER



1 Ø12 glass olive with SUL-18 stopper and a Ø10 x Ø18 mm gasket.

For:

2. SCRUBBER FUMES INTAKE



1 condensates bottle of 1L with a SUL-45 stopper and a Ø26 x Ø45 mm gasket.



1 neutralization bottle of 2L with a SUL-45 stopper and a Ø26 x Ø45 mm gasket.



1 washer assembly consisting of glass elements with SUL-18 plug and Ø8 x Ø18 mm gasket.



1 Teflon® hose of 24 cm Ø 8 x 6 mm for connection between the refrigeration circuit and the neutralization bottle.

COMPACT DIGESTION SYSTEM MBC SERIES

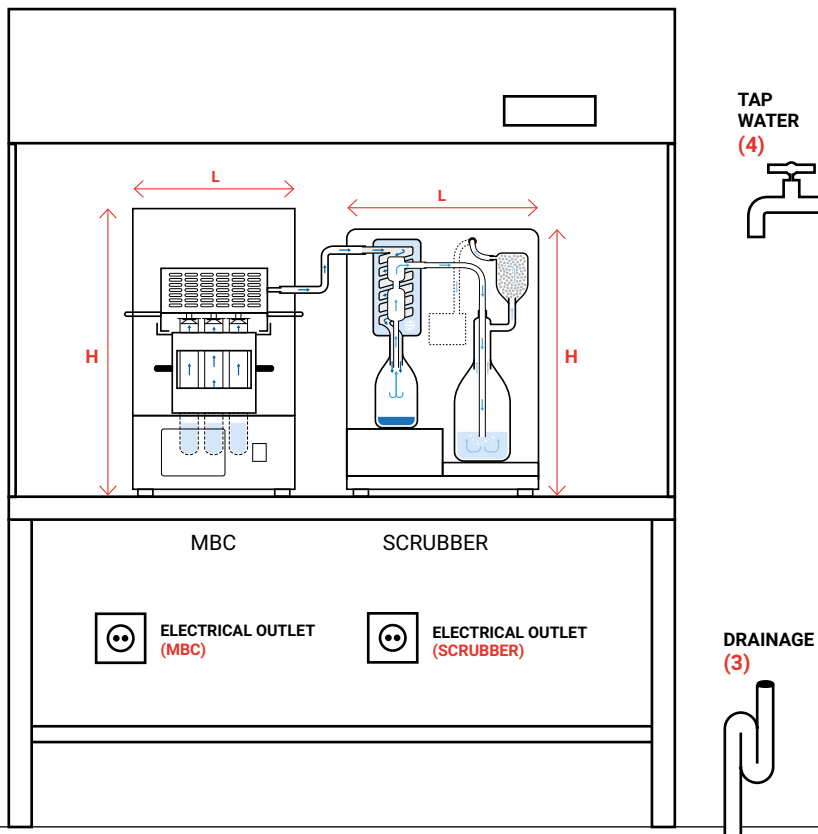
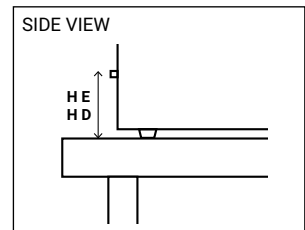
MBC SERIES + SCRUBBER



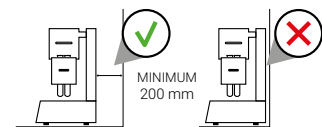
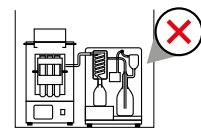
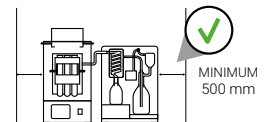
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MODEL	L LENGTH	D DEPTH	H HEIGHT	H E HEIGHT COOLING WATER INLET	H D HEIGHT COOLING WATER OUTLET
MBC-6 TS	350 mm	400 mm	635 mm	-	-
MBC-12 TS	350 mm	560 mm	635 mm	-	-
MBC-20 TS	460 mm	560 mm	635 mm	-	-
MBCM-12 TS	350 mm	400 mm	635 mm	-	-
MBCM-24 TS	350 mm	560 mm	635 mm	-	-
MBCM-40 TS	460 mm	560 mm	635 mm	-	-
SCRUBBER	375 mm	310 mm	540 mm	85 mm	85 mm



WARNING:
Respect the recommended distances



ENVIRONMENTAL CONDITIONS

These equipment are prepared to operate under the following maximum conditions:

- Ambient temp.: 5 to 40 °C
- Humidity: 30 to 80 %

**COMPACT DIGESTION
SYSTEM**
MBC SERIES

+ info



CLICK!
ACCESS
THE MBC
SERIES
VIDEO

Find out more about our **MBC Series** digesters on our Youtube Channel



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